# UNIT SELF STUDY

#### PH.D. IN THE BUILT ENVIRONMENT (NON-DEPARTMENTAL) COLLEGE OF BUILT ENVIRONMENTS

#### UNIVERSITY OF WASHINGTON SEATTLE CAMPUS

DEGREE GRANTED: Doctor of Philosophy (Built Environment)

> LAST REVIEWED: Autumn 2008

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# PART A

# REQUIRED BACKGROUND INFORMATION

# Section I: Overview of Organization

# Mission and Organization Structure

### Background

Approved by the Board of Regents in July 2003 and launched with a first class in Autumn Quarter 2003, the Ph.D. in the Built Environment Program is a non-departmental, interdisciplinary program housed in the College of Built Environments. The College has four departments: Architecture, Construction Management, Landscape Architecture, and Urban Design and Planning (one of the few academic units in the country that is comprehensive, containing all these departments). The College also is a major anchor of (and provides space for) the Interdisciplinary Ph.D. Program in Urban Design and Planning, which is administratively housed in the Graduate School.

### Mission Statement

The mission of the Ph.D. in the Built Environment Program is to form interdisciplinary teams of faculty and advanced students, to collaborate across the entire spectrum of scales, dimensions, and methods for the three fundamental areas of the built environment—domains that are emerging as the most important for future academic, professional, and entrepreneurial activity:

- 1. Sustainable systems and prototypes—ecological, community, and energy—across a range of scales from building elements to assemblages, sites, neighborhood context, city and region;
- 2. Computational Design and Research covering the spectrum of design, planning, and construction processes, practices, and pedagogy;
- 3. History, Theory, Representation focusing on issues of regional-global modernity.

The Program will educate researchers who are able to teach, engage in professional practice, or provide public service in an integrated manner, thus working creatively, effectively, and efficiently (able to take a leadership role with others who remain specialists) to solve social-environmental problems.

### **Objectives**

We work toward the above goals by

- a) maintaining two <u>balanced</u> modes:
  - collaborative themes or projects for faculty and students
  - individual, "free" projects of faculty and students so all can participate, without reduction or exclusion,
- b) recognizing the differences in research/scholarship and potentials for funding, and
- c) cooperating with the departments, college, and wider UW

# Enrollment and Graduation Patterns

The program offers one doctoral degree, the PhD in the Built Environment. The three aforementioned areas of activity do not divide students within the program. By the time of our first review, the program had stabilized at our target size of approximately 25 students, and has maintained that since, with small dips and rises with varying entry class sizes and graduations. Our entering classes range from three to six students, with an eye to balancing our three streams with a match of our top applicants to our faculty's research interests; most years we graduate three students. Our student population has a good gender balance (relatively new in our field), and a strong population of international students. While in the past we have been outbid by other institutions when attempting to recruit our top minority applicants, this 2013 admissions year we were able to successfully recruit our first officially tribally enrolled Native American student. This is an area our Steering Committee continues to commit time and attention to and works to improve.

- ! See Appendix D for Enrollment Information
- ! See Appendix N: Program Curriculum Overview & Flow Pattern

#### Governance and Organizational Structure

The program is housed, as a kind of "fifth space," in the College of Built Environments (in addition to the four departments: Architecture, Construction Management, Landscape Architecture, Urban Design and Planning). The program's three streams were carefully shaped by an intense participatory process involving the entire College to generate our major themes and the non-departmentalized interdisciplinary subject matter.

The program is small and operates with personal, relatively informal administration. It has a director and a steering committee of nine (seven faculty, two students) that, as an ensemble, includes a balance of faculty who work in each of these three areas and simultaneously come from all four of the College's departments (as well as the two student representatives), and a part-time staff Graduate Program Assistant. The steering committee and Program Director oversee program operations, admissions, and planning. Because the program is small, there are no other standing committees. Sub-groups of faculty are active in each of the three tracks, who work closely with students and departments in regard to curriculum. The students and faculty interact on a regular basis, dealing with any issues as they arise, and we hold at least one annual meeting of program faculty and all students. In addition, there are at least three annual meetings of the steering committee.

The quality of activity and productivity of program faculty and staff takes place as part of the general College context. In addition, the program specifically not only encourages fruitful interdisciplinary work among members of the College's four departments but facilitates connections across campus (for example, the Program Director regularly contacts and thanks participating faculty from outside the College and seeks travel support for students presenting papers resulting from faculty collaboration; the colloquium coordinator solicits presentations from faculty from across the university, especially faculty new to UW). Mentoring junior faculty is an important activity: the Program Director and senior faculty provide guidance to new faculty as to the ways to participate on dissertation committees and to serve as chair; they are encouraged to participate fully in research by having doctoral students to direct on scholarly and research projects.

The Program Assistant, shares her time working with the Ph.D. program with staffing the College's Urban Design and Historic Preservation certificate programs.

- ! See Appendix A: Organization Chart
- ! See Part C: Questions Added in Charge Meeting for Relation to Interdisciplinary Ph.D. in Urban Design and Planning

Budget & Resources <u>Current Budget</u> The current budget comes from the Dean's Office: 3 first-year fellowships at \$14,000 each = \$42,000 3 fellowship benefits at \$2,282 each = \$6,846 Operating budget \$3,000

\$51,846

Along with tuition waivers from the Graduate School Fund for Excellence and Innovation Top Scholar Program.

- All the faculty salaries are provided by the supporting departments.
- The Program Assistant's salary (as part of a shared part-time position that also includes responsibilities for the two college certificate programs) is provided by the central budget (Dean's Office).
  - ! See Appendix B: Budget Summary

#### Evaluation for best use

The funding is so small and targeted that there is little discussion of alternative uses, save for the desire to provide more student support for travel for conference presentation. The staffing works well with contributions from each department.

#### Strategies to seek additional funding

a) Faculty initiatives:

Faculty as individuals and teams generate grants and contracts that provide for student support. This responsibility is taken very seriously by participating faculty and enters in as a dimension of admissions decisions.

While many of these are listed elsewhere, it is notable that certain themes or clusters of successful work emerge, sketching in the Program's profile, especially in regard to our 3 tracks and sub-areas (and their interesting combinations). To cite several:

- information technology, software development, building performance simulation, digital pedagogy, sustainable construction, project delivery—Inanici, Dossick, El-Anwar, Kim
- Sustainable ecological processes and design; green/resilient infrastructure (especially water)—Yocom, Rottle, El-Anwar, Way

- Asian architecture, urban history, Asian urbanism, participatory design/planning (studyabroad)—Abramson, Hou, Chalana, Prakash
- Public policy, urban food, distributive justice-Born, Spencer,
- Housing, community development, social justice—Manzo, Hou, Abramson, Chalana, Mugerauer

### b) College-wide efforts:

The college as a whole has and continues to generate opportunities for courses in which BE Ph.D. Students can serve as TAs or RAs:

- Continuing cooperation with the departments and with the undergraduate CEP (Community, Environment, and Planning) program
- The B.E. Labs, initiated by Dean Friedman: (usually developed in parallel with the faculty research initiatives just above). The BE Lab series is a unique, special-topic micro-curriculum developed to provide CBE students and faculty with a 'fifth space' for highly integrative and experimental coursework. BE Labs expressly engage grand challenge problems, test novel methods, and promote rigorously trans-disciplinary frameworks for research, instruction, and design inquiry. Labs have included Community-Based Earthquake Recovery for Taoping Village and Li County, Sichuan, China; Vertical Farming and Sustainable Site Design; Constructed Frontiers: Cultural and Physical Systems on the Duwamish River; Disaster Response: Resilient Systems for Health; India: Cities of Tomorrow: Globalization and Urbanization in India. Chandigarh Unbound; In Between Climate and Built Environments: Designing for Urgent Change on the Pacific Rim; Re-Imagining America's National Parks San Juan Island National Historical Park: Planning and Design Competition Studio.
- The Emergent CBE Research Clusters: Academic year 2012-13 saw the College's Ad Hoc Strategic Planning Committee continue to develop a plan for assembling collegewide research clusters that could serve as the basis for new curriculum, symposia, public outreach projects, and collaborative research projects. Among the candidates for serious development are (despite a pause in early 2013) are Resilience, Sustainability/Energy of Built Environments, Asian Urbanism, Health and Built Environments, Human and Social Dimensions, Life-Cycle Processes of Built Environments.)
- Creating a college-wide undergraduate program in which B.E. Ph.D. students could teach—in addition to continuing, perhaps expanding, our students' role in undergraduate CEP.

### c) UW Continuing Education

Investigation of a possible joint program in Built Environment-Public Health was conducted, but Educational Outreach's study showed it would not be financially profitable.

# d) Other UW units

Continue to seek teaching and TA opportunities in other UW units, such as CHID, POE, Geography-GIS (noting the important leverage effect in which activity paid for with state dollars enables the student to qualify for a tuition waiver).

Continue to apply for the Graduate School's tuition waiver program for international students, which we have been previously able to receive for geographically strategic international students.

- e) Donor Fundraising:
  - · Continue to search for donors for fellowship funding by Program Director
  - Fund raising in next Capital Campaign—a major prospect lies in the emerging Capital Campaign. Dean Schaufelberger already has called several meetings with the Director of the BE Ph.D. Program and Department Chairs to begin planning for identification of potential donors, generating compelling stories of supported students "who made a difference," etc. Continuation of an explanation that was effective with educating new donors in Construction Management fundraising: explaining that a key to having excellent departmental faculty lies in providing what those faculty need to be successful—the Ph.D. Program and students are necessary if we are to hire, retain, and promote those faculty who are required to publish, make presentations, and carry out multi-year research projects normally involving doctoral assistants.
- f) Student initiatives

Actively encourage BE Ph.D. students to apply for fellowships and grants (where they already have a good record, though it is challenging).

! See Appendix E for student presentations, publications, research projects, awards, and service

g) Faculty initiatives

Faculty have worked with their departments and with fellow researchers to provide small fellowship funding at the amount that qualifies international and out-of-state students for instate tuition rates (NRD fellowships).

# h) Additional Facilities

A major resource for faculty research, and thereby a platform for expanded research and demonstration of infrastructure to funding sources, has been added by completing the research facility at Sandpoint. The facility is focally for construction management faculty and students working in the sustainable systems and prototypes and digital/computational research tracks (especially in visualization projects), but is open to and used by all program faculty and students.

# Section II: Teaching and Learning

# Student Learning Goals and Outcomes

Desired learning goals and outcomes of the program.

Our intent is to prepare students for success at each stage of the doctoral process, by means of both what the program curriculum and faculty provide and by the invaluable contributions of faculty and programs beyond the College—through the essential process of connecting students

to the rest of the university. Thus each student receives both core and customized bodies of knowledge and sets of skills.

# Major Objectives

- · Provide the background students need to successfully conduct doctoral-level research
- Engage the appropriate specialized faculty inside and outside the College Specifically, acquire and exercise the following knowledge and skill sets:
  - Knowledge of emerging issues and problems in the built environment.
  - Knowledge of the historical-cultural factors operative in today's built environment, especially a) the value-laden issues behind decisions sustaining or modifying biocultural environments, b) the complex relations among the built, virtual, and natural environments, and c) tensions arising out of global-local dynamics.
  - Competence in the knowledge base and procedures of the disciplines that comprise the chosen area of specialization; the ability to communicate effectively with members of other disciplines and practices and to appreciate their approaches and problems within a common project.
  - The ability to anticipate and engage with ethical problems early in their appearance, the ability to bring to bear the appropriate principles, the ability to work out, individually and in a group process, the hierarchy of competing values and factors when working toward a course of action.
  - Knowledge of the major contending epistemological theories of the built environment, not only to the level of understanding each one, but to the point of systematically understanding differences and conflicts that arise from structural differences and differences.
  - Ability to appropriately apply a range of methodologies and research skills, where judgment as to which method or combination of methods to use is just as important as ability to successfully carry out the methodological procedure.
  - Skill at producing, criticizing, and revising research products as well as the processes and outcomes of teaching or professional practice.
  - Specialized depth in their specific research area in balance with breadth that will enable them to teach effectively at both graduate and undergraduate levels—or function effectively in specialized research groups as well as with public interest groups.

# Evaluation of Student Learning

Measures of effectiveness, student satisfaction, and learning outcomes include:

i. Regular personal monitoring

Primarily we evaluate the program by monitoring the major dimensions on a continuous basis, keeping in close touch with the students' progress in their individualized programs of study (assessed by the judgment of their faculty committees and reviewed by the Program Director), listening and responding to their concerns as students, researchers, and job-seekers, attending to any noted academic deficiencies as soon as they occur (monitored by faculty teaching the courses, faculty advisors, the Program Assistant, and Program Director). Additionally we hold at least one annual joint student-faculty meeting to discuss concerns and future directions; the Program Director and Program Assistant meet together formally with individual students at least one a year and assess progress and outstanding issues, if any.

# ii. Course work

both provides many of the desired outcomes and measures of success:

a) Core curriculum:

(courses uniquely directed to achieve the program objectives) Core course offerings have been successfully maintained (with the exception of not being able to offer the ethics every year due to an unexpected faculty leave)

b) Students' grades:

Overall student average cumulative GPA at Spring Quarter 2013 is 3.75, which is especially

strong considering the interdisciplinary structure of their studies.

c) Occasionally research papers produced in courses may be of a quality meriting revision for conference presentation and publication (see Appendix E)

iii. Student presentations demonstrating increasing understanding of research interests The Colloquium-Practicum provides a structure for multiple stages of learning:

- a) in the first year students make a presentation on their master's work or general research interest (the first year also enables students to hear speakers from around the entire campus, facilitating their finding faculty with related research interests)
- b) in the second year the students must make a presentation on the progress toward their research topic that satisfactorily answers the following questions:
  - What do I know about that topic so far?
  - What is the relevance of the topic?
  - Why do I want to do research in this area?
  - What are the potential alternative directions in which I could take my research? (methodologies)
  - What would be the major contributions of this research?

iv. Successful connections across campus provide a measure of assessment and acceptance by the program's peer faculty

- via research methods, see Appendix K
- via committees joined by faculty from other UW units, see Appendix C

v. Refereed presentations, publications, research projects and awards; service Assessment by academic and professional peers through refereed conference presentations, journal publications, and research grants and contracts, and awards in a wide range of multidisciplinary and international venues provides broad and constant external assessment of the program's academic effectiveness. Additionally, service projects provide a gauge of accomplishment in the often ignored area of professional-social responsibility.

! See Appendix E for student presentations, publications, research projects, awards, and service

### vi. Course of progress to degree

Students progress through the stages of completing course work (including the required core courses and research methods courses), committee formation, general examinations, admission to candidacy, research proposal presentation, and dissertation research is satisfactory (especially

since learning new languages—Burmese, Hindi, Japanese, Arabic—is part of the process for some).

- ! See Appendix F for Student Flow Chart: Progress to Degree
- vii. Graduation/placement
- Of 17 graduates:
  - 12 are in university tenure-track assistant professor or lecturer lines Central Connecticut State University Chinese Culture University, Taipei (2) Chinese University of Hong Kong Ewha Womans University Tamkang University University of Edinburgh University of Idaho University of Tasmania University of Texas, San Antonio Univ. of Washington (2)
    - 3 are university/community college lecturers Columbia University Bellevue Community College ENSA-V Ecole Nationale Supérieure d'Architecture de Versailles
    - 1 is a director for a non-profit
    - 1 is a principal in a design firm
  - ! See Appendix G for Student Placement details

### Student satisfaction

- a) University Exit Surveys
  - ! See Appendix H
- b) The regular interaction in this small program: open, frank exchange occurs on a regular basis between students, faculty, and staff—our offices are literally feet apart.
- c) Our annual meetings of the director and program assistant with individual students at least once a year, and often more frequently, for a thorough review of what and how they are doing, a meeting that always provides an occasion for comments and questions.
- d) There are two active student representatives to the steering committee. These students are very proactive in program activities (as well as in broader college and university student governance). They are not shy.

# Findings of assessment of student learning

The students are doing well in several ways: in their core coursework, in their coursework preparing for their general exams and intended dissertation research, in exploring and becoming competent in the contributions that can be made by disciplines new to them. They finish with the capacity to focus on a traditionally categorized subject matter and a cross-disciplinary theme. They take a positive, active role in developing their specialized study—showing substantial, and successful, initiative and responsibility. One of the result is an exceptionally high level of placement in significant, interesting positions.

<u>Use of evidence for improvements, curricular change, and resource allocation</u> Some uncertainty among students concerning details for the processes of the general exam and research proposal defense has been the motive for a revision and refinement of the program statement of these two crucial dimensions. The improved versions are on the web site; additionally, each spring we dedicate a colloquium session to a panel of faculty and students to discuss the general exams.

