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UAccess New Academic Program Workflow Form

New Academic Program- Graduate Major Additional Information Form

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THE UNIVERSITY OF ARIZONA®

New Academic Program Workflow Form

General

Proposed Name: Bachelor of Landscape Arch

Transaction Nbr: 0000000000042

Plan Type: Major

Academic Career: Undergraduate

Degree Offered: Bachelor of Landscape Architecture

Do you want to offer a minor? Y

Anticipated 1st Admission Term: Fall 2020

Details

Department(s):

ARCH

DEPTMNT ID	DEPARTMENT NAME	HOST
1005	School of Landscape Architecture and Planning	Y

Campus(es):

MAIN

LOCATION	DESCRIPTION
TUCSON	Tucson

Admission application terms for this plan: Spring: Y Summer: Y Fall: Y

Plan admission types:

Freshman: Y Transfer: Y Readmit: Y Graduate: N

Non Degree Certificate (UCRT only): N

Other (For Community Campus specifics): N

Plan Taxonomy: 30.3301, Sustainability Studies.

Program Length Type: Program Length Value: 0.00

Report as NSC Program:

SULA Special Program:

Print Option:

Diploma: Y Bachelor of Landscape Architecture in Landscape Architecture

Transcript: Y Bachelor of Landscape Architecture in Landscape Architecture

Conditions for Admission/Declaration for this Major:

None.

Requirements for Accreditation:

The program will seek accreditation through the accrediting body, the Landscape Architectural Accreditation Board.

Because we intend to apply for accreditation for the proposed BLA program, we are required to maintain certain accreditation standards and conduct ongoing program assessment as defined by the Landscape Architecture Accreditation Board (LAAB). LAAB requires that the program covers approximately fifty learning outcomes. The faculty have created a detailed curriculum map to show how our proposed BLA curriculum will meet the accreditation standards of LAAB. This curriculum map is included as an attachment as part of the New Academic Program - Undergraduate Major Additional Information Form.

The program will seek Candidacy accreditation status during the initial semesters of program implementation. The program will seek full accreditation upon the successful graduation of the first cohort in accordance with LAAB accreditation procedures. See p.6 "Accreditation Procedures": https://www.asla. org/uploadedFiles/CMS/Education/Accreditation/LAAB_ACCREDITATION_PRO CEDURES_March2016.pdf

Program Comparisons

University Appropriateness

The University of Arizona will be the first university to comprehensively address the grand challenges of the built environment by creating a fully integrated multidisciplinary approach to these challenges through its recently adopted strategic plan. CAPLA's strategic plan, Building a Changing World, aligns our land grant mission with the university strategic plan. CAPLA aspires to be innovators of transformational strategies, championing a future-oriented perspective where students are engaged in hands-on design and planning. By maintaining a close alignment with CAPLA and University-wide strategic planning initiatives and partnerships, this BLA program will advance innovation in the Built Environment and increase CAPLA leadership and visibility in this critical domain at the forefront of the 4th industrial revolution.

CAPLA infrastructure provides opportunities for success in the BLA program through existing resources including courses, faculty, staff, and facilities. Existing CAPLA undergraduate programs-Bachelor of Architecture (BArch) and Bachelor of Science in Sustainable Built Environments (SBE)-provide BLA students the opportunity to collaborate with undergraduates in allied disciplines. For example, several existing courses (LAR 420 Plant Materials, LAR 423 Landscape Ecology, LAR 440 History, Theory and Contemporary Landscape Architecture, LAR 470 Introduction to GIS for Planning and Landscape Architecture) will be shared with SBE students pursuing the SBE Sustainable Landscapes Emphasis. Two new BLA design studio courses will be co-convened with BArch students to create interdisciplinary studios that simulate professional office experiences. Additionally, the university's undergraduate Sustainable Plant Systems program proposes to offer an Urban Horticulture emphasis area with courses including LAR 420 Plant Materials, LAR 423 Landscape Ecology, and LAR 440 History, Theory and Contemporary Landscape Architecture). Since landscape architecture is an historically multi-disciplinary field drawing from agriculture, civil engineering, fine art, plant and soil science, hydrology, health, and sociology, the program will seek university partners (faculty and students) as studio project collaborators. These multidisciplinary studio opportunities occur in the third year (spring semester) and fourth year (fall semester). The structure of these projectbased studios creates opportunities for external funding through public agencies (city, county, native nations, NPS), industry (private firms), and grants (e.g., NSF, USDA, NIH, EPA). The newly reinstated CAPLA Drachman Institute will be a resource in identifying appropriate university and community projects and partnerships. Typically, the ideas generated by students in the studio setting prove useful as catalysts for future professional work and funding.

Arizona University System

NBR	PROGRAM	DEGREE	#STDNTS	LOCATION	ACCRDT
1	BS in Landscape	BS	112	Arizona State Univ, Tempe	Y
	Architecture				

Peer Comparison

The UArizona BLA degree will distinguish itself from the ASU BSLA in that it is not a Bachelor of Science degree. This allows room in the curriculum for students to learn more design, language and communication skills, equipping them with the skills needed to write formal, technical, and legal information and effectively communicate with communities and public agencies.

Additionally, practitioners and LAAB have indicated that there is a shortage of qualified graduates entering the profession, and undergraduate enrollments in

landscape architecture programs are growing. ASU has also expressed their support for the BLA program and does not view it as a potential duplication. In their letter of support for this proposal, Jason Schupbach, director of The Design School at the Herberger Institute for Design and the Arts, writes: "In conversation with Landscape Architecture Professor Kenneth Brooks and Landscape Architecture Associate Professor and Program Head Joseph Ewan, we all believe the ASU BSLA and the proposed U of A BLA can complement the diverse and growing needs of the nation and planet for more professional landscape architects prepared to analyze, plan, design, manage, and nurture the built and natural environment."

The BLA program will exemplify the spirit of the land-grant mission that has characterized The University of Arizona since its founding. This professional degree program reflects the practical land stewardship values that led to the establishment of the profession in 1899. Our program will provide education, research, and outreach on the systematic organization of public and private outdoor places for human and environmental health, social well-being, preservation of cultural heritage, and visual beauty. Our vision is to advance sustainable design in arid environments for global application.

Faculty & Resources

Faculty

Current Faculty:

INSTR ID	NAME	DEPT	RANK	DEGREE	FCLTY/%
06209395	Lauri Johnson	1005	Professor	Master Landscape Arc	.25
03008108	Margaret Livingston	1005	Professor	Doctor of Philosophy	.40
22075795	Bo Yang	1005	Assoc. Prof	Doctor of Philosophy	.25
22067236	Kirk Dimond	1005	Assit. Prof	Master of Science	.25
14402773	Gina Chorover	1005	Lecturer	Master Landscape Arc	.60
02930621	Travis Mueller	1005	Adj. Lect.	Master Landscape Arc	.75
00744016	Kelly Cederberg	1005	Adj. Lect.	Master Landscape Arc	.20
14603466	Jennifer Patton	1005	Adj. Lect.	Master Landscape Arc	.25
22075059	Nancy Pollock- Ellwand	1005	Professor	Doctor of Philosophy	.05
22067856	Daniel Hoffman	1004	Prof. Pract.	Bachelor of Arch	.20
22075892	Shujuan Li	1005	Assoc. Prof	Doctor of Philosophy	.13

INSTR ID	NAME	DEPT	RANK	DEGREE	FCLTY/%
03173032	Nathan Ritchie	1005	Adj. Lect.	Master	.10
				Landscape Arc	

Additional Faculty:

A new tenure-line hire initially approved for the existing MLA program: Assistant Professor of Landscape Architecture - Urban Design, will have an anticipated 0.25 FTE role in the new BLA program beginning in Spring 2023. This is a replacement hire approved by the college and university. (UA job posting: F22089. Desired start date: 8/3/20.)

It is currently anticipated that a career-track lecturer may be hired to co-teach LAR 4^{**} Design Studio V - Interdisciplinary Outreach Studio with existing architecture faculty in Fall 2023.

Current Student & Faculty FTE

DEPARTMENT	UGRD HEAD COUNT	GRAD HEAD COUNT	FACULTY FTE
1005	100	34	6.70

Projected Student & Faculty FTE

	UGRD H	IEAD COL	JNT	GRAD H	EAD COL	JNT	FACULT	Y FTE	
DEPT	YR 1	YR 2	YR 3	YR 1	YR 2	YR 3	YR 1	YR 2	YR 3
1005	127	153	178	35	38	37	7.50	8.50	10.18

Library

Acquisitions Needed:

None. The liaison librarian to the School of Landscape Architecture does not anticipate any new expenditures. A review of the UA library's current print and online resources for landscape architecture indicated that the subject matter was already well covered.

Physical Facilities & Equipment

Existing Physical Facilities:

Currently, there is no need for additional facilities or infrastructure. However, it is expected that CAPLA will grow enrollments in existing undergraduate and graduate programs. To accommodate this growth, CAPLA has launched a new building initiative.

Additional Facilities Required & Anticipated:

None.

Other Support

Other Support Currently Available:

The School of Landscape Architecture and Planning has several full-time and part-time staff members who devote their time to all programs in the school:

Administrative Assistant: Works immediately under the director and handles course management and scheduling; Promotion and Tenure packets; travel authorizations and disbursement vouchers for faculty; event coordination; and other administrative duties for the school as they arise.

Program Coordinator - Laura Jensen, MLA: Organizes and disseminates student and faculty achievements and activities through social media and the CAPLA website; shares job and internship opportunities with students; maintains and updates website content for the programs in the school; assists with accreditation for all school programs; and creates print and digital promotional materials for school events, courses, and programs, with a focus on the Landscape Architecture and MS Planning Programs. Program Coordinator - Spencer Warmuth, MAS: Coordinates the Master of Real Estate Development, Sustainable Built Environments, and Heritage Conservation programs. Spencer provides support for all three programs by managing and operating their social media presence; communicating and assisting prospective students; interfacing with professional and corporate partners; and organizing outreach across various outlets.

Assessment Coordinator - Kelly Eitzen Smith, PhD: Collects program and student data and oversees and coordinates the assessment of all programs in the school for outside accrediting bodies as well as for internal University of Arizona program assessment.

Student worker: The programs in the school share a work-study student who works 20 hours per week, and is available to provide assistance with organizational and office related tasks as needed. CAPLA staff:

Graduate Program Coordinator - Emilio Romero: Serving all graduate programs in the college, Emilio's duties include recruiting, advising, admissions, and scholarship administration for students. She works in coordination with the Graduate College.

Senior IT Manager - Lucas Guthrie and Senior IT Support Analyst - Adam Katz: Manage and maintain CAPLA's IT infrastructure and equipment and manage student IT staff.

Course Design Specialist: Works closely with subject matter experts and faculty on online course instructional design, maintenance and troubleshooting of online d2l courses, and course mapping.

Materials Lab Coordinator - Paulus Musters: Oversees CAPLA's materials lab and maintains equipment.

Business office staff:

Assistant Dean of Finance and Administration - Simon White: Focuses on

business development and identifying funding sources necessary to meet the college and university missions. Simon has worked at the University of Arizona for 15 years in a variety of departments holding financial and business positions.

Analyst, Data and Financial - Jeff Guba, MBA: Provides CAPLA with various types of reports relating to financial and student data. He also provides critical analysis support relating to a range of business areas (i.e. accounting).

Accountant: Provide support to the CAPLA community relating to accounting, human resources, and other important business areas. Development and Alumni Relations staff:

Development Director: Directs and manages the identification, qualification, cultivation, and solicitation of major individual, corporate, and foundation prospects in support of CAPLA.

Director of Alumni and Community Engagement: Develops and maintains relationships with CAPLA alumni and donors by organizing alumni and scholarship events, maintaining contact with alumni and donors through newsletters and direct communication. Kay is the main point of contact for CAPLA alumni.

Development and Alumni Relations Coordinator: Assists the Director of Alumni and Community Engagement in all aspects of alumni and donor relations.

Marketing Manager: Works in conjunction with the dean, associate dean, directors, faculty, program coordinators, and other related staff in the coordination of marketing and promotional materials and efforts. Recruitment Coordinator: Responsible for college-wide student recruitment efforts.

Associate Dean for Research and Academic Affairs - Barbara White Bryson, EdD, FAIA: Coordinates promotion and tenure activities, holds research workshops, oversees building operations, and manages studio and office assignments for students, faculty, and staff.

These individuals work well as a team committed to all programs in the college. Dean Nancy Pollock-Ellwand, who holds degrees in Landscape Architecture (BLA), Architecture (MA), and Planning (PhD), the college and the school are well supported and staffed, thus ensuring the attainability of program mission and goals.

Other Support Needed over the Next Three Years:

Advising FTE Required: 2020-21: 0.10 2021-22: 0.20 2022-23: 0.30 2023-24: 0.40

Coordination FTE Required: 2020-21: 0.25

2021-22: 0.25 2022-23: 0.25 2023-24: 0.25

Business Support FTE Required: 2020-21: 0.10 2021-22: 0.10 2022-23: 0.20 2023-24: 0.20

Comments During Approval Process

11/27/2019 9:32 AM

MARTINMARQUEZ

Comments

Corrected upside down question mark error on impacted fields.



NEW ACADEMIC PROGRAM-UNDERGRADUATE MAJOR ADDITIONAL INFORMATION FORM

I. MAJOR DESCRIPTION -provide a marketing/promotional description for the proposed program. Include the purpose, nature, and highlights of the curriculum, faculty expertise, emphases (sub-plans; if any), etc. The description will be displayed on the advisement report(s), <u>Degree Search</u>, and should match departmental and college websites, handouts, promotional materials, etc.

The Bachelor of Landscape Architecture (BLA) program prepares students for professional licensure in landscape architecture through a robust, responsive, and professionally-rooted curriculum. Classwork and design studios instill a comprehensive understanding of landscape architectural practice, creative problem-solving, and the knowledge, skills, and values necessary to become sustainability-minded landscape architecture professionals prepared to enter the workforce upon graduation.

The BLA is a first-professional degree program that will seek accreditation from the Landscape Architectural Accreditation Board (LAAB). The program is steeped in applied learning and professional practice with an emphasis on natural resources, sustainable design strategies, and interdisciplinary partnerships. The place-based curriculum takes advantage of the Sonoran Desert to demonstrate sustainable design solutions in areas including energy and water conservation, use of native plant species, ecological stewardship, and urban heat island mitigation. BLA students will have the option to continue on to the Master of Landscape Architecture degree program with advanced standing. *

The program prepares students for entry-level professional practice by involving them in a variety of real-world learning experiences which enable them to meet the challenges of the 21st century. Studio experiences focus on design and planning for a variety of project types and scales including community and campus master plans; urban park systems, plazas and green streets; adaptive reuse of urban infrastructure, ecological restoration; habitat creation; neighborhood design; and more.

The program has a strong, committed, and energetic faculty who seamlessly integrate teaching, research, and outreach. Studio courses, classroom instruction, and real-world community outreach projects create a diverse learning environment that maximizes professional skill building. Faculty members prepare students for professional practice and interdisciplinary collaboration through design projects that address site and landscape planning issues and explore the ways in which designed landscapes can educate and inspire communities toward environmental health and cultural identity.

*Note: For details on this course progression, please refer to the attached BLA to MLA AMP proposal document.

II. NEED FOR THE MAJOR/JUSTIFICATION-describe how the major fulfills the needs of the city, state, region, and nation. Provide market analysis data or other tangible evidence of the need for and interest in the proposed major (and emphases, if applicable). This might include results from surveys of current students, alumni, and/or employers or reference to student enrollments in similar programs in the state or region. Include an assessment of the employment opportunities for graduates of the program for the next three years. Curricular Affairs can provide a job posting/demand report by skills obtained/outcomes/CIP code of the proposed major. Please contact Martin Marquez to request the report for your proposal.

Overview:

The University of Arizona Master of Landscape Architecture (MLA) program has been recognized by the Landscape Architectural Accreditation Board (LAAB) as "a strong program with a long history of excellence."¹ They note that the program's mission, goals, and objectives are in line with those of the university and are appropriate for a professional school in a land-grant institution. By offering an undergraduate level degree in landscape architecture, the University of Arizona can attract a larger share of students interested in the landscape architecture profession. Nationwide enrollments in MLA programs represent only the minority share of student demand. The Bachelor of Landscape Architecture (BLA) program as proposed will capture a growing market demand, promote interdisciplinary education and research, support future graduate enrollments, and implement key provisions of the CAPLA Strategic Plan. The first step to becoming a licensed landscape architect is completing a first-professional baccalaureate or first-professional master's level degree in landscape architecture. Subsequent steps entail gaining sufficient professional experience and completing a four-part professional exam. Therefore, BLA graduates are workforce ready, and employment in the field is high and growing. Ninety-six percent of our recent MLA graduates are actively employed in the field in both public and private sectors. Our graduates compete well in the national and international job market.

According to the CAPLA undergraduate recruiting and advising team, there has been consistent interest from prospective students in a BLA program over the last five years. They report many student-initiated inquiries about a bachelor's level program in landscape architecture at recruiting events and campus tours, at the rate of about 15-20 students per year. For example, on November 7, 2019 staff from CAPLA's recruitment team spoke to five prospective students at the Phoenix Unified School District College Recruitment Fair who expressed interest in a BLA degree program. Additionally, approximately five to ten currently enrolled University of Arizona undergraduate students contact CAPLA advisors or school staff annually to

¹ Landscape Architectural Accreditation Board Master of Landscape Architecture Re-Accreditation report, University of Arizona, February 2019

seek advice about preparing themselves for future enrollment in the Master of Landscape Architecture program. We believe that some of these students would seek a BLA if the option was available to them.

In response to such inquiries, we have performed additional market research to confirm these findings, identifying significant projected demand for careers in landscape architecture nationally. Local and national landscape architecture firms have reported difficulty finding suitable candidates given limited historic graduate numbers and extended pathways to employment.

Many industry groups attribute this employment gap to a lack of exposure and education about the field, and this becomes more apparent when considering the geographic dispersion of programs. Of the 44 accredited undergraduate landscape architecture programs in the United States, a significant number exist in the Northeast and Mid-Atlantic regions of the country. While there are several programs throughout the West, distribution throughout the Southwest is relatively limited with just three undergraduate programs; ASU is the only institution serving the Arizona market with a Bachelor of Science in Landscape Architecture (BSLA) offering. As a land-grant institution, our program differentiates itself by being focused on natural resources including energy and water conservation, urban heat island mitigation, and landscape performance. Studios engage students in community outreach and interdisciplinary approaches to design of the built environment. Development growth, in the west, southwest and throughout the US creates opportunities for growth in the profession. However, nationwide landscape architecture programs are not keeping up with this demand.

Market Size:

The estimation of demand is evidenced in a 2018 report published by the American Society of Landscape Architecture (ASLA) which identified a total of 5,376 students enrolled in a landscape architecture program. Of those enrollments, 3,320 of students (62%) are classified undergraduate and 2,056 (38%) are enrolled at the graduate-level.



Figure credit: American Society of Landscape Architects

Based on an analysis of existing programs and market size, we expect to have approximately 25 students entering the program on an annual basis. With approximately 3,320 students enrolled in an accredited BLA/BSLA Program in the United States, this suggests a market size based on a US Core-Based Statistical Area population = approximately 325 million (3,320 students / 325 million = approximately 10 students/million). With approximately 1 million people in the Tucson metro area, we can estimate a local market demand of approximately 10 enrollments per year. Within CAPLA, there is further opportunity to capture students with an interest in design in the built environment who begin studies as pre-architecture students in the Bachelor of Architecture program and find the program is not a match for their specific interests. An entry level studio has been designed for all incoming students interested in design of the built environment. At the end of this studio students will have the ability to choose either architecture or landscape architecture.

Modest market leakage can further be assumed from neighboring states given the higher cost of living, education related expenses, and limited number of undergraduate programs in the Southwest region. Given the population density of this

relatively underserved area, strength of historic BLA/BSLA enrollments², and potential transfer of existing CAPLA prearchitecture students we can reasonably expect a market capture of approximately 25 students per year. Without a BLA offering, CAPLA is becoming increasingly misaligned with market trends and shifts in student preference. Obtaining a high-paying job post undergraduate-level study becomes an attractive option for students, as suggested by the spread between graduate and undergraduate enrollments. Provision of an undergraduate BLA program could further induce demand for the existing Master of Landscape Architecture degree program, by establishing a complementary product in the CAPLA portfolio. BLA students would be able to complete the MLA with one additional year of study.

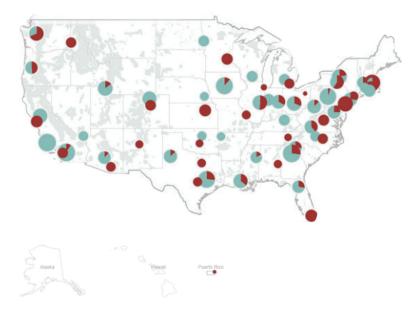
Local and national professionals value the existing MLA program and feel that graduates are well prepared to enter the profession. Practitioners and LAAB have indicated that there is a shortage of qualified graduates entering the profession. Adding a BLA program to the UA provides a four-year path to a profession that is in high demand. BLA programs provide greater access to the field as not all students have the ability to attend graduate school. This will help advance the school, college, and university goals in serving underrepresented populations.

² The University of Arizona once had a BLA program with robust enrollments. The program was eliminated in an era when faculty wanted to focus on research and budgets were not a concern.

Competitive Landscape:

At present, there are 96 accredited or candidacy status programs in 70 universities identified by the American Society of Landscape Architects (ASLA)³. Nearly half of these programs (48%) maintain a BLA or BSLA program. There are 44 undergraduate and 52 graduate programs nationwide, with a significant distribution in the Northeast and Mid-Atlantic regions⁴. While there are several programs throughout the West, distribution throughout the Southwest⁵ is relatively limited with just three undergraduate programs: University of Nevada Las Vegas, Utah State University, and Arizona State University. ASU is the only institution with an undergraduate program (BSLA) serving the Arizona market.





lap based on Longitude (generated) and Latitude (generated). Color shows details about Program Type. Size shows sum of Total Students. Details are shown for Zip Code.

Total Students		Program Type
0	10	MLA
0	50	Undergraduate
0	100	
	150	
	≥ 200	

Figure credit: American Society of Landscape Architects

³ <u>https://www.asla.org/FullListofAccreditedPrograms.aspx</u>

⁴ <u>https://www.asla.org/schools.aspx</u>

⁵ Nevada, Arizona, New Mexico, and Utah.

Employment Opportunities:

Graduates from our existing MLA program are well prepared for employment in landscape architecture. According to LAAB's February 2019 re-accreditation report of our program:

"...there are sufficient program opportunities for students to pursue academic interests and alumni are actively employed in the profession. Interviews with employers also reinforce the perception that students are well prepared to enter the profession."

Additionally, as reflected in the attached report from Program Insight by Burning Glass Technologies there is significant projected demand for careers in landscape architecture nationwide (see inserted graph).

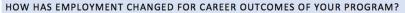
Program Structure:

The Bachelor of Landscape Architecture (BLA) program will prepare students for professional licensure in landscape architecture through a robust, responsive, and professionally-rooted curriculum.

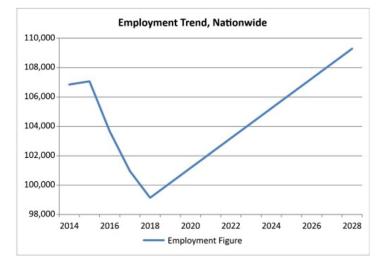
The BLA curriculum addresses emerging

technologies, challenges, and innovations in landscape architectural practice. Through tackling grand challenges facing the built environment, students solve real-world problems in service learning projects that engage and serve Arizona's diverse communities.

A series of progressive landscape architecture design studios and support courses instill a comprehensive understanding of landscape architectural practice, creative problem-solving, and the knowledge, skills, and values necessary for professional success. In accordance with LAAB accreditation standards, the BLA curriculum includes courses on 1) history, theory, and criticism; 2) design and design methods; 3) natural processes and sustainable design strategies; 4) socio-cultural factors in



	2014	2015	2016	2017	2018	2028
Employment (BLS)	106,850	107,070	103,670	100,960	99,140	109,286



Employment data between years 2019 and 2028 are projected figures.

National Employment trends. Report generated using Program Insight from Burning Glass Technologies

design; 5) design implementation; 6) professional communication documentation, and technology; 7) professional practice; and 8) research and scholarly methods. With an existing first-professional MLA program in place, these professional standards are currently being taught at the graduate level. The existing MLA curriculum and courses will help guide the development of the BLA courses in accordance with accreditation standards.

Qualified BLA students will have the opportunity to progress into one of our graduate programs, allowing them to earn both a bachelor's and master's degree in an accelerated amount of time. This would allow students to diversify their skills and enhance their interdisciplinary capabilities. CAPLA offers the following graduate degrees: Master of Architecture, Master of Science in Architecture, Master of Science in Urban Planning, Master of Landscape Architecture, and Master of Real Estate Development. In landscape architecture the master's degree is considered the terminal degree thus students receiving the BLA and MLA would be qualified for academic positions. There is currently a high demand for applicants in these faculty positions.

III. MAJOR REQUIREMENTS— complete the table below by listing the major requirements, including required number of units, required core, electives, and any special requirements, including emphases* (sub-plans), thesis, internships, etc. Note: information in this section must be consistent throughout the proposal documents (comparison charts, four-year plan, curricular/assessment map, etc.). Delete the EXAMPLE column before submitting/uploading. Complete the table in Appendix A if requesting a corresponding minor.

Total units required to complete the degree	122
Upper-division units required to complete the degree	46
Foundation courses	
Second language	Second semester proficiency
<u>Math</u>	Moderate Math Strand: BLA foundation math: MATH 108 (4) Modeling with Algebraic and Trigonometric Functions or higher depending on placement: - MATH 120R (4) Calculus Preparation or - MATH 122B (4) First-Semester Calculus or - MATH 125 (3) Calculus I
General education requirements	 2 courses/ 6 units- Tier I 150 (INDV) 2 courses/ 6 units-Tier I 160 (TRAD) 2 courses/ 6 units-Tier I 170 (NATS) 0 units-Tier II Arts (per college exception) 1 course/ 3 units-Tier II Humanities 1 course/ 3 units-Tier II Individuals and Societies 1 courses/3 units-Tier II Natural Sciences
Pre-major? (Yes/No). If yes, provide requirements. Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.	No.
List any special requirements to declare or gain admission to this major (completion of specific coursework, minimum GPA, interview, application, etc.)	None.

Major requirements	
Minimum # of units required in the major (units	77
counting towards major units and major GPA)	
Minimum # of upper-division units required in	46
the major (upper division units counting	
towards major GPA)	
Minimum # of residency units to be completed	- Students transferring from another accredited BLA program are required
<u>in the major</u>	to complete the following courses (31 cu):
	 LAR 470 Intro to GIS for Planning and Landscape Architecture (4)
	 LAR 3** Design Studio III (6)
	 LAR 3** Design Studio IV (6)
	 LAR 423 Landscape Ecology (3)
	 LAR 4** Design Studio V (6)
	 LAR 4** Design Studio VI (6)
	These students may receive advanced standing for equivalent
	previous coursework.
	- All other transfer students not coming from an accredited BLA program are
	required to complete all 77 units of the BLA core in addition to university
	requirements. These students would have the option of completing ARC
	102 Foundation Studio II (Proposed name change: Built Environment
	Foundation Studio II) during the summer making it possible to enter the
	program in their sophomore year.
Required supporting coursework (courses that	None.
do not count towards major units and major	
GPA, but are required for the major). Courses	
listed must include prefix, number, units, and	
title. Include any limits/restrictions needed	
(house number limit, etc.). Provide	
email(s)/letter(s) of support from home	
department head(s) for courses not owned by	
your department.	
Major requirements. List all major requirements	BLA Core (77)
including core and electives. If applicable, list	- ARC/LAR 101A/B (2/2) Foundation Studio 1A/1B (Proposed name
the emphasis requirements for each proposed	change: Built Environment Foundation Studio)

emphasis*. Courses listed count towards major	- ARC/LAR 131 A/B (1/1) Thinking About Architecture (<i>Proposed</i>
units and major GPA. Courses listed must	name change: Thinking About Design in the Built Environment)
include prefix, number, units, and title. Mark	 (New) LAR 2** (4) Landscape Architecture Intro Studio
new coursework (New). Include any	- (New) LAR 2** (6) Design Studio I
limits/restrictions needed (house number limit,	- (New) LAR 2** (6) Design Studio II
etc.). Provide email(s)/letter(s) of support from	- (New) LAR 3** (6) Design Studio III
home department head(s) for courses not	- (New) LAR 3** (6) Design Studio IV
owned by your department.	- (New) LAR 4** (6) Design Studio V
	- (New) LAR 4** (6) Design Studio VI
	- (New) LAR 2** (3) Site Engineering
	 (New) LAR 2** (3) Landscape Construction
	 (New) LAR 2** (3) History and Theory of Landscape Architecture
	- LAR 420 (4) Plant Materials
	- LAR 423 (3) Landscape Ecology
	 LAR 470 (4) Intro to GIS for Planning and Landscape Architecture
	 LAR 440 (3) History, Theory and Contemporary Landscape
	Architecture
	- LAR 426 (4) Planting Design
	 LAR 460 (3) Professional Practice/Working Drawings
	- LAR 496A (1) Special Topics in Landscape Architecture
	Notes:
	 Both ARC/LAR 101A/B and ARC/LAR 131A/B will be co-convened with first semester BArch students.
	- Course content from several of the MLA courses would be adaptable for the BLA. For example, all studio courses, LAR 2** Site Engineering, LAR 2**
	Landscape Construction, and LAR 2** History and Theory of Landscape
	Architecture already exist at the graduate level in the first-professional
	MLA program.
	- LAR 460 Professional Practice/Working Drawings is currently listed for 2
	credits and will be modified to 3 credits.
Internship, practicum, applied course	No.
requirements (Yes/No). If yes, provide	
description.	

Senior thesis or senior project required (Yes/No). If yes, provide description.	Yes, completed as part of coursework in LAR 4** Design Studio VI. Students are expected to undertake an independent in-depth, site-specific, and self-directed landscape architecture research and design project that draws on skills, knowledge, and values acquired in the program.
Additional requirements (provide description)	None.
Minor (specify if optional or required)	Optional.
Any <u>double-dipping restrictions</u> (Yes/No)? If yes, provide description.	No.

*Emphases are officially recognized sub-specializations within the discipline. <u>ABOR Policy 2-221 c. Academic Degree Programs</u> <u>Subspecializations</u> requires all undergraduate emphases within a major to share at least 40% curricular commonality across emphases (known as "major core"). Total units required for each emphasis must be equal. Proposed emphases having similar curriculum with other plans (within department, college, or university) may require completion of an additional comparison chart. Complete the table found in Appendix B to indicate if emphases should be printed on student transcripts and diplomas. IV. CURRENT COURSES—using the table below, list all existing courses included in the proposed major. You can find information to complete the table using the <u>UA course catalog</u> or <u>UAnalytics</u> (Catalog and Schedule Dashboard> "Printable Course Descriptions by Department" On Demand Report; right side of screen). If the courses listed belong to a department that is not a signed party to this implementation request, upload the department head's permission to include the courses in the proposed program and information regarding accessibility to and frequency of offerings for the course(s). Upload letters of support/emails from department heads to the "Letter(s) of Support" field on the UAccess workflow form. Add rows to the table, as needed.

Course prefix and number (include cross- listings)	Units	Title	Course Description	Pre-requisites	Modes of delivery (online, in- person, hybrid)	Typically Offered (F, W, Sp, Su)	Dept signed party to proposal? (Yes/No)
ARC/LAR 101 A/B	2/2	Foundation Studio 1A/1B (Proposed name change: Built Environment Foundation Studio)	A studio-based course introducing the fundamentals of design and its role in the built environment through drawing, modelling and a lecture component.	None	In-person	F	Yes
LAR 420	4	Plant Materials	This course focuses on the examination and evaluation of plants effectively used in landscapes of the Southwest. Emphasis is placed on strategies useful for plant identification and appropriate plant selection for a variety of landscape uses. Field studies will be the primary mode of instruction whereas classroom lectures provide support material for the field work.	None	In-person	F	Yes
LAR 423	3	Landscape Ecology	The emphasis of this course is the understanding and subsequent use of principles of landscape ecology. This will be accomplished through the study of how spatial heterogeneity in landscapes influences various ecological processes in natural and created landscapes.	None	Hybrid	Sp	Yes

LAR 470	4	Intro to GIS for Planning	This course is an introduction to	None	In-person	F	Yes
		and Landscape	Geographic Information Systems (GIS)				
		Architecture	for undergraduate students interested				
			in design and the built environment. We				
			will focus on three core usage domains				
			of GIS: data management,				
			communication/visualization, and				
			analysis. Specifically, this class focuses				
			on how fluency in these domains				
			contributes to better design and				
			planning of the built environment.				
LAR 440	3	History, Theory and	This course examines landscape	None	In-person	F	Yes
		Contemporary	architecture from an historic and				
		Landscape Architecture	contemporary perspective as reflected				
			in theory and practice. Through case				
			reviews of built works including				
			significant estates, gardens, urban				
			designs, park systems, corporate				
			landscapes, restored natural sites,				
			heritage sites, waterfront projects,				
			resorts, et al., students will explore the				
			evolution of design ideology and				
			application of theory in the practice of				
			landscape architecture.				
LAR 426	4	Planting Design	Principles of planting design, planting	C or better in LAR	In-person	Sp	Yes
			design process, and functional and	420 Plant			
			aesthetic uses of plants in designs are	Materials.			
			discussed. Studio projects focus on				
			development of planting plans for sites				
			with various scopes and conditions.				

LAR 460	3	Professional Practice	The practice of landscape architecture including professionalism, registration, the landscape architectural profession, services and fees, construction contract documents, bid documents and procedures, and business organization and operation.	In-person	Sp	Yes
LAR 496A*	1	Landscape Architecture Seminar I [~]	This course exposes students to various components of professional scholarship.	In-person	F	Yes

* Undergraduate 400-level sections need to be created for existing 500-level courses ~ Proposed name change to *Special Topics in Landscape Architecture*

Note: The following BLA courses are included in the Bachelor of Sustainable Built Environments Sustainable Landscapes Emphasis: LAR 420 *Plant Materials*; LAR 423 *Landscape Ecology;* and LAR 440 *History, Theory and Contemporary Landscape Architecture.*

The following BLA courses are listed for inclusion in the proposed Urban Horticulture sub-plan for the Bachelor of Science in Sustainable Plant Systems degree offered by the School of Plant Sciences, Department of Biosystems Engineering, and the Department of Environmental Science at the University of Arizona:

Required: LAR 420 Plant Materials

Elective option: LAR 423 Landscape Ecology

V. NEW COURSES NEEDED – using the table below, list any new courses that must be created for the proposed program. If the specific course number is undetermined, please provide level (ie CHEM 4**). Add rows as needed. Is a new prefix needed? If so, provide the subject description so Curricular Affairs can generate proposed prefix options.

Course prefix and number (include cross- listings)	Units	Title	Course Description	Pre- requisites	Modes of delivery (online, in- person, hybrid)	Stat us*	Anticipate d first term offered	Typically Offered (F, W, Sp, Su)	Dept signed party to proposal? (Yes/No)	Faculty members available to teach the courses
ARC 131A/B	1/1	Thinking About Architecture (Proposed name change: Thinking About the Built Environment)	The course provides an overview of the role of architecture in the design of the built environment using examples of notable buildings and structures.	None	In- person	D	Fall 2020	F	Yes	Lecturer Gina Chorover Co-teaching with Professor of Practice Daniel Hoffman
LAR 2**	4	Landscape Architecture Intro Studio	This studio course introduces students to design thinking and the principles of design. The course incorporates design theory, creative problem solving, and oral, written and visual communication skills including hand drawing and digital media graphics. Students are exposed to the basics of design processes including: site analysis, program and concept development, and design synthesis.	none	In- person	D	Spring 2021	Sp	Yes	Lecturer Travis Mueller

LAR 2**	6	Design Studio I	This studio course incorporates design thinking, principles of design, and design processes in the execution of site design problems that utilize site analysis skills, incorporate background research, and demonstrate concept and iterative design development resulting in schematic design solutions. Design communication skills including hand drawing and digital media graphics in 2D and 3D are practiced. Spatial sequences are diagramed and developed with focus on built and natural	Concurrent enrollment or C or better in LAR 1** Intro to Landscape Architectur e.	In- person	D	Fall 2021	F	Yes	Lecturer Kelly Cederberg, MLA or CT Practitioner TBD
			materials including plant masses and forms.							
LAR 2**	6	Design Studio II	This studio course advances skills and knowledge from Design Studio I with application of design thinking, principles of design, design processes, and design communication in the comprehensive execution of several site design projects. Creative problem-solving techniques are reviewed and reinforced and the skills learned in LAR 2XX Site Engineering are practiced. Students will have the opportunity to participate in a travel study program during spring break.	Concurrent enrollment or C or better in LAR 2** Landscape Architectur e Intro Studio.	In- person	D	Spring 2022	Sp	Yes	Lecturer Gina Chorover

LAR 3**	6	Design Studio III	This studio course expands the	C or	In-	D	Fall 2022	F	Yes	Lecturer
			scope of student design practice	better in	person					Travis
			to include greater attention to	LAR 2**						Mueller
			real-world complex scenarios.	Design						
			Knowledge, skills, and values	Studio II.						
			learned in previous semesters							
			are incorporated into							
			coursework with projects that							
			include a variety of scales, such							
			as site, neighborhood, and							
			landscape. The course advances							
			critical thinking skills; students							
			conduct appraisals of their							
			design work based on identified							
			project goals. Students							
			formulate professional							
			presentations (graphic, written,							
			and oral) that describe their							
			design intentions and results.							

LAR 3**	6	Design Studio	This interdisciplinary studio	C or	In-	D	Spring	Sp	Yes	New tenure
	Ū	IV -	courses includes BLA and BArch	better in	person	_	2023			track hire –
		Interdisciplinary	students. Through collaborative	LAR 3**	I					Assistant
		Urban Design	methods, multi-disciplinary	Design						Professor of
		Studio	work, and urban design	Studio III.						Landscape
			outreach, students prepare for							Architecture
			interdisciplinary professional							, Urban
			practice. Students will have							Design.
			expanded creative freedom to							(Anticipated
			collectively explore, in team							FTE:
			approaches, built environment							.75 MLA,
			solutions to the grand							.25 BLA)
			challenges that face society.							,
			Sustainable design strategies,							UA job
			socio-cultural frameworks,							posting:
			health and well-being, and							F22089.
			aesthetic theory and innovation							
			will inform design decisions.							Desired start
										date: 8/3/20
			(co-convened with ARCH 451a)							
										This hire
			Note: Faculty and students from							was
			other programs may be invited							approved
			to participate as project							for the
			consultants.							existing MLA
										program.

LAR 4**	6	Design Studio V - Interdisciplinary Outreach Studio	This interdisciplinary studio course includes BLA and BArch students. Students will work with community clients and campus partners to address real world complex urban and rural design projects. Through collaborative methods, and multi-disciplinary work, students will use research and technology to develop solutions that advance practice. Students will also develop design implementation strategies. Sustainable design strategies, socio-cultural frameworks, health and well-being, and aesthetic theory and innovation will inform design decisions. (co-convened with ARCH 451b) Note: Faculty and students from other programs may be invited to participate as project	C or better in LAR 3** Design Studio IV.	In- person	D	Fall 2023	F	Yes	Lecturer Tim Johnson, MLA or CT Lecturer TBD co- teaching with architecture faculty TBD
LAR 4**	6	Design Studio VI - Capstone studio	consultants. This studio course requires students to identify and develop independent projects that demonstrate proficiency in landscape architecture. Students will employ skills, knowledge, and values learned and applied in all previous courses. Projects will have a research component aimed at	C or better in LAR 4** Design Studio V.	In- person	D	Spring 2024	Sp	Yes	Associate Professor Bo Yang

LAR 2**	3	Site Engineering	This technical course introduces students to the engineering aspects of landscape architecture and site planning. Student gain technical competency in grading and earthwork design, storm water management, and road alignment while incorporating design principles and sustainability strategies.		In- person	D	Fall 2021	F	Yes	Assistant Professor Kirk Dimond co-teaching with CT Practitioner TBD
LAR 2**	3	Landscape Construction	This technical course prepares students to complete construction documents according to industry standards established by the Council of Landscape Architectural Registration Boards (CLARB) and the American Society of Landscape Architects (ASLA). Students develop site grading and drainage plans, site material specification plans, dimensioning plans, and construction details. Students learn professional standards for technical drawing layout applicable for construction. The course prepares students for professional practice and licensure.	C or better in LAR 2** Site Engineeri ng.	In- person	D	Spring 2022	Sp	Yes	Assistant Professor Kirk Dimond co-teaching with CT Practitioner TBD

LAR 2**	3	History and	This course examines landscape	None.	In-	D	Spring	Sp	Yes	Lecturer
		Theory of	architecture from an historic		person		2022			Gina
		Landscape	and contemporary perspective							Chorover
		Architecture	as reflected in theory and							
			practice. Through case reviews							
			of built works including							
			significant estates, gardens,							
			urban designs, park systems,							
			corporate landscapes, restored							
			natural sites, heritage sites,							
			waterfront projects, resorts,							
			etc., students will explore the							
			evolution of design ideology and							
			application of theory in the							
			practice of landscape							
			architecture.							

*In development (D); submitted for approval (S); approved (A)

Subject description for new prefix (if requested). Include your requested/preferred prefix, if any:

VI. FACULTY INFORMATION- complete the table below. If UA Vitae link is not provided/available, attach a short CV (2-3 pages) to the end of the proposal or upload to the workflow form (in the "Letter(s) of Support" field). UA Vitae profiles can be found in the <u>UA directory/phonebook</u>. Add rows as needed. Delete the <u>EXAMPLE</u> rows before submitting/uploading. NOTE: full proposals are distributed campus-wide, posted on committee agendas and should be considered "publicly visible". Contact Pam Coonan and Martin Marguez if you have concerns about CV information being "publicly visible".

Faculty Member	Involvement	UA Vitae link or "CV attached"
Gina Chorover, MLA, AICP	co-teach ARC 101A/B Foundation Studio w/current architecture faculty; Co-teach: ARC/LAR 131A/B Thinking about Architecture; Co-teach: LAR 2** History and Theory of Landscape Architecture; LAR 2** Design Studio II	CV attached
Kirk Dimond, MLA	Co-teach LAR 2** Site Engineering; co-teach LAR 2** Landscape Construction	CV attached
Jennifer Patton, MLA	Teach: LAR 2** Site Engineering; Teach: LAR 2** Landscape Construction	CV attached
Margaret Livingston, PhD	LAR 420 Plant Materials; LAR 423 Landscape Ecology; LAR 426 Planting Design;	CV attached
Lauri Macmillan Johnson, MLA, FCELA	LAR 440 History, Theory and Contemporary Landscape Architecture	CV attached
Travis Mueller, MLA	co-teach ARC 101A/B Foundation Studio (<i>Proposed name change Built Environment Foundation Studio</i>) w/current architecture faculty; LAR 2** Landscape Architecture Intro Studio; LAR 3** Design Studio III;	CV attached
Daniel Hoffman, AIA	ARC 101A Foundation Studio 1A Lecture; Co-teach ARC 101A Foundation Studio 1A – Studio; Co-teach ARC/LAR 131A/B Thinking about Architecture (<i>Proposed name change: Thinking About Design in the Built Environment</i>)	CV attached
Shujuan Li, PhD	LAR 470 Intro to GIS for Planning and Landscape Architecture	CV attached
Bo Yang, PhD	co-teach LAR 4** Design Studio VI - Capstone Studio	CV attached
Kelly Cederberg, MLA or CT	LAR 2** Design Studio I (6)	CV attached
Nate Richie. MLA	LAR 460 Professional Practice	CV attached
Tim Johnson, MLA ⁶	LAR 4** Design Studio V - Interdisciplinary Outreach Studio	CV attached
Nancy Pollock-Ellwand, PhD	LAR 496A Landscape Architecture Seminar I	CV attached

⁶ Anticipated hire date January 6th, 2020.

VII. FOUR-YEAR PLAN – provide a sample four-year degree plan that includes all requirements to graduate with this major and takes into consideration course offerings and sequencing. Refer to <u>Degree Search</u> for examples. Use generic title/placeholder for requirements with more than one course option (e.g. Upper Division Major Elective, Minor Course, Second Language, GE Tier 1, GE Tier 2). Add rows as needed.

Semester 1		Semester 2		Semester 3		Semester 4	
Course prefix and	Units	Course prefix and	Units	Course prefix and	Units	Course prefix and	Units
number		number		number		number	
GE Tier 1	3	Second Language	4	GE Tier 1	3	GE Tier 1	3
Second Language	4	MATH 108	4	GE Tier 1	3	LAR 2** History and	3
						Theory of Land Arch	
ENGL 101	3	ENGL 102	3	LAR 2** Site	3	LAR 2** Landscape	3
	5			Engineering		Construction	
ARC/LAR 101A/B	2/2	LAR 2** Landscape Architecture Intro	4	LAR 2** Design Studio I	6	LAR 2** Design Studio II	6
Foundation Studio ⁷							
ARC/LAR 131 A/B							
Thinking About		Studio					
Architecture ⁸							
Total	16	Total	15	Total	15	Total	15

Semester 5		Semester 6		Semester 7		Semester 8	
Course prefix and number	Units	Course prefix and number	Units	Course prefix and number	Units	Course prefix and number	Units
GE Tier 1	3	GE Tier 1	3	LAR 440 History, Theory and Contemp. Land Arch	3	GE Tier 2	3
LAR 470 Intro to GIS for Planning and Landscape Architecture	4	GE Tier 2	3	LAR 426 Planting Design	4	GE Tier 2	3

⁷ Proposed name change: Built Environment Foundation Studio

⁸ Proposed name change: Thinking about Design in the Built Environment

LAR 420 Plant Materials	4	LAR 423 Landscape Ecology	3	LAR 496A Special Topics in Land Arch	1	LAR 460 Professional Practice/Working Drawings	3
LAR 3** Design Studio III	6	LAR 3** Design Studio IV	6	LAR 4** Design Studio V	6	LAR 4** Design Studio VI – Capstone Studio	6
Total	17	Total	15	Total	14	Total	15

VIII. STUDENT LEARNING OUTCOMES AND CURRICULUM MAP—describe what students should know, understand, and/or be able to do at the conclusion of this major. Work with Office of Instruction and Assessment to create a curricular map using Taskstream. Include your curricular map in this section (refer to Appendix C for sample Curriculum Map generated using Taskstream).

Outcome 1	Students will define and develop design processes, methods, and solutions.
	Students will be able to identify appropriate methods of design inquiry and
	problem-solving processes (including research methods) to produce creative
	solutions to identified problems and questions.
Outcome 2	Students will develop effective written, oral, and graphic communication
	skills.
	Students will be able to communicate design methods and processes
	including analyses, programs, concept development, and solutions in written,
	oral, and graphic ways using appropriate media.
Outcome 3	Students will understand sustainable design strategies.
	Students will be able to create design concepts and solutions that use best
	practices for stormwater management, urban heat island mitigation, plant
	and ecosystem design, and landscape performance assessment.
Outcome 4	Students will gain knowledge and awareness of professional practices.
	Students will apply the principles of social justice, diversity and inclusion,
	cultural heritage, and ethics and act responsibly towards the public,
	profession, and environment.
Outcome 5	Students will demonstrate critical thinking skills and an understanding of
	the theoretical and historical context of the profession of landscape
	architecture.
	Students will understand the history and theory of landscape architecture
	and appropriate applications for practice.

Detailed Description of Student Learning Outcomes

Curriculum Map:

			Out	come	
	Outcome 1 Students will define and develop design processes, methods, and solutions	Outcome 2 Students will develop effective written, oral, and graphic communication skills	Outcome 3 Students will understand sustainable design strategies	Outcome 4 Students will gain knowledge and awareness of professional practices	Outcome 5 Students will demonstrate critical thinking skills and an understanding of the theoretical and historical context of the profession of landscape architecture
Core Courses			·	•	
ARC/LAR 101A/B Foundation Studio	I/P	I/P	I/P	I/P	I/P
ARC/LAR 131A/B Thinking about Architecture	I/P	Р	I	I	I/P
LAR 2**: Landscape Architecture Intro Studio	I/P	I/P	I/P	I/P	I/P
LAR 2**: Studio I	I/P	I/P	I/P	I/P	I/P
LAR 2**: Site Engineering	I	I/P	I/P	Р	P
LAR 2**: Studio II	I/P	Р	Р	Р	Р
LAR 2**: Landscape Construction	I/P	Р	Р	Р	Р
LAR 2**: History and Theory of LA	I/P	Р	I	I	I/P
LAR 420: Plant Materials	I	I	I	I	-
LAR 3**: Studio III	Р	Р	Р	Р	Р
LAR 423: Landscape Ecology	Р	Р	Р	I	Р
LAR 470: Intro to GIS	Р	Р	Р	Р	Р

LAR 3**: Studio IV	Р	Р	Р	Р	Р
LAR 4**: Studio V	Р	Р	Р	Р	Р
LAR 440: History,					
Theory and					
Contemporary	Р	Р	Р	Р	I/P
Landscape					
Architecture					
LAR 426: Planting	Р	Р	Р	Р	Р
Design	F	F	Г	F	F
LAR 496A: Special					
Topics in Landscape	I	I	I.	I.	I
Architecture					
LAR 460: Professional					
Practice/Working	I	I/P	Р	Р	Р
Drawings					
Program Outcome-Asse	essment Activities				
Direct Measure:					
LAR 4** Studio VI					
(Capstone)	А	А	А	A	А
Final Design Project					
and Oral Presentation					
Indirect Measure:					
Graduating Senior	А	А	А	А	А
Survey					

IX. ASSESSMENT PLAN FOR STUDENT LEARNING- using the table below, provide a schedule for program assessment of intended student learning outcomes 1) while students are in the program and 2) after completion of the major. Add rows as needed. Delete EXAMPLE row.

Learning Outcomes	Sources(s) of Evidence	Assessment Measures	Data Collection Points
Outcome 1: Students will define and develop design	Capstone project	Grading Rubric	End of LAR 4** Design Studio VI Capstone course
processes, methods, and solutions	Exit survey of graduating students	Self-assessed rating	Exit survey just prior to graduation
Outcome 2: Students will develop effective written,	Capstone project	Grading Rubric	End of LAR 4** Design Studio VI Capstone course
oral, and graphic communication skills	Exit survey of graduating students	Self-assessed rating	Exit survey just prior to graduation
Outcome 3: Students will understand sustainable	Capstone project	Grading Rubric	End of LAR 4** Design Studio VI Capstone course
design strategies	Exit survey of graduating students	Self-assessed rating	Exit survey just prior to graduation
Outcome 4: Students will gain knowledge and	Capstone project	Grading Rubric	End of LAR 4** Design Studio VI Capstone course
awareness of professional practices	Exit survey of graduating students	Self-assessed rating	Exit survey just prior to graduation
Outcome 5: Students will demonstrate critical thinking	Capstone project	Grading Rubric	End of LAR 4** Design Studio VI Capstone course
skills and an understanding of the theoretical and historical context of the profession of landscape architecture	Exit survey of graduating students	Self-assessed rating	Exit survey just prior to graduation

X. PROGRAM ASSESSMENT PLAN- using the table below, provide a schedule for program evaluation 1) while students are in the program and 2) after completion of the major. Add rows as needed. Delete **EXAMPLE** rows.

Assessment Measure	Source(s) of Evidence	Data Collection Point(s)
In program. Student retention and	UAccess Analytics	Census date each semester
graduation rates		
After program completion. Job	Student/Alumni Survey	At graduation exit survey and alumni
Placement or Graduate School		survey annually
Enrollment, and Student Satisfaction		
Academic Program	Report from external APR or	Every 7 years, or as dictated by our
Review/Accreditation Self-Study	Accreditation committee	accrediting board
Report and Site Visit*		
Adherence to accreditation standards	Annual Reports to LAAB	Annually, due August 1 st
as defined by the Landscape		
Architecture Accreditation Board		
(LAAB)*		

*Note: Our existing MLA program is accredited by the Landscape Architecture Accreditation Board (LAAB). As we intend to apply for accreditation for the proposed BLA program, we are required to maintain certain accreditation standards and conduct ongoing program assessment. The five learning outcomes identified on page 28 are condensed in order to meet the requirements of the UArizona Taskstream reporting system. However, LAAB requires that the program covers approximately fifty learning outcomes. We have included in our attachments the detailed curriculum map which demonstrates how our proposed curriculum will meet the standards of LAAB.

XI. ANTICIPATED STUDENT ENROLLMENT-complete the table below. What concrete evidence/data was used to arrive at the numbers?

5-YEAR PROJECTED ANNUAL ENROLLMENT					
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
Number of	25	47	68	88	91
Students					

Data/evidence used to determine projected enrollment numbers:

Based on data provided in Section II, and the marginal cost considerations included in the budget documentation, we expect to maintain an ongoing enrollment of 25 incoming students per year, 85% of whom will go on to graduate within 6-years (see Section IX). Due to the nature of our studio-centric curriculum and need for low student-faculty ratios, it is vital to keep class sizes small to maintain a high quality of instruction throughout the program.

XII. ANTICIPATED DEGREES AWARDED- complete the table below, beginning with the first year in which degrees will be awarded. How did you arrive at these numbers? Take into consideration departmental retention rates. Use <u>National Center</u> for Education Statistics College Navigator to find program completion information of peer institutions offering the same or a similar program.

PROJECTED DEGREES AWARDED ANNUALLY					
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
Number of	20	21	22	22	22
Degrees					

Data/evidence used to determine number of anticipated degrees awarded annually:

Our school has an historically high retention and graduation rate. For example, over the last three years our undergraduate Bachelor of Science in Sustainable Built Environment has seen an on-time graduation rate of 80%, and our three-year Master of Landscape Architecture program has seen an on-time graduation rate of approximately 90%.

When looking at the graduation rates of three selected peer institutions: University of Illinois Urbana-Champaign, Texas A&M University, and Pennsylvania State University, we see 4- and 6-year graduation rates of 66% and 85%; 70% and 84%; and 52% and 82%, respectively. When considering our school's graduation rates in addition to the average across these peer institutions, we arrive at an 80% 4-year graduation rate and an 85% 6-year graduation rate for students in the BLA program.

XIII. **PROGRAM DEVELOPMENT TIMELINE-** describe plans and timelines for 1) marketing the major and 2) student recruitment activities.

Marketing the Major

Post-Degree Approval: Immediate

- Add program description and major information to CAPLA web page
- Development of marketing materials in coordination with CAPLA marketing staff, faculty and UA Marketing and Brand Management
 - \circ Google Ad-words
 - $\circ \quad \text{Web banner ads} \quad$
 - o Social media campaigns through main UA and CAPLA channels
 - o Collateral/print materials for distribution
- Undergraduate Recruitment Coordinator and Advising Team to begin educating prospective students about BLA program
 - NACAC/RMACAC⁹ HS Recruitment fairs
 - High school/community college visits & fairs
 - High school & Transfer Advisor/Counselor visits and info sessions
 - Non-degree seeking/partner programs, student major info sessions
 - Weekly Tours and other UA campus recruitment events (ie: Arizona Experience Days)
 - o UA Admissions Recruitment training/updates and fly-in or site visits
- Engage with local landscape architecture firms to increase awareness of program
 - Provide opportunities for prospective students to learn about Landscape Architecture through firm visits and engage with alumni from the MLA program
- Electronic trade journal and professional association program announcement American Society of Landscape Architects, Council of Educators in Landscape Architecture (CELA)

Post-Degree Approval: Ongoing

- Distribute printed/digital marketing material to:
 - Recruitment Coordinators, Admissions Counselors, Program coordinators and advisors for distribution across campus

⁹ National Association for College Admission Counseling/Rocky Mountain Association for College Admission Counseling

- Traditional (physical) and digital billboards across campus (ie: student union, library resource centers and student recreation centers)
- Update dynamic CAPLA webpage content to include student work and student outreach activities
- Continued engagement with local landscape architecture firms to increase awareness of program and maintain professional-student relationships and engagement activities.
 - Job Fair participation
 - o Firm Visits/Alumni professional engagement

Student Recruitment

- In-person recruitment efforts, beginning Spring 2020:
 - On-Campus:
 - Presentations to relevant general education classes and to undeclared students by current BLA/MLA faculty and MLA students.
 - Host brown-bag, Lunch-n-Learns or other similar information sessions at the college for interested current students.
 - Invite interested students to community events hosted or supported by the program, encouraging
 interaction with the current student population and faculty.
 - Off -Campus:
 - Make presentations to high schools and community colleges with a focus on resident student retention. Consider sending current students from related programs as ambassadors.
 - Provide training and information to UA International recruiters about program.
 - Elementary engagement and outreach through community events (ie: STEM Fairs, HS/Elementary classroom visits)
 - Participate in college fairs across Arizona and the nation highlighting the strength of our program.
 - NACAC/RMACAC HS Recruitment fairs
 - High school/community college visits & fairs
 - High school & Transfer Advisor/Counselor visits and info sessions
 - Non-degree seeking/partner programs, student major info sessions
 - Weekly Tours and other UA campus recruitment events (ie: Arizona Experience Days)
 - UA Admissions Recruitment training/updates and fly-in or site visits
- Assess recruitment efforts at the end of recruitment cycle to determine efficacy and create plan for following

semester.

- Manage student prospects through UA Admissions (SLATE platform) to communicate with inquires as early as Freshman cohorts in High Schools
- Track students through admissions pipeline from inquiry to application to matriculation.

Program Accreditation

The program will seek Candidacy accreditation status during the initial semesters of program implementation. The program will seek full accreditation upon the successful graduation of the first cohort in accordance with LAAB accreditation procedures. See p.6 "Accreditation Procedures":

https://www.asla.org/uploadedFiles/CMS/Education/Accreditation/LAAB_ACCREDITATION_PROCEDURES_March2016.pdf

XIV. DIVERSITY AND INCLUSION-describe how you will recruit diverse students and faculty to this program. In addition, describe retention efforts in place or being developed in order to retain students.

A primary goal identified in the CAPLA strategic plan is to make CAPLA a leader in inclusive excellence. In October 2018, the Diversity and Inclusive Excellence College Subcommittee produced a report with specific recommendations for the college in order to achieve this goal (see attached report: DIVERSITY AND INCLUSIVE EXCELLENCE COMMITTEE REPORT AND ACTION PLAN - CAPLA). The School of Landscape Architecture is dedicated to inclusive excellence; the recognition and acceptance of the talents, worldviews, perceptions, cultures, and skills that diverse communities bring to the educational enterprise that can be harnessed to prepare students for leading, living, and working in a diverse world. Design of the built environment must include diverse perspectives. Thus it is critical we recruit underrepresented candidates into the field. The faculty have identified the following recruitment best practices to maximize the pool of diverse faculty and students:

Recruitment of Diverse Faculty

- Utilize search committees that are committed to diversity and inclusive excellence
- Identify a diverse pool of candidates through professional networking/connections of existing faculty
- Advertise faculty positions across a wide array of media
- Contact all promising candidates directly and encourage them to apply
- Provide opportunities for candidates to meet with diverse faculty, staff and students and provide a welcoming environment for all candidates during campus visits
- Highlight the university's status as a Hispanic-Serving Institution to all prospective candidates
- Include diversity and inclusiveness statements in all job searches, marketing, and promotional materials

Recruitment of Diverse Students

- Use social media and the website to attract diverse candidates
- Attend recruiting events held in a variety of settings, including locations that have underrepresented candidates
- Utilize student ambassadors from the MLA program to recruit students from diverse student clubs and organizations across campus. A comprehensive list of these clubs is available from the University's office of Equity, Inclusion & Title IX at: <u>https://diversity.arizona.edu/student-clubs-organizations</u>
- Engage in recruitment activities at local high schools and Pima Community College

XV. ABOR REQUIREMENT: New Academic Program Request. This section is required by ABOR. Most of the information can be copied/pasted from completed sections above. Instructions/clarification for completing the table below, from ABOR, can be viewed/downloaded <u>here</u>.

University: University of Arizona

Name of Proposed Academic Program: Bachelor of Landscape Architecture

Academic Department: School of Landscape Architecture and Planning, College of Architecture, Planning and Landscape Architecture

Geographic Site: University of Arizona Main Campus (Tucson)

Instructional Modality: In-person

Total Credit Hours: 122

Proposed Inception Term: Fall 2020

Brief Program Description:

Why Landscape Architecture?

Landscape architecture is a profession of increasing importance in the face of climate change and swelling urban populations. According to the American Society of Landscape Architects (ASLA), "Landscape architects are involved in regional master planning, conservation and restoration efforts, urban design, and park and green roof design and construction. At all scales, they bring a critical eye for social and artistic value to the design process." Landscape architects work closely with architects and city planners to create high-performing green spaces and implement solutions to improve quality of life, protect natural resources, preserve cultural heritage, manage stormwater, and create quality, healthful public places.

The Bachelor of Landscape Architecture (BLA) is a first professional four-year degree that will prepare students to successfully enter the job market and become licensed professionals. The robust curriculum includes classwork and design studios that instill a

comprehensive understanding of professional practice, creative problem-solving, and the knowledge, skills, and values necessary to become sustainability-minded landscape architects prepared to enter the workforce upon graduation.

Workforce Demand

Demand for trained landscape architects is high, and is growing at the local and national levels. Based on data from the Landscape Architectural Accreditation Board, Burning Glass Technologies' Program Insight Report, and letters of support from local and national practitioners, it is clear that there is a shortage of qualified graduates entering the profession. This professional undergraduate BLA degree will fill this gap while advancing college and university strategic plan goals.

College Expertise and Resources

The program draws on the expertise of faculty in the College of Architecture, Planning, and Landscape Architecture to teach students the core competencies of the profession: history, theory, and criticism; design and design methods; sustainable design strategies and natural processes; socio-cultural design factors; design implementation; professional communication, documentation, and technology; and professional practice policies, procedures, and ethics.

By leveraging college resources, including those in our existing Master of Landscape Architecture program, we are confident in our ability to successfully launch the BLA program in Fall 2020. Course content from many existing Master of Landscape Architecture (MLA) courses will be incorporated into equivalent BLA courses, select upper division BLA courses will be co-convened with MLA students. Two upper division studio courses will have an interdisciplinary component, being co-convened with Bachelor of Architecture students. Opportunities exist for BLA students to earn graduate degrees in an accelerated period of time. Qualified students will be able to earn an MLA with one additional year of study (4+1); or can pursue other graduate degrees in CAPLA on an accelerated schedule: MS Architecture, M Architecture, M Real Estate Development, and MS Urban Planning.

Additionally, the BLA program gives students who enrolled in the pre-architecture program another built environment design degree option should they discover that architecture is not a good fit for their career interests. The pre-architecture program loses approximately 25% of its students in the first semester.

Strategic Plan Goals and Community Partnerships

Consistent with the university's strategic plan goals, the curriculum will prepare students with the advanced technologies and design and planning skills needed to meet the challenges and opportunities that will arise during the Fourth Industrial Revolution (4IR). The BLA program will equip students with the skills and mindsets to lead in the 4IR and tackle the grand challenges in the built environment, and will utilize the diverse professional, entrepreneurial, and technological resources available in our community. In alignment with CAPLA's strategic plan, interdisciplinary studios will engage students with local landscape architects and allied professionals on community design projects, which can lead to funding sources and local industry/practitioner growth. Students will graduate with the essential methods and tools needed to become future leaders in the built environment.

Diversity and Inclusion

In keeping with the university's strategic plan goal of increasing student diversity and success, specific efforts will be made to recruit a diverse student body. The recognition and acceptance of the talents, worldviews, perceptions, cultures, and skills that diverse communities bring to the educational enterprise can be harnessed to prepare students for leading, living, and working in a diverse world. Design of the built environment must include diverse perspectives. Therefore, it is critical we recruit underrepresented candidates into the field. In direct service of this goal, CAPLA's Diversity and Inclusive Excellence College Subcommittee produced a report in October 2018 with specific recommendations for the college in order to achieve this goal.

Learning Outcomes and Assessment Plan: The faculty have identified 5 learning outcomes* for the BLA program:

Detailed Description of Student Learning Outcomes

Outcome 1	Students will define and develop design processes, methods, and solutions.
	Students will be able to identify appropriate methods of design inquiry and problem-solving processes (including
	research methods) to produce creative solutions to identified problems and questions.
Outcome 2	Students will develop effective written, oral, and graphic communication skills.
	Students will be able to communicate design methods and processes including analyses, programs, concept
	development, and solutions in written, oral, and graphic ways using appropriate media.
Outcome 3	Students will understand sustainable design strategies.
	Students will be able to create design concepts and solutions that use best practices for stormwater
	management, urban heat island mitigation, plant and ecosystem design, and landscape performance
	assessment.
Outcome 4	Students will gain knowledge and awareness of professional practices.
	Students will apply the principles of social justice, diversity and inclusion, cultural heritage, and ethics and act
	responsibly towards the public, profession, and environment.
Outcome 5	Students will demonstrate critical thinking skills and an understanding of the theoretical and historical
	context of the profession of landscape architecture.
	Students will understand the history and theory of landscape architecture and appropriate applications for
	practice.

Measures

Direct measure: a grading rubric applied to the LAR 4** Design Studio VI Senior Capstone project.

<u>Indirect measure</u>: a survey of graduating students in which they self-assess their knowledge in each of the learning outcomes. The survey will be administered just prior to graduation from the program.

*Because we intend to apply for accreditation for the proposed BLA program, we are required to maintain certain accreditation standards and conduct ongoing program assessment as defined by the Landscape Architecture Accreditation Board (LAAB). LAAB requires that the program covers approximately fifty learning outcomes. The faculty have created a detailed curriculum map to show how our proposed BLA curriculum will meet the full accreditation standards of LAAB.

Projected Enrollment for the First Three Years:

Year 1	Year 2	Year 3
25	47	68

Evidence of Market Demand:

Market Size and Projected Enrollments

The estimation of demand is evidenced in a 2018 report published by the American Society of Landscape Architecture (ASLA) which identified a total of 5,376 students enrolled in a landscape architecture program. Of those enrollments, 3,320 of students (62%) are classified undergraduate and 2,056 (38%) are enrolled at the graduate-level. Without a BLA offering, CAPLA is becoming increasingly misaligned with market trends and shifts in student preference which indicate growth in undergraduate BLA programs.

Based on an analysis of existing programs and market size, we expect to have approximately 25 students entering the program on an annual basis. With approximately 3,320 students enrolled in an accredited BLA/BSLA program in the United States this suggests a market size based on US CBSA population = approximately 325 million (3,320 students / 325 million = approximately 10 students/million). With approximately 1 million people in the Tucson metro area, we can estimate 10 local students per year. Modest market leakage can further be assumed from neighboring states given the higher cost of living, education related expenses, and limited number of undergraduate programs in the Southwest region.

According to the CAPLA undergraduate recruiting and advising team, there has been consistent interest from prospective students in a BLA program over the last five years. They report many student-initiated inquiries about a bachelor's level program in landscape

architecture at recruiting events and campus tours, at the rate of about 15-20 students per year. Within CAPLA, there is further opportunity to capture students with an interest in design in the built environment who begin studies as pre-architecture students in the Bachelor of Architecture program and find the program is not a match for their specific interests.

Given the population density of this relatively underserved area, strong anecdotal evidence of interest in a BLA offering, the strength of historic BLA/BSLA enrollments*, and potential transfer of existing CAPLA pre-architecture students we can reasonably expect a market capture of approximately 25 students per year.

Career Outlook

As reflected in a report from Program Insight by Burning Glass Technologies there is significant projected demand for careers in landscape architecture and the overall employment outlook remains strong. In fact, their report indicates a 10% increase nationwide in landscape architecture jobs in the next ten years. Local and national practitioners and LAAB have also indicated that there is a shortage of qualified graduates entering the profession. CAPLA remains in active discussions with landscape architecture professionals who express support for an undergraduate offering, seeing this program as the most direct path to satisfying this market need. These practitioners value the existing MLA program and feel that graduates are well prepared to enter the profession.

According to the US Bureau of Labor Statistics, the median pay for landscape architects was \$68,230 or \$32.80 per hour in 2018. Projections Central State Occupational Projections foresees a 14.7% increase of landscape architects in Arizona by 2026, and average annual openings of 60. Nationally these figures are 6.5% and 1,900, respectively.

(https://projectionscentral.com/Projections/LongTerm)

Area	Title	Base	Projected	Change	% Change	Avg. Annual Openings
Arizona	Landscape Architects	680	780	100	14.7	60

* The University of Arizona once had a BLA program with robust enrollments. The program was eliminated in an era when faculty wanted to focus on research and budgets were not a concern.

Similar Programs Offered at Arizona Public Universities:

Bachelor of Science in Landscape Architecture, Arizona State University

A letter of support from Jason Schupbach, Director of the Design School at ASU's Herberger Institute for Design and the Arts, states, "In conversation with Landscape Architecture Professor Kenneth Brooks and Landscape Architecture Associate Professor and Program Head Joseph Ewan, we all believe the ASU BSLA and the proposed U of A BLA can complement the diverse and growing needs of the nation and planet for more professional landscape architects prepared to analyze, plan, design, manage, and nurture the built and natural environment."

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):

<u>Infrastructure</u>: Currently, there is no need for additional facilities or infrastructure. However, it is expected that CAPLA will grow enrollments in existing undergraduate and graduate programs. To accommodate this growth, CAPLA has launched a new building initiative.

<u>Library resources:</u> The liaison librarian to the School of Landscape Architecture does not anticipate any new expenditures. A review of the UA library's current print and online resources for landscape architecture indicated that the subject matter was already well covered.

<u>Faculty</u>: The School of Landscape Architecture and Planning is currently conducting a faculty search for a new tenure-line faculty member who will serve both the MLA (.75 FTE) and new BLA (.25 FTE) programs. This is a replacement hire approved by the college and university.

Continuing Expenditures				
Faculty	30,000	72,000	96,000	120,000
Other Personnel	24,500	29,500	39,500	44,500
Employee Related Expense	17,100	31,900	42,500	51,700
Graduate Assistantships	-	-	26,600	46,600
Other Graduate Aid	-	-	-	-
Operations (materials, supplies, phones, etc.) - Marketing	20,000	20,000	10,000	-
Additional Space Cost	-	-	-	-
Other Items (attach description)	-	-	-	-
Total Continuing	\$91,600	\$153,400	\$214,600	\$262,800
One-time Expenditures				
Construction or Renovation	-	-	-	-
Start-up Equipment	-	-	-	-
Replace Equipment	-	-	-	-

EXPENDITURE ITEMS

43

Other Items - Course Build	2,000	5,000	2,000	2,000
			,	
Total One-time	\$2,000	\$5 <i>,</i> 000	\$2,000	\$2,000
TOTAL EXPENDITURES	\$93,600	\$158,400	\$216,600	\$264,800
· · · · · ·		ć c7 005	¢ 140 704	ć 221 000
Net Projected Fiscal Effect	\$ (4,631)	\$ 67,805	\$ 148,724	\$ 231,809
Net Projected Fiscal Effect Program Fee/Differentiated Tuition Required? YES Program Fee Justification:			\$ 148,724	\$ 231,809

Appendix A. Minor Requirements. Complete if requesting a corresponding minor. Delete EXAMPLE column before submitting.

Minimum total units required	19		
Minimum upper-division units required	10		
Total transfer units that may apply to the minor	3		
List any special requirements to declare/admission to this minor (completion of specific coursework, minimum GPA, interview, application, etc.) Minor requirements. List all minor requirements including core and electives. Courses listed must include course prefix, number, units, and title. Mark new coursework (New). Include any limits/restrictions needed (house number limit, etc.). Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.	None. Minor in Landscape Architectural Studies Required (10) - LAR 2** History and Theory of Landscape Architecture (3) - LAR 420 Plant Materials (4) - LAR 423 Landscape Ecology (3) Choose three of the following (9-10) - - SBE 201 Sustainable Design and Planning (3) - PLG 408 Planning for Urban Resilience (3) - LAR 440 History, Theory and Contemporary Landscape Architecture (3) - LAR 450 Green Infrastructure - LAR 470 GIS for Planning and Landscape Architecture (4) - PLG 495A Geodesigning Landscape Linkages (3)		
Internship, practicum, applied course requirements (Yes/No). If yes, provide description. Additional requirements (provide description) Any <u>double-dipping restrictions</u> (Yes/No)? If yes, provide description.	No. None. Yes. Minor coursework may not double dip with another minor or undergraduate degree emphasis area, with the exception of LAR 420 Plant Materials for students pursuing the Sustainable Plant Sciences BS, Urban Horticulture emphasis. Students in this emphasis area who are also interested in pursuing the Minor in Landscape Architectural Studies may count this course toward both the		

THE UNIVERSITY OF ARIZONA® BUDGET PROJECTION FORM

Name of Proposed Program or Unit: Bachelor in Landscape Architecture

Name of Proposed Program of Unit: Bachelor in Landscape Arc	intecture			Projec	ted		
Budget Contact Person: Simon White		s t Year 0 - 2021	2nd Yea 2021 - 202		3rd Year 2022 - 2023	2	4th Year 2023 - 2024
METRICS							
Net increase in annual college enrollment UG		25		47	68		88
Net increase in college SCH UG		200		662	1,143		1,599
Net increase in annual college enrollment Grad							
Net increase in college SCH Grad							
Number of enrollments being charged a Program Fee							
New Sponsored Activity (MTDC)							
Number of Faculty FTE							
FUNDING SOURCES							
Continuing Sources							
UG RCM Revenue (net of cost allocation)		88,969	226	,205	365,324		496,609
Grad RCM Revenue (net of cost allocation)							
Program Fee RCM Revenue (net of cost allocation)							
F and A Revenues (net of cost allocations)							
UA Online Revenues							
Distance Learning Revenues							
Reallocation from existing College funds (attach description)							
Other Items (attach description)							
Total Continuing	\$	88,969	\$ 226	,205	\$ 365,324	\$	496,609
One-time Sources							
College fund balances							
Institutional Strategic Investment							
Gift Funding							
Other Items (attach description)							
Total One-time	\$	-	\$	-	\$-	\$	-
TOTAL SOURCES	\$	88,969	\$ 226	,205	\$ 365,324	\$	496,609
EXPENDITURE ITEMS							
Continuing Expenditures							
Faculty		30,000	72	,000	96,000		120,000
Other Personnel		24,500	29	,500	39,500		44,500
Employee Related Expense		17,100	31	,900	42,500		51,700
Graduate Assistantships		-		-	26,600		46,600
Other Graduate Aid							
Operations (materials, supplies, phones, etc.) - Marketing		20,000	20	,000	10,000		-
Additional Space Cost							
Other Items (attach description)							
Total Continuing	\$	91,600	\$ 153	,400	\$ 214,600	\$	262,800
One-time Expenditures							
Construction or Renovation							
Start-up Equipment							
Replace Equipment							
Library Resources							
Other Items - Course Build		2,000	5	,000	2,000		2,000
Total One-time	\$	2,000		,000		\$	2,000
TOTAL EXPENDITURES	\$	93,600	\$ 158	,400	\$ 216,600	\$	264,800
Net Projected Fiscal Effect	\$	(4,631)	\$ 67	,805	\$ 148,724	\$	231,809
	<u> </u>	(1,001)	÷ 07	,	, 10 <i>),</i> 14	4	_01,005

THE UNIVERSITY OF ARIZONA® BUDGET PROJECTION FORM

Name of Proposed Program or Unit: Bachelor in Landscape Architecture

Name of Proposed Program of Unit: Bachelor in Landscape Arc	intecture			Projected	Cashi	low		
Budget Contact Person: Simon White		t Year 0 - 2021	2nd Year 2021 - 2022		3rd Year 2 2022 - 2023		2	4th Year 2023 - 2024
METRICS								
Net increase in annual college enrollment UG		25		47		68		88
Net increase in college SCH UG		200		662		1,143		1,599
Net increase in annual college enrollment Grad								
Net increase in college SCH Grad								
Number of enrollments being charged a Program Fee								
New Sponsored Activity (MTDC)								
Number of Faculty FTE								
FUNDING SOURCES								
Continuing Sources								
UG RCM Revenue (net of cost allocation)				88,969		226,205		365,324
Grad RCM Revenue (net of cost allocation)								
Program Fee RCM Revenue (net of cost allocation)								
F and A Revenues (net of cost allocations)								
UA Online Revenues								
Distance Learning Revenues								
Reallocation from existing College funds (attach description)								
Other Items (attach description)								
Total Continuing	\$	-	\$	88,969	\$	226,205	\$	365,324
One-time Sources								
College fund balances								
Institutional Strategic Investment								
Gift Funding								
Other Items (attach description)								
Total One-time	\$	-	\$	-	\$	-	\$	-
TOTAL SOURCES	\$	-	\$	88,969	\$	226,205	\$	365,324
EXPENDITURE ITEMS								
Continuing Expenditures								
Faculty		30,000		72,000		96,000		120,000
Other Personnel		24,500		29,500		39,500		44,500
Employee Related Expense		17,100		31,900		42,500		51,700
Graduate Assistantships		-		-		26,600		46,600
Other Graduate Aid								
Operations (materials, supplies, phones, etc.) - Marketing		20,000		20,000		10,000		-
Additional Space Cost								
Other Items (attach description)								
Total Continuing	\$	91,600	\$	153,400	\$	214,600	\$	262,800
One-time Expenditures								
Construction or Renovation								
Start-up Equipment								
Replace Equipment								
Library Resources								
Other Items - Course Build		2,000		5,000		2,000		2,000
Total One-time	\$	2,000	\$	5,000	\$	2,000	\$	2,000
TOTAL EXPENDITURES	\$	93,600	\$	158,400	\$	216,600	\$	264,800
Net Projected Fiscal Effect	\$	(93,600)	\$	(69,431)	\$	9,605	\$	100,524
	<u> </u>	(00,000)	т	(00)101/	т	3,003	7	_00,024

Bachelor of Landscape Architecture Income and Expense Statement Fiscal Year 2021 Values from fy20_rcm_model_final_0

	-			Nor	- Weighted		Weighted
Student Credit Hours Revenue					\$		\$
	Stud	ent Credit Ho	ours				
	Fall	Spring	Total				
CAPLA Admin			-	\$	-	\$	-
Drachman Institute			-	\$	-	\$	-
SofA			-	\$	-	\$	-
LAR	125.00	75.00	200.00	\$	59,332	\$	64,881
Planning			-	\$	-	\$	-
TOTAL CAPLA SCH	125.00	75.00	200.00	\$	59,332	\$	64,881
SCH taken outside of CAPLA	350.00	325.00	675.00	\$	200,246	\$	218,972
SCH taken by non-SLA students				\$	-	\$	-
Total Student Credit Hours Revenue				\$	259,578	\$	283,852
Total CAPLA Student Credit Hours Revenue				\$	59,332	\$	64,881
Less UA Support Units & Institutional Costs				\$	(18,369)	\$	(20,087)
Less UA Strategic Investment Fund				\$	(1,578)	\$	(1,726)
NET SCH REVENUE AFTER UA TAX				\$	39,385	\$	43,068
Majors Revenue		Majors			\$		\$
Majors	Fall 25.00	Spring 25.00	Total 50.00	ŝ	69,150	ć	69,150
Wajors	23.00	23.00	30.00	ş	05,130	Ş	05,150
Less UA Support Units & Institutional Costs				\$	(21,409)	\$	(21,409)
Less UA Strategic Investment Fund				\$	(1,839)	\$	(1,839)
NET MAJOR REVENUE AFTER UA TAX				\$	45,902	\$	45,902
TOTAL CAPLA REVENUE				\$	85,286	\$	88,969

Note - subject to change	
UA Support Units & Institutional Costs on PFDT 12.389	6
UA Support Units & Institutional Costs 30.969	6
Strategic Investment 2.669	6

\$/SCH	\$ 297
\$/SCH - Weighted Value	\$ 28
\$/SCH - Weighted	\$ 324
\$/Major	\$ 1,383

TOTAL CAPLA REVENUE

Bachelor of Landscape Architecture Income and Expense Statement Fiscal Year 2022 Values from fy20_rcm_model_final_0

				No	n- Weighted	Weighted
Student Credit Hours Revenue					\$	\$
	Stud	ent Credit Ho	ours			
	Fall	Spring	Total			
CAPLA Admin			-	\$	-	\$ -
Drachman Institute			-	\$	-	\$ -
SofA			-	\$	-	\$ -
LAR	323.00	339.00	662.00	\$	196,932	\$ 215,349
Planning			-	\$	-	\$ -
TOTAL CAPLA SCH	323.00	339.00	662.00	\$	196,932	\$ 215,349
SCH taken outside of CAPLA	482.00	391.00	873.00	\$	259,700	\$ 283,987
SCH taken by non-SLA students			-	\$	-	\$ -
otal Student Credit Hours Revenue				\$	456,632	\$ 499,336
otal CAPLA Student Credit Hours Revenue				\$	196,932	\$ 215,349
ess UA Support Units & Institutional Costs				\$	(62,034)	\$ (67,835
ess UA Strategic Investment Fund				\$	(5,908)	\$ (6,460
NET SCH REVENUE AFTER UA TAX				\$	128,990	\$ 141,053
Majors Revenue		Majors			\$	\$
Majors	Fall 47.00	Spring 47.00	Total 94.00	\$	130,002	\$ 130,002
ess UA Support Units & Institutional Costs				\$	(40,951)	\$ (40,951
ess UA Strategic Investment Fund				\$	(3,900)	\$ (3,90
				\$	85,151	85,151

Note - subject to change	
UA Support Units & Institutional Costs on PFDT 12.60%	
UA Support Units & Institutional Costs 31.50%	
Strategic Investment 3.00%	

\$/SCH	\$ 297
\$/SCH - Weighted Value	\$ 28
\$/SCH - Weighted	\$ 325
\$/Major	\$ 1,383

TOTAL CAPLA REVENUE

\$ 214,142 \$ 226,205

Bachelor of Landscape Architecture Income and Expense Statement Fiscal Year 2023 Values from fy20_rcm_model_final_0

				No	n- Weighted	Weighted
Student Credit Hours Revenue					\$	\$
	Stud	ent Credit H	ours			
	Fall	Spring	Total			
CAPLA Admin			-	\$	-	\$ -
Drachman Institute			-	\$	-	\$ -
SofA			-	\$	-	\$ -
LAR	615.60	527.10	1,142.70	\$	340,879	\$ 372,760
Planning			-	\$	-	\$ -
TOTAL CAPLA SCH	615.60	527.10	1,142.70	\$	340,879	\$ 372,760
SCH taken outside of CAPLA	544.70	516.40	1,061.10	\$	316,537	\$ 346,141
SCH taken by non-SLA students			-	\$	-	\$ -
Fotal Student Credit Hours Revenue				\$	657,416	\$ 718,902
Total CAPLA Student Credit Hours Revenue				\$	340,879	\$ 372,760
ess UA Support Units & Institutional Costs				\$	(107,377)	\$ (117,419)
ess UA Strategic Investment Fund				\$	(11,351)	\$ (12,413)
NET SCH REVENUE AFTER UA TAX				\$	222,151	\$ 242,928
Majors Revenue					\$	\$
		Majors				
	Fall	Spring	Total			
Majors	67.90	67.90	135.80	\$	187,811	\$ 187,811
ess UA Support Units & Institutional Costs				\$	(59,161)	\$ (59,161
ess UA Strategic Investment Fund				\$	(6,254)	\$ (6,254
NET MAJOR REVENUE AFTER UA TAX				\$	122,397	\$ 122,397

Note - subject to change	
UA Support Units & Institutional Costs on PFDT 12.60%	
UA Support Units & Institutional Costs 31.50%	
Strategic Investment 3.33%	

Note - subject to change	
\$/SCH	\$ 298
\$/SCH - Weighted Value	\$ 28
\$/SCH - Weighted	\$ 326
\$/Major	\$ 1,383

TOTAL CAPLA REVENUE

\$ 344,547 \$ 365,324

Bachelor of Landscape Architecture Income and Expense Statement Fiscal Year 2024 Values from fy20_rcm_model_final_0

			Non- Weighted			Weighted	
Student Credit Hours Revenue					\$		\$
	Stud	ent Credit H	ours				
	Fall	Spring	Total				
CAPLA Admin			-	\$	-	\$	-
Drachman Institute			-	\$	-	\$	-
SofA			-	\$	-	\$	
LAR	893.57	705.80	1,599.37	\$	478,434	\$	523,16
Planning	-		-	\$	-	\$	-
TOTAL CAPLA SCH	893.57	705.80	1,599.37	\$	478,434	\$	523,16
SCH taken outside of CAPLA	544.70	575.97	1,120.67	\$	335,236	\$	366,58
SCH taken by non-SLA students			-	\$	-	\$	-
otal Student Credit Hours Revenue				\$	813,670	\$	889,74
otal CAPLA Student Credit Hours Revenue				\$	478,434	\$	523,16
ess UA Support Units & Institutional Costs				\$	(150,707)	\$	(164,79
ess UA Strategic Investment Fund				\$	(17,511)	\$	(19,14
IET SCH REVENUE AFTER UA TAX				\$	310,217	\$	339,222
Najors Revenue					\$		\$
		Majors					
	Fall	Spring	Total				
Majors	87.76	87.76	175.51	\$	242,730	\$	242,73
ess UA Support Units & Institutional Costs				\$	(76,460)	\$	(76,46
ess UA Strategic Investment Fund				\$	(8,884)	\$	(8,88
IET MAJOR REVENUE AFTER UA TAX				Ś	157,386	\$	157,38

	University Tax Base in RCM Model fy20_rcm_model_final_0						
Note - subject to change							
UA Support Units & Institutional Costs on PFDT	12.60%						
UA Support Units & Institutional Costs	31.50%						
Strategic Investment	3.66%						

Note - subject to change			
\$/SCH	Ś	299	
\$/SCH - Weighted Value	\$	28	
\$/SCH - Weighted	\$	327	
\$/Major	\$	1,383	

TOTAL CAPLA REVENUE

\$ 467,603 \$ 496,609

SCH Analysis - LAR									
A	Active and	Enrolled							
Majors	Yr	1	Yr	2	Yr	3	Yr 4	4	
	FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING	
Freshman	25	25	25	25	25	25	25	25	
Sophomore			22	22	22	22	22	22	
Junior					21	21	21	21	
Senior TOTAL	25	25	47	47	68	68	20 88	20 88	
TOTAL	25	25	4/	47	00	00	00	00	
CAPLA SCH per Major									
	Yr	1	Yr	2	Yr	3	Yr 4		
	FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING	
Freshman	5	3	5	3	5 9	3	5	3	8
Sophomore			9	12	9 14	12	9 14	12 9	21 23
Senior					14	9	14	9	23
TOTAL	5	3	14	15	28	24	42	33	
CAPLA Total SCH									
	Yr FALL	1 SPRING	Yr FALL	2 SPRING	Yr FALL	3 SPRING	Yr 4 FALL	4 SPRING	
Freshman	FALL 125	SPRING 75	FALL 125	SPRING 75	FALL 125	SPRING 75	FALL 125	SPRING 75	
Sophomore	123	0	125	264	123	264	125	264	
Junior	0	0	150	204	293	188	293	188	
Senior	0	0	0	0	0	0	278	179	
TOTAL	125	75	323	339	616	527	894	706	
COLLAND IN DIAN									
SCH Analysis - Planning									
Majors									
	Yr	1	Yr	2	Yr	3	Yr 4	4	
	FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING	
Freshman	25	25	25	25	25	25	25	25	
Sophomore			22	22	22	22	22	22	
Junior Senior					21	21	21 20	21 20	
TOTAL	25	25	47	47	68	68	20 88	88	
TOTAL	25	25	47		00	08	00	00	
CAPLA SCH per Major									
	Yr		Yr		Yr		۲r		
	FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING	
Freshman									0
Sophomore									0
Junior Senior									0
TOTAL	0	0	0	0	0	0	0	0	U
10172	Ũ			•	Ũ	Ũ	· ·		
CAPLA Total SCH									
	Yr		Yr		Yr		Yr 4		
	FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING	
Freshman	0	0	0	0	0	0	0	0	
Sophomore	0	0	0	0	0	0	0	0	
Junior Senior	0	0	0	0	0	0	0	0	
Senior TOTAL	0	0	0	0	0	0	0	0	
	5	5	5	5	5	v		v	
SCH Analysis - outside of O	CAPLA								
Majors									
	Yr		Yr	2	Yr	3	۲r		
	FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING	
Freshman	25	25	25	25	25	25	25	25	
Sophomore			22	22	22	22	22	22	
Junior					21	21	21	21	
Senior		25			68	68	20 88	20	
TOTAL	25	25	47	47	68	68	88	88	
CAPLA SCH per Major									
	Yr		Yr		Yr		۲r		
	FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING	
Freshman	14	13	14	13	14	13	14	13	27
Sophomore			6	3	6	3	6	3	9
Junior Senior					3	6	3	6 3	9 3
Senior TOTAL	14	13	20	16	23	22	23	25	3
		13	20	10	25	22	25	25	
Total SCH outside of CAPLA	4								
	Yr		Yr		Yr		Yr 4		
	FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING	
Freshman	350	325	350	325	350	325	350	325	
Sophomore	0	0	132	66	132	66	132	66 125	
Junior Senior	0	0	0	0	63 0	125 0	63 0	125 60	
TOTAL					U				
	350	325	482	391	545	516	545	576	
IUIAL	350	325	482	391	545	516	545	576	123



CAPLA BLA Plan (printed 10/21/2019) Freshman year	128		_	elective options ENVS 195D Water and the Environment (F) 1
Fall			16	SBE 201 Sustainable Design and Planning (F) 3
Tier I Gen Ed MATH 108 Modeling with Algebraic and Trigonometric Functions. The main purpose of this course is	3	Tier I Gen Ed Tier I Gen Ed	3	GEOG 220 Our Diverse Biosphere (Sp) 3
to help students use algebraic and trigonometric functions to model real-life situations. Particular	-		5	
emphasis will be placed on applications relevant to Architecture and Speech, Language, and Hearing				
Sciences majors. Course topics will include ratios and proportions, functions and graphs, linear and				
quadratic functions and equations, trigonometric functions and equations, sinusoidal curve-fitting, exponential and logarithmic functions and equations, all with an emphasis on applications.				
Examinations are proctored.				
ENGL 101	3	ENGL 102	3	SBE 301 Intro to Design Thinking 4 PA 323 Environmental Ethics (F) 3
2ND Language		2ND Language	4	LAR 350 Parks and Urban Public Spaces (tier 2 Trad) 3
LAR 101A/B and LAR 131A/B Intro to Landscape Architecture - This course presents a introduction to	5	LAR 230 Foundation studio - This studio course introduces students to design thinking and principles	3	
the practice and history of landscape architecture, including historical and contemporary projects,		as well as the fundamentals of hand drawing/graphics and digital media design tools. This course		
design theory, intro to design principles, and design interpretation and narration, critical thinking, and design critique and evaluation.		incorporates design theory, creative problem solving, and oral, written and visual communication skills. Design programing and site analysis tools will be introduced.		
				PLG 408 Planning for Urban Resilience 3
Sophomore Year			-	ENVS 450 Green Infrastructure (F) ~ 3 PLG 495A Geodesign Studio 3
Fall	15	Spring 2	15	PLG 495A Geodesign Studio PLG 595A Geodesign Studio A MLA) 3
Tier I Gen Ed	3	Tier I Gen Ed	3	SBE 222 History of the Built Environment II 3
Tier I Gen Ed	3	LAR 241 History and Theory of Landscape Architecture. This course examines landscape architecture from an historic and contemporary perspective as reflected in theory and practice. Through case	3	
		reviews of built works including significant estates, gardens, urban designs, park systems, corporate		
		landscapes, restored natural sites, heritage sites, waterfront projects, resorts, etc., students will		
		explore the evolution of design ideology and application of theory in the practice of landscape architecture.		
LAR 254 Site Engineering. This technical course introduces students to the engineering aspects of	3	LAR 255 Landscape Construction. This technical course builds on the content and learning outcomes	3	
landscape architecture and site planning. Student are expected to gain technical competency in		from LARXXX Site Engineering. Students learn how to prepare construction documents according to		
grading and earthwork design, storm water management, and road alignment while incorporating aesthetics and design principles as well as ecological sustainability.		industry standards established by the Council of Landscape Architectural Registration Boards (CLARB) and the American Society of Landscape Architects (ASLA). Students prepare site grading and drainage		
		plans, site material specification plans, dimensioning plans, and construction details. They will learn		residency units
		professional standards for technical drawing layout applicable for construction. This course prepares		
		students for professional practice and licensure. (prereq: LAR 254)		
LAR 2XX Design Studio I. This studio course is the first of six immersive landscape architecture studios. The course incorporates design thinking and principles of design as well as design	6	LAR 2XX Design Studio II. This studio course advances skills and knowledge from Design Studio I	6	
studios. The course incorporates design thinking and principles of design as well as design		reinforcing design thinking and principles of design as well as design programing, landscape and site		
programing, landscape and site analysis, background research for design applications, concept and iterative design development, and design synthesis. Plant massings and forms are incorporated into		analysis, background research for design applications, concept and iterative design development, and design synthesis. Creative problem solving as well as skills learned in Site Engineering are practiced at		
spatial sequences and compositions. Design communication skills including hand drawing and digital		the site scale. Students study design precedent during a spring break travel intensive. (pre/coreg:		Minimum # of units required in major (units counting towards major units and major GPA)
spatial sequences and compositions. Design communication skills including hand drawing and digital media graphics in 2D and 3D are emphasized. (pre/corequisite: LAR 1XX Intro to Landscape	1	LAR 230 Foundation studio prereq: LAR 2XX Design Studio I & LAR 254)		
<u>Architecture</u>]	1		74	4
			48	6 Minimum # of upper-division units required in the major (upper division units counting towards major GPA)
				5 BLA Core
Junior Year		a. t	60 L5	0 minimum upper div units complete degree (includes one elective)
Fall Tier II Gen Ed			3	
LAR 470 Intro to GIS. This course is an introduction to Geographic Information Systems (GIS) for	4		3	
graduate students in planning and landscape architecture and undergraduate students interested in				
design and the built environment. The course will focus on three core usage domains of GIS: data management, communication/visualization, and analysis. Specifically, this class focuses on how				
fluency in these domains contributes to better design and planning of the built environment.				
LAR 420 Plant Materials. This course focuses on the examination and evaluation of plants effectively used in landscapes of the Southwest. Emphasic is placed as strategies useful for plant identification	4	LAR 423 Landscape Ecology. This course is a survey of current principles of landscape ecology,	3	
used in landscapes of the Southwest. Emphasis is placed on strategies useful for plant identification and appropriate plant selection for a variety of landscape uses. Field studies will be the primary mode		emphasizing how spatial heterogeneity and human activities influence ecological systems. Discussion and field trips focus on landscape management issues in the Southwest.		
of instruction whereas classroom lectures provide support material for the field work.		and neid eigs focus on andscape management issues in the southwest.		
LAR 3XX Design Studio III. This studio course advances skills and knowledge from previous design studios, expanding the scope of design to include the site context, user and cultural analyses,	6	LAR 3XX Design Studio IV - Interdisciplinary Urban Design Studio (co-convened with Arch 451a)." This is the first of two interdisciplinary studio courses which include BLA and BArch students.	6	Learning outcomes focus The focus of this studio Values sustainable design strategies, socio-cultural frameworks, health
background research, and site programming. Skills learned in previous semesters are incorporated		Through collaborative methods, multi-disciplinary work, and urban design outreach students prepare		and well-being structure the studio focus. including energy
background research, and site programming. Skills learned in previous semesters are incorporated into coursework. This course advances landscape analysis, conceptual diagramming, functional		for interdisciplinary professional practice. Students will have expanded creative freedom to		conservation and climate resilience as well as socio-cultural
relationship diagrams. (prereq: LAR 2XX Design Studio II)		collectively explore built environment solutions to the grand challenges that face society. Sustainable		frameworks create the focus for at the regional and urban levels.
		design strategies, socio-cultural frameworks, health and well-being, and aesthetic theory and innovation will inform design decisions. (prereq: LAR 2XX Design Studio III)		Skills related to sustainable strategies & natural processes are also incorporated in the urban context. Design strategies related
		minoration with inform design decisions. <u>(prefet, privezia besign station)</u>		to environmental sustainability and human health and well-being.
				this course expands design skills and knowledge within a variety
				of scaled including: the building, site, neighborhood, city, region. Skills learned in concurrent Landscape Ecology are reinforced,
				and skills acquired in Intro to GIS are incorporated into
				coursework. Advanced landscape analysis skills that inform
				design decisions are reinforced
Senior Year				
Fall	17	Spring	14	
LAR 440/540 Contemporary Landscape Architecture.** This course examines 20th and 21st century prominent designs that have shaped the profession of	3	LAR 460/560 Professional Practice/Working Drawings.* ** This course covers the practice of landscape architecture including professionalism, registration, the landscape architectural profession,	3	
landscape architecture. Through case reviews of built works including significant gardens, urban		services and fees, construction contract documents, bid documents and procedures, and business		
designs, recreational areas, corporate landscapes, restored natural sites, heritage sites, waterfront		organization and operation.		
projects, resorts, et al., students explore the evolution of contemporary design ideology and theory in applied landscape architectural practice. Within this platform, the course will examine				
contemporary movements and trends toward future scholarship and practice.				
(writing intensive)				
LAR 426 Planting Design.* ** Principles of planting design, planting design process, and functional	4	LAR 596B Landscape Architecture Seminar II.** The second in a series of academic seminar courses	2	
and esthetic uses of plants in designs are discussed. Studio projects focus on development of		for students engaged in the thesis or final report preparation. This course exposes students to		
planting plans for sites with various scopes and conditions.		various components of professional scholarship. (this course is for students who are continuing on to		 Is this only taken by students continuing to \$20.00
LAR 596A Special Topics in Landscape Architecture.** This course exposes students to various	1	the MLA program) Required elective	3	< is this only taken by students continuing to MLA?
components of professional scholarship.	Į.	•		
LAR 412/512 Design Studio V - Interdisciplinary Outreach Studio (co-convened with Arch 451b). ~	6	LAR 4XX Design Studio VI - Capstone studio. Students in this course are expected to undertake an	6	
This is the second interdisciplinary studio course which includes BLA and BArch students. Students will work with community clients and campus partners to address real world problems. Complex		independent in-depth and site specific self-directed landscape architecture research and design project that draws on skills and knowledge acquired in the program." Projects are presented during		
will work with community clients and campus partners to address real world problems. Complex urban and rural design projects will engage multidisciplinary teams that could include students from		end-of-year departmental conference. (prereq: LAR 2XX Design Studio V)		
civil engineering, sustainable plant systems, hydrology, fine art, and urban planning. Projects will be				
comprehensive and incorporate net zero design solutions, green infrastructure, landscape and building performance, advanced technology, and collaborative design methods. Projects may include				
building performance, advanced technology, and collaborative design methods. Projects may include designs for indigenous communities; educational, recreational, and health care facilities; and adaptive reuse of urban areas. Standards, methods, codes and ordinances, energy conservation, and				
adaptive reuse of urban areas. Standards, methods, codes and ordinances, energy conservation, and				
socio-cultural factors in design are stressed. Design implementation skills are practiced and assessed. (prereq: LAR 2XX Design Studio IV) (combined with ARC451b)				
	1			
	1			
Optional elective	3			12
BLA shared + MLA	31			11
MLA Year Fall	19	factor (
Fall LAR 569C Landscape Architecture Seminar III. The third in a series of academic seminar courses for			11 11 2	
students engaged in the thesis or final report preparation. This course exposes students to various	Ē	students engaged in the thesis or final report preparation. This course exposes students to various	-	
components of professional scholarship.		components of professional scholarship.	2	
SBE 480/580 Research Methods. This course is all about answering questions and solving problems in urban environments. Students will get to choose what content to study during the course, i.e.	5	LAR 909/910 Master's Report/Thesis. Individual study or special project or formal report thereof submitted in lieu of thesis for certain master's degrees./Research for the master's thesis (whether	2	
transportation, the environment, social equity, etc. For undergraduate students, their topic can		library research, laboratory or field observation or research, artistic creation, or thesis writing).		
inform the development of a senior capstone in subsequent semesters. Graduate students can use		Maximum total credit permitted varies with the major department.		
the work from this class to advance their thesis or professional project work. This course will train students to quantitatively and qualitatively analyze real world data used in the planning and design of				
the built environment. Students will gain firsthand experience in the research process: forming				
research questions and figuring out how to best answer those research questions. Students will				
develop key skills including: identifying and analyzing data sources, building datasets, learning descriptive statistics, analyzing trends, and visualizing data. The course will culminate in students				
descriptive statistics, analyzing trends, and visualizing data. The course will culminate in students developing a proposal that they can use for their Senior Capstone.				
Elective	1		9	
LALUT.	3			
Learning objectives are outlined in (name of matrix file)				
*UG section needs to be created				
** Shared credits between BLA and MLA ~ Need letter of support from Architecture				
existing CAPLA courses				
new course needed				
MLA Courses				

CAPLA Bachelor of Landscape Architecture

Expense Allocation Modeling Workbook

Program Instruction Costs

T/TE Faculty

Pop/Lecturer

Graduate Assistant

Sections Required - GA Sections Required - Student

Total Sections Required

Total Facilitation Cost

Adjunct

Facilitation

Course Build/Refresh	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	5-Year Total
Course Build		2	5	2	2	11
Course Refresh	-	-	-	-	-	-
Total Cost	\$-	\$ 2,000	\$ 5,000	\$ 2,000	\$ 2,000	11

Course/Section Load	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	5-Year Total
Unique Courses Taught	-	1	-	-	-	1
Total Sections Offered	-	1	-	-	-	1

Instructional Staffing	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	
T/TE Faculty-led Sections	-	-	-	-	-	
PoP/Lecturer-led Sections		5	12	16	20	
Adjunct-led Sections	-	-	-	-	-	
GA-led Sections	-	-	-	4	7	
Total Sections Covered	-	5	12	20	27	

-

39,400 \$

39,400 \$

2020-2021

2020-2021

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2019-2020

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2021-2022

2021-2022

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2022-2023

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2023-2024

2023-2024

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94,600 \$ 126,100 \$ 157,700 \$

26,600 \$

94,600 \$ 152,700 \$ 204,300 \$

2022-2023

-

\$

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46,600 \$

2019-2020

\$

\$

\$

\$

Total Costs \$

Courses Required for Program					
Total Courses Required		14			
Course Build Rate	\$	1,000			
Course Refresh Rate	\$	-			

Course/Section Enrollmen	t
Enrollment Cap per section	20

Instructor Load	
T/TE Faculty	1
PoP/Lecturer	1
Adjunct	1
Graduate Assistant	1

		Instructional Costs per Section					
-		Average T/TE Cost	\$	6,000			
417,800		Average PoP/Lecturer Cost	\$	6,000			
-		Average Adjunct Cost		6,000			
73,200		Average GA Cost	\$	6,000			
491,000		App/Faculty Regular ERE Rate		31.4%			
Faculty Ancillary ERE Rate			20.0%				
Graduate Assistant ERE Rate				11.0%			

Facilitation Costs per Section	n	
Average GA Cost	Ś	6,500
Average Student Cost	\$	-
Student Employee ERE Rate		2.0%

Grading Costs per Section

\$

Average GA Cost

Average Student Cost

	Facilitation Costs per Section	on	
	Average GA Cost	\$	6,500
	Average Student Cost	\$	-
	Student Employee ERE Rate		2.0%

Grading	0	2020-2021	2021-2022	2022-2023	2023-2024	
Sections Required - GA	-	-	-	-	-	
Sections Required - Student	-	-	-	-	-	
Total Sections Required	-	-	-	-	-	
Total Facilitation Cost	-	-	-	-	-	\$ -

Program Management	0	20	20-2021	20)21-2022	20	22-2023	20	23-2024	
Advising FTE Required	-		0.10		0.20		0.30		0.40	
Coordination FTE Required	-		0.25		0.25		0.25		0.25	
Business Support FTE Required	-		0.10		0.10		0.20		0.20	
IT Support FTE Required	-		-		-		-		-	
Advising Cost	\$ -	\$	6,600	\$	13,100	\$	19,700	\$	26,300	\$ 65,700
Coordination Cost	\$ -	\$	19,100	\$	19,100	\$	19,100	\$	19,100	\$ 76,400
Business Support Cost	\$ -	\$	6,600	\$	6,600	\$	13,100	\$	13,100	\$ 39,400
IT Support Cost	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -
Total Program Mgmt Costs	\$ -	\$	32,300	\$	38,800	\$	51,900	\$	58,500	\$ 181,500

Program Management Costs								
Advising Ratio - 1 to		-						
Average Advisor Salary	\$	50,000						
Coordinator Ratio - 1 to								
Average Coordinator Salary	\$	58,000						
Business Support Ratio - 1 to		-						
Average Bus Support Salary	\$	50,000						
IT Support Ratio - 1 to		-						
Average IT Support Salary	\$	-						
Classified Regular ERE Rate		31.4%						

	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	5-Year Total
Total Expenses						
Course Build/Refresh	-	2,000	5,000	2,000	2,000	11,000
Instruction	-	39,400	94,600	152,700	204,300	491,000
Facilitation	-	-	-	-	-	-
Grading	-	-	-	-	-	-
Prorgram Mangement	-	32,300	38,800	51,900	58,500	181,500
Total Expenses	-	73,700	138,400	206,600	264,800	683,500

Undergraduate Major Peer Comparison Chart-delete EXAMPLE columns once ready to submit/upload. Find UA peers here: <u>https://www.azregents.edu/arizonas-public-universities/peer-institutions</u>

Program name,	Proposed UA Program:	Peer 1:	Peer 2:	Peer 3:	Peer 4
sub-plan name (if applicable), degree, and institution	Bachelor of Landscape Architecture	Bachelor of Landscape Architecture: University of Illinois – Urbana Champaign (4-year)	Bachelor of Landscape Architecture: Texas A&M University (4-year)	Bachelor of Landscape Architecture: Penn State University (4.5-year)	Bachelor of Science in Landscape Architecture Arizona State University (4 year)
Current # of enrolled		49 Full time BLA students, 2017-18 17 BLA degrees awarded, 2017-18	112 Full time BLA students, Fall 2018	26 graduates in 2017-18 https://nces.ed.gov/collegenavigat	112 Full time BLA students in 2019- 20
students		https://landarch.illinois.edu/public-	25 BLA degrees awarded, 2017-18	<u>or/</u>	20 graduates in 2017-18
		information/ https://nces.ed.gov/collegenavigat	https://accountability.tamu.edu/All -Metrics/Mixed-Metrics/Student-		https://nces.ed.gov/collegenavigat or/
		or/	Demographics		
			https://nces.ed.gov/collegenavigat or/		
Major	The Bachelor of Landscape	The four-year program in	Landscape architecture is the	Penn State's professionally	The BSLA program offers students
Description -	Architecture (BLA) program	Landscape Architecture requires	profession providing landscape	accredited Bachelor of Landscape	the opportunity to engage with the
provide a	prepares students for professional	124 semester hours. The majority	planning, design, and management	Architecture (B.L.A.) program is one	community in applied projects that
description for	licensure in landscape architecture	of these credit hours are in	services to enhance and protect	of the nation's first, founded in	focus on designing sustainable
the proposed	through a robust, responsive, and	required landscape architecture	natural and built environments.	1907. Historically our	outdoor environments and
	professionally-rooted curriculum.	courses, consisting of design	Landscape architects plan and	undergraduate program has been	improving the ecological and social
program.	Classwork and design studios instill	studio, construction, plant	design places for the health, safety,	respected by professionals for the	health of the urban environment.
Include the	a comprehensive understanding of	materials and design, history,	and welfare of citizens through	solid skills of our graduates; more	
purpose,	landscape architectural practice,	design communication, and	systematic decision-making that	recently, we have gained further	Undergraduate landscape
nature, and	creative problem-solving, and the	professional internship. General	integrates science, art, and	respect for our educational	architecture projects can range
program	knowledge, skills, and values	education courses are also	technology. Landscape	innovations and excellence.	from large-scale work
highlights.	necessary to become sustainability-	required, as well as courses in	architectural project types include		encompassing urban design,

					<u> </u>
Description	minded landscape architecture	related fields like urban planning	residential communities, private	The goal of the Penn State B.L.A. is	landscape reclamation, open space
must be	professionals prepared to enter the	and geography. Check out our BLA	gardens, urban designs, college	to educate future leaders in the	preservation planning and
consistent	work force upon graduation.	handbook for a list of course	campuses, park facilities, regional	profession and/or the discipline of	landscape ecological design to
throughout the	The BLA is a first-professional	requirements.	landscape planning, etc.	landscape architecture. The	projects at the more intimate scale
proposal	·		The Deckeley of Levelson	program provides students an	of a neighborhood park or
documents and	degree program that is prepared to	In the first year, students acquire	The Bachelor of Landscape	education in the creativity,	residential back yard. Emerging
	seek accreditation from the	basic knowledge about landscape	Architecture (BLA) program at	technical skills, and ethical	areas of focus include biotechnical
match	Landscape Architectural	architecture, natural sciences,	Texas A&M University is the oldest	considerations necessary for	design; urban agriculture;
departmental	Accreditation Board (LAAB). The	social sciences, humanities, and	in the state and one of the oldest in	practice. One particular	greenways, green roofs and living
and college	program is steeped in applied	mathematics. This first year is	the Southwest. It is four-year	requirement of the program,	walls; and healing environments.
websites,	learning and professional practice	general and flexible to allow	accredited by the Council of	intended to enhance students'	Students complement their design
handouts, and	with an emphasis on sustainable	students from other colleges and	Landscape Architecture	breadth and perspective, is a	learning with electives from a
promotional	design strategies and	universities to acquire this basic	Registration Boards under the	semester of study abroad. The	broad range of approved courses.
materials.	interdisciplinary partnerships. The	knowledge and transfer into the	auspices of the American Society of	program also provides	
	place-based curriculum takes	second year of the curriculum.	Landscape Architects. Provisional	opportunities to pursue interests in	All students must pass a degree
	advantage of the Sonoran Desert to		accreditation was first granted for	a range of areas.	milestone at the end of the first
	demonstrate sustainable design	In the second year, students	the BSLA program in 1971 and has		year to continue in the major. For
	solutions in areas including water	become deeply involved in studio	maintained accredited status	We recently refined our B.L.A.,	more information, students should
	conservation, use of native plant	experience and site engineering.	continuously since that time.	using the mantra "flexibility,	visit
	species, ecological stewardship,	Students learn a systematic	Our mission is to prepare students	opportunity, affordability." The	https://design.asu.edu/resources/s
	and urban heat island mitigation.	approach to solve landscape	to become professional landscape	result is a 139-credit curriculum	tudents/milestones.
	BLA students will have the option	architectural problems,	architects in private and public	that easily can be completed in	
	to continue on with advanced	emphasizing the basic principles of	sector practice. Our educational	four and one-half years. Time to	This is an 8-semester program
	standing into the Master of	design, design process, and site	goal is to produce graduates	degree can be shortened to four	requiring sequential completion of
	Landscape Architecture degree	planning skills. Methods of	motivated to be leaders in the field	years through participation in one	studio coursework (or approved
	program.	landscape survey and analysis	and life-long learners.	of our optional summer abroad	equivalent).
	We employ real-world learning	further supply the student with a		programs. Students alternatively	
	experiences that enable students	logical basis for making design	From:	may extend their time-to-degree to	https://herbergerinstitute.asu.edu/
	to meet the challenges of the 21st	decisions. The use of computers in	https://laup.arch.tamu.edu/acade	take advantage of opportunities	node/40548
	century. The program prepares	the design process is introduced in	mics/	such as our Sustainability	
	students for entry-level practice by	this year as well.	undergraduate/bla/	Leadership minor in Pittsburgh, PA,	
	involving them in a variety of				
	involving them in a vallety of				

	project types and scales including	In the third and fourth years, we		or our Integrated	
				-	
	community and campus master	increase the complexity and scale		Undergraduate/Graduate program.	
	plans; urban park systems, plazas	of our students' design			
	and green streets; industrial	opportunities. We connect them		https://stuckeman.psu.edu/larch/	
	restoration; habitat creation;	with real places and people and		programs/bla	
	neighborhood design; and more.	allow them to work collaboratively			
	The program has a strong, committed, and energetic faculty who seamlessly integrate teaching, research, and outreach. Studio courses, classroom instruction, and real-world community outreach projects create a diverse learning environment that maximizes professional skill building. Faculty members prepare students for professional practice and interdisciplinary collaboration through design projects that address site and landscape planning issues and explore the ways in which designed landscapes can educate and inspire communities toward environmental health and cultural identity.	to create interesting, complex design solutions. Our students travel to places like Chicago, New York and Los Angeles and work on design solutions specific to these sites. From: https://landarch.illinois.edu/bachel or-program/			
Target careers	Students graduate fully prepared	Target careers not mentioned in	Graduates from the BLA program	Penn State Landscape Architecture	The bachelor's degree program is
	for professional practice, finding	online materials.	are prepared for employment with	graduates are well-prepared to join	designed to prepare students for
	internships and employment with		private practice firms in landscape	our distinguished professional	landscape architecture professional
	governmental agencies, nonprofit		architecture, engineering,	alumni network with a clear path to	practice and advanced study at the
	organizations, and private		architecture, or planning; and with	licensure and making an immediate	graduate level, and graduates have

sector firms locally, nationally, and	federal, state, or local government	impact on the world. The Bachelor	found employment in nationally
internationally. Others continue on	agencies. Upon graduation and	of Landscape Architecture (B.L.A.)	recognized firms working with
to pursue doctoral degrees.	with additional two-year practical	program is designed to prepare	notable landscape architects in
	experience students are qualified	graduates for either advanced	large multinational firms or in
	to pursue licensure in the	study or professional careers. A	public agencies. Graduates have
	profession or post graduate	B.L.A. degree provides students	also gone on to pursue graduate
	education in landscape architecture	C .	study at universities with
	or a related field.	technical skills, and ethical	distinguished graduate programs in
	(https://catalog.tamu.edu/undergr aduate/ architecture/landscape- architecture-urban-planning/bla/)	considerations necessary for professional practice. Careers or graduate study can lead to a diverse array of focus areas,	landscape architecture and allied design fields. The U.S. Bureau of Labor Statistics projects employment for landscape
		including sustainability, urban planning, research, social or environmental justice, design, ecology, social health and well- being, technology, construction, or community outreach.	architects will grow 16 percent from 2010 to 2020, about as fast as the average for all occupations. The bureau also notes employers prefer hiring entry-level landscape architects with internship
		Careers	experience, to significantly reduce
		The world is constantly changing,	the amount of on-the-job training.
		and landscape architects are skilled	The bachelor's degree program has
		designers poised to shape, drive,	an internship requirement meant
		and responsibly steward these	to address this preference and
		changes. Penn State landscape	better prepare graduates for
		architects are artists, ecologists,	employment.
		engineers, scientists, sociologists, conservationists, and often, leaders. The profession enables you	Students who complete this degree program may be prepared for the following careers. Advanced
		to connect with your passion.	degrees or certifications may be
		Engage with art, nature, and design. Build spaces, places, and	required for academic or clinical
		experiences. Collaborate. Solve	positions.
		experiences. Conaborate. Solve	

				problems Design a better future	Career examples include but are
				problems. Design a better future. A	
				B.L.A. will prepare you with	not limited to: Architects, Except
				leading-edge technical design	Landscape and Naval; Architectural
				principles and a deep foundation in	Drafters; Architecture Teachers,
				technologies and design-thinking	Postsecondary; Electrical Drafters;
				methods so that you can	Civil Drafters; Drafters, All Other;
				immediately enter professional	Architectural and Engineering
				practice with a wide range of	Managers; Landscape Architects;
				opportunities.	Mechanical Drafters; Electronic
				MORE INFORMATION	Drafters
				(https://stuckeman.psu.edu/jobs)	
				(https://stuckeman.psu.euu/jobs)	
Total units	122	124	128	139	120
required to					
complete					
degree					
ucgice					
Upper-division	46	37	43	36	45
units required					
to complete					
degree					
uegree					
Foundation					
courses					
<u>Second</u>	- Second semester proficiency	- Foreign Language (HS 3 years	- A minimum of one year of	- One 3 CU foreign language	- Not required.
language		OR 3 semesters) (foreign	foreign language is required	course recommended.	
		language requirement is	for all baccalaureate degree		
		satisfied by completion of three years of the same	programs at Texas A&M. For many programs, this degree		
		foreign language in high	requirement can be satisfied		
		school or a third semester	by the satisfactory		
		college language course.)	completion of two units of		

Math	Moderate Math Strand: BLA foundation math: MATH 108 (4) Modeling with Algebraic and Trigonometric Functions or higher depending on placement: - MATH 120R (4) Calculus Preparation or - MATH 122B (4) First-Semester Calculus or - MATH 125 (3) Calculus I	- Mathematics (depending on placement) - 0 to 5 hours	 the high school level or one year of the same language at the college level. MATH 141 Finite Mathematics (3) MATH 142 Business Calculus (3) 	- Not required	 MAT 170: Precalculus (3) Mathematics Placement Assessment score determines placement in mathematics course
Pre-major? (Yes/No. If yes, provide requirements.) Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.	No	No	No	No	No
List any special requirements to declare or gain admission	None.	None.	None.	None.	None.

to this major (completion of specific coursework, minimum GPA, interview, application, etc.) Major					
requirements Minimum # of units required in major (units counting towards major units and major GPA)	77	61	80	109	64
Minimum # of upper-division units required in the major (upper division units counting towards major GPA)	46	38	43	41	39
Minimum # of residency units	 Students transferring from another accredited BLA program are required to 	Unknown	A minimum of 36 semester hours of 300- and/or 400-level	24	Total hrs at ASU: 30 minimum

to be completed in the major	 complete the following courses (31 cu), but may waive others in the program depending on previous coursework: LAR 470 Intro to GIS for Landscape Architecture and Planning (4) LAR 3** Design Studio III (6) LAR 3** Design Studio IV (6) LAR 423 Landscape Ecology (3) LAR 4** Design Studio V (6) LAR 4** Design Studio VI (6) All other transfer students are required to complete all 77 units of the BLA core in addition to university requirements. 		coursework must be successfully completed in residence at Texas A&M to obtain a baccalaureate degree. A minimum of 12 of these 36 semester hours must be in the major.		Hrs Resident Credit for Academic Recognition: 56 minimum Total Community College Hrs: 64 maximum
Required supporting coursework (courses that do not count towards major units and major GPA, but are required for the major). Courses listed must include	None.	 UP 101 Introduction to City Planning (3) Supporting Electives - 12 hours Communication (3) History (3) Technical (3) Environment (3) 	 POLS 206 (3) American National Government POLS 207 (3) State and Local Government ENGL 104 Composition and Rhetoric (3) ENGL 210 Technical and Business Writing (3) MATH 141 Finite Mathematics (3) MATH 142 Business Calculus (3) RENR 205 (3) Fundamentals of Ecology 	First Year Engagement All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan. Other Penn State colleges and campuses may require the First- Year Seminar; colleges and campuses that do not require a	Complete 2 courses: Elective (7) MAT 170 (3) GPH 111+112 (4)

subject code, units, and title. Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.			 RENR 215 (1) Fundamentals of Ecology—Laboratory Other (5) Select one of the following URPN 201 The Evolving City (3) URPN 330 Land Development I (3) URPN 370 Health Systems Planning (3) Electives (12) General elective (9) Computer elective (3) URPN 320 or URPN 325 or approval of BLA Program Coordinator 	 First-Year Seminar provide students with a first-year engagement experience. First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements. Cultures Requirement 6 credits are required and may satisfy other requirements United States Cultures: 3 credits International Cultures: 3 credits Writing Across the Curriculum 3 credits required from the college of graduation and likely prescribed as part of major requirements. 	
Major requirements (list all required major coursework including major core, major	BLA Core (77) ARC/LAR 101A/B (2/2) Built Environment Foundation Studio ARC/LAR 131 A/B (1/1) Thinking About Architecture (New) LAR 2** (4) Landscape Architecture Intro Studio	LA 233 Foundation Design Studio (5) LA 250 Environmental Site Analysis (3) LA 280 Design Communications I (3)	LAND 101 (1) Introduction to Landscape Architectural Practice LAND 111 (3) Landscape Architecture Communications I URPN 220 (3) Digital Communication I	 SOILS 101 Introductory Soil Science (3) Prescribed Courses: Require a grade of C or better LARCH 60 Cultural History of Designed Places (3) 	ALA 100: Introduction to Environmental Design (3) or ALA 102: Landscapes and Sustainability (3) ALA 121: Design Fundamentals I (3) DSC 100: ASU Design Experience (1) ALA 122: Design Fundamentals II (3)

alactives sub	(New) LAR 2** (6) Design Studio I	LA 101 Introduction to Landscape	ARCH 250 (3) Survey of World	LARCH 115 Design I: Intro Spatial	ALA 124: Design Fundamentals II
electives, sub-	(INEW) LAR 2 (0) Design Studio I			5 1	-
plan core, and	(New) LAR 2** (6) Design Studio II	Arch (2)	Architecture History II	Composition (3)	Lecture (1)
sub-plan	(New) LAR 3** (6) Design Studio III	LA 234 Site Design Studio 5 (5)	LAND 112 (3) Landscape	LARCH 116 Design II: Spatial Design	LDE 261: Landscape Architecture
electives;		LA 241 Landform Design &	Architectural Communications II	(3)	Design Fundamentals III (4)
courses count	(New) LAR 3** (6) Design Studio IV	Construction (3)	LAND 240 (3) History of Landscape	LARCH 125 Landscape Architecture	LAP 254: Plant Materials (3)
towards major	(New) LAR 4** (6) Design Studio V		Architecture	Orientation Seminar (1)	
units and	(New) LAR 4** (6) Design Studio VI	LA 281 Design Communications II	LAND 211 (4) Landssons Design L	LADCH 145 Feelery and Diants L(2)	LDE 262: Landscape Architecture
major GPA)		(3)	LAND 211 (4) Landscape Design I	LARCH 145 Ecology and Plants I (3)	Design Fundamentals IV (4)
Courses listed	(New) LAR 2** (3) Site Engineering	LA 314 History of World	LAND 231 (4) Landscape	LARCH 155 Skills Lab I: Hand &	LPH 310: History of Landscape
must include	(New) LAR 2** (3) Landscape	Landscapes (4)	Construction I	Digital Graphics (2)	Architecture (3)
course prefix,	Construction	LA 335 Community & Open Space	LAND 212 (4) Landscape Design II	LARCH 156 Skills Lab II: Hand &	LPH 311: 20 th Century Landscape
number, units,	(New) LAR 2** (3) History and	Studio (5)	LAND 232 (3) Landscape	Digital Graphics (2)	Architecture (3)
and title. Mark	Theory of Landscape Architecture	LA 342 Site Engineering (4)	Construction II	LARCH 215 Design III: Site Design	LDE 361: Landscape Architecture I
new				(4)	(5)
coursework	LAR 420 (4) Plant Materials	LA 346 Professional Practice (2)	HORT 306 (3) Trees and Shrubs for		LDE 363: Landscape Planting Design
(New).	LAR 423 (3) Landscape Ecology	LA 336 Design Workshop Studio I	Sustainable Built Environments	LARCH 216 Design IV: Expanded	(3)
Provide	LAR 470 (4) Intro to GIS	(5)	LAND 241 (3) History and	Use, Scale, and Context (4)	LTC 343: Landscape Construction I
email(s)/letter(LA 343 Landscape Construction (4)	Development of Landscape	LARCH 235 Design Implementation	(3)
s) of support	LAR 440 (3) History, Theory and		Architecture in North America	I: Grading (3)	
from home	Contemporary Landscape	LA 345 Professional Internship (5)	LAND 311 (5) Landscape Design III	LARCH 236 Design Implementation	LAP 352: Ecosystems and
department	Architecture	LA 437 Regional Design Studio (5)		II: Materials (3)	Sustainable Design (3)
head(s) for	LAR 426 (4) Planting Design	LA 452 Natural Precedent in	HORT 308 (3) Plants for Sustainable		LAA 345: Professional Practice
courses not	LAR 460 (3) Professional	Planting (3)	Landscapes	LARCH 245 Ecology & Plants II (3)	Seminar (1)
owned by your	Practice/Working Drawings		LAND 301 (3) Landscape	LARCH 246 Ridge & Valley in the	LDE 362: Landscape Architecture II
department.	LAR 496A (1) Special Topics in	LA 438 Design Workshop Studio II	Architecture Theory	Field (1)	(5)
uepartment.	Landscape Architecture	(5)	LAND 312 (5) Landscape Design IV	LARCH 255 Skills Lab III: Digital	
			LAND 331 (4) Landscape	Graphics (2)	LTC 344: Landscape Construction II
			Construction III	LARCH 256 Skills Lab IV: GIS (2)	(3)
					LAP 332: GIS Applications in
			URPN 202 (3) Building Better Cities		Environmental Design (3)

LAND 412 (5) La	Iscape Design VI LARCH 276 Human D	imensions of LAP 484: Internship ORLAP 485:
LAND 431 (3) Pro	Design i History & Th	
PHIL 314 (3) Env	onmental Ethics	
URPN 361 or UR Issues or Sustain	Use, Scale, and Conte N 460 (3) Urban ble Communities III: Planting Methods	plementation LPH 411: Landscape Architecture
Semester away (the following:		
	L Field Studies in novation (study Landscape Architectu	orary Trends in LTC 446: Landscape Construction III
LAND 4	4 Internship LARCH 375 Human D Design - Applied (3)	imensions of Two Upper Division Design Professional Electives (6)
	LARCH 386 Professio	nal Practice (3)
	LARCH 414 Design an Advanced Landscape Design (5 per semest of 15) (5-15)	Architectural
	LARCH 424 Design Th (3)	eory Seminar
	LARCH 499A Design T Seminar 1()	heory
	LARCH 499B Design a Contemporary/Interr Landscape Architectu Issues (5)	national
	LARCH 499D Contemporary/Interr Special Topics (3)	national

Internship,	No.	Yes. LA 345 Professional Internship	Yes. LAND 484 Summer Internship	No.	Yes. LAP 484: Internship (2)
practicum,		(5) Professionally supervised field	(0).		Structured practical experience
applied course		experience in private firms and	Practical experience in an office of		following a contract or plan,
equirements		public agencies designed to	design allied professionals; 10-		supervised by faculty and practitioners.
Yes/No. If yes,		introduce students to professional	week internship with a minimum of		
		practice. Students work in a	400 hours; continuous		
provide		department-approved firm or	employment; departmental pre-		
description)		agency of their choice either during	approval through the department		
		a regular or summer session. May	internship coordinator required.		
		be repeated to a maximum of 24	Must be taken on a		
		hours.	satisfactory/unsatisfactory basis.		
			Prerequisites: Upper level		
		Prerequisite: Junior standing and	classification and approval of		
		consent of instructor.	internship coordinator; LAND 321		
			And		
			In fulfillment of the Semester Away		
			requirement, select one of the		
			following:		
			LAND 494 Fall Internship (6) An		
			internship (15 week, 600 hours)		
			with a landscape architecture or		
			landscape architecture-related		
			company that exposes the student		
			to landscape architectural		
			professional practice; monthly		
			reports, final internship portfolio		
			and internship supervisor		
			assessment letter required;		
			distance education course with		
			non-resident status.		

Senior thesis or senior project required (Yes/No. If yes, provide description)	Yes. Yes, completed as part of coursework in LAR 4** Design Studio VI. Students are expected to undertake an independent in- depth, site-specific, and self- directed landscape architecture research and design project that draws on skills, knowledge, and values acquired in the program.	No.	Prerequisites: LAND 321 and approval of coordinator. CARC 301 Field Studies in Design Innovation (1 – 18) Design innovation in international and domestic environments away from the Texas A&M University campus; emphasis on the cultural, social, economic, geographical, climatic and technological factors influencing design solutions for human needs. May be taken up to two times in the same semester. Prerequisite: Junior or senior classification; <u>CARC 481</u> ; approval of assistant dean for international programs and initiatives. No.	No.	Yes. Within LDE 462 Landscape Architecture IV, Students work under the instruction/direction of an instructor to develop individual or group projects in which the student(s) have responsibility in identifying a specific problem or issue. Some students may choose to pursue a senior thesis/creative
	_				Some students may choose to

Additional requirements (provide description)	None.	 BLA students are expected to maintain a minimum 2.0 GPA (on a 4.0 scale). 	 A grade of C or better is required in College of Architecture courses (CARC, COSC, ENDS, ARCH, URPN, LAND, VIST, ARTS) to satisfy Landscape Architecture degree requirements. 	 In order to graduate, a student in the major must earn at least a C grade in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 (http://senate.psu.edu/polici es-and-rules-for- undergraduate-students/82- 00-and-83-00-degree- requirements/#82-44). 	- 3.00 GPA required in major
Minor (specify if optional or required)	Optional.	Optional.	Optional.	Optional.	Optional

*Note: comparison of additional relevant programs may be requested.



Prof. Lauri Macmillian Johnson College of Architecture, Planning and Landscape Architecture The University of Arizona Tucson, AZ 85721

Dear Director and Professor Lauri Macmillan Johnson,

As Director of The Design School, I am pleased to lend my support on behalf of The Design School and our Landscape Architecture Program at Arizona State University (ASU) for your proposal to establish a Bachelors of Landscape Architecture (BLA) at the University of Arizona (U of A).

The Design School at the Herberger Institute for Design and the Arts supports more than 1700 students across Programs in Architecture, Industrial Design, Interior Design, Landscape Architecture and Visual Communication Design. The Design School's Landscape Architecture Program currently offers a Bachelor of Science in Landscape Architecture (BSLA) and a Masters of Landscape Architecture (MLA). Both the ASU MLA and the U of A's MLA have both supported the state and nation in preparing their graduates to enter the licensed profession of landscape architecture graduates produced each year. This fact indicates to me that more professionally accredited programs will support both the needs of the State of Arizona and the nation. Our experience at ASU has demonstrated a bachelor's degree provides an important point of access to the professional opportunities that an accredited degree in landscape architecture can provide.

The ASU Landscape Architecture Program has a long-standing focus urban ecological design and planning and is aligned to the Arizona State University focus on sustainability. In conversation with Landscape Architecture Professor Kenneth Brooks and Landscape Architecture Associate Professor and Program Head Joseph Ewan, we all believe the ASU BSLA and the proposed U of A BLA can complement the diverse and growing needs of the nation and planet for more professional landscape architects prepared to analyze, plan, design, manage, and nurture the built and natural environment.

Sincerely,

Jasm I hurry

Jason Schupbach Director The Design School Herberger Institute for Design and the Arts

SCHOOL OF ARCHITECTURE

1040 North Olive Rd. PO Box 210075 Tucson, AZ 85721-0075

Ofc: 520-621-6752 Fax: 520-621-8700

capla.arizona.edu 11.13.19-09:30

to

Arizona Board of Regents

re

support for proposed Bachelor of Landscape Architecture (BLA) degree

Dear Regents:

I write in full support of the proposed BLA degree from the UA College of Architecture, Planning, and Landscape Architecture. This degree would not only advance our College's strategic plan, which emphasizes interdisciplinarity and collaboration, but would also advance the University's Pillars Two (2.2A, 2.2D2) and Three (by driving cultural and economic impact through its graduates, who will be workforce-ready upon graduation). As the proposal envisions students engaged in community service who will thereby build partnerships with local industry and professionals, it is designed to have tangible community impact.

The reputation of its existing degree forecasts success. The School of Landscape Architecture and Planning (SoLA+P) has developed an outstanding reputation with the Landscape Architecture Accreditation Board (LAAB) through its long-standing Master of Landscape Architecture. There is every reason to expect similar exceptional level of quality in the proposed BLA, whose students will, with one additional year, be able to earn the Master's.

Duplication should not be a concern. Although Arizona State University has a Bachelor of Science in Landscape Architecture (BSLA), it is different in nature and credential from this proposal. Our degree will have greater emphasis on language, writing, and design that is focused on arid climate and sustainable design, so any duplication would be superficial.

Most importantly for my School, the BLA will allow a cross-disciplinary and collaborative learning environment for our Bachelor of Architecture (B.Arch) degree. Working with Director Lauri Macmillan Johnson, we have identified several studios that would be co-convened to help prepare students for a workforce where cross-disciplinary cooperation is standard. We envision a co-taught first semester as well as advanced studios in which B.Arch and BLA students will learn about each other's professions and develop collaborative projects based in the community or on applied research.

I heartily support the creation of the BLA degree as it will enhance our students' scholarly experience. create opportunities for interdisciplinarity and collaboration, and strengthen our College, the University, and the community.

sincerely:

Robert Miller, AIA Professor; Director of the School of Architecture HeadsUP Executive Director 2019 AIA Arizona Past-President millerR@u.arizona.edu



THE UNIVERSITY OF ARIZONA College of Architecture, Planning & Landscape Architecture



School of Plant Sciences College of Agriculture and Life Sciences 520.621.1977 Telephone 1145 E. South Campus Drive P.O. Box 210036 Tucson, Arizona 85721-0036 520.621.7186 FAX www.cals.arizona.edu/pls

MEMORANDUM

Date: November 8, 2019To: Review CommitteeFrom: Matthew A. Jenks, Director, School of Plant Sciences

Matter A-Jack

Subject: Support Letter for Bachelor of Landscape Architecture degree

This letter is in support of the School of Landscape Architecture and Planning's proposal for a Bachelor of Landscape Architecture (BLA) degree. The proposed program is associated with a Master of Landscape Architecture degree, with courses that have been included in a recent proposal put forward by our School of Plant Sciences for a new Urban Horticulture sub-plan in our Bachelor of Science degree in Sustainable Plant Systems (SPS).

A new BLA degree will offer additional opportunities that will specifically benefit undergraduate students in our SPS degree to take advantage of lower division courses offered by the School of Landscape Architecture and Planning, including design studios. This option will appeal to students who seek a design background to complement their studies. Students in SPS may even seek the minor in Landscape Architectural Studies.

Creating opportunities for students from the SPS and BLA programs to interact with one another through shared coursework will foster increased understanding between these closely related disciplines, which will ready students for careers in a multidisciplinary workforce. SPS students in the Urban Horticulture sub-plan or minor in Landscape Architectural Studies would prepare themselves for collaboration with allied disciplines in both horticulture and design of the built environment.





CITY OF TUCSON TUCSON WATER DEPARTMENT November 29, 2019

New Academic Program Landscape Architectural Accreditation Board (LAAB) Review Committee The University of Arizona, Tucson, AZ 85721

RE: New Academic Program: Bachelor of Landscape Architecture (BLA), Undergraduate Major at University of Arizona within College of Architecture, Planning & Landscape Architecture (CAPLA)

To the Program Review Committee,

As the Urban Landscape Manager in the Pubic Information and Conservation Office within City of Tucson's public water utility, I have been able to apply the lessons learned from my undergraduate BLA from the University of Arizona, College of Agriculture. At the time, UArizona was one of two Landscape Architecture programs not in a design college, but due to its connection with the School of Renewable Natural Resources, was ahead of its time in emphasizing applications of community sustainability issues to landscape theory and design. This strength continues in the current Masters in Landscape Architecture program (MLA) within CAPLA. UArizona continues to be a leader in community and ecological sciences, both physical and social; these will be resources available to the BLA student.

It was a great loss to the profession and to this community when the undergraduate program was eliminated. The undergraduate program can offer that first exposure to landscape architecture, a professional program much needed in today's world of ever changing climate, urban and ecological systems. Undergraduate Landscape Architects are the future leaders of tomorrow and today, understanding the unique connections between man and the surrounding environment, both local and global.

I support the re-institution and accreditation of an undergraduate BLA program in UArizona, CAPLA.

Sincerely, 0110 Irene Ogata, Urban Landscape Manager, PLA, CPM, ASLA Public Information & Conservation Office



PUBLIC INFORMATION OFFICE • P.O. BOX 27210 • TUCSON, AZ 85726-7210 (520) 791-4331 • water.tucsonaz.gov



November 11, 2019

Lauri Johnson Director of the School of Landscape Architecture and Planning University of Arizona Ijohnson@email.arizona.edu

Dear Lauri,

I am excited to learn that CAPLA is proposing to offer a BLA program. As the Southern Section Chair (2018-2019) of the Arizona Chapter of the American Society of Landscape Architects, as well as a registered landscape architect and Principal of Wilder Landscape Architects, I applaud this step and feel that it fills a need in the profession.

Since the University of Arizona discontinued its bachelor's program there have been limited options for undergraduate students in the southwest. Having this degree program in Tucson would provide an alternative to ASU. The ability to earn an MLA degree in one more year or pursue a masters in a related field (architecture, urban planning, or real estate development) at the same university adds to the appeal.

Providing more options for education in the field, community involvement of students, and opportunities for local practitioners to share their knowledge are all great outcomes of the proposed program, and this initiative has our support.

Best regards,

Tomit Pattr

Jennifer Patton, RLA Principal, Wilder Landscape Architects Southern Section Chair (2018-2019) AZASLA



School of Population and Public Health 2206 East Mall Vancouver, BC Canada V6T 1Z3

Phone 604 822 2772 Fax 604 822 4994 info@spph.ubc.ca www.spph.ubc.ca

November 25, 2019

Lauri Johnson, Director School of Planning and Landscape Architecture University of Arizona

Re: Bachelor of Landscape Architecture (BLA)

To Whom It May Concern:

The training I received in the U of A's undergraduate in Landscape Architecture (BLA) prepared me well for both an academic and a professional consulting career. I graduated from the U of A's BLA program in 1985. For the past 16 years, I have held the Bombardier Chair in Sustainable Transportation at the University of British Columbia and before that I was a planning professor at Georgia Tech. For the past 25 years, I have been President of Urban Design 4 Health, Inc. There is no question that the U of A's BLA program provided me with the required training to develop the analytical foundation required to advance within and outside of academia – and perhaps an odd ability to do both.

This was the training that led me to the core set of research questions at the nexus of urban design, behavior and activity patterns, and well-being. I had some fantastic professors at the U of A in the BLA program who challenged me and helped me understand the importance of site design, flow of space, and respecting the natural environment. What I did not know at the time was they were teaching me how to think. It was this training that led me later into academia and into the application of evidence to decision making and in the creation of scenario planning "decision support" tools.

Over the years, I have remained in contact with faculty at the U of A and with CAPLA. I was disappointed that the BLA program was shut down. I am excited to see it now under consideration for renewal. I believe that future BLA graduates from the U of A will be ready for the workforce when they graduate. Like myself, I am confident that BLA students will become licensed professionals. I understand that there is a strong market for the BLA program and this is supported with market data. Moreover, there are a lot of inquiries from prospective students. There is also a strong market for landscape architecture graduates entering the workforce. I myself have hired several students to work in my own firm and also recruited students into master's programs in urban planning who trained as landscape architects at the undergraduate level. A BLA trains students to communicate graphically, verbally, and in written form.

The U of A's MLA program and 6 FTE's who oversee it offer considerable support for the relaunching of the BLA program. I see several reasons why CAPLA provides an excellent home for a BLA degree. Candidly, it is oddly missing. BLA students will once again be



able to advance to the MLA or enroll in other related degree programs such as Urban Planning or Real Estate Development. I also understand that the U of A's BLA will be quite different from what is offered at ASU.

It is my understanding that the BLA program can be relaunched with little to no investment required in building infrastructure. Due in part to the success of the previous BLA program, there are a large number of outstanding local practitioners with unique skills that would enjoy teaching. Finally, the BLA fills a critical gap in CAPLA needed to advance its mission and form a more fully interdisciplinary College.

In closing, it is my hope that the U of A will once again be training landscape architecture at the undergraduate level. Landscape architecture offers a unique training and culture that helps to bridge the social science aspect of urban planning with the physical form and design focused technical training gained in architecture and perhaps in other related disciplines such as civil engineering. A complete vision for CAPLA is quite arguably one with a BLA program.

Sincerely,

our Dituk

Lawrence Frank, PhD, ASLA, AICP Bombardier Chair Professor Community and Regional Planning Population and Public Health



220 W. Sixth Street P.O. Box 210300 Tucson, AZ 85721-0300

pdc.arizona.edu

Lauri Macmillan Johnson Professor and Director School of Landscape Architecture and Planning College of Architecture, Planning, and Landscape Architecture The University of Arizona 1040 N. Olive Road, A303A Tucson, AZ 85719-0075

Re: Letter of Support for the Bachelor of Landscape Architecture Program at CAPLA

Dear Lauri,

As a University of Arizona Bachelor of Landscape Architecture graduate (Class of 1980), it is my immense pleasure to write a letter of support for the reestablishment of the BLA program. My BLA education at Arizona gave me a strong foundation of landscape architectural and problem solving skills that helped me obtain employment and pursue a professional license.

With serous regional issues of sustainable development, water conservation and climate resiliency, landscape architects are uniquely positioned to help communities in Arizona and the arid southwest address these issues. Continued growth and prosperity in the southwest requires more professionals to help solve our environmental and urban challenges. The profession (ASLA) sees a need for more graduates to supply the workforce for private firms and public agencies.

First professional degree BLA graduates are ready to successfully enter the job market and continue the path towards becoming licensed professionals. The College of Architecture, Planning, and Landscape Architecture (CAPLA) has an excellent Masters of Landscape Architecture program with faculty and resources that can successfully add and develop a BLA program. CAPLA programs provide great service to the community and adding a BLA program will increase the opportunity for service.

I have had the pleasure of working with CAPLA faculty and students on campus related projects and I fully support CAPLA's effort to reestablish a Bachelors of Landscape Architecture program at Arizona.

Bear Down,

Mark 9. Jovak

Mark A. Novak, PLA, ASLA Landscape Architect Planning, Design & Construction The University of Arizona 220 W. Sixth Street, B216 Tucson, AZ 85721-0300





November 13, 2019

Ms. Lauri Macmillan Johnson Director CAPLA **The University of Arizona** 1040 N. Olive Road, A303A Tucson, Arizona 85719

RE: BLA Program

Lauri:

I am writing in support of the re-establishment of the Bachelor or Landscape Architecture (BLA) program within CAPLA at the University of Arizona. I am fortunate to be a graduate from The University of Arizona BLA program and have found tremendous advantages over colleagues with BSLA degrees. Some notable differences I have discovered within BLA programs are their emphasis upon writing, design and sustainable practices. This gives a tremendous advantage to students coming out of these programs. As a business owner, I too often see students and new employees with difficulty in writing skills; a solid design foundation; and an understanding of sustainable systems. These are essential skills for our craft, and we are currently in a great shortage of qualified Landscape Architecture graduates.

In my discussion with other practitioners, there is a good list of people, myself included, who would love to help the program further. Including part time teaching, attending studio critiques, or student mentoring. I have always found University of Arizona BLA students to stand out as leaders in our profession and communities. We are the first to step up and lead, mentor and engage. I myself, am the current Arizona ASLA President, former Parks and Recreation Board Chairman and Planning and Zoning Commissioner. Our current national ASLA president is a University of Arizona graduate.

I went to the University of Arizona knowing they were the leaders of design in the arid southwest. Currently, with the direction and strength of the Current MLA program, I see the same in the marketplace. The re-establishment of the BLA program will not only strengthen the school but provide more rounded leaders in the field of Landscape Architecture. Please do not hesitate to reach out to me with any questions about my support for the program.

Sincerely

Brett H. Anderson Partner



wilson design studio

1631 Alhambra Blvd., Suite 100 Sacramento, CA. 95816 916.524.5614 keith@wdsla.com

November 21, 2019

The University of Arizona College of Architecture, Planning, and Landscape Architecture School of Landscape Architecture and Planning 1040 N. Olive Road, A303A Tucson, AZ. 85719-0075

Reference: New Academic Program - Undergraduate Major (BLA) Attention: Laurie Macmillan Johnson Professor and Director

Dear Laurie:

It is with excitement that I write this letter of support for the School of Landscape Architecture and Planning's application for creation of a new Undergraduate Major in Landscape Architecture (BLA). As a graduate of the past BLA program's <u>last</u> graduating class ('98), I cannot tell you how happy I am to hear that this application has the support of the School, College, and UofA Curricular and Financial Affairs. In all honesty; it's about time!

Looking back on my time at the UofA, I can confidently say that the experience I gained as part of a dual undergraduate/graduate program in landscape architecture was <u>the</u> most important aspect of my education and entry into the professional workforce. As a licensed practitioner and owner of a growing design firm, I can tell you that entry into the job market of landscape architecture requires the technical knowledge only provided by an undergraduate degree. My experience in a dual program made me even more prepared, because working with the research-oriented perspective of my fellow graduate students helped me develop a respect for research-based design that has informed both my design aesthetic and career path from day one. Without this experience and perspective I doubt I would have had the confidence to start my own practice. Few programs offer a dual program today and I consider myself fortunate to have had this opportunity while at the UofA. As a past Vice President of Membership for ASLA (The American Society of Landscape Architects), I can tell you that the future of our profession relies on the symbiotic relationship of thoughtful problem-solving and research-based design solutions. One without the other leaves tremendous gaps in understanding and ability. Today's markets and society at large rely on both more heavily that ever.

I addition to running my own practice, I have worked for several years at the University of California at Davis as a part-time lecturer in their undergraduate landscape architecture program. The ability to utilize local practitioners as real world instructors through an undergraduate program would be a huge benefit to both your student body and to local practitioners. The UofA has a rich heritage of providing students with local community service learning projects that help lead to funding sources and local professional and practitioner growth. Bringing this program back would guarantee this history continues. Finally, at my firm we prefer to hire undergraduate students. Their 4 or 5 year educational experience simply makes them more suited to entry level employment and hands on learning in the office environment. This approach varies based on region and practice, but I can confidently tell you the over-whelming majority of my owner-colleagues feel the same.

If there is anything else I can do to support this effort, please let me know.

Sincerely,

Keith P. Wilson, CRLA #4728 Principal, Wilson Design Studio www.wdsla.com



November 21, 2019

Lauri Macmillan Johnson Professor and Director School of Landscape Architecture and Planning College of Architecture, Planning, and Landscape Architecture The University of Arizona 1040 N. Olive Road, A303A Tucson, AZ 85719-0075 capla.arizona.edu Office: (520) 621-8790 Cell: (520) 250-2500

Dear Director Macmillan Johnson:

It was a pleasure to talk with you at the recent ASLA National Conference in San Diego. As per our discussion, I was very happy to year that The University of Arizona is seriously considering reinstating the undergraduate program in Landscape Architecture. Our firm, as well as most firms on the East Coast, are experiencing great difficulty in finding qualified graduates from accredited programs in Landscape Architecture. Student numbers in East Coast university programs are down and my colleagues and I are concerned about being able to meet a growing demand for our services. The Great Recession of 2008 has created a deficit of qualified professionals. Several years ago, Simone Collins Landscape Architecture was fortunate to employ one of your graduates and her qualifications and skills were exceptional. While I understand that you head the graduate program in Landscape Architecture, not all students can afford the time or cost of pursuing a graduate degree. A student with a Bachelor's in Landscape Architecture is totally employable and given my read of the market over the next several years, there will continue to be a great demand for quality students from institutions such as yours.

I wish you well in reestablishing the undergraduate program at the University of Arizona. You will be doing a great service to the profession and to all of the many types of clients who employ landscape architects. Given all of the challenges facing the natural and built world, the need has never been greater.

C:\Users\Simonep\Desktop\U of Arizona - Simone Collins.docx

Sincerely,

Simone Collins Landscape Architecture

Peter M. Simone, RLA, FASLA President Landscape architecture has a vital role to play in solving the defining issues of our time: climate change, species extinction, rapid urbanization, and inequity. The urgent challenge before us is to redesign our communities in the context of their bioregional landscapes enabling them to adapt to climate change and mitigate its root causes. As designers versed in both environmental and cultural systems, landscape architects are uniquely positioned to bring related professions together into new alliances to address complex social and ecological problems. Landscape architects bring different and often competing interests together to provide artistic physical form and integrated function to the ideals of equity, sustainability, resiliency and democracy.

Landscape Architecture Foundation, Declaration of Concern

To Whom It May Concern,

As a child in the 60's and 70's growing up around Tucson, I remember my grandmother renting an apartment behind her house to university students, for several years many of these students were studying landscape architecture. I recall them spending time showing me their work, I would admire how they hand drafted plans onto paper. Later my grandmother would take me to some of these built places and describe to me the nuances of the design. The students would show me books of Sonoran Desert flora and describe to me how adaptive the landscape was to the harsh environment. Years later as an undergraduate landscape architecture student at the University of Arizona, I was able to dive deeper into the importance of the landscape and more importantly our place in it.

GREENWORKS

After graduating with a Bachelor of Landscape Architecture degree in 1992 I found that I was well prepared for the transition into the "real world". Coming from an agricultural and science based program allowed me to speak to issues of natural resource management and habitat preservation. Unlike some of my professional peers I believe I understood "why" designs worked taking a systems approach to problem solving. When I entered the workforce in Portland Oregon, I found my education from the University of Arizona offered a diverse understanding of environmental, cultural, and natural resources which was sought after by potential employers. As a partner today in a 21-person, award winning design firm I covet the BLA graduate that utilizes system thinking to problem solve.

With Tucson's proximity to Mexico and its rich and complicated cultural history, it provides an ideal setting for a BLA program. The continued degradation of the fragile Sonoran eco-system between the US and Mexico will require multi-national solutions. During my time at the U of A I recognized there is a great demand for this program, not only from southern Arizona residents but also those that reside south of the border as we had several in our program. Having just returned from the American Society of Landscape Architecture Annual Meeting in San Diego, it has become abundantly clear that there is a shortage of undergraduate landscape architecture students graduating, specifically those of color or diverse ethnicity.

I would strongly support a BLA program at the University of Arizona, it is the right time and the right place for such a program. The U of A's history with an BLA program offers a strong alumni base from which to draw support. Most importantly, the demand for students with diverse backgrounds coupled with a comprehensive understanding of climate change and all its implications would make an undergraduate BLA program in Tucson a success.

Sincerely,

Gill Williams, ASLA Principal, GreenWorks

Eric Scharf, BLA, RLA PO Box 40304 Tucson, AZ 85717

Ms. Lauri Macmillan Johnson, Professor and Director School of Landscape Architecture and Planning College of Architecture, Planning, and Landscape Architecture (CAPLA) The University of Arizona 1040 N. Olive Road, A303A Tucson, AZ 85719-0075

Dear Lauri,

Thank you for contacting me and providing a draft copy of the Proposal for a Bachelor of Landscape Architecture (BLA) degree within CAPLA. I read the Proposal at length and I am pleased to write in its support.

While I know you are aware of my background, let me summarize: As with many landscape architects, I came to the profession indirectly. My first degree is in Biology (Botany). As I neared graduation, I was introduced to and then read about landscape architecture, and visited the University of Arizona's program, where I felt that perhaps I'd found my calling. I was accepted into the program, and graduated with a BLA in 1981. Many of my classmates and I found employment immediately. Most of us remain in close contact to this day, and I can report that most continue to practice, principally in the private and public sectors, locally and across the nation, and one in Australia. Personally, I worked for small, Tucson-based firms including joining my wife (also a landscape architect) in a firm she started that remains in business to this day. I also worked for the University of Arizona in the Facilities Design and Construction department as a senior project manager for more than seven years, and taught a range of courses for many years as Adjunct Professor in the University's BLA and Masters of Landscape Architecture (MLA) programs.

My support for the proposed BLA program begins with the basic premise that landscape architecture is a generalist profession: graduates and registered professionals can be found, for example, in a wide range of single- and multi-discipline design offices; as team members in city, county, regional, state and federal agencies and departments engaged in planning, policy-making, research, and project implementation; and of course in academia.

From my experience, the role of a BLA program in relation to these situations is four-fold: 1) providing a rigorous and demanding core curriculum including design studios, history and theory, research materials and techniques, site analysis and engineering, environmental assessment and impacts, and professional practice, 2) course requirements in areas fundamental to successful practice, including: communication (written, graphic and oral), process (approaches to and methods of problem identification solving), and interdisciplinary interactions (the value and essential nature of allied disciplines, and how and when to engage

them), 3) introduction, training and exposure to typical practice settings and projects, and 4) a selection of both required and strongly-encouraged-but-optional technical coursework such as Computer Assisted Design and Drafting (CADD), Geographic Information Systems (GIS), soil science, plant materials, construction materials and methods, geodesign, natural history, and geography. My education included courses in all these areas, and all proved measurably significant over the years of my professional life. From my review, the curriculum illustrated and described in the Proposal supports these goals well.

In addition to the degree, I believe strongly that professional registration is a fundamental milestone to practice. While registration varies by state, most states require professional experience in various capacities in addition to a BLA or MLA degree, and passing the multi-part LA Registration Exam (LARE) before considering an application for registration. Here, again, those of my BLA classmates who chose to pursue registration were successful. I believe the proposed BLA curriculum will prepare graduates for professional registration as well.

The demands and expectations of the profession, often stated as the Standard of Care, (as well as competition among practitioners for clients and project types) continue to increase, expanding the range of topics and technical challenges faced and pursued by practitioners. To address this and to keep the profession both current and relevant, research such as that required of MLA students is essential. That CAPLA already offers an accredited and highly regarded MLA degree, within a Research 1 University, means that BLA students wishing to—or perhaps encouraged to—explore particular areas in greater depth can do so in a straightforward manner.

Finally, I'm aware of the history of the LA program at the University over the decades, and can appreciate the goals of those who pursued the MLA at the expense of the BLA years ago. That said I believe the degrees can exist and be mutually supportive within CAPLA, and can serve the profession well as a result.

Wishing you success in this endeavor,

Eric Scharf



November 12, 2019

Novak Environmental, Inc. 4574 North First Avenue Suite 100 Tucson, AZ 85718 Tel 520.206.0591 Fax 520.882.3006

Ms. Lauri Macmillan Johnson, Professor and Director School of Landscape Architecture and Planning College of Architecture, Planning, and Landscape Architecture The University of Arizona 1040 N. Olive Road, A303A Tucson, AZ 85719-0075

aure,

Dear Ms. Macmillan Johnson:

This letter is to express my enthusiastic support for a return to offering a Bachelor of Landscape Architecture (BLA) degree from the College of Architecture, Planning, and Landscape Architecture (CAPLA) at the University of Arizona.

As a holder of a BLA and MLA from UArizona, as well as the owner of a local private practice landscape architecture firm in Tucson for over twenty years, I know the benefit a BLA would bring to the local and regional landscape architecture profession. BLA graduates are ready to successfully enter the job market, here or anywhere, as workforce ready professionals. The need for entry-level employees, both locally and regionally is acute, and graduates with a BLA can fill this demand.

A BLA graduate, in my opinion, has had more time to develop the full complement of knowledge, skills and abilities necessary to start a career in the field of landscape architecture. This includes more language, writing, design and critical problem solving, along with developing a strong emphasis on sustainable design strategies, something that we need to focus more attention on in the future.

The MLA program at CAPLA is excellent, and in fact, I have employed, both through internships and full-time employment, several students and graduates over the years. Even so, if there were BLA graduates, I would be very keen on seeking them out for possible employment.

I am admittedly biased with my BLA background as a primary professional degree, which I followed up later with an MLA as a "secondary" professional degree. The combination, I believe, gave me the education, background and ability to not only work in both private and public sectors, but start and run a successful private landscape architecture firm, as well as run for and win an elected seat on the Central Arizona Water Conservation District Board of Directors, which manages the Central Arizona Project – Arizona's largest renewable water supply. I would like to see more opportunities like this available for the next generation of leaders in Arizona.

Thank you for this opportunity to provide my input on this important and promising proposal. If I can be of further assistance, please let me know.

Very Truly

Karen M. Cesare

Karén M. Cesare, RLA, ASLA President



McGann & Associates

Landscape Architects and Planners

> 6814 North Oracle Road, Suite 210, Tucson AZ 85704 Tel: 520-297-9540 Fax: 520-297-9545 www.mcgannland.com

November 12, 2019

Lauri Macmillan Johnson Professor and Director of the School of Landscape Architecture and Planning College of Architecture, Planning, and Landscape Architecture The University of Arizona 1040 N. Olive Road, A303A Tucson, AZ 85719-0075

Ref: Letter of Support – University of Arizona Bachelor of Landscape Architecture Program

Dear Lauri,

As a 2001 graduate of the University of Arizona's Master of Landscape Architecture (MLA) Program and local practitioner I am writing this in support of the proposal to offer a Bachelor of Landscape Architecture (BLA) degree at the University of Arizona. I have witnessed firsthand the continuous growth and success of the current MLA Program as graduates from this program have demonstrated a deeper understanding of this field as it relates to sustainability design strategies in arid and desert environments and are well qualified to enter the profession.

By offering a BLA degree, the College of Architecture, Planning, and Landscape Architecture (CAPLA) will support the industry's growing demand for well qualified landscape architects. The BLA degree can provide undergraduates the opportunity to collaborate with the architecture, planning, and other departments across the university – preparing them for the real world interdisciplinary design process. All of this can take place in a first-rate facility which could be expanded as both the MLA and BLA programs would see continual growth in the coming years.

On a personal note, when I applied to U of A in 1995 for my undergraduate studies I was very interested in the BS of Landscape Architecture, which was in the College of Agriculture, but unfortunately they were no longer accepting students and ended the program. I then focused my studies on landscape horticulture and turfgrass management and received my BS in Agriculture in 1997. I returned in 1998 and entered the MLA program and have been practicing landscape architecture ever since. Given the opportunity, I would have entered the BSLA program as I was eager to enter into the workforce and I feel that this is also true for many undergraduates today.

Thank you for allowing me the opportunity to express my fullest support of the BLA program and I look forward to hearing about its success.

Sincer

Soott Martinez, PLA Director of Landscape Architecture

Lorí Jones Woods, PLA 3301 N. Mountain Avenue Tucson, Arízona *85719*

November 15, 2019

Ms. Lauri Macmillan Johnson, Professor and Director School of Landscape Architecture and Planning College of Architecture, Planning, and Landscape Architecture The University of Arizona 1040 N. Olive Road, A303A Tucson, AZ 85719-0075

Subject: Proposed Bachelor of Landscape Architecture (BLA) Program

Dear Lauri:

The news that there is growing support for re-establishing a BLA program at the University of Arizona is wonderfully exciting. I wholeheartedly support this idea. As a UArizona graduate with a Bachelor of Science in Landscape Architecture (BSLA) degree, I have always felt my degree has been instrumental in my having an extremely rewarding professional career.

Without a doubt, the knowledge, skills and abilities I gained from earning my degree enabled me to achieve many things and serve in various capacities, including but not limited to the following:

- Being offered the choice between three full-time job opportunities upon graduation;
- Passing all portions of the national licensure exam (Landscape Architect Registration Examination / LARE) at first attempt, within 4 years of graduation;
- Gaining licensure in Arizona, California, and Texas, thereby earning what has been, for me, criticallyimportant credentials;
- Experiencing a wide-range of various aspects of Landscape Architecture practice (e.g., custom residential and commercial design, planning and design of public works projects, overseeing the construction of large-scale river restoration efforts, developing native plant palettes for revegetation work, writing Environmental Impact Statements, conducting visual impact analyses, doing site engineering for rainwater harvesting, preparing regional conservation plans and resource management plans);
- Working collaboratively with biologists, archeologists, planners, engineers, architects, lawyers, and other professionals and subject-matter specialists- as a knowledgeable, contributing, credentialed professional peer or team leader;
- Working in the private, public, and non-profit sectors;

- Receiving local, state and national awards for project-related work and presenting work at those conferences;
- Volunteering in various capacities with CAPLA to support students in classroom and studio sessions, encouraging students and advocating for their pursuit of licensure.
- Being elected to serve the profession as the Arizona Chapter President (and other offices) for six years; and
- Being appointed by two Arizona Governors to serve terms as Landscape Architect member on the Arizona Board of Professional Registration for six years. Chairing that Board and serving as the Arizona delegate to the Council of Landscape Architectural Registration Boards (CLARB).
- Importantly, the gainful employment opportunities opened to me by my degree has enabled me to enjoy full-time work in the profession of my choice for nearly four decades, support myself and others over the years, save, and retire comfortably.

Lauri, I mention these things as a validation of the education I received while earning my undergraduate degree in Landscape Architecture, not because of any need for recognition. This education included not only the mechanics of Landscape Architecture practice, but a strong land ethic, professional integrity, ability to collaborate and solve problems as a team, and importantly, the value of sharing knowledge and giving back.

I thank you for all of your efforts in seeking approval for the proposed BLA program and wish you and others at CAPLA the very best in this endeavor. There is a critical need for graduates having the knowledge and skillset such a degree offers. Will you please let me know how I can support this effort?

Sincerely,

Lori Jones Woods, PLA ASLA Emeritus

Amy Webb Project Manager, Landscape Designer 14246 S. Via Horma Dr. Sahuarita, Arizona 85629

14 November 2019

Ms. Lauri Johnson Professor and Director, School of Landscape Architecture and Planning College of Architecture, Planning and Landscape Architecture The University of Arizona 1040 N. Olive Road Tucson, AZ 85719

Dear Lauri,

In 2013, I was an undergraduate engineering student taking a general education course: History of American Landscapes. Through the course, I was introduced to landscape architecture and already feeling out of place in the College of Engineering, immediately knew that landscape architecture was what I needed to study. Unfortunately, the University of Arizona did not offer an undergraduate degree in Landscape Architecture leading me to pursue an alternate route to complete an education in landscape architecture. This involved completing my degree in Sustainable Built Environments at the University of Arizona's College of Architecture, Planning and Landscape Architecture and then pursuing my Master of Landscape Architecture Degree. As my undergrad career was coming to an end, I was not intending on pursuing my master's degree at the University of Arizona. I had been considering other schools in Oregon, Washington, and even considered Harvard's design school. During my time at CAPLA, I had been introduced to the Landscape Architecture and Planning Department. The faculty and staff were passionate about their fields, dedicated to the school, and supportive of their students. While I knew that any school in the country would prepare me for the field, I was not positive that I would gain the same level of mentoring or guidance as I would at CAPLA so I chose to stay.

The MLA program has proven its success at CAPLA through its accreditation with the Landscape Architecture Accreditation Board as well as it's statistics of graduates being employed within the industry after graduation. Personally, the program provided opportunities for me to find an internship at Norris Design which lead to my employment with the company after school. If there were a bachelor's degree program, there would be opportunity for undergraduate students to participate in graduate courses, helping to keep curriculums efficient. I have firsthand experience of being an undergraduate student having the opportunity to participate in the same courses as the landscape architecture graduate students. This was beneficial for numerous reasons but include additional mentoring from the graduate students, an increased expectation in my performance, as well as having a springboard effect furthering my education and abilities. While this experience worked well for me, had I been able to obtain my undergraduate degree in landscape architecture, I would have sought an additional degree to support my landscape architecture knowledge from CAPLA in either Planning or Real Estate Development.

The bachelor's program at the University of Arizona would be distinguished from that of Arizona State University in that it would not be a Bachelor of Science degree. This would allow for students to learn more language and written skills which helps to create a cohesive and well-rounded education. Landscape architects do not only require design and science backgrounds but must be able to effectively communicate with communities, public agencies, and have an ability to write formal, technical, and legal information. Additionally, the sustainable design strategies that UA and CAPLA prides itself on can be incorporated into the program furthering student's education and understanding of the challenging environments that we work in. The CAPLA facilities provide investigation into real world design strategies. These include being able to learn how materials are put together in the Materials Lab, through learning in the Underwood Family Sonoran Landscape Laboratory, and the ability to learn and work collaboratively with the

adjacent Planning and Architecture studios. Granted, these skills and teaching strategies are all integrated into the master's program but there is only so much you can learn and teach during a three-year master program. An undergraduate degree allows for students to be more engaged and focus on the value that the degree provides.

From the viewpoint of a landscape designer in our Tucson community and active member in the American Society of Landscape Architecture, I see the following: there appears to be an increase in not only landscape architecture firms, but planning, architecture, engineering, and non-profit organizations hiring landscape architecture graduates. Students that have obtained bachelor's degrees are obtaining jobs and have the skills required to be hired into these entry level positions. In addition to their undergraduate degrees providing them with the knowledge needed to enter the workforce, they also are eligible to begin the road to licensure. Holding a bachelor's degree in landscape architecture, allows for a person to begin taking licensure exams and after practicing under a licensed landscape architect for five years (in Arizona) they may seek application approval from the Arizona State Board of Technical Registration.