The major curricular change has been in the evolution of the colloquium. Originally it was a venue for the graduate students to report on their work and to become acquainted with faculty from other UW units and outside in order to become broadly aware of the research specializations and opportunities. Due to student desire for more active learning modes, a process developed engaging a number of students in the process of evaluating and making suggestions for each presentation—a very positive experience according to the students. In the latest morphing this academic year, the students became even more proactive, generating the idea for a public student symposium—they organized such and carried it off Spring Quarter 2013 to a good-sized audience. This success encouraged them to plan another for Spring 2014.

Student interest in learning by participating in research projects and teaching has encouraged the faculty to devote additional attention to leaning outside the classroom

- ! see section below, Teaching and Mentoring Outside the Classroom
- ! See Appendix E for student presentations, publications, research projects, awards, and service

Student concerns about adequate space in which to carry out their work has led us to continue to coordinate effectively with the Interdisciplinary Ph.D. Program in Urban Design and Planning on use of the common dedicated seminar room. This is important now that both programs are at full capacity, with a heavy load of committee meetings, examinations, research proposals and defenses, dissertation defenses, etc. that have to be scheduled to meet the unpredictable availability of all committee members. Small reading groups have also become very popular and effective, so this room provides space for those meetings as well. The two student rooms for the two programs are adequate (though minimally) as is the dedicated seminar room. Students working in digital research have benefitted from the facility-infrastructure improvement that has occurred with the completion of the research facility at Sandpoint, with its sophisticated equipment and capacity. This is focally for students working with construction management faculty in the sustainable systems and prototypes and computational research tracks (especially in visualization projects), but open to all program faculty and students.

# Instructional Effectiveness

### Methods of Evaluating Instruction

Methods used to evaluate quality of instruction in the core courses include the traditional review of student course evaluations, student feedback to Program Director and Program Assistant, feedback from faculty teaching subsequent courses as to level of preparedness. As the courses are tailored to the needs of the students, the level of satisfaction consistently is high.

! See Appendix F: Progress to Degree Chart

The College departments, not the Ph.D. program, carry out evaluations for promotion, merit pay, and tenure processes. Similarly, TAs are evaluated by the hiring departments.

### Opportunities for Training in Teaching

Students participate as TAs in many courses, and in that capacity are mentored as to running discussions, grading homework including essays, holding office hours, It has increasingly become the case that they are invited to teach their own courses in a variety of formats, in each of which there is additional mentoring. They teach courses in the undergraduate Community, Environment, and Planning Program, in the graduate level Master's of Urban Planning program (for instance, statistics). They have the opportunity to create their own courses and offer them in the summer session if the courses make the adequate level on enrollment—here they have been creative and successful, teaching courses ranging from Environment and Community Health, to photography, to Turkish architecture.

# Teaching and Mentoring Outside the Classroom

Student Learning and Development Other than through Classroom Teaching Opportunities for training in teaching occur as faculty invite students to participate in teaching courses and mentor them in connection with their contribution. For example, in academic year 2012-2013 Professor Purcell engaged two of the graduate students in assisting in first developing then teaching his undergraduate course, working closely with them along the way (for which the Urban Design and Planning Department faculty awarded them a commendation for outstanding contributions).

Doctoral students also frequently participate in studio and thesis reviews within the College and occasionally in other UW departments.

Multiple reading groups, consisting of one or more faculty and a self-organizing set of students, regularly operate, often lasting several years and even meeting over the summer. These have included political theory and policy, chronic trauma in the built environment, and critical design.

The graduate students are regularly asked to join, and help with, exploration seminars abroad. They have combined assistance with the courses and often some attention to their own projects at both rural and urban sites in India, China, the Himalayan mountains, Taiwan, Russia, and Alaska.

Since research in the built environment naturally involves field work, it is a regular occurrence that faculty and students explore social-physical processes and conditions on site. Sometimes led by the student to investigate her study area, sometimes led by a faculty member engaged in research, there is considerable exploration and analysis of urban neighborhoods, suburban development, housing, health care facilities, landscapes, and urban gardens.

Finally, valuable skill sets are taught and developed by the Visual Resource Center director, Josh Polanski to those students hired as staff.

#### Recruiting

#### Admission & retention

Over the course of the program, we have strong offer/yield rates: of 66 admissions offers we have recruited 49 students, a rate of 74%. —impressive for a program that attracts applicants from around the world and which can only offer one year of "guaranteed" support where other institutions have multi-year packages. In 2013 we successfully recruited all six students to whom we made offers.

Because the program is intended to match prospective students and faculty, we recruit by generating interest through national and international faculty networks rather than having formalized outreach by the Program Director or Program Assistant (of course, the latter two respond to all inquiries from prospective students). Any faculty interested contribute to the network of information and solicitation among their national and international colleagues. This allows the areas of current research to remain flexible and up-to-date. (An example of flexibility as a result of changing faculty specialization is seen in the gradual emergence of two discernable but complementary dimensions of the sustainability track —sustainability of natural systems and of communities.) Applicants are encouraged to contact faculty whose research interests match their own. Care is taken in the admissions process each year to provide good students to each of the streams and to new faculty as they become involved, maintaining a changing but fairly balanced set of participants.

Thus far the number of applications have been fine and steady (see Enrollment Trends below); more importantly, the number of applicants directly relevant to faculty interests has increased and the blanket applications from unfocused students have decreased.

One of the program's strong features is the matching of student and faculty interests that begins during the application process. When applications are received, a form is sent to all faculty in the College who may have some expertise and interest in the student's intended work. Those faculty review the application materials and complete a form that indicates a level of interest in working with the particular student. These forms are a critical ingredient in the steering committee's decision process: decisions are based not only on students' demonstrated general excellence and potential, but also on the extent and degree of faculty match and commitment. From the very beginning in the recruiting process, then, student applicants are aligned with specific faculty.

! See Appendix I for Sample of Faculty Sponsor-Mentor Form for Admissions

For those admitted, the initially self-identified faculty (as well as the Program Director and Program Assistant) provide advising and contact with other faculty in the College and, most importantly, across campus. In addition, the weekly colloquium explicitly serves as a venue in which faculty from the College and UW in general present their work, allowing students to become acquainted with other potential collaborators. Thus, as the students pass to the stage where they form their committees in preparation for their examinations, they have developed relationships with appropriate faculty in the College and university as a whole.

We have had a consistent problem recruiting students from under-represented groups. Such applicants do contact us and apply; often they are accepted and offered financial support.

However because we are only able to guarantee one-year of funding and provide the promise to seek more, accepted U.S. Latino/a and African-American students have chosen to take multi-year offers from schools such as Harvard, Carnegie Mellon, and University of British Columbia. For 2013, however, we are glad to report that a Native American student has accepted our offer—apparently due to her familiarity with several of our faculty who work in her intended area and the fact that she can receive financial support from tribal sources.

In addition, we have been very successful in attracting highly qualified international students, especially from China, Taiwan, Korea, India, and Iran. These students have been successfully integrated into the rest of our student cohorts and program activities. This growth has been, it would seem, a result of our faculty's international connections and their international service and scholarship. For example, Dan Abramson, Jeff Hou and Qing Shen have strong relationships with Taiwan and China, drawing applicants and students from both places, often students they met during their overseas work, and our construction management faculty have strong connections with Korea. Additionally, once students from these countries are accepted and enrolled, their positive experiences begin to generate a "network" of interest in their home countries—we know this from what they and members of subsequent cohorts say. Among the dimensions that positively lead international students to stimulate such home networks are our personalized counseling from both staff, the program director, and faculty advisors and intentionally nurtured connections with their advisors and fellow students from their own and previous years. (Our core courses, especially the colloquium, and shared student spaces facilitate interactions with other students and the sense of community.)

Since the inception of the program in 2003 we have lost only five students: one to a faculty move, two to personal moves, one to a university transfer, and one who received a PhC but declined to go further.

#### Ensuring steady academic progress and success

Expectations are communicated, progress is monitored regularly, and students are encouraged by teams of faculty selected as appropriate for each individualized research agenda. The program faculty and staff monitor, document, report, and discuss with the students in at least five ways: 1) on an ongoing basis by the Program Assistant with each quarter's enrollment and course completion and in light of intermittent issues arising.

2) by the Program Director, who regularly keeps up with the students throughout the academic year and who (together with the program Assistant) meets formally with them at least once a year to discuss their work and specific questions and plans.

3) by the faculty advisors, both before and after the dissertation committee has been officially set in place. Timelines and progress to degree are formally reviewed at least once a year in the meetings with the Program Director and Assistant, which cover the procedures for committee formation, courses required, examination-presentation requirements, and standards of academic integrity at both the annual colloquium and annual formal meeting.

4) through the colloquium-practicum: the weekly colloquium serves as the site of a series of presentations made by all students on their work as they arrive and during the course of their progress (often including trial runs of conference paper presentations, which additionally are scheduled at other times).

5) by regularly following student productivity: we record student awards, papers presented, articles published, and so on. This record is consulted in the course of writing recommendations, marketing the program and fundraising, and during the annual review meeting with each student. ! see Appendix E for Student presentations, publications, research projects, awards, and service

# Prepare students for the next phases of their careers

The mentoring process not only includes constant interaction with the appropriate faculty in our individualized process, but students are prepared for academic and professional careers by their work on research teams, teaching, and working on publications and reports together with faculty. Students are provided opportunities and encouraged to participate with mentors in writing research grants and carrying them out if awarded, authoring conference presentations or publications submitted for peer review, or teaching a class. Beyond the occasions of acting as a TA, RA, or GSA students increasingly have chances to teach their own courses. Along the way, the Program Director makes regular contact with the mentors in regard to the students' progress. We actively work to help them obtain financial support for presentations and publications and by introducing them to research and scholarly networks for the sake of being recognized during hiring processes. Our students have also initiated their own informal program to mentor undergraduate students in the College, a program that they intend to regularize by handing it over to the College's new Student Council, another initiative headed by students in our program.

# Section III: Scholarly Impact

# Educational Impact

The positive impact on educational programs is seen in the way that the University of Virginia's highly rated School of Architecture's recently created Ph.D. Program in The Constructed Environment very closely emulates our program. Their degree program (embracing the departments of architecture, Urban and Environmental Planning, Landscape Architecture, and Architectural History) has as its core curriculum "Theories of Knowledge," "Ethics, Politics, and Aesthetics" and "Colloquium" and 9 hours of research methods selected from around the university (our core courses are "The Contemporary Built Environment," "Theories of Knowledge," "Ethics in Practice, Research, and Teaching," and "Colloquium" plus 6 credits of research methods selected from around the university.

# Broad Impact

The program was ranked first in its area in the United States in Top Universities' Faculty Scholarly Productivity for 2007, as reported by the Chronicle of Higher Education Facts & Figures: Faculty Scholarly Productivity Index. There is no newer ranking. See <a href="http://chronicle.com/stats/productivity/page.php?year=2007&primary=234&secondary=56&bycat=Go">http://chronicle.com/stats/productivity/page.php?year=2007&primary=234&secondary=56&bycat=Go</a>>.

! See Appendix J: Chronicle of Higher Education Screen Saves from 6/5/13

With the exception of this Index of Faculty Productivity, there currently is no national comparison or ranking of schools of architecture nor their Ph.D. programs as is common in most other disciplines: the "architecture" programs withdrew from the process several years ago because the variety of particular departments included in them makes comparison almost impossible.

- Quantitative measures include the
  - Index of Faculty Productivity
- Qualitative measures include
  - Faculty monitoring of sense of status from constantly updated feedback systems resulting from the faculty's international interactions with colleagues: referrals of students back and forth, job offers and placements, interactions at conferences, invitations, and so on
  - Administrative peer assessment and recognition, for example through the biannual meetings of the Dean's Collaborative (the Deans of large public U.S. universities offering Ph.D. degrees).

Faculty Impact: specific faculty cited as indicative of distinctive contributions to the unit's mission and that distinguish the Ph.D. program and the college.

Especially outstanding is the faculty's continued ability to contribute both to traditional disciplines and specializations and to work across disciplines by means of expertise across a broader field, methodology, or complex subject matter, often internationally. For example, this might involve a particular area of architectural history combined with expertise in post-colonial thought, the globalism-localism tension, and Southeast Asian studies; or, sustainability in its many manifestations: resilience, disaster prevention and relief, energy research and conservation, green construction, ecological design, and so on. This impact on the departments, college, university, and internationally can be seen in a review of some of the Program's Steering Committee members—we choose this group for the Report so as to include a non-arbitrary selection of faculty from differing program "tracks" and college departments (and preclude concern with "being left out"). Obviously, many other faculty could just as well be cited.

Dan Abramson's broad expertise appears in the ease with which he is equally at home in the U.S. and China in his teaching, research, publications, presentations, and planning practice. Overall these areas can be identified as comparative urbanism and planning cultures, with a special focus on China; urban design, historic preservation, and built-environmental expressions of identity; democratic and intercultural action and networking in community planning and design; and transcultural pedagogy in planning and design. For example, his transnational impact and reputation are witnessed in refereed journal articles (sole authored or co-authored with Chinese colleagues) such as "'Urban-rural integration' in the Earthquake Zone: Sichuan's Post-Disaster Reconstruction and the Expansion of the Chengdu Metropole," Pacific Affairs, Vol.84, No.3 (September 2011): 495-523 (with QI Yu); "Transitional Property Rights and Local Developmental History in China," Urban Studies, Vol. 48, No.3 (March 2011): 553-568; "Places for the Gods: Urban Planning as Orthopraxy and Heteropraxy in China," Environment and Planning D: Society and Space, Vol.29, No.1 (February 2011): 67-88; "Using GIS in Community Design Charrettes: Lessons from a Japan–U.S. Collaboration in Earthquake Recovery and Mitigation Planning for Kobe," Habitat International, Vol. 33, No. 4 (October 2009): 310-318 (with Takahiro Tanaka and Yoshito Yamazaki); "Haussmann and Le Corbusier

In China: Land Control and the Design of Streets in Urban Redevelopment," Journal of Urban Design, Vol. 13, No. 2 (June 2008): 231-256. His work in community sustainability, neighborhood participatory design & planning, and Asian Urban combines with that of Manish Chalana, Jeff Hou, and Vikram Prakash to provide a strong orientation in the college and beyond that combines architecture, planning, urban design, landscape, and historic preservation. Work in progress in these areas includes: "Saving the City: Landscape Heritage as a Frontier of Urban Conservation in China," for Conserving the City: Critical History and Urban Conservation, edited by Michele Lamprakos and Randall Mason, University of Pennsylvania; "Planning for New Urban-Rural Relations in China," in preparation for Transforming Distressed Global Cities into More Healthy and Humane Places, edited by Fritz Wagner; "Order and Disorder in Chinese Urbanism," in preparation for Messy Urbanism, co-edited by Jeffrey Hou and Manish Chalana; and "Qiaoxiang Globalization: Local Identity and the Transformation of Quanzhou, Fujian," in China Globalizing: Differentiation, Reception, and Social Cohesion, edited by Pitman Potter and T. Cheek. His research has been supported by a U.S. Department of Education Title VI Outreach Grant, a China Studies Faculty Research Grant, a Fulbright Scholarship for field research and action, a Chiang Ching-kuo Foundation for International Scholarly Exchange (USA) grant.

Carrie Sturts Dossick's research includes BIM (Business Information Modeling-also a specialty of other CM faculty such as Yong-Woo Kim and Giovanni Migliaccio, see faculty profiles and their CVs) and collaboration in support of higher building performance, virtual world collaboration, and innovative experiential education-thus moving across concerns of construction management, architecture, digital & computation work, sustainability, ethnographic approaches, and pedagogy. In her role with the PNCCRE (Pacific Northwest Center for Construction Research and Education) she has participated in multiple initiatives, some providing a venue for the presentation of her doctoral students research projects. As an indication of the range of her work, from the 16 funded research grants (many including funding for student work) she has had over the last 6 years as PI or co-PI, note the diversity of those from HP Leadership Fund: ECL + VI Construction Catalyst-Merging UW Experiential and Contextual Learning; Skanska Innovation Grants for Modular Prefabrication for Mid-rise Urban Infill Projects and for Virtual World Collaboration for the Boeing Delivery Center Construction Project; COAA COBIE Pilot Project Phases I and II: BIM for Facilities Management; NSF--VOSS: CyberGRID Networks- Cyber-enabled Global Research Infrastructure for Design Networks; NSF--Assessing Collaboration Across Organizational Boundaries in U.S. Green Construction: Does working together with new information technology result in better buildings?; U.S. Army Engineer Research and Development Center-Developing Best Practices for Capturing As-Built Building Information for Existing Faculties and also Generating Building Information Models (BIM) for Existing Facilities. Additionally, she is author or co-author of over 15 peer-reviewed journal articles.