Although I have a master's degree, several my coworkers earned their bachelor's degree in landscape architecture at the University Arizona when the program had been offered. These gentlemen have had successful careers in the profession, each having a different route that they have taken. Being new to the field, I am grateful to have them as mentors and to be able to learn from their experiences both from when they were in school and now. I am often envious of the classes, projects, or experiences that they were able to have while in the undergraduate program. These additional opportunities simply were not able to be offered within the short amount of time and rigorous curriculum that the master's program requires.

Working in the industry is fulfilling and continuously educational. I look forward to growing my career and knowledge in the field. I hope that one day, I will be able to share this knowledge whether as a professor or adjunct professor at CAPLA. I believe that this bachelor program will not just give me that opportunity one day but that it would provide the opportunity for more of Tucson's great landscape architecture community to impart valuable knowledge with students.

Thank you for your time and consideration for the addition of a Bachelor of Landscape Architecture program at the University of Arizona.

Sincerely,

amy Wetob

Amy Webb Project Manager, Landscape Designer awebb@norris-design.com 928.279.2345

CHRONOLOGY OF EDUCATION

Graduate Certificate in Heritage Conservation, University of Arizona, 2015

Master of Landscape Architecture (MLA), University of Arizona, 2005

Doctoral coursework (4 semesters), Organizational Behavior and Industrial Relations University of California, Berkeley, 1986-1988

M.S. Business Administration, Organizational Behavior University of Illinois, Urbana-Champaign, 1984

B.S. Business Administration University of Illinois, Urbana-Champaign, 1982

PROFESSIONAL CERTIFICATIONS

American Institute of Certified Planners (AICP), certified January 2017

ADDITIONAL TRAINING

Master Watershed Steward Certificate University of Arizona, Cooperative Extension, 9-month course, 2008

Community Mediation Program "Facilitating Challenging Groups", Our Family Services, 40-hour course, 2009

Arc GIS II, ESRI Training Group, 24-hour course, 2006

CHRONOLOGY OF EMPLOYMENT

2016-present	Program Chair, Coordinator, Heritage Conservation Program, College of Architecture, Planning & Landscape Architecture, University of Arizona
	Lecturer, School of Landscape Architecture and Planning, College of Architecture, Planning & Landscape Architecture, University of Arizona
	Program Chair, MS Architecture – Heritage Conservation, School of Architecture, College of Architecture, Planning & Landscape Architecture, University of Arizona
2015-2016	Adjunct Lecturer, School of Landscape Architecture and Planning
	Program Coordinator, Drachman Institute, College of Architecture, Planning & Landscape Architecture, University of Arizona

2013-2015	Coordinator Master of Real Estate Development, University of Arizona
2011-2013	Adjunct Lecturer School of Landscape Architecture and Planning, University of Arizona
2008-2013	Lead Planner and Project Manager Comprehensive Planning, City of Tucson
2008	Consultant Pinal County Water Augmentation Authority
2006-2007	GIS Program Manager and Planner Natural Resources, Parks, and Recreation Department, Pima County
2005-2006	Environmental Planner Development Department, Pathway Developments, Tucson
2004-2005	Research Assistant Department of Landscape Architecture, University of Arizona
2003-2007	Landscape Designer Self-employed
1997-2001	Research Associate Department of Women's Studies, The Pennsylvania State University
1995-1997	Program Planner Continuing and Distance Education, The Pennsylvania State University
1991-1994	Health Educator and Program Coordinator California Department of Health Services
1989-1991	Program Coordinator Department of Health Services, Contra Costa County, California

COURSES TAUGHT

2018-2019	LAR 350 PLG 544 LAR 597j RED 521	Parks and Urban Public Spaces (online) Site Planning Documentation of the Historic Built Environment (online) Urban Form and Placemaking
2017-2018	PLG 515 LAR 597j LAR 350	Design Studio 1 Documentation of the Historic Built Environment (online) Parks and Urban Public Spaces (online)
2016-2017	PLG 501a PLG 511 LAR 597j	Introduction to Planning, University of Arizona Design Studio I Documentation and Interpretation of the Historic Built Environment (online)

		CHOROVER / CURRICULUM VITAE / 3
2013	PLG 611	Planning Studio, University of Arizona
2011-2012	LAR 350	Parks and Urban Public Spaces, University of Arizona
1983-1984	BA 265	Organizational Behavior for Non-Majors, University of Illinois
1982-1983	BA 250	Introduction to Organizational Behavior, University of Illinois

REPORTS

2018	Fort Lowell Park, Historic American Landscapes Survey. Submitted to National Park Service. Chorover, Gina (editor) with student researchers from the University of Arizona course, LAR 497j/597j.
2017	Himmel Park, Historic American Landscapes Survey. Submitted to National Park Service. Chorover, Gina (editor) with student researchers, Jaimie Luria and Molly Adamowicz
	Armory Park, Historic American Landscapes Survey. Submitted to the National Park Service. Chorover, Gina (editor) with student researchers, Susan Bierer and Stephanie Badurski
	Valley of the Moon, Historic American Landscapes Survey. Submitted to the National Park Service. Chorover, Gina (editor) with student researchers, Jaimie Luria, Susan Bierer and Crystal Cheek
2016	Empire Ranch, Historic American Landscapes Survey. Submitted to the National Park Service. Chorover, Gina, Helen Erickson, and Robin L Pinto with Student Researchers
2015	City of Tucson Historic Preservation Plan (final draft). Chorover, Gina and Nicole Lavely
2014	Colossal Cave Mountain Park Historic American Landscapes Survey. Submitted to the National Park Service. Chorover, Gina (Project Lead) with Student Researchers
	Phoenix Homesteads Historic American Landscapes Survey. Submitted to the National Park Service. Allan, Aaron, Jim Coffman, Caryn Logan Heaps, and Helen Erickson (Editor) with Student Researchers
	Prescott Armory Park Historic American Landscapes Survey. Submitted to the National Park Service. Chorover, Gina (Project Lead) with Student Researchers
	South Mountain Park Entry Complex Historic American Landscapes Survey. Submitted to the National Park Service. Allan, Aaron, Jim Coffman, Caryn Logan Heaps, and Gina Chorover (Editor) with Student Researchers
	Kinishba Ruins Historic American Landscapes Survey. Submitted to the National Park Service. Barry Steinbecher, Starr Herr-Cardillo, Allison Dunn, and Gina Chorover (Editor)

	CHOROVER / CURRICULUM VITAE / 4 El Tiradito Historic American Landscapes Survey. Submitted to the National Park Service. Steinbrecher, Barry. Gina Chorover (Editor)
	Tucson Plant Materials Center Historic American Landscapes Survey. Submitted to the National Park Service. Levstik, Jennifer with Student Researchers. Gina Chorover (Editor)
	Tumacacori Historic Park Historic American Landscapes Survey. Submitted to the National Park Service. Erickson, Helen with Student Researchers. Gina Chorover (Co-Editor)
2013	Arizona Inn Historic American Landscapes Survey. Submitted to the National Park Service. Chorover, Gina (Project Lead) and Helen Erickson
	Faraway Ranch Historic American Landscapes Survey. Submitted to the National Park Service. Erickson, Helen (Project Lead). Gina Chorover (Co-Editor)
2012	Boyce Thompson Arboretum Historic American Landscapes Survey. Submitted to the National Park Service. Erickson, Helen, Gina Chorover (Project Co-Lead), Rebeca Field, and Sylvia Lee
2012	Pine Creek Historic District, National Register Amendment, Zion National Park. Submitted to the National Park Service. Jeffery, R. Brooks (Principal); Researchers: Gina Chorover, Izajah Gordon, Elizabeth Hermanns, Martha Penado, Dan Pierce, Mike Rageth, A.J. Vonarx, and Karie Westphal.

PUBLICATIONS

- Chorover, Gina. 2012. An accessible community garden in a food dessert. Mesquite Journal. Arizona Chapter, American Society of Landscape Architects.
- Livingston, M., Chorover, G. and E. Dudley. 2006. Design guidelines for public access into Saguaro National Monument East from the Rincon Valley, Tucson, Arizona. Report to the Arizona Department of Game and Fish.
- Livingston, M. and G. Chorover. 2005. Mitigating impacts of urban encroachment on critical protected lands in southeastern Arizona, USA. Proceedings from the 17th Conference of the Society for Ecological Restoration International, Zaragoza, Spain.
- Roberts, K.H. and G. Gargano*. 1990. Managing high reliability organizations: a case for interdependence. In Von Glinow, M.A. and Mohrman, S. (Eds.), Managing Complexity in High Technology Industries: Systems and People, New York: Oxford University Press, 147-159.
- Weldon, E. and G.M. Gargano*. 1988. Cognitive loafing: the effects of accountability and shared responsibility on cognitive effort. Personality and Social Psychology Bulletin, 14(10): 159-171.

Weldon, E. and G.M. Gargano^{*}. 1985. Cognitive effort in additive task groups: the effects of shared responsibility on the quality of multi-attribute judgments. Organizational Behavior and Human Decision Processes, 36(3): 348-361.

(* Chorover, formerly Gargano)

PROFESSIONAL PRESENTATIONS

2017	Embracing Cultural Resources in Sustainable Planning. Arizona Planning Association Annual Meeting, Scottsdale, October 26, 2017
	Heritage Conservation: Why Does It Matter? Vail Preservation Society, Vail, Arizona, September 23, 2017
	Empire Ranch: A History of Landscape Preservation in the Arizona/Sonora Desert Grasslands. Alliance for Historic Landscape Preservation, Calgary, Alberta, with Helen Erickson, May, 2017
	A Historic American Landscapes Survey Project: Documenting 150 Years of Cattle Ranching and Conservation at the Empire Ranch. Exhibit, Research Symposium. College of Architecture, Planning and Landscape Architecture, University of Arizona.
2016	Placing Historic Landscapes on the Map: The New Deal in Arizona, with Helen Erickson and Robin Lothrop Pinto. Arizona Historic Preservation Conference, Flagstaff, Arizona.
2015	Intervention through Training: Providing Tools for Historic Landscape Preservation, with Helen Erickson. Alliance for Historic Landscape Preservation, Savannah, Georgia
2014	Documenting Arizona's Evolving Historic Landscapes, with Helen Erickson. SHADE Conference (Southwest Horticulture Annual Day of Education), Glendale, Arizona
2014	Economic Landscapes of Arizona Pioneer Women: The Arizona Inn & Faraway, with Helen Erickson. Arizona Historic Preservation Conference, Rio Rico, Arizona
2013	The Historic American Landscapes Survey. American Society of Landscape Architects, Arizona Chapter, Central Section, Phoenix, Arizona
2012	Boyce Thompson Southwestern Arboretum, with Helen Erickson. Arizona Historic Preservation Conference, Prescott, Arizona
2011	Reclaiming Public Space with Community Gardens, with S. Weaks and G. Zonge. World Town Planning conference (virtual)
2011	The Historic American Landscapes Survey. American Society of Landscape Architects, Arizona Chapter, Southern Section

2010	CHOROVER / CURRICULUM VITAE / 6 Mobilizing Public Support through Community Dialogue. American Planning Association, Arizona Chapter Meeting, Phoenix, Arizona
2009	Urban Planning and the Built Environment of Neighborhoods: Identifying a Sense of Place. Landscape Design Seminar, Tucson Art Center Design College
2005	Living on the Edge: Minimizing the Impact of Development along Rincon Creek through Conservation Subdivision Development and Design. Water Sustainability Program, University of Arizona

INVITED CLASSROOM PRESENTATIONS

2018	Careers in Heritage Conservation. SBE 195B: Careers in Sustainability. Instructor: Adriana Zuniga
2017	Historic and Cultural Landscapes. LAR 540: Contemporary Landscape Architecture. Instructor: Lauri Johnson
	Heritage Conservation: What is Worth Conserving and Preserving. SBE 201: Sustainable Design and Planning. Instructor: Jonathan Bean
	Historic and Cultural Landscapes. History 306: Studies in US History. Instructor: Mark Tebeau
2015	Plan Tucson: Environmental Policy. PLG 256: Sustainable Cities and Societies. Instructor: Gary Pivo
2014	Careers in Heritage Conservation. SBE 195B: Careers in Sustainability. Instructor: Michael Esser
	Documentation of Historic Landscapes through HALS. LAR 540: Contemporary Landscape Architecture. Instructor: Lauri Johnson
	The Value of Open Space in Urban Settings. EVS 260: Environmental Studies Issues. Instructor: Dan Ferguson
2013-2014	Documentation and Interpretation of the Historic Built Environment. Architecture 597j. Instructor: R. Brooks Jeffery. Planned and instructed two 4- week sessions including field work and student reviews
2014	The Historic Landscapes Survey in Arizona. LAR 540: Contemporary Landscape Architecture. Instructor: Lauri Johnson
2011	History and Role of Parks in America. LAR 150B: American Design on the Land. Instructor: Wendy Lotze

CLASSROOM REVIEWS

2017	Served as guest reviewer for student presentations. LAR 596	5C: Landscape
	Architecture Seminar III. Instructor: Margaret Livingston	

GRANTS & AWARDS

2017	Governor's Heritage Preservation Honor Award for Empire Ranch Historic American Landscapes Survey. Presented at the Arizona Historic Preservation Conference, June 2017, Oro Valley, Arizona
2016	Historic American Landscapes Survey, 2016 Challenge. First place for The Empire Ranch Historic American Landscapes Survey
2014	Tucson-Pima County Historical Commission Preservation Award for the Arizona Inn Landscape Documentation Project, with Helen Erickson and Jennifer Levstik
	"Landscapes of the New Deal", National Park Service HALS Challenge, Honorable Mention
2013	"The Arizona Inn", National Park Service HALS Challenge, 2nd place
2013	Innovative Supportive Housing Program Award for Blue Moon Garden, Arizona Department of Housing
2013	Creative Partnership Award, Blue Moon Garden, U.S. Housing and Urban Development, Regional Office, Phoenix
2012	Teamwork Award, Plan Tucson, Tucson-Pima Women's Commission
2011	Blue Moon Community Gardens Grants (principal) Communities Putting Prevention to Work, Pima County, \$60,000 Tucson Water, \$12,000 Community Development Block Grant/COT, \$350,000
2010	Groundwork Trust Exploratory Grant, National Park Service, \$10,000
2005	Sigma Lambda Alpha, The Honor Society of Landscape Architecture
2004	Graduate Student Fellowship Award, Technology and Research Initiative Fund, Water Sustainability Program, University of Arizona, \$18,000
2003	Design Excellence, Student Design Competition, School of Landscape Architecture, The University of Arizona
1983	Outstanding Teaching Award, Daily Illini, University of Illinois, Urbana
SERVICE	
2017-2018	2018 Conference Planning Committee, Alliance for Historic Landscape

2017 2010	Preservation Annual Meeting, Tucson (3/14/18-3/17/18)
2017	Volunteer of the Year Award, with Helen Erickson, Arizona ASLA

	CHOROVER / CURRICULUM VITAE / 8
2015-2016	Vail Main Street Program, Design Committee
2011-2015	Board of Directors, Community Gardens of Tucson Fund Development Chair, 2014 Board Chair, 2012-2013
2010-current	Executive Committee and Historic American Landscapes Liaison, Arizona Chapter, American Society of Landscape Architects
2013	Organizing Committee, Climate Summit, CLIMAS, Institute for the Environment, University of Arizona
2011-2012	Juror, Landscape Architecture Design Excellence, University of Arizona
2011	Project Review Panel, Tucson Art Center Design College
2010-2012	Transportation Enhancement Task Force, Pima Association of Governments
2010-2011	Community Oversight Committee, Schools Sites Tomorrow, Tucson Unified School District
2007-2009	Board of Directors, Watershed Management Group, Tucson, Arizona

PROFESSIONAL MEMBERSHIPS

American Institute of Certified Planners (AICP)

American Society of Landscape Architects, Historic American Landscapes Survey Liaison Arizona State Chapter Executive Committee

American Planning Association

CONTACT INFORMATION

Email: gchorove@email.arizona.edu + Office: 520-626-7675 + Cell: 520-247-2789

Kirk Dimond, LEED AP

Address 1040 N Olive Road, A303J P.O. Box 210075 Tucson AZ 85721-0075 Phone O 520.626.8613 Email kirkd@email.arizona.edu	 CURRICULUM VITAE Chronology of Education Master of Science in Landscape Architecture, August 2011 The Pennsylvania State University, University Park PA Community and Urban Design Option Thesis: The Urban Edible Schoolyard: A case study evaluation in Pittsburgh, PA Thesis Advisor: Professor Ken Tamminga Bachelor of Landscape Architecture with honors, May 2008 Utah State University, Logan UT Honor's Thesis: The role of landscape architects in LEED certification
	Utah State University, Logan UT
	Chronology of Employment
	Assistant Professor, School of Landscape Architecture and Planning University of Arizona, Tucson AZ, Aug 2015 - Present
	Instructor/Faculty Academic Adviser, The H Campbell and Eleanor R. Stuckeman School of Architecture and Landscape Architecture The Pennsylvania State University, University Park PA, Jul 2011 - Jul 2015
	Research Assistant , The Department of Landscape Architecture The Pennsylvania State University, University Park PA, Aug 2009 - Jul 2011
	Teaching Assistant , The Department of Landscape Architecture The Pennsylvania State University, University Park PA, Aug 2009 - May 2011
	Landscape Architectural Designer Architectural Nexus, Salt Lake City UT, May 2008 - July 2009
	Landscape Designer/Landscaper A&D Landscaping, Logan UT, April 2006 - April 2008
	Nursery Sales Representative Glover Nursery, West Jordan UT, May 2004 - May 2006
	Honors and Awards
	 AZASLA Educator of the Year Award, 2018 College of Arts and Architecture Excellence in Advising and Mentoring Award, 2014 ASLA Student Award of Merit, 2011 Pashek, Lonnett, and Buerkle Scholarship in Landscape Architecture, 2010 ASLA Student Award of Merit, 2008 College of Humanities Arts and Social Sciences Scholarship 2007 - 2008 Mosier Scholarship 2005 - 2007 Dean's List, Five consecutive semesters, Fall 2005 - Fall 2007

	Kirk Dimond, LEED AP
Address 1040 N Olive Road, A303J P.O. Box 210075 Tucson AZ 85721-0075	 "A" Pin Award, Achieved by obtaining a 4.0 GPA for two consecutive semesters with 15+ credit hours, 2007
Phone	Service/Outreach
O 520.626.8613 Email kirkd@email.arizona.edu	Local/State Outreach: Rio Rico Park System Master Plan, Santa Cruz County, Arizona 2018-2019. Oracle Park Master planning, Pinal County Open Space and Trails, Pinal County, Arizona, 2016-2017.
	National/International Outreach: Cursos de Actualización en las Disciplinas (CADi) Workshop, Tecnológico de Monterrey, Campus Sonora Norte, Hermosillo, Mexico, 2017.
	Departmental Committees: MLA California Study Trip Coordinator, 2016-present Sub-Committee Task Force on MLA Program Assessment, 2016-present ASLA Student Honor/Merit Award presentation coordinator, 2016-present Design-Build Faculty Search Committee, School of Architecture, 2016-2017 Urban Design Faculty Search Committee, School of Landscape Architecture and Planning, 2016
	College Committees: Innovations in Curriculum Task Force, University of Arizona, 2018-present CAPLA-West Building Master Plan Stakeholder Committee, University of Arizona, 2018-present Website Working Group, CAPLA, University of Arizona, 2018-present College Curriculum Committee, CAPLA, University of Arizona, 2015-present Research Working Group, CAPLA, University of Arizona, 2018 Dean Search Committee, CAPLA, University of Arizona, 2016-2017 Design Thinking Task Force, CAPLA, University of Arizona, 2015-2016 Connect2STEM CAPLA recruiting planning, 2017
	University Committees: Under Graduate Council, 2019-present ENR2 Green Roof/Solar PV Planning, 2018-Present SXSW Working Team, 2019-2020 Design Spirit Charette, University of Arizona Strategic Planning, 2018
	Other Committees: Region 2 Director, Council of Educators in Landscape Architecture, 2018-present CELA Standing Committee on Operations and Management, 2018-present
	Publications/Creative Activity
	Chapters in scholarly books and monographs; *Bose, M. & Dimond, K. (2013). "What's Parks got to do with it? Latino Children, Physical Activity, and the Parks System in Lancaster, Pennsylvania." In Hou, Jeffrey (Ed.), <i>Transcultural Cities: Border-Crossing and</i> <i>Placemaking.</i> New York: Routledge. (Scholarly work)

Kirk Dimond, LEED AP

Address 1040 N Olive Road, A303J P.O. Box 210075 Tucson AZ 85721-0075	Refereed journal articles, published or accepted in final form
Phone O 520.626.8613 Email	Barron-Gafford, G. A., Pavao-Zuckerman, M. A., Minor, R. L., Sutter, L. F., Barnett-Moreno, I., Blackett, D. T., Thompson, M., Dimond, K. , Gerald, A., Nabhan, G. P., & Macknick, J. E. (2019). Agrivoltaics provide mutual benefits across the food–energy–water nexus in drylands. Nature Sustainability, 2(9),
kirkd@email.arizona.edu	848-855.
	Dimond, K. & Webb, A. (2017). "Sustainable roof selection: Environmental and contextual factors to be considered in choosing a vegetated roof or rooftop solar photovoltaic system." Sustainable Cities and Society, 35, 241- 249. doi: 10.1016/j.scs.2017.08.015
	Other peer-reviewed publication Dimond, K. (Accepted, 2019). "Context and Embellishments for a Solar Photovoltaic Pattern Language." In Proceedings of Sustainable Urban Environments: The 50th Annual Conference of the Environmental Design Research Association, May 22-26, 2019
	Van Wieran, R., Ragsdale, J., & Dimond, K. (2018). "Assessing student learning of landscape performance." In Yang, B. (Ed.) Landscape Research Record. No. 7. pp. 32-41
	 Dimond, K. & Johnson, A. (2018). "Singular use landscapes: A critique of metropolitan solar farms." In Bean, J., Dickinson, S. Ida, A. (ed.s), AMPS Proceedings Series 12. Critical Practice in an Age of Complexity. University of Arizona, Arizona, USA. 22-23 February. pp. 38-48.
	Dimond, K. (2017). "Integration of Landscape Performance into Site Engineering Curriculum." In Yang, B. (Ed.) <i>Landscape Research Record. No. 6.</i> pp. 12-22
	 Dimond, K. (2017). "Schoolyard solar gardens: Solar PV systems in public elementary school landscapes in Tucson, Arizona." In Shin, J., Narayan, M. & Dennis, S. (Eds.) Proceedings of Voices of Place: The 48th Annual Conference of the Environmental Design Research Association, pp. 99-106
	*Substantially based on work done as a graduate student
	Conferences/Scholarly Presentations
	Symposia Dimond, K. & Webb, A. "Landscape Performance: Acceptable deviation for accessibility in topographic disparity" Oral Presentation at CAPLA Spring Research Symposium, University of Arizona, Tucson, AZ. April, 2017.
	Conferences Dimond, K. "Solar PV Case Study: Tucson Unified School District." Case study presentation at APRU, Sydney, NSW, Australia. August, 2019

Kirk Dimond, LEED AP+

Address 1040 N Olive Road, A303J P.O. Box 210075 Tucson AZ 85721-0075	Dimond, K . "Context and Embellishments for a Solar Photovoltaic Pattern Language." Paper presentation at EDRA50, Brooklyn NY. Submitted for May, 2019
Phone O 520.626.8613 Email kirkd@email.arizona.edu	Dimond, K. , Barron-Gafford, G., & Livingston, M. "Maker Space for Environmental Monitoring." Paper presentation at CELA 2019, Sacramento, CA. Accepted for March, 2019.
	Barron-Gafford, G., Minor, R., Jojol, J., Barnett-Moreno, I., Martinez, C., Thompson, M., Gerlack, A. Nabhan, G., Dimond, K. , Pavao-Zuckerman, M. & Macknick, J. "Dryland Agrivoltaics: A novel approach to collocating food production and solar renewable energy to maximize food production, water savings, and energy generation." Paper presentation at American Geophysical Union Fall Meeting, Washington, D.C. December, 2018.
	Dimond, K. & Johnson A. "Singular use landscapes: A critique of metropolitan solar farms." Paper presentation at Architecture Media Politics Society, Tucson, AZ. February, 2018.
	Van Wieran, R., Ragsdale, J. & Dimond, K. "Assessing learning landscape performance." Coauthored paper presentation at CELA 2018, Blacksburg, VA. March, 2018.
	Dimond, K. "Solar Schoolyard Gardens: Solar PV systems in public elementary school landscapes in Tucson, Arizona." Paper presentation at EDRA48, Madison, WI. June, 2017.
	Dimond, K. "Integration of landscape performance in site engineering curriculum." Paper presentation at CELA 2017, Beijing, China. May, 2017.
	Dimond, K. "Green Roof or Solar Panels?" Paper presentation at CELA 2016, Salt Lake City, UT. March 23-26, 2016.
	Awarded Grants and Contracts State
	WEES Equipment Grant, 2018, 70% Effort; PI ; Greg Barron-Gafford (Co-PI), Margaret Livingston (Co-PI); University of Arizona Water, Environmental & Energy Solutions, \$7,500.
	Accelerate for Success Grant, 2017-present, 20% Effort; Co-PI ; Greg Barron- Gafford (PI), Andrea Gerlak (Co-PI); University of Arizona RDI, \$100,000.
	Rio Rico Park System Concept Designs Contract, 2019, 100% Effort; PI ; Santa Cruz County, \$9,349
	Rio Rico Park System Master Plan Contract, 2018, 100% Effort; PI ; Santa Cruz County, \$9,349
	Oracle Park Design Assistance Contract, 2016-2017, 100% Effort; PI ; Pinal County, \$7,000.

Kirk Dimond, LEED AP+

Address 1040 N Olive Road, A303J P.O. Box 210075 Tucson AZ 85721-0075

> Phone O 520.626.8613

Email kirkd@email.arizona.edu

Private Foundation

Landscape Performance Education Grant, 2016, 100% Effort; **PI**; Landscape Architecture Foundation; \$2,500 (competitive).

Extent of Teaching

Instructor: LAR 511 | Studio II LAR 555 | Site Construction LAR 554 | Site Engineering LAR 610 | Studio III LAR 612 | Studio V LArch 121S | Landscape Architecture Orientation Seminar (Penn State)

Graduate Teaching Assistant (Penn State):
LArch 332 | Design Implementation II: Planting Design.
LArch 341 | Plant, People and Places: Plants in landscape architectural design.
LArch 231 | Introduction to Design Implementation.
LArch 211 | Design and Theory I: Introduction to principles of landscape architectural design.

Teaching Awards and Teaching Grants

National and International

Educator of the Year, 2018, American Society of Landscape Architecture, Arizona Chapter

Grants for teaching innovations

Landscape Performance Education Grant, 2016, Landscape Architecture Foundation

2738 E. ADAMS ST. TUCSON, AZ 85716

JENNIFER PATTON, PLA, PRINCIPAL

WILDER Landscape Architects

Jennifer founded Wilder Landscape Architects in 2016 with the mission to create vibrant (rich with plants and pollinators, and natural cycles) landscapes that are environmental wins and that people love. Committed to applied research and continuing education, Jennifer routinely revisits built projects, learning what worked and should be repeated, and what did not work and needs to be done differently.

With thirteen years of professional experience in Arizona, Jennifer is an experienced team leader with a comprehensive understanding of City, County, and University policies and guidelines. Working closely with the client and project team throughout the design and construction process, Jennifer provides creative, cost-sensitive solutions that are designed for project longevity. Clients appreciate Jennifer's reliability, responsiveness, and dedication to every project she undertakes. Her technical experience includes preparation of salvage, planting and hardscape plans, water harvesting plans, LEED documentation, and construction administration.

PROJECT EXPERIENCE

Bisbee Clinic Renovations

CHIRICAHUA COMMUNITY HEALTH CENTERS, INC. (CCHCI) With BWS Architects; Under construction

The proposed landscape for the Clinic integrates planting areas within the parking lot, and incorporates seating areas at the building entry, beautifying the arrival experience for patients and staff. Plant species native to the area emphasize local character as well as support local pollinators, birds, and butterflies. Species considerations include cold and heat tolerance, water use, exposure, and ease of maintenance. The result will be a sustainable landscape that is adapted to the area and will require minimal inputs to thrive. Deliverables: Landscape and Irrigation Plans.

Raul & Patricia Castro Center for Border Studies and Outreach

THE UNIVERSITY OF ARIZONA With BWS Architects; In Design Feasibility Stage

This historic bungalow within the Crawford Hill Historic District on the Mexico/US border will provide a place for research on border issues and neighborhood-University interaction. The Castro House landscape is designed as a space for community gathering and socializing, a retreat for academia, and an extension of the resources provided inside the building. In the late Raul Castro's words, the Castro House can be a place to facilitate "neighbors knowing each other and working together as neighbors...". Deliverables: :andscape Plans and Cost Assumptions for Feasibility Study.



REGISTRATION Professional Landscape Architect, AZ #50915

> CERTIFICATIONS LEED AP, USGBC

Certified Professional in Erosion and Sediment Control (ID 8554)

EDUCATION

Master of Landscape Architecture, University of Arizona, 2006

EXPERIENCE

Wilder Landscape Architects 2016 – present

> Adjunct Lecturer University of Arizona School of Landscape Architecture 2016 - 2017

> > Wheat Design Group 2010 - 2016

> > > Norris Design 2006 - 2010

AFFILIATIONS

AZASLA Southern Section Chair, 2018 - present

City of Tucson Design Review Board Member, 2012 - 2016

> Task Force Member, COT Commercial Rainwater Harvesting Ordinance, 2008 - 2009

Old Main Rehabilitation

UNIVERSITY OF ARIZONA With Poster Frost Mirto; 2014 *Project experience while employed with Wheat Design Group*

Old Main is the University of Arizona's original building and an iconic symbol for the campus. Rehabilitated as the public hub of the University, housing the executive offices, admissions, and public meeting spaces, the building has recaptured its former stature. The landscape reflects the campus's role since inception as a 'living laboratory' – numerous plant species are represented, including several heritage trees. Sonoran desert plantings ground the building in its locale. Passive water harvesting supplements irrigation. Contribution: Project Manager; Salvage/Demo, Planting, Hardscape, and Irrigation Plans (Irrigation sub-consultant Carl Kominsky).

Garden of Hope

TUCSON JEWISH COMMUNITY CENTER With SBBL Architecture + Planning and Public Artist Barbara Grygutis; In Design

The Garden is a healing retreat as well as a venue for small events and receptions. The garden incorporates seating areas, sculpture, and a diversity of Sonoran desert native plants that provide color and texture as well as attract birds and butterflies. Deliverables: Planting and Irrigation Plans.

Bungalow Block (Broadway Blvd., Warren to Cherry)

RIO NUEVO With Poster Frost Mirto; In Design

Interested in spurring economic opportunity and preserving historic structures in light of the Broadway Boulevard widening, Rio Nuevo has proposed the relocation and re-allocation of seven bungalows. Working with Projects for Public Spaces and Poster Frost Mirto, Wilder will be developing landscape plans for this proposed community arts-district destination. Scope: Native Plant Preservation Plans, Planting, Hardscape, and Water Harvesting Plans.

Wagons West Recreation and Open Space Plan

TUCSON, AZ With Mike Marks, MJM Consulting; 2017

Wilder helped the residents at Wagons West resort park transform three acres of previously graded and barren land into a recreation and natural area. Wilder provided grading, hardscape, and planting plans. Recreation amenities include tournament-sized pickle ball courts, bocce ball courts, ramada, and putting green. A loop path accommodates walkers and bicyclists. The residents have planted over 100 native trees, and hundreds of native shrubs. Passive water harvesting will provide long-term irrigation.

Margaret Livingston Curriculum Vitae

□ Personal Data

Position

Professor, School of Landscape Architecture and Planning, College of Architecture and Landscape Architecture (CALA), University of Arizona

Office Address

School of Landscape Architecture and Planning College of Architecture and Landscape Architecture University of Arizona P.O. Box 210075 Tucson, Arizona, 85721-0075 (520) 621-5359 mlivings@u.arizona.edu

□ Chronology of Education

1992 Ph.D., Renewable Natural Resource Studies, University of Arizona, Tucson, Arizona. Dissertation: Factors influencing germination and establishment of Arizona cottontop, bush muhly, and plains lovegrass. Dissertation Director: Bruce Roundy Major field: Renewable Natural Resource Studies with emphases in Landscape Studies and Range Management. 1990 M.L.A., University of Arizona, Tucson, Arizona. Thesis: Effects of three landscapes on building microclimates, and energy and water use. Thesis Director: Greg McPherson Major field: Landscape Architecture 1985 M.S., Plant Sciences, University of Arizona, Tucson, Arizona. Thesis: Root development of stem cuttings selected plant species as influenced by boron, calcium and 1H-Indole-butanoic Acid (IBA). Thesis Director: Paul Bartels Major field: Plant Physiology 1978 B.S., Horticulture, University of Arizona, Tucson, Arizona. Advisor: LeMoyne Hogan Major field: Horticulture

□ Fields of Interest

Use of native plants in urban, exurban and natural areas, analysis of arid land plant communities, habitat restoration and revegetation, habitat development for urban wildlife, and master plan development for multi-use, natural and semi-natural areas.

□ Chronology of Employment

Chronology of Employment - Academic

2010-present	Professor, School of Landscape Architecture and Planning, College of Architecture and Landscape Architecture (CALA), University of Arizona, Tucson, Arizona.
2004-2010	Associate Professor, School of Landscape Architecture and Planning, College of Architecture and Landscape Architecture (CALA), University of Arizona, Tucson, Arizona.
1998-2004	Assistant Professor, School of Landscape Architecture, College of Architecture, Planning, and Landscape Architecture (CAPLA), University of Arizona, Tucson, Arizona.
1992-1998	Adjunct Lecturer, School of Landscape Architecture, CAPLA, University of Arizona, Tucson, Arizona.
1993-1994	Adjunct Lecturer, School of Renewable Natural Resources, College of Agriculture, University of Arizona, Tucson, Arizona.
1990-1992	Graduate Research Assistant, School of Renewable Natural Resources, College of Agriculture, University of Arizona, Tucson, Arizona.
1985-1990	Research Specialist, School of Plant Sciences, College of Agriculture, University of Arizona, Tucson, Arizona.
1987-1990	Graduate Research and Teaching Assistant, Landscape Architecture Program, School of Renewable Natural Resources, College of Agriculture, University of Arizona, Tucson, Arizona.
1982-1985	Graduate Research and Teaching Assistant, Department of Plant Sciences, College of Agriculture, University of Arizona, Tucson, Arizona.
Chronology of	of Employment • Professional Experience
1992-present	Consultant in conservation-based design and assessment of natural and revegetated plant communities (local, state, national and international sites).
1980-1982	Wholesale Production Manager, Woodruff Nursery, Eugene, Oregon.
1979	Nursery Manager, Greer Gardens, Eugene, Oregon.
1978	Horticulturist, Ludescher Gartnerei, Klaus, Austria.
🗆 Honor	rs and Awards
2018	Excellence in Teaching Award, Senior Level, Council for Educators in Landscape Architecture.
2017	Darryl B. Dobras Award for Excellence CAPI A. University of Arizona Tucson

- 2017 Darryl B. Dobras Award for Excellence, CAPLA, University of Arizona, Tucson, Arizona.
 - 2015 Faculty Advisor, AzASLA Student Collaborative Community Service Award,

	Catch and Release. Students: Gina Trautner, Rachel Glass and Xiaoyauan "Sharon" Du.
2014	Darryl B. Dobras Award for Excellence, CAPLA, University of Arizona, Tucson, Arizona.
2014	Faculty Advisor, AzASLA Student Individual Honor Award, Integrating Biophilic Principles & Therapeutic Design Elements at Tucson Medical Center. Student: Deryn Davidson.
2014	Faculty Advisor, AzASLA Student Collaborative Community Service Award, <i>Tumamoc Hill Sykes House Welcome Center and Gardens</i> . Students: Katia Gedrath-Smith, Brianna Lehman and Daniel Morgan.
2013	AzASLA Educator of the Year Award.
2013	Faculty Advisor, AzASLA Student Collaborative-Community Service Award, <i>Mount Lemmon Children's Forest</i> . Students: Kelly Van Den Berg, Becky Blacher, Autumn Ela, Deryn Davidson, Katia Gedrath-Smith.
2013	Faculty Advisor, AzASLA Student Collaborative-Community Service Award, Silvercroft Community Park. Students: Kelly Van Den Berg, Jason Satterly, Deryn Davidson, Desneige Hallbert, Kexin Zhao.
2012	DesignIntelligence 25 Most Admired Educators for 2012, U.S.
2009	Faculty Advisor, National ASLA Student Individual Honor Award, Communication Category, <i>Tucson's Urban Wildlife Walk</i> . Student: Kimberly Creagan.
2008	Outstanding Teaching Award, CALA, Awards of Distinction, University of Arizona, Tucson, Arizona.
2007	Outstanding Teaching Award, CALA, Awards of Distinction, University of Arizona, Tucson, Arizona.
2006	Outstanding Teaching Award, CALA, Awards of Distinction, University of Arizona.
2004	Darryl B. Dobras Award for Excellence, CAPLA, University of Arizona, Tucson, Arizona.
2004	Recognition, Herring Hall Renovation Effort, College of Agriculture, University of Arizona, Tucson, Arizona.
2002	Faculty Award for Outstanding Contributions, CAPLA, University of Arizona, Tucson, Arizona.
2000	Team Award, University Awards for Excellence, University of Arizona, Tucson, Arizona.
1999	Outstanding Teaching Award, CAPLA, School of Landscape Architecture, University of Arizona, Tucson, Arizona.
1996	Outstanding Board of Directors Member, Tucson Botanical Gardens, Tucson, Arizona.
1994	Nominee for Outstanding Faculty Member, School of Renewable Natural Resources, University of Arizona, Tucson, Arizona.
1991	Outstanding Graduate Student Presentation, Society for Range Management Annual Meeting, Washington, D.C.

- 1990 Graduate Student Award of Honor, American Society of Landscape Architects ASLA), School of Landscape Architecture, University of Arizona Chapter, Tucson, Arizona.
- 1985 Outstanding Graduate Student Award, Gamma Sigma Delta, College of Agriculture, University of Arizona, Tucson, Arizona.

Elected member of honor societies

Sigma Lambda Alpha Alpha Zeta Gamma Sigma Delta Phi Kappa Phi

Professional Memberships

Council for Educators in Landscape Architecture American Society for Landscape Architects

D Publications/Creative Activity

Publications/Creative Activity - Chapters in scholarly books

- Livingston, M. 2013. Habitats in Urban Environments *in* Malloy, R., J. Brock, A. Floyd, M. Livingston, and R. Webb, eds. Design with the Desert: Conservation and Sustainable Development. CRC Press, Taylor and Francis Group LLC, London, UK. 100%
- Dunsten, A. and M. Livingston. 2013. Native Plant Salvaging in the Southwest *in* Malloy, R., J. Brock, A. Floyd, M. Livingston, and R. Webb, eds. Design with the Desert: Conservation and Sustainable Development. CRC Press, Taylor and Francis Group LLC, London, UK. 50%
- Darnell, B., M. Livingston, and L. Johnson. 2010. Assessing the potential play value of vegetation in the outdoor environments of NAEYC-accredited preschool programs in Tucson, Arizona *in* Hewitt, R., ed. Landscape Imprints: CELA 2003 Select Papers. Clemson University Digital Press. 40%
- al-Asad, M. and M. Musa, in collaboration with M. Livingston. 2007. Creating landscapes in water-scarce environments: a case study of Tucson, Arizona *in* al-Asad, M. and M. Musa, eds. Exploring the Built Environment: Essays on the presentations of Diwan al Mimar and affiliated public lectures. Center for the Study of the Built Environment (CSBE) and Darat al Funun - The Khalid Shoman Foundation. 20%
- Livingston, M. 2001. Xeriscapes *in* Shoemaker, C., ed. Encyclopedia of Gardens. Fitzroy Dearborn Publishers, Chicago, IL. 100%
- Shaw, W. W., L. K. Harris, M. Livingston, and L. Propst. 1994. A methodology for detailed urban habitat analysis *in* VanDruff, L., ed. Urban landscapes for People and Wildlife: An integrative approach. National Institute for Urban Wildlife. Shepherdstown, WV. 20%

Publications/Creative Activity - Refereed journal articles

- Bass, B. and M. Livingston. 2018. Automotive retrofits in historic city centres and their potential effects on their walkability: a comparison of San Luis Obispo, CA, USA and Bath, England, UK. Journal of Urban Design. https://doi.org/10.1080/13574809.2018.1551055
- Bresdin, C., M. Livingston, and E. Glenn. 2016. Design Concept of a Reverse Osmosis Reject Irrigated Landscape: Connecting Source to Sabkha. Sabkha Ecosystems V: The

Americas. 237-250.

- Ridgway, S.C., M. Livingston, and S. E. Smith. 2005. Visitor behavior and perceptions in zoo exhibits with underwater viewing. Visitor Studies Today 8:1-10. 60%
- Livingston, M. and J. Mehlem. 2004. Planning open spaces for biodiversity: evaluating urban parks for wildlife habitat. Landscape Review 9:162-166. 90%
- Myers, M. and M. Livingston. 2004. Existing vegetation of built landscapes and their relationship to existing ecosystems. Landscape Review 9:171-175. 50%
- Livingston, M. W. W. Shaw, and L. K. Harris. 2003. A model for assessing wildlife habitats in urban landscapes of eastern Pima County, Arizona (USA). Landscape and Urban Planning 64:131-144. 80%
- Mielcarek, L. and M. Livingston. 2001. From the ground up: developing and implementing a master plan. Public Garden 16:8-11. 90%
- Livingston, M. 2001. Creating landscapes in arid environments using xeriscape principles. Alreem 69:16-17. 100%
- Livingston, M. 2000. Invasion of the pod plants: notable legumes on campus. Aridus: Bulletin of the Desert Legume Program of the Boyce Thompson Arboretum 12:1-7. 100%
- Shaw, W. W., L. K. Harris, and M. Livingston. 1998. Vegetative characteristics of urban land covers in metropolitan Tucson, Arizona. Urban Ecosystems 2:65-73. 30%
- Livingston, M., B. A. Roundy, and S. E. Smith. 1997. Association of overstory plant canopies and native grasses in southern Arizona. Journal of Arid Environments 35:441-449. 80%
- Roundy, B. A., L.B. Abbott, and M. Livingston. 1997. Surface soil water loss after summer rainfall in a semidesert grassland. Arid Soil Research and Rehabilitation 11:49-62. 10%
- Roundy, B. A., J. A. Young, L. B. Sumrall, and M. Livingston. 1992. Laboratory germination responses of 3 lovegrasses to temperature in relation to seedbed temperatures. Journal of Range Management 45:306-311. 10%
- Ray, D. T., W. Coates, M. Livingston and D. J. Garrot, Jr. 1992. Mechanical pollarding as a means to increase rubber yields in Guayule (*Parthenium argentatum*, Asteraceae). Industrial Crops and Products 1:11-15. 10%
- Gathman, A. C., D. T. Ray and M. Livingston. 1992. Comparison of three stability measures in guayule. Industrial Crops and Products 1:67-74. 20%
- Garrot, D. J., Jr., D. T. Ray, M. Livingston, D. D. Fangmeier and S. Husman. 1990. Watermelon field management using the crop water stress index. Acta Horticulturae 278:755-761. 10%
- McPherson, E. G., J. R. Simpson, and M. Livingston. 1989. Effects of three landscape treatments on residential energy and water use in Tucson, Arizona. Energy and Buildings 13:127-138. 25%
- Thompson, A. E., D. T. Ray, M. Livingston and D. A. Dierig. 1988. Variability of rubber and plant growth characteristics among single-plant selections from a diverse guayule breeding population. Journal of the American Society for Horticultural Science 113:608-611. 10%

Publications/Creative Activity - Refereed Book Reviews

- Livingston, M. 2009. The Living Landscape: An Ecological Approach to Landscape Planning, 2nd Edition, by Frederick Steiner. Landscape and Urban Planning 91:48-49. 100%
- Livingston, M. 2006. The American Society of Landscape Architects Annual Meeting and Expo,

2005. Landscape Journal 25: 262-263. 100%

- Livingston, M. 2003. Ecoregion-Based Design for Sustainability, by Robert Bailey. Landscape and Urban Planning 65:167-168. 100%
- Livingston, M. 2002. Sustainable Landscape Construction, by William Thompson and Kim Sorvig. Landscape Journal 21:29. 100%

Publications/Creative Activity - Refereed conference proceedings

- Jacobsen, B. and M. Livingston. 2013. A green roof implementation model for Tucson, Az. Proceedings for the Council for Educators in Landscape Architecture Annual Meeting, Los Angeles, California, March 30- April 2, 2011: 605-632.
- Livingston, M. and D. Myers. 2010. Contributions of watercourse-associated greenways to green infrastructure: a comparison between two case studies in Arizona and Maryland, USA *in* Fabos, J. Gy., Ryan, R. L., Lindhult, M. S., Kumble, P., Kollányi, L., Ahern, J., Jombach, Proceedings for the Fábos Conference on Landscape and Greenway Planning 2010, Budapest, Hungary, July 8-11: 161-168.
- Livingston, M. and C. Rose. 2009. Developing streetscape patterns for Tucson, Arizona. Proceedings for the Council for Educators in Landscape Architecture Annual Meeting, Tucson, Arizona: 263-269.
- Livingston, M. and L. M. Johnson. 2005. Evaluating outcomes of community outreach from an academic perspective. Proceedings for the Council for Educators in Landscape Architecture Annual Meeting, Athens, Georgia: 99-104.
- Addison, E. and Livingston, M. 2004. Cultural Interpretation and the implementation of water conservation policy. Proceedings of the International Water Demand Management Conference, Amman, Jordan. 30%
- Darnell, B., M. Livingston, and L. Johnson. 2003. Assessing the potential play value of vegetation in the outdoor environments of NAEYC-accredited preschool programs in Tucson, Arizona. Proceedings for the Council for Educators in Landscape Architecture Annual Meeting, Charleston, South Carolina: 177-182. 40%
- Livingston, M. 2001. Habitats in Urban Environments. Proceedings of Design with the Desert Conference, Arizona State University, Tempe, Arizona. 100%
- Livingston, M., L. K. Harris, and W. W. Shaw. 1999. Relationships among land cover and vegetation attributes related to wildlife habitats in eastern Pima County. Proceedings of Urban Wildlife Conservation 4th International Symposium, Tucson, Arizona. 90%
- Johnson, L. M. and M. Livingston. 1998. Cultural Landscape Analysis within the Southwest. Proceedings of the ASLA Annual Meeting, Washington, D.C.: 172-177. 40%
- Shaw, W. W., L. K. Harris, M. Livingston, J. Charpentier, and C. Wissler. 1997. Wildlife Habitats in Urban Environments. Proceedings of Effects of Urbanization in the Sonoran Desert Symposium, Tucson, Arizona. 20%
- Livingston, M., B. A. Roundy, and S. E. Smith. 1994. Association of native grasses and overstory species in southern Arizona. Proceedings of 8th Wildland Shrub and Arid Land Restoration Symposium, USDA, Las Vegas, Nevada, 202-208. 70%

Publications/Creative Activity - Editor

Ecology in Design (6 chapters) *in* Malloy, R., J. Brock, A. Floyd, M. Livingston, and R. Webb, eds. Design with the Desert: Conservation and Sustainable Development. 2013. CRC Press, Taylor and Francis Group LLC, London, UK.100%

- Ortho's All about Creating Natural Landscapes. 2003. Meredith Books. Des Moines, Iowa. Technical Editor. 100%
- Duffield, M. and W. Jones. 2001. Plants for Dry Climates. Revised Edition. Perseus Publishing. Cambridge, Massachusetts. Technical Editor. 100%
- Livingston, M., 1992. Urban Landscape Booklet: Native Grasses. Arizona Native Plant Society, Tucson, AZ. Editor. 100%

Manuscript reviewer for:

Landscape and Urban Planning Landscape Journal

Publications/Creative Activity - Refereed Reports

- Livingston, M., S. Smith, and K. Halbrook. 2014. Rain Bird Phase II final report. 9 pp.
- Livingston, M. S. Smith, and K. Halbrook. 2012. Rain Bird final report. 46 pp.
- Livingston, M, and K. VanFleet. 2011. Design and conservation enhancement plan: Visitor facility landscapes at Petrified Forest National Park. 208 pp. 30%
- Livingston, M. and M. Mazza. 2011. Resaca de la Palma Master Plan: Linking History, Ecology and Community in Brownsville, TX. 101 pp. 40%.
- Livingston, M. and E. Bareis. 2011. Public Design Guidelines for Public Access into and along Airport Wash. 98pp. 70%
- Livingston, M. and C. Jarchow. 2010. Draft document of outstanding remarkable values (ORVS) for six wild rivers at Gates of the Arctic National Park and Preserve. 37 pp. 30%
- Livingston, M. and I. Olson. 2010. Chamizal National Memorial master plan: renewing a conservation ethic. 109 pp. 50%
- Livingston, M. and S. Abbott. 2009. Management Strategy for White Sands National Monument. National Park Service. 57 pp. 60%
- Livingston, M., J. Jones, W. Lotze, and J. Patton. 2007. Creating trails along secondary washes in Tucson. Arizona Department of Game and Fish. 139 pp. 60%
- Livingston, M., H. Flugstad, and H. Uzzelle. 2007. Plants benefiting urban wildlife on Campus. Arizona Department of Game and Fish. 110 pp. 60%
- Livingston, M. and K. Furenlid. 2006. Assessing Neighborhood Tree Species for Avian Habitats in Tucson, Arizona. Arizona Department of Game and Fish. 36 pp. 70%
- Livingston, M., G. Chorover, and E. Dudley. 2006. Design Guidelines for Public Access into Saguaro National Monument East from the Rincon Valley, Tucson, Arizona. Arizona Department of Game and Fish. 136 pp. 60%
- Livingston, M. and R. Campos. 2006. Wildlife Value of Revegetated Roadsides in Tucson, Arizona. 144 pp. 60%
- Livingston, M., J. Mehlem and R. McCaffrey. 2004. Designing created spaces for avian species: assessing existing parks and prescribing design guidelines for future parks in Tucson. Arizona Department of Game and Fish. 59 pp. 70%
- Livingston, M. and I. Herring. 2000. Revegetation study of North Central Natural Resource Park. City of Tucson Parks and Recreation Department, Tucson, Arizona. 31 pp. 70%
- McGann, D., R. Payson, W. W. Shaw, M. Livingston, L. Slawson, K. Nelson, and T. Frederick. 1997. Sonoita Creek State Natural Areas Management Plan. Arizona State Parks,

Phoenix, AZ. 27 pp. 10%

- Johnson, L., M. Livingston, and E. Zube. 1996. Tumacacori National Historical Park: Design Concepts for the Administration /Visitor Center Courtyard and the Mission Landscape. National Park Service, Washington, D.C. 41 pp. 20%
- McGann, D., R. Payson, and M. Livingston. 1996. Watercourse and riparian habitat protection and mitigation requirements: Mitigation standards and implementation guidelines. Pima County Department of Transportation and Flood Control District, AZ. 20 pp. 10%
- Livingston, M. 1996. Revegetation/rehabilitation guidelines for the Bell Rock Pathway and the Sedona Red Rock area. United States Forest Service, Coconino National Forest, Sedona, AZ. 12 pp. 100%
- Shaw, W. W., L.K. Harris, and M. Livingston. 1995. Pima County Habitat Inventory Phase II. Arizona Department of Game and Fish, Phoenix, AZ. 93 pp. 30%
- McGann. D., R. Payson, and M. Livingston. 1995. Town of Oro Valley riparian habitat classification and mapping project. Town of Oro Valley, AZ. 17 pp. 20%
- McGann, D., W. W. Shaw, and M. Livingston. 1994. Cienega Creek Natural Preserve Management Plan. Pima County Department of Transportation and Flood Control District, AZ. 51 pp. 20%
- Shaw, W. W., L. K. Harris, M. Livingston, and L Propst. 1993. Wildlife Habitat Inventory Pilot Study. Arizona Department of Game and Fish, Phoenix, AZ. 92 pp. 25%
- Livingston, M., D. T. Ray, and D. J. Garrot, Jr. 1987. Evaluation of two levels of irrigation in relation to Calsweet watermelon yield. University of Arizona Cooperative Extension Service Vegetable Report. Series P-70: 35-35. 40%
- Ray, D. T., and M. Livingston. 1986. Response of guar to drought conditions. University of Arizona Cooperative Extension Service Forage and Grain Report. Series P-67:125-126. 30%

Publications/Creative Activity - Popular journals

- Reprint of Livingston and Myers (2010) paper in Chinese website: Youth Landscape Architecture. http://www.youthla.org/2011/01/contributions-of-watercourse-associatedgreenways-to-green-infrastructure/. 50%
- Livingston, M. and M. Solol. 2001. UA's Living Legacy. Tucson Lifestyle Homes and Gardens. Winter edition. 80%
- Livingston, M. and C. Franklin. 2000. Xeriscape Guidelines. Tucson Lifestyle Homes and Gardens. Summer edition. 80%
- Livingston, M. and C. Franklin. 1999. Design Guidelines for Hummingbirds. Tucson Lifestyle Homes and Gardens. Fall edition. 80%

Publications/Creative Activity - Professional work related to habitat assessment

1990-present Principal investigator (unless noted) for identification and evaluation of critical riparian habitat, endangered species and other native plant communities.

Examples of work:

- 2010-2014 ENG2, UA campus plant list. Collaboration with McGann and Associates, Tucson, AZ.
- 2006 Red Rock Conservation Area Visitor Center, Las Vegas, Nevada. Collaboration with McGann and Associates, Tucson, AZ.

- 2000 Sonoran Desert Conservation Plan, Tucson, Arizona. Collaboration with Harris Environmental Group, Tucson, AZ.
- 1999 City of Scottsdale Greenbelt Project, Scottsdale, Arizona. Collaboration with Harris Environmental Group, Tucson, AZ.
- 1996 Red Rock Trail, Sedona Forest Ranger District, U.S. Forest Service, Sedona, AZ.
- 1996 Sonoita Creek State Park Management Plan, Phoenix, AZ. Collaboration with McGann and Associates, Tucson, AZ.
- 1996 Tortolita Mountain Park Master Plan, Oro Valley, AZ. Collaboration with McGann and Associates, Tucson, AZ.
- 1995 Pima County Habitat Inventory Phase II, Tucson, AZ. Collaboration with William Shaw (University of Arizona) and Harris Environmental Group, Tucson, AZ.
- 1995Town of Oro Valley riparian habitat classification and mapping project, Oro
Valley, AZ. Collaboration with McGann and Associates, Tucson, AZ.
- 1994 Cienega Creek Natural Preserve Management Plan, Tucson, AZ. Collaboration with McGann and Associates, Tucson, AZ.

Publications/Creative Activity - Professional work related to planting designs

- 1990-present Principal designer (unless noted) for over 100 residential (0.25-2 acres) and public sites, with emphasis in conservation-based designs. Examples of public work:
- 2007 Moonlight Garden, Tucson Botanical Gardens, AZ. Co-designer Patsy Waterfall.
- 2000 Australian Garden, Tucson Botanical Gardens, AZ.
- 1998 Tohono O'odham Trail, Tucson Botanical Gardens, AZ.
- 1998 Nuestro Jardin, Tucson Botanical Gardens, AZ.



Photographs by Margaret Livingston.

1996	Butterfly Habitat Garden, Tucson Botanical Gardens, AZ.
1995	Wildflower Garden, Tucson Botanical Gardens, AZ.
1995	Plants of the Sonoran and Chihuahuan Desert, U.S.D.A. Natural Resources Conservation Service, Tucson Plant Materials Center.
1994	Sabino Canyon Visitors Center Wildlife Garden, Tucson, AZ.
1994	Safford Elementary School Songbird Garden, Tucson Unified School District, Tucson, AZ.

□ Media

Media • Exhibitions

- 2009 Exhibition, Tucson Botanical Gardens, featured ceramist, "Flora + Fauna + Function," Tucson, AZ. 100%
- 2002 Finalist, Center for Middle Eastern Studies, University of Arizona, 12th Annual



Photographs by Tucson Botanical Gardens and Margaret Livingston.

photo exhibit, Tucson, AZ. 100%

1997 Exhibition, featured designer, Sky Harbor Airport Arts Program: Outdoor Expressions, Phoenix, AZ. 100%

Media • Articles and Interviews

- 2013 Article, Arizona Daily Star, "Tim Steller: So let's ditch those palm trees," Tucson, Arizona. Author: Tim Steller.
- 2012 Article, Oman Observer, "Biosphere 2 to showcase Oman's aflaj heritage," Muscat, Oman. Author: Conrad Prabhu.
- 2012 Article, The Explorer, "Green Roofs project at Biosphere 2," Tucson, AZ. Author: Mariana Dale.
- 2006 Article, Arizona Daily Star, "Use of non-native plantings increases despite warnings," Tucson, AZ. Author: Tony Davis.
- 2006 Article, Arizona Daily Star, "Local trees are dying of thirst," Tucson, AZ. Author:

	Tony Davis.
2006	Article, New York Times, "Helping save prickly victims of development," Author: Patricia Leigh Brown.
2006	Article, The Daily Territorial, "Local builders break ground on Tucson Gardens pavilion," Tucson, AZ. Author: Philip Moore.
2005	Article, UANEWS.org, "A Water-Conserving Garden for 'Aqaba," Tucson, AZ. Author: Susan McGinley.
2003	Article, AZ Daily Star, "Monsoon fells saguaro," Tucson, AZ. Authors: Jennifer Sterba and Irma L. Bravo.
2003	Article, Arizona Daily Star, "Transplanted cactus survives first year," Tucson, AZ. Author: Jennifer Sterba.
2002	Article, Arizona Daily Star, "Beautifying a historic temple," Community Outreach project, Tucson, AZ. Author: Tiffany Kjos.
2002	Article, The Star: Jordanian Weekly Newspaper, Public Lecture Series, Amman, Jordan. Author: Ghassan Joha.
2002	Acknowledgement, UANews release: uanews.opi.Arizona.edu, Krutch Garden Advisory Committee members.
2001	Acknowledgement, City of Tucson Public Library webpage: www.lib.ci.tucson.az.us/bkmkspub/ homeconsumer/gardening.htm, course plant list (LAR 520 website).
2001	Article, Archnet website: http:// archnet.org., Amman, Jordan.
2001	Article, Archnet website: http://archnet.org. Water Conserving Landscapes Workshop, Amman, Jordan.
1998	Article, featured designer, "Gardening where you live: Born to Be Wild." Better Homes and Gardens: Garden Ideas and Outdoor Living. Spring edition.

□ Scholarly Presentations

Scholarly Presentations - Invited

2018	Panelist, Urban Environments: Surviving Peak Drought and Warming Workshop, March 29. Tucson, AZ.
2016	Water management and conservation in arid urban environments UA-GCC Reunion Panel Discussion. Tucson, AZ.
2013	What about those microbasins? And more ASLA Southern Arizona Chapter Meeting. Tucson, AZ.
2012	The New Green Landscape Program: Cutting edge - green technology and design Southern AZ USGBC and Tucson Association of Realtors. Tucson, AZ.
2012	What is Xeriscape? Instructor, 3-hour workshop for architecture students. University of Science and Technology, College of Architecture and Design, Amman, Jordan.
2012	Guest reviewer, Petra University, Amman, Jordan.
2011	Water conservation in the desert. CALA Homecoming 2011.
2010	Use of Xeriscape principles in the Landscape Architecture Program at the University of Arizona. Lecturer, 10th Joint Arab Expo for Graduation Projects,

	Jordan University of Science and Technology, College of Architecture and Design, Amman, Jordan.
2010	What is Xeriscape? Instructor, 3-hour workshop for architecture students. University of Science and Technology, College of Architecture and Design, Amman, Jordan.
2010	Conserving water in landscapes: understanding Xeriscape principles. Instructor, 2-hour workshop, Greater Amman Municipality, Jordan.
2009	Developing coursework related to water conservation in urban landscapes. Lecturer, Jordan University of Science and Technology. Amman, Jordan.
2007	Maintaining biodiversity: green spaces in urban areas. Lecturer, Monteverde Institute Study Abroad Program (part of 1-week studio instruction), Monteverde, Costa Rica.
2007	Incorporating native plants in urban spaces: how can we do better? Lecturer, Arizona Native Plant Society Tucson Chapter Meeting.
2007	Incorporating native plants in urban spaces: how are we doing? Lecturer, American Society of Landscape Architecture Tucson Chapter Meeting.
2006	Natural versus created landscapes: compromises we make. Lecturer, Desert Horticulture Conference, Tucson, AZ.
2004	Careers in landscape ecology. Panelist, Student Career Forum, International Association for Landscape Ecology, U.S. Regional Association, 19 th Annual Symposium, Las Vegas, Nevada.
2004	Water conservation in urban design. Instructor, 1-week workshop, Arid Landscape Workshop IV, Center for the Studies of the Built Environment, Amman, Jordan.
2003	Careers in landscape ecology. Panelist, Student Career Forum, International Association for Landscape Ecology, U.S. Regional Association, 18th Annual Symposium, Banff, Alberta.
2002	Application of Sonoran Desert plants in created landscapes. Instructor, Arid Landscape Workshops II and III (2-day workshops), Center for the Studies of the Built Environment, Amman, Jordan.
2002	Planting design in arid climates. Instructor, Arid Landscape Workshops II and III (2-day workshops), Center for the Studies of the Built Environment, Amman, Jordan.
2001	Preserving and creating habitats in urban environments. Lecturer, Southwestern Horticultural Educational Conference, Phoenix, AZ.
2001	Creating landscapes in water scarce environments: A case study of Tucson, Arizona. Lecturer, Public Lecture Series, Center for the Studies of the Built Environment, Amman, Jordan.
2001	Creating low-water-use landscapes in arid environments. Instructor, Arid Landscape Workshop I (2-day workshop), Center for the Studies of the Built Environment, Amman, Jordan.
2001	Habitat in urban environments. Lecturer, Design with the Desert Conference: Ecological Perspectives of Living in a Desert Environment, Phoenix, AZ.
2000	Small plants for small places. Lecturer, Landscape Architecture Conference,

	Phoenix, AZ.
2000	Designing gardens for butterflies and songbirds. Lecturer, Desert Horticulture Conference, Tucson, AZ.
1999	Flora and fauna of Arizona. Lecturer, Tucson Botanical Gardens Lecture Series, Tucson, AZ.
1998	Guided tour: plants of the University of Arizona. Guide, Desert Horticulture Conference, Tucson, AZ.
1998	Landscape plants for shade. Lecturer, Tucson Botanical Gardens Lecture Series, Tucson, AZ.
1997-99	Grass taxonomy. Instructor, Tucson Botanical Garden Workshops, Tucson, AZ.

Scholarly Presentations - Submitted with refereed abstracts

- Dimond, K, G. Barron-Gafford, and M. Livingston. 2019. Maker Space for Environmental Monitoring. Accepted for Council for Educators in Landscape Architecture, Annual Meeting, Sacamento, California.
- Livingston, M. and A. Stoicof. 2018. Addressing Open Space Needs and Ecosystem Preservation using Green Infrastructure Strategies: A Case Study of El Rio Open Space Preserve. Council for Educators in Landscape Architecture, Annual Meeting, Blacksburg, Virginia.
- Cederberg, K. and M. Livingston. 2016. Reclaiming greens in the Southwest: Strategies for transforming golf courses into multiuse desert communities. Council for Educators in Landscape Architecture, Annual Meeting, Salt Lake City, UT.
- Myers, D. and M. Livingston. 2015. Strategies for Introducing Green Infrastructure into Metropolitan Environments: Comparisons between Maryland and Arizona. 2nd International Conference on "Changing Cities II: spatial, design, landscape & socioeconomic dimensions" Porto Heli, Peloponnese – Greece.
- Bass, B. and M. Livingston. 2015. Parking retrofits within historic city centers and the potential effects on their walkability: A comparison of San Luis Obispo and Davis, CA. Council of Educators in Landscape Architecture (CELA) Annual Meeting, Manhattan, KS.
- Bass, B. and M. Livingston. 2014. Retrofitting historic city centers and the potential effects on their walkability: A comparison of San Luis Obispo, CA and Bath, England. Council of Educators in Landscape Architecture (CELA) Annual Meeting, Baltimore, Maryland.
- Livingston, M. and D. Myers. 2013. Shoehorning native plants into urban and exurban environments. Council of Educators in Landscape Architecture (CELA) Annual Meeting, Austin, TX.
- Jacobsen, B. and M. Livingston. 2011. Sustainable Roofscapes: Developing a green roof implementation model for Tucson, AZ. Council for Educators in Landscape Architecture (CELA) Annual Meeting, Tucson, AZ.
- Pavao-Zuckerman, M., M. Livingston, S. Smith, and R. Stoltz. 2010. Evaluating the performance of model green roofs in a semi-arid urban ecosystem. 95th Annual ESA Meeting, Pittsburgh, PA.
- Livingston, M. and D. Myers. 2010. Contributions of watercourse-associated greenways to green infrastructure: a comparison between two case studies in Arizona and Maryland, USA. Proceedings for the Fábos Conference on Landscape and Greenway Planning 2010, Budapest, Hungary.

- Livingston, M. and C. Rose. 2009. Developing streetscape patterns for Tucson, Arizona. Proceedings for the Council for Educators in Landscape Architecture, Annual Meeting, Tucson, AZ.
- Livingston, M., A. Kaufman, D. Spooner, and D. Myers. 2009. Exploring campuses as valuable open space: opportunities for teaching, research, and outreach. Council for Educators in Landscape Architecture, Annual Meeting, Tucson, AZ.
- Livingston, M. and E. Meadows. 2009. A wildlife viewing experience: planning for visitors to Whitewater Draw. Council for Educators in Landscape Architecture, Annual Meeting, Tucson, AZ.
- Babb, Z. and M. Livingston. 2009. Paths through the wilderness: planning a rural greenway system through southeastern Arizona. Council for Educators in Landscape Architecture, Annual Meeting, Tucson, AZ.
- Livingston, M. and C. Rose. 2008. Urban infrastructure in arid environments: Designing public corridor guidelines for alternative modes of transportation in Tucson, AZ. International Association for Landscape Ecology, U.S. Regional Association, 23rd Annual Symposium, Madison, WI.
- Flugstad, H. and M. Livingston. 2008. Where do Lizards Lounge? Assessing Potential Habitat Characteristics Favorable for Urban-Adapted Lizards in Tucson, Arizona. Current Research on the Herpetofauna of the Sonoran Desert IV, 11-13 April, 2008, Tucson, AZ.
- Uzzelle, H. and M. Livingston. 2007. Public interpretation of urban bird habitat design guidelines on a self-guided tour of the University of Arizona campus in Tucson, Arizona. International Association for Landscape Ecology, U.S. Regional Association, 22nd Annual Symposium, Tucson, AZ.
- Flugstad, H. and M. Livingston. 2007. Assessing potential habitat characteristics of urbanadapted lizards in Tucson, Arizona. International Association for Landscape Ecology, U.S. Regional Association, 22nd Annual Symposium, Tucson, AZ.
- Lotze, W. and M. Livingston. 2007. Reclaiming forgotten corridors: An urban greenway system utilizing secondary watercourses in Tucson, Arizona. International Association for Landscape Ecology, U.S. Regional Association, 22nd Annual Symposium, Tucson, AZ.
- Livingston, M. and E. Dudley. 2006. Challenges of public space: evaluating issues of access through private rangelands to public lands in southeastern Arizona. Council for Educators in Landscape Architecture, Annual Meeting, Vancouver, British Columbia.
- Livingston, M., J. Jones, J. Patton, and S. Kaplan. 2006. A suitability model for evaluating access and trail development along secondary watercourses in Tucson, Arizona. International Association for Landscape Ecology, U.S. Regional Association, 21st Annual Symposium, San Diego, California.
- Patton, J., and M. Livingston. 2006. Integrating pedestrian needs and bird habitat in trail design along secondary watercourses in Tucson, Arizona. International Association for Landscape Ecology, U.S. Regional Association, 21st Annual Symposium, San Diego, California.
- Jones, J., and M. Livingston. 2006. Strategies for increasing access and circulation along secondary watercourses and links with larger river parks in Tucson, Arizona. International Association for Landscape Ecology, U.S. Regional Association, 21st Annual Symposium, San Diego, California.
- Kaufman, A., D. Myers, and M. Livingston. 2005. Plants, design and diversity: barriers and links

with vegetation in three multi-cultural cities. 36th Annual Conference of the Environmental Design Research Assoc. Vancouver, Canada.

- Myers, D. and M. Livingston. 2005. Using simple technology to make your small firm more competitive: top10 IT strategies for Improving production, packaging, and presentation. ASLA Annual Meeting and EXPO. Fort Lauderdale, Florida.
- Livingston, M. and G. Chorover. 2005. Mitigating impacts of urban encroachment on critical protected lands in southeastern Arizona, USA.17th Conference of the Society for Ecological Restoration International, Zaragoza, Spain.
- Livingston, M., R. Campos, and S. E. Smith. 2005. Evaluating roadside restoration practices and plant composition in urban zones. 17th Conference of the Society for Ecological Restoration International, Zaragoza, Spain.
- Livingston, M. and L. Johnson. 2005. Outcomes of outreach from an academic perspective. Council for Educators in Landscape Architecture Annual Meeting, Athens, Georgia.
- Furenlid, K. and M. Livingston. 2004. An assessment of neighborhood tree species for avian habitat in Tucson, Arizona. International Association for Landscape Ecology, U.S. Regional Association, 18th Annual Symposium, Las Vegas, Nevada.
- Campos, R. and M Livingston. 2004. Evaluating species establishment and revegetation practices along roadsides in Tucson, Arizona. International Association for Landscape Ecology, U.S. Regional Association, 18th Annual Symposium, Las Vegas, Nevada.
- Livingston, M. and S. E. Smith. 2003. Evaluation of potential refuge sites in areas of urban development for an endangered species, *Coryphantha scheeri* var. *robustispina*. International Association for Landscape Ecology, 6th Annual World Congress, Darwin, Australia.
- Livingston, M., S. E. Smith, and M. Schwartz. 2003. An assessment of Tucson riparian corridors: representative native communities or degraded interior strands? International Association for Landscape Ecology, U.S. Regional Association, 18th Annual Symposium, Banff, Alberta.
- Smeltzer, J. and M. Livingston. 2003. Prioritizing fragmented patches of cottonwood-willow forests for preservation efforts within watercourses in urban and exurban areas of Tucson Arizona. USA. International Association for Landscape Ecology, U.S. Regional Association, 18th Annual Symposium, Banff, Alberta, CA.
- Mehlem, J. and M. Livingston. 2003. Use of a vegetation suitability index for assessing bird habitat in urban neighborhood parks of Tucson, Arizona, USA. International Association for Landscape Ecology, U.S. Regional Association, 18th Annual Symposium, Banff, Alberta.
- Bass, B. and M. Livingston. 2003. Assessing ecological sustainability in neighborhoods of Tucson, Arizona, USA. International Association for Landscape Ecology, U.S. Regional Association, 18th Annual Symposium, Banff, Alberta.
- Ribes, L. J. and M. Livingston. 2003. Integrating existing watercourse patterns into future planning efforts for Tucson, Arizona, USA. International Association for Landscape Ecology, U.S. Regional Association, 18th Annual Symposium, Banff, Alberta.
- Ribes, L. J. and M. Livingston. 2003. Use of spatial patterns of existing watercourses for future development in Tucson, Arizona, USA. Conference: Framing Land Use Dynamics: Integrating knowledge on spatial dynamics in socio-economic and environmental systems for spatial planning in western urbanized countries. Utrect University, The Netherlands.

Accepted, not presented.

- Rudy, M. I. and M. Livingston. 2002. Wildlife corridor planning and design for Santa Cruz County, Arizona. Ecological Society of America, Annual Meeting, Tucson, AZ.
- Livingston, M., and M. al-Asad. 2002. Evaluating cross-cultural exchanges in landscape architecture: water conservation workshop in Amman, Jordan. Council of Educators in Landscape Architecture, Annual Meeting, Syracuse, New York.
- Duncan, A., M. Livingston, and S. Smith. 2002. Relationship between remnant size and plant species diversity in the Tucson Urban Matrix. International Association for Landscape Ecology, U. S. Regional Association, 17th Annual Symposium, Lincoln, Nebraska.
- Goodwin, T. and M. Livingston. 2002. Recreating the Sonoran Desert in the urban matrix: evaluation of the City of Tucson Native Plant Preservation Ordinance. International Association for Landscape Ecology, U. S. Regional Association, 17th Annual Symposium, Lincoln, Nebraska.
- Livingston, M. 1999. Landscape design for attracting wildlife in southwestern urban environments. Urban Wildlife Conservation, 4th International Symposium, Tucson, AZ.
- Livingston, M., L. K. Harris and W. W. Shaw. 1999. Relationships among land cover and vegetation attributes related to wildlife habitats in eastern Pima County. Urban Wildlife Conservation, 4th International Symposium, Tucson, AZ.
- Livingston, M., B. A. Roundy, and S. E. Smith. 1994. Association of native grasses and overstory species in southern Arizona. Wildland Shrub and Land Restoration, 8th Annual Symposium, Intermountain Research Station, USDA, Las Vegas, Nevada.
- Livingston, M., B. A. Roundy, and S. E. Smith. 1993. Association of native grasses with overstory plants in southern Arizona. Society for Range Management, 45th Annual Meeting, Spokane, Washington.
- Livingston, M. and B. A. Roundy. 1991. Seedling emergence of warm-season native grasses in relation to soil cover. Society for Range Management, 44th Annual Meeting, Washington, D.C.
- Livingston, M., D. T. Ray, and S. E. Smith. 1987. Stability evaluation of six guayule cultivars at ten locations over three years. Guayule Rubber Society, 7th Annual Meeting, Annapolis, Maryland.
- Mamood, A. N., D. T. Ray, G. D. Waller, and M. Livingston. 1987. Honey bee pollination and seasonal impact on the seed quantity and quality of cultivated guayule. Guayule Rubber Society, 7th Annual Meeting, Annapolis, Maryland.
- Ray, D. T., W. Coates, and M. Livingston. 1986. Hedging to promote seed production. Guayule Rubber Society, 6th Annual Meeting, College Station, Texas.
- Livingston, M., P.G. Bartels, and D. T. Ray. 1985. Root development in *Cuphea procumbens* stem cuttings as influenced by boron, calcium and IBA. Arizona-Nevada Academy of Science, 30th Annual Meeting, Phoenix, AZ.
- Livingston, M. 1984. Rooting responses of *Cuphea angustifolia* in various liquid media. Western Society of Crop Science, Annual Meeting, Tucson, AZ.

□ Grants and Contracts

- 2018-2019 Tumamoc Hill Boathouse Landscape Plan. 100% effort. \$12,792.
- 2016-2017 Town of Marana El Rio Riparian Restoration Project. Phase II. 100%

	effort. \$6951.
2015-2016 2013-2014	Town of Marana El Rio Riparian Restoration Project. 100% effort. \$6508. Assessment of irrigation treatments: re-calibrating recommended guidelines for lower water use. 60% Co-P.I. with S. Smith. Rain Bird. \$63,681.
2012	Visual Maintenance Manual, Town of Oro Valley. 100% effort. \$5,054.
2011-2012	Omani Falaj Exhibition, Biosphere 2. 15% Co-P.I. with P. Smith (P.I.) and H. Hijazi, B. Plant, and G. Woodard (Co-P.I.s). \$297,026. Implemented.
2011-2012	Inter-Fab Inc. References for pond planting designs and plant references for the U.S. climate zones.100% effort. \$16,900.
2011-2012	Eller courtyard redesign: reflecting conservation design practices. 100% effort. \$6,157. Implemented.
2011-2012	Reducing the potable water footprint of Flandrau Science Center: Setting a high- profile example for the campus community. 10% Co-P.I. with G. Woodward (P.I), B. Plant (co-P.I.), and J. Riley (Co-P.I.). Provided in-kind faculty and GRA support in landscape architecture for re-design of Flandrau Planetarium grounds to accommodate water harvesting cisterns and new plantings and seating areas. \$26,800.
2010-2012	Assessment of irrigation treatments: Is less water used when landscape irrigation is with hand watering or automated systems? 60% Co-P.I. with S. Smith. Rain Bird. \$66,014.
2010	Design and conservation enhancement plan for Painted Desert Inn and Park South Entrance. 100% effort. P.I, National Park Service. \$17,000.
2010	Outstanding Remarkable Values (ORVs) for six wild rivers at Gates of the Arctic National Park and Preserve. 100% effort, P.I., National Park Service. \$20,000.
2009-2011	Master plan for Resaca de la Palma. 100% effort, P.I., National Park Service. \$36,500.
2009-2011	Conservation plan for the Petrified National Forest Housing Complex. 100 % effort. National Park Service. \$20,000.
2008-2011	Design guidelines for public access into and along Airport Wash. 100% effort, P.I., Arizona Department of Game and Fish Heritage Fund. \$9,400.
2008-2010	Master plan for Chamizal National Memorial. 100% effort, P.I., National Park Service. \$35,000.
2008-2009	Management Strategy Document, White Sands National Monument. 100% effort, P.I., National Park Service. \$35,000.
2008-2009	Green roof investigations in the Southwest. 20% effort, one of four co-P.I., University of Arizona Biosphere2. \$50,000.
2008-2009	Water conservation demonstration garden. 100% effort, P.I., Town of Marana. \$3,462. Implemented.
2008-2009	City of Butte, Montana recreational master plan. 100% effort, P.I., City of Butte, Montana. \$7,600.
2008-2009	Southwest Materials berm restoration plan. 100% effort, P.I., CalPortland Cement Southwest Materials. \$4,032.
2008	Planting prototypes for extraction operations in Marana, Arizona. 100% effort, P.I., Arizona Rock Products Association. \$6,200.

2007-2008 2007-2008 2007	City of Tucson urban wildlife plazas. 100% effort, P.I., City of Tucson. \$5,000. City of Tucson landscape patterns. 100%, effort, P.I., City of Tucson. \$4,000. Mesquite Power Plant interpretive trails for wildlife viewing. 90% effort, co-P.I.
2007-2008	with Martin Karpiscak. Mesquite Power Plant. \$4,000. Whitewater Draw master plan. 100% effort, P.I., Arizona Department of Game and Fish. \$20,000.
2005-2006	Rainwater harvesting –a neglected, significant source of water for arid lands. 25% effort, one of five co-P.I. Multiple funding sources. \$98,800.
2005-2006	Sidd Al-Ahmar master plan, Petra Region, Jordan. 90% effort, co-P.I. with Robert Frietas. \$18,000.
2005-2006	Water conserving demonstration garden, Aqaba, Jordan. 90% effort, co-P.I. with Robert Frietas. \$18,000.
2005-2006	Organ Pipe Visitor Center interpretive islands. 100% effort, P.I. National Park Service. \$2,000. Implemented.
2004-2007	Creating trails along secondary washes in Tucson. 100% effort, P.I., Arizona Department of Game and Fish Heritage Fund. \$24,238.
2004-2007	Plants benefiting urban wildlife on campus, 100% effort, P.I., Arizona Department of Game and Fish Heritage Fund. \$16,369.
2003 -2005	Assessing neighborhood tree species for avian habitats in Tucson, Arizona. 100% effort, P.I., Arizona Department of Game and Fish Heritage Fund. \$14,196.
2003-2005	Wildlife value of revegetated roadsides in Tucson, Arizona. 100% effort, P.I., Arizona Department of Game and Fish Heritage Fund. \$14,196.
2003-2005	Design guidelines for public access into Saguaro National Park East from the Rincon Valley, Tucson, Arizona. 100% effort, P.I., Arizona Department of Game and Fish Heritage Fund. \$16,914.
2003	University of Arizona International Foreign Travel Grant. 100% effort, P.I., International Association for Landscape Ecology, 6th Annual World Congress, Darwin, Australia. University of Arizona. \$1,000.
2002-2004	Designing created spaces for avian species: assessing existing parks and prescribing design guidelines for future parks in Tucson, Arizona. 100% effort, P.I., Arizona Department of Game and Fish Heritage Fund. \$13,841.
2002	Stone Avenue Historic Temple planting plan, Tucson, Arizona. 100% effort, P.I., \$150. Funding for implementation of design, \$15,000, Small Grants Program, City of Tucson, AZ. Implemented.
2001-2003	Establishing a monitoring program for visitor use and associated impacts in Las Cienegas Natural Conservation Area. 20% effort, collaboration with R. Gimblett, (P.I.), School of Renewable Natural Resources. Bureau of Land Management. \$129,793.
2001-2003	Pima pineapple cactus monitoring study. 100% effort, P.I., Robson Communities. \$5,324.
2001	Ambos Nogales revegetation project. 20% effort, collaboration with Diane Austin (P.I.), Bureau of Applied Research in Anthropology. National Science Foundation. \$45,000.
2000-2001	Watercourse vegetation changes associated with growth in the Tucson Basin.

	100% effort, P.I., University of Arizona Small Grants Program, Office of Vice President for Research. \$4,966.
2000	North District Central Park restoration study, Tucson, AZ. 100% effort, P.I., City of Tucson Parks and Recreation. \$2,186.
2000	City of Globe Parks and Recreation master plan, Globe, AZ. 50% effort, co-P.I. with Lauri Johnson. City of Globe. \$5,000.
1999	Association for Women Faculty Travel Grant. 100% effort, P.I., \$500.
1999	Hollinger outdoor schoolyard habitat master plan, Tucson, AZ. 100% effort, P.I., \$350. City of Tucson funding for implementation pending.
1999	McClaran residence planting plan, Tucson, AZ. 100% effort, P.I., \$100.
1999	Tombstone Presbyterian Church master plan, Tombstone, AZ. 50% effort, Co- P.I. with Mark Frederickson. City of Tombstone. \$2,000.
1998	Christ Presbyterian Church memorial garden, Tucson, AZ. 100% effort, P.I., Private funding. \$500.
1998	Avra Valley Water Company landscape plan, Avra Valley, AZ. 100% effort, P.I., Town of Avra Valley. \$200.
1994-1998	Pima pineapple cactus transplantation study. 100% effort, P.I. Diamond Ventures. \$51,124.
1992-1996	Wildlife habitat inventory study: Phases I and II. 25% effort, collaboration with W. W. Shaw (P.I.), School of Renewable Natural Resources. Arizona Department of Game and Fish Heritage Fund. \$93,848.