Mehlika Inanici is providing cutting-edge research in the area of daylighting simulations and computational approaches to energy efficiency/sustainability. Among her fundamental research projects has been the grant funded "Development and Validation of Image-based Sky Models for Daylighting Applications" (with key research student support) and the currently developing "Dynamic Daylighting Simulations form Static High-Dynamic Imagery." Her dedication and contribution to student research in all three of our research tracks (specifically architectural representation, sustainability, and computational research, as well as health) is seen in her

persistent applicant to funding sources as diverse as National Science Foundation, Department of Energy, and National Institute of Occupational Health. Her mentorship has included a key role in garnering awards for our doctoral students: for example, one won substantial funding over multiple years from the Nuckolis' Fund for Educational Lighting, the Illuminating Engineering Society of North America, and the International Association of Lighting Designers.

Robert Mugerauer is an internationally acknowledged leader in the application of phenomenology to the built environment and the "creation" of the field of environmental hermeneutics (recognized as such in Interpreting Nature: The Emerging Field of Environmental Hermeneutics, edited by Forrest Clingerman, Martin Drenthen, Brian Treanor, and David Ulster (New York: Fordham University Press, in press, 2013). He is a co-founder of the International Association for Environmental Philosophy, which over the past 17 years has generated an annual three-day conference and a journal. He also has made a major contribution by utilizing complexity theory as part of the international project to integrate the "natural" and "cultural" dimensions in urban ecology and as an aspect of qualitative research in the field of health [for example in recent publications such as "The City: A Legacy of Organism-Environment Interaction at Every Scale" in I. Stefanovic & S. Scharper, eds., The Natural City: Revisioning the Built Environment (Toronto: University of Toronto Press, 2011), pp. 257-294; "Toward a Theory of Integrated Urban Ecology: Complementing Pickett et al.," Ecology and Society, December, 2010, 15 (4), 31 < http://www.ecology and society.org.vol15/iss4/art31>; "Anatomy of Life and Well-Being: A Framework for the Contributions of Phenomenology and Complexity Theory, International Journal of Qualitative Studies of Health & Well-Being, July, 2010, <5:5097- DOI: 10.3402/ghw.v512.5097>]; and in an appointment to a Visiting [Adjunct] Professorship to the School of Health and Social Care, Bournemouth University, UK.

Vikram Prakash's co-authored book <u>A Global History of Architecture</u> (with Francis DK Ching & Mark Jarzombek, John Wiley & Sons, Inc., 2006—translated into five languages) is turning out to be one of the major, influential texts in the multi-cultural expansion of architectural history as taught at colleges and universities. He also is regularly consulted as expert in the development and continued change in Chandigarh, India (Chandigarh's Le Corbusier: The Struggle for Modernity in Postcolonial India (University of Washington Press, 2002); Chandigarh 2.0: The Modern City in Neoliberal India(contracted with Routledge, 2013) and in the reinterpretation of post-colonial urbanism, particularly in South Asia (Colonial Modernities: Building, Dwelling and Architecture in British India and Ceylon (co-edited with Peter Scriver, Routledge, 2007). Dr. Prakash is also working on and a new textbook the history of the architecture of India.

#### Student Awards, Presentations, Activities with Impact

Our students have a record of outstanding placements with significant impact, both contributing to traditional programs (including those participating in the movement to more interdisciplinary approaches to their core subject matter), to newly emerging non-disciplinary programs, and notably in the international sphere.

! see Appendix G for graduates' placements.

Our students have

• made presentations at 126 refereed conferences

- published 106 papers in refereed journals and books
- won 68 awards
  - ! See Appendix E for students' presentations, publications, & research projects.

#### Non-degree-seeking Researchers

Though the program does not have postdoctoral fellows, our reputation is such that we are regularly requested to host people during advanced studies. A faculty member in anthropology who has a Mellon Fellowship to study "urban warfare" requested in his proposal that he do his work in the Built Environment program; additionally we often host Valle Scholars visiting from Scandinavian institutions, and have also attracted students from other institutions both informally and formally through the Visiting International Student Internship & Training program.

#### Impact of program graduates on field, academically and professionally

Most but not all of our graduates pursue academic careers. Those that do impact a wide-range of programs (internationally) in two ways. First, many graduates are hired to make core contributions and add research specializations to traditional academic programs (including those participating in the international movement to more interdisciplinary approaches to their fundamental subject matter). Examples include Kuei-Hsien Liao explicitly hired by Singapore University Department of Architecture to add specialization in landscape architecture in a way that would integrate it with the already existing focus on architecture and planning (in addition to adding a research specialization on urban flooding); but just now recruited by the Chinese University of Hong Kong in a joint appointment between the School of Architecture and Department of Geography and Resource Management that together operate the Urban Studies program. Jayde Lin Roberts was hired by University of Tasmania Asian Studies Program to add the area of built environment to their cultural and language specialization and help develop a closer interaction between the physical and social aspects of their research.

Secondly, our graduates contribute to the development of new non-disciplinary programs –that continue to emerge as universities increasingly orient themselves to interdisciplinary collaboration focusing on a given phenomenon or set of problems. For example, Meriwether Wilson was hired by the University of Edinburgh as part of their new Shoreline Program (including an internationally oriented Master's degree in the area) created in response to issues resulting from climatic change and the research agenda supported by the EU.

As noted, some of our graduates choose careers professionally oriented or that aim at community-public service. One of our first graduates, Ken Yocom intended and began his career as a consultant to an environmental engineering firm, specializing in riparian mitigation and restoration (though he was eventually persuaded to shift to an academic trajectory). Or, Josh Miller, having done his dissertation on the social-political dimensions of urban bicycling movements, sought a position that engaged the community on such issues: he applied for as was hired by a NGO/non-profit as "Go by Bike" Program Manager, <u>Bicycle Alliance of Washington</u>. In this capacity he is a key figure in planning a Bicycle Urbanism Symposium, that is the collaborative effort of several agencies and groups including the University of Washington.

It should be appreciated that many of the graduate students contribute to university outreach through the projects they undertake for their advanced coursework and dissertation research. For

example, in preparing to do participant observation work evaluating the contributions of Neighborhood Associations on community revitalization, Amber Trout has provided useful knowledge and practice to her subject neighborhood. The same was true of Shu-Mei Huang for the neighborhood associations dealing with low-income residents' housing in Hong Kong (for which she already has received a book contract for a revised version of her dissertation focusing on her theme of "Care").

#### Influence of Advances and Changes

The development of digital capacity, especially involving computation dealing with energy uses and design and with virtual interactions have had a major impact. The studies of daylighting, for example, contribute simultaneously to reducing energy use and thus carbon emissions, to user comfort and more importantly employee health, and to more sophisticated designs that also result from architectural collaboration with materials and HVAC system experts. Or, with the ability to build virtual environments and write customized software, faculty now also develop visualauditory programs to teach safety procedures, more efficient construction processes and procedures, and information retrieval and management systems.

The growing research and social concerns with health and well-being have been reflected in changing (increasing) work by faculty on urban food systems, environmental and distributional justice, environmental health and community ecology. There has been a steady growth in student and faculty interest in these areas.

As part of the academic and social analysis of increasing globalization and its relationship to local traditions and sense of place, our faculty and students have developed their background expertise (for example in modern architecture) to explore specific local built environments and their interrelationships with the practices of everyday life. This appears in studies of the political, post-colonial, touristic, ethical, or rural to urban dimensions of specific sites in the Mediterranean, China and India. Work combining analysis of place and media-information technology also plays a part in this research—currently cutting edge work is being done in dissertation projects concerned with the phenomenon and still-developing impact of Google Street View or with the social implications, economic drivers, and marketing strategies of the current development of Seattle's South of Union Bay district.

#### Collaborative Efforts

The Ph.D. in the Built Environment program is thoroughly interdisciplinary and collaborates with the rest of UW and other institutions. To cite one instance not otherwise mentioned in this Report, the faculty played a leadership role in conceptualizing and carrying out "Now Urbanism," a 2010-2011 Sawyer Seminar funded by the Mellon Foundation and hosted by the Simpson Center for the Humanities, is a collaboration of the College of Built Environments and the College of Arts & Sciences, University of Washington, with support from the UW Alumni Foundation and the Graduate School. "Now Urbanism" is a central component of "Next City," a two-year special initiative of the UW Office of the Provost focused on the challenges and opportunities of urbanization in the 21<sup>st</sup> century.

Overall, most of what could be said in this section <u>has been covered above (and presented</u> <u>elsewhere in the annual reports of the individual departments</u>). In addition, the collaboration is seen by the list below of faculty from 20 other UW units, three other universities, and the U.S. government actively (or recently) working on our students' doctoral committees (all of whom play an active role, making substantial contributions as members of fully interactive committees.)

! See Appendix C for list of faculty working on our students' doctoral committees

Additionally, as noted, following the individualized trajectories of our students, 11 other UW departments and faculty provide a useful array of research methodology classes: the range of units in which B.E. students have successfully completed research methods courses: Anthropology, Architecture, Center for Statistics and Social Sciences, Comparative Literature, Construction Management, Educational Psychology, Geography, History, Oceanography, Technical Communication, Urban Design & Planning.

" See Appendix K for a full list

#### Work with junior faculty.

Though all faculty are housed within the college's departments, the program contributes to their success by including them in student work and dissertation research, providing them a chance to participate in dissertation committees before becoming chairs themselves. The opportunity to work with Ph.D. students obviously enhances the range of grants and contracts for which junior faculty are eligible and provides them research assistance to aid in the successful completion of the projects—and thus also movement toward tenure and promotion. Indeed, though the departments do the recruiting and hiring, the existence of the B.E. Ph.D. clearly is a major attractor and retention factor for the departments and entire college: we have numerous stories of how faculty decisions to join or remain within the college have depended significantly on the ability to have doctoral-level students.

#### Faculty from under-represented groups

Clearly, a diverse faculty is a key to recruiting and retaining other diverse faculty and students. Here the Ph.D. program contributes a distinctive resource to the College and the departments in their efforts to recruit and retain faculty from under-represented groups. We have a decently diverse faculty, and have paid special attention to increasing the number of women—an important goal since architecture and construction management (as engineering and many sciences) have historically been male-dominated until recently. We now have more women faculty not only in planning and landscape, but in the scientific-technical areas of architecture (computational lighting research and structures engineering) and construction (informational management and visualization).

The current task is not only to increase the number of faculty from under-represented groups, but not to lose good faculty whom we already have—perhaps the greatest and most immediate danger as seen in that two of our outstanding faculty (Hilda Blanco of Urban Design and Planning, who taught the B.E. Ph.D. ethics course and Eddy Rojas of Construction Management, a founding faculty member of the program who taught the colloquium) have moved on for reasons unrelated to the Ph.D. program.

# Section IV: Future Directions

#### Where is the unit headed?

The program already is strong, providing a customized mode of study to students that results in outstanding placement. Our student career trajectories include successful participation in traditional academic positions, innovative leadership in the expanding development of interdisciplinary education programs world-wide, professional work, and community service. Thus, the primary intention of the program is to maintain both its core identity and flexibility but become more robust. The trajectory aims at resilience by generating supporting conditions, especially by finding funding resources, while making normal modifications in light of changing faculty interests and shifts within the fields (as with the emergence of "urban" and "indigenous" food systems).

1. A fuller opportunity for the students to gain experience teaching can be combined with generating additional program-student support revenue. While continued effort will be directed to developing the teaching opportunities within the four college departments, the college's undergraduate CBE program, and in cooperation with other UW units (such as CHID), new college-wide undergraduate courses can be developed. Such courses of general importance and interest for university-wide undergraduates could include subject matter on sustainability, urban systems, the built environments and health/well-being, or environmental justice.

2. Substantial financial resources to support students, including funds to support travel to make presentations of refereed papers need to be developed. Not only will fuller funding be developed to offer to students in their time here, but sufficient monies to make multi-year offers to the best students applying for admission.

3.Continue to expand the participation of college faculty, so that more and more are engaged in education at the doctoral level. This is congruent with the development of the college-wide research clusters and the continued hiring of research-oriented faculty by the college.

4. Flexibility enabling the curriculum and research to shift with changing faculty interests and specialization, thus supporting faculty over the course of their careers and newly hired faculty—while they participate both in interdisciplinary projects via work oriented to complex subject matter as well as in the pathways of traditional disciplines.

### Opportunities we wish to pursue, goals to reach

Diversity: fuller funding would allow the program to be successful in its goal of enrolling a more diverse student body. The reputation of the program already does attract applicants from underrepresented groups, if we had adequate resources not only could we convert more admissions to acceptances, but the program could be "marketed" more aggressively than we currently are comfortable doing.

Continue and expand the range of funding sources, not only by grants applications submitted to major funding agencies (NSF, NIH, WHO, OSHA) but contracts to agencies and NGOs in areas such as transportation (such as WASHDOT), resilience and ecological design (e.g. Scan Design; city and county agencies). Continue to participate, when invited, with other CBE centers and

laboratories—which have been most supportive and inclusive: for example, the Green Futures research and design lab, Hazards planning mitigation and research, Northwest Center for Livable Communities, Pacific Northwest Center for Construction Research and Education.

How intend to seize—in era of do more with less—continue to search and find \$\$; to collaborate; move with students in their research;

1. The groundwork for the undergraduate courses and thus teaching experience and resource generation has already been laid. The year-long work of the Ad Hoc Strategic Planning Committee in academic year 2011-2012 and followed-up in 2012-2013 resulted in creation of research clusters that identified broad areas of interest to the college community, with the idea that these would impact the college curriculum. Follow-up to that by the College Council resulted in a end of the year report (May, 2013) that at least one college undergraduate course should be created. Earlier the concept of an entire college-wide undergraduate degree program had been raised by former Dean Friedman; also, following a curriculum review of CEP and its overall departmental offerings several years ago, the department of urban design and planning already has proceeded with the plan of further undergraduate offerings has generated and offered a course of general undergraduate interest (Introduction to Urbanization).

Finally, the B.E. Graduate Student symposium just held in May, 2013 had as one of its three sessions a panel on curriculum development: "College-wide Built Environment Curricula." The outcome was that the students affirmed that

the value of our collaborative efforts would be better thought of us as meta-disciplinary or trans-disciplinary: they should not be reduced to the sum of disciplinary positions or relationships but instead form the basis of an academic pursuit worthy in its own right. Parallel, at the other end of the spectrum, for younger audiences who may be unfamiliar with built environments studies, we believe that there are academic and social values in remaining at a "pre-disciplinary" mindset (particularly in lower-level courses). For example, we believe that the content of a course titled "Introduction to the Built Environment" will encourage students to develop an awareness of and appreciation for the built environment, as well as encouraging critical reflection upon one's daily relationship with it.

The students have generated an initial outline for such a course, with the intention to continue to develop it. Thus, what now is needed is a dedicated group and sponsors to put in the "time on task" necessary to further articulate and realize the project.

2. The forthcoming capital campaign will provide the platform for significant fundraising. Dean Schaufelberger already began to lay the foundations for the campaign and central inclusion of the B.E. Ph.D. Program with a series of meetings of the department chairs, Director of the B.E. Ph.D. Program and Director of the Real Estate Program. Initial projects include such items as identifying and fleshing out the stories of our graduates "who made a difference" as part of a compelling demonstration of program value and legitimacy of need for further resources.

Continue to develop more flexibility for student funding, especially in regard to maximally utilizing short-term contracts awarded for faculty projects. These are complex because the funding often involves support that can be used by students to develop projects on which they might be engaged, but that come at unpredictable times and with short-timelines. This works

well if there are students "standing by" who are competent; but too often (during the two years of coursework) they are already on some kind of fellowship and/or need a situation where they will not wind up devoting too much time to working on projects and not enough on their coursework. We have tried allowing a modest increase in non-coursework activity that seems to be working well; we will continue to monitor and adjust the practices.

## Current benefit & impact

The program's multiple dimensions enable us to contribute in at least three dimensions: research and scholarship, professional practice, leadership.

# 1. Contribution to institutional role and mission

The program adds, at the highest level of research and education, to the College's distinctive identity as one of the country's few comprehensive built environment programs, combining Architecture, Construction Management, Landscape Architecture, and Urban Design and Planning. As a result, the program helps the faculty and students to engage almost the entire development process, from economic and environmental planning, real estate, regulatory processes, siting and design, through actual financing and construction, to facility management and adaptive reuse in subsequent stages. Because of the College's focus on comprehensive analysis and practice concerning the built environment and its interrelation with society, it is substantially engaged in interdisciplinary work with other units on campus and outside of the campus.

The Ph.D. program adds substantially to the College's overall interdisciplinary character and thus to College's contribution to the University of Washington's commitment to leadership in pluralistic and collaborative approaches to learning, teaching, research, and services appropriate to meet the needs for today's and tomorrow's complex world. This program helps provide both disciplinary and professional means to promote environmental well-being, the diverse environmental specializations must be fully integrated. Thus, working beyond traditional disciplinary and departmental categories, the College's faculty, along with colleagues from across campus and the community and region, fulfill their roles and simultaneously make a distinctive contribution to the collaborative effort to deal with social problems—especially the ecological, cultural, and economic sustainability of the built environment, both locally and globally in a time of climate and political change.

Faculty impact: not to be overlooked is that in addition to "need" defined in the usual sense of "external demand," there also are necessities connected with the high-quality faculty so vital to the College's well-being: without the Ph.D. in Built Environment, the College will not be able to attract, maintain, much less develop, its excellent and diverse faculty. (Also see Section IV on Diversity. The dramatic changes in CBE faculty and congruent research capacity can be seen in the comparison of the time before and after creation of the BE Ph.D.—to the point where now almost two-thirds of the faculty have doctorates.

! Appendix L: Changes in CBE Faculty with Ph.D.s and Research Grants.

- 2. Regional and statewide benefit
- The specialized research and practices of our faculty positively impact the social, ecological, and economic well-being of the Puget Sound, Seattle and other regions of Washington (as well as the national and international realms). This is especially due to contributions in urban

ecology, green infrastructure, environmental resilience and community sustainability, technology development and transfer, cultural re-theorization, and support of participation by historically under-represented populations in urban planning and design),.

- The faculty and students, utilize their research and professional skills locally and regionally in urban food systems and distributive justice, community service-engagement, stimulating and facilitating citizen-resident participation, dealing with environmental problems such as stormwater runoff or buried streams, low-income housing, integration of immigrants into local neighborhoods, environmental trauma in veterans and the elderly.
- The State of Washington has ongoing economic and cultural connections with the Pacific Rim countries most of our international students come from (China, Taiwan, Canada, Korea) relating to the built environment. The international work and research our students and faculty do in the built environment (in Japan, China, Taiwan, Tunisia, and Burma to name a few) under the University of Washington name make our program and college an ambassador for our State and help deepen our state's international connections, giving us the opportunity to make closer bonds with built environment professionals and academics in our students' home areas while they conduct their research. As our students graduate and continue their professional lives in their home countries, our ongoing connections with them open doors for exchanges both academic and economic, helping deepen Washington State's relationships with these regions, helping transform competitive relationships into collaborative ones where knowledge and expertise can be shared for mutual benefit and further growth.
- Our student and faculty's work and research into the local built environment offer the State an even more immediate benefit, as their innovative environmental and construction-related work frequently has direct local application. Two graduates of our program are now tenuretrack faculty at the University of Washington—this speaks to the excellence both of our students and of our program, as this is somewhat of a rarity but demonstrates our direct benefit to the state, as their teaching will continue to produce professionals in the built environment for our region and their local research will be ongoing.
- There is a substantial geographical gap in the Pacific Northwest as far as locations where the socially needed interdisciplinary education is offered. There is no such program along the continental West Coast, our program's historically dominant source of students.
  - ! Appendix M: Map of the geographical distribution of Interdisciplinary Doctoral Programs in Built Environment in the U.S.

#### 3.National and international benefits to academia and the professions

- Universities and colleges in the United States and internationally have increased the
  requirements for faculty appointments, more often than ever before requiring the Ph.D. as
  proof of advanced research capacity. It is no exagger ation to say we are a leader
  worldwide in providing interdisciplinary faculty. Because of changed expectations, with
  a disposition to interdisciplinary work combined with retirements of traditionally educated
  faculty there is an increasing need for and trend to interdisciplinary built environment
  education, but there are not an adequate number of qualified graduates. As noted earlier the
  international impact is seen as universities hire our graduates in order to add or strengthen
  programs that are problem or subject-matter-oriented (e.g. Shoreline studies, suburban sprawl
  and urbanism, health and well-being, Chinese studies, and climate change)
  - ! See Appendix G for Graduates' Placement

 Our three specific tracks continue to be the site of leading developments in academic, professional practice, and social realms. This is true of sustainability in prototypes and systems in the time of climate change, of digital design and research as information technologies continue to develop rapidly, and of history, theory, and representation in the global, post-colonial era.

How the envisioned future will augment that benefit and impact.

More adequate student funding and support would enable them to be more focused and productive and to be more competitive in the job market: it is almost expected that applicants for assistant professor tenure-track positions will have teaching experience, conference presentations, and even publications. Not only would we be better able to recruit and retain the best students—and, needless to say, students from under-represented groups—but (beyond removing anxieties in regard to their basic needs) they would have resources for travel to present papers at refereed conferences. There would be similar results from the envisioned increased opportunities to teach and be mentored pedagogically.

With greater student success the program will have even more positive impact on the interdisciplinary dimensions of traditional departments and on innovative programs nationally and internationally. Parallel, research and practice will add even more to practical problem solving, at all scales, to deal with resilience and sustainability in the time of climate change; to provide innovative software and computational resources in regard to energy and project delivery; to community ecology and distributional justice concerning health and well-being; to deal with the need to balance local place and identity with increasing urbanism and globalization.

# Part B UNIT-DEFINED QUESTIONS

The critical background is found in the Mission Statement, which is worth reiterating:

Mission Statement:

The mission of the Ph.D. in the Built Environment Program is to form interdisciplinary teams of faculty and advanced students, to collaborate across the entire spectrum of scales, dimensions, and methods for the three fundamental areas of the built environment

- Sustainable systems and prototypes ecological, community, and energy
- Computational Design and Research
- History, Theory, Representation

The Program will educate researchers who are able to teach, engage in professional practice, or provide public service in an integrated manner (able to take a leadership role with others who remain specialists) to solve social-environmental problems.

We work toward this goal by

a) maintaining two <u>balanced</u> modes:

- collaborative themes or projects for faculty and students
- individual, "free" projects of faculty and students-

so all can participate, without reduction or exclusion,

b) recognizing the differences in research/scholarship and differing potentials for funding c) cooperating with the departments, CBE, and wider UW

Three Central Review questions:

1. What level of quality and degree of success have we achieved in these areas and how can we continue to improve. Especially important is: How well do we prepare graduates for academic careers, particularly in the area of teaching?

Student Successes

- · Customized curriculum and faculty networks for each specialized project
- Presentations at conferences, publications
- Opportunities for teaching experiences (as TA or own)
- Opportunities to participate in research projects
- Support for internal and external fellowships
- Placements

2. Are the current three focus areas embedded within the degree correct, or should we consider others?

This is a matter raised last in 2013 by some faculty who believe the current description does not adequately represent their research interests. Discussions are underway but resolution has not yet been reached. Note, the issue is NOT whether the areas under discussion are acceptable or encouraged, or whether students can be recruited and accepted; it is only whether the areas named or "called out" are sufficient and appropriate (especially for recruiting). The specific question at hand centers on the concern that the three tracks do not cover the work done by some Construction Management faculty where funding comes from projects like infrastructure systems (especially for transportation) and project and process management. While, for these projects, computing is often a tool and sustainability at times the driving goal behind the research, it could be that something more along the lines of Infrastructure Systems, Ecosystems, Building Information Systems, Delivery Systems, or Project and Process Management might better cover the current research areas developing from our new faculty in Construction Management.

The origin of the three areas remains a force in their continuation and modification. Originally the BE degree was generated because even though the College did participate in the Interdisciplinary Ph.D. in Urban Design and Planning, only some of the faculty in the Urban Design and Planning Department were actively involved, leaving no sphere of action for the rest of the faculty who wanted to work with Ph.D. students. The three focal areas resulted from a multi-year series of college-wide faculty meetings where everyone articulated the areas in which they already were or wished to work. From this grass-roots, bottom-up process we worked through a process of naming potential clusters that would best include and name the desired foci (in a non-departmentalized manner). Thus the three areas emerged as and remain functional and intellectually legitimate categories.

We have modified them as faculty work and student interests change over time. For example, the original idea for sustainable systems was that it would primarily be "natural" or environmental sustainability, which has come to include energy and resource issues in academic, scientific, and professional work. But in the last half-dozen years a number of faculty have developed complementary work in the area of community sustainability, which includes studies in place and identity, social and political dimensions of historic preservation, public spaces as sites of citizen/resident participation, environmental and social justice. Thus, we now operate with the two sub-areas of "natural" and "social" ecologies—which correlates with current sustainability theory that now emphasizes the unity rather than the separation of "nature" and "culture."

Another example is recent interest in the emerging area of "health and well-being," which also has easily fit into the sustainability track. Students and faculty have done work in urban food systems, some of it grant funded; this area continues to attract applicants and expands to include local knowledge and indigenous cultures. Other dimensions include the health impacts of buildings and environments, dimensions pursued by students working on concurrent degrees with Public Health and doing dissertation research into neighborhood ecology, with connections

to Social Work and studies of physiological and built environment/spatial factors of chronic stress.

An initial discussion by the program's Steering Committee reaffirmed that the current categories could be un-problematically unfolded to include the areas of concern, making explicit the flexibility and inclusiveness and at the same time preventing entering onto a slippery slope of fragmentation into overly specialized categories or departmentalization. As just one example, in the "sustainable systems and prototypes" track, the "and prototypes" never materialized as a research area; the category could be changed to a general term such as "urban systems" which could then have specified sub-categories (such as the current 3 (ecological, community, and energy sustainability) and then infrastructure as a 4th). The idea here would be to not add a fourth track, in order to maintain the critical spread of admissions fairly across the college faculty and allocation of first year fellowships and tuition waivers (since now we have three of the former from endowment funds and three of the latter insofar as we are successful in biennial applications to the Graduate School Fund for Excellence and Innovation Top Scholar Awards, which matches having three tracks). Of course there are many other possible recategorizations—the discussion of which is occurring as the next step.

Or, on the other hand it might be that new categories might best address the issue and still be able to represent college-wide themes and be made practically operational in terms of admissions and the three available first year fellowships and tuition waivers.

In sum: this is a rare difference of opinion within college faculty on the program. Because we value both inclusion and flexibility, fairness in admissions and resource allocation, non-departmentalization of the program, and recognize the importance of intellectual legitimacy as well as pragmatic matters, we are continuing the discussion among ourselves and are open to and seek advice.

3. How can we best adapt to changes in resources from internal and external systems, particularly by developing additional resources in relation to all three areas in cooperation with CBE departments and Dean's Office, University of Washington, and external sources?

Of course, the problem is exacerbated by the state's Higher Education Board's change whereby out-of-state students can no longer eventually qualify for in-state tuition rates (unless they have fellowship above a certain amount) and by the State budget cuts that have dramatically reduced funding for TAs with their accompanying tuition waivers, the hitherto most important source of student support. On the positive side, Graduate School Support has remained critical, for instance in the provision of Tuition Waivers, without which our program could not operate.

The strategy is to balance of our individual and collaborative approaches, especially with sensitivity to different potentials for external funding within specializations (for example, the greater difficulty of raising funding for history projects than for software development.

a) individual, "free" projects of faculty and students continue to be encouraged, so that all can participate, without reduction or exclusion. Some of these projects (such as) remain the special

interest of particular researchers and their students; others however often turn out to be part of emerging clusters, and thus seeds for collaborative projects (for example urban food or healthy buildings).

b) collaborative themes—often projects—with faculty and student colleagues. Examples of great interest with high-likelihood of possible funding include

Health—we especially could use advice in this area—it is a growing field but sustained initial efforts are bearing little fruit:
 <u>positively</u>, we have generated enough student interest to fill two courses a year connecting built environment and public health (taught jointly by a BE faculty member and one from public health); we have two students working in the combination of built environment and public health (one actually concurrently enrolled in both degree programs, and with fellowships in both), Mugerauer has applied for Royalty Research Fund support to work on healthy buildings (though not funded), there is a team working on healing gardens, there was enough faculty interest to make "health" one of the proposed college-wide research clusters but

<u>negatively</u>, UW Educational Outreach determined that there was not a prospect for economic development of a program in Built Environment-Public Health (which would both generated income and opportunities for the Ph.D. students to teach)—we especially could use good advice in this area.

- Resilience (ecological infrastructure and sustainability)—several proposals to fund student support in regard to storm water research have been made (e.g. to Scan Design), but none have been successful
- Asia studies/Asian urbanism (community sustainability)—China studies, India Studies (often includes funding possibilities for Ph.D. students as TAs on field trips and studios abroad).
- Modernism/local-global dynamics (in US, Japan, India, Turkey, Tunisia)
- Infrastructure Systems, Project Delivery Systems, for example concerning transportation (for WASHDOT).
- Software development (educational, energy, management)
- c) Coordination with college-wide and university-wide activities and initiatives
  - Participation in BE Labs
  - Participation in UW "Now Urbanism" Mellon Grant Project
  - Participation in emerging CBE Research Clusters. Academic year 2012-13 saw a sustained faculty committee develop a plan for assembling college-wide research clusters that could serve as the basis for new curriculum, symposia, public outreach projects, and collaborative research projects. (Despite a momentary pause in early 2013-14), a project focusing on Resilience has been approved, such that a Conference is being planned, with some of the funding intended to support Ph.D. students assisting in the event. A proposal concerning Asian Urbanism is in the final stages of approval. Among further candidates for serious development are clusters such as Health and Well-being).
  - Fundraising in next Capital Campaign—a major prospect lies in the emerging Capital Campaign. Dean Schaufelberger already has called several meetings with the Director of the BE Ph.D. Program and Department Chairs to begin planning for identification of

potential donors, generating compelling stories of supported students "who made a difference," etc. Continuation of an explanation that was effective with educating new donors in Construction Management fundraising: explaining that a key to having excellent departmental faculty lies in providing what those faculty need to be successful: the Ph.D. Program and students are necessary if we are to hire, retain, and promote those faculty who are required to publish, make presentations, and carry out multi-year research projects normally involving doctoral assistants.

- Continuing search for donors for fellowship funding by Program Director
- Possibility of administering a college-wide undergrad curriculum/program—or at least courses—this has been an on-going interest of several administrators and faculty.
- More teaching opportunities with CBE's undergraduate CEP, as departmental TAs, with UW units such as CHID
- Continued appreciation for Dean's Office support, for example in the staffing of the Visual Resource Center (for which the director of that facility is also to be thanked).

Also, time on task is devoted to:

- Concentrating on student support with state funds as TA or RAs that enables the students to qualify for the tuition waivers.
- Continuing to expand faculty networks and opportunities for raising additional resources in relation to all three areas.
- Attention to increasing our reputation so as to attract applications from "self-funded" students (including those with Grants/Fellowships as Fulbright as well as those with resources from home governments)
- Encouragement for BE Ph.D. students to actively apply for fellowships and grants (where there already have a good record, though it is hard work)

# Part C Items Added at the Charge Meeting 5/23/13

- Update status of responses to recommendations from the 2008-2009 program review: See Appendix O for
  - Update as of 2014
  - Responses to Review in 2009
  - o Original Report of the Review Committee
- <u>Treat program preparation of students for teaching</u>
   This set of issues is discussed throughout the report

! see especially the sections on Instructional Effectiveness and Preparing Students for their Careers )

#### <u>Relation to Interdisciplinary Urban Design and Planning Ph.D. program, also under review</u> during 2013-2014

The question is regularly raised "why two Ph.D. programs?" Actually there aren't two in the college. The Build Environment Ph.D. is a college wide program in the College of Built Environments that is broadly conceived so as to be open to and inclusive of all the college's faculty. The Interdisciplinary Ph.D. in Urban Design and Planning is housed in the Graduate School, and operates with a faculty drawn from many departments across UW (including a limited number from CBE), to provide a classic planning degree. Thus the latter has the requirements and coursework that follow that planning degree format—none of which are especially relevant to the students in the B.E. program, who are pursuing different research tracks, agendas, and career trajectories, though B.E. students do occasionally take UrbDP doctoral seminars, especially those focused on research methods applicable to their area of study. Likewise, though a few of the Interdisciplinary Ph.D. in Urban Design and Planning students occasionally take BE 552 (theories of knowledge) the BE core courses are not relevant to their specialization. The faculty of the two programs have regularly discussed the matter and reviewed offerings in order to consider possibilities of consolidating at least a course or two. For example, the Interdisciplinary Ph.D.'s Planning Theory is an extended, more rigorous version of one facet of the Planning History, Theory, and Ethics course offered in the Master's of Urban Design program—but the latter is not connected to the BE Ph.D. and does not remotely match up with any course there. Overall, through the years, the result comes out the same every time: the learning objectives of the two programs, the content of particular courses, and the research specializations are, in fact, too distinct to combine.