Work submitted, not funded

Agnese Nelms Haury Program in Environment and Social Justice Seed Charitable Grant Proposal; Democratizing Sustainability Funding: Enhancing Community Capacity to Address Climate Change and Build Resiliency. \$88,748. Submitted fall 2016, and resubmitted in spring 2017.

Work submitted, not funded

Assessment of Vegetation Suitability in Tucson Microbasins. EPA Urban Waters Small Grants. Livingston and Chorover. Co-P.I. \$68,910. Submitted fall 2015, not funded; scored 80.4/100, projects 91 and above were funded.

D Pro-Bono Service Learning/Outreach Projects

- 2017 Tucson Heritage Park (Grant Road Coalition): a collaboration with neighborhoods adjacent the Grant Road expansion that focuses on open space development between Santa Rita Ave. and Park Ave. Landscape designs will include trails, seating, buffer plantings, and other elements that will serve the surrounding neighborhoods as well as visitors to Tucson.
- 2016 Bugmania Courtyard Plan: a collaboration with the UA Herbarium that focused on development of courtyard designs and associated elements inspired by a particular insect. Work was displayed at the Insect Festival in the fall (Bugmania).
- 2016 Arizona History Museum (AHM) Entry Landscape Design: this project revisited the south entrance to this historical structure and provided a landscape design that

	highlights the noted architectural style of structure while more clearly addressing
2015	current and future needs of the AHM.
2015	Valley of the Moon Landscape Plan: plan for water harvesting and conservation
	demonstration, including gathering spaces and shade structures, ADA pathways,
2014	and arid plants demonstration garden.
2014	City of Tucson (COT) Main Library Urban Plaza and Landscape Plan: plan for
	demonstration/entry design for east entry open space at this COT library,
	including gathering spaces and shade structures, pathways, and arid plants
2014	demonstration garden. Billite Dand Neighborhood Streeteene Design a design feewaad on a multi-
2014	Rillito Bend Neighborhood Streetscape Design: a design focused on a multi-
	modal corridor that focuses on creation of a green corridors, native plant materials, microbasins, and other water harvesting techniques.
2013	City of Tucson (COT) Himmel Park Branch Library Landscape Plan: plan for
2015	demonstration/entry design for east entry open space at this COT library,
	including gathering spaces and shade structures, pathways, and arid plants
	demonstration garden.
2013	Sky Islands High School Outdoor Learning Laboratory: plan for outdoor learning
2015	classroom focusing on sustainable practices, including garden plots, water
	harvesting, tortoise habitat, aquaculture, and arid plantings.
2012	Tucson House Open Space Design: plan focusing of gathering spaces, planting
_ •	designs, and water harvesting systems for the north side of the Tucson House,
	City of Tucson, Tucson, AZ.
2011	Omani Falaj Exhibition: a design for the Omani Sultan Qaboos Cultural Center, a
_ •	member of the Middle East Institute, that highlights Oman's falaj water
	infrastructure and management system. Implemented at Biosphere 2, Tucson, AZ.
2011	Toole Ave. Warehouse Arts District Corridor Master Plan: design focusing on
	a multi-modal corridor that draws various users to the Warehouse Arts District
	along Toole Ave. Tucson, AZ.
2011	City of Tucson Housing Complex Development Master Plan: development
	focusing on a lower income housing complex that focused on redevelopment of
	the space, including design of open space uses, parking re-design, stormwater
	control, and guidelines for landscape designs. Tucson, AZ.
2010	Tucson House Community Garden Master Plan: plan for community gardens,
	including gathering spaces and shade structures, exercise trails, parking, and cacti
	and succulent demonstration garden. Tucson, AZ. Implemented.
2009	Cooper Outdoor Learning Center: planting plans for focus areas indicated on
	site master plan (developed in another studio course, in collaboration with
	Professors Lauri Johnson and Nadir Chalfoun), Tucson, AZ.
2009	Gould-Simpson Monocot Garden: landscape design demonstrating
	monocotyledons for use in the Tucson environment, Tucson, AZ.
2009	Drachman Institute residence: landscape plan and implementation for a low-
	income residential unit, Tucson, AZ. Implemented.
2009	Downtown Tucson urban habitat: landscape design and web-based interpretive
	material for habitat assessment, design, and interpretation in downtown areas,
	Tucson, AZ.
2009	City of Tucson Origins Heritage Park master plan: plan focusing on reclaiming a

	landfill for an urban multi-use park, Tucson, AZ.
2008	City of Tucson Granada Park: landscape design focusing on water harvesting strategies demonstrated in a public park, Tucson, AZ. Implemented.
2008	Drachman Institute residence: landscape plan and implementation for a low- income residential unit, Tucson, AZ. Implemented.
2007	National Phenology Network (NPN) Garden: landscape design for open space for neighbors and visitors of the University of Arizona, with a focus on NPN mission and goals, Tucson, AZ.
2007	Drachman Institute residence: landscape plan and implementation for a low- income residential unit, Tucson, AZ. Implemented.
2006	Tucson Nature Conservancy master plan: focus on water harvesting and conservation techniques for public display, Tucson, AZ. Implemented.
2006	Lawrence Middle School Outdoor laboratory: design of outdoor learning space focusing on cultural and environmental significance of the region, Tucson, AZ.
2006	Tumamoc Hill Desert Laboratory inventory and planting plan: assessment of significant existing vegetation and proposed planting plans for Tumamoc Hill, Tucson, AZ.
2005	University of Arizona Math Building landscape plan: entry space emphasizing planting plan and seating areas for campus, Tucson, AZ.
2005	University of Arizona Chemistry Building: entry design for historic Chemistry building, including plantings, patios, and seating, Tucson, AZ.
2004	Desert Survivors Nursery Demonstration Garden: student designs focus on entryways into the nursery, with concepts relating to water conservation, native plantings, and connections to adjacent communities, Tucson, AZ.
2004	Cachuma Lake Nature Center Interpretive Garden: student designs focusing on development of a landscape plan for the Nature Center that highlights native plants and communities, and neighboring watersheds, Santa Barbara, California. Implemented.
2004	Habitat for Humanity Residence: student design emphasizing sustainable design practices for low-income housing, Tucson, AZ. Implemented.
2004	Nature Conservancy landscape plan: student design focused on new low-water- use planting design for the eastern section of the site, including a performance/class platform, seating, and covered patios, Tucson, AZ. Implemented.
2004	Drachman Institute residence: landscape plan for a low-income residential unit, Tucson, AZ. Implemented.
2003	Herring Hall landscape plan: focuses on Campus Arboretum and Herbarium, University of Arizona Campus, Tucson, AZ. Implemented.
2003	Biosciences East Building, landscape plan for School of Natural Resources, University of Arizona Campus, Tucson, AZ. Implemented.
2003	Oro Valley Demonstration Garden, Tucson, AZ.
2003	El Capitan Courts, landscape plan, Tucson, AZ.
2002	Family and Consumer Sciences Building, landscape plan, University of Arizona Campus, Tucson, AZ. Implemented.

2002	Habitat for Humanity residence: landscape plan, Tucson, AZ.
2001	Habitat for Humanity residence, landscape plan, Tucson, AZ.
2001	El Rio Health Center, landscape plan, Tucson, AZ.
2000	Shantz Building patio garden, University of Arizona Campus, Tucson, AZ. Implemented.
1999	North Central District Park, conceptual master plan, City of Tucson Parks and Recreation Department, Tucson, AZ. Final plan funded.
1999	Shantz Building, shade garden, University of Arizona Campus, Tucson, AZ. Implemented.
1999	Ronald McDonald House, landscape plan, Tucson, AZ. Implemented.
1998	Architecture Building, entry garden, University of Arizona Campus, Tucson, AZ. Implemented.
1998	Maricopa Agricultural Center, landscape plan, University of Arizona, Maricopa, AZ. Implemented.
1998	Rincon Vista Recreational Field Facility, planting plan, University of Arizona, Tucson, AZ. Implemented.
1998	Watson and Willow Lakes, master plan, City Planning Department, Prescott, AZ.
1998	Stork's Nest Agency: planting plan, Tucson, AZ.
1998	Tucson Urban Welcome Center: background study and master plan, City of Tucson Arts Council, Tucson, AZ.
1998	Joesler Residence, planting plan, CAPLA, Tucson, AZ. Implemented.
1998	Avra Valley Water District Office, landscape plan, Avra Valley, AZ. Implemented.
1998	Metro Water Center, landscape plan, Tucson, AZ. Implemented.

□ Principal Courses Taught

Design Studio III

Landscape Ecology Planting Design

Plant Materials

Seminar(s): Thesis and Master's Report Development

Seminar: Strategies for Water Conservation in Urban and Exurban Areas

Ph.D., M.L.A, and M.Arch. Dissertations and Thesis and Master's Report Committees (starting in 2016, MLA students are all advised in the Master's Report and Thesis development seminar, 596C)

Dissertations

- 2017 Smith, Garrett. Title TBA. Arid Lands Studies. Member.
- 2017 Keith, Ladd Title TBA. Arid Lands Studies. Member.
- 2015 Bresdin, Cylphine. Agronomy of Halophytes as Constructive Use of Saline Systems. Arid Lands. Member.
- 2006 McCaffrey, Rachel. Assessing patterns of abundance and the influence of habitat features

and scale on birds in an urban environment. Member.

Theses and Master's Reports: major advisor

2015

Alammar, Mashal. The multimodal transit corridor, Eastern Province, Saudi Arabia.

Gamboa, Malerie. Coronado Airport: a project in flight.

Glass, Rachel. Redington Pass: a collaborative place-based design process for public landscapes. Hyson, Kendra. Second city – leveling the playing field: a revitalization plan for Colon, Panamá. Lotzgesell, Janelle. Food justice in the lower ninth ward: cultivating resilience with our school at Blair grocery.

Thorley, Sam. El Borde – a design for Alto Hospicio, Chile.

2014

Gedrath-Smith, Katia. The 1936 Olympic Village: A look from the past into the future.

Gong, Yuan (Candice). Guipan Lake Wetlands Park: designing for recreation and preservation. Herman, Brandon. The Tacoma Flats: a study of post-industrial urban waterfront rejuvenation.

Scaife, Allison. Reimagining Reid Park: Redesign and Rejuvenate.

- Tarbox, Jeff. Enhancing neighborhoods through green street design: the Mountain First restoration project.
- Ziolkowski, Cory. A fair way to share the outdoors: exploring how public golf courses can reach their full potential.

2013

Davidson, Deryn. Making room for nature: addressing the emotional and physical restorative needs of patients, family and staff at Tucson medical Center for Children.

Melnick, James. Dog park design.

Rayyan, Kawthar. The Hashemite University campus landscape master plan.

VanDenBerg, Kelly. Metamorphosis: A master planned community renovation, from struggling golf course to vibrant desert community.

- Wang, Xi. Arroyo Chico riparian design: integrating stormwater management with greenway enhancement.
- Zhao, Kexin. Revitalization of alleys creating safe, social and green networks in central Tucson.

2012

Blacher, Becky. Expanding the front yard: green infrastructure in the urban desert.

- Ela, Autumn. Designing for the greatest good: ensuring multi-seasonal recreational sits are relevant to the urban desert Southwest.
- Jensen, Laura. Habitat creation human connections citizen art in the landscape: Tucson's Warehouse Arts District.

Poe, Rudy. Food forest gardens for the Southwest: a residential and small farm approach.

Okour, Yasmien. Retrofitting highway arterials into greenways: redesigning Petra St., Irbid, Jordan.

Voris, Maria. Buckelow Farm's Wetland: crating habitat and recreation for agricultural runoff.

2011

- Jarchow, Chris. Assessment of and guidelines for the development and renovation of urban and exurban Chiricahua leopard for (*Rana chiricahuensis*) habitat in Arizona.
- Lennon, Lisa. Pocket pollination: landscape design guidelines for native bees in urban

environments.

- Mazza, Mike. Resaca de la Palma master plan: linking history, ecology and community in Brownsville, TX.
- Van Fleet, Kristin. Design and conservation enhancement plan: visitor facility landscape at Petrified Forest National Park.

2010

- Bareis, Eirin. Strategies for linkages, access and urban wildlife opportunities for southern Tucson's underserved community along Airport Wash greenway.
- Bossler, Matthew. Guidelines for the design of mitigated riparian habitat and other uses in detention basins of Pima County, AZ.
- Hawn, Jessica. Tree of Life Rejuvenation Center: a sustainable development focusing on quality of life.

Olson, Iylea. Chamizal National Memorial master plan: renewing a conservation ethic.

2009

Abbott, Shelly. The role of stakeholders in public land planning. Reflecting ideas in action. Babb. Zach. Iron Horse heritage greenway system.

Creagan, Kim. Urban habitat: a model for habitat assessment, design, and interpretation in downtown areas.

Dinsmore, Kate. Enhancing recreational opportunities in Butte, Montana.

Jacobsen, Brent. Sustainable roofscapes: developing a green roof implementation model for Tucson, AZ.

Mast, Natalie. Refuse to refuge: reclaiming a landfill in Tucson's urban core.

2008

Elam, Angie. Arizona open space: planning in the growing smarter era.

Kopke, Jay. The arid green roof design process.

Meadows, Eric. Whitewater draw wildlife areas; a wildlife viewing experience.

Rose, Chris. Urban streetscape patterns in arid environments: streetscape patterns and principles in Tucson, AZ.

2007

Flugstad, Heidi. Assessment of potential habitat characteristics favorable for urban adapted lizards in Tucson, Arizona.

Hobson, Levi. Fire in the hole: expanding the role of golf courses in wildlife management.

- Lotze, Wendy. Reclaiming forgotten corridors: an urban greenway system utilizing secondary watercourse in Tucson, Arizona.
- Uzzelle, Hampton. Public interpretation of urban bird habitat design guidelines on a self-guided tour of the University of Arizona Campus in Tucson, Arizona.

2006

- Addison, Erin. Documenting deforestation at Sidd Al-Ahmar, Petra Region, Jordan. Connolly, Neva. The Nature Conservancy water harvesting project: an exploration of water harvesting techniques in Tucson, Arizona.
- Jones, Jennifer. Strategies for increasing access and circulation along secondary watercourses in Tucson, AZ.
- Kaplan Suzanne. Retrofitting existing drainageways into the urban fabric for the uses as recreational amenities.
- Patton, Jennifer. Integrating pedestrian needs and bird habitat in trail design along secondary

watercourses in Tucson, Arizona.

Volenick, Irene. Sam Shu Farm, Marana, Arizona: Master plan for a recreational farm.

2005

- Chorover, Gina. Living on the edge: minimizing the impact of urbanization along Rincon creek through conservation development and design.
- Hurley, Martha. Interpretative trail and trail connection between Manitou Springs and the Garden of the Gods, Colorado Springs, Colorado.
- Penati, Elizabeth. Recreational access on ranching lands: problems and solutions in Arizona as articulated by those who live and work in the West
- Rosen, Josh. Interpretative garden at Cachuma Lake Nature Center, Santa Barbara, California.
- Vitkay, Karen. Water conserving garden, Aqaba, Jordan: recommendations for the landscape design practice in the Middle East.

2004

- Campos, Rebeca. Wildlife value of revegetated roadsides in Tucson, Arizona.
- Cooper, Harry. Site appropriate design: Sustainable trail design for a degraded site in Pima County, Arizona.
- Furenlid, Karen. Assessing neighborhood tree species for avian habitats in Tucson, Arizona.
- Robaina, April. Effective elements of interpretive home landscaping exhibits for arid environments: Case study for Tucson, Arizona.
- Smeltzer, Jenny. Prioritizing fragmented patches of cottonwood-willow forests for preservation efforts within watercourses in urban and exurban areas of Tucson, Arizona.

2003

- Bass, Beverly. Assessing ecological design principles as they relate to sustainability in neighborhoods of Tucson, Arizona.
- Darnell, Beth. Assess the potential play value of vegetation in the outdoor environments of NAEYC-accredited preschool programs in Tucson, Arizona.
- Gogal, Lisa. Understanding rotational zoo exhibits and recommendations for the creation of a rotational exhibit at the Oregon Zoo.
- Mehlem, Josh. Use of a vegetation suitability index for assessing bird habitat in urban neighborhood park of Tucson, Arizona.
- Ribes, Lisa. A comprehensive bicycle parking plan for the University of Arizona Campus: developing methods for assessing parking requirements.
- Rudy, Michelle. Wildlife corridor design and planning for western Santa Cruz County, Arizona.
- Showalter, Darlene. Post-installation evaluation of the plant materials used in traffic calming applications on residential streets in Tucson, Arizona.

2002

Duncan, Alison. Urban remnants and their susceptibility to invasion by non-native plant species.

- Gormally, Josh. Changes in riparian vegetation following release of reclaimed effluent water into the Santa Cruz River.
- Kirk, Patricia. Evaluating therapeutic landscape design elements of urban plazas in the southwestern United States.
- Marshall, Chelsea. Residential landscapes in Tucson, Arizona: Sustaining Sonoran Desert landscape character as urban edges.
- Sager, Brian. Is the constitution of a greenway trail network associated with cycling commuter use?
- Stickler, Stacey. The Tucson Museum of Art courtyard: a guide to effective participatory design

methods for adolescents.

Taylor, M. A design for transit-oriented development in San Diego, California.

2001

Goodwin, Troy. Preserving native plants through regulations: a case study of the City of Tucson's NPPO (Native plant preservation ordinance).

Haselhorst, Corey. A skatepark: from the ground up.

Martinez, Scott. Evaluation of roadside revegetation along Arizona Forest Highway 39 (Mt. Lemmon Highway). Thesis.

2000

- Ridgway, Stephanie. Visitor behavior in zoo exhibits with underwater viewing: an evaluation of six exhibits in the western United States. Thesis.
- Rohr, Barbara. Healing outdoor spaces: housing for AIDS patients in Tucson, Arizona. Master's Report.

1999

- Mielcarek, Laura. Factors associated with the development and implementation of master plans for botanical gardens.
- Thawley, Mark. Techniques for improving established golf course: restoration, renovation, and redesign: An improvement plant for the Meadow Club, Fairfax, California.

Theses and Master's Reports: served as committee member

2015

Aros, Daniel. The Iron Triangle: Willets Point redevelopment.

Laughlin, Katherine. Ghost town revitalization: Gilman, Colorado.

Roh, Sunyoung. Newtown Creek revitalization.

Trautner, Gina. Reinventing the schoolyard: a master plan for Rogers Commons.

Yang, Yang. Nashville waterfront – urban design and landscape design.

2014

- Bassey, Monique. Gowanus Canal: Rethinking the Urban Fabric through Corridors of Coexistence.
- Costello, Karen. Masterplan proposal for the former Kai Tak Airport in East Kowloon, Hong Kong.
- De La Torre, Mark. Imagine greater Denver: an urban revitalization through vehicular and pedestrian reconfiguration.
- Figueroa, Jesus Alan. Projecto Azul Marino: A Community's Waterfront in an Ecological Framework.

Hosseinzadeh, Misagh.6th Street revitalization in Tucson, AZ.

Lehman, Bri. Presidio del Tubac master plan.

- Morgan, Daniel. Lost tracks: creating culinary connections and community in Tucson.
- Shemanski, Nigel. Coca-Cola Ballpark Village: Activating major seasonal public facilities through reinvisioning the surrounding context for multi-seasonal use.
- Singh, Sukhmeet. Santa Cruz mixed use village and research park: a demonstration of sustainable agreicultural methods and water harvesting techniques for aird environments.
- Sobecki, Christian. Bridging the battleground: master plan for Monmouth Battlefield State Park, Monmouth County, New Jersey.

Yongkun,Ye. Using stormwater management and green infrastructure to enhance neighborhood livability.

2013

- Booth, Amy. Linking children and nature through design: integrating nature education for children of the Texas panhandle into Palo Duro Canyon.
- Edwards, Mitchell. The Carrying Capacity of Water in Arid Regions: Landscape Planning and Urban Design Improvements.
- Halbert, Desneige. Pilgrim Hot Springs.
- Lu, Li. Sustainable landscape development of urban waterfront a waterfront park design in WuhanEconomic development zone, Wuhan City, China.

Pedersen, Christian. Sensory garden experience.

- Radcliffe-Meyers, Lori. "A Landscape of Memories: a master plan design for the Crawford Town Hall.
- Rasmussen, Libby. Maximizing minimal green space: re-thinking land use on Coast Guard bases.
- Quach, Kevin. Envisioning Oakland: the ballpark district.
- Wang, Yuxin. Yangchun Lake sub-urban center master plan.
- Ware, Charles. Design-Build in the Education of Landscape Architecture.

2012

Idriss, Lana. A design guide for incorporating ecology into southwestern schoolyards.

Satterly, Jason. Revitalization through design: bringing life back to downtown Cheyenne, Wyoming.

Streitz, Lee. An industrial adapted reuse project: reimagining the beer garden.

2011

Perry, Yennifer. Rails to trails greenway: awakening cultural heritage.

2010

Keifer, Christopher. Coastal protection as urban landscape.

2009

Kennedy, Melisa. Master plan for redevelopment in southern Avra Valley.

2008

Kennedy, Allison. As spoken by landscape architecture: an urban infill design language.

Marhefka, David. Tucson Electric power place; a public-private open space model in Tucson, Arizona.

Rojas, Patricia. Awakening the water snake.

2007

Bolton, Scott. Koko Crater: landscape poetics revealed.

- Frazier, Beth. Sustainable communities: implementations strategies and guidelines for design and planning.
- Hazlett, Jennifer. Utilizing wind as a determining factor for design guidelines pertaining to the lower Sonoran Desert life zone.

Henegar, Aaron. Reclamation recreation: finding place for public golf on forgotten landscape.

2006

Bio, Roberto. Design strategies for the Rillito River, Tucson, Arizona: exploring the urban

design opportunities for improving the river corridor.

- Moeller, Colby. Sustainable design for health care facilities: A Case Study of the LEED certified Rincon Community Hospital at Civano.
- Steinmeyer, Samirah. Reinventing the brownfield: integrating identity in sustainability in design.
- Watson, Angie. Revamping rover's playground: an examination of design possibilities for urban offleash dogs parks in Tucson, Arizona.
- Zarko, Gwen. Preserving the past, changing the present, and ensuring the future: Sentinel Peak.

2005

- Burns, Scot. Grounds for Play: Rethinking, reinventing, reinvigorating the kid's playground with multiple intelligence; Tucson, Arizona.
- Mahoney, M. The expanding field: exploring the interface between art and ecology in landscape architecture.

2003

Davis, Darby. Expressions of urban design: the park as a theater.

- Kumazawa, Naoto. A study of urbanization practices on the health of ephemeral headwater streams in eastern Pima County, Arizona.
- Lynch, Erin. Feng Shui as a site design tool: assessing conditions of human comfort in urban places.
- Schaeffer, R. Identifying success in schoolyard design through post-construction evaluation of public elementary schoolyard environments in Tucson, Arizona.

2002

Camacho, M. Sacramento River Park master plan.

Clifford, S. Butte Creek Trails project: a master plan.

Nelson, K. Determining factors that lead to the success of community gardens.

2001

Takessian, J. Literacy and multicultural representation on the context of a school master plan: A master plan for Lawrence Intermediate School, Tucson, Arizona.

2000

- Castrillo, M. Evaluating the effect of context in the use of two downtown Tucson urban plazas using qualitative and quantitative approaches.
- Peters, J. Gila Bend: a small town revitalization study.
- Pinto, R. Analysis of the cultural landscape of Fort Bowie National historic site.
- Walker, S. An analysis and design for extending the Rillito River Park system from Dodge Blvd. to Swan Rd.

1998

- Dietz, R. Guidelines for the design and development of golf courses adjacent to riparian habitat in semi-arid desert landscapes. M
- Mendosa, J.G. Riparian areas, ecological protections, and recreational uses along the Magdalena River.

1997

Gerstenberger, N. Historic plant materials of Tucson.

Undergraduate Capstone Reports for students in Bachelor's for the Study of the Built Environment: advisor

2016 Harris, Houston 2015 Rioux, Andre 2015 Jackson, Chloe

2015 Cunningham, Beau

□ Service/Outreach

Service/Outreach National/International

- 2008-2012 Vice President, Phi Kappa Phi, University of Arizona Chapter.
- 2008-2009 Member, Web Development Committee, US-International Association of Landscape Ecology.
- 2006-2008 Treasurer, Executive Committee, US-International Association of Landscape Ecology.
- 2004 Judge, student presentations, US-International Association of Landscape Ecology national conference (IALE), Las Vegas, Nevada.
- 2003 Judge, student presentations, US-International Association of Landscape Ecology National Conference (IALE), Banff, Alberta.
- 2002 Judge, student presentations, US-IALE National Conference, Lincoln, Nebraska.

Service/Outreach • Local/State

2008-present President, Sycamore Canyon Conservation Foundation Board, Tucson. 2013-2016 Member, Arizona Community Forest Council. 2012 Panel Participant, International Workshop on Water, Science, Environment and Engineering: Perspectives on Grand Challenges, Veolia Environment Foundation, Veolia Water North America. 2012 Panel Participant, The New Green Landscape: cutting edge - green technology and design. Tucson Association of Realtors & US Green Building Council, Southern Branch. Member, Desert Horticulture Conference Committee. 2010 2010 Moderator, Desert Horticulture Conference. 2010 Secretary, Executive Committee, Board of Directors, Tucson Botanical Gardens. 2009 Chair, Horticulture Committee, Board of Directors, Tucson Botanical Gardens. 2009 Guide, Arizona-Sonora Desert Museum field trip, Council for Educators in Landscape Architecture Conference, Tucson. 2008 Reviewer, Selection of firms for On-Call Landscape Architectural Services, City of Tucson Department of Procurement. President, Executive Committee, Board of Directors, Tucson Botanical Gardens. 2004-2006 2000-present Member, City of Tucson Plant List Advisory Committee. 1996-2011 Member, Executive Committee, Board of Directors, Tucson Botanical Gardens. 2001 Invited Judge, Tohono Chul Park Landscape Design Competition, Tucson. 2001 Participant, Reception for the International Council on Monuments and Sites, CAPLA, University of Arizona, Tucson.

2000-2002	Chair, Master Plan Committee, Tucson Botanical Gardens.
2000-1998	Vice President, Executive Committee, Board of Directors, Tucson Botanical Gardens.
1998	Panel Participant, Development of the Marana Native Plant Ordinance, Marana.
1997-2001	Chair, Facilities Committee, Tucson Botanical Gardens.
1994-present	Member, Board of Directors, Tucson Botanical Gardens.

Service/Outreach • University

2017-present	Member, the UA Center for Climate Adaptation Science and Solutions (CCASS).
2016-2017	Member, CAPLA Dean Search Committee.
2015	Member, Director Miller 5-year Review Committee.
2015	Co-chair, Director Johnson 5-year Review Committee.
2015	Member, Director Jeffery 5-year Review Committee.
2015	Faculty advisor, UA Community Garden Club.
2013-2014	Dean Cervelli 5-year Review Committee.
2012-present	Surface Water Group.
2010-2013	Chair, Committee on Conciliation.
2010-2013	Member, Grievance Clearinghouse Committee.
2010	Advisor, Invention to Venture, The McGuire Entrepreneurship Program and the
	Office of Technology Transfer.
2009-present	Member, Faculty Advisory Committee, Institute for the Environment.
2009-present	Member, Committee on Conciliation.
2003	Member, Community Water Harvesting Consortium.
2003	Member, Old Main Steering Committee.
2002	Member, Krutch Garden Advisory Committee.
2000-present	Member, Campus Arboretum Committee.
2000-2005	Faculty Marshall and Hooder, University Commencement.
1998-present	Member, Association of Women Faculty.
1999-2005	Faculty Advisor, Expanding Your Horizons Conference.
1999-2004	Member, Plant Database Committee.
1993-2002	Coordinator, FFA Field Day, Landscape Architecture Section.

Service/Outreach • College

2019	Constitution and Bylaws Committee.
2018-2019	Member, SPOAC Advisory Council.
2018	Co-Chair, SPOAC Doctoral Programs Task Force.
2018	Co-Chair, SPOAC Teaching Working Group.
2018	Member, Faculty Promotion Review Committee (2 faculty).
2017	Member, Faculty Tenure Review Committee (1 faculty).
2015	Chair, Faculty Search Committee, Urban Design position, Landscape

	Architecture.
2014-present	Member and Co-Chair, Post-Stoltz, Post-Blazquez, and Post-Frederickson Faculty
-	Search Committee, Landscape Architecture.
2014	Moderator, Panel Discussion on CAPLA Culture and Change.
2013-2015	Chair, CAPLA Faculty Assembly.
2013-2014	Urban Design Faculty Search Committee, Architecture.
2010-present	Member, Faculty Status Committee.
2010	Chair, Post Tenure Review Committee.
2010-2011	Member, Dean's Audit Review Committee.
2011-2012	Chair, Graduate Student Expo.
2010	Faculty Senate representative (when Director Johnson is absent).
2009-2010	Chair, Graduate Curriculum Task Force.
2010	Organizer, Graduate Student Expo.
2007-2009	Chair, CALA Faculty Assembly.
2007	Juror, Archon Prize.
2006	Member, CALA By-laws Committee.
2000-2002	Member, CAPLA Building Committee.
1998	Member, Joesler House Advisory Committee.

Service/Outreach - Department

2012-present	Faculty Advisor, Third Floor Studio Outreach Committee.
2009-present	Chair, Graduate Student Expo.
2013-2016	Member and Co-Chair, Landscape Architecture Faculty Search Committee.
2008, 2006	Member, Prospective Student Review Committee.
2004, 2003	Faculty Coordinator, School Fall Retreat.
2003	Member, Administrative Assistant Search Committee.
2001-2002	Member, Director Search Committee.
2001	Speaker, Brown Bag luncheon, ASLA-University of Arizona section.
2001	Faculty Coordinator, Brown Bag luncheon, ASLA-University of Arizona section,
	speaker, Janet Rademacher.
2000-2002	Faculty Coordinator, Student Internship Program.
2000	Faculty Coordinator, Visiting lecturer, Eduardo Sampre.
1999	Faculty Coordinator, ASLA Student Awards ceremony.
1999	Member, Faculty Search Committee.
1999	Faculty Advisor, Phoenix Shadow Day (organized visits to landscape architecture
	firms and projects).
1999	Faculty Advisor, Career Day for Landscape Architecture.
1999	Faculty Advisor, US Forest Service Internship, Sedona, Arizona.
1998	Member, Director Search Committee.

Curriculum Vita

Lauri Macmillan Johnson

Professor School of Landscape Architecture College of Architecture and Landscape Architecture P.O. Box 210075 The University of Arizona Tucson, Arizona 85721-075 (520) 621-8790 Ijohnson@u.arizona.edu February 2010

EDUCATION

MLA	Department of Landscape Architecture, College of Fine and Applied Arts, University of Illinois at Urbana-Champaign, 1977, masters project: Institute for Child Behavior and Development playground evolution, advisor: Albert J. Rutledge, major field: landscape architecture
BSLA	Department of Landscape Architecture, Cook College, Rutgers University, New Brunswick, New Jersey, 1975, advisor: Jeffery Hall, major field:

landscape architecture

ACADEMIC EXPERIENCE

1998-present	Associate Professor/ Professor (awarded 2007), School of Landscape Architecture, College of Architecture and Landscape Architecture (CALA) formerly the College of Architecture, Planning, and Landscape Architecture (CAPLA), The University of Arizona, Tucson, Arizona (also 1998-present, affiliated faculty Preservation Studies-an Interdisciplinary Graduate Certificate Program, CALA, The University of Arizona)
1991-1998	Associate Professor, School of Renewable Natural Resources (SRNR), The University of Arizona, Tucson, Arizona (Landscape Architecture was moved to the College of Architecture, Planning, and Landscape Architecture in 1998.)
1989-1991	Associate Professor, School of Natural Resources, College of Agriculture and Forestry, West Virginia University, Morgantown, West Virginia
1982-1989	Assistant Professor, School of Architecture and Planning, University of Colorado at Denver, Denver, Colorado
1981-1982	Adjunct Lecturer, Delaware Community College, Media, Pennsylvania
1975-1977	Graduate Teaching Assistant, Department of Landscape Architecture, College of Fine and Applied Arts, University of Illinois at Urbana- Champaign
1982-1985	Teaching Assistant, Department of Landscape Architecture, Cook College, Rutgers University, New Brunswick, New Jersey

ADMINSTRATIVE EXPERIENCE

2009-present	Director of Graduate Studies, School of Landscape Architecture, College of Architecture and Landscape Architecture, The University of Arizona, Tucson, Arizona
1998-2009	Acting Director, School of Landscape Architecture, College of Architecture and Landscape Architecture, The University of Arizona, Tucson, Arizona (during Director's absence)
2000	Interim Associate Director, School of Landscape Architecture, College of Architecture, Planning, and Landscape Architecture, The University of Arizona, Tucson, Arizona
1987	Acting Chairperson, Program of Landscape Architecture and Urban Design, School of Architecture and Planning, University of Colorado at Denver, Denver, Colorado
1983-1984	Assistant to the Dean, College of Design and Planning, University of Colorado at Denver, Denver Colorado

PROFESSIONAL EXPERIENCE

1973-present	Landscape Design and Planning Consultant
_	Selected landscape architectural projects include:
	Manzanita Elementary School Playground and Native Tree Garden Site
	Plan, Tucson, Arizona
	Troutdale Village Open Space Master Plan, Evergreen, Colorado
	Expert Witness, playground injury litigations, City Attorney's Office,
	Denver, Colorado
	Castle Pines Open Space Master Plan, Castle Pines, Colorado
	Little Lambs Nursery Playground Site Plan, Aurora, Colorado
	Niwot Elementary School Outdoor Classroom Design Development, Niwot,
	Colorado
	Harrison Elementary School Playground Design Development, Canyon
	City, Colorado
	Treeview Montessori Daycare Outdoor Classroom Site Plan, Evergreen,
	Colorado
	Kittredge Park Master Plan, Kittredge, Colorado
	Numerous residential Site Plans including: Feldman, Tucson, Arizona;
	Spalding, Evergreen, Colorado; Bliss, Evergreen, Colorado; Roger,
	Littleton, Colorado; Jackson, Denver, Colorado; Vardaman, Denver
	Colorado; Temin, Philadelphia, Pennsylvania; James, Philadelphia,
	Pennsylvania
	Edison Township, City-wide Park and Playground Master Plans, Edison,
	New Jersey
	East Brunswick Township, City-wide Park and Playground Master Plans,
	East Brunswick, New Jersey

1982	Project Designer, Richard Martin Organization, Philadelphia, Pennsylvania Selected landscape architectural projects include: Riverbend Master Plan, East Baton Rouge, Louisiana 667 Acre Tract Master Plan, Boca Raton, Florida
1979-1982	Project Manager, Synterra Ltd., Philadelphia, Pennsylvania Selected landscape architectural projects include: <i>Staten Island Development Center Environmental Factors</i> Report, Staten Island, New York
	Pump House Plaza, at the World Trade Center Towers Site Plan, New York, New York
	City of Compton, City-wide Park Master Plans, Compton, California Charlotte Douglas International Airport Design Development, Charlotte, North Carolina
	Eastern Market Historic Structure and Streetscape Revitalization Master Plan, Washington, D.C.
	Andrews Air Force Base Master Plan, Landover, Maryland Several New York City Park Design Development Plans: Springfield Park, Metro North Park, St. Nickolas Park
	Highland Scenic Highway Extension Visual Quality Analysis Report, Elkins, West Virginia
	Capitol Gallery Roof Garden Site Plan, Washington D.C. City of Gary Streetscape and Urban Revitalization Master Plan Report,
	Gary, Indiana Somerset Homes Open Space Master Plan, Baltimore, Maryland Baltimore Transit Authority, Sudbrook Right of Way Design Development, Baltimore, Maryland
1979	Project Designer, Andropogen, Philadelphia, Pennsylvania Selected landscape architectural projects include: Morris Arboretum Master Plan, Philadelphia, Pennsylvania
	The University of Pennsylvania Campus Master Plan and Focal Rose Arbor Design Development, Philadelphia, Pennsylvania
1978-1979	Graphic Design, Direction Associates, Springfield, Pennsylvania Selected design projects include graphic design for several master plan reports
1977-1978	Project Manager and Graphic Designer, Schnadelbach, Braun Partnership Philadelphia, Pennsylvania
	Selected landscape architectural projects include: Bell Operations Housing Community Master Plan, Isfahan, Iran <i>Atlantic City Master Plan</i> Report, Atlantic City, New Jersey
1977	Project Manager and Designer, National Plantscape, Interior Designers Philadelphia, Pennsylvania
	Selected landscape plans include: Resorts International Interior Courtyard Planting Plan, Atlantic City, New
	Jersey New Market Courtyard Planting Plan, Philadelphia, Pennsylvania Center Square Interior Courtyard Planting Plan, Philadelphia, Pennsylvania
1975	Designer, Synterra Ltd., Philadelphia, Pennsylvania

Selected landscape architectural projects include: Mt. Pisgah State Park Master Plan, Bradford County, Pennsylvania Boys Park Design Development, Newark, New Jersey Disston Recreation Center Design Development, Philadelphia, Pennsylvania

PROFESSIONAL MEMBERSHIPS

American Society of Landscape Architects Council of Educators in Landscape Architecture Society for Ecological Restoration

HONORS AND AWARDS

2007	Award for Faculty Excellence, Darryl B. Dobras, College of Architecture, Planning, and Landscape Architecture, The University of Arizona
2001	Congressional Award for Outstanding Community Service, Office of Ed Pastor, United States Congressman
2001	Award for Faculty Excellence, Darryl B. Dobras, College of Architecture, Planning, and Landscape Architecture, The University of Arizona
2000	Award for Outstanding Faculty Contributions, College of Architecture, Planning, and Landscape Architecture, The University of Arizona, Tucson, Arizona
1995	Recognition for Outstanding Teaching, Office of Academic Programs, The University of Arizona
1992	Sigma Lambda Alpha, the National Honor Society of Landscape Architecture
1988	Tau Sigma Delta Honor Society in Architecture and Allied Arts
1988	Merit Award, Faculty Art Show, School of Architecture and Planning, University of Colorado at Denver, Denver, Colorado
1987	Service Award, Colorado Chapter of the American Society of Landscape Architects
1987	Award for Excellence in Teaching, University of Colorado at Denver, Denver, Colorado
1971	Middlesex County, New Jersey, Regional Arts Council Award for Excellence in Sculpture (selected for traveling exhibit)

SERVICE – DEPARTMENTAL COMMITTEES

The University of Arizona

2009-present	Director of Graduate Studies: student advising, graduate orientation,
	student recruitment, awards coordination, faculty reviews.
2008, 2010	Member, Graduate Student Applicant Review
1991-present	Member, Curriculum Development (1991-1994 development of the five year BLA undergraduate curriculum, (1994-present development of the three year MLA curriculum)
1993, 2003	Member, "Save the Landscape Architecture School/Program" (ad-hoc committee of faculty, students, and professionals working together to keep landscape architecture from elimination at The University of Arizona)
2002	Chair, Promotion and Tenure Review
1998, 2001-2002	Member, Director Search Committees
1998, 2002	Member, School Accreditation Reports
2000-2001	Chair, Faculty Search Committee
2000	Faculty Coordinator, for visiting scholar
2000	Co-Chair, Faculty Search Committee
1994, 1996, 2000	Chair, and Co-Chair, American Society of Landscape Architecture Student Awards Program
1994	Member, Self Evaluation Report (program evaluation)
1992-1993	Member, Development of the Ph.D. Program in Landscape Architecture
1991-1993	Member, School Faculty Search Committee
1992	Member, School Awards Committee
1991-1992	Program Promotion and Tenure Guidelines (co-authorship)

University of Colorado at Denver

1982-1989	Member, Faculty Search Committees
1982-1988	Member, Faculty Review Committees
1986-1987	Chair, Director Search Committee
1985	Coordinator, Continuing Education Program (development of several short
	courses in conjunction with the Colorado Chapter of the American Society
	of Landscape Architects)
1985	Member, Professional Advisory Board
1985	Chair, American Society of Landscape Architects Student Awards
	Committee

SERVICE – COLLEGE COMMITTEES

The University of Arizona

2009-Present	Member, Dean's and Director's Council
2000-Present	Member, Bylaw Review and Revision Task Force
2009-present	Chair, Faculty Status Task Force
2009-present	Member Curriculum Task Force—Graduate
2006-present	Member, CALA, Special Events Committee
2003-present	Member, CALA, Lecture Series Committee
2000-present	Member, Chair (2002), CALA, Faculty Status Committee
2007-2008	Member Dean Search Committee
2005	Juror, Archon Prize

2004	Elected Faculty Representative, CALA, Key Personnel Salary Adjustment
	Committee
1998-2003	Member, CAPLA, Curriculum Committee (course review and approval)
2002	Outreach Reprehensive, CAPLA, for presentation of community design
	projects to Arizona state legislators
2000	Chair, CAPLA, Grade Appeal Committee
1998	Member, CAPLA, Associate Dean Search
1995-1998	Member, SRNR, Peer Evaluation of Teaching
1996-1997	Co-Chair, SRNR, Lecture Series Committee
1995-1997	Member, SRNR, Computer Resources Committee
1992-1996	Chair, SRNR, Lecture Series Committee
1992-1996	Member, SRNR, Recruitment and Retention Committee
1994-1995	Chair, SRNR, Outreach Display Committee
1995	Participant, SRNR, Arizona Cooperative Extension's Moving to Higher
	Ground, Assessment of Educational Programs
1993-1995	Member, SRNR, Core Curriculum Committee
1992-1994	Member, SRNR, Awards Committee

West Virginia University

1989-1991	Member, College of Agriculture and Forestry, Academic Standards
	Committee

University of Colorado at Denver

1986-1987	Member, Associate Dean Search Committee
1985	Member, Dean Search Committee
1985	Member, Lecture Series Committee
1983-1984	Member, Honorary Degree Committee for Hideo Sasaki

SERVICE – UNIVERSITY COMMITTEES

The University of Arizona

2009-present	Provost Task Force - Creating an Online Reporting System to Use in Annual Reviews of Faculty; severing also on two related sub-committees
2008-present	Faculty Senate
2002	Member, Healthy Cities/Communities Consortium (ad-hoc research
	discussion group for interdisciplinary approaches to the creation of healthy
	communities)
1998-2002	Representative, CAPLA, Enhanced Review Board
1995-1997	Member, Campus Library Council
1993-1996	Member, Planning and Design Review Advisory Committee (PADRAC)
1993-1996	Member, Committee on Academic Freedom and Tenure (three year term)

West Virginia University

1989-1991	Member, Campus Historic Preservation Committee
1989-1991	Member, Academic Standards Committee

University of Colorado at Denver (selected)

1987-1988	Member, Academic Affairs Committee
1986-1987	Member, Curriculum Committee (course review and approval)
1986-1987	Member, Student Assistance Committee
1986-1987	Member, Student Retention Committee

SERVICE – NATIONAL AND LOCAL OFFICES/TASK FORCES/COMMITTEES

2000-present	Advisor, Sigma Lamba Alpha, Iota Chapter, the National Honor Society of Landscape Architecture
2002-2005	Regional Director (Region Two), Council of Educators in Landscape Architecture
2004	Judge, Southern Arizona Home Builders Association, Home Show, Tucson, Arizona
2004	Session Chair, <i>Landscape Architecture</i> , Hawaii International Conference on Arts and Humanities, University of Hawaii, West Oahu, East West Council for Education, Asia-pacific Research Institute of Peking University, Honolulu, Hawaii, January 8-11
2003	Session Moderator, Council of Educators in Landscape Architecture Annual Conference, <i>Imprints/Footprints</i> , Clemson University, Charleston, South Carolina, September 24-27
2002	External Review, Promotion and Tenure, College of Architecture and Environmental Design, School of Planning and Landscape Architecture, Arizona State University
2002	Session Moderator, Council of Educators in Landscape Architecture Annual Conference, <i>Groundwork</i> , SUNY-ESF Syracuse, New York, September 25-28
1998-2000	Founding Member, Citizens for Excellence in Education, In the Greater Community of Elgin, Patagonia, and Sonoita, Arizona
1998	Chair and Juror, Texas Chapter of the American Society of Landscape Architects Annual Awards Program for Design, Planning, Research, and Envisioned Landscapes
1998	Co-Chair, conference organization, <i>Identification and Analysis of Cultural Landscapes: Different Voices, Different Visions</i> jointly organized between The University of Arizona and the National Park Service, Tumacacori National Monument, Arizona, (Speaker Organization, Cultural Landscape Training, Session Moderator), September 14-18
1997-1998	Southern Section Chair, Arizona Chapter of the American Society of
1995-1997	Elected School Board Member, Sonoita Elementary School District #25, Arizona Landscape Architects
1993	Respondent, <i>Landscape Architecture: Ecology and Design and Planning</i> , International Symposium sponsored by the Design Arts Program of the National Endowment for the Arts, Washington D.C., School of Planning and Landscape Architecture, College of Architecture and Environmental Design, Arizona State University, Tempe Arizona, April 16

1993	External Review, Promotion and Tenure, School of Architecture and Planning, University of Colorado at Denver, Denver, Colorado
1992	Juror, Southern Arizona Water Resources Association Annual Xeriscape Awards
1988-1989	Regional Director (Region Three), Council of Educators in Landscape Architecture
1988-1989	Co-Chair, Council of Educators in Landscape Architecture, preliminary conference organization, 1990 <i>Tourism, Recreation, and Resort Design</i> , University of Colorado at Denver, Denver, Colorado, October 4-7
1987	Session Moderator, Council of Educators in Landscape Architecture Annual Conference, <i>Landscape and Architecture</i> , Rhode Island School of Design, Providence, Rhode Island, August 13-15
1986	Juror, Colorado Chapter of the American Society of Landscape Architects, Annual Design Awards Program
1986	Session Moderator, Council of Educators in Landscape Architecture Annual Conference, <i>Vegetation</i> , the University of Georgia, Athens, Georgia, September 10-12
1984-1986	Chair, Design Review Board, Jefferson County, Colorado
1985	Member, Landscape Architect IV Examining Board, responsible for evaluating candidates for City Landscape Architect, Denver, Colorado
1985	Member, Evergreen Lake Master Plan Committee, Evergreen, Colorado
1981	Member, Mayor's Advisory Council, Task Force Member for City Beautification, Philadelphia, Pennsylvania

DESIGN COMPETITIONS

2003	Winning entry, accepted and constructed, "Garden of Abandonment" Le Conservatoire de Chaumont-sur-loire, France, International Festival of Gardens (des Parcs et Jardins), festival theme <i>Weeds</i> (Mauvaise Herbe), (with Hili Sonia Mann). 60%
1987	Design entry, Woman's Rights National Historic Park, Seneca Falls, New York, United States Department of the Interior, National Park Service and the National Endowment for the Arts (with Gail Whitney Karn, and Diane Wilk Shirvani). Entry selected for national traveling exhibit. 40%

PUBLICATIONS - INTERVIEWS, CREATIVE WORK FEATURED (selected)

Book: *Creating Outdoor Classrooms...* featured at the 2009 American Society of Landscape Architects (ASLA) Annual Meeting and Expo, [ASLA/ Urban Land Institute (ULI) Bookstore], *Beyond Sustainability: Regenerating places and people*, September 18-21, 2009, Lakeside Center at McCormick Place.

Artfully Green

[http://www.sfeap.org/images/USGBCweb.pdf] (January, 2010).

Wikipedia: Ak-Chin Indian Community

[http://en.wikipedia.org/wiki/Ak-Chin_Indian_Community] (last modified January 2010).

- Reception and book signing sponsored by the South Florida Environmental Art Project, Inc., West Palm Beach, Florida. January 12, 2009.
- Latané, Claire. 2008. Creating outdoor classrooms: schoolyard habitats and gardens for the southwest, by Lauri Macmillan Johnson, ASLA with Kim Duffek, Austin, Texas: University of Texas Press, 2008, Books (review) in *Landscape Architecture:* 98(10):166.
- American Society of Landscape Architects, *Land on Line: Landscape Architecture News Digest*. January 30, 2007. U A Students Help Design Capitol Mall [http://land.asla.org/2007/0130/lain.html] (February 2009).
- Bibloiography, Lorna Jordan Environmental Aritst Seattle WA [http://lornajordan.com/artist.asp?ArtistID=20609&AKey=2c782fms] (January 2010).
- Small, Jim. December 1, 2006. Redesigned Capitol courtyard: A place where people congregate. *Arizona Capitol Times.*
- Barton, Benjamin. 2006. Tort reform, innovation, and playground design. 57 Florida Law Review 265
- Everett-Haynes, La Monica. 2005. UA Students receive honors in landscape design competition. *Tucson Citizen* (March 17):7a.
- Taylor Jr., Stuart, and Evan Thomas. 2003. Lawsuit hell: how fear of litigation is paralyzing our professionals. *Newsweek*, Cover Story (December 15):42-51.
- Wright, Elizabeth. 2003. United States Department of Health and Human Services, Office of Planning and Education. Interview on playground design for safety.
- Philip K. Howard. 2002. The Collapse of the Common Good: How America's Lawsuit Culture Undermines Our Freedom. New York: Randomhouse Publishing Group.
- Philip K. Howard. 2001. *The Lost Art of Drawing the Line, How Fairness Went too Far.* New York: Random House Publishing Group.
- Portillo Jr., Ernesto. 2001. A quiet place to celebrate life. *Arizona Daily Star*, Tucson, Arizona (February 21):B5.
- Eisele, Kimi. 2001. Architecture–harnessing the power for children: green education, how does your garden grow? and for whom?. *Report on Research: A Journal of Creative Activity from The University of Arizona*, Tucson, Arizona (Winter 2000-2001):2-5.
- Tim Steller. 2000. Creating a place to heal: kids, UA students, are building peace haven at school hit by tragedy. *Arizona Daily Star*, Tucson, Arizona (October 28):B3.
- North-Hager, Eddie. 1999. GardZen of Eden. The Tucson Citizen (June 11):1B.
- Martin, Douglas. 1996. An upside-down high will be just a memory. *The New York Times* (April 11):A14.
- Kellum, Jeff. 1995. Globe looks toward future with Round Mountain hiking park. *Arizona Silver Belt*, Globe, Arizona (June 14):A3.
- Rick Hesse. 1990. Fayetteville advised to use history for its future. *The Fayette-Nicholas Report,* Beckley, West Virginia (May 11):1.
- Randall, Gail. 1988. Danger lurks throughout playgrounds. *Rocky Mountain News*, Denver Colorado (February 1):49, 51.
- Mays, Vernon. 1987. Pro-bono pedagogy. Landscape Architecture 80(9):54-57.

- Salcedo, Tracy. 1987. CU students devise some solutions to local problems. *Canyon Courier*, Evergreen, Colorado (May 27):16.
- Editors. 1986. NES science garden dedicated. The Recorder, Boulder, Colorado (June 5):1.
- Lawior, Barbara. 1984. Students found town lacks clear identity: ideas range from stagecoach line, to boardwalk system and jogging paths. *The Mountain-ear*, Nederland, Colorado (April 13):3, 5-7.
- Shulruff, Lawrence. 1984. Goal: new Nederland image. The Denver Post (April, 18):1,3.

PUBLICATIONS – REFEREED BOOKS

- Johnson, Lauri Macmillan, with Kim Duffek, and drawings by James Richards. 2008. Creating Outdoor Classrooms: Schoolyard Habitats and Gardens for the Southwest. Austin: University of Texas Press, viii-191. 80%
- Johnson, Lauri Macmillan. 1999. *Schoolyard Habitat Design*. Phoenix: Arizona Game and Fish Department: III-143. 100% http://www.gf.state.az.us/i_e/ee/resources/books/schoolyard_habitat.pdf [May, 2006].

PUBLICATIONS – REFEREED BOOK CHAPTERS

- Johnson, Lauri Macmillan. 2001. "Burle Marx, Roberto 1909-1994." In *Encyclopedia of Gardens: History and Design*, edited by Candice Shoemaker. Chicago: Chicago Botanical Garden, Fitzroy Dearborn Publishers, 212-216. 100%
- Johnson, Lauri Macmillan. 2001. "Design Fundamentals." In *Encyclopedia of Gardens: History and Design*, edited by Candice Shoemaker. Chicago: Chicago Botanical Garden, Fitzroy Dearborn Publishers, 355-357. 100%
- Johnson, Lauri Macmillan. 2001. "Rose, James 1910-1991." In *Encyclopedia of Gardens: History and Design*, edited by Candice Shoemaker. Chicago: Chicago Botanical Garden, Fitzroy Dearborn Publishers, 1136-1138. 100%
- Johnson, Lauri Macmillan. 2001. "United States." In *Encyclopedia of Gardens: History and Design*, edited by Candice Shoemaker. Chicago: Chicago Botanical Garden, Fitzroy Dearborn Publishers, 1339-1355. 100%

PUBLICATIONS – EDITORSHIPS

anuscript reviewer for:	
Annual Association of Collegiate School of Architecture	
nvironmental Design Research Association	
ouncil of Educators in Landscape Architecture	
undscape Journal	
nomson Publishing	
entice Hall	
dvisory Board, Avant Garde Journal of Theory and Criticism in Architecture and e Arts	
 b-editor with Hamid Shirvani, Urban Design and Preservation Quarterly, merican Planning Association, for the following issues: 11(1):1-24, 11(2/3):1-24, (4):1-24, 12(1/2):1-44. 50% 	

PUBLICATIONS – REFEREED JOURNAL ARTICLES

- Johnson, Lauri Macmillan and John Messina. 2003. The Solis Garden in Alamos, Mexico: a surreal garden with a contemporary interpretation of the sublime. *Journal of the Southwest* 45(1/2):249-261. 70%
- Johnson, Lauri Macmillan. 1989. The Niwot Ecological Science Garden. *Children's Environments Quarterly* 6(1):54. 100%
- Johnson, Lauri Macmillan. 1989. The Brook Knolls Cooperative Community: a case study for resident design of public open space. *Landscape and Urban Planning* 17 (1989):283-295. 100%
- Johnson, Lauri Macmillan. 1988. The release of Bureau of Land Management Lands in Clear Creek County, Colorado. *Urban Design and Preservation Quarterly*, American Planning Association 11(4):18-24. 100%
- Johnson, Lauri Macmillan. 1988. Exploring a concept for a dynamic urban landscape. Urban Design and Preservation Quarterly, American Planning Association 11(4):8-15. 100%
- Johnson, Lauri Macmillan. 1987. The Niwot Ecological Schoolyard. *Leisure Today, Journal of Physical Education Recreation and Dance* (April). 100%

PUBLICATIONS - REFEREED PROCEEDINGS - SCHOLARLY PRESENTATIONS

- Beverly J. Wilson, Lauri Macmillan Johnson, Pamela Crooke, and Brooks Jeffery. 2007. Therapeutic gardens for children with Autism Spectrum Disorders. *Proceedings Council of Educators in Landscape Architecture Annual Conference, Negotiating Landscapes*, Penn State, State College, Pennsylvania, August 14-19, abstract: 67, proceedings 131-141. 40% (http://www.thecela.org/pdfs/cela-2007-preedings.pdf) [February 2009].
- Livingston, Margaret, and Lauri Macmillan Johnson. 2005. Evaluating outcomes of community outreach from an academic perspective. *Proceedings Council of Educators in Landscape Architecture Annual Conference, A Time of Change,* University of Georgia, Athens, Georgia, September 21-24, abstract:217-218, proceedings: 88-104. 40%
- Johnson, Lauri Macmillan. 2004. American playgrounds and schoolyards—a time for change. *Proceedings Open Space: People Space, an International Conference on Inclusive Environments*, Edinburgh College of Art, Edinburgh, Scotland, October 27-29, paper no. 00122 :1-7. 100% (http://www.openspace.eca.ac.uk/conference/proceedings/PDF/Macmillan.pdf.) [March 2006].
- Darnell, Beth, Margaret Livingston, and Lauri Macmillan Johnson. 2003. Assessing the play value of vegetation in the outdoor environments of NAEYC-accredited preschool programs in Tucson, AZ. *Proceedings Council of Educators in Landscape Architecture Annual Conference, Imprints/Footprints*, Clemson University, Charleston, South Carolina, September 24-27, abstract:171, proceedings:176-162. 20%
- Johnson, Lauri Macmillan. 2000. Schoolyard gardens: aid for America's youth. Proceedings of the American Society of Landscape Architects Annual Meeting, Gateway to Discovery: Confluence of Environment, Heritage and Community, St. Louis, Missouri, October 27-31, abstract:18-19, 35, proceedings:159-166. Translated in Japanese and published in Landscape Design 23 (Spring):112-113. 100%
- Johnson, Lauri.Macmillan and Margaret Livingston. 1998. Cultural landscape analysis within the Southwest. *Proceedings of the American Society of Landscape Architects Annual Meeting*,

Exploring Livability and Quality of Life, Portland, Oregon, October 2-6:172-177. Translated in Japanese and published in *Landscape Design* 14 (December):102-103. 70%

- Johnson, Lauri Macmillan. 1988. Exploring a design concept for a dynamic urban landscape. *Proceedings Council of Educators in Landscape Architecture Annual Conference, Sustainable Landscapes*, California State Polytechnic University, Pomona, California, June 22-25. 100%
- Johnson, Lauri Macmillan. 1987. Designer as facilitator, educator and social scientist. *Proceedings Council of Educators in Landscape Architecture Annual Conference, Landscape and Architecture,* Rhode Island School of Design, Providence, Rhode Island, August 13-15. 100%
- Johnson, Lauri Macmillan. 1987. The disposition of Bureau of Land Management Lands in Clear Creek County, Colorado: determining land use, identify and growth. *Proceedings Aesthetics of the Rural Renaissance Conference*, California Polytechnic State University, San Luis Obispo, California, August 27-29. 100%
- Johnson, Lauri Macmillan. 1987. The Niwot Ecological Schoolyard, a post construction evaluation. *Proceedings Aesthetics of the Rural Renaissance Conference*, California Polytechnic State University, San Luis Obispo, California, August 27-29. 100%
- Johnson, Lauri Macmillan. 1987. The Brooks Knolls Cooperative Housing Community, Loveland, Colorado. Proceedings Association of Collegiate Schools of Architecture, Common Grounds: Built Forms of Public Life, West Central Regional Meeting Iowa State University, Ames, Iowa, October 22-24. 100%

PUBLICATIONS – REFEREED ABSTRACTS – SCHOLARLY PRESENTATIONS

- Lotze, Wendy and Lauri Macmillan Johnson. 2009. Redefining National register of historic boundaries with the cultural landscape report in Bryce Canyon National Park. Abstracts Council of Educators in Landscape Architecture 2008-2009: Teaching + Learning Landscape, Tucson, Arizona, January 14-17, 2009: 90. 50%
- Walthier, Helen and Lauri Macmillan Johnson. 2009. A conceptual master plan for an environmental estate on Palawan, Philippines. Abstracts Council of Educators in Landscape Architecture 2008-2009:Teaching + Learning Landscape, Tucson, Arizona, January 14-17, 2009: 281. 20%
- Marhefka, David and Lauri Macmillan Johnson. 2009. Electric Spaces A Private/public open space model in Tucson, Arizona. Abstracts Council of Educators in Landscape Architecture 2008-2009: Teaching + Learning Landscape, Tucson, Arizona, January 14-17, 2009: 287. 30%
- Morse, Barry R. and Lauri Macmillan Johnson. 2009. Indeterminacy, the I Ching and John Cage: a new design method for landscape architecture. *Abstracts Council of Educators in Landscape Architecture 2008-2009: Teaching + Learning Landscape*, Tucson, Arizona, January 14-17, 2009: 296. 30%
- Johnson, Lauri Macmillan, and Monica Mahoney. 2005. Art as a catalyst for public acceptance of ecologically designed landscapes. *Abstracts World Conference on Ecological Restoration, Society for Ecological Restoration Annual Conference: A Global Challenge*, Zaragoza, Spain, September 12-18:90. Submitted presentation followed by invitation to special panel: *Art, Culture and Restoration.* 50%
- Johnson, Lauri Macmillan and Monica Mahoney. 2004. Design intervention in the Sonoran Desert. *Proceedings Environmental Design Research Association Annual Conference, Design with Spirit,* Albuquerque, New Mexico, June 2-6:147-148. 75%

- Johnson, Lauri Macmillan. 2004. Garden of Abandonment, International des Parcs et Jardins, Le Conservatoire de Chaumont-sur-loire, France. *Proceedings Hawaii International Conference on Arts and Humanities*, University of Hawaii, West Oahu, East West Council for Education, Asia-pacific Research Institute of Peking University, Honolulu, Hawaii, January 8-11. 100%
- Johnson, Lauri Macmillan, Robert B. Lutz, Laura Huntoon. 2003. Using design/planning and public health concepts to investigate the correlation between physical activity and the environment. *Abstracts Environmental Design Research Association Annual Conference, People Shaping Places Shaping People*, Minneapolis, May 21-25:235. 60%
- Johnson, Lauri Macmillan. 2000. Women of the Chiricahua Mountains of Southeastern Arizona. Abstracts Third Annual Conference on Women and Historic Preservation, National Park Service, National Museum of American History, Smithsonian Institution, National Trust for Historic Preservation, George Washington University at Mount Vernon College, Washington, D.C., May 19-21. 100%
- Johnson, Lauri Macmillan and Sarah Davis. 1992. Guide to landscape architecture in the United States. American Society of Landscape Architects Annual Meeting, *New Horizons, New Realities,* Washington, D.C., November (presentation and poster session). 75%
- Johnson, Lauri Macmillan and Steven M. Johnson. 1990. Giving tourists the true place. Abstracts Council of Educators in Landscape Architecture Annual Conference, Tourism, Recreation, and Resort Design, University of Colorado at Denver, October 4-7:91. 75%
- Johnson, Lauri Macmillan. 1989. Art: inspiration for landscape architecture. *Abstracts American Society of Landscape Architects Annual Meeting, Space for Tomorrow,* Orlando, Florida. November 18-21:9. 100%
- Johnson, Lauri Macmillan. 1989. Post-construction evaluation for the ecological science garden. Fourth Annual Landscape Ecology Symposium, *Linking Landscape Structure to Ecosystem Processes*, Colorado State University, Fort Collins, Colorado, March 15-18. 100%
- Johnson, Lauri Macmillan. 1986. The Niwot Ecological Science Garden. Abstracts Council of Educators in Landscape Architecture Annual Conference, Vegetation, the University of Georgia, Athens, Georgia, September 10-12. 100%

PUBLICATIONS – REFEREED EXHIBIT CATALOGES

Lanceman, Tal, Lauri Macmillan Johnson, Hili Sonia Mann, and Maurizio Galante. 2003. Abandonment. (Translated in French) *In Exhibit Catalog—Manuvaise Herbe* edited by Jean-Paul Pigeat and Lucie Paye-Moissinac, Conservatoiree international des parcs et jardins et du paysage, Chaumont-sur-Loire, France. www.chaumont-jardin.com [June 5, 2005]. 25%

PUBLICATIONS – REFEREED OTHER

- Johnson, Lauri Macmillan and Sarah Delaloye. 1990. A tribute to the life and work of Jane Silverstein Ries. Working Paper No. 3, School of Architecture and Planning, University of Colorado at Denver:1-24. 75%
- Boyd Allen, Patricia; Cheri, Kluesing, and Lauri Macmillan. 1976. *An Annotated Bibliography on Play Environments; Planning, Design and Evaluation*. Council of Planning Librarians, Exchange Bibliography No. 1184, University of Illinois at Urbana-Champaign, Illinois: 1-31. 33%

PUBLICATIONS – REFEREED REPORTS

In progress (see Grants)

- Johnson, Lauri Macmillan, Matthew Bossler and Theresa Gredig. 2010. Tumacacori National Historical Park, Arizona, Park-wide Cultural Landscape Inventory and National Register nominations, Tumacacori National Historical Park, Tumacacori, Arizona. 50%.
- Johnson, Lauri Macmillan, Julia Roberts and Michael Massa. 2010. San Antonio Missions Cultural Landscape Inventories for, San Antonio National Park, San Antonio, Texas. 50%.
- Johnson, Lauri Macmillan, Daniel Bradshaw. 2010. Fort Davis National Historic Site, Conceptual Master Plan for Interpretative Spaces and Signage, Fort Davis National Historic site, Fort Davis, Texas. 40%.

Completed (see Grants)

- Johnson, Lauri Macmillan, R Brooks Jeffery, and Wendy Lotze. 2008. Bryce Canyon National Park; Old NPS Housing and Bryce Canyon Lodge Cultural Landscape Report, Bryce Canyon National Park, Utah. 50% http://www.nps.gov/history/history/online_books/brca/clr/index.htm
- Johnson, Lauri Macmillan, Robin L. Pinto, Irene Herring, and P. Anne Kirk. 2000. Fort Bowie National Historic Site Cultural Landscapes Inventory. United States Department of the Interior, National Park Service, Washington D.C.:1-94. 30%
- Johnson, Lauri Macmillan, Ervin H. Zube, and Carla A. Singer. 1997. *Aztec Ruins National Monument Cultural Landscape Inventory*. United States Department of the Interior, National Park Service, Washington D.C.:1-70. 40%
- Johnson, Lauri Macmillan, Ervin H. Zube, and Carla A. Singer. 1997. Casa Grande Ruins National Monument Cultural Landscape Inventory. United States Department of the Interior, Washington D.C.:1-102. 40%
- Johnson, Lauri Macmillan, Ervin H. Zube, and Carla A. Singer. 1997. Chiricahua National Monument Cultural Landscape Inventory. United States Department of the Interior, National Park Service, Washington D.C. 40%
- Johnson, Lauri Macmillan, Ervin H. Zube, and Carla A. Singer. 1997. Organ Pipe Cactus National Monument Cultural Landscape Inventory. United States Department of the Interior, National Park Service, Washington D.C.:1-67. 40%
- Johnson, Lauri Macmillan, Margaret Livingston, and Ervin H. Zube. 1996. *Tumacacori National Historical Park: Design Concepts for the Administration/Visitor Center Courtyard and the Mission Landscape*. United States Department of the Interior, National Park Service, Washington, D.C.:iii-41. 60%

PUBLICATIONS – WORK IN PROGRESS

- Johnson, Lauri Macmillan. *History of Landscape Architecture with Applications for Contemporary Design.* New York: Delmar Learning, Thompson Publishing. Accepted and under contract.
- Johnson, Lauri Macmillan. Art in landscape interpretation. *Landscape Journal*. Accepted with revisions. 100%

MEDIA – EXHIBITS

2009	Council of Educators in Landscape Architecture: <i>Teaching + Learning Landscape</i> , Tucson, Arizona, January 14-17, 2009, exhibit of student work.
2008	National Parking Day (September 19), six MLA graduate student exhibits, Tucson, Arizona
2008	Go Green Exhibit, CALA Centrum, The University of Arizona (with Tom Powers lead)
2006	Designs for the Capitol Mall Exhibit, the University of Arizona Pride Night: to meet Arizona State Representatives
1988	Student/Faculty Art Show, School of Architecture and Planning, University of Colorado at Denver.
1987-1988	Design entry selected for national traveling exhibit, Woman's Rights National Historic Park, Seneca Falls, New York, United States Department of the Interior, National Park Service and the National Endowment for the Arts (with Gail Whitney Karn, and Diane Wilk Shirvani).
1985	Photo show entitled <i>Inhabitants I: a Photographic Exhibit of Vernacular Design in Colorado</i> , City Spirit Book Store and Art Gallery, October-December, (with Steven M. Johnson).

MEDIA – SHOWS, VIDEOTAPES – INVITED

2007	Arizona Illustrated, KUAT, Arizona Public Television, design for Valley of the Moon, Tucson, Arizona, fall.
2000	Arizona Illustrated, KUAT, Arizona Public Television, design for the Ochoa Elementary School, Tucson, Arizona, fall.
2000	Interview by Jeff Harrison, The University of Arizona News Services, community outreach projects, for distribution to the following stations KCEE - Tucson, KAVV - Benson, KIKO - Miami/Globe, KLPZ - Parker, KVWN - Show Low, KATO - Stafford, Thatcher, and KAHM - Prescott, Flagstaff (with Margaret Livingston).
1996	Interview by Margo Adler on playground design for <i>All Things Considered</i> , National Public Radio, July 8.
1989	Presentation and panel member for public television program entitled <i>New River</i> <i>Communities: a Time of Change,</i> sponsored by the United States Department of the Interior, National Park Service and produced by Public Television WSWP-TV, Beckely, West Virginia.
1984	Interview for radio stations KBC and KADE, Boulder, Colorado, <i>Nederland Colorado Town Image Study</i> , April 14.

SCHOLARLY PRESENTATIONS – INVITED

Johnson, Lauri Macmillan. 2009. *Art—out of the gallery and into the garden*. Public lecture, Factory Carriage House Art Gallery, Wichita, Kansas. August 10th 2009.

Johnson, Lauri Macmillan. 2009. Nature, Play, and Learning. AZ ASLA Southern Section Lecture

Series. July 21, 2009.

- Johnson, Lauri Macmillan. 2009. Nature play places: children's gardens. Spring Lecture Series: *Creating Gardens Past and Present*, Arizona Historical Society, The University of Arizona, March 11.
- Johnson, Lauri Macmillan. 2008. *Outdoor classroom design: strategies for success* sponsored by the South Florida Environmental Art Project, Inc., West Palm Beach, Florida. January 12.
- Johnson, Lauri Macmillan. 2008. *Ecological art in campus planning*. Alexander W. Dreyfoos School of the Arts, West Palm Beach, Florida, (lectures and design charrettes), January 12-14.
- Johnson, Lauri Macmillan. 2006. *Ephemeral gardens, festivals, and art*. Desert Horticulture 15th Annual Conference, Tucson Convention Center, Tucson, Arizona, May 19.
- Johnson, Lauri Macmillan. 2005. *Landscape as art: tools for interpretation*. Community and Environmental Planning, University of Washington, Seattle, Washington, July 5.
- Johnson, Lauri Macmillan. 2003. Where did you play as a child. *Real People Symposium*, Richard Rainwater Foundation, Fort Worth, Texas, featured lecture, October 22.
- Johnson, Lauri Macmillan. 2003. *Schoolyard gardens for integrated learning*. College of Architecture Fall Lecture Series, The University of Texas at Arlington, October, 23.
- Johnson, Lauri Macmillan. 2002. Central Park. *Famous Gardens of the World* Lecture Series, Senior Achievement and Growth through Education (SAGE), Tucson, Arizona, October, 23.
- Johnson, Lauri Macmillan. 2001. Landscape as art. *Semana Cultural de Arquitectura*, Arq. Daniel Marin Botello, Primera Reunión Regional Del ASINEA Del 18 Al 20 De Octubre, El Programa de Arquitectura de Universidad de Sonora, Hermosillo, Mexico, (feature lecture, seminars, and design studio charrette), October 18-20.
- Johnson, Lauri Macmillan. 1990. The rediscovery of design. *Changing Perspectives*, 25th Anniversary of the Program of Landscape Architecture, Rutgers University, New Brunswick, New Jersey (symposium), April 26:13.
- Johnson, Lauri Macmillan. 1999. Schoolyard habitat design. Arizona Association for Learning about the Environment Annual Conference: *Celebrating Arizona's Heritage*, Chauncey Ranch, Mayer, Arizona (lecture and workshop), September 24-26.
- Johnson, Lauri Macmillan. 1999. *Schoolyard habitat design*. Arizona Game and Fish Department, Phoenix, Arizona (lecture and workshop), April 20.
- Johnson, Lauri Macmillan. 1998. Cultural landscapes for children. United States Department of the Interior, National Park Service Cultural Landscape Training and Conference, *Identification and Analysis of Cultural Landscapes: Different Voices, Different Visions*, Tumacacori National Monument, Arizona, September 21-25.
- Johnson, Lauri Macmillan. 1997. *Playground design*. Tucson Hebrew Academy, Tucson, Arizona. January 3.
- Johnson, Lauri Macmillan. 1997. *Schoolyard habitat design*. Arizona Game and Fish Department, Education Branch, Tohono Chul Park, Tucson, Arizona, May.
- Johnson, Lauri Macmillan. 1995. Designing eco-gardens for children. *Women for Sustainable Technologies Conference, Creating Sustainable Communities, Minority Engineering Program, The University of Arizona, Tucson, Arizona (lecture and workshop), November 5.*

- Johnson, Lauri Macmillan. 1995. Schoolyard habitats: developing environmental study areas. Arizona Game and Fish Department, Tucson Resource Center for Environmental Education, the Children's Museum, Tucson, Arizona.
- Johnson, Lauri Macmillan. 1992. Landscape architecture—an historic and contemporary survey. Western Colorado Center for the Arts, Grand Junction, Colorado, June 6.
- Johnson, Lauri Macmillan. 1990. *Design meets ecology*. College of the Atlantic, Bar Harbor, Maine (feature lecture), March 1.
- Johnson, Lauri Macmillan. 1990. *Children's environments*. College of the Atlantic, Bar Harbor, Maine (lecture and seminar), March 2.
- Johnson, Lauri Macmillan. 1990. *The history of gardens and landscape architecture*. West Virginia Garden Club, Morgantown, West Virginia (keynote speaker).
- Johnson, Lauri Macmillan. 1990. *The development of landscape architecture*. South Atlantic Region, National Council of State Garden Clubs, Landscape Design Study Course, Morgantown, West Virginia, June 4-6.
- Johnson, Lauri Macmillan. 1989. Women's Rights National Historical Park, Seneca Falls, New York, Design Competition. *International Women's Week Design Workshop*, University of Colorado, Boulder (speaker and panel member), February 27.
- Johnson, Lauri Macmillan. 1988. *Teaching excellence*. University of Colorado at Denver, Symposium on Teaching, Denver, Colorado (panelist).
- Johnson, Lauri Macmillan. 1987. Colorado Chapter of the American Planning Association, Symposium, *Shaping Design*, Denver, Colorado (roundtable facilitator), April 9.
- Johnson, Lauri Macmillan. 1986. History and design. United States Department of the Interior, National Park Service, Design Arts Program Symposium, *Design Excellence*, Lakewood, Colorado, November.
- Johnson, Lauri Macmillan. 1985-1986. Career day talks on the profession of landscape architecture. Evergreen Open High School, Evergreen, Colorado; Arapahoe High School, Denver, Colorado; Westgate Elementary School, Lakewood, Colorado.
- Johnson, Lauri Macmillan. 1985-1986. *Design inspiration for semi-arid environments*. Redrocks Community College, Evergreen, Colorado (lectures and workshops).
- Macmillan, Lauri with staff from Synterra Ltd., Philadelphia, Pennsylvania. 1985-1986. Design workshops and lectures, North Carolina A & T State University, Greensboro, North Carolina.
- Macmillan, Lauri with staff from Synterra Ltd., Philadelphia, Pennsylvania. 1979-1980. Design workshops and lectures. Morgan State College, Baltimore, Maryland.

REFEREED PROCEEDINGS – ABSTRACTS – SCHOLARLY PRESENTATIONS

(Accepted, Not Published or Presented)

- Johnson, Lauri Macmillan. 2010. Ecological art. Accepted Abstract and invited paper, Council of Educators in Landscape Architecture 2009/2010: Landscape Architecture Between Art and Science, Maastricht, The Netherlands, May 12-14. 100%.
- Johnson, Lauri Macmillan, Charles Albanese, Thomas Peterson, Michael Mathieu, Ronald Stoltz. 2007. The Arizona State Plaza outcomes from an interdisciplinary service learning project. *Connected International Conference on Design Education*, University of South Wales,

Sydney, Australia, July 9-12 2007 (accepted paper but insufficient funds for conference attendance). 75%

- Johnson, Lauri Macmillan, Robin L. Pinto, Ireane Herring, P. Annie Kirk. 2004. The landscape and past inhabitants of Apache Pass and the Fort Bowie National Historic Site. *Proceedings Hawaii International Conference on Arts and Humanities*, University of Hawaii, West Oahu, East West Council for Education, Asia-pacific Research Institute of Peking University, Honolulu, Hawaii, January 8-11 (accepted unpublished paper). 40%
- Lutz RB, Laura Huntoon, Lauri Macmillan Johnson, and Mark Arnett. 2003. Evaluating activityfriendly communities for children. American Journal of Health Promotion (accepted unpublished paper first author abandoned project, fourth author deceased). 25%

GRANTS AND SERVICE CONTRACTS – FEDERAL

2009-2010	United States Department of the Interior, National Park Service, Colorado Plateau Cooperative Ecosystem Studies Unit, Cooperative Agreement, San Antonio Missions Cultural Landscape Inventory. Principal Investigator, \$45,000. 100%.
2008-2010	United States Department of the Interior, National Park Service, Colorado Plateau Cooperative Ecosystem Studies Unit, Cooperative Agreement, Tumacacori National Historical Park, Arizona, Park-wide Cultural Landscape Inventory and National Register nominations. Principal Investigator, \$60,900. 100%.
2008-2010	United States Department of the Interior, National Park Service, Desert Southwest Cooperative Ecosystem Studies Unit, Cooperative Agreement, Fort Davis National Historic Site, Conceptual Master Plan for Interpretative Spaces and Signage. Principal Investigator, \$24,700. 100%
2008	United States Department of the Interior, National Park Service, Casa Grande Ruins National Monument, Schematic Design for New Multi- Purpose Room at Existing visitor Center. Co-Principal Investigator with R. Brooks Jeffery, \$20,000. 50%
2005-2008	United States Department of the Interior, National Park Service, Bryce Canyon National Park, Utah, Cultural Landscape Report. Co- Principal Investigator, with R. Brooks Jeffery, \$100,000. 50%.
2003	United States Department of the Interior, National Park Service, Chamizal National Memorial, El Paso, Texas, Cultural Master Plan. Co- Principal Investigator, with Ronald Stoltz, \$5,000. 50%
1999-2000	United States Department of the Interior, National Park Service, Fort Bowie National Historic Site, Cultural Landscape Inventory. Principal Investigator, \$8,000. 100%
1997-1998	United States Department of the Interior, National Park Service, Cultural Landscape Training/Conference: <i>Identification and Analysis of Cultural</i> <i>Landscapes: Different Voices, Different Visions</i> , Tumacacori Arizona. Co- Principal Investigator, with Jill Cowley, \$7,335. 50%
1996-1998	United States Department of the Interior, National Park Service, Faraway Ranch, Chiricahua National Monument, Arizona; Organ Pipe Cactus National Monument, Arizona; Casa Grande Ruins National Monument, Arizona; Aztec Ruins National Monument, New Mexico, Cultural

	Landscape Inventorys. Co- Principal Investigator, with Ervin H. Zube, \$21,500.75%
1995-1996	United States Department of the Interior, National Park Service, Tumacacori National Historical Park, Historical Analysis and Design Concepts for Visitor Center Courtyard and the Mission landscape, Tumacacori, Arizona. Co- Principal Investigator, with Erwin H. Zube, \$5,800. 60%
1988-1989	United States Department of the Interior, National Park Service, New River Gorge National River, Fayetteville, West Virginia, <i>Cultural Master Plan</i> <i>and Historic Town Study</i> Report. Principal Investigator, \$1,200. 100%

GRANTS AND SERVICE CONTRACTS – STATE, COUNTY, CITY

2004	International Affairs, The University of Arizona, Foreign Travel Grant to present paper at <i>Open Space: People Space</i> Conference held by the Edinburgh College of Art, Edinburgh, Scotland. Principal Investigator, \$700. 100%
2003	International Affairs, The University of Arizona, Foreign Travel Grant for design installation at the <i>International des Parcs et Jardins (International Festival of Gardens)</i> , Le Conservatoire de Chaumont-sur-loire, France. Principal Investigator, \$700. 100%
1997-2000	Arizona Game and Fish Department, Schoolyard Habitat Design Handbook and Workshops. Principal Investigator, \$9,793. 100%
1993-1997	Arizona Agricultural Experimentation Station, The University of Arizona, Cooperative State Research Grant, Contemporary Projects in Landscape Architecture. Principal Investigator, \$20,764. 100%
1987-1988	Larimer County Mutual Affordable Housing Association, The Brook Knolls Cooperative Community Master Plan, Loveland, Colorado. Principal Investigator, \$10,270. 100%
1987	United States Department of the Interior, Bureau of Land Management (BLM), County of Clear Creek, Colorado Master Plan for Release of BLM Lands. Principal Investigator, \$7,500. 100%

GRANTS AND SERVICE CONTRACTS – INDUSTRY

2003 Le Conservatoire de Chaumont-sur-loire, France, *International des Parcs et Jardins (International Festival of Gardens*), materials, labor, for construction. Co-Principal Investigator with Hili Sonia Mann, 15,000E (\$18,000). 50%

GRANTS – PROFESSIONAL DEVELOPMENT

1997College of Agriculture, The University of Arizona, faculty training:
Historic Landscape Preservation Workshop, Alliance for Historic
Landscape Preservation, National Center for Preservation Technology and
Training, Utah Division of State History, Salt Lake City, Utah, June 26 and
27. \$1,200. 100%

1999Dumbarton Oaks, Invited Colloquium participant, Lassus' LandscapeApproach, Washington, D.C., November 20-21. \$1,300. 100%

GRANTS AND SEVERCE CONTRACTS, GIFTS FOR SERVICE LEARNING

The following funds were used in conjunction with courses, MLA theses and MLA Reports, independent studies, internships, or for student wages for community design projects.

2009-2010	Hackley Campus, Tarrytown, New York, Master plan revitalization: toward preservation of the Frederick Law Olmsted, Jr., and Downing Vaux original plans. \$8,000. (Supporting one ¹ / ₄ time GRA for 2 semesters).	
2009-2010	Reid Park Zoo, Tucson Arizona, Interpretive elephant exhibit design. \$8,000. (Supporting one ¼ time GRA for 2 semesters).	
2007-2008	Island of Palawan, Philippines: <i>Environmental Etate</i> , City of Puerto Princesa, Philippines. Master's Report prepared by Helen Walthier. \$1,500. Research scholarship from the Council of Educators in Landscape Architecture. \$2,000.	
2005-2007	Philippine Council for Sustainable Development, Gawad Kalinga Program of the Philippines, <i>Retrofitting Clark Air Force Base</i> : Master's Report prepared by Katy Hoogerwerf. \$900.	
2004	Tucson Police Department, Police Force Memorial Plaza - dedicated to the memory of the fallen officers, Tucson, Arizona. Principal Investigator, \$1,000. 100%	
2004	Arizona Builder's Alliance, House of Neighborly Services (a mission serving South Tucson) Community Center Master Plan, Tucson, Arizona. Principal Investigator, \$750. 100%	
2002-2003	Tohono Chul Park Children's Garden Revitalization Plan, Tucson Arizona. Principal Investigator, \$1,000. 100%	
2002	St Francis De Sales Meditative Labyrinth Design and Implementation, Tucson, Arizona. Principal Investigator, \$2,000. 100%	
2001	Tohono Chul Park Master Plan, Tucson, Arizona. Principal Investigator, \$1,000. 100%	
2001	El Rio Health Center Healing Garden Master Plan, Tucson, Arizona. Co- Principal Investigator with Margaret Livingston, \$500. 50%	
2000-2001	Lawrence Intermediate School Multicultural Literacy Garden Master Plan, Tucson, Arizona. Principal Investigator, \$1,000. 100%	
2000-2001	City of Globe Recreational Facility Master Plan, Globe, Arizona. Co- Principal Investigator with Margaret Livingston, \$5,000. 50%	
1999-2000	Richard Rainwater Foundation, Forth Worth, Texas; Crescent Real Estate Equities Company, Fort Worth, Texas; and Canyon Ranch, Tucson, Arizona; Ochoa Elementary School Outdoor Classroom Master Plan, Tucson, Arizona. Principal Investigator, \$2,500. [This effort led to a HUD grant award for construction. \$380,000. The project represents one of only 14 federal grants, allocated for community projects, from the office of Vice	

	President Al Gore. This is the first HUD grant, for community design, awarded in the state of Arizona.] 100%.	
1999-2000	Miles Exploratory School Outdoor Learning/Healing Garden Master Plan for all Children (some with special needs including autism), Tucson, Arizona. Principal Investigator, \$1,000. 100%	
1999-2000	Patagonia Union High School, Patagonia Middle School Campus Master Plan and Interpretative Trail for Outdoor Learning, Patagonia, Arizona. Principal Investigator, \$700. [This effort led to a grant for construction through Arizona Heritage Funds and the Disney Corporation. \$250,000.] 100%	
1997	Lawrence Intermediate School Ethno-botanical Garden Design for Multi- cultural Learning, Tucson, Arizona. Principal Investigator, \$1,000. 100%	
1997	Ft Lowel Elementary School Wildlife Garden and <i>Globe</i> Science Station Design Development, Tucson, Arizona. Principal Investigator, \$500. 100%	
1996	Elgin Elementary School Outdoor Classroom Master Plan, Sonoita, Arizona. Principal Investigator, \$500. 100%	
1995-1996	Cerbat Elementary School Outdoor Classroom Site Plan, Kingman, Arizona. Principal Investigator, \$900. 100%	
1995-1996	City of Globe Round Mountain Park Trail Design Development, Globe Arizona. Principal Investigator, \$6,200. 100%	
1995	Rodgers Elementary School Outdoor Classroom Design Concepts, Tucson, Arizona. Principal Investigator, \$500. 100%	
1995	Orange Grove Middle School Outdoor Classroom Design Concepts, Tucson, Arizona. Principal Investigator, \$500. 100%	
1994	Town of Kearny, ASARCO Copper Mine, and the Copper Basin Railroad, Kearny Town Revitalization Study, Kearny, Arizona. Principal Investigator, \$1,100. 100% 1993 Santa Cruz County, La Concha Pocket Park Master Plan, Nogales, Arizona. Principal Investigador, \$900. 100%	
1993	Karsten Turf Grass Research Center Master Plan, Tucson, Arizona. Co- Principal Investigator, with Mark Frederickson, \$3,000. 50%	
1992	Falling Waters School District Site Inventory and Analysis, Tucson, Arizona. Principal Investigator, \$1,000. 100%	
1987	City of Woodland Park Master Plan, Woodland, Colorado. Principal Investigator, \$1,500. 100%	
1987	Cherry Hills Elementary School Playground Site Plan, Englewood, Colorado. Principal Investigator, \$500. 100%	

PRO-BONO SERVICE LEARNING

2009 San Xavier Path Mission Gateway, San Xavier District Tohono O'odham Nation Planning Design Vision Drawings prepared by MLA Candidate, Eirin Bareis. These drawings were use by the District in a grant application that was awarded: by the State Transpiration Board of the Arizona Department of Transportation (award for graduate assistance from Dean Cervelli: \$500.00).

2009	Cooper Center for Environmental Learning, Tucson Unified School District and The University of Arizona's College of Education, Department of Teaching, Learning, and Socio-cultural Studies, Tucson, Arizona: <i>Campus</i> <i>master plan</i> , with professor Chalfoun.	
2009	Reid Park Zoo, Tucson Parks and Recreation, Tucson Arizona: <i>Master plan</i> with consideration for expansion and redevelopment of the existing elephant exhibit.	
2008	Alvernon and Valencia Park Master Plan, Tucson Parks and Recreation, Tucson, Arizona.	
2007	Sentinel Peak Park Master Plan, Tucson Parks and Recreation, Tucson, Arizona	
2007	Valley of the Moon Master Plan, Tucson, Arizona.	
2007	School of Art Site Plan, The University of Arizona (collaboration with Graphic Arts Department)	
2006	Capitol Mall Plaza, Phoenix, Arizona (collaboration with Dean Charles Albanese, Dean Thomas Peterson, Michael Mathieu, and Ronald Stoltz).	
2006	Saint Augustine Catholic High School Campus Master Plan, Tucson Arizona.	
2006	Reid Park Zoo, Special Events Garden, Tucson Parks and Recreation, Tucson Arizona.	
2005	The Tucson Theatre District Revitalization Concepts, with a focus on the Rialto Theatre, Tucson, Arizona.	
1998-1999	Calabazas National Park Analysis and Conceptual Master Plan, Tubac, Arizona.	
1993	Tucson Center for the Blind and Visually Impaired Training Course Master Plan, Tucson, Arizona.	
1993	Saguaro National Monument East Administration Complex Conceptual Site Plan, Tucson, Arizona.	
1992	Pueblo Gardens Elementary School Outdoor Classroom Site Design, Tucson, Arizona.	
1992	Navajo Nation Zoological and Botanical Park Design Concepts, Window Rock, Arizona.	
1990	Terra Alta Elementary School Outdoor Classroom Design Concepts, Terra Alta, West Virginia.	
1987	Jefferson County and the Town of Evergreen Town Image Study, Trail Design, Performing Arts Center, Evergreen Lake, Dam and Spillway Planning, Colorado.	
1985	Hope Center Playground for Disabled Children Design Concepts, Denver, Colorado.	
1985	The Denver Planning Office, City and County of Denver, Open Space Master Plan, Denver, Colorado.	
1984	Santa Fe Drive Redevelopment Authority, Streetscape Design, Denver, Colorado.	

1984	Town of Nederland, Town Image Study, Nederland, Colorado.
1983	Gilpin Extended Day Center Playground Site Plan, Denver, Colorado.

TEACHING GRANTS

1977- 2002	Office of Undergraduate Education, The University of Arizona, teaching assistantships, class expenses, INDV 102 American Design on the Land. Principal Investigator, \$23,500. 100%
1999-2000	Faculty-Student Curriculum Development Grant, The University of Arizona, Internet site development, INDV 102 American Design on the Land. Principal Investigator, \$5,000. [Resulted in the following on-line source that includes course syllabus, assignments, lecture notes, and related Web-links (password protected): <u>www.architecture.arizona.edu/landscape/courses/indv102/default.htm</u> [December 11, 2002]. 100%
1998	Office of Undergraduate Education, The University of Arizona, Course development, INDV 102 American Design on the Land. Principal Investigator, \$7,500. 100%
1998	Faculty Center for Instructional Innovation, The University of Arizona, "Joining the Worlds of Teaching, Learning, and Technology," training and equipment. Participant, \$2,500. 100%
1988-1989	Teaching Enhancement Grant, University of Colorado at Denver. Principal Investigator, \$480. 100%

DESIGN COMPETETIONS (Within the context of teaching)

2009	Finalist and semifinalist recognition in <i>Recycle This Site</i> , Competition, Asheville, North Carolina, sponsored by the Land of Sky Regional Council, with Nader Chalfoun. [http://www.recyclethissite.org/] (February, 2010).
2008	International Student Design Competition, <i>Buckhead Neighborhood Park</i> Sponsored by Park Pride, 8 th Annual Parks and Green Space Conference, City of Atlanta, [http://spdc.msu.edu/LinkClick.aspx?fileticket=JR%2Fcrrgz1sw%3D&tabid=93] (February 2010);
	Aspen Design Challenge, <i>Designing Water's Future, 2008-2009</i> ; sponsored by AIGA, the professional association for design, New York, [http://www.aspendesignchallenge.org/content.cfm/08-09] (February 2010);
	<i>Land/art proposals</i> for Harwood Art Center in conjunction with the Rio Grande Bosque, City of Albuquerque Public Art Program, [http://harwoodartcenter.org/ss/] (February, 2010);
	Cleveland Design competition sponsored by the Cleveland Urban Design Collaborative, Project 2008 interPLAY, [http://www.clevelandcompetition.com/weblog.html] (February, 2010);
2007	Third Place, "Daily migrations," Mixed use development with riparian forest habitat interface, in <i>Integrating Habitats</i> design competition, Metro and City of Portland, studio advisor to Roby Babcock, Kate Dinsmore, Brent Jacobsen, Melisa Kennedy. Student work displayed [http://www.metro-

	region.org/index.cfm/go/by.web/id/21627] (February, 2009)
2007	People's Choice Award, "The green spine: backbone of a new commercial common," Commercial development and lowland hardwood forest in <i>Integrating Habitats</i> design competition, Metro and City of Portland, studio advisor to Laura Bolyard, Kimberly Creagan, Rachel Hill, Jenny Leijonhufvud, Steven Steinberg. Student work displayed [http://www.metro-region.org/index.cfm/go/by.web/id/21627] (February, 2009)
2005	Honorable Mention, <i>Ross Bridge</i> design competition, A Greenspace Master Plan, Birmingham, Alabama, studio advisor to Blessing Hancock and Jennifer Patton.
2004	Design entry International design competition, <i>Garden for Lovers</i> , Trauttmansdorff Castle, Meran/Italy, studio advisor to Angie Watson, and Nathan King.
1992	Design entry, <i>The Coming of Age: Traditions, Symbols, and Meanings it the Landscape</i> , UNESCO, the Korean Association of Landscape Architects, and the International Federation of Landscape Architects, faculty advisor to John Anderson.
1991	Merit Award Governor Symington's Environmental License Plate Design Competition, studio advisor to Cynthia Lunine.

COURSES TAUGHT

School of Landscape Architecture, The University of Arizona, Tucson, Arizona (undergraduate and graduate courses)

Course No.	Course Name, Units, Percent Effort	Semester	Years Taught
LAR 101	Introduction to Landscape Architecture (2) 100%	Fall	1992, 1993
INDV 102	American Design on the Land (3) 100%	Fall	1998-2002
RNR 105	Survey of Landscape Architecture (2) 100%	Fall	1995, 1997
LAR 201	Intermediate Design III (4) 100%	Fall	1992
LAR 202	Intermediate Design IV (4) 100%	Spring	1994, 1995
LAR 212	Landscape Graphic Communication (3) 100%	Spring	1992
LAR 301	Site Planning and Design Studio (4) 100%	Fall	1991
LAR 302	Urban Landscape Design (4) 100%	Spring	1993, 1996
LAR 401	Urban Design (4) 100%	Fall	1991
LAR542, 541	History and Theory of Landscape Architecture (3) 100%	Fall	1997-1998
LAR542, 541	History and Theory of Landscape Architecture (3) 100%	Spring	2000-2010
LAR 443/543	Contemporary Landscape Architecture (3) 100%	Fall	1993-1996, 1999- 2009
LAR 443/543	Contemporary Landscape Architecture (3) 100%	Spring	1997, 1998, 1999
LAR	Contemporary Landscape Architecture (2) 100%	Fall	2005-2006
LAR 511	Design Studio II (4) 100%	Spring	1997-1999, 2001, 2002
LAR 522B	Advanced Landscape Design (4) 100%	Spring	1992
LAR 438/538	Planting Design (3) 100%	Spring	1997
ARC 597	Special Projects in Architecture (1)	Fall	2000

LAR 499/599	Ind. Study used for LAR 511 (forthcoming) (4) 100%	Spring	1995, 1996
LAR 599	Ind. Study (1-3) 100%	Fall	1997-2005
LAR 620/610	Design Studio III (4) 100%	Fall	2003-2009
LAR 696A	Contemporary Landscape Architecture Seminar (1) 100%	Spring	1992
LAR 696A	Children's Environments Seminar (1) 100%	Spring	1996
LAR 696A	Landscape as Art Seminar (1) 100%	Fall	1999-2002
LAR 696A	Landscape as Art Seminar (1) 100%	Spring	2001, 2002
LAR 696A	Advanced Graphic Seminar (1) 100%	Spring	2001
LAR 694	Practicum (4) 100%	Spring	2002
LAR 694	Practicum (4) 100%	Fall	1997-2001

Program of Landscape Architecture, School of Natural Resources, West Virginia University, Morgantown, West Virginia (undergraduate courses)

Course No.	Course Name, Units, Percent Effort	Semester	Years Taught
LAR 020	Landscape Architectural Drawing (3) 100%	Fall	1989, 1990
LAR 112	Landscape Architectural History (3) 100%	Spring	1990, 1991
LAR 150	Landscape Architectural Design I (6) 50%	Fall	1989, 1990
LAR 151	Landscape Architectural Design II (6) 100%	Spring	1990
LAR 251	Advanced Landscape Architectural Design II (6) 100%	Spring	1990

<u>Program of Landscape Architecture and Urban Design, College of Architecture and Planning.</u> <u>University of Colorado at Denver, Denver, Colorado (Graduate courses)</u>

Course No.	Course Name, Units, Percent Effort	Semester	Years Taught
LA 500	Landscape Architecture I (6) 100%	Fall	1982-1988
LA 501	Landscape Architecture II (6) 100%	Spring	1982-1986
LA 510	Graphic Communication I (3) 100%	Fall	1983-1988
LA 511	Graphic Communication II(3) 100%	Spring	1988
LA 509	Design Drawing (elective) (3) 100%	Summer	1983-1987
LA 609	Design Drawing (elective) (3) 100%	Winter	1983-1988
LA 5521	Landscape Architecture History (3) 100%	Spring	1988-1989
LA 581	Rocky Mountain Plant Design (3) 100%	Spring	1985-1987-1989
LA 601	Landscape Architecture IV (6) 100%	Spring	1987
LA 630	Landscape Architecture for Allied Designers (3) 100%	Spring	1983
LA 763	Professional Practice (3) 100%	Spring	1986
LA 760	Advanced Landscape Architecture Construction (3) 100%	Fall	1982

GRADUATE STUDENTS – MLA, CHAIR OF COMMITTEE

School of Landscape Architecture, College of Architecture and Landscape Architecture, The University of Arizona, Tucson, Arizona

In Progress

Alicea, Olivia. 2010. Master's report.

Bolyard, Laura. 2010. Master's report.

- Bradshaw, Daniel. 2010. The Fort Davis master plan: engaging generation Y. Master's report.
- Gredig, Theresa. 2010. Florida Station: where history, environmental sustainability, and education unite. Master's report.
- Kenworthy, Carla. 2010. Master plan of the Northern Arizona Veterans Hospital: enhancing the site through circulation and therapeutic landscapes.
- Lyndes, Joy. 2010. National Heritage Areas best practices; guidelines for programs and projects. Master's report.
- Ruedinger, Maria. 2010. Between earth and sky: In search of celebration through death. Master's Report
- Scott Stephens. 2010. Expedition Tanzania, creating an interpretive elephant exhibit for the Reid Park Zoo. Master's report.

Completed

Babcock, Roby. 2009. Valencia Park, Tucson, Arizona. Master's report.

- Kosir, Sarah. 2009. Bowie, Arizona, a lesson in small town revitalization. Master's report.
- Fisher, Christina. 2008. Gleaning the everyday landscape through vision, sound, and time. Master's report.
- Kennedy, Allison. 2008. As spoken by landscape architecture: an urban infill design language. Master's report.
- Marhefka, David. 2008. Tucson Electric Power Place; a Public-Private Open Space Model in

Tucson, Arizona. Master's report.

- Walthier, Helen. 2008. Master plan for an environmental estate on the island of Palawan, Philippines. Master's report.
- Bolton, Scott. 2007. Koko Crater: Landscape poetics revealed master plan. Master's report.
- Gorski, Drew. 2007. The Environmental aesthetic appreciation of cultural landscapes. Thesis.
- Hoogerwerf, Katy. 2007. Retrofitting Clark: revealing Filipino cultures and environments through the landscape. Master's report.
- Jaffe, Joss. 2007. Quail Springs: an experiment in permaculture design. Master's report
- Morse, Barry. 2007. Indeterminacy, the *I Ching* and John Cage: a new design method for landscape architecture. Thesis.
- Widner, Dara. 2007. Tools in the toolbox: An exercise in design ideation for landscape architecture students. Master's report.

Arriola, Julia. 2006. Interpreting historical landscapes: connecting landscapes and memory. Thesis

- Byrd, Jessie. 2006. Reading the everyday landscape: patterns in Jefferson Park Neighborhood, Tucson, Arizona. Master's report
- Steinmeyer, Samirah. 2006. Redefining the brownfield: the integration of identity and sustainability in redevelopment. Master's report.
- Watson, Angela C. 2006. Revamping rover's playground: an examination of design possibilities for urban off-leash dog parks in Tucson, Arizona. Master's report.
- Wilson, Beverly. 2006. Sensory gardens for children with Autism spectrum disorders. Thesis.
- Berns, Scot. 2005. Grounds for play: rethinking reinventing, reinvigoration the kids playground with multiple intelligences. Master's report.
- Mahoney, Monica, L. 2005. The expanding field: exploring the interface between art and ecology in landscape architecture. Master's report.
- Barns, Holly Lavina. 2003. A regional approach to a plaza design for downtown Tucson. Master's report.
- Camacho, Alex. 2003. Convergence of youth and their communities. Master's report.
- Ciriacks, Peter. 2003. The power of place: indigenous continua and accordant environmental design in arid lands of the greater Southwest. Master's report.
- Davis, Darbi. 2003. Expressions of urban design: the park as a theater. Thesis.
- Hatton, Stephanie M. 2003. The creation of a master plan for Alga Norte Community Park. Master's report
- Schaeffer, Renee Suzanne. 2003. Defining success in schoolyard design in Tucson, Arizona: evaluating schoolyards utilizing assessment, staff perceptions, and achievement test scores. Thesis.
- Camacho, Miguel Serna. 2002. Sacramento River Park master plan. Master's report.
- Nelson, Karl. 2002. Determining factors that lead to the success of community gardens. Master's report.
- Radtke, Lisa Beth. 2002. Rehabilitating historic residential landscapes: Tucson, Arizona. Thesis
- Longino Les. 2001. Glitch Landscapes. Master's report.
- Takessian, Janice. 2001. Literacy and multicultural representation: a master plan for Lawrence Intermediate School, Tucson, Arizona. Master's report.
- Pinto, Robin Lothrop. 2000. Analysis of the cultural landscapes of Fort Bowie National Historic Site. Master's report.
- Walker, Susan Jeanne. 2000. An analysis and design for extending the Rillito River Park system from Dodge Blvd. to Swan Road. Master's report.
- Jablonski, Robin. 1998. Alternative learning environments: A visual study of the outdoor classroom. Master's report.
- Huffman, Debra. 1997. Fear in the landscape: characteristics of the designed environment as they relate to perceived and actual safety of women from assault and rape. Thesis.
- Novak, Karen. 1997. The importance of xeroriparian habitat to single family residents in Pima County. Master's report.

<u>Program of Landscape Architecture and Urban Design, College of Architecture and Planning,</u> <u>University of Colorado at Denver, Denver, Colorado</u>

- Skrukrod, Dori. 1988. An experimental design process for the design of an educational park, Vikon Middle School, Brighton, Colorado. Thesis.
- Jeffrey P. Tupala, Jeffrey, P. 1987. Design guidelines for maintained cross country ski trails for Colorado Cross Country Ski Association. Thesis.
- Kristiadi, Didik. 1987. Social/behavioral analysis of urban plazas. Thesis.
- Grimes, Merle. 1986. Educational benefits in environmental design. Thesis.

Masatsugu, Taka. 1986. Design fundamentals in Japanese gardens. Thesis.

Anderson- Goguehen, Peggy. 1985. A new approach to vehicular design. Thesis.

Carpenter, David. 1985. Design with intuition. Thesis.

Fry, Debra. 1985. Flatwater recreation. Thesis.

McCandles, Mary. 1985. Guidelines for trail and campsite locations in Colorado wilderness areas. Thesis.

Takevchi, Lin. 1985. Drainage design in urban areas: approach to aesthetics and multi-use. Thesis.

Williams, Lori. 1984. Creative playgrounds and environmental fit. Thesis.

GRADUATE STUDENTS – SERVICE ON COMMITTEE

- School of Landscape Architecture, College of Architecture and Landscape Architecture, The University of Arizona, Tucson, Arizona (Other departments as noted)
- Barnes, Ray. 2010. The outside-in house design of a net-zero plus house in the desert. Master of Architecture. Thesis.
- Bareis, Eirin. 2010. Airport Wash Greenway: strategies for linkages, access, and urban wildlife opportunities for South Tucson's underserved community along Airport Wash Greenway. Master's Report.
- Hawn, Jessica. 20010. Tree of life Rejuvenation Center: a master plan for a sustainable ecovillage.
- Abad, Shelly. 2009. The Role of stakeholders in public land planning; reflecting ideas in actions.
- Cregan, Kimberly. 2009. Urban habitat a model for habitat assessment, design and interpretation in downtown areas. In conjunction with this report *Tucson's Urban Wildlife Walk*. [http://www.tucsonurbanwildlife.com/PAGES/Home_main.html] (February 2010) received the Student National Honor ASLA Award in the Communication Category
- Mast, Natalie. 2009. Refuse to refuge, reclaiming a landfill in Tucson's urban core. Master's report.
- Jatiage, Jose. 2009. Master of Planning. Thesis.
- Mast, Natalie. 2009. Refuse to refuge: reclaiming a landfill in Tucson's urban core.
- Fisher, Ariel. 2008. Brannick at Red Wing Ranch; a sustainable community design for the arid southwest. Master's report.
- Hoff, Sarae. 2008. Zoo experience: a new vision for the Phoenix Zoo. Master's report.

Kerns, Katie. 2008. Gardens in Roman Gaul, Master of Classics. Thesis

Kopke, Jay. 2008. The arid green roof design process. Master's report.

- Meadows, Eric. 2008. White Water Draw Wildlife Area; A wildlife viewing experience. Master's report.
- Rhody, Jeff. 2008. The Broadway Corridor; rethinking the urban corridor. Master's report.
- Suri, Priya. 2008. Preserving Cultural Landscapes A Cross-cultural analysis. Master of Architecture. Thesis
- Herr, Sara. 2006. Welcome to the jungle: master plan for Summit Nature Pak, Panama City. Master's report.
- Volenick, I. 2006. Master plan for Marana Orchards, Marana, Arizona. Master's report.
- Apicella, Anthony. 2005. Play environment project. Master's report.
- Swiryn, Gail Ryan. 2005. The Sinagua Circle. Master's report.
- Cooper, Harry R. 2004. Mountain biking and shared-use trail networks: a master plan for Saginaw Hill Urban Trails Park. Thesis.
- Garrett-Ritenbaugh, Brian. 2004. Placing the path: creating a landscape for retreat at the Shadhiliyya Sufi Center, Pope Valley, California. Master's report.
- Robaina, April. 2004. Interpretive exhibit guidelines and application for landscapes in arid environments. Thesis.
- Wang, Fan. 2004. Bridging between reality and virtuality with information technology: the Winniethe Pooh Theme Park master plan in Anaheim, California. Master's report.
- Darnell, Beth Wagelie. 2003. Assessing the potential play value of vegetation in the outdoor environments of NAEYC-accredited preschool programs in Tucson, Arizona. Thesis.
- Gogal, Lisa Ann. 2003. Understanding rotational exhibits and recommendations for rotational exhibits at the Oregon Zoo. Master's report.
- Lynch, Erin. 2003. Feng Shui as a site design tool: assessing conditions of human comfort in urban places. Master's report.
- O'Sullivan, Rheanna. 2003. The Revitalization of Benson, Arizona. Master's report
- Showalter, Darlene Denise. 2003. Evaluation of plant selection for traffic calming on residential streets in Tucson, Arizona. Thesis
- Clifford, Sars. 2002. Butte Creek Trails project: a master plan. Master's report.
- Gormally, Joshua, Flora. 2002. Changes in riparian vegetation following release of reclaimed effluent water into the Santa Cruz River: as a corollary, the effects of channelization of vegetation in the Santa Cruz River. Thesis.
- Pena, Luis Gerardo Mayoral. 2002. Sub-cultural preference for sustainable urban forests in Agua Prieta, Sonora, Mexico. Thesis
- Shaw Wayken. 2002. Landscape architectural solutions to the revitalization of downtown Tucson. Master's report.
- Martinez, Scott. 2001. Evaluation of roadside revegetation along Arizona Forest Highway 39 (Mt. Lemmon Highway). Thesis.
- Costante, Karen. 2000. A landscape design approach for public transportation areas sensitive to the climate of South Tucson, Arizona. Master's report.

- Chapman, Gary. 1999. Design variables and the success of outdoor neighborhood recreational facilities. Master's report.
- Lunine, Cyntnia. 1998. Immaculate Heart Convent and school master plan, Tucson Arizona. Master's report.
- Marshall, Edward. 1998. Small town revitalization using traditional landscape architecture techniques in Clarkdaale, Arizona. Master's report.
- Gerstenberger, Nanette. 1997. Historic plant materials of Tucson. Thesis.
- Batelli, Penny. 1998. Therapeutic values of gardens. Master's report.
- Singer, Carla. 1998. Interpreting the cultural landscape of a pioneer cattle ranch in the arid Southwest. Thesis.
- Walzak, Keith. 1998. Public art in transit: a comparison of three transit supportive areas in Tucson, Arizona. Thesis.
- Rasmussen, Brian. 1997. The role of environmental education in river-based greenway projects. Master's report
- White, Steven. 1997. A confluence of thinking: the influence of 20th Century art history on American landscape architecture. Master's report
- Nucaro, Margaret T. 1994. A study of the relationship between landscape architecture and painting in England during the 17th, 18th, and 19th Centuries. Thesis.
- Biascoechea-Copp, Maria. 1993. A new age of play design competition: a retrospective study on the Winning design submittal. Thesis.
- Copp, Brian. 1993. The university village: planning framework and open space development. Thesis.
- Driapsa, David Joseph. 1993. The conservation and development of a historic vernacular Spanish-American cultural landscape; the village of Chimayo, New Mexico. Thesis.
- Lyons, Nohl. 1993. The Variability of Pen-Based computers in landscape architecture. Thesis.

Travis Mueller

4938 E 4th St. Tucson, AZ 85711 512.417.5879 | muellert@email.arizona.edu

EXPERIENCE

University of Arizona, Tucson, AZ - Adjunct Lecturer

01/2016 - present

- LAR 530 | Introduction to Digital Media
- LAR 510/PLG 515 | Design Studio I
- LAR 611 | Design Studio IV

Tait Moring & Associates, Austin, TX – Project Manager/Project Designer 01/2014-05/2015

- Foremost design associate
- Managed design production at all phases from concept to construction documentation
- Established all current design graphic standards
- Assisted in project cost estimating & proposals
- Assisted in construction administration

dwg. Urban Landscape Architecture, Austin, TX - Project Designer

10/2013-01/2014

• Assisted in the production of CD & DD design document packages for 3 major projects

Ten Eyck Landscape Architects, Austin, TX - Project Designer

01/2013-10/2013

- Assisted in the production of CD & DD design document packages for more than 6 major projects
- Involved in production of site drawings including but not limited to layouts, elevations, sections, and details for all design document packages above with a handful of opportunities to design and work on custom details for project site elements
- Worked with vendors & manufacturers to complete custom details for project site elements
- Assisted in the creation and management of CAD standards and communications standards files

Bernard Trainor & Associates, Monterey, CA - Landscape Designer

08/2012-12/2012

- Built extensive digital site models for on-going site analysis and site design studies and landscape design representation
- Assisted in the production of design document packages from SD through CD stages

Olin, Philadelphia, PA – Summer Internship Program

S06/2011-08/2011

- Assisted in production of design document package for 100%CD phase of a major park in West Hollywood
- Created Photoshop renderings for client meetings and presentations for a new federal agency headquarters in Washington, DC

University of Arizona, Tucson, AZ - Teaching Assistant

09/2010-05/2012

- Classes: Site Engineering (Fall 2010 & 2011), Site Construction (Spring 2011 & 2012), Design Studio II (Spring 2012)
- Taught AutoCAD to MLA students
- Red lined submitted drawings for Site Engineering and Site Construction courses
- Aided in design study and critique in Design Studio II

EDUCATION

University of Arizona, Tucson, AZ – Masters in Landscape Architecture (MLA)	05/2012
University of Texas, Austin, TX – BA in Music	05/2006

AWARDS

ASLA Arizona Chapter, AZ – Honor Award, Campbell Bridge Park, General Design Categ	or y 2012
INTERN AT OLIN – Selected as one of the three students for their 2012 intern program	2012

DAN HOFFMAN, AIA

Phone: (602) 421-7721 Email: <u>hoffman@studioma.com; studioma1@email.arizona.edu</u> Address: 4451 East Pima Street #3, Tucson, AZ 85712

PROFESSIONAL REGISTRATION

Michigan Architecture License - 1301039917 Arizona Architecture License - 51027 Utah Architecture License - 78298670301

EDUCATION

Bachelor of Architecture, Cooper Union, 1976 Urban Studies, New York University, 1969-1971

INTERNSHIP

Edward Larrabee Barnes and Associates, 1983-1986 William Kessler and Associates, 1977-1980

PRACTICE

Founding Principal, Studio Ma, Inc., 2003-2017, currently Emeritus Architectural Advisor, Detroit Symphony Orchestra Renovation and Addition: 1998-2002 Cranbrook Campus Architect, 1996-2002 Director, Cranbrook Architecture Office, 1994-2000

FULL TIME TEACHING POSITIONS

2017-Present: UNIVERISTY OF ARIZONA - Professor of Practice: Capstone preparation and studio (coordinator), theory seminar, first year design studio (coordinator).

2010–2015: UNIVERSITY OF UTAH - Professor of Practice: graduate and undergraduate design studio, introductory sustainability lecture course.

1999–2010: ARIZONA STATE UNIVERSITY - Professor: graduate design studio, undergraduate design studio, building integration lecture course, introductory sustainability lecture course, thesis supervision, promotion and tenure committee, executive committee, curriculum committee, accreditation (authored APR), lecture series, admissions.

1998-1999: UNIVERSITY OF MICHIGAN - Professor of Practice: graduate design studio, construction seminar.

1986-1998: CRANBROOK ACADEMY OF ART - Head of the Department of Architecture: graduate design studio, theory seminar, thesis supervision, recruitment, admissions, outreach, department budget management, curriculum management, lecture series.

1983: UNIVERSITY OF TORONTO - Assistant Professor: fourth year design studio in Florence.

1979-1983: CARLETON UNIVERSITY - Assistant Professor: first year design studio, Renaissance and Baroque lecture course, fourth year design studio in Rome, thesis supervision.

1976-1979: UNIVERSITY OF DETROIT - Assistant Professor: first year design studio, design fundamentals seminar.

VISITING TEACHING POSITIONS

2015-2016: UNIVERSITY OF ARIZONA – Thesis seminar, thesis studio 1998: UNIVERSITY OF ILLINOIS - CIRCLE CAMPUS, Graduate studio 1998: CORNELL UNIVERSITY – Undergraduate studio 1997: YALE UNIVERSITY (Saarinen Chair) – Graduate studio 1996: HELSINKI TECHNICAL UNIVERSITY – Graduate studio 1992-1997: UNIVERSITY OF MICHIGAN – Graduate studio 1990-1992: UNIVERSITY OF WATERLOO – Undergraduate studio 1988: UNIVERSITY OF TEXAS AT ARLINGTON – Undergraduate studio

RESEARCH AT ARIZONA STATE UNIVERSITY (1999 – 2010)

My work in Arizona is divided between projects undertaken as a professor at Arizona State University and as a practicing architect at Studio Ma, Inc. A number of the projects undertaken by Studio Ma have involved a funded research component at the University.

2009: TEXTILE REINFORCED CONCRETE RESEARCH STUDIO - Fabrication and testing of an emerging material technology in collaboration with Studio Ma for the Salt River Sustainable Research Center Project. Research from this project was used to develop a façade for the Salt River Project Sustainability Center.

2008: PEDESTRIAN COMFORT IN ARID REGIONS - Research conducted in partnership with professors and doctoral students in the MS Program in the Built Environment for the Downtown Phoenix Urban Form Project

2007: DOWNTOWN PHOENIX PUBLIC MARKET - A study funded by the United States Department of Agriculture for a public market in Downtown Phoenix. Project included the design of a free-standing Market Shed and Market Store commercial retrofit.

2007: EVANS CHURCHILL DISTRICT PLANNING STUDY - A new zoning code and open space plan for a district in downtown Phoenix, in collaboration with the Downtown Urban Form Project.

2006: WHISPERING HOPE RANCH - A project funded by the Arizona Community Foundation to master plan and program for a 45-acre camp facility for children with special medical needs in the ponderosa pine forest of Central Arizona. (See Studio Ma below.)

2005: NAVAJO ROUNDWOOD PROJECT - A project funded by the Arizona Community Foundation, the National Endowment for the Arts and Indigenous Community Enterprises, a Navajo led non-profit, involving the use of small-diameter timber culls from the Arizona Ponderosa Pine Forest to construct low-cost, culturally sensitive dwellings for the Navajo Nation. The project included the planning of a prototype, multi-generational community development using a variety of Hogan-based typologies. Three prototype Hogans were constructed for the project.

2002: COOL CONNECTORS - A studio funded by a grant from the AIA College of Fellows exploring bio-climatic design strategies to improve the quality of pedestrian environments in the Phoenix Metropolitan Area.

STUDIO MA, INC. (2003-2017) www.studioma.com

Established in 2003 by myself, Christopher Alt and Christiana Moss, Studio Ma is a collaborative design practice located in Downtown Phoenix. The firm currently has ten employees and has undertaken a wide range of planning and architecture projects. I have had substantial involvement in the following projects:

2017: RENOVATION OF ARIZONA STATE UNIVERSITY MEMORIAL UNION, PHASE II – Planning, design and interior design of 35,000sf of lounge and multi-use spaces on the lower and main level of the Memorial Union.

2015: SUMMIT POWDER MOUNTAIN - Planning and Design Guidelines for a 10,000-acre, year-round community in the Wasatch Mountains of Utah.

2015: LAKESIDE HOUSING at PRINCETON UNIVERSITY – Planning and design for 735 bed graduate community on the Princeton University Campus. Project includes multiple building typologies and a wrapped 500 car parking deck. LEED Silver rating for ND+C, LEED Gold rating for ND.

2013: ASU MANZANITA HALL RENOVATION – Full renovation of a 195,000sf landmark 14 story mid-century modern dormitory on the ASU campus. LEED Silver.

2013: ASU SUN DEVIL FITNESS COMPLEX- A 100,000sf addition and renovation of the Student Recreation center on the ASU Tempe Campus consisting of 5 gyms, 2 small gyms, a multipurpose gym, wellness center and cardio-fitness center. LEED Platinum

2011: NORTHERN ARIZONA STATE UNIVERSITY NATIVE AMERICAN CULTURAL CENTER - A 12,000sf cultural center serving the Native American Community at the center of the Northern Arizona University campus. Studio Ma teamed with Dr. Ted Jojola of New Mexico State University to engage the community in an Indigenous Community Planning Process to program and design the facility in a manner consistent with Native American values. Net Zero Ready, LEED Gold.

2008: SALT RIVER PROJECT SUSTAINABILITY CENTER - A LEED Platinum, net zero energy, net-zero water consumption, consumer education center for a major Arizona utility (completed through schematic design).

2008: RENOVATION OF ARIZONA STATE UNIVERSITY MEMORIAL UNION - Extensive renovation to 95,000sf of meeting rooms, ballrooms, stairways, and other public spaces. The project was the first renovation to achieve LEED Gold in Arizona.

2008: ASU MEMORIAL PLAZA - A complete renovation of the main campus plaza including new shade structures, hardscape, and plantings.

2007: NEW YORK CONDOMINIUM RENOVATION - Complete renovation of a 1,600sf condominium in an historic Manhattan high rise.

2007: DOWNTOWN PHOENIX URBAN FORM PROJECT - Local Architect and Sustainability Consultant for a new form based plan and zoning code for Downtown Phoenix. Studio Ma conducted basic research on impact of form based planning on mitigating Urban Heat Island and optimizing Thermal Comfort for pedestrians. The plan and code were adopted by the City in 2010.

2006: PRD 845 - A 12-unit urban infill project in Downtown Phoenix. The project was published in Architectural Record and was awarded the International Athena Prize for Architecture.

2005, CRANBROOK INSTITUTE OF SCIENCE WEST ENTRANCE AND PARKING DECK - An 11,000sf, group entrance and multipurpose addition to Cranbrook Institute of Science. Project includes a 200- car parking deck and entry plaza.

2005: ASU CAMPUS BOOKSTORE RENOVATION AND PLAZA - Renovations to the main campus bookstore including a new shade structure and plaza.

2005: WHISPERING HOPE RANCH - A 45-acre ranch for children with special medical needs in Arizona's ponderosa pine forest. Facilities include twelve cabins, a lodge, medical center, animal interaction area and interpretive trail.

2003: MORSE HILL RESIDENCE - A 2,500sf private residence located in Duchess County, NY. Project combines traditional and modem forms to conform to historic covenants.

2003: PAPAGO SALADO COMPETITION - The winning entry in a National Endowment for the Arts sponsored competition for an urban trail network connecting the cities of Phoenix, Scottsdale and Phoenix.

WORK AT CRANBROOK (1989-2002)

Cranbrook Campus Architect, President's Architectural Review Committee

Duties included, programming, campus planning, architect selection and overseeing a staff of project managers, presentations to Board of Trustees... Major capital projects undertaken during this period included the Addition to the Institute of Science by Steven Holl, Cranbrook Schools Natatorium by Williams and Tsien, Brookside School by Peter Rose and the Studio Addition to Cranbrook Academy of Art by Rafael Moneo. Planning studies, renovation, restoration and landscape projects completed during this period include:

2002: CRANBROOK GIRLS' MIDDLE SCHOOL - Pre-design study for a new middle school adjacent to the Cranbrook-Kingswood campus.

2002: CRANBROOK CAMPUS MASTER PLAN - A comprehensive study of the campus buildings, roadways, parking and pathways (with Sasaki Associates).

1998: NATATORIUM COMPLEX SITE PLAN and LANDSCAPE DESIGN - Design of plazas, lawn areas, walkways and roadways surrounding the Natatorium designed by Williams-Tsien Architects (with Peter Osler, Landscape Architect)

1998: KINGSWOOD SCHOOL GREEN LOBBY RESTORATION - Restoration of historic Pewabic tile in the historic Green Lobby designed by Eliel Saarinen.

1998: PROGRAMMING AND PROJECT MANAGEMENT FOR THE CRANBROOK ACADEMY OF ART STUDIO ADDITION AND MUSEUM EXPANSION - A master plan for new art studios, collection storage and gallery addition. Project management responsibilities included programming and selection of design team.

1997: CRANBROOK SCHOOL COURTYARD RESTORATION - Renovation of the brick paving for the courtyards of Cranbrook School designed by Eliel Saarinen. Project involved innovative use of hydronic heating to minimize the effects of freeze thaw (with Peter Osler, Landscape Architect).

Director, Cranbrook Architecture Office (CAO)

CAO was a division of the Cranbrook Educational Community founded in 1994 to provide design-build services for a wide variety of campus projects. At its peak, the office had thirty employees, many of whom were students and graduates of the Academy. In addition to managing the office, I served as the principal-in-charge of each project, collaborating on design with individuals noted below.

1998: EXHIBITS FOR CRANBROOK INSTITUTE OF SCIENCE - Design of seven thousand square feet of interpretive exhibits for the addition to the Institute designed by Steven Holl (with Marcus Schaeffer).

1998: CONNECTIONS THEATER - Design and construction of an enclosed orientation theater for the Cranbrook Institute of Science featuring a video presentation designed by Scott Makela, co-chair of the Cranbrook Academy of Art's department of graphic design (with Douglas Pancoast and Alfred Zollinger).

1997: RIPPLE WALL - Design and fabrication of a thirty-foot long polyurethane cast of a fossilized seabed used as a concrete formwork in the foundation wall for Cranbrook Institute of Science (with Susan Molesky).

1996: CLASSROOM FURNITURE FOR THE BROOKSIDE ELEMENTARY SCHOOL - Design of molded plywood furnishings including chairs, tables and a classroom play structures (with Jason Vollen).

1996: BROOKSIDE SCHOOL TRELLIS - Design and fabrication of a celebratory entry structure for the Brookside Elementary School (with Jason Vollen).

1995: BROOKSIDE SCHOOL READING PAVILION - A structure on an island in the Rouge River adjacent to the Brookside Elementary School. The project includes a twenty five-foot long wood and steel bridge (with Jason Vollen).

1997: CAMPUS MAILBOX ENCLOSURE - Design, fabrication and installation of a wooden shelter to serve as the community mailbox (with Jason Vollen and Sandra Wheeler).

1996: CAMPUS LIGHTING - Design and fabrication of four types of site lighting fixtures (with Alfred Zollinger).

1995: CAMPUS SIGNS - Design and fabrication of three types of campus roadway directional signs (with Alfred Zollinger).

1996: CRANBROOK ENTRANCE - A new entry to the Cranbrook campus. Design elements include a two-hundredfoot Corten steel retaining wall, guard booth, a stainless steel and copper mesh canopy. (with Alfred Zollinger and Gregory Yang).

1994: PEDESTRIAN BRIDGE - A fifty-eight-foot wood pedestrian bridge (with Theodore Gallante).

Projects Fabricated by CAO from Designs by Architects Working at Cranbrook

1996: ORNAMENTAL METAL FABRICATION FOR THE ADDITION TO THE CRANBROOK INSTITUTE OF SCIENCE, Steven Holl, Architect - Reception desk, lobby seating, cladding for entry doors and a brass-clad entry canopy (with Alfred Zollinger).

1996: HOUSE OF ICE, Steven Holl, Architect - A garden enclosure made of curved stainless-steel rods (with Alfred Zollinger).

1994: ENTRANCE CANOPIES FOR BROOKSIDE SCHOOL - Peter Rose, Architect: Metal and wood fabrication (with Theodore Gallante).

1994: ARRIVAL PLAZA, Juhani Pallasmaa, Architect - Construction documents, construction supervision and fabrication of custom details for a plaza at the center of the Cranbrook Campus (with Theodore Gallante).

1992: BRIDGE LANTERNS, Baird-Sampson Architects - Four galvanized steel and copper lanterns for a vehicular bridge (with Alfred Zollinger).

EXHIBITS AND INSTALLATIONS

2011 "Whispering Hope Ranch" Group Show in Honor of Edward Larrabee Barnes at Haystack College for the Arts 2011 "Svein Tsonsanger and Friends," An Exhibition of Architectural Drawings at the Danish Architectural Center

- 2010 "Work of Studio Ma," University of Tennessee
- 2008 "Dan Hoffman Cranbrook Drawings," University of Colorado at Denver
- 2006 "Portals and Loops" Eye Lounge Gallery, Phoenix 1998 "Block Installation," Technical University of Eindhoven 1998 "Block Installation," SUNY Buffalo
- 1997 "Work of the Cranbrook Architecture Office," Yale University
- 1994 "Natural Histories," Princeton University 1994 "The Gamlebeyn Project," Gallerie ROM, Norway (with Ronit Eisenbach)
- 1992 "Building Measure," University of Waterloo
- 1990 "Work of Dan Hoffman," Storefront for Art and Architecture, NYC
- 1988 "Natural Histories," Cranbrook Academy of Art Museum

AUTHORED ARTICLES, INTRODUCTIONS AND CHAPTERS IN BOOKS

"Currents-Thoughts on the New Regionalism in North America," in XII Foro Internacional de Architectura, (CADI, 2012), 26-35.

"Visualizing Pedestrian Comfort Using ENV-MET," with Akram Rosheidat, Third National Conference of BPSA-USA, 2008.

"From the Ground Up, Architecture Away from the Center," Journal of Architectural Education, (Volume 61, September 2007):101-102.

"The Wobbling Earth, Juhani Pallasmaa at Cranbrook," Archipelago, Essays on Architecture for Juhani Pallasmaa, MacKeith edit., (Helsinki, Rakennustieto, 2006).

"The World Is My Imagination - Work of Marlon Blackwell," Introduction to An Architecture of the Ozarks, Blackwell edit., (Princeton Architectural Press, 2005).

"Downtown Phoenix Public Market - The ASU Integral Studio," Shade Magazine, (2004): 66-67.

"The Capital of the 20th Century-Updated", Working Papers, Shrinking Cities, Institute for Contemporary Art, (Leipzig, 2004): 50-54.

"Detroit, Capital of the 20th Century," Praxis, (Issue 5): 113-119.

Authored Articles cont'd.../

"Shade Sutures, Retrofitting Our Desert City, with Nan Ellin, Shade Magazine, (2002): 32-37. Authored Articles cont'd.../

"The Best that the World has to Offer," Stalking Detroit, Daskalakis, Young, Waldheim edit., (Actar, 2001), 42-56.

"Erasing Detroit," Stalking Detroit, Daskalakis, Young, Waldheim edit., (Actar, 2001), 100-103.

"The Receding Horizon of Mies - Work of the Cranbrook Architecture Studio," The Presence of Mies, Mertens edit., (Princeton Architectural Press, 2000), 98-117.

"Craft in Architecture and Education," *Reflections on Architectural Practice in the Nineties*, William Saunders editor, (Princeton Architectural Press, 1996), 72-75.

"Construction at Cranbrook Academy of Art," *Learning by Building, Design and Construction in Architectural Education, William Carpenter, (Van Nostrand Reihhold, 1997), 33-42.*

Forward to Morphosis Tangents and Outakes, Mayne, (Artemis Verlage, 1993), 1.

"Building Blocks," Intersight 3, Journal of the School of Architecture and Planning, SUNY Buffalo, (1995): 11-13.

"Representation in the Age of Simulation," *Architecture Ethics and Technology*, Perez-Gomez and Pelletier, (McGill-Queen's Publishers, 1994), 123-124.

"Un-Making and the Possibility of Critical Work," On Making, Pratt Journal of Architecture, (Rizzoli, 1992), 18-37.

"Mark West at the Storetront for Art and Architecture," Storefront for Art and Architecture Newsprint, (1992)

AUTHORED BOOKS

Architecture Studio, Hoffman, (Rizzoli, New York, 1994).

ARTICLES and CHAPTERS ON MY WORK

"Recording Wall," *Installations by Architects*, Bonnemaision and Eisenbach, (Princeton Architectural Press, 2009), 65-67.

"Post-Modern, Full Circle," XS, Big Ideas, Small Buildings, LeCuyer, (Richardson, Universe, London, 2002), 58-61, 76-79.

"Dan Hoffman, Cool Connectors, Bio-Climatic Urbanism in Phoenix, "A+U, (#382, June 2002): 92-97.

"A Modern Master's Spirit Soars Anew," New York Times, (June 3,1999), p. F1

"Dan Hoffman and the Cranbrook Architecture Office," AP+ Magazine, (May-June 1998): 31-59.

"Cranbrook Continuum," Architectural Review, (November 1997): 76-81.

"Il Sogno di Cranbrook," Casabella (#644, April 1997): 16-19.

"The New Entrance for Cranbrook," ARK -, (#5-6, June 1996): 36-38.

"An Interview with Dan Hoffman," ARK - Finnish Architectural Review, (#4, November 1995): 20-26.

"Erasing Detroit," Art Papers, (September 1992):

"Dan Hoffman at the Storefront for Art and Architecture," Art Forum, (April 1991): 125.

STUDIO MA PUBLISHED WORK

"Studio Ma designs net-zero timber building for Arizona State," Architects Newspaper, (November 2017

"The Past and Future of Housing," Architect Magazine, (October 2017

"Scottsdale's Museum of the West," *Metropolis*, (September 2016: 54-56.

"Design Vanguard – Studio Ma, Phoenix," Architectural Record, (December 2014): 78-79.

"Manzanita Hall," Architectural Record, (November 2014).

"PRD 845," ARCH Dailey, (September 12, 2011).

"Shade Canopies Benefit Arizona Campus," Fabric Architecture, (July 2010).

"Build a Nice House and Mom Wants In," New York Times, (August 31, 2006), H&G -1.

"Finding the There, There," Landscape Architecture, (April 2003).

AWARDS AND RECOGNITION

2018 Arizona AIA Educator of the Year Award
2017 Architect's Magazine, Architect's 50, (Studio Ma ranked number 11 in a national survey of architecture firms)
2017 Western Mountain Region Honor Award – Lakeside Graduate Housing, Princeton University
2016 Arizona AIA Firm of the Year
2015 Arizona AIA Honor Award – Scottsdale's Museum of the West
2015 Arizona AIA Honor Award – ASU Manzanita Hall Renovation
2015 Arizona AIA Merit Award – ASU Student Recreation Center
2010 Arizona AIA Honor Award – Whispering Hope Ranch
2010 Arizona AIA Merit Award – George Condominiums
2009 Chicago Athenaeum American Architecture Award – PRD 845
2009 Arizona AIA Merit Award – PRD 845

INVITED LECTURES

Aarhus University, AlA Iowa State Convention, AlA Iowa State Convention, AlA Arizona State Convention, AlA Iowa State Convention, Arhus University-Denmark, Arizona State University, California College of the Arts, Barcelona Colegio de Arquitectos, Carleton University, Cooper Union, Cornell University, Delft Technical University, Eindhoven Technical University, Helsinki Technical University, Iowa State University, KTH School of Architecture- Stockholm, Lawrence Technical University, Louisiana State University, McGill University, Miami of Ohio University, Mississippi State University, McGill University, Ohio State University Penn State University, Savanna College of Art, Temple University, UCLA, Union of international Architects Congress XIX, University of Arkansas, University of Cincinnati, University of Colorado at Denver, University of Detroit, University of Illinois at Champagne-Urbana, University of Illinois-Circle Campus, University of Manitoba, University of Maryland, University of Michigan, University of Pennsylvania, University of Texas at Arlington, University of Tennessee, University of Toronto, University of Waterloo, University of Virginia, Virginia Tech, Rensselaer Polytechnic Institute, SUNY Buffalo, Yale University, Washington University, University of Washington-Pullman, Woodbury University-Los Angeles, Woodbury University-San Diego

REFERENCES:

Diogo Burnay, Director, School of Architecture, Dalhousie University

diogo.burnay@dal.ca

902 494 4128

Ron McCoy, Princeton University Architect, FAIA (Former Director, School of Architecture, Arizona State University)

rmccoy@princeton.edu

609 258 3356

Stephen Vogel, Former Dean, University of Detroit, Mercy

vogelsp@udmercy.edu

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Shujuan Li

School of Landscape Architecture and Planning College of Architecture, Planning and Landscape Architecture The University of Arizona 1004 N Olive Road, Tucson, AZ 85719 <u>shujuanli@email.arizona.edu</u>, 520-621-3662

EDUCATION

Ph.D. in Geography (May, 2009)

Department of Geography, Texas A&M University Dissertation: Self-organizing Criticality among Chinese Cities

Master of Science in Ecology (June, 2003)

Department of Ecology, Peking University, China Thesis: Study on Expansion Modes, Driving Mechanism and Dynamic Modeling of Built-up Land-use in Nanchang, China

Bachelor of Science in Geography (June, 2000)

Department of Geography, Beijing Normal University, China

PROFESSIONAL EMPLOYMENT

The University of Arizona

Associate Professor, School of Landscape Architecture and Planning, The University of Arizona, 2017-present

Utah State University

Associate Professor, Department of Landscape Architecture and Environmental Planning, Utah State University, 2016-2017

Assistant Professor, Department of Landscape Architecture and Environmental Planning, Utah State University, 2009-2016

Faculty Associate, Ecology Center, Utah State University, 2011-2017

Faculty Researcher, iUTAH (innovative Urban Transitions & Aridregion Hydro-sustainability), 2012-2017

Texas A&M University

Research Assistant, Department of Geography, Texas A&M University, 2004-2009

Lab Instructor, Department of Geography, Texas A&M University, 2005-2008

Teaching Assistant, Department of Geography, Texas A&M University, 2004

The National Disaster Reduction Center of China

Assistant Engineer (Full Time), 2003-2004

Peking University, China

Research Assistant, Department of Ecology, 2000-2003

GRANTS

- 2015, Co-Principal Investigator (PI: Dr. Sean Michael, Co-PI: Todd Johnson). Madison Farm Site Planning Internship. Madison House Foundation (\$40,560).
- 2015-2016, Co-Principal Investigator (PI: Dr. Bo Yang). Green Infrastructure Design for Stormwater Quality and Climate Change Resilience: Monitoring and Modeling Study in a Semiarid Environment. CELA/CLASS Fund (\$25,000).
- 2014-2015, Collaborator, Coordinated Resource Management Planning for the South Fork of Chalk Creek Watershed, Utah. Utah Department of Agriculture and Food (\$20,500).
- 2013-2016, Ph.D. Co-advisor (with Dr. Joanna Endter-Wada). Doctoral Fellowship for Enjie Li, Coupling Water and Land Use Planning. iUTAH NSF EPSCoR (\$71,677).
- 2013-2015, Co-Principal Investigator (PI: Dr. Carlos Licon). Urban Growth Patterns, a Century of Transformation in Utah Communities. Utah Agricultural Experiment Station (\$11,393).
- 2013-2015, Principal Investigator. Water Management for Wildlife under Climate Change-A case study of Cache Valley, Utah. Utah Agricultural Experiment Station (\$19,787).
- 2013-2014, Co-advisor (with Dr. Joanna Endter-Wada). Undergraduate Research assistantship, Population Growth and Land Use and Land Cover Change in the Wasatch Front Metropolitan Area. iUTAH NSF EPSCoR (\$9,840).
- 2012-2017, Collaborator, iUTAH innovative Urban Transitions and Aridregion Hydro-sustainability. National Science Foundation, EPSCoR (\$20 million).
- 2012-2017, Principal Investigator. Water-Related Agricultural Land Use in Utah's Urban Edge. Utah Agricultural Experiment Station (\$22,500).
- 2011-2013, Principal Investigator. Land Use and Land Cover Dynamics under Climate Change in Urbanizing Intermountain West. Utah Agricultural Experiment Station (\$18,040).
- 2010-2011, Co-Principal Investigator (PI: Dr. Bo Yang, Co-PI: Professor Nancy Mesner). Integrating Land Use Planning Tools for Groundwater and Surface Water Protection in Middle Bear River Watershed (Cache Valley). Funded by Research Catalyst (RC) Seed Grant, Utah State University (\$18,533).
- 2009-2011, Co-Principal Investigator (PI: Dr. Carlos Licon, Co-PI: Dr. Michael Dietz). Assessment of Sustainable Development Possibilities of Mexican Municipalities along the United States-Mexico Border. Funded by the Border Environmental Cooperation Commission (\$25,000).

PUBLICATIONS (* denotes graduate student; ** denotes undergraduate student)

Peer-Reviewed Journal Articles

- Yang, B. and S. Li. 2019. Blending project goals and performance goals in ecological planning: Ian McHarg's contributions to landscape performance evaluation. *Socio-Ecological Practive Research*. 1(3-4): 209-225.
- Christensen, K., S. Chen* and S. Li. 2019. A Comparison of park access with park need for children: Case study in Cache County, Utah. *Landscape and Urban Planning*. 187: 119-128.
- Li, E.*, J. Endter-Wada and S. Li. 2019. Dynamics of Utah's agricultural landscapes in response to urbanization: a comparison between irrigated and non-irrigated agricultural lands. *Applied Geography*. 105: 58-72.
- Li, E.*, S. Li and J. Endter-Wada. 2017. Water-smart growth: Linking water and land in the arid urbanizing environment. *Journal of Environmental Planning and Management* 60(6): 1056-1072. http://www.tandfonline.com/doi/full/10.1080/09640568.2016.1197106 [Impact Factor: 1.367]
- Jackson-Smith D., P. Stoker, M. Buchert, J. Endter-Wada, C. Licon, M. Cannon, S. Li, Z. Bjerregaard, and L. Bell. 2016. Differentiating urban forms: A neighborhood typology for understanding urban water systems. *Cities and The Environment* 9(1). http://digitalcommons.lmu.edu/cate/vol9/iss1/5/.
- Wang, Z., B. Yang, S. Li and C. Binder*. 2016. Economic Benefits: Metrics and Methods for Landscape Performance Assessment. *Sustainability* 8, 424; DOI: 10.3390/su805424. [Impact Factor: 1.343]
- Li, S. 2016. Rank-size distributions of Chinese cities: Macro and micro patterns. *Chinese Geographical Science* 26(5): 577-588. [Impact Factor: 0.877]
- Yang, B. and S. Li. 2016. Design with nature: Ian McHarg's ecological wisdom as actionable and practical knowledge. *Landscape and Urban Planning*. [Impact Factor: 3.654]
- Yang, B., S. Li and C. Binder*. 2015. A research frontier in landscape architecture: Landscape performance and assessment of social benefits. *Landscape Research* DOI: 10.1080/01426397.2015.1077944. [Impact Factor: 1.077]
- Yang, B., S. Li, H. Wall**, P. Blackmore**, and Z. Wang. 2015. Green infrastructure design for improving stormwater quality: Daybreak community in the United States West. *Landscape Architecture Frontiers* 3(4): 12-21.
- Li, S. and B. Yang. 2015. Introducing a new method for assessing spatially explicit processes of landscape fragmentation. *Ecological Indicators* 56: 116-124. [Impact Factor: 3.444]

- Li, E.*, J. Endter-Wada and S. Li. 2015. Characterizing and contextualizing megacities' water challenges. *Journal of the American Water Resources Association* 51(3): 589-613.
 [Impact Factor: 1.348] (2015 Boggess Award for the *best paper* published in the Journal)
- Yang, B. and S. Li. 2013. Green infrastructure design for stormwater runoff and water quality: Empirical evidence from large watershed-scale community developments. *Water* 5(4): 2038-2057. [Impact Factor: 1.428]
- Yang, B., S. Li, B.R. Elder and Z. Wang. 2013. Community planning approach and residents' perceived safety: A landscape analysis of park design in the Woodlands, Texas. *Journal of Architectural and Planning Research* 30(4): 311-327. [Impact Factor: 0.737]
- Yang, B., M. Li and S. Li. 2013. Design-with-Nature for Multifunctional Landscapes: Environmental Benefits and Social Barriers in Community Development. *International Journal of Environmental Research and Public Health* 10(11): 5433-5458. [Impact Factor: 2.063]
- Li. S. and D. Sui. 2013. Pareto's law and sample size: A case study of China's urban system 1984-2008. *GeoJournal* 78(4): 615-626.
- Zeng, H., Y. L. Chu, and S. Li. 2007. Construction and utility of a general-conversion probability model for simulation of built-up area spatial expanding in Nanchang City of China. *Scientia Geographica Sinica* 27(4): 473-479 (in Chinese).
- Zeng, H., D. Z. Sui, and S. Li. 2005. Linking urban field theory with GIS and Remote Sensing to detect signatures of rapid urbanization on the landscape: toward a new approach for characterizing urban sprawl. *Urban Geography* 26(5): 410-434.
- Li, S. and H. Zeng. 2004 The expanding characteristics study of built-up land use along the urbanization gradient in quickly urbanized area a case study of Nanchang area. *Acta Ecologica Sinica* 24(1): 55-62 (in Chinese with English abstract).
- Li, S., H. Zeng, J. Xia, and L. Zhang. 2004. The status and some intending problems of landscape spatial dynamic model. *Chinese Journal of Applied Ecology* 15(4): 701-706 (in Chinese with English abstract).
- Zeng, H., N. Kong, and S. Li. 2002. A fragmentation study of mountain forest landscape based on boundary characteristics. *Acta Ecologica Sinica*. 22(11): 1803-1810 (in Chinese with English abstract).
- Kong, N., H. Zeng, and S. Li. 2002. A study of the spatial distribution characteristics of human landscape impact in Wolong National Natural Reserve, Sichuan Province. *Acta Scientiarum Naturalium Unicersitatis Pekinensis* 38(3): 393-399 (in Chinese with English abstract).
- Li, S., and H. Zeng. 2002. The application of remote sensing technique in landscape ecology. *Journal of Remote Sensing* 6(3): 233-240 (in Chinese).
- Zeng, H., L. Gao, and S. Li. 2002. A strategy study on ecological integrated renovation of Dongchuan region, Yunan Province. *China Environmental Science* 22(1): 80-84 (in Chinese with English abstract).

• Zeng, H., N. Kong, and S. Li. 2001. The human impact on landscape structure in Wolong Nature Reserve. *Acta Ecologica Sinica* 21(12): 1995-2001(in Chinese).

Peer-Reviewed Book Chapters

• Yang, B., S. Li, W. Xiang, I. Bishop, K. Liao, and H. Liu. (2018). What is ecological wisdom? Definition, acquisition, and prospects. In Yang, B., Young, R. (Eds.). *Ecological Wisdom: Theory and Practice*. United Kingdom: Springer-Nature. ISSN: 2367-0029.

Peer-Reviewed Conference Proceedings

- Yang B. and **S. Li**. 2016. Web-Enhanced Teaching of Landscape Architecture Digital Graphics: An Evaluation of Benefits and Challenges. *Landscape Research Record* 3: 28-37.
- Li, S., B. Yang and J. Yan. 2013. 3D Digital Graphics in Landscape Architecture Professional Practice: Current Conditions in a Nutshell. *Landscape Research Record* 1: 2-10. Available at: https://www.thecela.org/pdfs/Landscape_Research_Record_No.1.pdf [Acceptance rate: 51.3%]

Invited, Non-referred Article

• Li, E., J. Endter-Wada and S. Li. 2015. Linkages between water challenges and land use planning in megacities. *Water Resources IMPACT* 17(1): 9-12.

Professional Conference Papers/Presentations

- Yang, B., Y. Luo, S. Li. (2019). Social Benefits Assessment: Comparing Project Goals with Outcomes. 2019 CELA conference, May 6-9, 2019, UC Davis.
- Luo, Y., B. Yang, **S. Li.** (2019). Doing Real and Permanent Good: Examining Landscape Performance Benefits from an Ecological Wisdom Perspective. 2019 CELA conference, May 6-9, 2019, UC Davis.
- Li, S. and B. Yang. Social Media in Lanscape Planning and Design: A Review. American Association of Geographers Annual Meeting, Washington DC, USA, April 3-April 7, 2019.
- Yang, B., M. Currie, S. Li. (2019). Ecological Planning as a Tool for Urban Flood Resilience: Lessons from Community Developments in the Houston Region. The 99th American Meteorological Society Conference, Phoenix, Arizona, January 6-10, 2019. (abstract accepted)
- Li, S. (2018). Geodesign and Landscape Architecture. The 2nd Mountain Landscape Architecture Symposium, Colorful Parks in Guizhou. Guiyang, China, June 22-23, 2018.
- Li, S. and B. Yang. From Design with Nature to Geodesign: The Evolution of GIS in Landscape Architecture. American Association of Geographers Annual Meeting, New Orleans, Louisianan, USA, April 10-April 14, 2018.
- Yang, B., S. Li, Z. Wang. (2018). Economic Benefits: Metrics and Methods for Landscape Performance Assessment. 2018 CELA conference. Blacksburg, Virginia, March 21-24,

2018.

- Li E., S. Li and J. Endter-Wada. The good, the bad and the ugly: 30 years of land use changes in the Wasatch Range Metopolitan Area, Utah. The 2016 Annual Meeting of the Association of American Geographers. San Francisco, California, USA, March 28-April 2, 2016.
- Li, S. and B. Yang. Geodesign: A new revolution of GIS. The 2016 Annual Meeting of the Association of American Geographers. San Francisco, California, USA, March 28-April 2, 2016.
- Li, S., B. Yang, J. Endter-Wada and E. Li. Integrating water and land use planning for wildlife habitat conservation. Council of Educators in Landscape Architecture (CELA) Conference. Salt Lake City and Logan, Utah, USA, March 23-26, 2016.
- Yang, B., S. Li, H. Wall, P. Blackmore, G. Hardy, J. Locke. Green infrastructure design for stormwater quality and climate change resilience: Monitoring and modeling study in a semiarid environment. Council of Educators in Landscape Architecture (CELA) Conference. Salt Lake City and Logan, Utah, USA, March 23-26, 2016.
- Li, S. Geodesign: A new revolution of GIS in landscape planning. Speaker Series in the Department of Landscape Architecture and Environmental Planning at Utah State University. Logan, Utah, USA, November 20, 2015.
- Li E., S. Li and J. Endter-Wada. Utah's agricultural land conversion: Implications for water management and land-use planning. The 2015 American Water Works Association Intermountain Section Annual Conference. Logan, Utah, USA, September 16-18, 2015.
- Yang, B. and S. Li. Ecological planning for urban sustainability: Manifestation of Ian McHarg's ecological wisdom. The Ecological Society of America (ESA) 100th annual conference. Baltimore, MD, USA, August 9-14, 2015.
- Li E., S. Li and J. Endter-Wada. Spatiotemporal dynamics of water-related agricultural land use during rapid urbanization process. The 2015 Annual Meeting of the Association of American Geographers. Chicago, Illinois, USA, April 21-25, 2015.
- Li, S. and B. Yang. Quantifying forest fragmentation pattern and process during rapid urbanization. The 2015 Annual Meeting of the Association of American Geographers. Chicago, Illinois, USA, April 21-25, 2015.
- Yang, B. and S. Li. Design with nature: Ian McHarg's ecological wisdom as actionable and practical knowledge. Ecological Wisdom for Urban Sustainabilty Symposium. Chongqing, China, October 17-19, 2014.
- Li, S. and B. Yang. Spatially Explicit Processes of Land Transformation and Fragmentation: Introducing a new method for assessing forest landscape change. The 2014 Annual Meeting of the Association of American Geographers. Tampa, Florida, USA, April 8-12, 2014.
- Li, S. Rapid urbanization in China: A story of Shenzhen. Invited presentation at Utah Valley University's Twenty-Fifth Annual Environmental Ethics Symposium, Orem, Utah,

USA, April 3, 2014.

- Jackson-Smith D., M. Buchert, P. Stoker, M. Cannon, S. Hinners, S. Li, J. Endter-Wada, C. Licon, Z. Bjerregaard, and E. Li. Neighborhood socio-ecohydrology along a gradient of urbanization. 2013 American Geophysical Union Annual Conference. San Francisco, California, USA, December 9-12, 2013,.
- Li E., J. Endter-Wada and S. Li. Learning, modeling and envisioning: An application of integrated water and land use planning. The 2013 American Water Resources Association (AWRA) Annual Conference. Portland, Oregon, USA, November 4-7, 2013.
- Li E., J. Endter-Wada and S. Li. Coupling water and urban planning in mega cities: A review of theoretical, political, and technical integration needs. American Water Resources Association (AWRA) and Beijing Hydraulic Engineering Society (BHES) 2013 Specialty Conference on Mega Cities: Challenges and Solutions. Beijing, China, September 16-18, 2013.
- Li, S. Evaluating Plan implementation in the transitional China: A conformance based study of Shenzhen's master plans. The 2013 Association for China Planning (IACP) conference. Shanghai, China, June 29-July 1, 2013.
- Li E., S. Li and J. Endter-Wada. Water-smart growth: Integrating water management and land use planning. 2013 Spring Runoff Conference: Water, People and Sustainability: Integrating Physical, Social and Ecological Dimensions. Utah State University, Logan, Utah, USA, April 9-10, 2013.
- Li, S., B. Yang and J. Yan. 3D Digital Graphics in Landscape Architecture Professional Practice: Current Conditions in a Nutshell. Council of Educators in Landscape Architecture (CELA) Conference. University of Texas, Austin, Texas, USA, March 26-30, 2013.
- Yang, B. and S. Li. Web-enhanced teaching of landscape architecture digital graphics: An evaluation of benefits and challenges. Council of Educators in Landscape Architecture (CELA) Conference. University of Illinois, Urbana-Champaign, Illinois, USA, March 28-31, 2012.
- Li, S. Quantifying spatiotemporal patterns of self-organizing and planned urban growth. Invited presentation for the Consortium for Research on China and Asia, University of Utah. Salt Lake City, Utah, USA, March 9, 2012.
- Li, S., B. Yang and D. Sui. Urban Planning in Shenzhen 1978-2010: A Critical Review and Evaluation. The 2011 Conference of the Association of Collegiate Schools of Planning. Salt Lake City, Utah, USA, October 13-16, 2011.
- Li, S., B. Yang and D. Sui. Comparing self-organizing and planned urban growth -Empirical evidence from Shenzhen, China. The 2011 Annual Meeting of the Association for China Planning (IACP). Beijing, China, June16-19, 2011.
- Li, S. and D. Sui. Pareto's Law and sample size: A case study of China's urban system. The 2011 Annual Meeting of the Association of American Geographers (AAG). Seattle, Washington, USA, April 12-16, 2011.

- Li, S. 2009. Quantifying spatiotemporal patterns of self-organizing and planned urban growth. The 2009 Annual Meeting of the Association of American Geographers (AAG). Las Vegas, Nevada, USA, March 22-27, 2009.
- Li, S. Urban development as a fight between city government and local agencies: A case study of Bao'an District, Shenzhen. The 2008 Annual Meeting of the Association of American Geographers (AAG). Boston, Massachusetts, USA, April 17-21, 2008.
- Li, S. Urban planning and urban spatial development in Shenzhen, China. The 2007 Annual Meeting of the Association of American Geographers (AAG). San Francisco, California, USA, April 17-21, 2007.
- Li, S. Does urban planning matter? A case study of Shenzhen, China. The 2006 Annual Meeting of the Southwestern Division of the Association of American Geographers (AAG). Norman, Oklahoma, USA, October 26-27, 2006.
- Li, S. Zipf's law and city size evolution in China. The 2006 Annual Meeting of the Association of American Geographers (AAG). Chicago, Illinois, USA, March 7-12, 2006.
- Li, S. Neighborhood characteristics across spatial and temporal scales: Two case studies in urban growth using a GIS approach. The 2005 Annual Meeting of the Association of American Geographers (AAG). Denver, Colorado, USA, April 5-9, 2005.
- Li, S. Impacts of neighborhood characteristics on land use/land cover change: Two case studies using a GIS approach. The 2004 Annual Meeting of the Southwestern Division of the Association of American Geographers (AAG). Nacogdoches, Texas, USA, November 10-12, 2004.
- Zeng, H. and S. Li. The impact of urban pattern on the sprawl of built-up areas— A case study of Nanchang area. The 4th Congress of Landscape Ecology in China. Beijing, China, December 12-15, 2003.

AWARDS AND SCHOLARSHIPS

2016	Boggess Award for the Best Paper published in the <i>Journal of the American Water Resources</i> Association.
2008	Graduate Student Research and Presentation Grant (Office of Graduate Studies, Texas A&M University)
2005-2008	Conference Travel Grant (Department of Geography, Texas A&M University)
2004	Incentive Tuition Scholarship (College of Geosciences, Texas A&M University)
2003	Second prize of China National Environmental Science and Technology (The Ministry of Environmental Protection of China)
2001-2002	Outstanding Graduate Student Award (Peking University)
2001-2002	"Antai" University Fellowship (Peking University)
1998-1999	Third place prize of Academic Scholarship (Beijing Normal University)

TEACHING

The University of Arizona

- Instructor PLG 580—Environmental Spatial Analysis (Spring 2018, Spring 2019)
- Instructor PLG 495/595—Geodesign Studio (Spring 2018, Spring 2019)
- Instructor, PLG 472/572 Environmental Land Use Planning (Fall 2017, Spring 2019)
- Instructor, GEOG 461– Urban GIS (Fall 2017, Fall 2018, Fall 2019)
- Instructor, PLG 599-018 Independent Studies (Fall 2018)
- Instructor, GIST 602b—Vector GIS (Summer 2018, Summer 2019)

Utah State University

- Instructor, LAEP 3400/6400 Geodesign Studio: Advanced Geographic Information and Tools (Spring 2015, Spring 2016)
- Instructor, LAEP 3300 Advanced Computer Applications in Landscape Architecture (Spring 2010, Fall 2010, Fall 2011, Fall 2012, Fall 2013, Fall 2015)
- Co-instructor, LAEP 4100 Urban Theory, Systems, and Design (Fall 2009)
- Co-instructor, LAEP 4130 Emerging Areas (Spring 2010)
- Co-instructor, LAEP 4350/6650 International Travel Course to China (Summer 2013)
- Co-instructor, LAEP 6110 Landscape Planning for Wildlife (Spring 2011)
- Instructor, LAEP 6110 Landscape Planning for Wildlife (Spring 2012, Spring 2013, Spring 2014, Spring 2015, Spring 2016)
- Instructor, LAEP 6860 Trends in Landscape Architecture Seminar (Fall 2011, Fall 2012, Fall 2013)
- Co-instructor, LAEP 6890 Seminar on Thesis Proposals and Procedures (Spring 2010)
- Co-instructor, LAEP 6100 Regional Landscape Analysis and Planning (Fall 2010, Fall 2011, Fall 2012, Fall 2013)
- Co-instructor, LAEP 6910 Reading Seminar (Fall 2009, Fall 2010, Spring 2011, Spring 2012, Spring 2013, Spring 2014, Spring 2015)

Texas A&M University

- Lab instructor, GEOG 203 Planet Earth System Science (Fall 2005, Spring 2006)
- Lab instructor, GEOG 332 Thematic Cartography (Fall 2006, Spring 2007)
- Lab instructor, GEOG 390 Principles of GIS (Fall 2007, Spring 2008, Fall 2008)
- Lab instructor, GEOG 475 Advanced GIS (Spring 2005)
- Teaching assistant, GEOG 662 GIS in Land and Property Management (Fall 2004)

Invited Lectures in other LAEP classes

- Li, S. 2011-2016. Applications of GIS in Planning. LAEP 6740 Planning Theory and Methods. Invited by Instructor Caroline Lavoie, Utah State University.
- Li, S. 2012 & 2011. GIS and ecological conservation. LAEP 1030 Introduction to landscape architecture. Invited by Instructors Susan Buffler and Dave Anderson, Utah State University.
- Li, S. 2010. Urban and regional planning in China. LAEP 3700 City and regional planning. Invited by Instructor Bo Yang, Utah State University.
- Li, S. 2009 & 2010. Detecting signatures of rapid urbanization on the landscape using a GIS-based analysis and modeling approach: Planned vs. Self-organized metropolitan growth in Shenzhen, China. LAEP 6860 Graduate Seminar. Invited by Instructor Sean Michael, Utah State University.

Advising for Student Awards and Honors

- Co-Instructor (Monica Landgrave Serrano, Emma James, Jon Choi, Jenny Moscato, Graduate students), Social Equity in Stormwater Management in Tucson. Second Place Award in Planning Excellence Competition, University of Arizona (2018).
- Co-Major Advisor (Enjie Li, PhD student), Modeling Residential Water Demands under Climate Change in a Transitional Urban System. NSF iUTAH/EPSCoR Graduate Fellowship (2013-2017).
- Faculty Advisor (Kimberly Harris, BLA), "New West" Development for Remote Western Towns: A Case Study of Utah's Scenic Byway 12 Corridor. Undergraduate Research and Creative Opportunities Grant, Utah State University (2012-2013).
- Faculty Advisor (Allan Perry, BLA), Land Use Related Groundwater Change: A Case Study for Sanpete County, Utah. The 11th annual Utah Research Presentation to Utah Legislators on Capitol Hill, Salt Lake City, Utah (2012).
- Faculty Advisor (Cameron Bodine and Allan Perry, BLA), Land Use Related Groundwater Change: A Case Study for Sanpete County, Utah. First Place in the Student Poster Contest in the 2011 Utah Planning Students' Organization "Planning for Sustainability" Conference, University of Utah, Utah (2011).
- Faculty Advisor (Cameron Bodine and Allan Perry, BLA), Land Use Related Groundwater Change: A Case Study for Sanpete County, Utah. First Place in the Student Poster Contest at the 2011 Utah Geographic Information Council (UGIC) Conference, Logan, Utah (2011).
- Faculty Advisor (Blake Burton, Andrew Stringfellow, and Jeremy Webb, BLA). Estimating impervious surface using remote sensing and parcel data: A comparative evaluation. First Place in the Student Poster Contest at the 2010 Southwest ESRI Users Group (SWUG)/Utah Geographic Information Council (UGIC) Conference, Moab, Utah (2010).

SERVICE

Professional Service

- Book proposal review for publisher: CRC Press, Taylor & Francis Group, 2019.
- Manuscript Reviewer for Journals: GeoJournal; Computers, Environment, and Urban Systems; GeoCarto; Cities; Journal of Environmental Planning and Management; Ecological Engineering; Journal of Urban Management; Landscape and Urban Planning; Environment and Planning B; Environment Management; Journal of the American Water Resources Association
- Abstract and Manuscript Reviewer for Conferences, Council of Educators in Landscape Architecture Conference, 2013, 2016, 2020; Computers in Urban Planning and Urban Management, Cambridge, USA, 2015; The International Association for China Planning Conference, 2012, 2011;
- Grant Proposal Reviewer, Utah Agricultural Experiment Station, 2012, 2017; Geography and Spatial Sciences, National Science Foundation, 2011.
- Theme Track Chair, Council of Educators in Landscape Architecture Conference, 2016.
- Session Chair: "Quantifying Forest and Trees," at the 2015 Annual Meeting of the Association of American Geographers. Chicago, Illinois, April 17-21, 2015; "Urban Planning of China" at the 2007 Annual Meeting of the Association of American Geographers. San Francisco, California, April 17-21, 2007.

Service at The University of Arizona

University

Committee Member, Faculty Search Committee, School of Geography and Development

College of Architecture, Planning and Landscape Architecture

- Faculty Advisor, International Student Club, College of CAPLA
- Promote & Tenure Review Committee Member
- Promotion Review Committee Member for career track faculty candidates.
- Committee Member, College Faculty Status Committee, CAPLA
- Post Tenure Audit Faculty Observer

School of Landscape Architecture and Planning

- Committee Member, The School Faculty Status Committee,
- Committee Member, Planning Program Curriculum Development Committee

- Course Reviewer, PLG 256 Sustainable Cities and Societies
- Course Reviewer, LAR 611 Design Studio IV

Service at Utah State University

College of Agriculture and Applied Sciences

- Committee Member, College of Agriculture and Applied Sciences Awards Committee, 2011-2016.
- Committee Member, College of Agriculture and Applied Sciences Safety Committee, 2015-2016.

Department of Landscape Architecture and Environmental Planning

- Committee member, organizing committee of Council of Educators in Landscape Architecture Conference, 2015-2016.
- Faculty advisor, LAEP Charrette Week, Utah State University, 2010-2016.
- Faculty coordinator, LAEP Speaker Series, LAEP, Utah State University, 2011-2016.
- Faculty representative to the Technology and Research Committee of the LAEP Advisory Board, Utah State University, 2009-2013.
- Committee member, Faculty Search Committees, LAEP, Utah State University, 2012, 2013.
- Committee member, MLA and BLA Graphic Presentation Committee of LAEP for Landscape Architecture Accreditation Board (LAAB), Utah State University, 2010-2011.
- Committee member, MLA and BLA Curriculum Report Committee of LAEP for LAAB, Utah State University, 2010-2011.