# Appendices

- A Organization Chart
- B Budget Summary
- C Faculty: Core faculty, affiliate faculty, UW faculty joining dissertation committees
- D Enrollment Information and Graduation Patterns
- E Students' presentations, publications, & research projects, awards, and service
- F Student Flow Chart: Progress to Degree
- G Student Placement
- H University Exit Surveys
- I Sample of Faculty Sponsor-Mentor Form for Admissions
- J Chronicle of Higher Education Screen Saves
- K Departments Providing Research Methodology Classes
- L Faculty with Ph.D.s
- M Map of Built Environment Doctoral Programs
- N Program Overview & Flow Pattern
- O Update status of responses to recommendations from the 2008-2009 program review

Appendix A: Organization Chart

College of Built Environments 4 Departments with Degree Programs:

- Architecture
- Construction Management
- Landscape Architecture
- Urban Design and Planning

& Non-Departmental Degree Program:

• Ph.D. Program in Built Environment

Program Director

Robert Mugerauer, Departments of Architecture and Urban Design and Planning; Adjunct, Landscape Architecture

Staff Program Assistance Neile Graham, Counseling Services Coordinator (part-time)

Program Steering Committee

Daniel Abraham, Department of Urban Design and Planning Alex Anderson, Department of Architecture Carrie Sturts Dossick, Department of Construction Management Mehlika Inanici, Department of Architecture Vikram Prakash, Ph.D. Department of Architecture Ken Yocom, Department of Landscape Architecture

2 Student Representatives Daniel Coslett James Thompson

# Appendix B: Budget Summary

The Ph.D. in the Built Environment Program 2007 to 2013

Dean's Office Financial Contributions (from endowments) for the Last Three Biennia

143 \$75,30 <sup>°</sup> 743 \$3.47	1 )
	43 \$75,30 743 \$3,478

+ The Program Assistant's salary (as part of a shared part-time position that also includes responsibilities for the two college certificate programs) is provided by the central budget.

Departmental Contributions to the Program

Faculty	Departments each donate 1 course/year for a total of 4 courses/year
	BE 550 (1 credit x 3 quarters)—Dossick from
	CM
	BE 551—rotates, Anderson/Prakash from Arch
	BE 552—Mugerauer, Plan/Arch
	BE 553—Manzo/LArch (every other year)

# Appendix C: Information about Faculty— Core faculty, affiliate faculty, UW faculty joining dissertation committees

Link to faculty CVs

Core Faculty

Definition

Though many of the College's faculty are involved with the Ph.D. in the Built Environment Program, here we limit the list to the core faculty who currently are active teaching core courses, chairing or serving on student's committees, or providing substantial advising and mentoring 2008–2013. (Affiliate faculty are not currently engaged in these activities, though we are encouraging expanded participation; thus, many affiliate faculty are likely to act as core members—just as some core members may temporarily revert to affiliate status).

All of the Built Environment faculty are 100% full-time members of one of the departments in the College of Built Environments (no FTE specifically in the Ph.D. in the Built Environment Program).

Daniel Abramson, Associate Professor, Urban Design and Planning

- Doctoral committees chaired Kuangting Huang (co-chair, graduated 2012)
- Doctoral committees on which served
   Jiawen Hu

Marina Alberti, Professor, Urban Design and Planning

Doctoral committees chaired Kuei-Hsien Liao (co-chair, graduated 2012)

Alex Anderson, Associate Professor, Architecture

- Doctoral committees chaired Tyler Sprague (graduated 2013) James Thompson (co-chair)
- Doctoral committees on which served Keith Harris
  - Paula Patterson (graduated 2009)
- Teaches BE 551: The Contemporary Built Environment (alternate years)

Branden Born, Associate Professor, Urban Design and Planning

- Doctoral committees chaired Shannon Tyman
- Initial advisor
   Valerie Segrest

Heather Burpee, Research Assistant Professor, Architecture

 Doctoral committees on which served Hoda Homayouni

Christopher Campbell, Senior Lecturer, Urban Design and Planning

- Initial advisor
  - Amy Dobrowolsky

Manish Chalana, Assistant Professor, Urban Design and Planning

 Doctoral committees on which served Daniel E. Coslett Shu-Mei Huang (graduated 2012) Chiaoyen Yang

Frank Ching, Professor Emeritus, Architecture

 Doctoral committees on which served Nanching Tai (graduated 2012)

Meredith Clausen, Professor, Architecture and Art History

 Doctoral committees on which served Tyler Sprague (graduated 2013)

Saeed Daniali, Professor, Construction Management

 Doctoral committees on which served Rahman Azari

Carrie A. Dossick, Associate Professor, Construction Management

- Doctoral committees chaired Anne Anderson Hoda Homayouni
- Doctoral committees on which served Namhun Lee (graduated 2009) JeongWook Son (graduated 2011)
- Initial advisor
   Seon Yeon Lee
   Christopher Monson
- Teaches BE 550: Colloquium-Practicum

Jeffrey Hou, Associate Professor, Landscape Architecture

- Doctoral committees chaired Kuangting Huang (co-chair, graduated 2012)
- Doctoral committees on which served Jiawen Hu Shu-Mei Huang (graduated 2012) Julie Poncelet Nanching Tai (graduated 2010) Chiaoyen Yang

Nicole Huber, Assistant Professor, Architecture

 Doctoral committees on which served Cheryl Gilge Joshua Miller (graduated 2010)

Mehlika Inanici, Associate Professor, Architecture

- Doctoral committees chaired Nanching Tai, (graduated 2010) Kevin Van den Wymelenberg (graduated 2012)
- Initial advisor Yue Liu

Yong-Woo Kim, Associate Professor, Construction Management

 Doctoral committees chaired Rahman Azari

Ken-Yu Lin, Assistant Professor, Construction Management

- Doctoral committees on which served Anne Anderson Shalini Priyadarshini
- Initial Advisor:

Joel Loveland, Professor, Architecture

 Doctoral committees on which served Julie Kriegh Kevin Van den Wymelenberg (graduated 2012)

Brian McLaren, Associate Professor, Architecture

- Doctoral committees chaired Daniel E. Coslett Paula Patterson (graduated 2009) Ozge Sade Mete (graduated 2012)
- Doctoral committees on which served Alex Tulinsky

Lynne Manzo, Associate Professor, Landscape Architecture

- Doctoral committees chaired Julie Kriegh
- Doctoral committees on which served Shannon Tyman
- Teaches BE 551: Ethics

Giovanni Migliaccio, Assistant Professor, Construction Management

- Doctoral committees chaired Shalini Priyadarshini
- Initial advisor Wonil Lee

Robert Mugerauer, Professor, Architecture, Urban Design and Planning

- Doctoral committees chaired
  - Cheryl Gilge
  - Jiawen Hu
  - Shu-Mei Huang (graduated 2012)
  - Kuei-Hsien Liao (co-chair, graduated 2012)
  - Joshua Miller (graduated 2010)
  - Jayde Roberts (graduated 2011)
  - Amber Trout
  - Jerry Watson (co-chair)
  - Meriwether Wilson (co-chair, graduated 2009), Chiaoyen Yang
- Doctoral committees on which served
  - Daniel E. Coslett Keith Harris Paula Patterson (graduated 2009)
    - Ozge Sade Mete (graduated 2012)
  - Initial advisor Jonathan Childers Naeun Gu
    - Aran Osborne
- Teaches BE 552: Theories of Knowledge

Kamran N. Nemati, Associate Professor, Construction Management

 Doctoral committees on which served Shalini Priyadarshini

Jeffrey Ochsner, Professor, Architecture

- Doctoral committees on which serve Tyler Sprague (graduated 2013)
- Initial advisor Holly A. Taylor

Ken Oshima, Assistant Professor, Architecture

 Doctoral committees chaired Alex Tulinsky

Robert Peña, Assistant Professor, Architecture

 Doctoral committees on which served Rahman Azari

Vikram Prakash, Professor, Architecture

- Doctoral committees on which served Jayde Roberts (graduated 2011)
   Ozge Sade Mete (graduated 2012)
   Alex Tulinsky
- Teaches BE 551: The Contemporary Built Environment (alternate years)

Mark Purcell, Associate Professor, Urban Design and Planning

- Doctoral committees chaired Keith Harris James Thompson (co-chair)
- Doctoral committees on which served Cheryl Gilge, Shannon Tyman

Iain M. Robertson, Associate Professor, Landscape Architecture

 Doctoral committees on which served James Thompson

Eddy Rojas, Associate Professor, Construction Management

- Doctoral committees chaired
  - Namhun Lee (graduated 2009) JeongWook Son (graduated 2011)
- Initial advisor Susan Locsin

Nancy Rottle, Associate Professor, Landscape Architecture

 Doctoral committees on which served Meriwether Wilson

John Schaufelberger, Professor, Construction Management

 Doctoral committees on which served Rahman Azari
 Namhun Lee (graduated 2009) JeongWook Son (graduated 2011)

Benjamin R. Spencer, Assistant Professor, Landscape Architecture

Doctoral committees on which served
 Amber Trout

David Streatfield, Professor Emeritus, Landscape Architecture

 Doctoral committees chaired Jerry Watson (co-chair)

Sharon Sutton, Professor, Architecture

Doctoral committees chaired
 Julie Poncelet

Fredrick W. Wagner, Research Professor, Urban Design and Planning

Doctoral committees on which served
 Amber Trout

Thaisa Way, Associate Professor, Landscape Architecture

Initial advisor
 Eyun Jennifer Kim

Ken Yocom, Assistant Professor, Landscape Architecture

Initial advisor
 Leanne Andrews

# Leanne Andre

## List of Affiliate Faculty

Affiliate faculty are College of Built Environments faculty qualified but not currently actively engaged in program activities. Many affiliate faculty are likely to shift to becoming core members as their interests and those of program students align.

Ahmed Abdel Aziz, Associate Professor, Construction Management Christine Bae, Associate Professor, Urban Design and Planning Christopher Bitter, Assistant Professor, Urban Design and Planning James DeLisle, Associate Professor, Urban Design and Planning Omar El-Anwar, Assistant Professor, Construction Management Daniel Friedman, Professor, Architecture and Urban Design and Planning Louisa Iarocci, Associate Professor, Architecture Donald Miller, Professor, Urban Design and Planning Kamran Nemati, Construction Management Anne Vernez Moudon, Professor, Architecture, Landscape Architecture, Urban Design and Planning, Jan Whittington, Assistant Professor, Urban Design and Planning

#### Non-CBE UW Faculty on Committees

Cecilia Bitz, Associate Professor, Atmospheric Sciences
GSR: Meriwether Wilson (graduated 2009)
Mary P. Callahan, Associate Professor, International Studies
Committee: Jayde Roberts (graduated 2011)
Kam Wing Chan, Professor, Geography
Committee: Kuangting Huang (graduated 2012)
Kyle Crowder, Professor, Sociology
GSR: Shalini Priyadarshini
Teresa A Evans-Campbell, Associate Professor, Social Work
GSR: Julie Poncelet
John M Findlay, Professor, History
GSR: Jerry Watson
Thomas A. Furness, Professor, Industrial and Systems Engineering
GSR: Anne Anderson Namhun Lee (graduated 2010), Jeongwook Son (graduated 2011
Stevan Harrell, Professor, Anthropology
GSR: Chiaoyen Yang
Christine L Harold, Associate Professor, Communication
GSR: Keith Harris
Peter W. Johnson, Public Health
GSR: Kevin van den Wymelenberg
Leslie R. Herrenkohl, Professor, Education
GSR: James Thompson

Jerald R. Herting, Research Professor, Nursing GSR: Rahman Azari Bruce W Hevly, Associate Professor, History GSR: Tyler Sprague (graduated 2013) Daniel Hoffman, Associate Professor, Anthropology GSR: Joshua Miller (graduated 2010) Philip Edward Howard, Professor, Communication GSR: Hoda Homayouni Miriam Kahn, Professor, Anthropology GSR: Daniel E. Coslett, Jiawen Hu Resat Kasaba, Professor, International Studies GSR: Ozge Sade Mete (graduated 2012) Susan Kemp, Associate Professor, Social Work Committee: Julie Poncelet Charles F Keyes, Professor Emeritus, Anthropology GSR: Jayde Roberts (graduated 2011) Rachel G. Kleit, affiliate Professor, Public Affairs Committee: Julie Kriegh Terrie Klinger, Associate Professor, Marine Affairs Co-Chair: Meriwether Wilson (graduated 2009) Victoria A. Lawson, Professor, Geography GSR: Shu-Mei Huang (graduated 2012) Karen T. Litfin, Associate Professor, Political Science GSR: Shannon Tyman Robert J Naiman, Professor Emeritus, Fisheries GSR: Kuei-Hsien Liao Gina S Neff, Associate Professor, Communication Committee Member: Anne Anderson, Hoda Homayouni Paula S. Nurius, Professor, Social Work **GSR: Amber Trout** John C. Palmer, Research Professor, Psychology GSR: Nanching Tai (graduated 2010) Elizabeth Sanders, Assistant Professor, Education GSR: Julie Kriegh Leroy F Searle, Professor, English GSR: Paula Patterson (graduated 2009) James Tweedie Associate Professor, Comparative Literature GSR: Cheryl Gilge Committee: Joshua Miller (graduated 2010) Susan H. Whiting, Associate Professor, Political Science GSR: Kuangting Huang (graduated 2012) Marek K. Wieczorek, Associate Professor, Art History GSR: Alex Tulinsky

Outside UW Judith H. Heerwagen, Heerwagen & Assoc. Committee: Kevin van den Wymelenberg Christopher Konrad, USGS Committee: Kuei-Hsien Liao (graduated 2012) Alberto Pérez Gómez, Professor, McGill University Committee: Paula Patterson (graduated 2009)

#### CBE faculty involved in student support with research funds

Daniel Abramson Branden Born Carrie Dossick Omar El-Anwar Daniel Friedman Jeff Hou Mehlika Inanici Yong-Woo Kim Rachel Kleit Lynne Manzo Eddy Rojas Nancy Rottle Thaisa Way Ken Yocom

# Appendix D: Enrollment Information and Graduation Patterns

# Admissions Data

Year	Total completed applications	Foreign	U.S.	Known minority	Offered	Accepted
2003*	7	3	4	)0)	5	5†
2004	12	7	5	1 (not offered	6	5
2005	14	11	3	)0)	4	4
2006	24	17	7	)0)	7	5
2007	25	17	8	)0)	5	4
2008	27	21	6	1 (offered, deferred, declined <sup></sup> ∭	8	4 (+ 1 deferral to 2009 ᠍
Subtotal 2003, 2008					35	27 (77%)
2009	35	19	16	)0)	7 + 1 (2008 deferral <sup>I∭</sup>	6
2010	45	30	15	)0)	4	3
2011	45	27	18	2 (both offered, declined	8	3
2012	48	35	13	1 (offered, declined <sup>∭</sup>	5	3
2013	48	35	13	1 (offered accepted	6	6
Subtotal 2009, 2013					31	21 (68%)
TOTALS	330	222	108	6	66	49 (74% 🔢

\* Program approved in Summer 2003 and had restricted promotion †One student delayed acceptance and entered Winter Quarter due to visa transfer issues

In its ten years of existence, the program has grown to and continues to average an enrollment of 25 students at a time. Our entering classes range from three to six students, with an eye to balancing our three streams with a match of our top applicants with our faculty's research interests.

Year	Entering students	PhCs awarded	PhDs awarded
2003–2004	5	_	_
2004–2005	5	—	—
2005–2006	4	4	—
2006–2007	5	2	1
2007–2008	4	4	1
2008–2009	4	3	_
2009–2010	6	5	4
2010-2011	3	2	2
2011–2012	3	5	3
2012–2013	3	3	5
2013–2014 (as of 12/31/13	6	1	1

Note: The Program also admits temporary students as Graduate Non-Matriculated (GNM) students, Visiting Graduate Students, and through the VISIT program. These students are not included in our official tallies.

# Student Census Data

	2003-	2004-	2005-	2006-	2007-	2008-	2009-	2010-	2011-	2012-	2013-
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total BE											
PhD	5	10	14	17	19	22	27	26	27	26	27
Enrolled	5	10	12	17	18	18	22	24	24	20	19
On leave	0	0	2	0	1	4	5	2	3	6	8
Visiting	0	1	1	1	0	0	0*	1	0	0	1
GNM	0	0	0	1	0	1	0	1	0	1	0
Enrolled											
total	5	11	13	19	19	20	22	25	24	21	20
Total											
Students	5	11	15	19	19	23	27	28	27	27	28
New	5	5	4	5	4	4	6	3	3	3	6
Left	0	0	0	2	1	0	0	1	0	0	1
PhCs											
Awarded	0	1	3	3	4	3	5	2	5	3	1
PhDs											
Awarded	0	0	0	1	1	0	4	2	3	5	1
Male	4	6	9	10	10	11	11	10	11	11	9
Female	1	4	5	7	9	11	16	16	16	15	18
Internati											
onal	1	2	5	8	9	9	9	9	9	8	8
Domesti											
С	4	8	9	9	10	13	18	17	18	18	19
Comp	2	2	2	3	3	4	4	5	4	5	6
HTR	2	4	7	8	10	10	12	11	11	8	8
Sus	1	4	5	6	6	8	11	10	12	13	13

# Time to Graduation

According to the Graduate School's calculations, we average 20 quarters for students to graduate; however if we don't count Summer Quarters, for which our students rarely register, we average five years or 15 quarters.