BO YANG, PhD, PLA, ASLA, APA

School of Landscape Architecture and Planning College of Architecture, Planning, and Landscape Architecture The University of Arizona, Tucson, AZ 85721-0075 Office: 1040 N. Olive Road, A303k; 1+520-621-1009; boyang17@email.arizona.edu

EDUCATION

- Ph.D. in Urban and Regional Sciences (2009) Dept. of Landscape Architecture & Urban Planning, Texas A&M University
- Master of Landscape Architecture (2009) Dept. of Landscape Architecture & Urban Planning, Texas A&M University
- Master of Architecture (2004) Huazhong University of Science & Technology, China
- Bachelor of Architecture (2002) Huazhong University of Science & Technology, China

PROFESSIONAL APPOINTMENTS

- Founding Editorial Board Member. Socio-Ecological Practice Research. Springer (2018-present)
- Founding Principal. Luo & Yang Associates LLC (2018-present)
- Assistant Editor. Landscape Research. Routledge, United Kingdom (2017-present)
- Faculty Associate. Environmental Research Institute (2017-2018)
- Vice President for Research & Creative Scholarship, Council of Educators in Landscape Architecture (CELA) (2016-2018)
- International Advisory Committee. Academic Advisory Board, Center for Urban Design in Cold Region. Jilin Jianzhu University, Jilin, China (2017-2020)
- Changchun Urban Design Expert Advisor. Changchun City Planning Bureau, China (2017-2020)
- ChangBai Mountain Scholar (appointed by The People's Government of Jilin Province, China). Jilin Jianzhu University (2016-2019)
- Associate Professor (w/ tenure). School of Landscape Architecture and Planning (2017-present) The University of Arizona
- Associate Professor (w/ tenure). Landscape Architecture & Environmental Planning (2015-2017) Utah State University
- Assistant Professor. Landscape Architecture & Environmental Planning (2009-2015) Utah State University
- Faculty Associate. Ecology Center (2011-2017) Utah State University
- Graduate Student Instructor. Landscape Architecture & Urban Planning (2007-2009) Texas A&M University
- Teaching Assistant. Landscape Architecture & Urban Planning (2005-2007)

Texas A&M University

• Research Assistant. College of Architecture (2002-2004)

Huazhong University of Science & Technology

PROFESSIONAL REGISTRATION

Registered Landscape Architect, State of Utah (by examination). License Number 10406661

RESEARCH

Grant and Fellowship (Funded)

External

- 2019. Rainwater harvesting demonstration model for Tucson Water Department. PI: Bo Yang (\$5,000)
- 2019-2020. Understanding the State of Landscape Performance and the Impacts of the Case Study Investigation (CSI) Program on Landscape Architecture Practice. Penn State Ecology + Design Mini-Grant Program. PI: Hong Wu, Co-PI: Bo Yang (\$5,396)
- 2017-2020. Urban design and performance assessment. Jilin Province, China. PI: Bo Yang (\$75,826)
- 2017-2020. Spatial form of sponge unit under urban viaducts and its landscape performance. National Natural Science Foundation of China. PI: Lihua Yin, 1st Co-PI: Bo Yang (\$135,476)
- 2015-2016. Utah Botanic Center porous pavement green infrastructure performance, iUTAH NSF. PI: Bo Yang. Co-PIs: Ryan Dupont, David Anderson (\$18,664)
- 2015-2016. iUTAH NSF Traineeship, Urban Stormwater Database. Co-advisors: **Bo Yang**, Ryan Dupont Research assistant: Hailey Wall (\$10,000)
- 2015-2016. Green infrastructure design for stormwater quality and climate change resilience: Monitoring and modeling study in semiarid environment. California Landscape Architectural Student Scholarship Fund (CLASS Fund) and CELA. PI: Bo Yang. Co-PI: Shujuan Li. Research assistant: Hailey Wall (National competition, only one proposal was funded) (\$25,000)
- 2014-2017. iUTAH NSF EPSCoR, Doctoral Fellowship, Stormwater Engineering Performance and Modeling. Co-advisors: Ryan Dupont, **Bo Yang** (\$60,000)
- 2013-2014. Landscape Architecture Foundation, Landscape Performance Series Case Studies Review: Content Assessment. **PI: Bo Yang**. Co-PI: Mary Myers (Temple University) (National competition, only one proposal was funded) (\$7,500)
- 2013-2014. Landscape Architecture Foundation, Landscape Performance Series Case Studies Review: Quality Assessment. **PI: Bo Yang**. Co-PIs: Jessica Canfield and Tim Keane (Kansas State University). (National competition, only one proposal was funded) (\$15,000)
- 2013-2014. iUTAH NSF EPSCoR, Focus Area 2, Cache Valley Social and Engineered Water System. Advisor: **BoYang**; Research assistant: Stephen Peaden (\$3,671)
- 2013. Landscape Architecture Foundation (LAF) Faculty Fellowship. Case Study Investigation, LAF Landscape Performance Series [Selected as *one of nine* research fellows from the landscape architecture faculty across the nation]. Firms of collaboration: Design Workshop, Inc. **PI: Bo Yang**. Research assistants: Pamela Blackmore and Chris Binder (\$6,720)

- 2012-2017. iUTAH innovative Urban Transitions and Aridregion Hydro-sustainability. National Science Foundation EPSCoR Grant. Team member of Focus Area 2 The social and engineered ecohydrologic system and Focus Area 3 The coupled human-natural system. Lead institution: Utah State University (\$20,000,000, USU portion 37%; **Bo Yang**: \$11,556)
- 2012. Landscape Architecture Foundation (LAF) Faculty Fellowship. Case Study Investigation, LAF Landscape Performance Series [Selected as *one of ten* research fellows from the landscape architecture faculty across the nation]. Firms of collaboration: Design Workshop, Inc. and Conservation Design Forum. PI: Bo Yang. Research assistants: Yue Zhang and Pamela Blackmore (\$6,720)
- 2011. Landscape Architecture Foundation (LAF) Faculty Fellowship. Case Study Investigation, LAF Landscape Performance Series [Selected as *one of ten* research fellows from the landscape architecture faculty across the nation to conduct post-occupancy evaluation of exemplary design projects, in partnership with leading design firms]. Firm of collaboration: Design Workshop, Inc. **PI: Bo Yang.** Research assistant: Amanda Goodwin (http://lafoundation.org/news-events/blog/archives/2011/05/) (\$3,500)
- 2008-2009. Using SWAT to compare planning methods for neighborhoods: Case study of stormwater in The Woodlands, Texas. Texas Water Resource Institute through the U.S. Geological Survey 104B program. PI: Bo Yang, Co-PIs: Ming-Han Li, Chang-Shan Huang (\$5,000) (Competitive, funding rate 25%-30%)
- 2003-2004. Old city renewal in Wuhan: Case study of Tongfeng and Tongren communities. Graduate Student Research Grant, Huazhong University of Science & Technology, China. Sole PI: Bo Yang (Chinese Yuan 5,000)

Internal (UA and USU) (Funded)

- 2019-2020. CAPLA Teaching Innovation Grant. **PI: Bo Yang.** Co-PIs: Drs. Meredith and Buzzard. (\$4,000)
- 2018-2019. Addressing environmental injustice around green infrastructure in Tucson, Arizona. UA Green Fund. PIs: Adriana Zuniga and Andrea Gerlak. **Collaborator: Bo Yang** (\$25,025)
- 2014-2016. Utah Agricultural Experiment Station (UAES) Grant. Stormwater quality monitoring and modeling of Utah's largest green infrastructure community development. **Sole PI: Bo Yang** (\$19,998)
- 2012-2017. Utah Agricultural Experiment Station (UAES) Project. Land-use planning for farmland and water resource protection in Utah's Wasatch Front urban-rural gradient. **Sole PI: Bo Yang** (operating budget \$22,500, UTA 01105)
- 2012-2014. Utah Agricultural Experiment Station (UAES) Grant. Water resource protection in rural-urban interface: Land use planning for Cache Valley, Utah. **Sole PI: Bo Yang** (\$17,331)
- 2011-2013. Utah Agricultural Experiment Station (UAES) Grant. Low-impact development for stormwater quality and climate change resilience in Utah communities. **Sole PI: Bo Yang** (\$37,331)
- 2010-2011. Integrating land use planning tools for groundwater and surface water protection in Middle Bear River Watershed (Cache Valley). Research Catalyst Grant, Utah State University. PI: Bo Yang; Co-PIs: Nancy Mesner, Shujuan Li (\$18,533)
- 2009. Travel and Preliminary Data Collection Grant. College of Humanities, Arts, and Social Sciences (HASS), Utah State University. **Sole PI: Bo Yang** (\$1,450)

PUBLICATION (* denotes graduate student; ** denotes undergraduate student)

Accepted/Published Journal Article

[SCI: Science Citation Index; SSCI: Social Science Citation Index]

- Yang, B., Li, S.-J. (2019). Blending project goals and performance goals in ecological planning: Ian McHarg's contributions to landscape performance evaluation. *Socio-Ecological Practice Research*, 1, 209-225.
- (SCI) Cheng, M. Dai, F., Yang, B., & Zhu, S.-W. (2019). Assessing the effects of urban green infrastructure morphological pattern on PM2.5 in the neighborhoods of five Chinese megacities. *Building and Environment*, 158, 1-15. [Impact Factor: 4.539]
- (SCI) Cheng, M. Dai, F., Yang, B., & Zhu, S.-W. (2019). Evaluating the effects of neighborhood green space on PM2.5 mitigation: Evidence from five megacities in China. *Building and Environment*, 156, 33-45. [Impact Factor: 4.539]
- Flint, C., Jackson-Smith, D., Yang, B., & Dean, T. * (2019). Transdisciplinary Socio-Scientific Practice: Lessons Learned from Social and Engineering Water Science. *Socio-Ecological Practice Research*, 1(1), 55-66.
- Yang, B., Mesner, N., Drew, M. *, Durfee, D.* (2018). Rain as a Resource: Green infrastructure design and performance at campus setting, USA. *Landscape Architecture Frontiers*, 6(5), 044-059.
- Yang, B., Fang. C. (2018) Editorial: Special Issue Urban Stormwater Management. *Modern Urban Research*, *2*, 1. (in Chinese)
- Fang, C., Lebleu, C. Zhao, H.-Y., Liu, S.-D., **Yang, B.**, (2018). Vision, Pattern, Focus: Research Frontiers of Stormwater Management in 2017 CELA Conference. *Modern Urban Research, 2*, 2-8. (in Chinese)
- (SCI) Fang, C., **Yang, B.** (2017). Modern Christian Landscapes in Nanjing, China: A Literature Review. *Sustainability*, 9, 2155; doi:10.3390/su9112155 [Impact Factor: 1.789]
- Yang, Y.-H., **Yang, B**., & Li, F. -Z. (2017). Assessing historical flooded areas and city comprehensive plans in Nanjing, China. *Hundred Schools in Arts, 5, 266-267.* (in Chinese)
- Fang, C., Li, J., **Yang, B.** (2017) Study on the War Landscape Heritage from Collective Memory Perspective: A Case Study of the Landscape Heritage of the Chinese People's War of Resistance Against Japanese Aggression in Nanjing. *Modern Urban Research*, 7, 22-30. (in Chinese)
- Dai, F., Jiang, J.-Y., **Yang, B.** (2017). Research frontiers of GIS applications in landscape and urban planning. *Chinese Landscape Architecture*, 33 (260), 52-58. (in Chinese)
- (SCI/SSCI) **Yang, B.**, Li, S.-J. (2016). Design with Nature: Ian McHarg's ecological wisdom as actionable and practical knowledge. *Landscape and Urban Planning*, 155, 21-32. [Impact Factor: 3.654]
- (SCI) Wang, Z., **Yang, B.**, Li, S.-J., Binder, C.* (2016) Economic benefits: Metrics and methods for landscape performance assessment. *Sustainability*, 8, 424. [Impact Factor: 1.343]
- (SSCI) **Yang, B.**, Li, S.-J., Binder, C. * (2016). A Research Frontier in Landscape Architecture: Landscape Performance and Assessment of Social Benefits. *Landscape Research*, 41(3), 314-329. [Impact Factor: 1.012] DOI: 10.1080/01426397.2015.1077944.
- Yang, B., Li, S.-J. (2016). Web-enhanced teaching of landscape architecture digital graphics: An

evaluation of benefits and challenges. *Landscape Research Record, No.3*, 28-37. [acceptance rate 20.0%]

- Yang, B., Li, S.-J., Wall, H. **, Blackmore, P. **, Wang, Z. (2015). Green infrastructure design for improving stormwater quality: Daybreak community in the United States West. *Landscape Architecture Frontiers*, 3(4), 12-21. (Invited)
- (SCI) Li, S.-J., **Yang, B.** (2015). Introducing a new method for assessing spatially explicit processes of landscape fragmentation. *Ecological Indicators*, 56, 116-124. [Impact Factor: 3.444]
- Yang, B., Blackmore, P. **, Binder, C. * (2015). Assessing residential landscape performance: Visual and bioclimatic analyses through in-situ data. *Landscape Architecture Journal*, 1, 87-98. Available at: http://www.la-bly.com/news/show_news.aspx?news_id=207. DOI: 10.14085/j.fjyl.2015.01.0085.11. (one of six papers invited for a special issue of Landscape Performance)
- (SSCI) **Yang, B.**, Li, M.-H., Huang, C. S. (2015). Ian McHarg's Ecological Planning in The Woodlands: Lessons Learned after Four Decades. *Landscape Research*, 40(7), 777-798. [Impact Factor: 1.012]
- Yang, B., Goodwin, A. *, Dupont, R., Borecki, M. (2014). Form-based variables for stormwater quality performance: comparing three BMP types in five U.S. States. *Urban Planning and Design Research*, 2(1), 14-19.
- Canfield, J., **Yang, B.** (2014). Reflections on Developing Landscape Performance Case Studies. *Landscape Research Record*, *No.1*, 310-317. [acceptance rate 51.3%]
- Yang, B., Zhang, Y. *, Blackmore, P. ** (2014). Performance and Economic Benefits of Four Streetscape Renovations: A Comparative Case Study Investigation. *Landscape Research Record*, No.1, 300-309. [acceptance rate 51.3%]
- Li, S.-J., **Yang, B.**, Jie, Y. * (2014). 3D Digital Graphics in Landscape Architecture Professional Practice: Current Conditions in a Nutshell. *Landscape Research Record*, *No.1*, 2-10. [acceptance rate 51.3%]
- (SCI) **Yang, B.**, Li, S.-J. (2013). Green infrastructure design for stormwater runoff and water quality: Empirical evidence from large watershed-scale community developments. *Water*, 5, 2038-2057. [Impact Factor: 1.428]
- (SCI) **Yang, B.**, Li, M.-H., Li, S.-J. (2013). Design-with-Nature for multifunctional landscapes: Environmental Benefits and Social Barriers in Community Development. *International Journal of Environmental Research and Public Health*, 10(11), 5433-5458. [Impact Factor: 2.063]
- (SSCI) **Yang, B.**, Li, S.-J., Elder, B. R., Wang, Z. (2013). Community planning approach and residents' perceived safety: A landscape analysis of park design in the Woodlands, Texas. *Journal of Architectural and Planning Research*, 30 (4), 311-327. [Impact Factor: 0.737]
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- (SCI) **Yang, B.**, Li, M.-H. (2010). Ecological engineering in a new town development: Drainage design in The Woodlands, Texas. *Ecological Engineering*, 36 (12), 1639-1650. [Impact Factor: 3.041]
- (SCI) **Yang, B.** (2010). Book Review *Grading for Landscape Architects and Architects*. Peter Petschek with a foreword by Peter Walker. Basel, Schweiz: Birkhäuser Verlag AG (2008). *Landscape and Urban Planning*, 98 (2), 136-137. [Impact Factor: 3.654]
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design. Urban Design International, 15(4), 208-220. [Impact Factor: 0.61]

- Lang, W., Wang, Z., **Yang, B.** (2006). Parse on Double Skin Glass Curtain Wall. *Urbanism and Architecture*, 11(20), 16-19. (In Chinese)
- Lang, W. **Yang, B.**, Li, B.-F. (2003). Smart building envelopes: Sustainability and architecture. *New Architecture*, 86 (1), 9-17. (In Chinese)

Books

- Yang, B., Young, R. (Eds.). (2019). *Ecological Wisdom: Theory and Practice*. The Springer EcoWISE (Ecological wisdom inspired science and engineering) book series. United Kingdom: Springer-Nature. ISSN: 2367-0029. Available at (https://www.springer.com/us/book/9789811305702)
- Canfield, J., **Yang, B.,** Whitlow, H. (2019). *Evaluating Landscape Performance: A Guidebook for Metrics and Methods Selection*. Washington, D.C.: Landscape Architecture Foundation. https://doi.org/10.3153/gb001. Available at

(https://www.landscapeperformance.org/guide-to-evaluate-performance)

• Yang, B. (2018). Landscape Performance: Ian McHarg's ecological planning in The Woodlands, Texas. Routledge Academic Monographs Series (Research in Landscape and Environmental Design). United Kingdom: Routledge. ISBN: 978-1-138-64011-5. Available at (https://www.routledge.com/Landscape-Performance-Ian-McHargs-ecological-planning-in-The-Woodla nds/Yang/p/book/9781138640115)

Edited Peer-reviewed Proceedings

- Yang, B. (Editor-in-Chief). (2018). *Landscape Research Record*, *No.7*. ISSN 2471-8335. Available at (http://thecela.org/landscape-research-record/)
- Yang, B. (Editor-in-Chief). (2017). *Landscape Research Record*, *No.6*. ISSN 2471-8335. Available at (http://thecela.org/wp-content/uploads/LRR6.pdf)
- Yang, B. (Editor). (2017). Council of Educators in Landscape Architecture 2017 Conference Proceedings, Beijing, China, May 26-29, 2017. ISSN 978-0-9853013-4-7. Available at: (http://thecela.org/wp-content/uploads/CELA-2017-Conference-Proceedings_Final.pdf)
- Yang, B. (Co-editor). (2016). *Landscape Research Record, No.5*, Design Implementation Track, Council of Educators in Landscape Architecture. ISSN 2471-8335. Available at (thecela.org/wp-content/uploads/LRR-5_revised_1_21_17.pdf)
- Yang, B. (Co-editor). (2015). *Landscape Research Record, No.4*, Design Implementation Track, Council of Educators in Landscape Architecture. ISSN 2471-8335. Available at (thecela.org/wp-content/uploads/LRR4 Revised-12017.pdf)
- Yang, B. (Co-editor). (2014). *Landscape Research Record, No.2*, Design Implementation Track, Council of Educators in Landscape Architecture. ISSN 978-0-9853013-4-7. Available at (thecelaorg.ipage.com/wp-content/uploads/lrr-no-2.pdf)
- Yang, B. (Co-editor). (2013). *Landscape Research Record, No.1*, Design Implementation Track, Council of Educators in Landscape Architecture. ISSN 978-0-9853013-2-3. Available at (thecelaorg.ipage.com/wp-content/uploads/2013_Landscape_Research_Record_No.1.pdf)

Edited Special Issue

• Yang, B., & Fang, C. (Eds.) (2018) *Modern Urban Research* 2018 Special Issue on Urban Stormwater Management.

Peer-reviewed Book Chapter

- Yang, B., Li, S.-J., Xiang, W.-N., Bishop, I., Liao, K.-H., Liu, H. (2019). What is ecological wisdom? Definition, acquisition, and prospects. In Yang, B., Young, R. (Eds.). Ecological Wisdom: Theory and Practice. United Kingdom: Springer-Nature. ISSN: 2367-0029.
- Jin, J., Miller L. N., Yang, B. (2012). Modeling of the effects of land use change and irrigation on hydroclimate. Book chapter in *Land Use: Planning, Regulations, and Environment*. NOVA Science Publisher, Hauppauge, NY, U.S. pp 125-147. ISBN 978-1-62257-357-8. (Invited) https://www.novapublishers.com/catalog/product_info.php?products_id=35475

Peer-reviewed Conference Papers

• Yang, B., Volkman, N. J. (2009). Exploring the revelations of traditional design on contemporary urban open space in China. CELA 2008-2009 proceedings.

http://www.thecela.org/pdfs/cela-conf-2008-09-proceedings.pdf, pp. 270-277.

- Yang, B., Li, M.-H. (2009). Comparing planning methods for neighborhoods: Case study of stormwater in The Woodlands, Texas. CELA 2008-2009 proceedings. http://www.thecela.org/pdfs/cela-conf-2008-09-proceedings.pdf, pp.111-118.
- Yang, B. (2005). Preservation and revitalization of the industrial architectures and historical zone. International Conference on Life in the Urban Landscape, Gothenburg, Sweden. (Full paper included in the CD).
- Yang, B., Li, B.-F., Yang, H. (2004). Study on the climatic adaptability and design alternatives to residential balconies in the Hot-summer and Cold-winter Zone. The 1st International Tropical Architecture Conference. Architecture and Urban Design in the Tropical Regions: Sustainability and Society, Singapore, pp. 29-40.
- Li, B.-F., Yang, D., **Yang, B.** (2003). Traditional bio-climatic principles in urban planning and architectural design in the Hot-summer and Cold-winter Zone. The 5th International Symposium on Asia Pacific Architecture, Honolulu, Hawaii, pp. 209-222.
- Yang, B. (2003). Thoughts on old city renewal in Wuhan. Dense Living Urban Structures, International Conference on Open Building, Hong Kong, pp. 163-175. (In Chinese)
- Yang, B. (2003). Urban renewal in old cities: Case study of Wuhan. Architectural Society of China Annual Convention, Beijing, China, pp. 343-351. (In Chinese)

Peer-Reviewed Research Report

Note: Completed eleven research reports for the Landscape Architecture Foundation's (LAF) Landscape Performance Series, Case Study Investigation Program (2011-2013). These reports were reviewed by the LAF Research Committee and external reviewers (academic researchers and practitioners) before publication. (PDF downloads available at <u>http://works.bepress.com/bo_yang)</u>

Published

(1) Residential Landscape Performance

- Yang, B., Blackmore, P. **, and Binder, C. * (2013). Capitol Valley Ranch Landscape Performance Benefits Assessment. Available at: <u>http://works.bepress.com/bo_yang/48</u> (http://landscapeperformance.org/case-study-briefs/capitol-valley-ranch)
- Yang, B., Blackmore, P. **, and Binder, C. * (2013). Cascade Garden Residence Landscape Performance Benefits Assessment. Available at: <u>http://works.bepress.com/bo_yang/49</u> (http://landscapeperformance.org/case-study-briefs/cascade-garden)
- Yang, B., Blackmore, P. **, and Binder, C. * (2013). Riverside Ranch Landscape Performance Benefits Assessment 2013. Available at: <u>http://works.bepress.com/bo_yang/50</u> (http://landscapeperformance.org/case-study-briefs/riverside-ranch)

(2) Streetscape Landscape Performance

- Yang, B., Zhang, Y. *, Blackmore, P. ** (2012). Charles City Permeable Streetscape Phase I Landscape Performance Benefits Assessment. Available at: <u>http://works.bepress.com/bo_yang/53</u> (http://landscapeperformance.org/case-study-briefs/charles-city-permeable-streetscape)
- Yang, B., Zhang, Y. *, Blackmore, P. ** (2012). Cherry Creek North Improvements and Fillmore Plaza Landscape Performance Benefits Assessment. Available at: <u>http://works.bepress.com/bo_yang/52</u> (http://landscapeperformance.org/case-study-briefs/cherry-creek-north-and-fillmore-plaza)
- Yang, B., Zhang, Y. *, Blackmore, P. ** (2012). Park Avenue & US 50 Redevelopment Streetscape Performance Benefits Assessment. Available at: <u>http://works.bepress.com/bo_yang/51</u> (http://landscapeperformance.org/case-study-briefs/park-avenue-us50-redevelopment)
- Yang, B., Zhang, Y. *, Blackmore, P. ** (2012). South Grand Boulevard Great Street Landscape Performance Benefits Assessment. Available at: <u>http://works.bepress.com/bo_yang/54</u> (http://landscapeperformance.org/case-study-briefs/south-grand-boulevard-great-streets-initiative)

(3) Community Landscape Performance

- Yang, B., Goodwin, A. * (2011). Daybreak Community Landscape Performance Benefits Assessment. Available at: <u>http://works.bepress.com/bo_yang/55</u> (http://landscapeperformance.org/case-study-briefs/daybreak-community)
- Yang, B., Goodwin, A. * (2011). High Desert Community Landscape Performance Benefits Assessment. Available at: <u>http://works.bepress.com/bo_yang/56</u>

(http://landscapeperformance.org/case-study-briefs/high-desert-community)

In Review/Revision

• Yang, B., Goodwin, A. * Rancho Viejo Community Landscape Performance Benefits Assessment. Available at: http://www.lafoundation.org/?page_id=408&template_id=31&preview=true

Invited Panel Discussion, Workshop & Presentation

Panel Discussion & Conference Presentation (Invited)

- (Panel under review) Yang, B. (2019). The Woodlands: Is ecological planning enough? National Planning Conference, Houston, Texas, April 25–28, 2020. (invited by James Stickley, Principal of WRT) (Other panelists: Billy Fleming, Don Norrell, James Stickley)
- Yang, B. (2019). The role of green infrastructure in dry environments: Examples from Utah and Arizona. Networking for Environmental Sustainability in Arid Region Urban Communities. Conference sponsored by the National Science Foundation, Texas Tech University, Lubbock, Texas, August 13-16,

2019 (Invited by Dr. Melissa Currie)

- (Panel) Whitlow, H., Canfield, J., & Yang, B. (2019). Guidebook 2.0: The Evolution of Landscape Performance Evaluation Metrics and Methods. 2019 CELA conference (May 6-9, 2019), UC Davis.
- Yang, B. (2018). Green Infrastructure Planning and Design Case Studies and Landscape Performance Assessment. AzASLA meeting, September 18, 2018.
- Yang, B. (2018). Perspectives on Ecological Wisdom. The Tongji-JLJU Changbai Mountain Summit on Ecophronetic Cities and Towns. Jilin, China, July 26-29, 2018.
- Yang, B. (2018). Landscape Performance Assessment of Park Design. The 2nd Mountain Landscape Architecture Symposium, Colorful Parks in Guizhou. Guiyang, China, June 22-23, 2018.
- Yang, B. (2017). Landscape Performance Assessment and Research Trends in the USA. Changchun Planning Bureau, Changchun, China. May 2017.
- Yang, B. (2015). Ecological Wisdom in China and U.S. Planning Cases. 1st International Workshop on Ecological Wisdom Principles and Applications. Theme: Ecological Wisdom and Resilient City. November 12-16, 2015. Shanghai, China. (Invited by Dept. Head Yuncai Wang)
- (Panel/Section 4 discussant). 1st International Workshop on Ecological Wisdom Principles and Applications. Theme: Ecological Wisdom and Resilient City. November 12-16, 2015. Shanghai, China.
- (Panel/Section 3 discussant). International Symposium on Planning & Design Based on "Sponge City Landscape." Huazhong University of Science & Technology, Wuhan, China (12/19-20, 2015).
- (Panel discussion). A Landscape Architect's Perspective: Ecological wisdom applied to environmental planning and green infrastructure. Panel: Integrating Ecological Wisdom with Ecology: A New Strategy for Socio-Ecosystem Planning and Management. The Ecological Society of America (ESA) 100th annual conference, August 9th-14th, 2015, Baltimore, USA. (with Drs. Wei-Ning Xiang, Duncan Patten, Robert Young, Chundi Chen, and Varenyam Achal)
- (Panel/moderator). Research in Ecological Wisdom. *Landscape and Urban Planning* 2014 Special issue Ecological Wisdom for Urban Sustainability: Doing Real and Permanent Good in Landscape and Urban Planning, Chongqing, China, 2014.
- (Panel discussion) Yang, B., Mary Myers, Canfield, J., Keane, T., Whitlow, H. (2014). Landscape Performance Series Case Study Review and Analysis: Strengths, Weaknesses, and Prospects. Council of Educators in Landscape Architecture (CELA) Conference, March 26-39, 2014. Morgan State University and University of Maryland, Baltimore, Maryland [Invited by the Landscape Architecture Foundation].
- (Presentation) **Yang, B.** Green infrastructure design for storm water management in community development. Invited by Dr. Sam Liang to present at the Twenty-Fifth Annual Environmental Ethics Symposium, Utah Valley University (4/3/2014)
- (Panel discussion) Economic benefits of high-performance landscape design. (2013). Council of Educators in Landscape Architecture (CELA) Conference, March 27-30, 2013. The University of Texas at Austin [Invited by the Landscape Architecture Foundation].
- (Panel discussion) Environmental benefits of high-performance landscape design. (2013). Council of Educators in Landscape Architecture (CELA) Conference, March 27-30, 2013. The University of Texas at Austin [Invited by the Landscape Architecture Foundation].
- (Panel discussion) Landscape performance benefits. (2013). (with Drs. Victoria Chanse, Mark Delaney, and Ryan Wampler). The Environmental Design Research Association (EDRA) Conference. May

30-June 2, 2013.

Workshop (Invited)

• Low-impact development and green infrastructure. Salt Lake City, Utah. All-day workshop presented to a group of engineers, landscape architects, architects, water quality specialist, and high school teachers (presented with Kris Kvarfordt and Amanda Goodwin). Invited by HalfMoon Seminars (Altoona, Wisconsin) (1/12/2012)

Keynote Address (Invited)

 Keynote speaker. Green Infrastructure Design for Stormwater Runoff and Water Quality: Empirical Evidence from Multi-Scale Community Developments. International Symposium on Planning & Design Based on "Sponge City Landscape." Huazhong University of Science & Technology, Wuhan, China (12/19-20, 2015).

Presentation (Extramural, invited)

- Guest speaker for Roberts-Naylor K-8 School. Introduction to Landscape Architecture (Invited by Gabriel Davila, 7th Grade math teacher))12/13/2018)
- STAR Academic High School project completion and presentation. Co-presented with Drs. Adriana Zuniga-Teran, Joaquin Murrieta, Andrea K. Gerlak, and Isaac Palomo (12/8/2018)
- Current scholarship in landscape performance assessment. Presentation for faculty and students in the departments of Architecture and Urban Planning, Jilin Jianzhu University, Changchun, China (August, 2018).
- Introduction to ecological wisdom. Jilin Jianzhu University (Invited by Dr. Hongyu Zhao) (3/2018).
- Introduction to landscape architecture & green infrastructure for campus. STAR Academic High School (Invited by Dr. Adriana Zuniga-Teran) (10/25/2017).
- Landscape Performance Assessment and Research Trends in the USA. Changchun Planning Bureau, Changchun, China (May 2017).
- Overview of Landscape Architecture, Architecture, and Planning Education and Professional Registration in the USA. Jilin Jianzhu University, Changchun, China (May 2017).
- On Technical Writing. Jilin Jianzhu University, Changchun, China (May 2017).
- Green infrastructure design for improving stormwater quality: Monitoring and modeling study in Daybreak community. iUTAH NSF RFA2 meeting. Presented to Utah research institutions (Invited by Dr. Courtney Flint) (11/9/2016).
- Landscape Performance Assessment. Department of Landscape Architecture, School of Architecture and Urban Planning, Huazhong University of Science & Technology, Wuhan, China (Invited by Department Head Dr. Min Wan) (12/21/2015).
- Green Infrastructure and Stormwater Management: An Overview. Department of Landscape Architecture, School of Architecture and Urban Planning, Huazhong University of Science & Technology, Wuhan, China (Invited by Department Head Dr. Min Wan) (12/21/2015).
- Green Infrastructure Design for Stormwater Runoff and Water Quality: Empirical Evidence from Multi-Scale Community Developments. Department of Landscape Architecture, Southeast University

Nanjing, China (11/11/2015).

- Ecological Wisdom, Landscape Performance Assessment, and Green Infrastructure Planning and Design. School of Architecture, Nanjing Tech University (Invited by Dr. Xiaoguang Liu) (7/13/2015).
- Research Collaborations and Beyond. College of Landscape Architecture, Nanjing Forestry University (Invited by Provost Dr. Hao Wang) (7/12/2015).
- Green infrastructure: Overview and applications. CMP 4960/6960 Green Infrastructure, Department of City and Metropolitan Planning, University of Utah; (Cross listing) CEE 4930/6930 Green Infrastructure, Department of Civil and Environmental Planning, Utah State University. (Invited by instructor Drs. Sarah Hinners and Ryan Dupont) (9/4/2015)
- 2013 Landscape Architecture Foundation Case Study Investigations of three Design Workshop projects. Invited by Allyson Mendenhall to present to all the Design Workshop offices (Continuing Education Units for landscape architecture professionals) (11/12/2013)
- Green infrastructure design for stormwater runoff and water quality: Empirical evidence from multi-scale community developments. College of Landscape Architecture, Nanjing Forestry University. (Invited by Dr. Jin Wan, 6/7/2013)
- Green infrastructure design in community developments: Learning from three U.S. case studies. Invited by Dean Dr. Baofeng Li, School of Architecture and Urban Planning, Huazhong University of Science & Technology. (6/5/2013)
- Stormwater management in large-scale community development. Invited by Dr. Zhifang Wang, College of Architecture and Landscape Architecture, Beijing University. (5/20/2013)
- Green infrastructure design in community development. Interdisciplinary research seminar, invited by The University of Utah Metropolitan Research Center and Global Change and Sustainability Center. (11/20/2012)
- What we learned from Landscape Architecture Foundation's Landscape Performance Series. Invited by Principal and Director Allyson Mendenhall to present to Design Workshop regional offices (11/6/2012)
- The art and science of landscape architecture. Invited by Dr. Nick Safai to present to CEEN 2900 Special Topics in Civil Engineering, Engineering Department, Salt Lake Community College, Utah. (9/9/2011)

Peer-Reviewed Abstract/Presentation & Panel Discussion (Contributed)

- (In review) Li, S.-J., **Yang, B.** (2020). GIS in landscape architecture education, research, and practice: A review. 2020 CELA conference, March 18-21, 2020, Louisville, Kentucky.
- (In review) Li, S.-J., **Yang, B.** (2020). Visitors' behavior and landscape perception: A case study of Saguaro National Park based on social media data. 2020 American Association of Geographers (AAG) conference, April 6-10, 2020, Denver, Colorado.
- (In review) **Yang, B.,** Li, S.-J. (2020). Design with Nature at 50: Ian McHarg's contributions to performance evaluation of ecological planning. 2020 CELA conference, March 18-21, 2020, Louisville, Kentucky.
- (In review) **Yang, B.,** Li, S.-J. (2020). Blending project goals and performance goals in ecological planning: Ian McHarg's contributions to landscape performance evaluation. 2020 Environmental Design Research Association (EDRA) conference, Tempe, Arizona, April 4-7, 2020.

- Liu, L.-Y., & **Yang, B.** (2019). Children's Daily Activities, Spatiotemporal Characteristics, and Daily Life-Sphere Structure: A Case Study of Wuhan, China. 2019 CELA conference (May 6-9, 2019), UC Davis.
- Liu, L.-Y., & Yang, B. (2019). Study on the Self-Organization Characteristics of County Urbanization and its Fractal Urban System in Hubei Province. 2019 CELA conference, May 6-9, 2019, UC Davis.
- Tang, H.-B., & **Yang, B.** (2019). Facing Sea Level Rise: Strategies in Establishing a Global Community in Coastal Ecological Planning. 2019 CELA conference, May 6-9, 2019, UC Davis (Abstract accepted)
- Yang, B., Luo, Y., & Li, S.-J. (2019). Social Benefits Assessment: Comparing Project Goals with Outcomes. 2019 CELA conference, May 6-9, 2019, UC Davis.
- Luo, Y., **Yang, B.**, & Li, S.-J. (2019). Doing Real and Permanent Good: Examining Landscape Performance Benefits from an Ecological Wisdom Perspective. 2019 CELA conference, May 6-9, 2019, UC Davis.
- Li, S.-J., **Yang, B.** (2019). Social Media in Lanscape Planning and Design: A Review. American Association of Geographers Annual Meeting, April 3-7, 2019, Washington DC.
- Yang, B., Currie, M., & Li, S.-J. (2019). Ecological Planning as a Tool for Urban Flood Resilience: Lessons from Community Developments in the Houston Region. The 99th American Meteorological Society Conference, Phoenix, Arizona, January 6-10, 2019 (Abstract accepted)
- Li, S.-J., **Yang, B.** (2018). From Design with Nature to Geodesign: The Evolution of GIS in Landscape Architecture. American Association of Geographers Annual Meeting, April 10-14, 2018, New Orleans, Louisianan
- Yang, B., Li, S.-J., Wang, Z. (2018). Economic Benefits: Metrics and Methods for Landscape Performance Assessment. 2018 CELA conference, March 21-24, 2018, Blacksburg, Virginia.
- McKenna Drew*, Durfee, D. *, **Yang, B.** (2017). Green infrastructure as a campus stormwater management technique. Spring Runoff Conference, March 28–29, 2017, Logan, Utah. (Poster competition)
- McKenna Drew*, Durfee, D. *, **Yang, B.** (2017). Green infrastructure as a campus stormwater management technique. 8th Annual Intermountain Sustainability Summit, Weber State University, March 16-17, 2017. (Poster competition)
- Yang, B. (2017). Ecological wisdom inspired eco-practice: Historical roots, pathways, and revelation from time-honored examples. Council of Educators in Landscape Architecture (CELA) Conference, May 25-29, 2017, Beijing, China.
- Cheng, F., Yang, Y.-H., **Yang, B**. (2017). Study on the value and the conservation strategy of the Landscape Heritage of War: Based on the perspective of comparison between China and America. Council of Educators in Landscape Architecture (CELA) Conference, May 25-29, 2017, Beijing, China.
- Yang, B. (2016). What is ecological wisdom? Definition, acquisition, and prospects. 2nd International Symposium on Ecological Wisdom. The University of Texas at Austin, Austin, Texas, November 17-20, 2016.
- Yang, B. (2016). Ecological wisdom inspired eco-practice: Historical roots, pathways, and revelation from time-honored examples. The Tongji Forum on Ecological Wisdom Inspired Urban and Rural Ecological Practice. Tongji University, Shanghai, China, July 9-10, 2016. (Invited by Dept. Head Yuncai Wang)

- Yang, B., Li, S.-J. Wall, H. **, Blackmore, P.**, Hardy, G. *, Locke, J. ** (2016). Green infrastructure design for stormwater quality and climate change resilience: Monitoring and modeling study in a semiarid environment. Council of Educators in Landscape Architecture (CELA) Conference, March 23-26, 2016. Salt Lake City and Logan, Utah.
- Li, S.-J., **Yang, B.**, Endter-Wada, J., Li, E.-J.* (2016). Integrating water and land use planning for wildlife habitat conservation. Council of Educators in Landscape Architecture (CELA) Conference, March 23-26, 2016, Salt Lake City and Logan, Utah.
- Li, S.-J., **Yang, B.** (2016). Geodesign: A new revolution of GIS. 2016 Annual Meeting of the Association of American Geographers, March 28-April 2, 2016, San Francisco, California.
- Myers, M., **Yang**, **B**. (2016). Landscape Performance Metrics: A first step in informing design. Council of Educators in Landscape Architecture (CELA) Conference, March 23-26, 2016, Salt Lake City and Logan, Utah.
- Yang, B., Li, S.-J. (2015). Ecological planning for urban sustainability: Manifestation of Ian McHarg's ecological wisdom. The Ecological Society of America (ESA) 100th annual conference, August 9th-14th, 2015, Baltimore, Maryland.
- Wall, H. **, Hardy, G. *, Blackmore, P.**, Dragonetti, L.**, **Yang, B.** (2015). Green Infrastructure Performance in Stormwater Quality. Spring Runoff Conference, March 31-April 1, 2015. Utah State University, Logan, Utah.
- Yang, B., Horsburgh, J., Blackmore, P.**, Dragonetti, L.**, Wall, H. ** (2015). Green Infrastructure Performance in Stormwater Quality: Two-Year Assessment of a Landscape Architecture Foundation Case Study. Council of Educators in Landscape Architecture (CELA) Conference, March 24-28, 2015. Kansas State University, Manhattan, Kansas.
- Canfield, J., Yang, B., Leise, K., Binder, C.* (2015). Landscape Performance Metrics and Methods: A Discussion of What to Measure and How. Council of Educators in Landscape Architecture (CELA) Conference, March 24-28, 2015. Kansas State University, Manhattan, Kansas.
- Yang, B., Li, S.-J. (2014). Design with Nature: Ian McHarg's ecological wisdom as actionable and practical knowledge. *Landscape and Urban Planning*, Special issue Ecological Wisdom for Urban Sustainability: Doing Real and Permanent Good in Landscape and Urban Planning, Chongqing, China, October 17-19, 2014

http://www.journals.elsevier.com/landscape-and-urban-planning/news/ecological-wisdom-for-urban-sus tainability-doing-real-and-pe/

- Li, S.-J., **Yang, B**. (2014). Spatially Explicit Processes of Land Transformation and Fragmentation: Introducing a new method for assessing forest landscape change. The 2014 Annual Meeting of the Association of American Geographers (AAG). Tampa, Florida, April 8-12, 2014.
- Myers, M., **Yang, B.**, Smith, D., Binder, C.* (2014). Defensible Metrics. Council of Educators in Landscape Architecture (CELA) Conference, March 26-39, 2014. Morgan State University and University of Maryland, Baltimore, Maryland.
- Yang, B., Blackmore, P. **, Binder, C. * (2014). Assessing Residential Landscape Performance: Visual and Bioclimatic Analyses through In-Situ Data. Council of Educators in Landscape Architecture (CELA) Conference, March 26-39, 2014. Morgan State University and University of Maryland, Baltimore, Maryland.

- Zhao, Y., Yang, B. (2014). Adaptive Landscape Planning for Climate Change: A Case Study of Water System in Wenshang, China. Council of Educators in Landscape Architecture (CELA) Conference, March 26-39, 2014. Morgan State University and University of Maryland, Baltimore, Maryland.
- Liu, X.-G., Hao, W., Michael, S., Yang, B. (2014). Landscape Architecture Education in China: A Synopsis and Review of Milestones in the 20th and 21st Centuries. Council of Educators in Landscape Architecture (CELA) Conference, March 26-39, 2014. Morgan State University and University of Maryland, Baltimore, Maryland.
- Thompson, T. ** Maughan, J. **, Thorpe, R. **, Wang, D. **, Hard, S. **, **Yang, B.** (2014). Water Resources in Northern Cache County, Utah. Spring Runoff Conference, Logan, Utah. April 1–2, 2014.
- Yang, B., Myers, M. (2013). Landscape Performance Series Case Studies Review, Task 1 Content Assessment. Report findings to the Board of Directors. 2013 American Society of Landscape Architects (ASLA) Annual Meeting, Boston, Nov 15–18, 2013. Boston, Massachusetts.
- Yang, B., Horsburgh, J., Blackmore, P. ** (2013). Stormwater Quality in Utah's Largest Green Infrastructure Community Development: A Pilot Study. 2013 American Water Resources Association (AWRA) Conference, November 4–7, 2013. Portland, Oregon.
- Yang, B., Horsburgh, J. (2013). Green Infrastructure Design in the Intermountain West, USA: A Case Study of Daybreak Master-Planned Community. International Association for China Planning (IACP) Conference, June 29–July 1, 2013. Shanghai, China.
- Blackmore, P. **, Gibby, D. **, Krumm, S. **, Wood, G. **, Li, E-J. *, **Yang, B.** (2013). Water in the West: Conserving water on a campus research farm. Spring Runoff Conference, Logan, Utah. April 9-10, 2012.
- Binder, C. *, Decker, N. **, Peaden, S. *, Taylor, S. **, Ward, J. **, **Yang, B.** (2013). Utah State University Green Roof Initiative. Spring Runoff Conference, Logan, Utah. April 9–10, 2013.
- Yang, B., Zhang, Y. *, Blackmore, P. ** (2013). On the research front: 2012 Landscape Architecture Foundation Case Study Investigation and the case of streetscape. Council of Educators in Landscape Architecture (CELA) Conference, March 27-30, 2013. The University of Texas at Austin.
- Canfield, J., **Yang, B.** (2013). Making a Case: Strategies for Developing Landscape Performance Case Studies. Council of Educators in Landscape Architecture (CELA) Conference, March 27-30, 2013. The University of Texas at Austin.
- Li, S.-J., **Yang, B.** Jie Y. * (2013). 3D digital graphics in landscape architecture professional practice: Current conditions in a nutshell. Council of Educators in Landscape Architecture (CELA) Conference, March 27-30, 2013. The University of Texas at Austin.
- Yang, B. (2012). Water Conservation in Master-Planned Communities in Desert Environments. Council of Educators in Landscape Architecture (CELA) Conference, March 28-31, 2012. University of Illinois at Urbana-Champaign.
- Yang, B., Li, S.-J. (2012). Web-enhanced teaching of landscape architecture digital graphics: An evaluation of benefits and challenges. Council of Educators in Landscape Architecture (CELA) Conference, March 28-31, 2012. University of Illinois at Urbana-Champaign.
- Yang, B. (2012). Green infrastructure design for stormwater management: Empirical evidence from watershed-scale community developments. Land Grant & Sea Grant National Water Conference, Portland, Oregon, May 20-24, 2012.

- Zhang, Y. *, **Yang, B.** (2012). Design of a constructed wetland for wastewater treatment and reuse in Mount Pleasant, Utah. Spring Runoff Conference, Logan, Utah. April 3-4, 2012.
- Goodwin, A.*, **Yang, B.** (2012). An evaluation of stormwater best management practice: Relationships between design and efficiency. Spring Runoff Conference, Logan, Utah. April 3-4, 2012.
- Yang, B., Li, S.-J., Elder, B. R., Wang, Z. (2011). Community planning approach and residents' perceived safety: A landscape analysis of park design in the Woodlands, Texas. Association of Collegiate Schools of Planning (ACSP) Conference, October 13-16, 2011, Salt Lake City, Utah.
- Li, S.-J., **Yang, B.**, Sui, D. (2011). Comparing self-organizing and planned urban growth: Empirical evidence from Shenzhen, China. International Association of China Planning (IACP) Conference, June 17-19, 2011, Beijing, China.
- Yang, B., Li, M.-H. (2011). Ecological engineering in a new town development: Drainage design in The Woodlands, Texas. Association of American Geographers (AAG) Conference, April 12-6, 2011, Seattle, Washington.
- Yang, B., Li, M.-H., Huang, C.S. (2011). McHarg's ecological planning in The Woodlands: What works and what does not. Council of Educators in Landscape Architecture (CELA) Conference, March 30-April 2, 2011, Los Angeles, California.
- Yang, B., Li, M.-H. (2009). Drainage designs in The Woodlands, Texas: Comparative study of open surface and conventional drainage systems in community development. Association of Collegiate Schools of Planning (ACSP) Conference, October 1-4, 2009, Crystal City, Virginia.
- Yang, B., Li, M.-H. (2009). Municipal water conservation practices of Texas cities: A review of irrigation ordinances and feasible techniques. Council of Educators in Landscape Architecture (CELA) Conference, January 28-31, 2009, Tucson, Arizona.
- Yang, B., Li, M.-H. (2008). Comparing planning methods for neighborhoods: Case study of stormwater in The Woodlands, Texas. Association of Collegiate Schools of Planning (ACSP) Conference, July 6-11, 2008, Chicago, Illinois.
- Yang, B., Volkman, N. J. (2007). Contemporary open space design in China: Traditional models in sustainable urban placemaking. Association of Collegiate Schools of Planning (ACSP) Conference, October 18-21, 2008, Milwaukee, Wisconsin.

Other Publication (non-referred)

- Yang, B., Blackmore, P. ** (2013). Low Impact Development: Is it effective in Utah? Utah Chapter, American Society of Landscape Architects (UT ASLA) Newsletter, May 2013. Available from http://aslautah.org/wp-content/uploads/2013/06/May-Newsletter-2013.pdf
- Yang, B. (2013). Quote of my writing on Design Workshop's Legacy Design. *World Architecture Review*, Special issue on Design Workshop, Inc.
- Yang, B. (2012). Design Workshop's Legacy Design in landscape architecture education and research. Available from http://blog.designworkshop.com/. (Invited by Design Workshop)
- Yang, B., Li, M.-H., Huang, C.S. (2009). Using SWAT to compare planning methods for neighborhoods: Case study of stormwater in The Woodlands, Texas. 2008-2009 USGS Research Grant Final Report for Texas Water Resources Institute (TWRI). Project number: 06HQGR0130.

TEACHING

TEACHING EXPERIENCE

University of Arizona

- (forthcoming) Co-Instructor (100%): PLG 580/LAR 623 Environmental Spatial Analysis/Landscape Planning Studio. Spring 2020.
- Co-Instructor (50%): LAR 511 Design Studio II. Spring 2019, Spring 2018.
- Co-Instructor (50%): PLG 580/LAR 623 Environmental Spatial Analysis/Landscape Planning Studio. Spring 2019, Spring 2018.
- Instructor (100%): LAR 612 Design Studio V. Fall 2018, Fall 2018, Fall 2017 (Elizabeth "Liba" Wheat Memorial Prize Award 2017, 2018)

<u>Utah State University</u>

- Co-Instructor/Lead: LAEP 6910 Reading Seminar I
- (11 students, graduate level). Fall 2017.
- Instructor: LAEP 4940/6940 Green Infrastructure Design (studio course, undergraduate & graduate levels). Spring 2017.
- Instructor: LAEP 1300 Computer Applications in Landscape Architecture (47-51 students, undergraduate & graduate levels). Spring 2015, Spring 2014, Spring 2013, Spring 2012, Spring 2011, Spring 2010.
- Instructor: LAEP 2600 Landscape Construction I (40-55 students, undergraduate & graduate levels). Fall 2014, Fall 2013, Fall 2012, Fall 2011, Fall 2010, Fall 2009.
- Instructor: LAEP 3700 City and Regional Planning (24-35 students, undergraduate & graduate levels). Spring 2015, Spring 2014, Spring 2013, Spring 2012, Spring 2011, Spring 2010.
- Co-Instructor (20% role): LAEP 4120 Emerging Areas in Landscape Architecture (studio course) (27 students, undergraduate & graduate levels). Spring 2010.
- Co-Instructor (50% role): LAEP 4350 Travel Course (China) (31 students, undergraduate & graduate levels). Summer, 2013. (http://laep.usu.edu/htm/faculty-staff/bo-yang/bo-yang-courses; Trip story at http://www.laep.usu.edu/htm/works-publications, pp. 26-28)
- Co-Instructor (20% role): LAEP 4350 Travel Course (20 students). Spring 2010.
- Co-Instructor (20% role): LAEP 6910 Reading Seminar I
- (8-11 students, graduate level). Fall 2014, Fall 2013, Fall 2012, Fall 2012, Fall 2011, Fall 2009.
- Co-Instructor (20% role): LAEP 6930 Reading Seminar II
- (8-11 students, graduate level). Spring 2011.
- Co-Instructor (10% role): LAEP 6860 Graduate Seminar
 (8-11 students, graduate level). Fall 2014, Fall 2013, Fall 2012, Fall 2012, Fall 2011, Fall 2009.

Texas A&M University

- Instructor: LAND 489 Special Topics of Communication Graphics in Landscape Architecture. Developed this new course on digital graphics. Spring 2009, Fall 2008.
- Co-Instructor: LAND 321 Landscape Design IV (Co-Instructors: Dr. Michael Murphy, Prof. Bruce Dvorak). Spring 2008.
- Instructor: LAND 200 Introduction to Landscape Architecture Practice. Fall 2008.
- Instructor: LAND 200 Introduction to Landscape Architecture Practice. Fall 2007.
- Teaching Assistant: Land 240 & Land 630 Landscape History (Instructor: Prof. Nancy Volkman). Gave three lectures on Chinese Garden Design & Philosophy. Fall 2006, Spring 2007.
- Teaching Assistant: LAND 620 Open Space Development I (graduate level design studio; Instructor: Dr. Jon Rodiek). Fall 2005.
- Teaching Assistant: LAND 240 & LAND 630 Landscape History (Instructor: Dr. Thomas Woodfin). Gave three lectures on Chinese Garden Design & Philosophy. Fall 2005, Spring 2006.
- Teaching Assistant: International Architectural Workshop on Solar Bridge: Huazhong University of Science & Technology Architecture Center. Wuhan, China. (Instructor: Dr. Werner Lang, University of Texas at Austin). Spring 2004.

Community Service Project (University of Arizona, as Major Advisor)

• STAR Academic High School, South Tucson, Arizona (2018). In collaboration with STAR, UA School of Geography and Development, Udall Center for Studies in Public Policy, Watershed Management Group, Tierra y Libertad Organization, and the Sonoran Institute.

(*Phase I construction completed 12/2018; featured in Landscape Architecture Magazine July 2019, column NOW,* Turn the Temperature Down: Tucson Verde Para Todos takes a local—and more equitable—approach to green infrastructure)

- Trees Please! Green Infrastructure Masterplan (Phases I-III), Barrio Hollywood Neighborhood. Phase I: Community Garden and Speedway Streetscape in collaboration with Trees Please! and Tucson Department of Transportation, Arizona (2019).
- Green Infrastructure Masterplan for Elvira Neighborhood, South Tucson, Arizona (2019). In collaboration with Sonoran Institute, UA School of Geography and Development, University of Maryland (2019).

Charrette (Utah State University)

- Best Friends & Kanab City 2017 Charrette, Faculty advisor of History, Sustainability, and Environment. (11 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2017.
- Salt Lake City Granary District 2015 Charrette, Faculty advisor of Stormwater Management. (7 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2015.
- Ogden Valley 2014 Charrette, Faculty advisor of Property Ownership and Property Rights team. (7 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2014.

- Brigham City 2013 Charrette, Faculty advisor of Highway 13 Corridor team (7 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2013.
- Bear Lake 2012 Charrette, Faculty advisor of Pickleville team (4 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2012.
- Cedar City 2011 Charrette, Faculty advisor of Downtown Housing development team (8 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2011.
- Providence City 2010 Charrette, Faculty advisor of Town Center development team (8 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2010.

Invited Design Critique & Guest Lecture (University of Arizona)

<u>Architecture</u>

- Guest reviewer: ARC301 Design Studio III: Integrations of Place (invited by Professor Teresa Rosano, 10/21/2019)
- Guest reviewer: ARC451b/510f Schematic Review (invited by Professor Courtney Crosson, 10/7/2019)
- Guest reviewer: ARC452 Capstone Schematic Review (invited by Professors Christopher Domin and Daniel Hoffman, 2/28/2019)
- Guest reviewer: ARC 451B Design Studio 7 (invited by Professor Courtney Crosson, 10/29/2018)

Landscape Architecture and Planning

- Guest reviewer: LAR 596C Landscape Architecture Seminar III (invited by Dr. Margaret Livingston, Fall semester 2019)
- Guest lecture: SBE 380 Research Methods. Research Methods in Planning: An Example from ACSP (invited by Dr. Philip Stoker, 4/1/2019)
- Guest lecture: PLG 444/544 Site Planning. Green Infrastructure Planning and Design Case Studies and Landscape Performance Assessment (invited by Professor Gina Chorover, 1/16/2019)
- Guest reviewer: LAR 596D Landscape Architecture Seminar IV (invited by Dr. Margaret Livingston, Spring semester 2018)
- Guest reviewer: LAR 610 Design Studio III (invited by Professor Kelly Cederberg, 9/19/2018)
- Guest lecture: PLG/RNR 256 Sustainable Cities and Societies (invited by Dr. Gary Pivo, 9/18/2018)
- Guest reviewer: LAR 596C Landscape Architecture Seminar III (invited by Dr. Margaret Livingston, 9/6/2018, 9/13/2018, and last quarter of Fall semester)
- Guest reviewer: LAR 555 Landscape Construction (invited by Professor Kirk Dimond, 4/11/2018)
- Guest lecture: Green Infrastructure Planning and Design Case Studies. SBE Guest Lecture Series (invited by Dr. Adriana Zuniga-Teran) (3/2/2018)
- Guest reviewer: LAR 596D Landscape Architecture Seminar IV. Spring 2018 (invited by Dr. Margaret Livingston, 2/28/2018)

- Guest reviewer: LAR 596C Landscape Architecture Seminar III. Fall 2017 (invited by Dr. Margaret Livingston, Oct 2017, Nov 2017)
- Guest lecture: Introduction to green infrastructure and climate change resilience. PLG 572/472 Environmental Land Use Planning (invited by Dr. Shujuan Li) (10/26/2017)

Interdisciplinary

- Guest lecture: Green infrastructure technical modules. ENVS 450/550 Green Infrastructure (invited by Professor Grant McCormick, 11/12/2019)
- Guest speaker: College-wide Faculty Research Presentations and Discussion with CAPLA Futures Council. Introduction to Landscape Performance (invited by Dean Nancy Pollock-Ellwand, 10/8/2019)
- Guest lecture in Civil Engineering Speaker Series. Green Infrastructure Planning and Design: A Landscape Approach (invited by Dr. Jennifer Duan, 10/1/2019)
- Guest reviewer: Design proposal review. ENVS 450/550 Green Infrastructure (Invited by Dr. Tanya Quist, 9/19/2019)
- Guest speaker: Overview EPA RainWorks Challenge Design Competition. ENVS 450/550 Green Infrastructure (Invited by Dr. Tanya Quist, 9/12/2019)
- Guest speaker: Green Infrastructure and Landscape Performance. RNR 496B-002 / 596A-002 Ecology of Water Harvesting (Invited by Vanessa Buzzard, 9/12/2019)
- Guest speaker: Introduction to Landscape Architecture. RNR 496B-002 / 596A-002 Ecology of Water Harvesting (Invited by Dr. Laura Meredith, 9/5/2019)
- Guest speaker: Introduction to Landscape Architecture. ENVS 450/550 Green Infrastructure (Invited by Professor Grant McCormick, 9/5/2019)
- Guest lecture: NSF team discussion with stakeholders (A science-policy dialogue to explore pathways for water harvesting in Tucson neighborhoods) (invited by Drs. Andrea Gerlak and Mitch Pavao-Zuckerman, 3/15/2019)
- Guest lecture: Introduction to landscape architecture and green infrastructure design, for graduate students in Hydrology and Atmospheric Sciences) (invited by Dr. Thomas Meixner, 9/28/2018)
- Guest lecture: Green Infrastructure Planning and Design Case Studies. ENVS 450/550 LAR 450/550 PLG 450/550 SBE 450/550 Green Infrastructure (invited by Professor Grant McCormick) (11/21/2017)

Invited Design Critique (Extramural)

• (National) "Sponge Campus" Landscape Design Competition (China). Invited jury member. Participating teams from top-tier landscape architecture programs in China. Wuhan, China. December, 2015

Arizona State University

- The Design School Design Excellence Jury, Arizona State University (invited by School Director Jason Schupbach) (Spring 2019)
- Invited jury member for final project presentation. LDE 461 Landscape Architecture III (South Mountain Village Site Design - Green Infrastructure Prototype) (invited by Dr. Paul Coseo) (Fall 2014)

Invited Design Critique & Guest Lecture (Utah State University)

Invited Design Critique

- LAEP 4120 Capstone Studio, 2015
- LAEP 3610 Landscape Construction II, 2015
- LAEP 4120 Emerging Area in Landscape Architecture, 2013
- LAEP 4100 Urban Theory, Systems, & Design, 2013
- LAEP 2700 Site Analysis, 2014, 2013, 2011, 2010

Invited Guest Lecture

- Conservation Subdivision Design and Curve Number Method Applications. CEE 4930/6930 Green Infrastructure, Department of Civil and Environmental Planning, Utah State University (invited by instructor Dr. Ryan Dupont) (9/8/2016)
- Green infrastructure design: Case studies in Utah and Texas. Civil and Environmental Engineering (CEE) 5460/6460 Water Resources Engineering (invited by instructor Dr. David Rosenberg, 10/9/2012)
- Ecohydrological planning and design in landscape architecture. Watershed Sciences (WATS) 4490 & 5490 Small Watershed Hydrology (invited by instructor Dr. Patrick Belmont, 4/18/2012)
- Landscape performance assessment. LAEP 4130 Emerging Areas of Landscape Architecture (invited by instructor Dr. Carlos Licon, 3/22/2012)
- Chinese garden design and philosophy. LAEP 2300 & 6230 History of Landscape Architecture (invited by instructor Professor Michael Timmons, 2/1/2010, 1/31/2011, 1/25/2013, 1/27/2014)
- Chinese garden design and philosophy. LAEP 1030 Introduction to landscape architecture (invited by instructor Professor David Anderson, 9/16/2011, 1/26/2011)
- Chinese garden design and philosophy. LAEP 1030 Introduction to landscape architecture (invited by instructor Professor Susan Buffler, 9/24/2010, 9/18/2009)
- Green infrastructure and low-impact development. LAEP 6860 Graduate Seminar (invited by instructor Dr. Sean Michael, 9/15/2010, 9/9/2009)
- Assessing planning approaches by watershed streamflow modeling: Case study of the Woodlands, Texas (invited by College of Natural Resources, 9/23/2009)

Invited Design Critique & Guest Lecture (Texas A&M University)

- Stormwater management in community planning: Case study of The Woodlands, Texas. PLAN 658 Plan Implementation (invited by instructor Dr. Elise Bright, Fall 2008)
- Soil and Water Assessment Tool (SWAT) applications in GIS hydrologic modeling. BAEN 673 Modeling Small Watershed (invited by instructor Dr. Clay Munster, Spring 2008)
- Advanced topics in SWAT applications in GIS hydrologic modeling. BAEN 673 Modeling Small Watershed (invited by instructor Dr. Clay Munster, Spring 2008)
- Stormwater management in community planning and design. LAND 621 Open Space Development II. (Graduate level design studio. Invited by instructor Professor Nancy Volkman, Spring 2008)
- Chicago World Expo and American landscape development. (Translator) Presenter: Prof. Nancy Volkman (invited by Yunnan University, Kunming, China, December 2006)

• Chinese garden design and philosophy. LAND 200 Introduction to Landscape Architecture Practice (invited by instructor Dr. Christopher Ellis, Fall 2005)

STODENT ADVISING (University of Arizona)							
Student Name	Faculty Role	Degree Sought	Topic/Title	(Expected) Graduation Date			
Yuheng Zhang	Advisor ^a	MLA	Landscape performance	2018			
Elliott Bartels	Mentor	MLA	Latodami envisioned	2018			
Tai An	Advisor ^a	MLA	Landscape performance	2019			
Mario Nuno-Whelan	Advisor ^a	MLA	Tucson green infrastructure *	(Spring 2020)			

STUDENT ADVISING (University of Arizona)

^a provided funding support

Student Neme Fearly Dele Demos Tarie/Title (Furgeted)								
Student Name	Faculty Role	Degree	Topic/Title	(Expected)				
<u> </u>		Sought		Graduation Date				
Shuolei Chen	Member(PhD) ^a	MLA,PhD	Park Quality*	(Spring 2020)				
Tony Melcher	Member ⁺	PhD	Urban Stormwater *	2019				
Trixie Rife	Member†	PhD	Logan "Green" Street	2019				
Osmer Beck	Member	MLA	Renewable Energy *	2009				
Jeff Dzikowski	Member	MLA	Sustainable Sites Initiative *	2012				
Yue Zhang	Major Prof. ^a	MLA	Mount Pleasant City Park *	2012				
Amanda Goodwin	Major Prof. ^a	MLA	Stormwater BMPs *	2013				
Jie Yan	Member ^a	MLA	Digital Communication *	2014				
Chris Binder	Research Advisor ^a	MLA	Landscape Performance	2015				
Stephen Peaden	Research Advisor ^a	MLA	Logan GIS Database	2017				
Grant Hardy	Research Advisor ^a	MLA	GI Performance	2017				
Allan Perry	Research Advisor ^a	BLA	Sanpete County	2012				
Gordo Wood	Research Advisor ^a	BLA	Groundwater	2013				
Pamela Blackmore	Major Prof. ^{a,b}	BLA	EPA Database	2013				
Devon Gibby	Research Advisor ^c	BLA	Streetscape Performance	2013				
Zach Taylor	Research Advisor ^a	BLA	EPA RainWorks	2013				
Luigi Dragonetti	Major Prof. ^{a,b}	BLA	GI Performance	2014				
Tim Bowler	Research Advisor ^a	BLA	GI in Dominican Republic	2014				
Sam England	Research Advisor ^a	BLA	GI Performance	2014				
Di Wang	Research Advisor ^{ac}	BLA	GI Performance	2014				
Sam Taylor	Major Prof. ^{a,b,c}	BLA	Performance Database	2015				
Nick Decker	Research Advisor ^a	BLA	Wasatch Front GI Inventory	2015				
Hailey Wall	Research Advisor ^a	BLA	Logan Urban Design	2016				
John Locke	Research Advisor ^a	BLA	GI Performance	2016				
Rebecca Thorpe	Major Prof. ^b	BLA	GI Performance	2016				
Abram Sorensen	Research Advisor ^c	BLA	GI Performance	2016				
Brett Hoffer	Research Advisor ^a	BLA	3D Modeling	2017				
Mckenna Drew	Research Advisor ^a	BLA	GI Performance	2017				
Emmeline Hooper	Research Advisor ^a	BLA	GI Performance	2017				
Tyson Murray	Research Advisor ^a	BLA	GI Performance	2017				
Darci Williams	Research Advisor ^a	BLA	EPA RainWorks	2017				

STUDENT ADVISING (Utah State University)

David Durfee	Research Advisor ^a	BLA	EPA RainWorks	2017
			EPA RainWorks	

^a provided funding support

^b major professor of Honors thesis

^c undergraduate Teaching Fellowship (UTF, \$750)

* denotes graduate thesis/dissertation topic. GI, green infrastructure.

† not serving on the advisory committee after leaving USU.

Significant Student Award & Recognition (As Major Advisor)

National

 2nd Place, Demonstration Project Category. 2018 EPA Campus RainWorks Challenge design competition. (Re)Searching for a Spot. Students: Matthew Lutheran, Aaron Johnson, Zhiyuan Song, Samantha Swartz, Jack Anderson. (\$3,000 student and faculty prize) Available at (https://www.epa.gov/green-infrastructure/2018-campus-rainworks-challenge) EPA news release (https://www.epa.gov/newsreleases/epa-announces-winners-7th-annual-campus-rainworks-challenge)

• Honorable Mention, Master Plan Category. 2018 EPA Campus RainWorks Challenge design competition. Socio-Hydrology. Students: Jennifer Moscato, Jon Choi, Cody White, Jack Anderson, Samantha Swartz.

Available at (https://www.epa.gov/green-infrastructure/2018-campus-rainworks-challenge)

EPA news release (https://www.epa.gov/newsreleases/epa-announces-winners-7th-annual-campus-rainworks-challenge)

• Honorable Mention, Master Plan Category. 2017 EPA Campus RainWorks Challenge design competition. West University Wash Revival. Students: Sam Hauserman, Andre Rioux, Brad Kindler, Brendan Ore.

Available at (https://www.epa.gov/green-infrastructure/2017-campus-rainworks-challenge#Arizona%20DP) EPA news release (https://www.epa.gov/newsreleases/epa-announces-winners-6th-annual-campus-rainworks-challenge)

Honorable Mention, Demonstration Project Category. 2017 EPA Campus RainWorks Challenge design competition. A River Runs Through It. Students: Dan Zedick, Nate Ritchie, Fei Yu, Yuheng Zheng. Available at (https://www.epa.gov/green-infrastructure/2017-campus-rainworks-challenge#Arizona%20DP)
 EPA news release (https://www.epa.gov/newsreleases/epa-announces-winners-6th-annual-campus-rainworks-challenge)

State

- Student Community Service Award. 2019 Arizona Chapter American Society of Landscape Architects. Green Infrastructure for Social Justice: Retrofitting a High School in South Tucson. Students: Penelope Cottrell-Crawford, Jinqiao Deng, Dionna Hatch, Rebecca Johnstone, Mario Nuño-Whelan, Isaac Palomo, Grace Stoner, Tess Wagner.
- Student Collaborative Honor Award. 2019 Arizona Chapter American Society of Landscape Architects. Socio-Hydrology. Students: Jennifer Moscato, Jon Choi, Cody White
- Student Collaborative Honor Award. 2018 Arizona Chapter American Society of Landscape Architects. A River Runs Through It. Students: Dan Zedick, Nate Ritchie, Fei Yu, Yuheng Zheng.

- McKenna Drew and David Durfee (2017). Green infrastructure as a campus stormwater management technique. 2017 Research on Capitol Hill, Salt Lake City, Utah.
- Hailey Wall (2015). Green infrastructure performance in stormwater quality. 2015 Research on Capitol Hill, Salt Lake City, Utah.

College/School/University

- 2018 Elizabeth "Liba" Wheat Memorial Prize. Socio-Hydrology. Students: Jennifer Moscato, Jon Choi, Cody White. School of Landscape Architecture and Planning, University of Arizona.
- 2nd Place. 2018 Friends of Planning (FOP) Award. PLG 580/LAR 623 class project. School of Landscape Architecture and Planning, University of Arizona.
- 2017 Elizabeth "Liba" Wheat Memorial Prize. Conduit Connections. Students: Elliott Bartels, Michael Cimino. School of Landscape Architecture and Planning, University of Arizona.
- Hailey Wall (2016). Utah State University Undergraduate Olmsted Scholar of 2016 (Note: Only one undergraduate student from the LAEP Department is chosen for this award)
- Hailey Wall (2015). Undergraduate Researcher of the Year (2015-2016), CAAS, USU.
- Hailey Wall (2015). Best Research Poster (undergraduate), Research Week, USU.
- Pamela Blackmore (2013). Outstanding Honor's Thesis Award, USU Honors program. (Note: Only one thesis is chosen for this award at USU)
- Pamela Blackmore (2013). Utah State University Undergraduate Olmsted Scholar of 2013 (Note: Only one undergraduate student from the LAEP Department is chosen for this award)
- Pamela Blackmore (2013). National Finalist, Undergraduate Olmsted Scholar of 2013 (Note: One of the three finalists from U.S. landscape architecture programs. Pam was the first receipt in LAEP Department history)

Select Student Advisees' Professional Employment

- Yuheng Zhang. Shanghai Tongji Urban Planning & Design Institute, Shanghai, China
- Tyson Murray. Design Workshop. Lake Tahoe, Stateline, Nevada
- McKenna Drew. Bureau of Land Management. Salt Lake City, Utah
- David Durfee. LOCI. Salt Lake City, Utah
- Brett Hoffer. LOCI. Salt Lake City, Utah
- Pamela Blackmore. Master of Landscape Architecture (w/ full scholarship). Kansas State University
- Yue Zhang. Landscape Designer, The Planning Center, California
- Amanda Goodwin. Stormwater Inspector and Reclamation Consultant, Encana Corporation
- Jeff Dzikowski. Landscape Designer, Design Workshop, Salt Lake City, Utah
- Jess Yan. GIS Center (part-time), Utah State University
- Allan Perry. Environmental Planner, Transcon Environmental, Inc.
- Rob Waner. GIS Specialist, ValleyCrest, California
- Osmer Beck. Environmental Planner at Transcon Environmental

PROFESSIONAL EXPERIENCE

Luo & Yang Associates, LLC	2018-	
• SWA Group, Houston	Summer	2007
• HNTB, Kansas City	Summer	2006
• SWA Group, Houston	Summer	2005
Huazhong Architectural Design & Research Institute, Wuhan, China	Part-time	2004
Guangzhou Urban Planning & Research Institute, Guangzhou, China	Summer	2001
• Zhongnan Architectural Design & Research Institute, Wuhan, China	Summer	1998

SELECTED PROJECTS

Planning and Urban Design

- Oyster Creek New Community and Town Center, Texas. (SWA 2005)
- Kunshan Urban Design, Champs Elysees Blvd Design of Kunshan Flower Bridge International Community, Kunshan, Shanghai, China. (SWA 2005)
- Schematic Design of Yongqing District, Wuhan, China. 2004
- Schematic Design of Wujiashan Taiwan Commercial District, Wuhan, China. 2003
- Urban Design of Zhongshan Commercial and Cultural District, Guangzhou, China. 2001

Landscape Architecture

- Buffalo Bayou West, Houston, Texas. (SWA 2007)
- Northwest Vista College Palmetto Arts Center, San Antonio, Texas. (SWA 2007)
- Hangzhou Sheraton Mixed-use Development, Hangzhou, China. (SWA 2007)
- Nanhai Leigang Park, Nanhai, China. (SWA 2007)
- Erfurt Park Master Plan. Shawnee, Kansas. (HNTB 2006)
- Harvest Home Campus Master Plan, Kansas City, Missouri. (HNTB 2006)
- Timber Lane Utility District Park & Trail Master Plan, Spring, Texas. 2005 (supervised by Dr. Jon Rodiek, TAMU)
- Dalian Amber Bay Residential Community Design, Dalian, China. (SWA 2005)
- Texas A&M University Texarkana Phase I, Texarkana, Texas. (SWA 2005)
- Greater East End Streetscape Design, Houston, Texas. (SWA 2005)

Architecture

- Wuhan Bus Terminal, Wuhan, China. 2003
- Affiliated Middle School of Huashi Normal University, Wuhan, China. 2003
- Municipal Government Office Building of Yiyang, Yiyang, China. 2002 (B.Arch final project)

SELECT PROJECT CONSULTANT

- Residential landscape design, Tucson, Arizona (2018)
- Shennongjia National Park Dajiu Lake Scenic Area, China (2017)
- Zitsing Lake Scenic Spot, Nanjing, China (research report, 2016)

AWARDS, HONORS, AND SUPPORT

- 2019 President's Esteemed Faculty. University of Arizona
- 2018 President Award. Council of Educators in Landscape Architecture (CELA)
- 2016 Excellence in Research and/or Creative Work Award (Junior Level). Council of Educators in Landscape Architecture (CELA)
- Researcher of the Year 2014-2015, Dept. of Landscape Architecture & Environmental Planning, USU, 2015
- Research Fellow (2013). Landscape Architecture Foundation
- Research Fellow (2012). Landscape Architecture Foundation
- Research Fellow (2011). Landscape Architecture Foundation
- Undergraduate Research Mentor of 2013-2014, College of Agriculture and Applied Sciences (\$500, CAAS), 2013
- Travel Grant for the 2013 American Water Resources Association (AWRA) Conference, Portland (\$500 UAES, \$1,000 CAAS)
- Travel Grant for the 2013 American Society of Landscape Architects (ASLA) Conference, Boston (\$2,000 CAAS)
- Travel Grant for the 2013 Council of Educators in Landscape Architecture (CELA) Conference, The University of Texas at Austin. (\$500 UAES, \$500 CAAS, \$500 LAEP)
- Feature of the Month. Ecology Center, Utah State University. February 2012
- Travel Grant for the 2012 Council of Educators in Landscape Architecture (CELA) Conference, University of Illinois at Urbana-Champaign. (\$1,500, funded by Ecology Center)
- Travel Grant for the 2011 American Society of Landscape Architects (ASLA) Conference, San Diego, California (\$500 COA, \$400 LAEP)
- Travel Grant for the 2011 Association of American Geographers (AAG) Conference, Seattle, Washington (\$500 COA, \$400 LAEP)
- Participant of the 3rd Utah State University Proposal Writing Institute (2011) (\$5,000)
- Travel Grant for the 2008-2009 Conference of Council of Educators in Landscape Architecture (CELA) (2009). Tucson, Arizona. Dept. of Landscape Arch. & Urban Plan. (LAUP), TAMU. (\$500)
- Research and Presentation Grant (2008). Office of Graduate Studies, TAMU. (\$400)
- Travel Grant for the 49th Conference of Association of Collegiate Schools of Planning (ACSP) (2008). Chicago, Illinois. LAUP, TAMU. (\$250)
- Department Head Award (2008). LAUP, TAMU. (\$250)
- Travel Grant for the 48th Conference of Association of Collegiate Schools of Planning (ACSP) (2007). Milwaukee, Wisconsin. LAUP, TAMU. (\$250)
- Gill Chim Lim Award for the 48th Conference of Association of Collegiate Schools of Planning (ACSP) (2007). Milwaukee, Wisconsin. Association of Collegiate Schools of Planning. (\$200)
- Grant for the International Conference on Sustainable Urbanism (2007). LAUP, TAMU (\$250)
- The Park People Scholarship (2006-2007). (\$2,000) http://www.parkpeople.org/parkpeople/2006 Scholarship Recipients.asp
- Timber Lane Utility District Park & Trail Mater Plan, Spring, Texas (2005). Through Dr. Jon Rodiek. LAUP, TAMU. (\$3,000)

- R. Joseph Reeves Endowed Memorial Scholarship (2005). College of Architecture, TAMU. (\$1,000)
- First Prize in Student Research Week (2005). TAMU. (\$250) Graduate Oral, Engineering Panel 2, http://srw.tamu.edu/pages/winners.htm
- Incentive Tuition Scholarship (2004-2005). College of Architecture, TAMU. (\$1,000)
- Outstanding Graduate Student (2004). College of Architecture, Huazhong University of Science & Technology, China.
- Outstanding Academic Performance Scholarship (2003). College of Architecture, Huazhong University of Science & Technology, China. (RMB 2,000)
- Outstanding Undergraduate Student (2002). College of Architecture, Huazhong University of Science & Technology, China.

SERVICE

International/National

Professional Organization

- Member of Research Committee (2016-2019), Landscape Architecture Foundation
- CELA Representative (2016-2018), Board of Landscape Architecture Foundation
- Vice President for Research and Creative Scholarship (2016-2018), Council of Educators in Landscape Architecture (CELA)
- Chair, Standing Committee on Research (2016-2018), Council of Educators in Landscape Architecture
- Chair, CLASS Fund/CELA Grant Proposal Selection Committee (2016-2018)
- Member of Executive Committee (2016-2018), Council of Educators in Landscape Architecture
- Chair (2014-2016), Design Implementation Track, CELA Conference
- Co-Chair (2012-2013), Design Implementation Track, CELA Conference

National/International Conference

- Conference Organizing Committee. The 2nd Mountain Landscape Architecture Symposium, Colorful Parks in Guizhou. Guiyang, China, June 22-23, 2018.
- Co-chair. 2nd International Workshop on Ecological Wisdom. Theme: Ecological Wisdom Inspired Urban Resilience: Building Strategies, Tenets, and Practice. November 17-20, 2016. The University of Texas at Austin. Austin, Texas, USA.
- Conference Organizing Committee. The 1st Tongji Forum on Ecological Wisdom Inspired Urban and Rural Ecological Practice. Tongji University, Shanghai, China, July 9-10, 2016.
- Field Trip Organizer. Daybreak community, South Jordan, Utah. Council of Educators in Landscape Architecture (CELA) Conference, March 23-26, 2016.
- Session Chair and Co-organizer. 1st International Workshop on Ecological Wisdom Principles and Applications. Theme: Ecological Wisdom and Resilient City. November 12-16, 2015. Shanghai, China.
- Co-Chair (2015). 2016 Council of Educators in Landscape Architecture (CELA) Conference, Utah State University (host institution)

Abstract & Paper Reviewer

- Abstract Reviewer, Environmental Design Research Association (EDRA) Conference (2017-present, 5-8 abstracts annually)
- Abstract & Paper Reviewer, Council of Educators in Landscape Architecture (CELA) Conference (2009-present, 3-9 abstracts annually)
 Design Implementation Track
 Landscape Performance Track
 Research and Methods Track
 Sustainability Track
 - Theme Track
 - Urban Design Track

Editorial

- Editor-in-Chief (2018). Landscape Research Record, No.7
- Editor-in-Chief (2017). Landscape Research Record, No.6
- Editor (2017). CELA 2017 Conference Proceedings
- Lead Guest Co-Editor (2017). Modern Urban Research 2017 Special Issue
- Co-editor (2016). Landscape Research Record, No.5
- Co-editor (2015). Landscape Research Record, No.4
- Co-editor (2014). Design Implementation Track, Landscape Research Record, No.02.
- Co-editor (2013). Design Implementation Track, Landscape Research Record, No.01.

Ad-Hoc Manuscript Reviewer (2010-present, 50+ articles)

African Journal of Agricultural Research	[Impact Factor: 0.51]
CELA Proceedings	
Chinese Landscape Architecture	[Impact Factor: 1.579]
Ecological Engineering	[SCI, 5-Year Impact Factor: 3.430]
Environmental Management	[SCI, Impact Factor: 2.177]
Environmental Modelling and Software	[SCI, 5-Year Impact Factor: 4.990]
IACP Conference Proceedings	
International Journal of Climate Change Strategies and Manager	nent
International Journal of Environmental Research and Public Hea	<i>ulth</i> [SCI/SSCI, Impact Factor: 2.145]
Journal of Environmental Management	[SCI, Impact Factor: 4.449]
Journal of Environmental Planning and Management	[SSCI, Impact Factor: 0.657]
Journal of Irrigation and Drainage Engineering	[Impact Factor: 0.78]
Journal Urban Planning and Design Research	
Landscape and Urban Planning	[SCI/SSCI, 5-Year Impact Factor: 5.957]
Landscape Architecture Frontiers	
Landscape Architecture Journal	[Impact Factor: 1.205]
Landscape Ecology	[SCI, Impact Factor: 3.833]
Landscape Journal	
Landscape Research	[SSCI, Impact Factor: 1.198]
Landscape Research Record	
Modern Urban Research	[Impact Factor: 1.536]
Professional Geographer	[SSCI, Impact Factor: 1.347]
Socio-Ecological Practice Research	
Sustainability	[SCI, Impact Factor: 2.075]
Urban Forestry & Urban Greening	[SCI/SSCI, 5-Year Impact Factor: 3.521]

Grant Proposal, Book Proposal & Research Report Reviewer

- Book Proposal Reviewer, Routledge (2018-present)
- Proposal Reviewer, North Carolina Water Resources Research Institute (2017)
- Research Report Reviewer, Landscape Performance Case Study Review for Landscape Architecture

Foundation (2015-present)

• Textbook Proposal Reviewer, John & Wiley and Sons (2012)

Professional Awards Jury

- Jury Member. 2016 American Society of Landscape Architects (ASLA) Professional Awards Jury (Research Category).
- "Sponge Campus" Landscape Design Competition. China (2015)

Promotion & Tenure External Reviewer

- Fall 2019 (1)
- Fall 2017 (2)
- Fall 2016 (1)
- Fall 2015 (1)

Vice President

Overseas Chinese Landscape Architect Association (OCLAA), 2007

University of Arizona

University

• Committee Member, Environmental Research Landscape Review Committee (Fall 2017-2018)

College/School

- CAPLA Council of Faculty Members (Fall 2019-present)
- CAPLA Curriculum Committee (Fall 2019-present)
- CAPLA Building Committee (Spring 2019-present)
- Design Professional Search Committee (Spring 2019)
- Committee Member, College Constitution and Bylaws Committee, College of Architecture, Planning and Landscape Architecture (Spring 2019-present)
- Committee Member, International Programs Task Force (co-chair for Research section), SPOAC (Fall 2018-Spring 2019)
- Committee Member, Strategic Planning and Operations Advisory Committee (SPOAC), College of Architecture, Planning and Landscape Architecture (Fall 2018-Spring 2019)
- Faculty Status Committee, CAPLA (since Fall 2018)

Utah State University

University/College

- Faculty Senate, LAEP, CAAS (Fall 2016-Spring 2017)
- University Safety Committee, CAAS (Fall 2016-Spring 2017)
- Co-organizer (with Dr. Ryan Dupont). NSF EPSCoR Focus Area 2 Green Infrastructure Facility Field Trip, Logan. (10/21/2013)

- Executive Committee Member. NSF EPSCoR Focus Area 3 Green Infrastructure Research Facility (GIRF), in collaboration with University of Utah (Fall 2013)
- Post-doc Search Committee. NSF EPSCoR Focus Area 2 The Social and Engineered Ecohydrologic System (Spring 2013)
- Reviewer, Utah State University Honors Program scholarship application evaluation (Spring 2015)
- Reviewer, College of CAAS, Honors Program prospective student application evaluation (Spring 2014)
- Reviewer, Utah State University Honors Program prospective student application evaluation (Spring 2013)
- Sustainability Curriculum Committee. College of Agriculture, Utah State University (Spring 2010-2011)

Department

- LAEP Department Speaker Series Faculty Coordinator (2016-2017)
- Craig Johnson Fund for Excellence Lecture Coordinator (Fall 2016). Speaker: Keith Bowers (10/28/2016)
- LAEP Department Thesis Reviewer (Fall 2012-Spring 2015, Fall 2016-Spring 2017)
- Faculty Search Committee Member, LAEP, Spring 2012.
- Prepared Curriculum Section of the Self-Evaluation Report (SER) for 2011 Landscape Architectural Accreditation Board (LAAB) review (BLA & MLA programs). (with Caroline Lavoie and Shujuan Li)
- Sigma Lambda Alpha (SLA) Advisor. Dept. of Landscape Architecture & Environmental Planning, Utah State University (2010-2015)
- Honors Program Advisor, Dept. of Landscape Architecture & Environmental Planning, Utah State University (since Oct. 2009)
- Faculty representative of Advancement Board (Diversity and Outreach). Dept. of Landscape Architecture & Environmental Planning, Utah State University (since 2009)
- Judge in Student Research Week, Texas A&M University, 2007.
- Executive Committee, New Planner Doctoral Student Forum, Dept. of Landscape Architecture & Urban Planning, Texas A&M University, 2005-2007.