Appendix E: Students' presentations, publications, & research projects.

# Student Accomplishments 2008–2013

Anne K. Anderson (entered A09, PhC A11)

Conference Invitations and Presentations

- "2013 CyberGRID Global Team Project," poster presentation, 2013 Construction Industry Research Conference, Seattle, Washington, USA, April 19, 2013.
- "BIM Supported Data Visualization Strategies for Facility Management," presentation, 12th International Conference on Construction Applications of Virtual Reality, Taipei City, Taiwan, November 1, 2012.
- "Construction to Operations Exchange: Challenges of Implementing COBie and BIM in a Large Owner Organization," presentation, Construction Research Congress 2012, West Lafayette, IN, May 22, 2012.
- "Copresence in Global Virtual Teams," poster presentation, Construction Research Congress 2012, West Lafayette, IN, May 21, 2012.
- "Avatars, text, and miscommunication: The impact of communication richness on global virtual team collaboration," presentation, 2011 Canadian Society for Civil Engineering Conference, Ottawa, Ontario, Canada, June 16, 2011.

Publications

Peer-reviewed Conference Papers

- Anderson, A., Lin, K.Y., Dossick, C.S. (2012), BIM Supported Data Visualization Strategies for Facility Management. Proceedings of the 12th International Conference on Construction Applications of Virtual Reality (CONVR 2012), Taipei, Taiwan, Nov. 2012.
- Anderson, A., Dossick, C., & Neff, G. (2012). Seeking New Social Norms: Facilities Services Organizational Isolation in the University of Washington's Digital Transition. Proceedings of the Engineering Project Organizations Conference, Rheden, The Netherlands, July 2012.
- Dossick, C., Anderson, A., Iorio, J., Neff, G., & Taylor, J. (2012). Messy talk and mutual discovery: exploring the necessary conditions for synthesis in virtual teams. Proceedings of the Engineering Project Organizations Conference, Rheden, The Netherlands, July 2012.
- Anderson, A., Marsters, A., Dossick, C., and Neff, G. (2012) Construction to Operations Exchange: Challenges of Implementing COBie and BIM in a Large Owner Organization. Published electronically, Proceedings of Construction Research Congress 2012, West Lafayette, IN, USA. May 2012.
- Anderson, A., Dossick, C.S., Iorio, J., Taylor, J. E., and Neff, G. (2011). Avatars, text, and miscommunication: The impact of communication richness on global virtual team collaboration. Proceedings, Annual Conference Canadian Society for Civil Engineering, 4, 2767–2775.
- Peer-reviewed Conference Papers under Review
  - Anderson, A., Dossick, C. S., and Taylor, J. E. (2013). Exploring the Impact of Individual User Navigable Virtual Worlds on Coordination Latency in Distributed CEM Work. Revised and resubmitted to: Engineering Project Organizations Conference, Winterpark, CO, July 2013.

Peer-reviewed Journal Papers under Review

Dossick, C. S., Anderson, A., Azari, R., Iorio, J., Neff, G., and Taylor, J. E. (2013). Messy Talk in Virtual Teams: Exploring the Conditions to Achieve Synthesis through Shared Visualizations. Submitted to: special issue of ASCE Journal of Management in Engineering on "Information and Communication Technologies (ICT) in AEC Organizations: Assessment of Impact on Work Practices, Project Delivery and Organizational Behavior."

#### Resear ch

- CyberGRID Networks; Cyber-enabled Global Research Infrastructure for Design Networks (Summer 2010–Spring 2013), funded by the National Science Foundation.
- Virtual World Collaboration for the Boeing Delivery Center Construction Project (Summer/Fall 2012), funded by Skanska USA Building through their internal Innovation Grant Program. COBie-BIM for Facilities Management (Summer 2011–Spring 2012), funded by the University
- of Washington's Capital Projects Office as part of the COAA COBie Pilot Project for Foster School of Business Phase II.

#### Teaching

- Instructor, Virtual Construction (CM 414), Fall 2012, Construction Management Department, University of Washington
- Teaching Assistant, Special Topics: CyberGRID (CM 598), Winter/Spring 2012 & 2013, Construction Management Department, University of Washington
- Teaching Assistant, Innovative Project Mgmt. Concepts (CM 515), Winter/Spring 2011, Construction Management Department, University of Washington

#### Leann Andrews (entered A13)

#### Research

Peru, community garden and ecological restoration initiative for "slum" community, Summer 2013

## Rahman Azari (entered A08, PhC W11, PhD S13)

Current Employment

Assistant Professor in Building Technology (tenure track), Department of Architecture, University of Texas at San Antonio, 2013–present.

- Conference Invitations and Presentations
  - Rahman Azari, Yong-Woo Kim (2013). Evaluation of Integrated Design Process of High-Performance Green Buildings. 2013 49<sup>th</sup> Annual International Conference of Associated Schools of Construction, California, US, April 9-13.
  - Carrie Dossick, Rahman Azari, Yong-woo Kim, Omar El-Anwar (2013). IPD in Practice: Innovation in Healthcare Design and Construction. ASCE Architectural Engineering conference 2013, State College, April 3-5.
  - Ken-Yu Lin, Giovanni Migliaccio, Rahman Azari-N., Gorge De La Llata, Howard Lee (2012). Developing 3D Safety Training Materials on Fall Related Hazards for Limited English Proficiency (LEP) and Low Literacy (LL) Construction Workers, ASCE International Conference on Computing in Civil Engineering, Clearwater Beach, Florida, US, June 17-20.
  - Rahman Azari-N., Rob Pena (2012). Integrated Design To Achieve Net-Zero Energy in an Urban Office Building, American Solar Energy Society (ASES) and World Renewable Energy Forum (WREF) 2012 conference, Denver, Colorado, May 13-17
  - Rahman Azari-N. & Yong-Woo Kim (2012). Assessment of Environmental Impacts of Curtain Wall Systems. Proceedings of 2012 Construction Research Congress, West Lafayette, US, May 21-23, 1610-1619.
  - Rahman Azari-N. & Elnaz Farahbakhsh (2011). Energy efficiency through envelope design in high-rise buildings. Second International Conference of Architecture and Structure, Tehran, Iran, May 15-16.
  - Rahman Azari-N., Glenn Ballard, Seong Cho, Yong-Woo Kim (2011). A Dream of Ideal Project Delivery Systems, Proceedings of ASCE Architectural Engineering Conference, pp. 427-436

- Seong Cho, Glenn Ballard, Rahman Azari-N., Yong-Woo Kim (2011). Development of Innovative Project Delivery Systems for Healthcare Projects, Proceedings of International Public Procurement Conference, South Korea, August 26-28.
- Rahman Azari-N., Kimia Daneshvar, Sara Puryusef & Sahar Pakseresht (2006). Role of wind in architecture of hot and humid regions of Iran, Proceedings of 15th Symposium on Improving Building Systems in Hot and Humid Climates, July 24-26.

## Publications

- Book Chapters
  - Rahman Azari-N. & Maryam Singery (2012). Sustainable Buildings and Relationship with Humans and Nature. In: Ali Sayigh (Eds.), Sustainability, Energy and Architecture; Elsevier Science Ltd. (In Press)
- Peer-reviewed Journal Papers
  - Rahman Azari-N. & Yong-Woo Kim (2012). "Comparative Assessment of Environmental Life Cycle Impacts of Curtain Wall Mullions." Journal of Building and Environment, 48, pp. 135-145.
  - Yong-Woo Kim, Rahman Azari-N., June Seong Yi & Jinwoo Bae. "Environmental Impact Comparison of Onsite vs. prefab-JIT rebar supply systems." Journal of Civil Engineering and Management (Accepted for publication on December 14, 2011).

# Peer-reviewed Journal Papers under Review

Dossick, C. S., Anderson, A., Azari, R., Iorio, J., Neff, G., and Taylor, J. E. (2013). Messy Talk in Virtual Teams: Exploring the Conditions to Achieve Synthesis through Shared Visualizations. Submitted to: special issue of ASCE Journal of Management in Engineering on "Information and Communication Technologies (ICT) in AEC Organizations: Assessment of Impact on Work Practices, Project Delivery and Organizational Behavior."

## Research Reports

- Glenn Ballard, Yong-Woo Kim, Rahman Azari-N., Seong Cho (2012). Starting from Scratch: New Project Delivery Paradigms, Construction Industry Institute (CII), Austin, Texas.
- Carrie Dossick, Omar Al-Anwar, Kate Simonen, Rahman Azari, et al. (2012). Modular Prefabricated Mid-rise Residential Construction. Research Report to Skanska USA Building.

## Research

- Under Prof Carrie Dossick, "Integrated Project Delivery in GSA projects", Funded by General Services Administration (GSA), August 2012–March 2013
- Under Prof Carrie Dossick, "Cyber-enabled Infrastructure for Design & Engineering Networks", Funded by National Science Foundation (NSF), January 2012–2012
- Under Professor Ken-Yu Lin and Professor Giovanni Migliaccio, "Fall Protection Training Materials for Construction Workers", Funded by Occupational Safety and Health Administration (OSHA), September 2011–June 2012
- Under Prof Yong Kim, "Innovative Project Delivery Systems", Funded by Construction Industry Institute (CII), September 2010–2011

# Jonathan Childers (entered A11)

Presentations

Panelist, PhD in the Built Environment BE More symposium, May 2013

Resear ch

RA, HIA for the Duwamish Cleanup (grant-funded)

Service

Member, School of Public Health's MPH curriculum review and planning committee. Teaching

TA, EnvH 510, Global Environmental and Occupational Health.

# Daniel Coslett (entered A10, PhC W13)

Conference Invitations and Presentations

- "Broadening the Scope of North Africa's Planning History: Urban Development and Heritage Preservation in Protectorate-era and Postcolonial Tunis." Accepted for the International Planning History Society/Institute of Geography and Spatial Planning, University of Lisbon "Colonial and Postcolonial Urban Planning in Africa" Conference in Lisbon (September 2013).
- "Allusions to Antiquity in Colonial, Catholic and Postcolonial Tunisia: A Semiotic Analysis in Three Parts." Accepted for the International Association for the Study of Traditional Environments (IASTE) 2012 Conference "The Myth of Tradition" (October 4–7, 2012).
- "(Re)branding a (Post)colonial Streetscape: Tunis' Avenue Habib Bourguiba and the Road Ahead." Presented at the 2011 Middle East Studies Assoc. conference in Washington DC. (December 2011).
- "(Re)branding a (Post)colonial Streetscape: Tunis' Avenue Habib Bourguiba and the Road Ahead." Presented at the "Research, Revelation and Revolution" Student Conference on Near and Middle East Studies, UW (May 2011).

Grants Received

Ottenberg-Winans-Honors Fellowship (UW African Studies Program), dissertation research grant, France/Tunisia, 2013

Publications

"(Re)creating a Christian Image Abroad: The Catholic Cathedrals of Protectorate-era Tunis." Invited paper for edited volume, Sacred Precincts: Non-Muslim Sites in Islamic Societies (Brill Publishers, forthcoming, early 2014).

Related Employment

Registrar and Laboratory Manager, Davidson College's Athienou Archaeological Project in Cyprus (Summer 2012.)

Service — University of Washington

- Graduate Student representative, Advisory Search Committee for the College of Built Environments Dean (2012–2013)
- BE PhD Program representative, UW Graduate and Professional Student Senate (2011–2013), "Senate Choice Award" for outstanding service on behalf of GPSS, 2013.
- Chair, Ad Hoc Travel Grants Program Review Committee, UW Graduate and Professional Student Senate (2012–2013)
- Graduate Student representative, Faculty Committee on University Facilities and Services (2011–2013)

Service — College of Built Environments

- Chairman & Built Environments Ph.D. representative, Built Environments Student Council (2012–2013)
- Co-chair, Volunteer Planning Committee, Built Environments Student Council (2012)
- Built Environments Ph.D. Program student symposium planning committee and

"Interdisciplinary Research" panel moderator, BE More: A Symposium on Interdisciplinarity and the Built Environment (2013)

Teaching

Instructor, Visual Culture in Medieval Europe (art and architectural history), Western Washington University, Department of Art (Spring 2013).

Teaching Assistant, UW Departments of Architecture and Urban Design &

Planning (2011-2013)

## Amy Dobrowolsky (entered part-time A07)

- Presentations
  - "Student-Created Digital Content in UW Courses" co-presented at UW Catalyst Spark Session November 2007
  - "Urban Archives: Adaptive Tools for Creative Collaboration and Cultural Research" co-presented at the Information School's Research Conversation March 2008
- Publications
  - Co-authored paper with Cheryl Gilge for Association of American Geographers Annual Meeting; Los Angeles, April 2013
  - "Leaving My Mark on the American Heartland." Travel narrative and personal essay for Autostraddle.com: News, Entertainment, Opinion, and Girl-On-Girl Culture—"Trans Scribe" series. (forthcoming)
  - "Urban Archives: Public Memories of Everyday Places" with Irina Gendelman and Giorgia Aiello. In Jeffrey Hou's Insurgent Public Space: Guerrilla Urbanism and the Remaking of Contemporary Cities (New York: Routledge, 2010)

Service

- Founding organizer and participant, http://urbanarchives.org, 2006-present.
- Blogger, http://urbanarchives.org, July 2005-present.
- Queer mentor, UW Q Center. Trained Spring 2013 for potential mentoring Autumn 2013.
- Program guide for http://www.metropologie.com/tour/ghost. Leading tours in Seattle's Pioneer Square, exploring Seattle's preservation history and "ghost signs", or historical painted wall advertisements. Summer 2013.
- Contributing writer. "Becoming Poor" blog. The blog for Becoming Poor theory reading group with Mark Purcell. 2013.
- Contributing Writer Seattlest.com, a website about Seattle arts and culture. (2006 -2009) Contributing writer. "Nomad Scholarship" blog. The blog for cross-country reading group collaboration between Becoming Poor at UW and Eugene Holland's OSU students.
  - 2013."Photo Submiterator," a series of web-based CGI (PerI) scripts that allow students, and eventually the public at large, to submit photos for possible inclusion in the Urban Archives' digital repository at the UW Libraries, Autumn 2007
- Mentored a group of 4 undergraduates from Communication and CHID as part of an independent study course in Winter 2008, continuing with 1 student Spring 2008
- Historical Researcher & Media Archivist -- Collected biographical accounts, acquired and prepared photographic media, and conducted historical research on Polish citizens, now living in the Seattle area, exiled to Siberia during World War II. Assisted in creation of website to accompany the film A Trip To Nowhere. http://www.siberianexiles.org (2005-2009, 2010)
- Served as expert on King 5 TV's Evening Magazine's segment on ghost signs: http://www.king5.com/on-tv/evening-magazine/Ghost-Signs-98457474.html Broadcast July 14, 2010; rebroadcast July 2011, April 2012, January 2013.
- The Urban Archives Project she contributes to was featured in a Seattle Times Pacific Northwest (Sunday magazine. March 18, 2007)

# Cheryl Gilge (entered A09, PhC A11)

Conference Invitations and Presentations

- "Wonder and Deterritorialization: Implications of Aesthetic Experience," Deleuze Studies Conference: The Territory In-Between (will present 2013).
- "Google Street View: Image of the Urban as Raw Material," New Urban Languages Conference, Milan Politecnic (will present 2013).

Co-organizer, "Geophilosophy and the Places of Urban Experience 1& 2," AAG Annual Conference, Los Angeles, CA, 2013.

"Citizen Cartographers as Micro-fascism: Fascist Regime of Google," AAG Annual Conference, Los Angeles, CA, 2013.

- "Locating Agency: Reading Against the Grain," Political Geography Specialty Group, AAG Preconference, UCLA, 2013.
- "Google Street View: Artistic Practices as Lines of Flight." 5th Annual International Deleuze Studies Conference, New Orleans, LA, 2012.
- "Destabilized Duration of Google Street View." Duration: Before and After New Media, Toronto, 2011.

"Cognitive Disjunctions of Google Street View" Rendering the Visible, Georgia State University, Atlanta, GA (accepted, 2011).

- "The Terrain Vague of Google Street View," Framing the City, CRESC Annual Conference, Manchester (accepted, 2011).
- "Reading the City in the Era of Google: Man on the Street as Virtual Derive" (dis)junctions 2010: States of Crisis, University of California, Riverside, 2010.

"Reading the City in the Era of Google: Man on the Street as Virtual Derive," Urban Cuts Graduate Conference, St. Louis University (accepted, 2010).

Presentations and invited talks

- "Walking as an Aesthetic Practice, Reading & Writing the City," CHID 200, University of Washington, 2013
- Be More: A Symposium on Interdisciplinarity + Built Environment: College-wide BE Curricula, Invited Panelist, 2013

Hume & Emotivism, CEP 461 Ethics & Identity, University of Washington, 2012 CEP 461: Ethics and Identity, Research Paper Project

#### Publications

"Reading the City in the Era of Google: Man on the Street as Virtual Derive." Column 5: Mind the Gap (2011).

#### Service

2010 Park(ing) Day, Judge

Reviewer, CEP Senior Project Night

Reviewer, MArch Furniture Studio

Juror, MArch Thesis Presentation

Referee, Space and Polity

## Related Work Experience

Graduate Assistant, Visual Resources Collection, College of Built Environments

Editor, "Integrated Community Planning and Development in the Kumaon Himalaya: Sarmoli and Munsiyari, India" Exploration Seminar Final Report (with Manish Chalana)

Course component development (Visual Theory), CEP 498 Digital Design Practicum Contributor, Becoming Poor, Online Blog, College of Built Environments Reading Group, 2012 Deleuzeianexcursis, personal blog

Nomad Scholarship, Built Environment blog, in collaboration with The Ohio State University Teaching

Instructor, Arch 498 Spatial Practices: Intersection of Art & Design (seminar, Summer 2011) CEP 498 Digital Design Practicum (lecture/lab) (2 qtrs)

Teaching Assistant, CEP 462: Community & Environment (capstone seminar)

IP 2011: India Program: Chandigarh (Studio)

Arch 350: Architecture and the Ancient World (Discussion)

Arch 352: History of Modern Architecture (Discussion)

Co-Instructional Leader, CEP 461: Ethics and Identity (Seminar)

# Keith Harris (entered A09, PhC A11)

Conference Invitations and Presentations

"Posthegemony and urban revitalization" (working title). Invited to present at International Studies Association annual conference (March 2014)

"Urban Theory and Schizonomadology." Will present at 6th Annual Deleuze Studies conference in Lisbon, Portugal (July 2013, session co-organizer)

"Planes of organization, expression, and content in Seattle's South Lake Union neighborhood." Will present at Communication and the City conference, Leeds U.K. (June 2013)

"South Lake Union: Plane of Organization/New Urbanization." Presented at American Association of Geographers Annual conference (April 2013, session co-organizer)

"Thinking critically about urban environments for students in all majors." Panelist, American Association of Geographers Annual conference (April 2013)"Urban Branding and Affect." Presented at 5th Annual Deleuze Studies conference in New Orleans (June 2012).

"Eros and 'Urban Society': Re-examining Henri Lefebvre from a Marcusean Perspective." Presented at International Herbert Marcuse Society's "Critical Refusals" conference (2012)

"Consumption and the (Soft) Urban Process" presented at Consumption: Pleasures of the Text, Materiality, and Cultural Practices (Columbia University, March 2010)

"Consumption and the (Soft) Urban Process" presented at Spaces: Personal, Cultural, Urban (Mid-Atlantic American Studies Association annual conference, LaSalle University, Philadelphia, March 2010)

"Consumption, Terrorism, and the Built Environment" accepted but not presented at Space in The Americas (Université de Brest, France November, 2010)

Pecha Kucha participant, March 2011, Society for College and University Planners, Pacific Region Annual Meeting (topic: third places)

- Guest lectures: "New Materials in Architecture since 1945"; "Cathedrals of Commerce and Consumerism: large-scale construction in the postwar era" Arch 459 Architecture since 1945, January 2011
- Colloquium Presentation, January 2011, "Bourgeois desires: the sexual illusion in luxury condo advertising, a visual discourse analysis"

#### Service

Moderator for CHID Thesis presentations, Spring 2013

CHID Scholarship Committee, 2012-2013

CHID Thesis Advisor, Michelle Kehne, Spring 2013

CEP final project mentor for Maddie Beeders, Winter-Spring 2012

Moderator for Q&A session @ film screening: "You Cannot Kill Us, We are Part of You" — a documentary about the Christiania squatter community in Copenhagen, Denmark, November 2010

Park(ing) Day Central Park organizer, September 2009, September 2010

Invited Participant, City of Seattle DPD "Holding Patterns" competition for activating stalled construction sites around the city, August 2010

Cooperatively facilitated a spatial/political/urban theory reading group, which has attracted participants from inside and outside CBE

Contributor, Becoming Poor, Online Blog, College of Built Environments Reading Group Presentation, CEP 461: Ethics and Identity, Research Paper Project

Guest lectures: "New Materials in Architecture since 1945"; "Cathedrals of Commerce and Consumerism: large-scale construction in the postwar era" Arch 459 Architecture since 1945, January 2011

Colloquium Presentation, January 2011, "Bourgeois desires: the sexual illusion in luxury condo advertising, a visual discourse analysis"

#### Teaching

ARCH 320: Introduction to Structures I, Autumn 2011

ARCH 321: Introduction to Structures II, Winter 2010, Winter 2012, Winter 2013 ARCH 322: Introduction to Structures III, Spring 2010, Spring 2011 ARCH 350: Architecture of the Ancient World, Autumn 2009 (TA) ARCH 351: Romanesque, Gothic, and Renaissance Architecture, Winter 2011 (TA) CEP 461: Ethics an Identity, Winter 2012 (Instructional Co-leader) CHID 250: Writing and Reading the City, Spring 2013, Spring 2014 URBDP 200: Introduction to Urbanization (TA), Spring 2012

co-designed (w/ Mark Purcell) Urban Studio project for new "Introduction to Urbanization" course (URBDP 200).

## Publications

"Building the Moral City: Urban Revitalization and the Conscious Capitalist Axiomatic." To be published in Deleuze and the Schizoanalysis of Spatial Power (in progress)

## Awards

GSFEI Travel Award, Winter 2010, Autumn 2011 John Toews Travel Grant, Winter 2013 Urban Design and Planning Special Service Award, May 2013

# Hoda Homayouni (entered A08, PhC A11)

## Awards and Honors

Designated as a 2011 EPOS Ph.D. Scholar (received scholarship towards attending EPOC conference in Colorado)

Nellis Scholar, College of Built Environments, Fall 2008–Spring 2009

## Conference Papers and Publications

Homayouni, H., Dossick, C. S., Neff, G., Howard, P. N. (2011). "Construction Projects as Fuzzysets: Applying Fuzzy Set Theory to Analyze the Role of Building Information Modeling and Collaboration in Greener Buildings", Proceeding with Engineering Project Organization Conference, Estes Park, Colorado.

Homayouni, H., Neff, G, Dossick, C.S. (2010). "The Strategies of Successful Collaboration and BIM Implementation within the AEC Industry", Construction Research Congress, Seattle.

Dossick, C. S., Neff, G., and Homayouni, H. (2009). "The Realities of Building Information Modeling for Collaboration in the AEC Industry." Construction Research Congress, Seattle. Participation in Funded Research:

Participated in a National Science Foundation (NSF) funded research: "Assessing Collaboration across Organizational Boundaries in U.S. Green Construction: Does working together with new information technology result in better buildings?" (Winter 2010- Winter 2011)

NSF program: Innovation & Org Sciences, Grant Opportunity for Academic Liaison with Industry (GOALI). Principle Investigator: Gina Neff

## University Service (Teaching Assistantships):

Graduate Student Assistant (GSA) for CM313 Construction Methods and Materials, University of Washington, Department of Construction Management, Fall 2009.

GSA for CM515 Advanced Project Management Concepts, Spring 2009.

## Jiawen Hu (entered A09, PhC W12)

Conference Invitations and Presentations

"Pilgrimage, tourism, and organic farming: Therapeutic landscape experience in Mount Emei and Anlong Village, China". Accepted for presentation at International Human Science Research Conference: Montreal, 2012. (Not presented due to visa issues.)

## Workshops

Workshop on New Socialist Village in Chengdu Plain: University of Washington. Workshop facilitator, Mar 2013.

China-U.S. Professional Workshop on Regional Sustainable Development: Seattle. Workshop interpreter, Oct 2012.

Awards and Honors

China Studies Small Grant, University of Washington, Mar 2012.

Library Student Scholarship, University of Washington, Feb 2012.

Kuang-ting Huang (entered A05, PhC S08, PhD S12)

Current Position

2012-present Assistant Professor, Department of Architecture and Urban Design, Chinese Culture University, Taiwan

2012-present Adjunct Instructor, Department of Architecture, Tunghai University, Taiwan Awards and Honors

China Studies Program Fellowship 2008-2009

Third Prize, International Competition of /Xian Tang Da Ming Gong/ Preservation 2008, China (group project with Dan Abramson, and Manish Chalana)

Conference Invitations and Presentations

"Demands and Challenges: Chinese Urban Planning at the Golden Age" Presented at the 2011 Northwest Graduate Student Conference on Transitions & Growth in China, The Henry M. Jackson School of International Studies, University of Washington, April 23, 2011.

#### Presentations

"Struggling with Chaos: The Residence of Dr. Zhang Yunpen, China." Tenth Conference of the International Association for the Study of Traditional Environments, Bangkok (Dec. 15–18, 2006)

"Demands and Challenges: Chinese Urban Planning at the Golden Age" Presented at the 2011 Northwest Graduate Student Conference on Transitions & Growth in China, The Henry M. Jackson School of International Studies, University of Washington, April 23, 2011.

## Publications

Translator, with Shu-Mei Huang, Jim Diers, Neighbor Power: Building Community the Seattle Way. Taipei: Hungyeh, 2009. (Original work published in 2004).

## Sponsor ed Research

Echoes of Diaspora: /Huaqiao/ Influence on Housing Policy and the Development of a Globalized Domestic Architecture in Quanzhou, Fujian (research work with Dan Abramson, summer 2008, sponsored by CCK Foundation)

## Work and Professional Service

- 2008 Translating (with Shu-Mei Huang) Neighbor Power by Jim Diers from English to Chinese 2008 Delegate (representing Taiwan) for INTA 32 World Urban Development Congress, Riga, Latvia, 2008 Oct. 26-29.
- 2011-2012 Adjunct Instructor, Department of Landscape Architecture, Chung Yuan Christian University, Taiwan
- 2012-present Board Member, Advisory Board on Landscape Architecture, Taoyuan County Government
- 2012-present Columnist, Village Taipei Project, Urban Redevelopment Office, Taipei City Government

Translator, with Shu-Mei Huang, Jim Diers, Neighbor Power: Building Community the Seattle Way. Taipei: Hungyeh, 2009. (Original work published in 2004).

## Shu-Mei Huang (entered A07, PhC S10, PhD A12)

Awards and Honors

2011–2012 Dissertation Fellowship, Chiang Ching-kuo Foundation for International Scholarly Exchange

Government Scholarship, awarded by Ministry of Education, Taiwan, R.O.C. (2008–2010)

Conference Invitations and Presentations

- Huang, Shu-Mei. (March 2009). A Sustainable City renewed by People-Centered Approach: Resistance and Identity in Lee Tung Street Renewal Project in Hong Kong. IAR 6th Grad Student Conference: Changing Face of Asia: Re-emergence or Continuity? Vancouver, Canada. Published online by Institute of Asian Research, University of British Columbia.
- Huang, S. (Jan 2012) Expropriation and Expatriation of the City: A Study of the Making of Serviced Apartments in Hong Kong. Annual Conference for the Cultural Studies Association of Taiwan. National Taiwan University, Taiwan.
- Huang, S. (Oct 2011) Can Traveling Mothers Ever Arrive? Cross-Border Care Practices for A Better Home In Between Two Systems, One Country in Crossing Borders, Traversing Boundaries: Bridging the Gap between International and Internal Migration Research and Theory, National University of Singapore, Singapore.
- "Requalifying Old Places For New Uses." IAPS-CSBE 'Culture & Space in the Built Environment Network' and the IAPS-Housing Network Symposium, Istanbul, Turkey, 2009.
- Huang, Shu-Mei. "Interrogating Urban Renewal by Preservation: Resistance and collaboration in Lee Tung Street Renewal Project." Culture and Space International, October 2009.
- "Requalifying Old Places For New Uses." IAPS-CSBE 'Culture & Space in the Built Environment Network' and the IAPS-Housing Network Symposium, Istanbul, Turkey, 2009.

#### Publications

- Huang, S. (2012) Transnational Building in the Borderland Settlement. In Elke Krasny (Eds.) Hands-On Urbanism 1850-2012: The Right to Green. pp. 260-269. HK: mccm creation (the German edition: Vienna:Turia + Kant).
- Re-envisioning Hing Hay Park: Report of the CYLA Studio, Seattle, 2008. Edited by Jeff Hou and Shu-Mei Huang. Produced by Inter\*Im Community Development Association (Inter\*Im) and Seattle Chinatown-International District Preservation and Development Authority (SCIDpda) February 2009.
- Columns for Green Design magazine (www.green-mag.com.tw) (2010-2011) Huang, Shu-Mei. "Interrogating Urban Renewal by Preservation: Resistance and collaboration in Lee Tung Street Renewal Project." Culture and Space International, October 2009.
- Translator, with Kuang-ting Huang, Jim Diers, Neighbor Power: Building Community the Seattle Way. Taipei: Hungyeh, 2009. (Original work published in 2004).

#### Service

- Member, International Children's Park Steering Committee in the International District, Seattle (Feb. 2008–present)
- Coordinator, school reconstruction for aboriginal children after typhoon Marokat in Taiwan (July 2010-present)
- Review of Master's Thesis, Department of Geography, National Taiwan University (May 2012). Work
  - Research Assistant. Housing Condition of Foxconn Laborers in Urban Villages in Shengzhen. Institute of Building and Planning, National Taiwan University (Aug-Oct 2011).

## Eyun Jennifer Kim (entered A12)

## Teaching

- TA LArch 352 History of landscape architecture (Autumn 2013).
- TA Arch 351 Romanesque, Gothic and Renaissance architecture history honors section (Winter 2014)

#### Service

- GSA Thaisa Way's Now Urbanism seminar report (Fall 2012)
- GSA Arch 211 Design Drawings II (Spring 2013)
- GSA Arch 100 Introduction to architecture (Summer 2013)

## Julie Kriegh (entered A09)

Awards and Honors

AIA Featured Firm of the Month, June 2010, Participating Firm: Future Shack 2010 Publications

Evergreen Sustainable Development Standards Website-Ferncliff CLT Eco-Charrette Report, 2009–2010

HOPE VI Redevelopment of Westpark Evaluation Report: Year IV.