MEMBERSHIPS

- Council of Educators in Landscape Architecture (CELA)
- American Society of Landscape Architects (ASLA)
- Arizona Chapter American Society of Landscape Architects (AzASLA)
- Council of Landscape Architectural Registration Boards (CLARB)
- American Planning Association (APA)
- Association of Collegiate Schools of Planning (ACSP)
- Overseas Chinese Landscape Architects Association (OCLAA)
- International Association for China Planning (IACP)
- Center for Watershed Protection (CWP)
- Sigma Lambda Alpha (SLA)

Kelly Cederberg Curriculum vitae

PERSONAL DATA

Position:

Assistant Professor, School of Landscape Architecture and Planning, College of Architecture, Landscape Architecture and Planning (CAPLA), University of Arizona

Office address:

School of Landscape Architecture and Planning College of Architecture, Landscape Architecture and Planning University of Arizona P.O. Box 210075 Tucson, AZ 85721-0075 (520) 626-7730 kelly.cederberg@arizona.edu

CHRONOLOGY OF EDUCATION

2013	M.L.A., University of Arizona, Tucson, AZ. Master's Report: <i>Metamorphosis: A Master-Planned Community Renovation-</i> <i>From Struggling Golf Course to Vibrant Desert Community</i> Advisor: Margaret Livingston Major Field: Landscape Architecture
2007	B.F.A., 3-D Studio Art, University of Arizona, Tucson, AZ. Advisor: Carlton Bradford Major Field: 3D Studies
1997	B.A., Communication Studies, Central College, Pella, IA. Advisor: Dennis Doyle Major Field: Communication Studies

Fields of Interest

Urban redevelopment strategies and land use change, golf course redesign/repurposing, teaching creative confidence and interdisciplinary design studios.

CHRONOLOGY OF EMPLOYMENT

Chronology of Employment- Academic

2015-May 2019	Assistant Professor, School of Landscape Architecture and Planning, College of Architecture, Landscape Architecture and Planning (CAPLA), University of Arizona, Tucson, Arizona.
2011, 2012 (Fall)	Teaching Assistant, School of Landscape Architecture and Planning, College of Architecture, Landscape Architecture and Planning, University of Arizona, Tucson, Arizona.
2012,2013 (Spring)	Graduate Research Assistant, School of Landscape Architecture and Planning, College of Architecture, Landscape Architecture and Planning, University of Arizona, Tucson, Arizona.

Chronology of Employment- Professional

2013 - 2015	Landscape Designer, Sites Southwest LLC, Albuquerque, NM
2012	Landscape Design Intern, Sites Southwest LLC, Albuquerque, NM
2011	STEP Landscape Architect Intern- USDA Forest Service - Coconino N.F., Red Rock Ranger District, Sedona, Arizona
2003 - 2014	Guide- Canyon Explorations and Expeditions, Flagstaff, Arizona.

PUBLICATIONS/CREATIVE ACTIVITY

Chapters in scholarly books

Cederberg, K. 2019. Practice and permission to take shortcuts in Amoroso, N., ed. Representing Landscapes: Analogue. Routledge, Taylor and Francis Group, London and New York. Feb. 8, 2019.

Refereed journal articles

Cederberg, K. 2018. Taking Golf Out of Golf Course: Trajectories to convert facilities to parks and open space preserves. Landscape Research Record no. 7: p.158-171.

Refereed conference proceedings

Cederberg, K. 2018. Building creative confidence: A review of literature and implications for beginning design studios. Proceedings for the Conference on the Beginning Design Student Annual Meeting, Cincinnati, OH, March 1-3rd, 2018: forthcoming.

Popular journals

Cederberg, K. 2019. Taking Golf Out of Golf Course: Trajectories to convert facilities to parks and open space preserves. *Landscape Architect and Specifier News*. March edition.

Media- Articles and Interviews

2018 Pigott, S. UA Students Take to Tucson's Roads. *UA News*. https://uanews.arizona.edu/story/ua-students-take-tucsons-roads

Scholarly Presentations • Invited

- 2018 Guest reviewer, Arizona State University, Tempe, AZ.
- 2016 Guest reviewer, Arizona State University, Tempe, AZ.

Scholarly Presentations - Submitted with refereed abstracts

- Cederberg, K. 2018. From golf course to community park and open space: Who is doing it and how? Council of Educators in Landscape Architecture (CELA) Annual Meeting, Blacksburg, VI. March 21-24, 2018: 214.
- Cederberg, K. 2018. Building Creative Confidence: A review of literature and implications for beginning design studios. National Conference on the Beginning Design Student, Cincinnati, OH. March 1-3, 2018.
- Cederberg, K. 2017. Golf course closures in the SW United States: Opportunities for Conservation. Society for Ecological Restoration -Southwest Conference. Albuquerque, NM. Dec. 6-8, 2017.
- Cederberg, K. 2017. Teaching Creative Confidence in Design Education: A review of literature and implications for beginning landscape design and planning studios. Council of Educators in Landscape Architecture (CELA) Annual Meeting, Beijing, China.
- Cederberg, K., Stoker, P. and Ritchie, N. 2017. Bridging the design disciplines: A study of interdisciplinary student engagement in a community planning and design studio. Council of Educators in Landscape Architecture (CELA) Annual Meeting, Beijing, China.
- Cederberg, K. 2016. Reclaiming greens in the Southwest: Strategies for transforming golf courses into multiuse desert communities. Council of Educators in Landscape Architecture (CELA) Annual Meeting, Salt Lake City, UT.

Refereed Abstracts

Cederberg, K., P. Stoker and A. Adkins. 2016. Rewards and hurdles of student engagement in community projects with community partners. Association of Collegiate Schools of Planning Annual Meeting, Portland, OR. (presentation not attended)

Cederberg, K. 2016. Golf course repurposing: An opportunity for retrofitting suburban communities to better serve the community and the ecosystem. Association of Collegiate Schools of Planning Annual Meeting, Portland, OR. (poster presentation not attended)

Pro-Bono Service Learning/Outreach Projects

2019	Cobre Valley Rail Trail. Miami, Tri-cities and Globe, AZ. In conjunction with Gila County and Water Resources Research Center
2018	Iron Horse Neighborhood Association Park Renovation Plan: plan for renovating the Iron Horse Neighborhood Park to make it safe and accessible and incorporate the wash into the park design.
2018	Thrive 05: Plan for City of Tucson and ASU School of Social Work. Included an urban design assessment and an asset-based plan for making transportation more accessible, increasing quality of life and reducing crime in the 85705 zip code. Tucson, AZ.
2017	Nogales Children's Museum and Park Plan (City of Nogales and Nogales Children's Museum non-profit). Plan for the conversion of 3 holes of a defunct golf course and clubhouse into a new children's museum and park. Design focused on the preservation of wetlands, a child centered park and renovation of areas surrounding the clubhouse. Nogales, AZ.
2017	Davis Monthan Air Force Base Ironwood Club Event Space: Plan included the renovation of an outdoor space for military celebrations and improved water management. Tucson, AZ.
2017	Davis Monthan Air Force Base: Plan for General William Blanchard Golf Course. Tucson, AZ.
2017	Tucson Commercial Clusters Report. City of Tucson. Analysis identifying historic commercial clusters within the City of Tucson with potential for adaptive reuse and urban design for walkability. Tucson, AZ
2017	Livable Streets for Vibrant Communities. City of Tucson. Complete Streets Strategies for Tucson, AZ.
2017	Marana's Original Neighborhoods. Town of Marana. Community assessment and improvement plans for Marana's wildcat neighborhoods.
2016	La Doce. A plan for a cultural and business district on South 12 th Ave. Tucson, AZ.
2016	Rethinking the City of Tucson's Major Streets and Routes Plan and Map: A toolbox of policy and design opportunity. Tucson, AZ.
2016	Town of Marana: Parks, Recreation and Open Space 5-year Update and Strategic Plan
2016	High Capacity Transit: Tucson's Next Corridor- City of Tucson

- 2013 University of Arizona College of Natural Resources and USFS- Mt. Lemmon Children's Forest- Master Plan Document
- 2012 Silvercroft Neighborhood Association and City of Tucson- Silvercroft Community Park Conceptual Design

HONORS AND AWARDS

2019	Faculty Advisor, AZ ASLA Student Individual Design Award Project: A River Story Student: Tess Wagner
2017	Faculty Advisor, AZ APA Award- Best Student Project Project: Livable Streets for Vibrant Communities Students: Connor Harmon, Brad Kindler, Amanda Maass, Chris Ortiz y Pino, Michele Scanze, Fei Yu, Yuheng Zhang.
2017	Faculty Advisor, AZASLA Honor Award- Student Collaborative Project: High Capacity Transit: Planning Tucson's next corridor Students: Daniel Martin, Ryan Fagan, Alena Fast, Minette Mahoney, Tai An, Yanan Liu, Falicia Farrante & Domenico Martinelli
2016	Faculty Advisor, AZ APA Award- Best Student Project Project: La Doce: Supporting a naturally occurring cultural and business district on South 12 th Avenue Students: Bridget Guiza, Chris Laria, Nicole Lavely, Maureen McDonald, Brian Sabri, Nolan Bade, Xin Tan, and Collin Palen.
2016	NM ASLA Merit Award: Design Exploratory Category Project: Valle de Oro Urban Wildlife Refuge-Sites Southwest Firm: Sites Southwest- Albuquerque, NM Role: Landscape Designer
2016	NM ASLA Merit Award: Planning & Analysis Category Project: Fourth Street Revitalization Firm: Sites Southwest Role: Landscape Designer

ELECTED MEMBER OF HONOR SOCIETIES

Sigma Lambda Alpha

PROFESSIONAL MEMBERSHIPS

American Society of Landscape Architects Council for Educators in Landscape Architecture

PRINCIPLE COURSES TAUGHT

Landscape Analysis Design Studio 4- Interdisciplinary studio/Urban Design Design Studio 3 Introduction to Design Thinking (online) Consulting/co-teaching PLG 611 spring 2018/2019

M.L.A. AND THESIS COMMITTEES

Theses and Master's Reports: served as committee member

2016 Alamri, Sultan. Aum Qasr Valley Environmental Rehabilitation Project: A connection to an elevated urban fabric

Undergraduate Capstone Reports for students in Bachelor's for the Study of the Built Environment: advisor

2016 Zedick, Daniel. Improving Water Use in the Landscape Through Subsurface Drip Irrigation

SERVICE/OUTREACH

State

2013-2015- NM ASLA Executive Committee 2014-2015- NM ASLA Secretary

University

Jan 2018- May	2019 Member- Undergraduate Council Academic programs subcommittee (2018-2019) Academic policies subcommittee (Spring 2018)
College	
2017-2019	Co-chair, Diversity and Inclusion Committee
2018-2019	CAPLA Strategic Plan Culture Task Force
2018 (spring)	CAPLA Strategic Plan Partnerships/Community Working Group
2015-2018	Member, Design Thinking Committee
2015	IT Search Committee
Department	
2018-2019	Sustainable Built Environments- Landscape emphasis area faculty advisor
2017-2019	Internal student recruitment to AMP Program
2016-2018	Prospective International Student Interviews
2016-2017	Tenure Track Associate Professor Hiring Committee

RELATED PROFESSIONAL SKILLS

Professional Landscape Architecture Registration pending (Spring 2019) Beginning Irrigation Design Workshop, Irrigation Association Conference, Phoenix, Arizona, 2014 Be Loose Graphic Workshop with Mike Lin, Manhattan, Kansas, Jan. 2013 River Restoration Workshop, Fred Phillips Consulting, Yuma, Arizona, 2012 Urban Stream Restoration Workshop, Watershed Management Group, Tucson, Arizona, 2011

NATE RITCHIE

202.834.8043 | nate.ritchie@gmail.com | 112 W. 5th St. Tucson, AZ 85705

EDUCATION

Master of Landscape Architecture

University of Arizona, 2018

Bachelor of Arts: Philosophy & Psychology (Double major) Asbury University, 2006

CERTIFICATIONS & TRAINING

- Completed 2 of 4 sections of the LARE exam to become a Registered Landscape Architect
- Principles of Irrigation: Landscape, Irrigation Association 2-day intensive course

CURRENT AFFILIATIONS

- ASLA Associate Member
- Lead, Emerging Professionals, Southern AZ American Society of Landscape Architects, 2018- present
- University of Arizona Liaison, Southern AZ American Society of Landscape Architects, 2018- present
- YARDS Youth Landscape Maintenance Training, Tucson Clean and Beautiful, 2017-present

WORK EXPERIENCE

Landscape Designer: 2016 – Present Wheat Design Group, Tucson, AZ, wheatdesigngroup.com

- Drafting
- Marketing Prop 407

Project Manager on 4 projects Designer on over 20 projects

Graduate Teaching Assistant: Fall 2017 Foundational Studio

Graduate Research Assistant: Summer 2016

Founder: 2016 Sonoran Morphology, Tucson, AZ

- Concept development
- Design
- Construction management
- Communication with clients

Rincon Community Garden and residential landscape designs

University of Arizona College of Education, Project FOCUS August 2014 – May 2016 Lead Instructor, Campus Life

SKILLS

Adobe Creative Suite Autodesk AutoCAD SketchUp Lumion Microsoft & Apple OS MicroStation Final Cut Pro Microsoft Office

INTERESTS

Sonoran Desert ecology, native plants, irrigation design, outdoor spaces, graphic design.

AWARDS & SCHOLARSHIPS

- 2018 ASLA Merit Award
- 2018 AZ ASLA Student Collaborative Design Award
- 2018 Best Colleague Award
- 2018 Outstanding Community Service
- 2018 Desert Garden Club, Scholarship, University of Arizona, Tucson, AZ
- 2017 EPA Rainworks Challenge Demonstration Category Honorable Mention
- 2017 AZ ASLA Park[ing] Day Award, 'Opuntia Re-Connection', University of Arizona, Tucson, AZ
- 2017 Mary M. and Cliffton E. Bloom Scholarship, University of Arizona, Tucson, AZ
- 2016 Ervin H. Zube Scholarship, University of Arizona, Tucson, AZ

LEADERSHIP & OUTREACH

- 2019 ASLA LARE Preparation Committee Member
- 2019 Emerging Professionals Chair, AZ ASLA
- 2018-2019 Invited Student Critique, CAPLA, University of Arizona, AZ
- 2017-2019 Board Member and Communication Chair, Women in Transportation
- 2017-2019 YARDS Youth Landscape Maintenance Training by Trees for Tucson
- 2017 Complete Streets Workshop, Living Streets Alliance
- 2016-2017 President, ASLA Student Chapter, University of Arizona, AZ
- 2015-2016 First Year Representative, ASLA Student Chapter, University of Arizona, AZ

VOLUNTEER

2019	Habitat for Humanity
2019	Cyclovia
2016	Adopt a Street, Tucson Clean and Beautiful
2015-2016	Freedom by Design

CONFERENCES

- 2019 ASLA, San Diego, CA (Upcoming)
- 2019 Desert Horticulture, Tucson, AZ
- 2019 Certified Irrigation Designer Course Irrigation Association, Long Beach, CA
- 2018 Sports Turf Management Association, Phoenix, AZ
- 2017 Desert Horticulture, Tucson, AZ
- 2016 ASLA, New Orleans, LA

SELECT PROJECTS

Lead Designer, with AECOM for ADOT - I-10/Ruthrauff Road Traffic Interchange, 2013 – present

Construction of bridges over I-10, Union Pacific Railroad, and Davis Ave.; new on/off ramps, MSE retaining walls, drainage improvements, landscape, irrigation and highway improvements along I-10.

Project responsibilities: architectural treatments, landscape and planting designs (over 2000 plants), drafting, irrigation design

Lead Designer - Christ Presbyterian Church, 2017-2018

New design for Church courtyard between the Sanctuary, Narthex and Fellowship Hall; new planting designs for the streetscape and front landscape areas.

Project responsibilities: Concept development, incorporating feedback from church committees into the design, hardscape, planting, irrigation, and site feature design.

Lead Designer, for City of Tucson Parks and Recreation Department - Proposition 407: Bond Renders, 2018

Renders illustrating before and after signage, street markings, crosswalks, landscape and plantings, passive water harvesting, and roundabout on the Connections projects. Project responsibilities: Create renderings, coordinate with City of Tucson Project Management Designer, With Kittelson & Associates and AECOM for Pima County Department of Transportation -Aerospace Parkway, 2017 – 2019

Improvements to Aerospace Parkway between Old Nogales Highway and Raytheon Boulevard, and a new roadway "Southern Extension" from the Aerospace/Raytheon intersection going south to provide access for new development, native plant inventory and report, landscape, and erosion control plans.

Project responsibilities: native plant inventory and native plant inventory memo.

Designer, With Stantec and WSP for Pima County Department of Transportation - Benson Highway,

2017 – 2018

Native plant inventory and report, landscape, and erosion control plans. Landscape design includes water harvesting.

Project responsibilities: landscape and planting designs.

Iandscape architecture + site planning



Curriculum Vitae **Tim Johnson**, PLA, LEED[®] AP Owner

Tim is the owner of JStudio and a registered landscape architect in Arizona, California, Utah, and New Mexico. His experience over the past 20+ years within the landscape architecture profession includes direction and oversight of landscape architecture staff and projects, environmental and riparian mitigation, site planning and design, graphic communications, construction document preparation, and construction administration.

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Tim's experience with the staff and processes of local jurisdictions enables him to help clients navigate the review and approval process with a direct and efficient manner. He is a native of the Sonoran Desert and is inspired by his experience working and living throughout the western U.S., Midwest, Alaska, and Europe. His strengths include his ability to provide creative solutions that meet clients' project needs and honor the environment within which they are designed.

education:

MLA, Landscape Architecture, Utah State University, 1999

BA, History, Arizona State University, 1996

AA, Glendale Community College, 1994

registration / certification:

2006, Leadership in Energy & Environmental Design Accredited Professional

2005, Registered Landscape Architect, Utah License number 4812851-5301

2005, Registered Landscape Architect, California number LA5101

2003, Registered Landscape Architect, Arizona License number 38905

2002, Registered Landscape Architect, New Mexico License number 322

affiliations:

American Society of Landscape Architects (ASLA)

Arizona Chapter of the American Society of Landscape Architects (AZASLA) Executive Committee, Vice President 2005-2007, Southern Section Chair 2005-2007

Urban Land Institute (ULI)

American Planning Association (APA)

United States Green Building Council (USGBC), Southern Arizona Chapter

Metropolitan Pima Alliance (MPA) American Society of Civil Engineers, Southern Arizona Chapter (AZSCE) Women in Transportation, Southern Arizona Chapter (WTS) City of Tucson Resource Preservation Advisory Committee (RPAC) Pima County Riparian Mitigation Work Group City of Tucson Rainwater Harvesting Technical Advisory Group (Rainwater TAG) Southern Arizona Home Builders Association (SAHBA) American Institute of Architects , Allied Individual Member (AIA)

work experience:

JStudio | landscape architecture + site planning - Owner 4/2018 - present Tucson, AZ The Planning Center - Principal 3/2004 - 4/2018 Tucson, AZ Novak Environmental, Inc. - Landscape Architect - Project Manager

7/2002- 3/2004 Tucson, AZ

Land Patterns, Inc. - Landscape Architect 5/1999 - 7/2002 Colorado Springs, CO

US National Park Service - Historical Landscape Architect Intern 5/1998 - 8/1998 and 5/1997 - 8/1997 AK, NE, OH, MI, KS

9/1996 - 5/1999 Utah State University - Research Assistant & Teaching Assistant Logan, UT

pro bono projects | service:

DM Youth Center, Tucson, AZ - conceptual site planning Sister Jose Women's Shelter, Tucson, AZ - landscape & irrigation plan Sky Island Public Charter School, Tucson, AZ - site analysis & master plan Casa de los Niños Campus, Tucson, AZ - landscape, hardscape, & irrigation plans City of Douglas Government Plaza Design, Douglas, AZ - conceptual site plan Habitat for Humanity, Logan UT, Tucson, AZ - landscape design La Frontera, Tucson, AZ - landscape & irrigation plans San Xavier District, Tucson AZ - Safe Routes to School Photo Simulations and Landscape Concept Design

Tucson MS Spring Training at Hi-Corbett Field Complex, Tucson, AZ - Master Planning Pima County Downtown Government Complex, Tucson, AZ - landscape & irrigation plans **conference presentations:** AZ Planning Association State Conference

Crossing Disciplines in Code Writing and Design (co-presenter/panelist) 10/2017

AZ Tech Parks - Latin American Green Development Symposium What is Green Design / Construction (presenter) 3/2016

AZ Planning Association State Conference What is a TRE and what does it do?... (presenter) 10/2015

American Society of Landscape Architects (ASLA) National Conference A Paradigm Shift in Irrigation Design: Calculating for Rainwater Harvesting (co-presenter) 9/2012

AZ Planning Association State Conference

From the Back of a Napkin to Avatar: Graphics as a Planning Translation Tool (co-presenter) 10/2011

AZ Planning Association State Conference *City of Tucson Commercial Rainwater Harvesting Requirements* (co-presenter/panelist) 10/2010

AZ Nursery Association State SHADE Conference *City of Tucson Commercial Rainwater Harvesting Requirements* (presenter) 4/2010

AZ Society of Civil Engineers (AZSCE-Southern Section) Luncheon *City of Tucson Commercial Rainwater Harvesting* (presenter) 5/2009

Metropolitan Pima Alliance (MPA) Brown Bag Luncheon Luncheon *City of Tucson Commercial Rainwater Harvesting* (presenter) 4/2009

selection committees | panels:

Women in Transportation (WTS) - Scholarship Review Committee 5/2009

University of Arizona (CAPLA) - Capstone Project Review Panel 4/2017

University of Arizona (CAPLA) - Capstone Project Review Panel 4/2014

American Society of Landscape Architects (ASLA) - NM State Awards Review Committee 10/2010

University of Arizona (CAPLA) - Capstone Project Review Panel 4/2008

University of Arizona (CAPLA) - Capstone Project Review Panel 4/2007

American Society of Landscape Architects (ASLA) - Indiana State Awards Review Committee 10/2006

foreign languages:

German - fluent Swiss German - conversational Spanish - beginning conversational French - beginning

computer skills:

Advanced professional skills in AutoCAD, Adobe Suite (PS, AI, ID), SketchUp, Microsoft Office, Revu Bluebeam

professional project experience:

commercial | office

- First and Main Town Center; Colorado Springs, CO
- Project designer for landscape and hardscape design of a 25-acre commercial town center. Project included anchor and boutique shopping landscape requirements, sub-surface fountain plaza, streetscape design, and pocket park.
- Walmart Neighborhood Market; Pima County, AZ
- Miramonte at the River Commercial, Tucson, AZ
- Pima County Administrative Building Landscape, Tucson, AZ
- Innovation and Technology Building at the UA Tech Park at the Bridges, Tucson, AZ
- Home Plate, Marana, AZ
- El Dorado Professional Plaza, Tucson, AZ
- El Rio Commerce Court, Tucson, AZ
- Casa de los Niños Campus, Tucson, AZ
- River Village Expansion Landscape, Pima County, AZ
- Agave Self Storage Landscape, Marana, AZ
- The Marketplace Expansion Landscape, Marana, AZ

multifamily

- Pima Canyon Luxury Apartments, Pima County, AZ
- RendezVous Downtown Apartments & Plaza, Tucson, AZ
- Sterling Student Housing Mid Rise, Tucson, AZ

infrastructure / utilities

North Marana Development and Infrastructure Study, Marana, AZ

- TEP Pantano Substation; City of Tucson, AZ
- TEP Camino Del Cerro Substation; City of Tucson, AZ
- TEP Cienega Substation; City of Tucson, AZ.
- TEP Canoa Ranch Substation; Pima County, AZ
- TEP Sun City Substation; Pima County and Town of Oro Valley , AZ
- TEP Harrison Substation; City of Tucson, AZ
- TEP Orange Grove Substation; Pima County, AZ
- TEP Kino Substation and Nature Park, City of Tucson, AZ

mixed use

- Spring Creek Traditional Neighborhood Development (TND); Colorado Springs, CO
- Lowell Neighborhood; Colorado Springs, CO
- El Conquistador Apartments and Mixed Use Commercial Planned Area Development, Oro Valley, AZ

site planning

- The Bridges Block-1 Conceptual Site Plan, Tucson, AZ
- La Cholla and Tangerine Community & Church, Oro Valley, AZ
- Kachina Homes Community , Pima County, AZ
- Silverbell & Gorret Community Slte Plan, Tucson, AZ
- Saguaro Bloom Neighborhoods (8A, 8B, 4, 3, 2, and 7), Marana AZ
- Kino South Master PLan, Tucson, AZ
- Lantana Apartments Expansion Site Plan, Tucson, AZ
- Marana Pumpkin Patch Site Plan, Marana, AZ
- Lazy-K Community Site Plan, Marana, AZ
- Houghton & Valencia (AZ State Land) Community Site Plan, Tucson, AZ
- Twin Peaks and Oasis Community, Marana, AZ
- Northstar Properties, Tucson, AZ
- Sonoran Corridor Master Plan, Pima County, AZ
- Southeast Employment & Logistics Center Master Plan, Pima County, AZ
- Sunset Professional Campus Master Plan, Tucson, AZ
- Pima Medical Campus Master Plan, Tucson, AZ
- Benedictine Monastery & Apartments Site Plan, Tucson, AZ
- Oracle and linda Vista Apartments & Mixed Use Site PLan, Oro Valley, AZ
- The Canyons at Linda VIsta Apartments and Mixed Use Site Plan, Oro Valley, AZ
- La Estancia Master Planned Community, Tucson, AZ
- Mountain Vail Community, Tucson, AZ
- Willow Ridge Community Site Plan, Marana, AZ
- Twin Peaks & Camino de la Manana Charter School Site Plan, Marana, AZ
- Eagles Nest Community Site Plan, Oro Valley, AZ

site, facility, or community master plans

• Pima County Aerospace Defense Research and Business Park, Pima County, AZ

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- Sahuarita Southeast Conceptual Area Plan (SECAP); Town of Sahuarita, AZ
- Pima County Sports Facilities Assessment; Pima County, AZ
- El Corozon del Tres Rios del Norte Open Space and Recreation Master Plan, Pima County, Tucson, and Marana AZ
- Continental Ranch Open Space Assessment and Master Plan; Town of Marana, AZ
- Davis-Monthan AFB Recreation Center and Park; Tucson, AZ
- Holloman AFB Recreation Center and Park; Alamogordo, NM
- Saguaro Bloom Community Center, Marana, AZ
- Sunset Professional Park, Pima County, AZ

visual impact & viewshed analysis

- Silverbell Road Viewshed Analysis and Simulations, Tucson, AZ
- Canoa Ranch Power Substation Simulation; Pima County, AZ
- El Camino del Cerro Power Substation Simulations, Tucson, AZ
- North Star Properties Simulations, Tucson, AZ
- U-Haul Queen Creek Simulations, Queen Creek, AZ
- U-Haul Lincoln Simulations, Lincoln, IL
- U-Haul Starky Ranch, Odessa, FL

design charrettes

- El Mirage Design Charrette; El Mirage, AZ
- Nogales General Plan Design Charrette; Nogales, AZ
- Kayenta Township Design Charrette; Kayenta Township, Navajo Nation
- Tucson Streetcar Urban Land Use Plan (SLUP) Design Charrette; Tucson, AZ
- UA BioPark Design Charrette; Tucson, AZ
- UA Tech Park Design Charrette; Tucson, AZ
- City of Safford General Plan, Safford, AZ

regional planning efforts

- Sahuarita East Conceptual Area Plan (SECAP), Sahuarita, AZ
- Grant Road Improvement Plan, Tucson, AZ
- Kayenta Township Master PLan Update, Kayenta, Navajo Nation, AZ
- Nogales General Plan Update, Nogales, AZ
- El Mirage General Plan Update, El Mirage, AZ

master planned communities

• Spring Creek Traditional Neighborhood Development, Colorado Springs, CO

- Star Valley Master Planned Community; Pima County, AZ.
- Saguaro Bloom Master Planned Community, Marana, AZ
- Dove Mountain Master Planned Community, Marana, AZ
- Tribute Master Planned Community, Sierra Vista, AZ
- Sendero Pass Master Planned Community, Pima County, AZ
- Continental Reserve Master Planned Community, Marana, AZ

recreational

- Kino South Sports Complex, Tucson, AZ
- Santa Cruz River Shared Use Path; Marana, AZ
- Queen Creek Trail Master Plan; Queen Creek, AZ
- Saguaro Bloom Community Park; Marana, AZ
- Pima County Sports Facilities Assessment; Pima County, AZ
- El Corozon del Tres Rios del Norte Open Space and Recreation Master Plan, Pima County, Tucson, and Marana AZ
- Pathway to Discovery at UA BioPark; Tucson AZ
- Science Park Drive Loop Multi-Use Path; Tucson, AZ
- Pima Canyon Trailhead; Pima County, AZ
- Rita Road Multi-Use Path and Parklet Design Concept; Tucson, AZ
- Queen Creek Recreational Master Plan; Superior, AZ
- Esmond Station Neighborhood Park; Tucson, AZ
- Continental Reserve Park, Town of Marana, AZ
- U.S. National Park Service; NE, MI, KA, OH, AK.

design guidelines

- Continental Reserve Design Guidelines, Marana, AZ
- Sendero Pass Design Guidelines, Pima County, AZ
- Downtown Tucson Streetscape Design Manual, City of Tucson, AZ
- Fourth Avenue Streetscape Master Plan, Tucson, AZ
- La Estancia Master Planned Community Design Guidelines, Tucson, AZ

residential communities

- Kachina Homes Landscape, Pima County, AZ
- Twin Peaks and Oasis Community Landscape, Marana, AZ
- Star Valley Landscape, Pima County, AZ
- Lazy-K Landscape, Marana, AZ
- Tangerine Ridge Landscape, Marana, AZ
- Madera Highlands Black 24 Landscape, Sahuarita, AZ
- Mountain Vail Community Landscape, Tucson, AZ
- Willow Ridge Landscape, Marana, AZ

- Eagles Nest Community Landscape, Oro Valley, AZ
- Deseo Community Landscape, Pima County, AZ
- Rancho del Cobre Landscape, Oro Valley, AZ

streetscape | transportation

- Marana Main Street and Sandario Road Roundabout, Marana, AZ
- RendezVous Downtown Streetscape (Stone, Broadway, & Congress), Tucson, AZ
- Sterling Student Streetscape (1st Street & Tyndall Ave), Tucson, AZ
- Downtown Tucson Streetscape Design Manual, City of Tucson, AZ
- Grant Road Design Concept Report, City of Tucson, AZ
- Fourth Avenue Streetscape Master Plan, Tucson, AZ
- Grant Road Corridor Study, Tucson, AZ
- InterQuest Business Park Boulevard, Colorado Springs, CO
- Dove Mountain Boulevard, Marana, AZ
- Continental Reserve Loop Road, Marana, AZ
- Grant Road Corridor Study, Tucson, AZ
- Rita Road Landscape, Tucson, AZ
- Aerospace Defense Corridor, Pima County, AZ
- Tucson Downtown Urban Streetscape Design Guidelines, Tucson, AZ

institutional | educational

- The Renaissance Academy, Colorado Springs, CO
- Kino Hospital Campus, City of Tucson, AZ
- Planned Area Development (PAD)
- University of Arizona Science and Technical Campus, Tucson, AZ
- Vail High School and Early Childhood Center, Tucson, AZ
- Saguaro Springs Community Center; Marana, AZ
- TechPark AZ at The Bridges (formerly UA BioPark), Tucson; AZ
- UA TechPark, Tucson, AZ
- YMCA at UA TechPark Concept Plan; Tucson, AZ
- Esmond Station Elementary and Middle School; Tucson, AZ
- Western Institute for Leadership Development (WILD) Campus Landscape; Tucson, AZ
- Sky Islands High School Campus Master Plan Concept; Tucson, AZ
- Valley View Early Childhood Learning Center Playground; Pima County, AZ
- Casa de los Niños Campus, Tucson, AZ

religious

- St. Paul's Catholic Church and School; Colorado Springs, CO
- Project Designer for church campus responsible for plaza design, landscape design, cost estimating, and construction observation.

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• Beth-El Mennonite Church; Colorado Springs, CO

environmental

- Grant Road Professional Plaza-Riparian Mitigation Report; City of Tucson, AZ
- 22nd and Houghton WASH Report and Mitigation Plan; City of Tucson, AZ
- Star Valley Riparian Mitigation Plans; Pima County, AZ
- TEP Cienega Substation Environmental Resources Report; City of Tucson, AZ
- Mountain Vail Environmental Resources Report; City of Tucson, AZ
- Rosehill Wash Restoration Plan; Tucson, AZ
- Valencia Wash Restoration Plan; Pima County, AZ
- Rodeo Wash Restoration Plan; Tucson, AZ
- TEP Kino Substation Riparian Mitigation and NPPO, Tucson, AZ
- TEP Orange Grove Substation Landscape, NPPO, Environmental Resources Report, Pima County, AZ
- Willow Ridge NPPO, Marana, AZ
- Eagles Nest Community NPPO, Oro Valley, AZ
- Deseo Community NPPO, Pima County, AZ

military

- Davis-Monthan Air Force Base Renovations; City of Tucson, AZ
- Holloman Air Force Base Renovations; City Alamogordo, NM
- Border Patrol Landscape, Tucson, AZ (Davis-Monthan AFB)

miscellaneous

- Commercial Rainwater Harvesting, Technical Advisory Committee & Seminars, Tucson AZ
- Marana Pumpkin Patch Amusement Park Master Plan, Marana, AZ
- Los Reales Landfill Landscape, Tucson, AZ
- Waste Management Landscape, Marana, AZ
- Komatsu Testing Facility Landscape, Pima County, AZ
- Glendale Assisted Living Landscape, Glendale, AZ

water resource management | irrigation design

- Saguaro Bloom Irrigation Master Plan, Town of Marana, AZ
- Vail Academy Irrigation and Rainwater Harvesting Plan; Tucson, AZ
- Esmond Station Park Irrigation Master Plan; Tucson, AZ

over-structure projects

- RendezVous Downtown Apartments & Plaza, Tucson, AZ
- Sterling Student Housing Mid Rise Plaza and Rooftop Pool, Tucson, AZ

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Education

PhD 1997 University of Waterloo, Canada Planning

MArch 1987 University of Manitoba, Canada Master of Architecture

BLA 1978 University of Guelph, Canada, Bachelor of Landscape Architecture

Professional Affiliations

Fellow – Canadian Society of Landscape Architects (CSLA)

World Heritage Evaluation Panel Co-Chair—International Council on Monuments and Sites (ICOMOS)

Member- International Federation of Landscape Architects (IFLA)

Expert Advisor—International Council on Monuments and Sites/International Federation of Landscape Architects- International Scientific Committee on Cultural Landscapes (ICOMOS/IFLA-ISCCL)

Full Member — Alberta Association of Landscape Architects (AALA); and Ontario Association of Landscape Architects (OALA)

Full Member — American Society of Landscape Architects (ASLA)

Member- Alliance for Historic Landscape Preservation

Work History

September 1984 to Present	Canada, Australia and USA
Cultural Landscape Consultant and Advisor	
Serving as Individual Practitioner to Multi-Disciplinary Team Member	
September 2017 to Present	Tucson, USA
Professor and Dean	
College of Architecture, Planning and Landscape Architecture,	
University of Arizona	
January 2010 to August 2017	Alberta, Canada
Professor and Dean	
Faculty of Environmental Design, University of Calgary	
January 2007 to December 2009	Adelaide, Australia
Professor and Head & Chair (Dean)	
School of Architecture, Landscape Architecture and Urban Design,	
University of Adelaide	
April 2006 to June 2006	Tokyo, Japai
Visiting Professorship	
Laboratory of Ecosystem Science and Landscape Planning,	
University of Tokyo	
August 1999 to December 2006	Guelph, Canada
Associate Professor of Landscape Architecture	
School of Environmental Design and Rural Development,	
University of Guelph	
May 1989 to July 1999	Guelph, Canada
Assistant Professor of Landscape Architecture	
School of Landscape Architecture, University of Guelph	
April 1988 to March 1989	Tokyo, Japar
Architectural Fellowship Recipient	
International Design Division, Shimizu Corporation/University of Manitoba	
September 1984 to May 1987	Winnipeg, Canada
Master of Architecture	
University of Manitoba	
Graduate Student and Self-employed Landscape Architect for Parks Canada	
April 1981 to August 1984	Winnipeg, Canada
Landscape Architect	
Parks Canada, Historic Sites.	
Prairie and Northern Region	
August 1980 to March 1981	Orthez, Franco
Landscape Designer	
Self-employed	
June 1978- July 1980	Calgary, Red Deer & Edmonton
Landscape Designer	Canada
Roman Fodchuk and Associates, Calgary; Red Deer Recreation Department,	

Expert Advising/Juror

2018	Cultural Landscape Workshop. Upon invitation of <i>ICOMOS Mexico</i> coordinating and delivering heritage conservation workshop to public and private sector practitioners now working on the recovery of cultural landscapes post-2017 Mexico City and region earthquake (October)
2018 – 2019	World Heritage Evaluation Panel Co-Chair, UNESCO'S International Council on Monuments and Sites. World Heritage Evaluation Unit. November, 2018 onward with current work on selection of Field Mission experts for 2018 nominated sites
2017 – 2018	World Heritage Sites Review Panel Member , UNESCO's International Council on Monuments and Sites. World Heritage Evaluation Unit. November, 2017 and March, 2018. Paris, France
2017	ICOMOS (UNESCO) Representative to the World Design Summit. Montreal, Canada
2017	State Party Advisor to the Japanese Government and Nagasaki Prefecture on the World Heritage nomination, <i>Hidden Christian Sites of Nagasaki Region</i>
2017	Juror. Designer of the Year. Western Living Magazine
2015 – 2017	Vice President, North America Region. UNESCO's International Council on Monuments (ICOMOS), International Scientific Committee on Cultural Landscapes
2016-2017	World Heritage Sites Review Panel Member, UNESCO's International Council on Monuments and Sites. World Heritage Evaluation Unit. November, 2016 and March, 2017. Paris, France
2016-2017	Part of 5-person expert panel struck by ICOMOS Canada , providing advisory service to jurisdictions across Canada seeking inclusion on the nation's new <i>World Heritage Tentative List</i>
2016	Midstream Field Mission Specialist on World Heritage nominations for State Parties in Czech Republic and Germany (June)
2016	Upstream Field Mission Specialist for World Heritage nomination for Saudi Arabia (September)
2016	International Panelist participating in Workshop on the development of Bhutan's new <i>Heritage Bill</i> . (June) Paro, Bhutan

2015-2016	World Heritage Sites Review Panel Member, UNESCO's International Council on Monuments and Sites. World Heritage Evaluation Unit. November, 2015 and March, 2016. Paris, France
2000 – Present	 ICOMOS/IFLA Member (Joint- International Council on Monuments and Sites/ International Federation of Landscape Architects) International Scientific Committee on Cultural Landscapes: Voting Member for Canada (2000 to 2006); Expert Advisor to Executive Council (2007 to present);
	World Heritage Nomination Desk Reviewer 2007-2014- regarding sites in Japan, China, Greenland, South Africa, England, USA & Viking Age Sites in Northern Europe
	(Iceland/ Denmark/ Germany/ Latvia/ Norway); Co-Chair , Working Group on Heritage Landscapes at Risk and Advocacy & Culturenature Committee Member. (2015 to present)
1989 – Present	Fellow. Canadian Society of Landscape Architects (investiture 2016); Full Member . Alberta Association of Landscape Architects and Ontario Association of Landscape Architects
2013 – 2017	Member. Advocacy Task Force, Canadian Society of Landscape Architects (CSLA), Canada
2015	Moderator. ICOMOS/IFLA- International Scientific Committee on Cultural Landscapes Annual Meeting 2015, October, Jeju Island, Republic of Korea
2015	Manuscript Reviewer. International Journal of Sustainable Development and World Ecology
2014	Grant Reviewer for the Austrian Science Fund- FWF Der Wissenschaftsfonds, Austria
2013	External Doctoral Examiner . <i>Royal Melbourne Institute of Technology University</i> (<i>RMIT</i>), <i>Practice-Based PhD Practica Examinations</i> and <i>Exhibitions</i> . (3 candidates- England, China and Estonia), Barcelona, Spain
2013 – 2015	Academic Advisor. National Executive Forum on Public Property. Canada
2012 – 2016	Panel Member for Alberta Association of Landscape Architects. Urban Design Review Panel, City of Calgary. Canada
2012	Urban Design Jury Member . <i>Ciudades Humanas Ciudades Incluyentes</i> <i>International Committee</i> , Mexico

2011-2012	Juror. 20th and 21st Annual Emerald Awards. Environmental award	
	competition for Province of Alberta, Canada	
2011	Juror. City of Calgary, Lion's Award (for heritage conservation efforts).	
2011	Panel Member . Province of Alberta appointee to <i>Oversight Panel judging the final selection of the new Royal Alberta Museum</i> Design-Build contractor, Edmonton, Canada	
2011	Juror. City of Calgary Mayor's Urban Design Award (MUDA) Competition, Canada	
2009 – 2010	Organizing Committee Member for <i>2nd Xiamen Forum on Urban Environment</i> (<i>XIFUE</i>), December 11-13, 2010. Organized with the Institute of Urban Environment, Chinese Academy of Sciences, Xiamen, China	
2009 – 2017	Editorial Board Member . International Journal of Urban Sustainability and World Ecology (Taylor and Francis)	
2009	Vice Chancellor Team Member investigating the feasibility of setting up a SE Asian Centre for design education in Singapore, on behalf of the University of Adelaide, Australia	
2009	World Heritage Nomination International Advisory Team Member for Mt. Fuji, Japan	
2008	Conference Co-organizer. <i>"How do you make a city hungry for design?"</i> National Wine Centre. Adelaide, Australia	
2008	Juror. National Australian Student Prize for the Advancement of Architecture. Student Organized Network for (SONA)	
2008 – 2009	Citizen Member. Port Adelaide Heritage Conservation Campaign, Australia	
2007 – 2008	Design Team Member . University of Adelaide lead on <i>Green Cathedral Project</i> . Water conservation landscape planning along the Torrens River, Adelaide. St. Peter's Cathedral and Energy Architects, Australia	
2007 & 2009	South Australia Design Awards Juror. <i>Australian Institute of Architects</i> and <i>Australian Institute of Landscape Architects</i> as well as the <i>Planning Institute of Australia</i> , Australia	

2007 – 2009	Full Member. Australian Institute of Landscape Architects, Australia	
	Corporate Member. Australian Institute of Architects, Australia	
	Academic Member. Planning Institute of Australia, Australia	
2003	Examiner. Council of Landscape Architectural Registration Board (CLARB), USA	
2002 & 2003	National Awards Juror (2002), and National Awards Chair (2003), Canadian	
	Society of Landscape Architects Awards of Excellence, Canada	
2001 – 2005	Educator Member. Ontario Association of Landscape Architects (OALA) Executive	
	Council, Educator from the University of Guelph, Canada	
2000 – 2010	International Member. American Society of Landscape Architects, USA	
2000 – 2002	Vice President. Alliance for the Preservation of Historic Landscapes. US-	
	Canadian organization of academics, government agencies and practitioners	
1999	Conference Organizer. Borderlands: The Shared Canadian and U.S. Experience of	
	Landscape. Alliance for Historic Landscape Preservation Annual Meeting, June 2-5,	
	1999, Niagara-on-the-Lake, ON, Canada	
1997 – 2001	Board Member, Parks Research Forum of Ontario (PRFO), Canada	

Awards, Fellowships, Grants

2016	Fellow Status granted by the <i>Canadian Society of Landscape Architects</i> (for Professional University Instruction, and Service to the Community or Public) http://www.csla-aapc.ca/people/college-of-fellows
	FELLOW
2015	"Notable Graduate", University of Guelph's Landscape Architecture Program, 50th Anniversary Legacy Site http://www.uoguelph.ca/sedrd/landscape- architecture NOTABLE GRADUATE
2014	Faculty representative for the award, <i>Heroes of The Flood</i> , granted by the Province of Alberta, which recognized the work of the Faculty (with the City of Calgary and O'Brien Institute of Public Health) mounting an international symposium and block week studio centering on making Calgary more resilient- <i>After the Flood</i> (of 2013). FACULTY REPRESENTATIVE NOMINEE
2009	American Society of Landscape Architects. Honor Award in Communications. (Contributor On Canadian Projects) THE MASTER LIST OF DESIGN PROJECTS OF THE OLMSTED FIRM, 1857-1979

2009	Boston Society of Landscape Architects' Award of Excellence. (Contributor On
	Canadian Projects) THE MASTER LIST OF DESIGN PROJECTS OF THE OLMSTED FIRM, 1857-1979
2009	J.B. Jackson Book Prize, Foundation for Landscape Studies. (Contributor On
	Canadian Projects)
	THE MASTER LIST OF DESIGN PROJECTS OF THE OLMSTED FIRM, 1857-1979
2007	Canada's Walk of Fame Foundation, Toronto, Canada.
	NORTHERN LIGHTS TEAM FIRST PLACE- WINNER, DESIGN COMPETITION
2006	Canadian Society of Landscape Architects, National Citation.
2000	LANDSCAPE LEGACIES (UofT Press) POLLOCK-ELLWAND & PRESTON (2006)
2004	Richardson Foundation
	LANDSCAPE LEGACIES (UofT Press) POLLOCK-ELLWAND & PRESTON (2006)
2003 – 2006	Social Science and Humanities Research Council (SSHRC): Standard Grant.
	PRINCIPAL INVESTIGATOR
	OLMSTED FIRM IN CANADA
1999	International Countryside Exchange, Isle of Wight, England.
	PLANNING TEAM MEMBER
1999	Canadian Institute of Planners Award for Planning Excellence - Honorable
	Mention. Creating Curricula and Software Tools for High School-Based
	Community Heritage and Economic On-line Resource Centers with
	Mapconnections Consortium.
	COMMUNITY-BASED INFORMATION SYSTEMS
1998	Mapconnections Consortium. Cambridge, Ontario.
	RESEARCH GRANT
1995 – 1997	Social Science and Humanities Research Council (SSHRC) Doctoral
	Fellowship.
	DOCTORAL FELLOW
1988 – 1989	Shimizu Corporation – University of Manitoba Architect Exchange Fellowship. Tokyo, JAPAN
	ARCHITECTURAL FELLOW
1987	American Institute of Architects Scholastic Award – The AIA School Medal and the
	Certificate of Merit from the Henry Adams Fund, University of Manitoba. "The
	American Institute of Architects awards an engraved medal and certificate of merit
	to the top-ranking graduating student in each architecture program"
	http://www.aia.org/education/AIAB087873
	MEDAL & CERTIFICATE WINNER

PAPERS AND PRESENTATIONS

Books

2004 - 2006Pollock-Ellwand, N. and Preston, S. Landscape Legacies. Created Space from
the Prehistoric to the Present. Toronto, ON: U of T Press. 563 pages

Chapters/Essays in Books/Guest Editing

2018	Pollock-Ellwand, N. "The Perils and the Promise of Cultural Landscapes in Conservation in Bhutan". In, <i>Support to the South Asian Cultural Landscape</i> <i>Initiatives. Experience in Bhutan.</i> Yeshi Samdrup, Junko Makai, Roland Lin Chih- Hung (eds.) UNESCO Japan FiT + Department of Culture, Bhutan and the Oriental Cultural Heritage Sites Protection Alliance. Paris, France (in Press)
2014	Guest Editor. Landscape/Paysage Special Issue on Resilience- Landscape Adaptations to Climate Change. Winter/Hiver 2014. Vol. 16 (4). "To Begin With" (pp. 11-12), "The Last Word" (p.54)
2008 and 2012 (revised)	Pollock-Ellwand, N. "The Canadian Olmsted Projects" In, <i>The Master List of Design Projects of the Olmsted Firm 1857 to 1979</i> (second edition). L. Lawliss, Caroline Loughlin and L. Meier (eds.). Tranquility, NJ: National Association of Olmsted Parks. pp.14-18 (and correction of Canadian job listings throughout document). 348 pages
2006	Pollock-Ellwand, N. "The Critical Divide: Landscape Policy and Its Implementation". In, John Weins and Michael Moss (eds.). <i>Issues in Landscape Ecology</i> . Second Edition. Cambridge, England: Cambridge University Press. pp. 281-295
1995	Pollock-Ellwand, N. "A Homestead Restored". In, Edwinna von Baeyer, and Pleasance Crawford (eds.). <i>Garden Voices: Two Centuries of Canadian Garden</i> <i>Writing</i> . Toronto: Random House Canada. pp. 122-126

Maior Refereed Journal Articles

2017 Pollock-Ellwand, N. "The Prolific Interpreter of the Olmsted Vision: Frederick G. Todd, Canada's First Landscape Architect." *Planning Perspectives: An International Journal of History, Planning and Environment.* Published On-line 16 Nov 2017. pp 1-24. DOI <u>10.1080/02665433.2017.1389658</u>

2012	Pollock-Ellwand, N. "Gordon Culham: Living a 'Useful Life' through the Professionalization of Canadian Landscape Architecture and Town Planning". <i>Planning Perspectives: An International Journal of History, Planning and the</i> <i>Environment.</i> Vol. 27 (4): 587-609. October
2011	Pollock-Ellwand, N. "Common Ground and Shared Frontiers in Heritage Conservation and Sustainable Development: Partnerships, Policies and Perspectives". Special Issue: Multidisciplinary Perspectives on Sustainable Development. International Journal of Sustainable Development & World Ecology. Vol. 18 (3): 236-242
2010	Pollock-Ellwand, N. "Rickson Outhet: Bringing the Olmsted Legacy to Canada. A Romantic View of Nature in the Metropolis and the Hinterland". <i>Journal of Canadian Studies.</i> 44 (1): 137-183
2009	Pollock-Ellwand, N., Yokohari, M., Miyamoto, M. and Kano, Y. "Commerce and Conservation: An Asian Approach to an Enduring Landscape, Ohmi-Hachiman, Japan". International Journal of Heritage Studies. 15(1):3-23
2006	Pollock-Ellwand, N. "The Olmsted Firm in Canada: A Correction of the Record". Planning Perspectives: And International Journal of History, Planning and the Environment. 21 (3): 277-310. July
2006	Pollock-Ellwand, N. "Travelling the Route from Designation to Local Action: The Case of the Underground Railroad Settlement in Buxton, Ontario, Canada" International Journal of Heritage Studies. 12 (4): 372-388
2001	Pollock-Ellwand, N. "Gréber's Plan and the 'Washington of the North': Finding A Canadian Capital in The Face of Republican Dreams". <i>Landscape Journal.</i> 20(1): 48-61
2001	Pollock-Ellwand, N. "Landscape Policy and Planning Practice: The Gap In Understanding, Ontario, Canada". <i>Landscape Research</i> . 26(2): 99-118
1996	Pollock-Ellwand, N. "The Need for Holism: A Landscape and Pluralist Perspective". in, Gordon Nelson and John Marsh (eds.). <i>Environments: A</i> <i>Journal of Interdisciplinary Studies.</i> 24(1): 94-96
1995	Pollock-Ellwand, N. "Cultural Landscapes and Environmental Ethics: The Case of Puslinch Township's Historic Roadside Trees". <i>Journal of Agricultural and Environmental Ethics</i> . 7(2): 189-203

1992 Pollock-Ellwand, N. "Heritage Advocacy in the Cultural Landscape'. APT Journal. XXIV (3-4): 71-77

Refereed Conference Presentations and Proceedinas

2014	Pollock-Ellwand, N. "The Completion of Sagrada Familia: Questions of Heritage Authenticity, Authority and Authorship". Theme 5- Emerging Tools for Conservation Practice. <i>18th ICOMOS General Assembly</i> . Florence, Italy
2011	Pollock-Ellwand, N. "Planning Innovations with Cultural Landscapes: Canada, New Zealand and Australia". <i>Canadian Society of Landscape Architects- L'Association</i> <i>des Architectes Paysagistes du Canada (CSLA-AAPC) Congress 2011. On the Land.</i> July 14 – 17; and moderator 'Value Heritage' session. Iqaluit, Nunavut
2010	Pollock-Ellwand, N. "The Paradox and Legacy of Gordon Culham: Professionalism of Landscape Architecture and Town Planning in Urban Canada". <i>CSLA-AAPC Congress 2010</i> . August 19-21; and moderator 'Urban Forests' session. Edmonton, AB
2008	Ma, M. (Presenter) and Pollock-Ellwand, N. "Reanimation of a Heritage Site: The Case in Alhambra". <i>Conference on Virtual Systems and Multimedia Dedicated to</i> <i>Digital Heritage (VSMM 2008),</i> October 20 th -25 th , 2008 in Limassol, Cyprus
2007	Pollock-Ellwand, N. "Exploring Aboriginal Approaches to Cultural Landscapes: At the Frontier of New Planning Perspectives". <i>International Federation of</i> <i>Landscape Architects (IFLA) World Congress.</i> August 24 th to 29 th , 2007. Kuala Lumpur, Malaysia
2007	Ma, M. (Presenter) and Pollock-Ellwand, N. "In Search of the Garden Atmosphere within the Court of the Lions, Granada, Spain: A Landscape Architectural Perspective". <i>5th International Conference on Science and</i> <i>Technology in Archaeology and Conservation</i> , July 7-10, 2007 in Baeza and Granada, Spain
2005	Pollock-Ellwand, N. "Out of America: The Olmsted Firm in Canada". <i>IFLA World Congress</i> . June 25th -July 1st, 2005. Edinburgh, Scotland
2005	Pollock-Ellwand in panel at <i>Council of Educators in Landscape Architecture (CELA)</i> . Session on Distance Education in Landscape Architecture. September, 25th, 2005. Athens, Georgia, University of Georgia, US

2004	Pollock-Ellwand, N. and Douglas, D. "Collaborative Education of Practitioners: Landscape Architects and Planners". <i>Ontario Professional Planning Institute/Ontario</i> <i>Association of Landscape Architects Conference</i> . Deerhurst Resort, September 9th – 12th. Gravenhurst, ON
2004	Pollock-Ellwand, N., Limousin, M. and Gosselin, H. "The Rabbits Sit Beside The Foxes Here". <i>IFLA World Congress</i> , May 26th, Calgary, AB
2002	Pollock-Ellwand, N. "The Path to the Promised Land: A Terminus to the Underground Railway". <i>ICOMOS Canada Momentum 2002 – Cultural Routes: A</i> <i>Heritage to Rediscover</i> . pp. 75-85. Ottawa, ON
2000	Pollock-Ellwand, N. "Intergenerational Learning at the Terminus of the Underground Railroad: Using Landscape-based High School Curriculum". <i>CELA 2000 Proceedings.</i> University of Guelph. August 4th -6th, Guelph, ON
2000	Pollock-Ellwand, N. "Community-Based Heritage Data Collection: Incorporation into High School Curriculum." <i>Proceedings of Caring for our Land and Water: Stewardship and Conservation in Canada</i> . Guelph, ON
1999	Pollock-Ellwand, N. and Nelson, J.G. "Land Use History, Landscape Change and The Role of Parks and Protected Areas". Keynote Presentation. <i>Challenges to Parks and</i> <i>Protected Areas in Ontario: Parks and Protected Areas Research in Ontario.</i> Annual Meeting, Guelph, ON. April 22nd and 23rd, Waterloo, ON: PFRO, pp. 11-22
1999	Pollock-Ellwand, N., Van Osch, K. and Nelson, J.G. "Introduction to Special Sessions On parks and Protected Areas in Southern Ontario". <i>Challenges to Parks and</i> <i>Protected Areas in Ontario: Parks and Protected Areas Research in Ontario. Annual</i> <i>Meeting of Parks and Protected Areas in Ontario.</i> Guelph, ON. April 22nd and 23rd, Waterloo, ON: Parks Research Forum of Ontario (PRFO), pp. 1-2
1999	Pollock-Ellwand, N. "Borderlands – Introduction" Conference Organizer of International Conference on the Shared Experience of Landscape between Americans and Canadians. Niagara-on-the-Lake, ON
1998	Pollock-Ellwand, N. "Notes from the Plenary Chair". <i>What Works? Heritage Day Workshop</i> . Cambridge, Ontario: Grand River Conservation Authority. pp. 97-99
1998	Pollock-Ellwand, N. "Building Community and Conserving Cultural Landscapes". Parks and Protected Areas in The Canadian Shield: Information and Research Needs. Annual Meeting of Parks and Protected Areas in Ontario. Peterborough, ON, February 5th-6th. Waterloo, ON: PRFO, pp. 326-329

1995	Pollock-Ellwand, N. "Ontario's Landscape Legacies: A Model for a Province- wide Inventory". in, John Marsh and Janice Fialkowski (eds.). <i>Linking Cultural and</i> <i>Natural Heritage</i> . (Proceedings of a Conference at Trent University). Peterborough: The Frost Centre for Canadian Heritage Development. pp. 91- 116
1995	Pollock-Ellwand, N. and Dakin, S. "'Landscape': From Concept to Practice". in J. G. Nelson, N.D. Pollock-Ellwand, and T. Stroud (eds.). <i>Landscape Planning:</i> <i>Implications of the Proposed New Ontario Heritage Act. Occasional Paper #25.</i> University of Waterloo: Heritage Resources Centre. pp.13-18
1995	Pollock-Ellwand, N., and Nelson, J.G. "Introduction: Landscape Planning, Implications of the Proposed New Heritage Act". in J. G. Nelson, N.D. Pollock- Ellwand, and T. Stroud (eds.). <i>Landscape Planning: Implications of the Proposed New Ontario</i> <i>Heritage Act. Occasional Paper #25.</i> University of Waterloo: Heritage Resources Centre. pp.1-2
1991	Pollock-Ellwand, N. "Discovering the Hidden Resource: Historic Landscapes". (Proceedings of the Travel and Tourism Association - Canada Conference). in, Laurel Reid (ed.). <i>Tourism Environment Sustainable Development: An Agenda for</i> <i>Research</i> . Ottawa: Environment Canada and Statistics Canada. pp. 43-54
1991	Pollock-Ellwand, N. "Southwestern Ontario Heritage Landscape Inventory: A Method of Data Collection, Storage and Dissemination". in, <i>Council of Educators in</i> <i>Landscape Architecture Proceedings. Volume III.</i> Michigan State University, East Lansing, Michigan: Landscape Architecture Foundation, Landscape Architecture Program. pp. 118-131
1991	Pollock-Ellwand, N. "Southwestern Ontario Heritage Landscape: An Inventory with a Difference". In, <i>Land and History</i> . pp. 1-4

Invited Lectures/Presentations/Interviews

2017	"Nature of Cultural Landscapes". School of Landscape Architecture and Planning. University of Arizona, Tucson, AZ (Invited)
2016	National Trust Conference. <i>Heritage Rising.</i> Session 4C. Cultural Landscapes- Managing Change. Moderator. October, Hamilton, ON (Invited)
2016	Presenter and Commentator. "International Standards of Cultural Landscape Management". <i>Workshop on Cultural Landscape and Sustaining its</i> <i>Significance (CLASS)- Bhutan,</i> 2016. July, Paro, Bhutan. (Invited)

2016	"Evolution of the Landscape Idea". <i>ICOMOS Canada. National Conversation on Cultural Landscapes</i> (on-line). Inaugural Guest Presenter. October. (Invited)
2015	"International Perspectives on Cultural Landscape Conservation". <i>National Trust Conference</i> . Energizing Heritage. Session 5C- ICOMOS Canada Session – Evolving Perspectives on Cultural Landscapes Stream: Energy Distribution – Heritage as Fuel for the Future. October, Calgary, AB (Invited)
2015	Issues Affecting Mid-Sized Cities. 2015 Urban Policy Program Symposium. Session Chair- "Conflict in the Rural-Urban Fringe". June 3rd, 2015. (Invited)
2015	"The Olmsted Legacy & Calgary's Urban Communities: The Father of Landscape Architecture, Frederick Law Olmsted". Thursday May 21st, 2015, <i>Scarboro</i> <i>Community Association</i> , Calgary. (Invited)
2015	Nickles Museum. University of Calgary. "Protecting World Heritage- Land and People", for <i>Nickle at Noon</i> on April 9th. (Invited)
2015	National Executive Forum on Public Property. 2015 National Symposium- Partnerships: The New Frontier. Moderator- Real Property Development Partnerships with Educational Facilities and Not-for-Profits, May 22nd, 2015, Calgary, AB (Invited)
2014	CBC Interview. December 23rd, 2014. <i>Homestretch.</i> "UofC Dean elected VP North America for a UNESCO advisory body"; <i>UToday</i> , University of Calgary. December 19th, 2014. "EVDS Dean elected vice-president of UNESCO advisory body." (Invited)
2014	Moderator. <i>This City in Seven Years: Calgary Spur Festival</i> . (Daniel Brook, Author of A History of Future Cities in discussion with Rollin Stanley, General Manager of Planning, City of Calgary). Glenbow Museum – Conoco-Phillips Theatre. April 26th. (Invited)
2014	makeCalgary 2014: Healthy- Shaping our Cities; Shaping Ourselves. International symposium with Urban Alliance, Institute of Public Health, Alberta Health Services and Alberta Innovates. April 11th. Co-Emcee with City of Calgary's David Down. (Invited)
2013	makeCalgary 2013: Resilient. Moderator at International Symposium (also Faculty Block Week Studio) called After the Flood- Resilient City Design. October 12th. (Invited)

2012	Presentation to the <i>Urban Development Institute</i> . Calgary, Alberta. November 27th. (Invited)
2012	"The Nexus of Planning and Design: What Does It Mean from A Practice and Educational Perspective?" <i>Can U (Canadian Urbanists</i>). Downtown Campus, University of Calgary. October 14th. (Invited)
2012	<i>makeCalgary 2012: Culture Space.</i> Moderator at Metropolitan Centre public presentation and debate on proposed design interventions. October 12th. (Invited)
2012	Panelist at <i>Chancellor's Club</i> event discussing Cities as Economic Engines with Calgary and Edmonton (Mayors Nenshi and Mandel). (Invited)
2012	Presentation to the <i>Parliamentary Delegation Inquiry State of Victoria,</i> <i>Australia</i> (Outer Suburban/Interface Services and Development Committee). Calgary, Fairmont Palliser, May 9th. (Invited)
2012	Sustainable Cities in a Global World. Keynote Speaker. University of Calgary. March 14th. (Invited)
2011	City of Calgary Library, Calgary Heritage Authority, and City of Calgary Land Use Planning and Policy. "Old Stone, New Concrete", March 11, 2011. (Invited)
2010	Calgary Heritage Authority. "Heritage Trends and Calgary". July 23, 2010. Calgary City Hall. (Invited)
2009	<i>Mt. Fuji World Heritage Nomination Advisory Group</i> (five members from around the world consulting on the nomination package). "An Asian Approach to Cultural Landscape Management- Ohmi-Hachiman, Japan". International Experts Conference on the Inscription of Mt. Fuji to World Heritage Status. Shizuoka Prefecture Conference Hall, September 7, 2009. Japan. (Invited)
2008	"From Sodom and Gomorrah to Kath and Kim". <i>Research Tuesday Talk</i> (public lecture series featuring top researchers at the University and broadcast on Radio Adelaide, June 20, 2008). University of Adelaide, Bonython Hall, May 13th. Australia. (Invited)
2008	"Cultural Landscape Work in Australia". <i>Cultural Landscape Scientific Committee Meeting. International Council on Monuments and Sites</i> . September 28th to 30th. Charlotte, Vermont, US. (Non-refereed Presentation)

2007	Coordination of <i>Community Workshop on Cultural Landscapes in Collaboration with University of Tokyo in Ohmi-Hachiman, Japan</i> , October 2 nd to 5th, 2007, Japan. (Invited)
2006	"Cultural Landscape Conservation in Canada". Tokyo, Japan. <i>Japan Institute of Rural Landscape Planning</i> . June, 2006 (translation: Makoto Yokohari), Japan. (Invited)
2006	"Buxton, Canada and Omi-Hachiman, Japan: A Comparison of Cultural Landscapes". <i>Omi-Hachiman City Council, Japan</i> . May, 2006. (translation: Makoto Yokohari), Japan. (Invited)
2006	"Sustainability and Cultural Landscapes". <i>Sustainability Cities Conference:</i> <i>Stuttgart, Naples and Kyoto.</i> University of Kyoto, Kyoto, Japan. May, 2006, Japan. (Invited)
2005	"Cultural Landscape Conservation in Canada". <i>ICOMOS/IFLA 2005 Meeting.</i> February 12th- 14th, Brussels, Belgium. (Non-refereed Presentation)
2004	"Canadian Trends in Cultural Landscape Conservation". <i>ICOMOS/IFLA 2004 Meeting</i> . October 3rd. Berlin, Germany. (Non-refereed Presentation)
2004	"The Landscape Idea and the Case of Buxton, Ontario". <i>Heritage Landscape Guidelines Workshop,</i> June 25th, 2004, Ridgetown, ON. (Invited)
2004	"Cultural Landscape Conservation". <i>Heritage Workshop,</i> September, 2004. University of Waterloo, Heritage Resources Centre Waterloo, ON. (Invited)
2003	"LA Title Acts and LARE: Do They Have to Go Together?". <i>CSLA 2003 Awards Symposium</i> , March 1st. Winnipeg, University of Manitoba, MN. (Invited)
2003	"Buxton N.H.S.: A Landscape Perspective on the Underground Railway". <i>Black History Month Workshop</i> , February 21st. Toronto, York University, ON (Invited)
2003	Heritage Day Celebrations Wrap-Up Address, February 14th, Guelph Youth Music Centre, Guelph, ON. (Invited)
2002	"Capital Design: Searching for The 21st Century Landscape of Ottawa". <i>CSLA 2002 Awards Symposium.</i> February 23rd. Winnipeg, University of Manitoba, MN. (Invited)

2002	"Conserving Cultural Landscapes at a Local Level". June. <i>Legacy Cambridge,</i> Cambridge, ON. (Invited)
2002	"Women in the Design Professions". <i>Women at Work</i> . May. University of Guelph, Guelph, ON. (Invited)
2001	"Canadian Cultural Landscape Report". <i>Annual Meeting 2001, Historic Gardens and Cultural Landscapes- ICOMOS-IFLA,</i> May. Budapest, Hungary. (Non- refereed Presentation)
1998	"Borderlands: The US/Canadian Shared Experience of Landscape". Alliance of Historic Landscape Preservation, Grey Towers (Gifford Pinchot Estate) Pennsylvania, US. (Invited)
1998	"Gréber and the 'Washington of the North'". CSLA Conference, Université de Montréal. Montreal, PQ. (Non-refereed Presentation)
1998	Opening Address, <i>Women in the Profession… a ten-year retrospective on the profession of Landscape Architecture.</i> January. University of Guelph, Guelph, ON. (Invited)
1997	"Building Community through Cultural Landscape Identification". <i>CELA</i> <i>Conference,</i> University of North Carolina. September 10th –13th, Chapel Hill, North Carolina, US. (Non-refereed Presentation)
1997	"Community-based Data Collection". <i>Community Heritage Ontario</i> <i>Conference: 'Continuity with Change'</i> . September 26th –28th, Penetanguishene, ON. (Invited)
1996	"Blair Cultural Landscape CD-ROM and Community Heritage Data Collection". Alliance of Historic Landscape Preservation Annual Conference. Burlington, Vermont, US (Non-refereed presentations)

Manuals and Professional Report

2016 Pollock-Ellwand, Nancy and Salma Samar Dalmuji. *Up-Stream Report on Rijal Almaa. Saudi Arabia.* Submitted to the World Heritage Evaluation Unit, ICOMOS, Paris

2016	Pollock-Ellwand, Nancy and Michel Cotte. <i>Mid-Stream Report on the Transboundary Erzgebirge Mining Cultural Landscape. Czech Republic and Germany.</i> Submitted to the World Heritage Evaluation Unit, ICOMOS, Paris
2016	Juliet Ramsay Lead Author with Contributors. Editing by Nancy Pollock- Ellwand, Aedeen Cremin, Jane Lennon and Brian Egloff. <i>The Aesthetic Value of</i> <i>Landscapes: Background and Assessment Guide. Technical Paper Number 2.</i> ICOMOS-IFLA International Scientific Committee on Cultural Landscapes (ISCCL). Website
2016	Juliet Ramsay Lead Author with Contributors. Editing by Nancy Pollock- Ellwand, and Brian Egloff. <i>Contemporary Issues in the Aesthetic Value of Landscapes, A Discussion. Technical Paper Number 3.</i> ICOMOS IFLA International Scientific Committee on Cultural Landscapes (ISCCL). Website
2001 to 2006	Pollock-Ellwand, N. and Cassidy, J. <i>History of Cultural Form Course Manual:</i> LARC*1950DE (Reader and Website as well for this Distance Course), Office of Open Learning, University of Guelph. 196 pages
2004	Nikittuittuq Ltd. <i>Kekerten Historic Whaling Station Master Plan.</i> Iqualuit, Nunavut: Nunavut Parks Department. 65 pages. (Part of Planning Team)
2004	Recreational Resources Ltd. <i>Uvajuq (Mt. Pelly) Territorial Park Plan.</i> Iqualuit, Nunavut: Nunavut Parks Department. 35 pages. (Part of Planning Team)
2001	Pollock-Ellwand, N. <i>Community-Based Landscape Inventory</i> . Parks Canada, Ontario Region, Cornwall, ON. March 20th. 28 pages
2000	Pollock-Ellwand, N. Buxton National Historic Cultural Landscape Inventory: Phase One- Data Assembly. Parks Canada, Ontario Region, Cornwall, ON. March 30th. 61 pages
1999	Pollock-Ellwand, N. et al. <i>Isle of Wight Countryside Exchange Report</i> . Cold Spring, NY: Countryside Exchange. 25 pages. (Part of International team that authored report to cross-sectoral Island organization on Countryside Sustainability)
1998	Pollock-Ellwand, N. June 1998. <i>Blair Cultural Landscape Inventory Project</i> . Ontario Ministry of Culture, Toronto, Ontario. 45 pages

Professional Publications, Blogs and Book Reviews

2015	"Dean of EVDS shares insights on being in Paris one week after attacks". UToday Feature. December. http://www.ucalgary.ca/utoday/issue/2015-12- 16/dean-evds-shares-insights-being-paris-one-week-after-attacks
2014	makeCalgary Talk. "Special Feature: The Role of Design Schools in Great Cities". http://makecalgary.com/?p=12535
2013	makeCalgary Talk. "A Question of Authorship, Authority, and Authenticity". http://makecalgary.com/?p=11308
2013	"The Big Idea 2013. Design, Education and Health Care". A discussion with Avenue Magazine. http://www.avenuecalgary.com/articles/introducing-the-big- idea-2013
2013	A discussion with the <i>Alberta Professional Planning Institute (APPI) Journal.</i> "New Planning Programs in Alberta: Nurturing Our Future". Winter (10): 22-26
2012	Avenue Magazine. The Big Idea 2012. Community Engagement. Launch. https://twitter.com/AvenueMagazine/status/251471241473556480
2007	Pollock-Ellwand, N. and Grosset, C. Winter/Hiver. "Coming to Terms with Cultural Landscapes/L'Acceptation des Paysages Culturels". <i>Landscape/Paysage.</i> 9(1): 36-39
2005	Pollock-Ellwand, N. "New York City: Concrete and Clay, A Book Review". Landscape Research. July Issue
2004	Pollock-Ellwand, N. Exhibit Text. "Olmsted and the British Properties". West Vancouver Museum.
2003	Pollock-Ellwand, N. 2004. "Le Parc Historique de Kekerten: Kekerten Historic Park". <i>Landscape/Paysages.</i> Vol. 5, No. 2, page 34
2003	Pollock-Ellwand, N. 2003. "Les Chefs-d'oeuvre de nos laureats d'un océan à l'autre/ Award-Winning Work from Coast to Coast". <i>Landscape/Paysages,</i> Vol. 5, No. 1, pp. 8-13
2001	Pollock-Ellwand, N. "The Hunter's Game: Poachers and Conservationists in Twentieth Century America." Book Review, <i>Landscape Research</i> . 2

2001	Pollock-Ellwand, N. Fall 2001. "International Committee on Monuments Sites". CSLA Bulletin. 16(3):14
2000	Pollock-Ellwand, N. "Student Reaction to 9/11". Letter to the Editor. <i>Landscape Architecture</i> .1 (January): 7
1998	Pollock-Ellwand, N. "The Boulevard That Ate Ottawa". <i>Globe and Mail,</i> Op Ed, June 12 th
1994	Publications listed in the "Cultural Landscape section of Edwinna von Baeyer's A Selected Bibliography for Garden History in Canada. (Revised Edition) Ottawa: Parks Canada, Canadian Heritage. p.14

Edited Proceedings/Monographs

2002	Pollock-Ellwand, N. (editor). <i>Borderlands: 1999 Conference Proceedings of the Alliance for Historic Landscape Preservation</i> . US National Park Service and the Alliance for Historic Landscape Preservation. Waterloo: Heritage Resources Centre, University of Waterloo. 150 pages. (withdrew as editor before completion)
2000	Pollock-Ellwand, N. (guest editor). 1999. <i>Proceedings, Parks Research Forum of Ontario: Challenges to Parks and Protected Areas in Ontario</i> . Waterloo, ON: Heritage Resources Centre, University of Waterloo. 450 pages
1999	Pollock-Ellwand, N., Van Osch, K, and Nelson, J.G. (eds.) with Beechey, T., Stephenson, W. and Marsh, J. <i>Parks and Protected Areas in Ontario.</i> <i>Proceedings of the Parks Research Forum of Ontario (PFRO), Annual General</i> <i>Meeting</i> , April 22nd –23rd. Waterloo, ON: Heritage Resources Centre. 515 pages

	Thesis	
1997		Pollock-Ellwand, N. <i>Planning for the Landscape Idea</i> . Ph.D. Dissertation. University of Waterloo. Defence, August 1997; Degree Conferred, October 1997

	Exhibitions	
2001		Land Art Generator Initiative. Online exhibition of group submission called Solar Dunes (three members- Nancy Pollock-Ellwand, Canada; Mansoor Ma, Adelaide, Australia; Daniel Xiang, China) to 2010 design completion for site in Abu Dhabi, UAE. <u>http://landartgenerator.org/participants2010.html</u>
1995		Work personally completed on the historic landscape restoration of Motherwell Homestead included in exhibition, <i>Interpretations of Nature</i> , held at the McMichael Canadian Art Collection.

Interests

Masters Swimming, Cycling, Rowing Sweep and Sculls, Snowshoeing, Back Country Hiking,

and Cooking

A THE UNIVERSITY OF ARIZONA:

ACCELERATED MASTER'S PROGRAM – IMPLEMENTATION REQUEST

Please include along with the attached form an outline of a sample plan of study for a student pursuing the *AMP* to earn both the bachelors and Master's degree in 5 years time.

I. <u>Requested by</u> – College of Architecture, Planning and Landscape Architecture, School of Landscape Architecture and Planning

II. <u>Master's Degree & Major</u>

a. Master of Landscape Architecture (MLA)

III. Bachelor's Degree & Major(s) Eligible for the AMP -

a. Bachelor of Landscape Architecture (BLA)

A letter of support from the unit head/college dean must accompany this request for each Bachelor's degree/major eligible for this AMP that is offered by a unit other than the unit submitting this request.

- IV. <u>AMP Admission Requirements</u> programs may have more stringent or additional requirements. List any additional unit/college admissions requirements in addition to the following University AMP Admission Requirements:
 - a) Completion of a minimum of 75 undergraduate credit hours will be required at the time of application; a minimum of 90 undergraduate credit hours will be required at the time of entry into the AMP. If the student's GPA falls below 3.3 at the time they have completed 90 units, the student will not be admitted into the program. Courses taken for audit may not be included in the total number of units counted for eligibility or admission.
 - b) A minimum cumulative GPA of 3.3 on a minimum of 12 units of undergraduate coursework at the UA.
 - c) Completion of at least 12 earned undergraduate credits in their major at the University of Arizona's main campus. Units still graded Incomplete, units graded Pass/Fail or units taken as audit will not count toward the requirement of the 12 undergraduate units.
 - d) Completion or near completion of general education requirements (no more than one course remaining).
 - e) Submission of a graduate application and payment of a graduate application fee.
 - f) Demonstration of the maturity necessary for success in an accelerated, highly competitive program.
 - g) Expectation to complete the undergraduate degree within four years. The undergraduate degree requirements must be completed before the student is eligible to have the Master's degree awarded.
 - V. <u>AMP Degree & Tuition Policies</u> all AMPs must comply with the AMP Degree and Tuition Policies. List any unit/college policies requirements in addition to the following University AMP Degree and Tuition Policies:
 - a) Students will be considered undergraduates until they complete their undergraduate requirements, which should be no later than the end of the fourth year.
 - b) Students entering with Advanced Placement Credit and/or who attend summer school may complete their Bachelor's degree in the Junior year.
 - c) During years 1-3 (or approximately 0-90 credits) students will be taking undergraduate coursework and charged at the undergraduate rate.
 - d) Once admitted to AMP, during the senior (or transition year), students may take up to 12 units of graduate coursework that may apply toward both the Bachelor's and the Master's degrees. Students will be charged at the undergraduate rate and retain eligibility for undergraduate scholarships.

- e) Students classified as seniors who have not yet completed a bachelor's degree may enroll in 500level courses following the <u>Graduate Credit for Seniors Policy</u>. Courses numbered at the 600, 700 and 900 levels are not open to undergraduates.
- f) After completion of all Bachelors' requirements, students will be granted graduate status, be charged at the graduate rate, and be eligible for graduate assistantships. The student won't be eligible to graduate nor will they be eligible for assistantships until all Bachelors' requirements are completed. While an undergraduate, students are required to keep their graduate coursework cumulative GPA at 3.0, or higher if required by the graduate degree offering unit, to be admitted to the Master's program.
- g) Should a student have completed 12 graduate credits, but not yet completed the undergraduate degree, they will be considered graduate for financial aid and tuition purposes and coded as 'graduate' in UAccess. They will no longer be eligible for undergraduate scholarships, nor will they be eligible for graduate assistantships.
- h) At least 12 graduate credits must be taken while in graduate status, after completing all degree requirements for the Bachelor's.
- Students should be encouraged to complete their undergraduate requirements as soon as possible, but not later than one semester before receiving their Master's degree. Students finishing their undergraduate requirements later than one semester before receiving their Master's degree will no longer be eligible for undergraduate scholarships, nor will they be eligible for graduate assistantships. Neither degree will be awarded until the undergraduate requirements are completed along with the Master's requirements.
- j) The BLA requires 120 units; 12 units would be shared between the BLA and the MLA:
 - LAR 526: Planting Design (4 credits)
 - LAR 540: History, Theory, and Contemporary Landscape Architecture (3 credits)
 - LAR 560: Professional Practice/Working Drawings (3 credits)
 - LAR 596A: Special Topics in Landscape Architecture (1 credit)
 - LAR 596B: Landscape Architecture Seminar II (1 credit)

Proposed Sequence of Courses for AMP from BLA to MLA Program:

CAPLA BLA + MLA (4+1) Plan (printed 11/13/2019)	121		
Freshman year			
Fall	16	Spring	16
ARC/LAR 101 A/B Foundation Studio~	4	LAR 2**	4
ARC/LAR 131 A/B Thinking about Architecture~	2	ENGL 102	3
MATH 108 Modeling with Algebraic and Trigonometric Functions.	4	Tier I Gen Ed	3
ENGL 101	3	Tier I Gen Ed	3
Tier I Gen Ed	3	Tier I Gen Ed	3
Sophomore Year			
Fall	15	Spring	15
LAR 2** Design Studio I.	6	LAR 2** Design Studio II.	6
LAR 2** Site Engineering.	3	LAR 2** History and Theory of Landscape Architecture.	3
Tier I Gen Ed	3	LAR 2** Landscape Construction.	3
Tier I Gen Ed	3	Tier II Gen Ed	3
Junior Year			
Fall	17	Spring	15
LAR 3** Design Studio III.	6	LAR 3** Design Studio IV - Interdisciplinary Urban Design Studio (co-convened with Arch 451a).~	6
LAR 470 Intro to GIS.	4	LAR 423 Landscape Ecology.	3
LAR 420 Plant Materials.	4	Tier II Gen Ed	3
Tier II Gen Ed	3	General Elective	3
Senior Year			
Fall	14	Spring	13
LAR 4** Design Studio V - Interdisciplinary Outreach Studio (co-convened with Arch 451b). ~	6	LAR 4** Design Studio VI - Capstone studio.	6
LAR 440/540 History, Theory and Contemporary Landscape Architecture.	3	LAR 460/560 Professional Practice/Working Drawings.*	3
LAR 426/526 Planting Design.*	4	LAR 596B Landscape Architecture Seminar II.**	1
LAR 496A/526A Special Topics in Landscape Architecture.*	1	General Elective	3
BLA shared + MLA	31		
MLA Year	19		
Fall	8	Spring	11
LAR 569C Landscape Architecture Seminar III.	2	LAR 596D Landscape Architecture Seminar IV.	2
SBE 480/580 Research Methods.	3	LAR 909/910 Master's Report/Thesis.	9
General Elective	3		
[#] Learning objectives are outlined in the BLA Curriculum Map			
*UG section needs to be created			
** Shared credits between BLA and MLA			
~ Need letter of support from Architecture			
existing CAPLA courses			
new course needed			

VALIDATE: EMPLOYMENT POTENTIAL

PROJECT CRITERIA

Validate	Programs
Location	Nationwide
Degree Level	Bachelor's degree
Time Period	9/1/2018 - 8/31/2019
Selected Programs	Landscape Architecture (04.0601)
Career Outcomes mapped to Selected Programs of Study	Landscape Architect, Environmental Planner / Scientist

HOW MANY JOBS ARE THERE FOR YOUR GRADUATES?

For your project criteria, there were 11,534 job postings in the last 12 months.

Compared to:

- 31,389,607 total job postings in your selected location
- 11,211,265 total job postings requesting a Bachelor's degree in your selected location

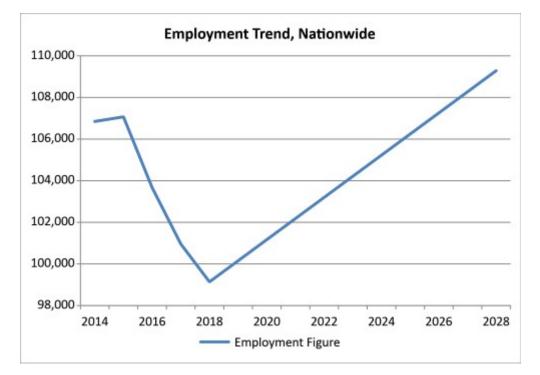
The number of jobs is expected to grow over the next 8 years.

GROWTH BY GEOGRAPHY

Geography Selected Occupations		Total Labor Market	Relative Growth	
Nationwide	10.23 %	5.78 %	Average	

HOW HAS EMPLOYMENT CHANGED FOR CAREER OUTCOMES OF YOUR PROGRAM?

	2014	2015	2016	2017	2018	2028
Employment (BLS)	106,850	107,070	103,670	100,960	99,140	109,286



Employment data between years 2019 and 2028 are projected figures.

DETAILS BY OCCUPATION

Occupation Group	Postings	LQ	Employment (2018)	Employment Growth (2017 - 2018)	Projected Employment Growth (2019-2028)
Environmental and Climate Science	9,426	NA	80,480	-1.8%	11.1%
Architects	2,108	NA	18,660	-2.0%	6.5%

HOW VERSATILE IS MY PROGRAM?

Graduates of this program usually transition into any of the 2 different occupation groups:

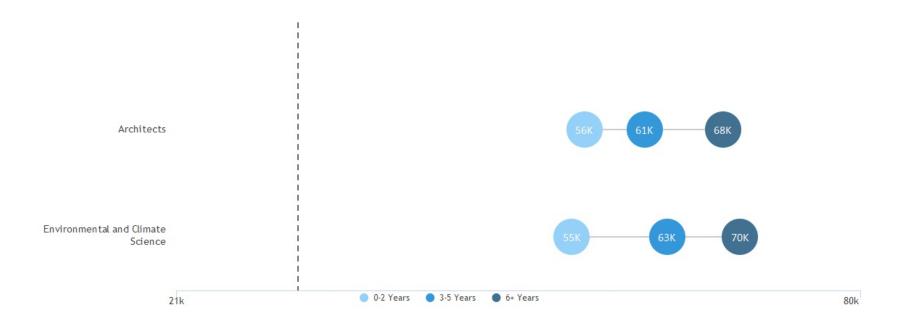
Occupations Group	Market Size (postings)	Percentage of Career Outcome demand	
Environmental and Climate Science	9,426	81.7%	
Architects	2,108	18.3%	

		Environmental and Climate Science
		Architects

WHAT SALARY WILL MY GRADUATES MAKE?

The average salary in the nation for graduates of your program is \$60,234

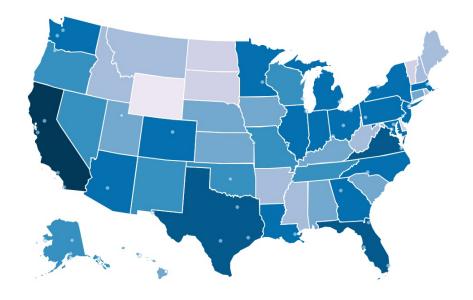
This average salary is Above the average living wage for your region of \$31,450



Salary numbers are based on Burning Glass models that consider advertised job posting salary, BLS data, and other proprietary and public sources of information.

Occupation Group	25 th Percentile	Average	75 th Percentile
Environmental and Climate Science	\$55,121	\$63,354	\$69,658
Architects	\$56,216	\$61,407	\$68,172

WHERE IS THE DEMAND FOR MY GRADUATES?



TOP LOCATIONS BY POSTING DEMAND

Location	Postings
California	2,095
Texas	985
Florida	700
Virginia	500
Washington	489
New York	429

Pennsylvania	423
North Carolina	395
Colorado	359
New Jersey	349

VALIDATE: COMPETITIVE LANDSCAPE

PROJECT CRITERIA

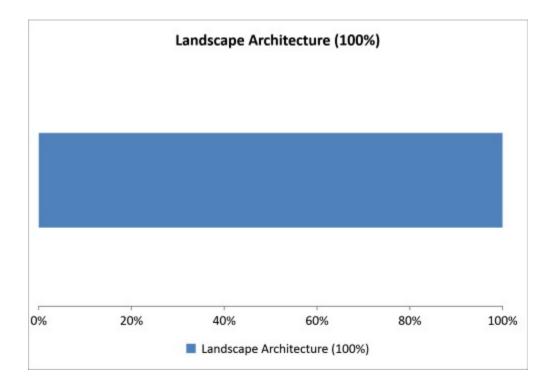
Validate	Programs
Location	Nationwide
Degree Level	Bachelor's degree
Time Period	9/1/2018 - 8/31/2019
Selected Programs	Landscape Architecture (04.0601)
Career Outcomes mapped to Selected Programs of Study	Landscape Architect, Environmental Planner / Scientist

OVERVIEW

	#	% Change (2013-2017)
Degrees Conferred	674	-31%
Number of Institutions	54	0%
Average Conferrals by Institution	12	-33.30%
Median Conferrals by	12	-29.40%

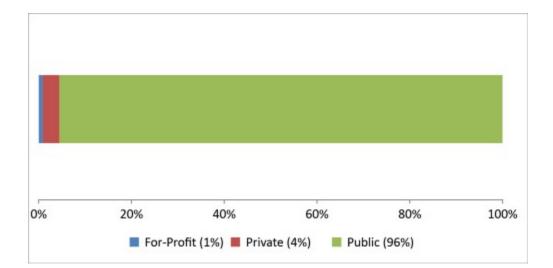
Institution

MARKET SHARE BY PROGRAM



Program	Conferrals Market Share (%)			
	(2017)	Market Share (70)		
Landscape Architecture	674	100.00%		

MARKET SHARE BY INSTITUTION TYPE



	Conferrals	Markat Chara (%)
Institution Type	(2017)	Market Share (%)
For-Profit	6	0.89%
Private	24	3.56%
Public	644	95.55%

TOP INSTITUTIONS

Institution	School Type	Market Share (2017)	Market Share Change	Conferrals (2017)	Conferrals Change (2013-2017)
University of Georgia	Public	5.34%	0.06%	36	-30.80%
University of	Public	4.60%	0.33%	31	-26.20%
California-Davis		4.0070	0.5570	51	20.2070
Iowa State University	Public	4.45%	0.69%	30	-18.90%

California State					
Polytechnic	Public	4.45%	-2.26%	30	-54.50%
University-Pomona					
California					
Polytechnic State					
University-San Luis	Public	4.15%	-0.42%	28	-37.80%
Obispo					
Pennsylvania State					
University-Main	Public	3.56%	-0.10%	24	-33.30%
Campus					
Texas A & M					
University-College	Public	3.26%	0.62%	22	-15.40%
Station					
University of	Public	2.97%	0.43%	20	-20.00%
Wisconsin-Madison					
Arizona State					
University-Tempe	Public	2.82%	0.38%	19	-20.80%
Colorado State					
University-Fort	Public	2.82%	1.09%	19	11.80%
Collins					

TOP PROGRAMS

Drogram	Market Share Market Share		Conferrals	Conferrals Change
Program	(2017)	Change	(2017)	(2013-2017)
Landscape Architecture	100.00%	0.00%	674	-31.50%

ACTIVE COMPETITORS

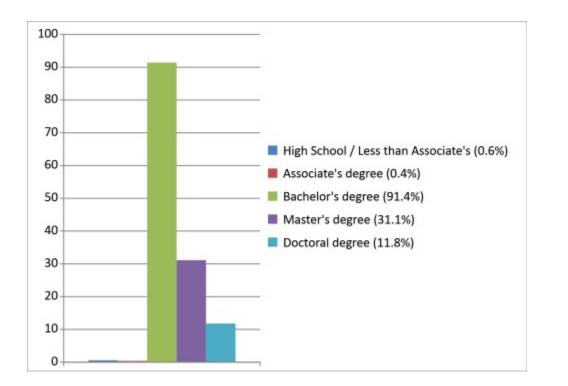
Institution	School	Market Share	Market Share Market Share	Conferrals	Conferrals Change
	Туре	(2017)	Change	(2017)	(2013-2017)

VALIDATE: MARKET ALIGNMENT

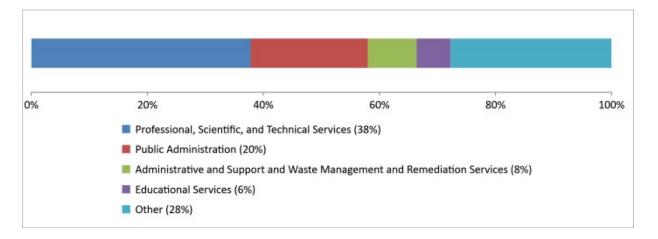
PROJECT CRITERIA

Validate	Programs
Location	Nationwide
Degree Level	Bachelor's degree
Time Period	9/1/2018 - 8/31/2019
Selected Programs	Landscape Architecture (04.0601)
Career Outcomes mapped to	Landscape Architect, Environmental Planner / Scientist
Selected Programs of Study	Landscape Architect, Environmental Flaimer / Scientist

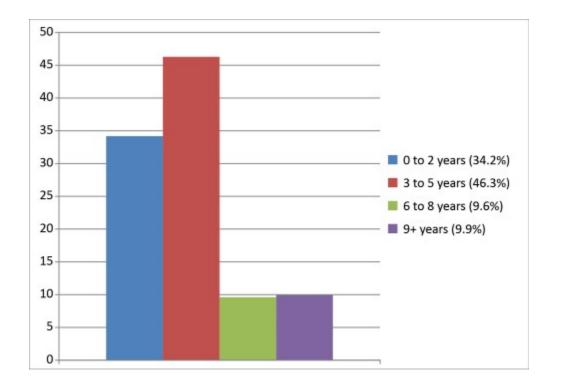
JOB POSTINGS BY ADVERTISED EDUCATION (%)



JOB POSTINGS BY INDUSTRY (%)



JOB POSTINGS BY EXPERIENCE REQUESTED (%)



TOP TITLES

Experience Level: All Experience

Title	Postings	Market Share (%)
Environmental Specialist	2,506	31.09%
Environmental Scientist	1,969	24.43%
Environmental Planner	801	9.94%
Landscape Architect	724	8.98%
Landscape Designer	266	3.30%
Environmental Protection Specialist	209	2.59%
Environmental Engineer	126	1.56%

Environmental Consultant	84	1.04%
Manager	64	0.79%
Safety Specialist	48	0.60%
Environmental Officer	43	0.53%
Environmental Manager	29	0.36%
Senior Environmental Consultant	26	0.32%
Planner	25	0.31%
Risk Assessor	23	0.29%

TOP EMPLOYERS HIRING

Experience Level: All Experience

Employer	Postings	Market Share (%)
US Navy	274	3.40%
AECOM Technology Corporation	205	2.54%
Stantec, Inc.	203	2.52%
CDM Smith	112	1.39%
Tetra Tech	103	1.28%
Jacobs Engineering Group Incorporated	97	1.20%
Kimley-Horn and	93	1.15%

Associates		
Arcadis	86	1.07%
HDR Incorporated	65	0.81%
Resource Options	60	0740/
Incorporated	60	0.74%
Veolia North America, Llc	53	0.66%
Swca Incorporated	51	0.63%
State Florida	48	0.60%
Erm Group	47	0.58%
Wsp	44	0.55%

VALIDATE: KEY COMPETENCIES

PROJECT CRITERIA

Validate	Programs
Location	Nationwide
Degree Level	Bachelor's degree
Time Period	9/1/2018 - 8/31/2019
Selected Programs	Landscape Architecture (04.0601)
Career Outcomes mapped to	Landscane Architect Environmental Dlanner / Scientist
Selected Programs of Study	Landscape Architect, Environmental Planner / Scientist

TOP 15 SPECIALIZED SKILLS

Skill	Postings	Projected Growth	Salary Premium	Competitive Advantage
Environmental Science	4494 (39%)	-8.57%	No	No
Budgeting	2031 (18%)	-10.04%	Yes	No

Environmental Laws and Regulations	1940 (17%)	37.08%	Yes	No
Project Management	1897 (16%)	-19.74%	Yes	Yes
Biology	1673 (15%)	-20.99%	No	No
Landscape Architecture	1661 (14%)	-1.71%	No	No
Chemistry	1644 (14%)	-10.21%	No	No
Environmental Compliance	1500 (13%)	-1.28%	Yes	No
Hazardous Waste	1371 (12%)	20.52%	No	No
Scheduling	1347 (12%)	1.88%	No	No
Environmental Regulations	1335 (12%)	-15.82%	No	Yes
Natural Resources	1228 (11%)	-38.4%	Yes	No
Occupational Health and Safety	1167 (10%)	19.02%	No	Yes
AutoCAD	1156 (10%)	4.22%	No	No

Environmental Protection	1013 (9%)	-11.69%	No	No

TOP 15 BASELINES SKILLS

Skill	Postings
Communication Skills	4297 (37%)
Planning	3561 (31%)
Writing	2773 (24%)
Research	2330 (20%)
Microsoft Office	2101 (18%)
Microsoft Excel	1965 (17%)
Teamwork / Collaboration	1919 (17%)

Organizational Skills	1837 (16%)
Detail-Oriented	1546 (13%)
Problem Solving	1362 (12%)
Creativity	1310 (11%)
Written Communication	1236 (11%)
Microsoft Word	1153 (10%)
Computer Literacy	1080 (9%)
Microsoft Powerpoint	1003 (9%)

TOP 15 SOFTWARE PROGRAMMING SKILLS

Skill	Postings	Projected Growth	Salary Premium	Competitive Advantage

Microsoft Office	2101 (18%)	-10.2%	No	No
Microsoft Excel	1965 (17%)	17.03%	No	No
AutoCAD	1156 (10%)	4.22%	No	No
Microsoft Word	1153 (10%)	-13.39%	No	No
Microsoft Powerpoint	1003 (9%)	-8.52%	No	No
Adobe Photoshop	873 (8%)	-22.36%	No	No
SketchUp	739 (6%)	13.3%	No	No
Adobe Indesign	722 (6%)	-25.5%	No	No
Adobe Acrobat	593 (5%)	-15.24%	No	No
Adobe Creative Suite	486 (4%)	-7.62%	No	No
ArcGIS	380 (3%)	-0.43%	No	No
	500 (3%)	-0.43%	INO	INO
Adobe Illustrator	363 (3%)	0.82%	No	No

Microsoft Access	349 (3%)	-57.74%	No	No
Geographic Information System (GIS)	295 (3%)	-42.56%	No	No
Word Processing	268 (2%)	-19.34%	No	No

TOP 15 SKILL CLUSTERS

Skill	Postings
Environmental Work	6366 (55%)
Environmental Regulations	3745 (33%)
Project Management	2453 (21%)
Resource Management and Restoration	2254 (20%)
Budget Management	2035 (18%)
Writing	1966 (17%)

Occupational Health and Safety	1875 (16%)
Drafting and Engineering Design	1455 (13%)
People Management	1402 (12%)
Regulation and Law Compliance	1213 (11%)
Graphic and Visual Design Software	1174 (10%)
Water Testing and Treatment	1141 (10%)
Air Quality	1110 (10%)
Ecology	982 (9%)
Construction Management	807 (7%)

TOP 15 SALARY PREMIUM SKILLS

2031 (18%)	-10.04%	Yes	No
1940 (17%)	37.08%	Yes	No
1897 (16%)	-19.74%	Yes	Yes
1500 (13%)	-1.28%	Yes	No
1228 (11%)	-38.4%	Yes	No
875 (8%)	-8.49%	Yes	No
820 (7%)	-18.14%	Yes	Yes
813 (7%)	-18.2%	Yes	No
741 (6%)	6.16%	Yes	No
578 (5%)	-15.68%	Yes	No
576 (5%)	-13.51%	Yes	No
565 (5%)	-20.39%	Yes	Yes
	1940 (17%) 1897 (16%) 1500 (13%) 1228 (11%) 875 (8%) 820 (7%) 820 (7%) 813 (7%) 741 (6%) 578 (5%)	1940 (17%) 37.08% 1897 (16%) -19.74% 1500 (13%) -1.28% 1228 (11%) -38.4% 875 (8%) -8.49% 820 (7%) -18.14% 813 (7%) -18.2% 741 (6%) 6.16% 578 (5%) -15.68% 576 (5%) -13.51%	1940 (17%) 37.08% Yes 1897 (16%) -19.74% Yes 1500 (13%) -1.28% Yes 1228 (11%) -38.4% Yes 875 (8%) -8.49% Yes 8875 (8%) -18.14% Yes 813 (7%) -18.2% Yes 741 (6%) 6.16% Yes 578 (5%) -13.51% Yes

Project Planning and Development Skills	563 (5%)	-15.09%	Yes	No
Business Development	538 (5%)	-8.98%	Yes	No
California Environmental Quality Act (CEQA)	533 (5%)	7.61%	Yes	Yes

TOP 15 COMPETITIVE ADVANTAGE SKILLS

Skill	Postings	Projected Growth	Salary Premium	Competitive Advantage
Project Management	1897 (16%)	-19.74%	Yes	Yes
Environmental Regulations	1335 (12%)	-15.82%	No	Yes
Occupational Health and Safety	1167 (10%)	19.02%	No	Yes
Environmental Planning	957 (8%)	-7.62%	No	Yes
Environmental Consulting	878 (8%)	-29.25%	No	Yes
Environmental Engineering	820 (7%)	-18.14%	Yes	Yes

Site Assessments	649 (6%)	12.94%	No	Yes
Environmental Assessments	639 (6%)	-27.94%	No	Yes
Environmental Permitting	565 (5%)	-20.39%	Yes	Yes
California Environmental Quality Act (CEQA)	533 (5%)	7.61%	Yes	Yes
Report Writing	437 (4%)	-45.4%	No	Yes
Geology	405 (4%)	-51.05%	Yes	Yes
Resource Conservation and Recovery Act (RCRA)	341 (3%)	-11.62%	Yes	Yes
Proposal Writing	305 (3%)	-31.96%	Yes	Yes

TOP 15 CERTIFICATIONS

Skill	Postings Salary Premium		Competitive Advantage
Driver's License	2965 (26%)	No	No

Hazwoper	538 (5%)	No	No
Security Clearance	274 (2%)	No	No
Licensed Professional Engineer	177 (2%)	No	No
American Institute of Certified Planners	171 (1%)	No	No
Certified Hazardous Materials Manager	116 (1%)	No	No
Occupational Safety and Health Administration Certification	111 (1%)	No	No
Landscape Architect License	106 (1%)	No	No
American Board for Engineering and Technology (ABET) Accredited	72 (1%)	No	No
Cdl Class B	66 (1%)	No	No
Project Management Certification	64 (1%)	No	No
First Aid Cpr Aed	59 (1%)	No	No

Cdl Class C	57 (0%)	No	No
Certified Industrial Hygienist	47 (0%)	No	No
Certified Erosion, Sediment and Storm Water Inspector	44 (0%)	No	No

TOP 15 SALARY PREMIUM CERTIFICATIONS

Skill	Postings	Salary Premium	Competitive Advantage

No certificates available

TOP 15 COMPETITIVE ADVANTAGE CERTIFICATIONS

Skill	Dectings		Competitive
	Postings	Salary Premium	Advantage

No certificates available

VALIDATE: EMPLOYMENT POTENTIAL

PROJECT CRITERIA

Validate	Programs
States	Arizona
	Arizona
Degree Level	Bachelor's degree
Time Period	9/1/2018 - 8/31/2019
Selected Programs	Landscape Architecture (04.0601)
Career Outcomes mapped to Selected Programs of Study	Landscape Architect, Environmental Planner / Scientist

HOW MANY JOBS ARE THERE FOR YOUR GRADUATES?

For your project criteria, there were 227 job postings in the last 12 months.

Compared to:

- 875,530 total job postings in your selected location
- 275,216 total job postings requesting a Bachelor's degree in your selected location

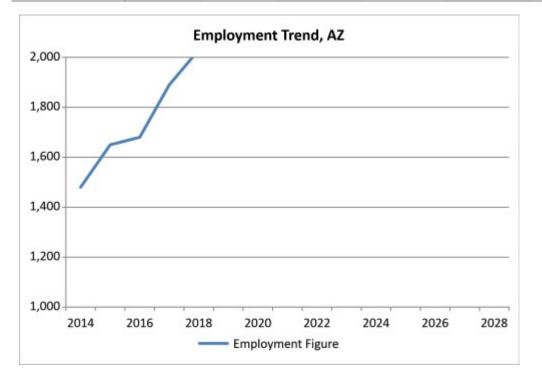
The number of jobs is expected to grow over the next 8 years.

GROWTH BY GEOGRAPHY

Geography	Selected Occupations	Total Labor Market	Relative Growth
Arizona	14.88 %	14.97 %	Average
Nationwide	10.23 %	5.78 %	Average

HOW HAS EMPLOYMENT CHANGED FOR CAREER OUTCOMES OF YOUR PROGRAM?

	2014	2015	2016	2017	2018	2028
Employment (BLS)	1,480	1,650	1,680	1,890	2,030	2,332



Employment data between years 2019 and 2028 are projected figures.

DETAILS BY OCCUPATION

Occupation Group	Postings	LQ	Employment (2018)	Employment Growth (2017 - 2018)	Projected Employment Growth (2019-2028)
Environmental and Climate Science	152	0.9	1,420	9.2%	15.2%
Architects	75	1.9	610	3.4%	14.1%

HOW VERSATILE IS MY PROGRAM?

Graduates of this program usually transition into any of the 2 different occupation groups:

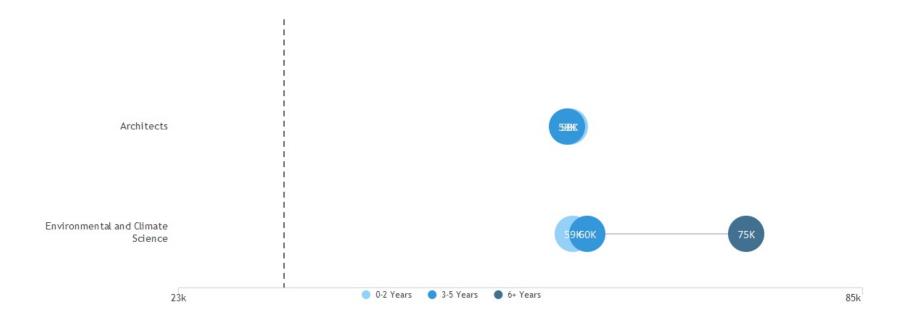
Occupations Group	Market Size (postings)	Percentage of Career Outcome demand
Environmental and Climate Science	152	67.0%
Architects	75	33.0%

	Environmental and Climate Science
	Architects

WHAT SALARY WILL MY GRADUATES MAKE?

The average salary in Arizona for graduates of your program is \$59,918

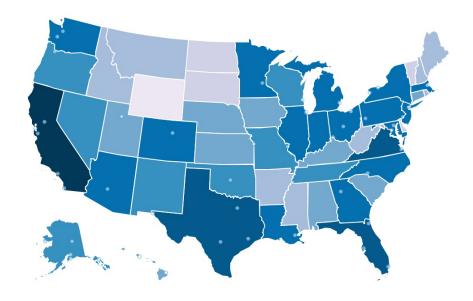
This average salary is Above the average living wage for Arizona of \$32,531



Salary numbers are based on Burning Glass models that consider advertised job posting salary, BLS data, and other proprietary and public sources of information.

Occupation Group	25 th Percentile	Average	75 th Percentile
Environmental and Climate Science	\$58,780	\$60,105	\$74,508
Architects	\$58,476	\$58,233	\$0

WHERE IS THE DEMAND FOR MY GRADUATES?



TOP LOCATIONS BY POSTING DEMAND

Location	Postings
California	2,095
Texas	985
Florida	700
Virginia	500
Washington	489
New York	429

Pennsylvania	423
North Carolina	395
Colorado	359
New Jersey	349

VALIDATE: COMPETITIVE LANDSCAPE

PROJECT CRITERIA

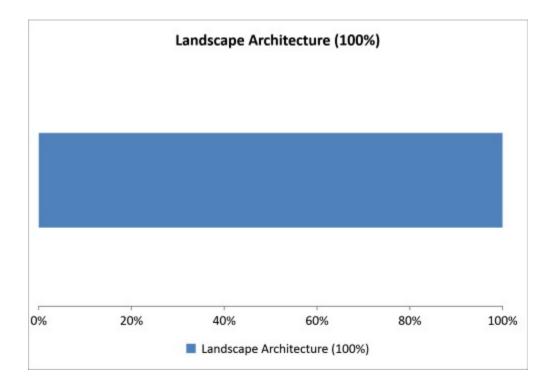
Validate	Programs
States	Arizona
Degree Level	Bachelor's degree
Time Period	9/1/2018 - 8/31/2019
Selected Programs	Landscape Architecture (04.0601)
Career Outcomes mapped to Selected Programs of Study	Landscape Architect, Environmental Planner / Scientist

OVERVIEW

	#	% Change (2013-2017)
Degrees Conferred	19	-32%
Number of Institutions	2	0%
Average Conferrals by Institution	10	-28.60%
Median Conferrals by	10	-28.60%

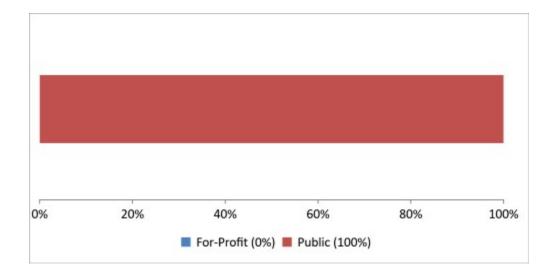
Institution

MARKET SHARE BY PROGRAM



Program	Conferrals	Market Share (%)
	(2017)	Market Share (70)
Landscape Architecture	19	100.00%

MARKET SHARE BY INSTITUTION TYPE



Institution Type	Conferrals	Market Share (%)	
	(2017)		
For-Profit	0	0.00%	
Public	19	100.00%	

TOP INSTITUTIONS

Institution	School Type	Market Share (2017)	Market Share Change	Conferrals (2017)	Conferrals Change (2013-2017)
Arizona State University-Tempe	Public	100.00%	14.29%	19	-20.80%
Southwest University of Visual Arts-Tucson	For- Profit	0.00%	-14.29%	0	-100.00%

TOP PROGRAMS

Brogram	Market Share	Market Share	Conferrals	Conferrals Change
Program	(2017)	Change	(2017)	(2013-2017)
Landscape Architecture	100.00%	0.00%	19	-32.10%

ACTIVE COMPETITORS

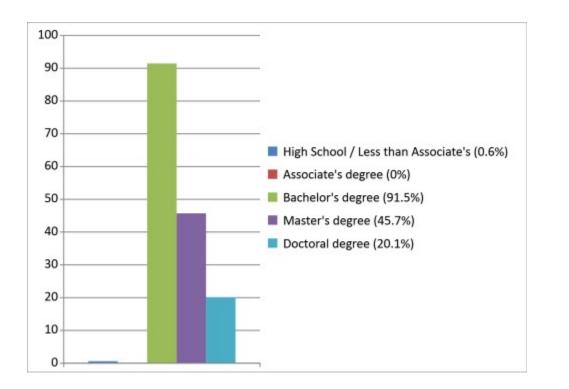
Institution	School	Market Share	Market Share	Conferrals	Conferrals Change
	Туре	(2017)	Change	(2017)	(2013-2017)

VALIDATE: MARKET ALIGNMENT

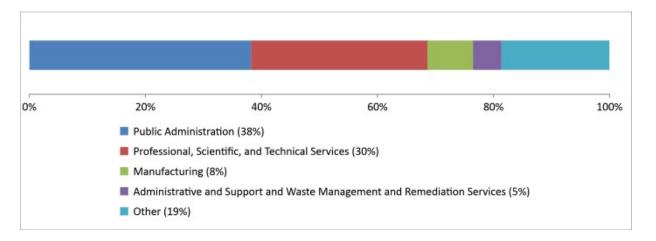
PROJECT CRITERIA

Validate	Programs
States	Arizona
Degree Level	Bachelor's degree
Time Period	9/1/2018 - 8/31/2019
Selected Programs	Landscape Architecture (04.0601)
Career Outcomes mapped to Selected Programs of Study	Landscape Architect, Environmental Planner / Scientist

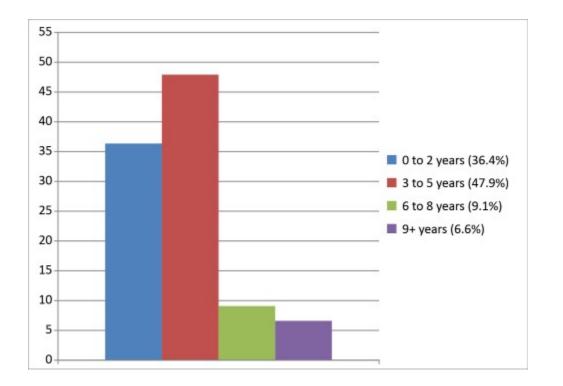
JOB POSTINGS BY ADVERTISED EDUCATION (%)



JOB POSTINGS BY INDUSTRY (%)



JOB POSTINGS BY EXPERIENCE REQUESTED (%)



TOP TITLES

Experience Level: All Experience

Title	Postings	Market Share (%)
Environmental Specialist	37	24.67%
Environmental Scientist	29	19.33%
Landscape Architect	27	18.00%
Environmental Protection Specialist	10	6.67%
Environmental Planner	8	5.33%
Consultant, Regulatory,Environmental Toxicology	7	4.67%

Environmental Engineer	5	3.33%
Landscape Designer	4	2.67%
Land Planner	3	2.00%
Risk Assessor	3	2.00%
Environmental Management Consultant	2	1.33%
Environmental Officer	2	1.33%
Site Planner	2	1.33%
Associate Landscape Designer	1	0.67%
Data Coordinator	1	0.67%

TOP EMPLOYERS HIRING

Experience Level: All Experience

Employer	Postings	Market Share (%)
State of Arizona	13	8.67%
US Navy	12	8.00%
Arcadis	4	2.67%
Kimley-Horn and Associates	4	2.67%
US Government	4	2.67%
Atwell	3	2.00%

Balfour Beatty	3	2.00%
Calibre Corporation	3	2.00%
Bradley Stinson & Associates	2	1.33%
Calibre Systems Incorporated	2	1.33%
City of Mesa	2	1.33%
Freeport-McMoRan Copper & Gold	2	1.33%
Gila River Indian Community	2	1.33%
Greey Pickett	2	1.33%
Logan Simpson	2	1.33%

VALIDATE: KEY COMPETENCIES

PROJECT CRITERIA

Validate	Programs
States	Arizona
Degree Level	Bachelor's degree
Time Period	9/1/2018 - 8/31/2019
Selected Programs	Landscape Architecture (04.0601)
Career Outcomes mapped to Selected Programs of Study	Landscape Architect, Environmental Planner / Scientist

TOP 15 SPECIALIZED SKILLS

Skill	Postings	Projected Growth	Salary Premium	Competitive Advantage
Environmental Science	67 (30%)	-8.57%	No	No
Budgeting	49 (22%)	-10.04%	Yes	No

Landscape Architecture	44 (19%)	-1.71%	No	No
Project Management	42 (19%)	-19.74%	Yes	Yes
Chemistry	38 (17%)	-10.21%	No	No
Environmental Laws and Regulations	35 (15%)	37.08%	Yes	No
Hazardous Waste	35 (15%)	20.52%	No	No
Scheduling	34 (15%)	1.88%	No	No
AutoCAD	34 (15%)	4.22%	No	No
Landscape Design	34 (15%)	-25.58%	No	No
Environmental Compliance	27 (12%)	-1.28%	Yes	No
Adobe Photoshop	25 (11%)	-22.36%	No	No
Legal Compliance	25 (11%)	6.16%	Yes	No
Environmental Regulations	24 (11%)	-15.82%	No	Yes

National Environmental	24 (11%)	-35.28%	No	No
Policy Act (NEPA)	24 (1170)	-33.2070	NO	NO

TOP 15 BASELINES SKILLS

Skill	Postings
Planning	79 (35%)
Communication Skills	77 (34%)
Research	67 (30%)
Writing	52 (23%)
Microsoft Office	46 (20%)
Teamwork / Collaboration	44 (19%)
Written Communication	41 (18%)

37 (16%)
36 (16%)
31 (14%)
30 (13%)
25 (11%)
24 (11%)
17 (8%)
17 (8%)

TOP 15 SOFTWARE PROGRAMMING SKILLS

Skill	Postings	Projected Growth	Salary Premium	Competitive Advantage

Microsoft Office	46 (20%)	-10.2%	No	No
AutoCAD	34 (15%)	4.22%	No	No
Adobe Photoshop	25 (11%)	-22.36%	No	No
Microsoft Excel	24 (11%)	17.03%	No	No
SketchUp	23 (10%)	13.3%	No	No
Adobe Indesign	19 (8%)	-25.5%	No	No
Microsoft Powerpoint	17 (8%)	-8.52%	No	No
Microsoft Word	16 (7%)	-13.39%	No	No
Adobe Acrobat	11 (5%)	-15.24%	No	No
Adobe Creative Suite	10 (4%)	-7.62%	No	No
ArcGIS	7 (3%)	-0.43%	No	No
Word Processing	4 (2%)	-19.34%	No	No

Active Server Pages (ASP)	4 (2%)	-52.12%	No	No
Adobe Freehand	4 (2%)	50.5%	No	No
Revit	4 (2%)	44.05%	No	No

TOP 15 SKILL CLUSTERS

Skill	Postings
Environmental Work	97 (43%)
Environmental Regulations	60 (27%)
Budget Management	49 (22%)
Project Management	44 (19%)
Drafting and Engineering Design	42 (19%)
Resource Management and Restoration	35 (15%)

Writing	33 (15%)
Graphic and Visual Design Software	32 (14%)
People Management	31 (14%)
Regulation and Law Compliance	28 (12%)
Occupational Health and Safety	26 (12%)
Estimating	23 (10%)
Earth and Space Science	23 (10%)
Air Quality	21 (9%)
Construction Management	19 (8%)

TOP 15 SALARY PREMIUM SKILLS

Growth Advantage

49 (22%)	-10.04%	Yes	No
42 (19%)	-19.74%	Yes	Yes
35 (15%)	37.08%	Yes	No
27 (12%)	-1.28%	Yes	No
25 (11%)	6.16%	Yes	No
18 (8%)	-18.14%	Yes	Yes
16 (7%)	-18.2%	Yes	No
14 (6%)	-38.4%	Yes	No
14 (6%)	-8.49%	Yes	No
12 (5%)	-51.05%	Yes	Yes
10 (4%)	-13.51%	Yes	No
6 (3%)	-20.39%	Yes	Yes
	42 (19%) 35 (15%) 27 (12%) 25 (11%) 18 (8%) 16 (7%) 14 (6%) 14 (6%) 12 (5%) 10 (4%)	42 (19%) -19.74% 35 (15%) 37.08% 27 (12%) -1.28% 25 (11%) 6.16% 18 (8%) -18.14% 16 (7%) -18.2% 14 (6%) -38.4% 12 (5%) -51.05% 10 (4%) -13.51%	42 (19%) 19.74% Yes 35 (15%) 37.08% Yes 27 (12%) 1.28% Yes 25 (11%) 6.16% Yes 18 (8%) 18.14% Yes 16 (7%) -18.2% Yes 14 (6%) 38.4% Yes 12 (5%) -51.05% Yes 10 (4%) -13.51% Yes

Resource Conservation and Recovery Act (RCRA)	6 (3%)	-11.62%	Yes	Yes
Project Planning and Development Skills	5 (2%)	-15.09%	Yes	No
Land Use	4 (2%)	-15.68%	Yes	No

TOP 15 COMPETITIVE ADVANTAGE SKILLS

Skill	Postings	Projected Growth	Salary Premium	Competitive Advantage
Project Management	42 (19%)	-19.74%	Yes	Yes
Environmental Regulations	24 (11%)	-15.82%	No	Yes
Environmental Engineering	18 (8%)	-18.14%	Yes	Yes
Environmental Planning	16 (7%)	-7.62%	No	Yes
Geology	12 (5%)	-51.05%	Yes	Yes
Occupational Health and Safety	10 (4%)	19.02%	No	Yes

Environmental Consulting	10 (4%)	-29.25%	No	Yes
Environmental Assessments	9 (4%)	-27.94%	No	Yes
Environmental Permitting	6 (3%)	-20.39%	Yes	Yes
Resource Conservation and Recovery Act (RCRA)	6 (3%)	-11.62%	Yes	Yes
Site Assessments	6 (3%)	12.94%	No	Yes
Report Writing	4 (2%)	-45.4%	No	Yes
California Environmental Quality Act (CEQA)	1 (0%)	7.61%	Yes	Yes
Proposal Writing	1 (0%)	-31.96%	Yes	Yes

TOP 15 CERTIFICATIONS

Skill	Postings	Salary Premium	Competitive Advantage
Driver's License	69 (31%)	No	No

Hazwoper	12 (5%)	No	No
Certified Hazardous Materials Manager	4 (2%)	No	No
Hazardous Materials Certification	4 (2%)	No	No
Licensed Professional Engineer	4 (2%)	No	No
Certified Information Systems Auditor (CISA)	3 (1%)	No	No
Certified Information Systems Security Professional (CISSP)	3 (1%)	No	No
Chartered Life Underwriter (CIU)	3 (1%)	No	No
Information Systems Certification	3 (1%)	No	No
Occupational Safety and Health Administration Certification	3 (1%)	No	No
American Institute of Certified Planners	3 (1%)	No	No
Certified Information Security Manager (CISM)	3 (1%)	No	No
Project Management Certification	3 (1%)	No	No

Certified Building Inspector	2 (1%)	No	No
Cdl Class B	2 (1%)	No	No

TOP 15 SALARY PREMIUM CERTIFICATIONS

Skill	Postings	Salary Premium	Competitive Advantage
No certificates available			

TOP 15 COMPETITIVE ADVANTAGE CERTIFICATIONS

Skill	Postings	Salary Premium	Competitive Advantage

No certificates available

VALIDATE: EMPLOYMENT POTENTIAL

PROJECT CRITERIA

Validate	Programs
Metro Areas (MSAs)	Tucson, AZ
Degree Level	Bachelor's degree
Time Period	9/1/2018 - 8/31/2019
Selected Programs	Landscape Architecture (04.0601)
Career Outcomes mapped to	Landscape Architect, Environmental Planner / Scientist
Selected Programs of Study	Landscape Architect, Environmental Haimer / Scientist

HOW MANY JOBS ARE THERE FOR YOUR GRADUATES?

For your project criteria, there were 32 job postings in the last 12 months.

Compared to:

- 111,367 total job postings in your selected location
- 32,031 total job postings requesting a Bachelor's degree in your selected location

The number of jobs is expected to grow over the next 8 years.

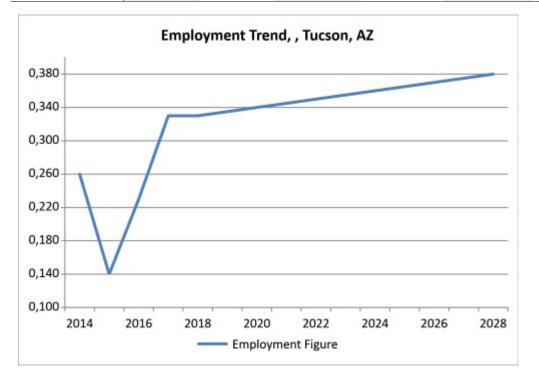
GROWTH BY GEOGRAPHY

Geography	aphy Selected Total Labor Market		Relative Growth	
Tucson, AZ	15.15 %	17.14 %	Average	
Arizona	14.88 %	14.97 %	Average	

Nationwide	10.23 %	5.78 %	Average

HOW HAS EMPLOYMENT CHANGED FOR CAREER OUTCOMES OF YOUR PROGRAM?

	2014	2015	2016	2017	2018	2028
Employment (BLS)	260	140	230	330	330	380



Employment data between years 2019 and 2028 are projected figures.

DETAILS BY OCCUPATION					
Occupation Group	Postings	LQ	Employment (2018)	Employment Growth (2017 - 2018)	Projected Employment Growth (2019-2028)
Architects	18	3.4	70	-22.2%	14.3%
Environmental and Climate Science	14	0.6	260	8.3%	15.4%

HOW VERSATILE IS MY PROGRAM?

Graduates of this program usually transition into any of the 2 different occupation groups:

Occupations Group	Market Size (postings)	Percentage of Career Outcome demand
Architects	18	56.3%
Environmental and Climate Science	14	43.8%

Architects
Environmental and Climate Science

WHAT SALARY WILL MY GRADUATES MAKE?

The average salary in Tucson, AZ for graduates of your program is \$56,107

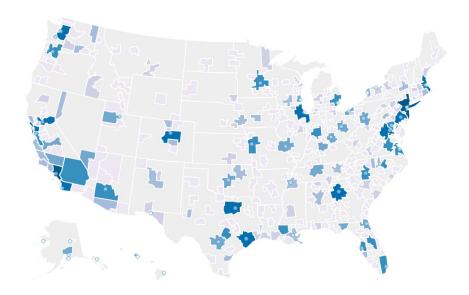
This average salary is Above the average living wage for Tucson, AZ of \$32,011

No experience salary information is currently available

Salary numbers are based on Burning Glass models that consider advertised job posting salary, BLS data, and other proprietary and public sources of information.

Occupation Group	25 th Percentile	Average	75 th Percentile
Environmental and Climate Science	\$0	\$0	\$0
Architects	\$0	\$0	\$0

WHERE IS THE DEMAND FOR MY GRADUATES?



TOP LOCATIONS BY POSTING DEMAND

Location	Postings
New York-Newark-Jersey City, NY-NJ-PA	574
Los Angeles-Long Beach-Anaheim, CA	533
Washington-Arlington-Alexandria, DC-VA-MD- WV	459
SacramentoRosevilleArden-Arcade, CA	356
San Francisco-Oakland-Hayward, CA	355

Dallas-Fort Worth-Arlington, TX	300
Houston-The Woodlands-Sugar Land, TX	298
Seattle-Tacoma-Bellevue, WA	276
Denver-Aurora-Lakewood, CO	268
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	257

VALIDATE: COMPETITIVE LANDSCAPE

PROJECT CRITERIA

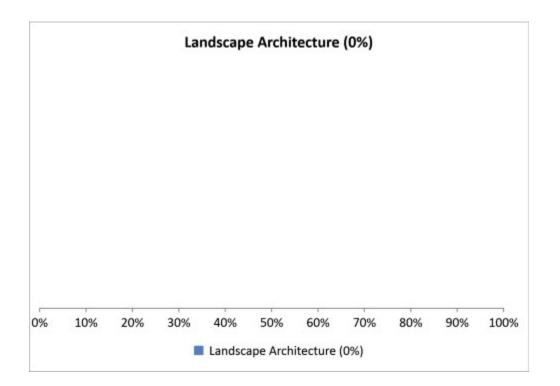
Validate	Programs
Metro Areas (MSAs)	Tucson, AZ
Degree Level	Bachelor's degree
Time Period	9/1/2018 - 8/31/2019
Selected Programs	Landscape Architecture (04.0601)
Career Outcomes mapped to Selected Programs of Study	Landscape Architect, Environmental Planner / Scientist

OVERVIEW

	#	% Change (2013-2017)
Degrees Conferred	0	-100%
Number of Institutions	1	0%
Average Conferrals by Institution	0	-100.00%
Median Conferrals by	0	-100.00%

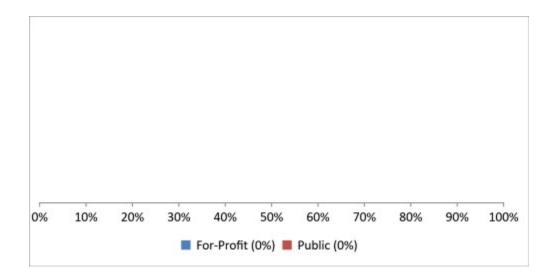
Institution

MARKET SHARE BY PROGRAM



Program	Conferrals Market Share (9		
	(2017)		
Landscape Architecture	0		

MARKET SHARE BY INSTITUTION TYPE



Institution Type	Conferrals	Market Share (%)	
	(2017)		
For-Profit	0	0.00%	
Public	0	0.00%	

TOP INSTITUTIONS

Institution	School Type	Market Share (2017)	Market Share Change	Conferrals (2017)	Conferrals Change (2013-2017)
Southwest University of Visual Arts-Tucson	For- Profit	NaN%	NaN%	0	-100.00%

TOP PROGRAMS

Program	Market Share	Market Share Change	Conferrals	Conferrals Change

	(2017)		(2017)	(2013-2017)
Landscape Architecture	NaN%	NaN%	0	-100.00%

ACTIVE COMPETITORS

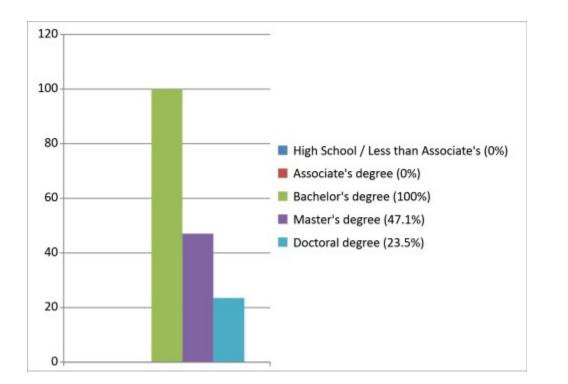
Institution School	School	Market Share	Market Share	Conferrals	Conferrals Change
	Туре	(2017)	Change	(2017)	(2013-2017)

VALIDATE: MARKET ALIGNMENT

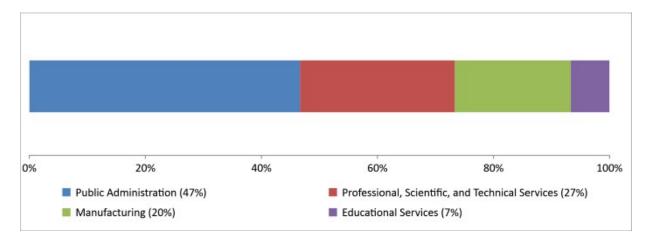
PROJECT CRITERIA

Validate	
validate	Programs
Metro Areas (MSAs)	Tucson, AZ
Degree Level	Bachelor's degree
Time Period	9/1/2018 - 8/31/2019
Selected Programs	Landscape Architecture (04.0601)
Career Outcomes mapped to	Landson a Aushitast Environmental Dianney / Crientist
Selected Programs of Study	Landscape Architect, Environmental Planner / Scientist

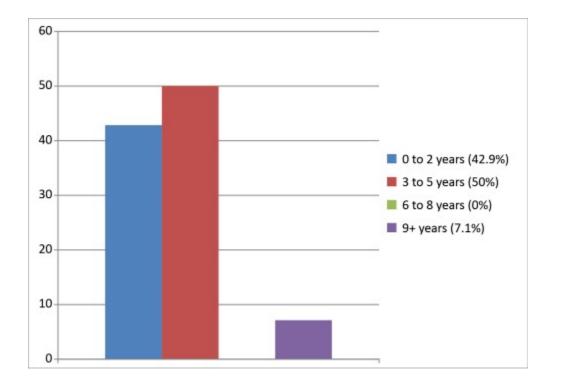
JOB POSTINGS BY ADVERTISED EDUCATION (%)



JOB POSTINGS BY INDUSTRY (%)



JOB POSTINGS BY EXPERIENCE REQUESTED (%)



TOP TITLES

Experience Level: All Experience

Title	Postings	Market Share (%)
Environmental Specialist	5	29.41%
Landscape Architect	4	23.53%
Environmental Protection Specialist	2	11.76%
Site Planner	2	11.76%
Environmental Planner	1	5.88%
Environmental Scientist	1	5.88%
Kold	1	5.88%

Landscape Designer 1 5.88%

TOP EMPLOYERS HIRING

Experience Level: All Experience

Employer	Postings	Market Share (%)
US Navy	4	23.53%
Kimley-Horn and Associates	3	17.65%
Monsanto	2	11.76%
City of Tucson	1	5.88%
Gray Television	1	5.88%
Pima County	1	5.88%
Stantec, Inc.	1	5.88%
State of Arizona	1	5.88%
University of Arizona	1	5.88%
Vantage	1	5.88%
Vantage Speciality Chemicals	1	5.88%

VALIDATE: KEY COMPETENCIES

PROJECT CRITERIA

Validate	Programs
Validate	
Metro Areas (MSAs)	Tucson, AZ
Degree Level	Bachelor's degree
Time Period	9/1/2018 - 8/31/2019
Selected Programs	Landscape Architecture (04.0601)
Career Outcomes mapped to Selected Programs of Study	Landscape Architect, Environmental Planner / Scientist

TOP 15 SPECIALIZED SKILLS

Skill	Postings	Projected Growth	Salary Premium	Competitive Advantage
Landscape Architecture	8 (25%)	-1.71%	No	No
AutoCAD	8 (25%)	4.22%	No	No

SketchUp	7 (22%)	13.3%	No	No
Landscape Design	7 (22%)	-25.58%	No	No
Budgeting	5 (16%)	-10.04%	No	No
Environmental Protection	5 (16%)	-11.69%	No	No
Hazardous Waste	5 (16%)	20.52%	No	No
Personnel Management	5 (16%)	-41.73%	No	No
Sales	5 (16%)	-11.17%	No	No
Environmental Compliance	4 (12%)	-1.28%	No	No
Environmental Laws and Regulations	4 (12%)	37.08%	No	No
Environmental Science	4 (12%)	-8.57%	No	No
Cost Estimation	3 (9%)	4.18%	Yes	No
Chemistry	3 (9%)	-10.21%	No	No

Fine Arts	3 (9%)	1.2%	No	No

TOP 15 BASELINES SKILLS

Skill	Postings
Planning	15 (47%)
Writing	9 (28%)
Microsoft Office	8 (25%)
Communication Skills	8 (25%)
Research	7 (22%)
Problem Solving	7 (22%)
Teamwork / Collaboration	6 (19%)

Positive Disposition	4 (12%)
Spanish	3 (9%)
Computer Literacy	3 (9%)
Oral Communication	3 (9%)
Preparing Reports	3 (9%)
Organizational Skills	3 (9%)
English	3 (9%)
Written Communication	3 (9%)

TOP 15 SOFTWARE PROGRAMMING SKILLS

Skill	Postings	Projected Growth	Salary Premium	Competitive Advantage

AutoCAD8 (25%)4.22%NoNoSketchUp7 (22%)13.3%NoNoAdobe Acrobat3 (9%)-15.24%NoNoAdobe Creative Suite3 (9%)-7.62%NoNoAdobe Indesign3 (9%)-25.5%YesNoAdobe Photoshop3 (9%)-22.36%NoNo		
SketchUp7 (22%)13.3%NoNoAdobe Acrobat3 (9%)-15.24%NoNoAdobe Creative Suite3 (9%)-7.62%NoNoAdobe Indesign3 (9%)-25.5%YesNoAdobe Photoshop3 (9%)-22.36%NoNo	Microsoft Office	No
Adobe Acrobat3 (9%)-15.24%NoNoAdobe Creative Suite3 (9%)-7.62%NoNoAdobe Indesign3 (9%)-25.5%YesNoAdobe Photoshop3 (9%)-22.36%NoNo	AutoCAD	No
Adobe Creative Suite3 (9%)-7.62%NoNoAdobe Indesign3 (9%)-25.5%YesNoAdobe Photoshop3 (9%)-22.36%NoNo	SketchUp	No
Adobe Indesign3 (9%)-25.5%YesNoAdobe Photoshop3 (9%)-22.36%NoNo	Adobe Acrobat	No
Adobe Photoshop 3 (9%) -22.36% No No	Adobe Creative Suite	No
	Adobe Indesign	No
Microsoft Excel 2 (6%) 17.03% No No	Adobe Photoshop	No
	Microsoft Excel	No
Microsoft Powerpoint 2 (6%) -8.52% No No	Microsoft Powerpoint	No
Microsoft Word 2 (6%) -13.39% No No	Microsoft Word	No
comScore 1 (3%) 1.45% No No	comScore	No
Google Drive 1 (3%) 81.69% No No	Google Drive	No

TOP 15 SKILL CLUSTERS

Skill	Postings
People Management	9 (28%)
Drafting and Engineering Design	9 (28%)
Graphic and Visual Design Software	7 (22%)
Environmental Work	7 (22%)
Environmental Regulations	6 (19%)
Resource Management and Restoration	5 (16%)
Budget Management	5 (16%)
Estimating	4 (12%)
General Architecture	4 (12%)

Writing	2 (6%)
Construction Management	1 (3%)
Ecology	1 (3%)
Regulation and Law Compliance	1 (3%)
Contract Management	0 (0%)
Architectural Design	0 (0%)

TOP 15 SALARY PREMIUM SKILLS

Skill	Postings	Projected Growth	Salary Premium	Competitive Advantage
Staff Management	3 (9%)	-13.84%	Yes	No
Adobe Indesign	3 (9%)	-25.5%	Yes	No
Cost Estimation	3 (9%)	4.18%	Yes	No

TOP 15 COMPETITIVE ADVANTAGE SKILLS

Skill	Postings	Projected Growth	Salary Premium	Competitive Advantage
No skills available				

TOP 15 CERTIFICATIONS

Skill	Postings	Salary Premium	Competitive Advantage
Driver's License	10 (31%)	No	No
Hazwoper	2 (6%)	No	No
First Aid Cpr Aed	1 (3%)	No	No
Hazardous Materials			
Certification	1 (3%)	No	No

TOP 15 SALARY PREMIUM CERTIFICATIONS

Skill	Postings	Salary Premium	Competitive Advantage

No certificates available

TOP 15 COMPETITIVE ADVANTAGE CERTIFICATIONS

Skill	Postings	Salary Premium	Competitive Advantage

No certificates available

BLA CURRICULUM MAP: CORE CLASSES

	Year 1					Year	2		Year 3					Year 4						
	ARC/LAR 101 A/B Foundation Studio	ARC/LAR 131A/B Thinking About Architecture*	LAR 230: Landscape Architecture Foundation Studio	LAR2XX: Design Studio I	LAR 254: Site Engineering	LAR 2XX: Design Studio II	LAR 255: Landscape Construction	LAR 241: History and Theory of LArch	LAR 420: Plant Materials	LAR 3XX: Design Studio III	LAR 423: Landscape Ecology	LAR 470: Intro to GIS for LAR	LAR 3XX: Design Studio IV	LAR 412/512: Design Studio V	LAR 440/540: Contemporary Land Arch	LAR 426: Planting Design	LAR 596A: Special Topics in Land Arch	LAR 460/560: Professional Practice	LAR 4XX: Studio VI (capstone)	LAR 596B: Landscape Arch Seminar II#
History, Theory, & Criticism					<u> </u>															_
a) Contemporary Landscape Architecture	х	х		х		х		Х		х			х	х	х				х	
b) History of Landscape Architecture		х						Х		х				Х	х				Х	
c) Design Theory	х	х	х	х	х	Х		Х		Х			Х	х	х	х			х	
d) Principles and Aesthetics of Design	х	х	х	х	х	Х		Х		Х		х	Х	Х	х	х			х	
e) Design Interpretation and Narration	х	х	х	Х		Х		Х		Х	Х	Х		Х	х				Х	
f) Critical Thinking	х	Х	х	х	х	Х		Х		Х	Х	Х	Х	Х	х			Х	Х	
g) Design Critique and Evaluation	х	х	х	Х	x	Х		Х		Х		Х		Х	х				Х	
Design & Design Methods																				
a) Creative Problem Solving	х		х	х	x	х	х	х		х		х	х	х	х	х		х	х	
b) Design Programming	х		Х	х		Х		Х		х				Х	х	х			Х	
c) Landscape and Site Analysis	Х		Х	х	х	Х		Х		Х		Х	Х	Х	х	х			Х	
d) Background Research for Design Applications	х		Х	х		Х		Х		Х				Х	х	Х			Х	
e) Philosophical Concept Development	х		Х	х		Х		Х		Х			Х	Х	х			Х	Х	
f) Physical Concept Development (functional relationship diagrams)	х		х	х		х		х		х			х	х					х	
g) Iterative Design Development	х		Х	Х		Х		Х		Х				Х					Х	
h) Design Synthesis	х		х	Х		Х		Х		Х			х	х					Х	

	Foundation Studio	Thinking About Architecture*	LAR 230	Design Studio I	LAR 254	Design Studio II	LAR 255	LAR 241	LAR 420	Design Studio III	LAR 423	LAR 470	Design Studio IV	Design Studio V	LAR 440/540	LAR 426	LAR 596A	LAR 460	Design Studio VI
Sustainable Strategies & Natural Processes	1				-	-	-		[1		-					-		
a) Resource Conservation	Х			Х	Х	Х	Х	Х	Х		Х		Х	Х	Х	Х			Х
b) Stormwater Management	Х			Х	Х	Х	Х	Х	Х		Х		Х	Х	Х	Х			Х
c) Urban Heat Island Mitigation	Х			Х	Х	Х	Х	Х	Х		Х		Х	Х	Х	Х			Х
d) Urban Flooding Mitigation	Х			х	х	х	х	Х	Х		х		Х	Х	х	х			Х
e) Plant and Ecosystem Science and Design				х		х	х		х		х		х	х		х			х
f) Land Stewardship	Х			х	х	х		Х	Х		х		х	х	х	х			х
g) Visual and Scenic Assessment								Х					х	х					х
h) Landscape Performance Assessment					х		х						х	х					х
Socio-Cultural Factors in Design																			
a) User Analysis	Х			х		х	х			х			х	х	х	х			х
b) Cultural Analysis	Х			х		х	х	Х		х			х	х	х				Х
c) Community and Client Engagement								Х		х			х	х	х			х	Х
d) Design for Diverse Populations	Х			х		х	х	х		х			х	х	х				х
e) Post Occupancy Evaluation										х			х	х	х				х
f) Human Health and Well-Being	Х			х		х	х	х		х			х	х	х			х	х
Design Implementation																			
a) Site Engineering					х	х	х			х			х	х					х
b) Construction Technology					х	х	х		х	х			х	х					х
c) Site Materials	Х			х	х	х	х		х	х			х	х					х
d) Construction Standards, Methods, and Applications					х	х	х			x			х	х					х
e) Codes and Ordinances Related to Public Safety, Health, and Welfare					х	х	х			x			х	х				x	х

	Foundation Studio	Thinking About Architecture*	LAR 230	Design Studio I	LAR 254	Design Studio II	LAR 255	LAR 241	LAR 420	Design Studio III	LAR 423	LAR 470	Design Studio IV	Design Studio V	LAR 440/540	LAR 426	LAR 596A	LAR 460	Design Studio VI
Professional Communication, Documentation	n, & To							T				1							
a) Written Communication		Х	Х	Х		X	X	Х		X	x	X	Х	Х	X			Х	X
b) Oral Communication	x		х	Х	Х	x	х	х		х		х	Х	Х	х	x		Х	Х
c) Digital Media Graphics	x		х	х	х	х		х		х		х	х	х	х	х			х
d) Hand Drawn Graphics	х		х	х	х	х				х			х	х		х			х
e) Geospatial Analysis												х	х	х					х
f) 2D Representations and 3D Modeling	х			х	х	х	х			х			х	х		х			х
g) Technical Construction Drawings					х	х	х			х			х	х					х
h) Project Proposal Writing														х				х	х
Professional Practice																			
a) Business Practices														х				х	x
b) Interdisciplinary Practice														х				х	х
c) Construction Administration														х				х	х
d) Contracts														х				х	х
e) Policies and Regulations					х									х				х	х
f) Health, Safety, Welfare				х	х		х	х						х	х			х	х
g) Standard of Care, Professional Ethics and Values					х		х							х				х	х
h) Leadership								х						х	х			х	х
Research and Scholarly Methods ⁺																			
a) Literature Review								х							х			х	
b) Case Study Review								х							х			х	
c) Quantitative and Qualitative Methods												х			х				х

	Foundation Studio	Thinking About Architecture*	LAR 230	Design Studio I	LAR 254	Design Studio II	LAR 255	LAR 241	LAR 420	Design Studio III	LAR 423	LAR 470	Design Studio IV	Design Studio V	LAR 440/540	LAR 426	LAR 596A	LAR 460	Design Studio VI
d) Framing Research Questions, Hypotheses, and Objectives												x						х	
e) Proposal Development																		х	

*Suggested name change: *Thinking About the Built Environment*

⁺Note: for BLA students research and scholarly methods is not emphasized, so this last section is not really necessary.

				Fi	irst Yea	ar						Sec	ond Y	ear				Third	l Year	
				Arch				ç				AR			0					
Key:				scape				of LAr	ion			and L			Studi	0		_		esis
X = Primary Learning Objective∕ Assessed	- 0	ials	nalysis	ary Land	ering	=	cology	Theory o	onstruct	io III	sign	for PLG	≥ o	eminar II	lanning	l Practic	v v	eminar II	eminar IV	LAR ana/a10: MLA Report/Thesis
O = Secondary Learning Objective/ Practiced	Design Studio	520: Plant Materials	LAR 522: Landscape Analysis	LAR 540: Contemporary Landscape Arch	LAR 554: Site Engineering	LAR 511: Design Studio II	LAR 523: Landscape Ecology	LAR 541: History and Theory of LArch	LAR 555: Landscape Construction	LAR 610: Design Studio III	LAR 526: Planting Design	LAR 570: Intro to GIS for PLG and LAR	LAR 611: Design Studio IV	LAR 5968: Master's Seminar II	LAR 623: Landscape Planning Studio	LAR 560: Professional Practice	LAR 612: Design Studio V	LAR 596C: Masters Seminar III	LAR 596D: Masters Seminar IV	
• = Introduced	LAR 510: Des	520: Plai	522: Lan	540: Cor	554: Site	511: Desi	523: Lan	541: Hist	555: Lan	610: Des	526: Plaı	570: Inti	611: Desi	596B: Ma	623: Lan	56o: Pro	612: Des	596C: M	596D: M	010/000
	LAR	LAR	LAR	LAR	LAR	LAR	LAR	LAR	LAR	LAR	LAR	LAR	LAR	LAR	LAR	LAR	LAR	LAR	LAR	IΔR
History, Theory, & Criticism																				
a) Contemporary Landscape Architecture	0			X		0		0					•		•					
b) History of Landscape Architecture				0				<u>х</u>							•					
c) Design Theory d) Principles and Aesthetics of Design	x		0 0	<u>х</u> х		<u>х</u> х		x x		<u>х</u> х	0 X	x	X X		0		•			
e) Design Interpretation and Narration			•	X			•	x		X	~	x	x		•		•		0	C
f) Critical Thinking			0	0			•	0		X		X	x			X	•			х
g) Design Critique and Evaluation	•		X	X		•		X		X		0	X		•		•		0	Х
Design & Design Methods																				
a) Creative Problem Solving	X		0	•	•	<u> </u>		•	•	<u>X</u>	0	X	X	X	•	X	•	X	X	X
b) Design Programming c) Landscape and Site Analysis	X		<u>х</u> х	•	•	<u>х</u> х		•		X	<u>х</u> х	x	x x	X	• x		X	X	X	X X
d) Background Research for Design Application			•	•		x		•		x	0		x	x	x		0	X	X	X
e) Philosophical Concept Development	X		•	0		X		0		X			X			•				Х
f) Physical Concept Development (functional	x		x			х		0		x			x				•		x	C
relationship diagrams) g) Iterative Design Development	x		0			x		•		X			x		0		•		X	X
h) Design Synthesis	x					X		•		×			x		x		•	-	X	X
Sustainable Design Strategies & Natural Pr																				
a) Resource Conservation		•	x	•	0	•	X	•	0	0	0		0		•				0	С
b) Stormwater Management		•	X	•	X	•	•	•	0	0	0		0		•		X		0	C
c) Urban Heat Island Mitigation		•	X	•	•	•	•	•	0	0	0		0		•		•			
d) Urban Flooding Mitigation		•	X	•	•	•	•	•	•	0	0		0		•		0			
e) Plant and Ecosystem Science and Design		X	•				X	•	•	0	0		•		•		•			
f) Land Stewardship g) Visual and Scenic Assessment		•	<u>х</u> х	•		•	0	•		0	0		•		•		•	-		
h) Landscape Performance Assessment	+				x	•			0	•					0		X			
Socio-Cultural Factors in Design																		-		
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b) Cultural Analysis			X	•		0		0	•	0			X		•		•		0	С
c) Community and Client Engagement	0		•	•		0		•		0			X		•	X	•			
d) Design for Diverse Populations e) Post Occupancy Evaluation			0	•	•	•		•	•	0			X	0	•		•	0	0	
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Design Implementation													~			~				
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DIVERSITY AND INCLUSIVE EXCELLENCE COMMITTEE REPORT AND ACTION PLAN

College of Architecture, Planning and Landscape Architecture (CAPLA)

Prepared By:

The CAPLA Diversity and Inclusive Excellence Committee

10/29/2018

CAPLA Diversity and Inclusiveness Goals and Action Plan

As CAPLA expands the influence and scope of the design and planning professional through an engaged process of making, risk-taking, and knowledge-building in support of a resilient and thriving natural and built environment, the CAPLA community is dedicated to nurturing and teaching design and planning methodologies grounded in responsible and sustainable real-world problem-solving with the potential to energize, improve, and inspire.

The College of Architecture, Planning and Landscape Architecture is a community of faculty, administrators, students, classified staff, and appointed personnel whose collective contributions are critical to its overall success. Every member of the community has a voice that should be respected, heard, and acknowledged.

Our Vision – Building a Changing World

Our Values

Value	Associated (Expected) Behaviors
Emergent Thinking	 Create and own transformative ideas Foster future oriented research, teaching, and outreach Apply expertise, skills, and knowledge to global challenges Anticipate new opportunities to expand college reach and impact Stay among the vanguard
Curiosity	 Encourage the spirit of inquiry and delight in learning Make strategic decisions with an appropriate balance of invention, risk, and probable success Provide inspirational solutions with impact Explore the unknown Apply lessons learned
Design Perspective	 Hone our sensibilities in this place that is the Sonoran Desert Use design thinking methods which are empathetic and consider the well-being of all participants Leverage studio culture and making environments to enhance student centered learning and applied research Address the global impacts of the built environment Demonstrate the value of design and planning in reshaping the world
Interdisciplinarity	 Use intellectual diversity as a means to create comprehensive thinking Create thoughtful, purposeful partnerships Remove barriers and develop rules of engagement to be applied to interdisciplinary processes Support cross-institutional, cross-college, and cross-departmental activity Facilitate inclusive approaches to problem solving
Collaboration	 Seek different perspectives, backgrounds, skills, and expertise Respect the value, skills, and qualities of others Strive for transparency, engagement, sharing, and divergent thinking Teach and demonstrate collaborative problem solving skills
Stewardship	 Be accountable for our responsibilities and actions Exhibit professional ethics, competence, and reliability Treat all members of our community with respect, dignity, and empathy, empowering them to be excellent in their domains Use resources fairly, ethically, and humanely to achieve goals in the present and to safeguard the future

Our 5th Aspiration

MAKE CAPLA A LEADER IN INCLUSIVE EXCELLENCE

Objective 1: Recruit, support, and retain successful students who reflect the future of Arizona and the communities we serve.

- Initiative 1: Recruit continuously diverse students.
- Initiative 2: Emphasize recruitment in under-served Arizona populations, in part by leveraging new HSI status.
- Initiative 3: Provide new student, faculty, and staff orientations that introduce students to the CAPLA culture of diversity and inclusiveness.
- Inititative 4: Embrace Hispanic Serving Institution status

Objective 2: Reinforce an inclusive and respectful environment where all faculty, administrators, staff, students, and outside partners contribute to CAPLA's success.

- Initiative 1: Include diversity and inclusiveness in leadership, goals, and values.
- Initiative 2: Embed diversity in human resources, student affairs, and services.
- Initiative 3: Support and re-invest in staff through professional development opportunities.
- Initiative 4: Recruit and promote to acheive faculty diversity.
- Initiative 5: Acknowledge the history of diverse groups and their contributions in different disciplines within CAPLA.
- Initiative 6: Develop new projects and initiatives to include more diverse groups in the community.

Objective 3: Prioritize wellbeing, equity, and diversity as a central tenant of CAPLA culture in all our activities.

- Initiative 1: Continuously benchmark with our peer institutions seeking opportunities to improve practices and culture.
- Initiative 2: Conduct cultural competency training offered at least once annually, in coordination with all college meetings at the beginning of each semester.
- Initiative 3: Include diversity and inclusiveness in marketing and promotional materials.
- Initiative 4: Complete data collection and assessment moving toward diversity and inclusiveness goals.
- Initiative 5: Fund diversity and inclusiveness initiatives.
- Initiative 6: Ensure physical spaces are inclusive.

AREAS OF STRENGTH:

- Top level administration expresses value in diversity and inclusiveness and has participated in diversity and inclusiveness training
- Inclusiveness is embedded as a responsibility in all staff and faculty job descriptions, job postings and other HR documents.
- HR staff meets periodically with all employees regardless of background to offer support
- Search committees take an active approach to the recruitment of diverse employees

- Traditions and celebrations at CAPLA are generally inclusive and provide foods for people with dietary restrictions and new requests are always welcome if someone is being excluded.
- CAPLA leadership is diverse in gender.
- Information on campus resources to support diverse students is provided during orientation
- CAPLA has identified student learning outcomes and concepts related to diversity
- CAPLA policies are inclusive and consider gender, race/ethnicity, disability, etc. and potential impact on diverse groups is taken into account when creating new policies
- CAPLA has a plan to recruit, retain and graduate more diverse students and there are resources allocated for recruiting, retaining and graduating these students
- CAPLA engages in outreach with diverse community groups and activities and reaches out to potential students from our regionally diverse communities
- Development officers are aware of the diversity needs of the college
- Researchers are encouraged to think about diversity and inclusiveness in their research projects.
- Advisors are trained to address diversity and inclusiveness issues, are knowledgeable about the resources available and are engaging in outreach to diverse students. The advising staff is diverse.
- CAPLA has sought available external funding to support efforts in diversity and the built environment.
- The building is accessible to students with disabilities and there is a gender inclusive bathroom.
- CAPLA takes and asset-based approach to the highlights and gifts that diverse students bring to the college and uses asset-based language in recruiting.

AREAS FOR IMPROVEMENT:

- CAPLA does not have a diversity and inclusiveness statement and our values do not clearly show our value of inclusive excellence and is therefore not prominently displayed in our marketing materials, website, and other materials.
- CAPLA leadership has not yet allocated resources to support diversity and inclusiveness initiatives.
- Inclusiveness is not part of an employee orientation, nor are there incentives for professional development in diversity and inclusiveness.
- CAPLA has not yet conducted a diversity climate assessment examining student, faculty and staff behaviors or perceptions about diversity/inclusiveness.
- There is no college protocol for reporting bias incidents beyond the UA process involving the dean of students.
- CAPLA does not have a process for learning about the experiences of diverse students, staff and faculty.

- Students are not provided with skills and knowledge to successfully navigate diversity in and out of the classroom at CAPLA or at the university level.
- There is no training required for faculty on diversity and inclusiveness in the classroom.
- Inclusiveness is not embedded in the promotion and tenure process. Faculty are not rewarded or recognized for their contributions in mentoring diverse students or embedding diversity into their courses.
- Faculty who serve on promotion and tenure committees may or may not be aware of the way diversity impacts the process for women, people of color, disabled people and other diverse groups.
- The college does not currently raise funds specifically for diversity and inclusiveness.
- There is no lactation room, baby-changing facility or quiet space available to students for religious purposes.
- CAPLA does not currently collect data on progress toward diversity and inclusiveness goals

DIVERSITY ACTION PLAN:

The CAPLA Diversity and Inclusive Excellence Committee has developed the following goals and action items to support this mission:

Goal	Action Plan	Priority
Embrace Hispanic Serving Institution status	ADMINISTRATION: Educate faculty, staff and administrators on the benefits of UA being a Hispanic Serving Institution and how they may contribute.	High
Continuously recruit diverse students.	MARKETING & RECRUITING: Specify a plan to recruit, retain and graduate students from diverse groups	Medium
	MARKETING & RECRUITING: Emphasize recruitment in under-served Arizona populations, in part by leveraging new HSI status.	
	FINANCE: Allocate resources to expand and enhance this work.	
Embed diversity and inclusiveness in the culture of CAPLA	ADMINISTRATION AND UA DIVERSITY OFFICE: Provide new student, faculty, and staff orientations that introduce students to the	High

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	CAPLA culture of diversity and inclusiveness. FACULTY, STUDENTS AND LECTURE SERIES FACILITATORS: Create exhibits and/or invite more speakers, presenters, and professional from diverse backgrounds within our disciplines to the college.	
Assess current climate and culture of CAPLA	CLIMATE AND CULTURE: Conduct a survey to ascertain whether students, staff, faculty, alumni, and community members from different backgrounds feel welcome working in or visiting our unit and to examine perceptions about diversity and inclusiveness. ADMINISTRATION: Propose the continuation of this Diversity and Inclusive Excellence Committee as a formal college committee, instead of ad-hoc or have it combined with the Culture Taskforce group.	Critical
Include diversity and inclusiveness in our leadership's goals and values.	 ADMINISTRATION: All top-level unit administration must participate in diversity and inclusiveness training. ADMINISTRATION: Provide incentives for people willing to take extra training and provide leadership in diversity. Identify diversity and training resources on and off campus. ADMINISTRATION: Continue to work throughout strategic plan development with SPOAC to make sure diversity and inclusiveness continues to be a part of the conversation. HUMAN RESOURCES: On-board and training of new staff/faculty/GA/TA regarding CAPLA's diversity statement and cultural competencies. Will partner with university resources to leverage expertise and align initiatives. FACULTY P&T: Train faculty who serve on P&T committees in the way diversity impacts the tenure and promotion process for women, 	High

	people of color, disabled people, and other diverse groups and make the process transparent where inclusiveness is part of the P&T process.	
Embed diversity in human resources, student affairs, and services.	HUMAN RESOURCES: On-board and training of new staff/faculty/GA/TA regarding CAPLA's diversity statement and cultural competencies. Will partner with University resources to leverage expertise and align initiatives.	High
	NEW STUDENT ORIENTATION: Incorporate CAPLA diversity statement and micro aggression training into UA Clicks session for new CAPLA students.	
	STUDENT ADVISING: All advisers should be required to participate in Diversity/Safe Zone training to support to college and university mission of inclusive excellence.	
	MANAGING CONFLICT AND DISCRIMINATION: Create accessible information about the resources on campus for addressing discrimination and make sure unit leadership (and staff, faculty and students), especially new people, are aware of its location.	
	CULTURAL COMPETENCY TRAINING: The training and development opportunities as offered by the UA should be communicated to CAPLA faculty and staff. Should there be interest, these development opportunities could be moved in house in coordination with UA units.	
	CURRICULUM: Curriculum should be examined on an annual basis to ensure learning materials are compliant with CAPLA mission of diversity and inclusion. Additionally, each syllabus should include CAPLA's diversity statement, as well as information where more university and community resources are available.	

Support staff and faculty through professional development opportunities and cultural competency training.	ADMINISTRATION & HUMAN RESOURCES: On-board and training of new staff/faculty/GA/TA regarding CAPLA's diversity statement and cultural competencies. Partner with University resources to leverage expertise and align initiatives. FACULTY P&T: Train faculty who serve on P&T committees in the way diversity impacts the tenure and promotion process for women, people of color, disabled people, and other diverse groups and make the process transparent where inclusiveness is part of the P&T process CULTURAL COMPETENCY TRAINING: The training and development opportunities as offered by the UA should be communicated to CAPLA faculty and staff. Conduct cultural competency training offered at least once annually, in coordination with all college meetings at the beginning of each semester. Should there be additional interest, these development opportunities could be moved in house in coordination with UA units.	High
Recruit and promote diverse faculty relative to teaching and research goals.	 HUMAN RESOURCES: On-board and training of new staff/faculty/GA/TA regarding CAPLA's diversity statement and cultural competencies. Partner with University resources to leverage expertise and align initiatives. HUMAN RESOURCES: Post job posting to various jobs sites to encourage a more diverse pool of applicants. Utilize connections through current college personnel to draw in more diverse referenced applicants. Work with UA Diversity group to see what options are available to increase pool. 	Medium
	FACULTY P&T: Train faculty who serve on P&T committees in the way diversity impacts the tenure and promotion process for women, people of color, disabled people, and other diverse groups and make the process	

	transparent where inclusiveness is part of the P&T process. MARKETING AND PROMOTIONAL MATERIALS: The CAPLA website development team, working on a new website for the college should work with the DRC to ensure it complies with best practices and we will include CAPLA's diversity statement on the About Us page. CURRICULUM: Curriculum should be examined on an annual basis to ensure learning materials are compliant with CAPLA mission of diversity and inclusion. Additionally, each syllabus should include CAPLA's diversity statement, as well as information where more university and community resources are available.	
Acknowledge the history of diverse groups and their contributions in different disciplines within CAPLA.	MARKETING AND PROMOTIONAL MATERIALS: The CAPLA website development team, working on a new website for the college should work with the DRC to ensure it complies with best practices and we will include CAPLA's diversity statement on the About Us page.	Medium
	CURRICULUM: Curriculum should be examined on an annual basis to ensure learning materials are compliant with CAPLA mission of diversity and inclusion. Additionally, each syllabus should include CAPLA's diversity statement, as well as information where more university and community resources are available.	
Ensure physical spaces are inclusive. Develop new, projects and initiatives to include more diverse groups in the community.	PHYSICAL STRUCTURE: Ensure college building(s) are accessible to individuals with disabilities and special needs, including updating doors without the accessible automatic door open button. Additionally, CAPLA should confirm necessary restroom requirements in coordination with ADA compliance. Additional consideration for a	Medium

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	lactation room and religious observation space is necessary. Involve students with special needs to help identify issues with the building. CURRICULUM: Curriculum should be examined on an annual basis to ensure learning materials are compliant with CAPLA mission of diversity and inclusion. Additionally, each syllabus should include CAPLA's diversity statement, as well as information where more university and community resources are available.	
Continue to look externally for inspiration from our peers and aspirational institutions.	ADMINISTRATION: Identify our peers and aspirational institutions. DIVERSITY GROUP: Set up a routine for checking our peer/aspirational institutions to see what they are doing. DIVERSITY GROUP: Work with office of Diversity to see what they have learned. DIVERSITY GROUP: Disseminate information to schools and college leadership.	High
Create a budget for financing diversity and inclusiveness initiatives.	FINANCE: Fund projects that include diversity and inclusiveness adequately. FINANCE: Fund diversity initiatives with the unit's budget and not temporary funding.	Critical

BACHELOR OF LANDSCAPE ARCHITECTURE

COURSE #	COURSE TITLE	UNITS		
FALL 1				
ARC 101A/B	Foundation Studio	2/2		
ARC 131A/B	Thinking about Design in the Built Environment	1/1		
ENGL 101	First-Year Composition	3		
	2nd Language	4		
	General Education – Tier 1	3		
TOTAL FALL 1 UNITS		16		
	FALL 2			
LAR 2**	Design Studio I	6		
LAR 2**	Site Engineering	3		
	General Education – Tier 1	3		
	General Education – Tier 1	3		
	TOTAL FALL 2 UNITS	15		
	FALL 3			
LAR 3**	Design Studio III	6		
LAR 470	Introduction to GIS for Landscape Architecture and Planning	4		
LAR 420	Plant Materials	4		
	General Education – Tier 1	3		
	TOTAL FALL 3 UNITS	17		
	FALL 4			
LAR 4**	Design Studio V 🛛 🔍	6		
LAR 440	History, Theory, and Contemporary Landscape Architecture	3		
LAR 426	Planting Design	4		
LAR 496A	Special Topics in Landscape Architecture	1		
	TOTAL FALL 4 UNITS	14		

COURSE TITLE COURSE # UNITS **SPRING 1** LAR 2** Landscape Architecture Intro Studio 4 **ENGL 102** First-Year Composition 3 Modeling with Algebraic and Trigonometric **MATH 108** 4 Functions 2nd Language 4 **TOTAL SPRING 1 UNITS** 15 **SPRING 2** LAR 2** Design Studio II 6 LAR 2** Landscape Construction 3 LAR 2** History and Theory of Landscape Architecture 3 General Education – Tier 1 3 **TOTAL SPRING 2 UNITS** 15 **SPRING 3** LAR 3** Design Studio IV 6 LAR 423 Landscape Ecology 3 3 General Education – Tier 1 3 General Education – Tier 2 **TOTAL SPRING 3 UNITS** 15 SPRING 4

LAR 4**	Design Studio VI		6	
LAR 460	Professional Practice/Working Drawings		3	
	General Education – Tier 2	•	3	
	General Education – Tier 2	•	3	
	TOTAL SPRING 4 UNITS		15	

ACCELERATED MASTERS PROGRAM - MLA OPTION

COURSE #	COURSE TITLE	UNITS			
	BLA SPRING 4 - additional coursework				
LAR 596B	Landscape Architecture Seminar II	1			
	TOTAL SPRING 4 UNITS	13			
MLA FALL 1					
LAR 569C	Landscape Architecture Seminar III	2			
SBE 580	Research Methods	3			
	Elective	3			
	TOTAL FALL UNITS	8			
MLA SPRING 1					
LAR 596D	Landscape Architecture Seminar IV	2			
LAR 909/910	Master's Report/Thesis	9			
	TOTAL SPRING UNITS	11			

IMPORTANT NOTES:

A minimum of 122 units of coursework are required.

- Co-convened with ARCH 451a (Spring 3) and ARCH 451b (Fall 4) options studios.
- UA General Education (Tier 1 TRADS, NATS, & INDVS | Tier 2 IND-VS, NATS, & Humanities) requires one course to have a "diversity" emphasis focus.
- 500-Level courses may be taken during this time to prepare for Accelerated Masters Program.

College of Architecture, Planning & Landscape Architecture

Sean Kramer

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