Manzo, Kleit, Dugdal, Kriegh, and Foster (HUD 2013)

Presentations, Invited Talks, Workshops

- "Eco-Charrette for Sustainable Affordable Housing Ferncliff CLT," Housing Resources Board, Bainbridge Island, June 2009
- "Seattle Homes and Lifestyles Magazine, March–April Publication of the Bainbridge Island Tour of Architects," Tour of "Yonder" and the "West Blakely Residence"
- "Sustainable Affordable Housing," Bainbridge Island Chamber of Commerce Luncheon Presentation, March 2010
- "Sustainable Housing Design and Technologies," Bainbridge Chamber of Commerce Home and Garden Show, March 2010
- "Housing Design Development Program (HDDP) Smart Growth and Affordable Housing," Sustainable Bainbridge, June 2010
- "Sustainable Affordable Housing and the Community Land Trust Model," Bainbridge Island Rotary Club, October 2010

Passive House Institute, Thermal Bridging and Design Workshops (Fall 2011 and Spring 2012) Emerge Leadership Workshop, Leadership for a more sustainable society (Spring 2012)

- Northwest Community Land Trust Regional Conference, presentation on Passive House Design (Fall 2011)
- Northwest Community Land Trust Regional Conference, presentation on Sustainable Communities (Fall 2011)
- "Innovations in Form-Based Codes—Process and Products." Forum speaker, American Planning Association Regional Conference (Fall 2011)
- "Life-Space-Building: New Methods for Planning Lively Neighborhood Centers" Presenter for Participatory Design Workshop, EDRA43Seattle National Conference (Spring 2012)
- Northwest Community Land Trust Regional Conference, speaker/presentation on Passive House Design (Fall 2013)
- "Revitalization in the Commercial Core and Downtown Burlington", ULI TAP Session and presentations for the City of Burlington (Spring and Summer 2013)

"Form Based Codes Plus", presentation Edmonds City Council- (Summer 2013)

Conferences and Continuing Education Sessions

The Housing Washington Conference (Fall 2013)

The Passive House NW Regional Conference (Fall 2013)

The Association of Collegiate Schools of Planning Annual Conference (Winter 2013)

The Urban Land Institute Housing Opportunities Conference (Spring 2013)

The Living Futures Annual Conference (Spring 2013)

Passive House US Contractor's Training (Spring 2013)

BioRegional, One Planet Living, Seminar, (Summer 2013)

Research (funded/unfunded)

Passive House Institute Training, Denver CO (ongoing, unfunded, 2010)

Panelized Housing Construction, Woodinville Lumber, Woodinville, WA (unfunded, 2011) Sustainable Systems: Ground Source Heat Pump, Solar PV, Green Roof Low Impact Storm Design (ongoing, unfunded, 2012)

Community Land Trust Public Policy in the State of Washington (ongoing, unfunded, 2013)

Affordable Housing Funding for Integrated Design: An Aggressively Passive Approach (ongoing, non-funded, 2013)

Occupant Engagement- The Efficacy of Agency in Sustainable Behaviors (ongoing, non-funded, 2013)

Related Work Experience

Kriegh Architects, Bainbridge, WA. Sustainable Community Land Trust Projects: KulshanCLT, Bellingham, WA; FerncliffCLT, Bainbridge, WA

Consultation, Sustainable Architectural Design Practice, Kriegh Architecture Studios, Bainbridge and Seattle, WA

Consultation with Jill Sterrett, City of Edmonds—ReVisioning Westgate: A District Form-Based Code, UW Green Futures Lab (2011–2012)

Teaching Assistant with International Passive House Academy and the University of Washington, Architecture 498 Passive House Training (Spring 2012)

International Certified Passive House Designer (2012)

Kriegh Architects, Affordable, Livable, Communities, MEND Community Land Trust, Leavenworth, WA

Kriegh Architects, Affordable Housing, Homestead Community Land Trust, Seattle, WA

- Research Assistant for Lynne Manzo, Westpark HOPE VI Redevelopment Evaluation for HUD (2012 and 2013)
- Co-leader/teacher with Nancy Rottle, "Revitalization in the Commercial Core and Downtown Burlington", UW Green Futures Lab (2013)
- Passive House Retrofit, Kriegh Architectural Studios, (2013)

Service

Board Trustee, Hyla Middle School Future Needs, Strategic Planning Chair (2011–2013)

Affinity Group, Affordable Homeownership, Housing Development Consortium of King County (2012–present)

Member, Passive House Northwest (2010–2012)

Member, Seattle AIA, National AIA (1991-present)

LEED-Accredited Professional, Green Building Council (2008-present)

Sustainable Master Planning-Hyla Middle School, Bainbridge, WA

Sustainable Master Planning-Montessori Country School, Bainbridge, WA

Master Planning—Bainbridge Island Land Trust Hilltop Property, University of Washington with Jill Sterrett, Spring Quarter (2010)

International Passive House Consultant certification (2012)

Housing Development Consortium of King County invitation to Affordable Housing Seminar for Beacon Pathway Inc. Auckland (Spring 2013)

# Wonil Lee (entered A12)

Conference Presentations

Under review: "Serious games for the learning and practices of hazard recognition: understanding the design complexity for 3D construction site modeling" and "Field Use of Physiological Status Monitoring (PSM) to Identify Workers' Physiologically Acceptable Bounds and Heart Rate Zones," International Conference on Computing in Civil and Building Engineering, 2014

# Resear ch

"How worker's physiological status and jobsite environment factors affect worker behavior and performance: Opportunities and limitation on field uses of monitoring devices," technical report for Skanska AB.

Kuei-Hsien Liao (entered A06, PhC A08, PhD S12)

Current Position

2012–present Assistant Professor, Department of Architecture, Chinese University of Hong Kong 2011–2012 Assistant Professor, Department of Architecture, National University of Singapore

Awards and Honors

2007-2008 Chester Fritz Endowment Fellow

Studying-Abroad Scholarship, Taiwan Ministry of Education, 2009–2011

- Conference Invitations & Presentations
  - "The urban river as a coupled natural and human system: a case study on the Lower Green River, Washington, USA," 2<sup>nd</sup> International Conference of Urban Biodiversity & Design (URBIO2010), Nagoya, Japan, 2010.
  - "Adaptive Hydrologic Infrastructure: A Plausible Solution to Urban Flooding in the Face of Climate Change," 5<sup>th</sup> International Conference on Planning and Design, Tainan, Taiwan, 2009.

"Building Dynamic Systems: A Direction for Urban Design to Promote Ecological Resilience," Thinking Through Nature: Philosophy for an Endangered World (The Annual Conference of the International Association for Environmental Philosophy), Eugene, 2008

#### Presentations & Invited Talks

"New concepts for Sustainable Urban Design," Taiwan Construction Research Institute, Taipei, Taiwan, 2010.

"Urban Design with Natural Fluvial Process," Taipei County Government, Taiwan, 2010.

- "Designing for Sustainable Urban Hydro-environment," National Taiwan University, Taipei, Taiwan, 2010.
- "Adaptation: The Only Way to Reduce Flood Disasters", National Cheng Kung University, Tainan, Taiwan, 2009
- "Designing Sustainable Cities", Taipei Community Planner Training Course, Taipei, Taiwan, 2009
- "Water and Mobility Issues in the City", National Yunling University of Science & Technology, Yunlin, Taiwan, 2009
- "Sustainable Urban Design", Taichung City Government, Taichung, Taiwan, 2009
- "Towards Eco-Cities", CECI Engineering Consultants, Taipei, Taiwan, 2009
- "Sustainable Urban Design", COSMOS Planning & Design Consultants, Taipei, Taiwan, 2009
- "New Concepts for Managing Urban Waters", National Cheng Kung University, Tainan, Taiwan, 2009
- "Adaptive Hydrologic Infrastructure: Enhancing Resilience of Cities and Rivers" Helmholtz Center for Environmental Research, Department of Computational Landscape Ecology, Leipzig, Germany, 2009

"Some Concepts about Floods," NGO Flood Alliance, 2007

Publications (in Chinese)

- The Good City: New Concepts for Sustainable Urban Design (in Chinese). 2009. Taipei: Yeren Publisher. Selected as one of the "books of the year 2009" by the China Times of Taiwan.
- "From Mountains to Water: Olympic Sculpture Park, Seattle," Dialogue Magazine, Issue 116, 2007
- "The Architecture Revolution of Library—Seattle Central Library," Dialogue Magazine, Issue 113, 2007
- "The Future of Waterfront in Seattle," Dialogue Magazine, Issue 112, 2007
- "Global Warming is Everyone's Business," Taiwan News Weekly, Issue 277, 2007
- "Paradigm Shift in Flood Management: Learning from Europe," Wetlands Taiwan Magazine, Issue 65, 2007

Service

Consultant for the Meinung Field Action Association, 2009-present

## Susan Locsin (entered A06, left program)

Presentations

With E. Rojas. "Integrated Practice: the road ahead." 2007 Construction Research Congress With Dossick, Rojas, & Lee. "Defining Construction Management Events on Situational Simulations." 2007 CONVR Penn State

"ViewMaster-Multi-User Web Based Remote Control." 2008 FIATECH Research Conference "Virtual Coach—Construction Management Simulation Trainer." 2008 FIATECH Research Conference.

Service

TA Autumn 06 CM 411 Project planning & control, 422 Construction Computer applications TA Winter 07 Digital Project Training

## Joshua Miller (entered A05, PhC A07, PhD S10)

Current Position

Program Manager, Bicycle Alliance of Washington

Awards and Honors

National Park Service (issued by Yosemite National Park trails office), Safety Award 2008. Conference Invitations & Presentations

"Cyborg Love: an affirmative postmodern vision for today's worlds," International Association of Environmental Philosophers: Thinking Through Nature Conference paper, June 21 2008.

Service

Volunteer photography instructor for street kids, Seattle, WA. Spring '07

Contributor, Alaska Yukon Pacific Re-photographic Survey, Exhibit curated by John Stamets, Architecture Hall, UW

Documentary photography of community and activist events in Seattle. (WTO, Critical Mass, MLK days)

Bicycle commuting activist

Studio Report: University of Washington Built Environment Lab 2009, Taoping, Sichuan, China. http://courses.washington.edu/belab09/

#### Related Work Experience

Lead Planner, Regional Open Space Strategy (ROSS) project, Green Futures Lab.

Collections Assistant, Henry Art Gallery. Photography and digital image handling for the creation of an online catalog of the collection. October 2007–June 2008

Planning Intern, photographic and land-use surveying, City of Seattle, Department of Planning and Development. July 2005-May 2007

Production assistant for Steve Hyde's film Shikashika

#### Christopher Monson (entered Su13)

#### Resear ch

COBie Intern position and research in integrated AEC practices for UW Capital Projects Office Invited Talk

"Research Methods" for CEP 490 Senior Project Prep Seminar

Teaching

Invited guest for CM 414 Virtual Modeling for Construction

Eric Noll (entered A04, PhC S09, left program)

Awards and Honors

2008 Foreign Language Area Studies (FLAS) Fellowship for study of Hindi.

2007 Fellow of the Institute for the Public Humanities, University of Washington, Walter Chapin Simpson Center for the Humanities

2006 American Planning Association National Student Award; Applying the Planning Process; Project Title: Pioneering Palmer's Future: Strategies For Managing Growth; Role: Teaching Assistant and Project lead

2006 Puget Sound Regional Council Vision 2020 Award; Rural/Town Plan; Project Title: Vision For Skykomish; Role: Project lead

Presentations

Guest Lecture in CEP 200 "Introduction to Community, Environment, and Planning," May 22, 2008

WA Chapter of the American Planning Association "Brown Bag," November 2005, presentation of University-Community collaborative work in Palmer, Alaska. Drew upon interdisciplinary studio that he co-instructed

WA Chapter of the American Planning Association Meeting, September 7, 2006, "Community Visioning and Environmental Cleanup in Skykomish, WA"

Publications

(Technical/Professional Reports and Publications—joint author)

July 2008, "New Directions For Old Jefferson." A post-Katrina revitalization plan prepared for US Department of HUD and Jefferson Parish, Louisiana

June 2007, "Visions for Terrytown: A Strategic Action Plan." A post-Katrina revitalization plan prepared for US Department of HUD and Jefferson Parish, Louisiana

October 2006, "The Valley—National Heritage Area Designation: A Preliminary Study." Prepared for the State of Alaska, Cultural Resources Division and the Matanuska-Susitna Borough

September 2005, "Vision For Skykomish." A community-based plan prepared for WA State Department of Ecology and the Town of Skykomish, Washington to guide environmental cleanup action plan

February 2005, "Pioneering Palmer's Future: Strategies For Managing Growth." A strategic action plan prepared for the Town of Palmer, Alaska

February 2005, "Towards A GMA Benchmarking System In Washington: Report on the Outcomes of a Western Washington Indicator Workshop." Prepared for the State of Washington Department of Community, Trade, and Economic Development.

Research Projects

June–Dec 2007, Pre-Doctoral Research Associate, University of Washington, Department of Urban Design and Planning; Project Title: Linking Toxics Cleanup and Redevelopment Across the States: Lessons for Washington State; for Washington State Department of Ecology

Feb-Sept 2006, Cultural Resources Assistant, Matanuska-Susitna Borough, Palmer, Alaska. Project title: Matanuska-Susitna National Heritage Area Feasibility Study. Conducted inventory of natural, recreational, and cultural resources; conducted community workshops to identify themes linking these resources; assisted in establishing community partnerships to carry NHA process and preparation of final feasibility report

2005–2006, Pre-Doctoral Research Associate, University of Washington, Department of Urban Design and Planning; Project Title: Universities Re-Building America Program (US Dept. of HUD), focused on Post-Katrina recovery planning in Jefferson Parish, Louisiana

May–Sept 2005, Hearings Board Examiner Assistant for Richard Sepler, Hearings Board Examiner for the City of Mt. Vernon, Washington. Assisted with research, analysis, and writing of Hearings Board Examiner decisions on development permit proposals

## Aran Osborne (entered A11)

Research Projects

- RA, Building User Audit: Capturing Behavior, Energy, and Culture, Green Seed Fund Project, UW Environmental Stewardship & Sustainability, 2013–2014
- RA, National Science Foundation grant, "Reduce Energy Consumption through Integrated Design: How do Engineers Translate and Teams Synthesize Energy Modeling in Successful High Performance Building Design?" (2013–2014)

#### Teaching

TA, ARCH 404A Integrated Design Build Studio (2014)

Paula Patterson (entered A03, PhC Su06, PhD Su09)

Awards and Honors

American-Scandinavian Fellowship, 2008–2009

Valle Scholar, Helsinki, 2006-2007

FLAS Fellowship for French, 2005–2006

FLAS Fellowship for Finnish, 2005

Kate Neal Kinley Memorial Fellowship, 2004

#### Presentations

- "Imagination and the Poetics of Process," Architecture and Phenomenology Conference The Technion, Haifa, Israel, May 2007
- "The Tectonics of the Poetic Image," Tectonics 2007 Conference, University of Technology, Eindhoven, The Netherlands, December 2007

Publications

"Imagination and the Poetics of Process," in Back to the Things Themselves: Architectural Experience, Memory and Thought, 2009

"The Tectonics of the Poetic Image," in Remapping Tectonics, 2008

- "Nordic Architects Write," photographs in conjunction with an essay by Juhni Pallasmaa, Routledge, forthcoming 2008
- "A Quiet Search for Meaning," Column 5 vol. 21, Journal of Architecture, University of Washington, 2007
- "Dangerous Liaisons," Column 5 vol. 20, Journal of Architecture, University of Washington, 2006
- "Alterity; the state of being other or different," Column 5 vol. 19, Journal of Architecture, University of Washington, 2005

"Eight Sighted Box," Column 5 vol. 18, Journal of Architecture, University of Washington, 2004

# Julie Poncelet (entered A05, PhC S08, PhD A13)

## Consultation

- Independent Evaluation Consultant, Emoti-Con! 2012 and 2013 New York City Youth Media and Technology Festival, New York City (2012, 2013)
- Independent Evaluation Consultant, The Point CDC, New York City (2013)
- Independent Evaluation Consultant, MOUSE Inc., National (2011-present)
- Independent Evaluation Consultant, Robert Wood Johnston Foundation, National (2011)

Independent Evaluation Consultant, The Point CDC, New York City (2011)

2011 Co-Founder, Action Evaluation Collaborative, Global Evaluation Collaborative (2011)

Senior Evaluator and Researcher, ActKnowledge, Center for Human Environments, CUNY

Graduate Center (2008–2010)

Conference Invitations and Presentations

Workshop presentation, "Mapping our Vision—Making it Happen," Planners Network, New York NY (2013)

Roundtable Presenter and organizer, with Action Evaluation Collaborative members, "A Knowledge Sharing Roundtable Designed Specifically to Strengthen Collaborative Evaluation Capacity Building Practices in Support of Social Change Work," American Evaluation Association, Anaheim CA (2011)

Roundtable Organizer with Action Evaluation Collaborative members, "Evaluating Movement Building and Social Change Work: When Funder and Grantee Outcomes Differ" (2011)

Booth/Table Organizer for ActKnowledge Coalition for Community Schools Conference, Philadelphia PA (2010)

Organizer, "Critical Geographies of Children and Youth"; presenter: "Conceptualizing an Ethical Praxis for Urban Youth Power," American Association of Geographers annual conference (2009)

2008 American Association of Geographers Annual Conference "Answering the Call: Children and Notions of Democracy," Boston MA (April 2008)

Abstract and paper accepted to the ACSP-AESOP joint annual conference in Chicago (summer 2008)

Participation in Funded Research

Research Assistant, Cornell University, Ithaca and New York City for USDA Extension funded project, "The role of the physical environment in youth self-efficacy: school building quality and self-efficacy projects".

Research Assistant, Department of Urban Design and Planning, UW, Washington State Department of Ecology Publication (2007–2008)

Research Assistant, Ford Foundation report on Youth Programs in America (with Sharon Sutton and Susan Kemp)

Case study reviews for the report for the Washington State Department of Ecology—Review of Brownfields in the State of WA (with Hilda Blanco and Eric Noll, UW, 2008).

Research Assistant, Department of Urban Design and Planning, UW, Livable Cities Survey for the Korean Research Institute on Human Settlement (2006)

Livable Cities Report for KRIHS—the Korean Research Institute for Human Settlements (with Hilda Blanco and Christine Bae)

Professional Experience

Graduate Research Assistant, Department of Urban Design and Planning & Department of Landscape Architecture UW, Urban Affairs Association (UAA) Annual Conference; conference planning (2007–2008)

## Resear ch

Dissertation Research (unfunded) "A Community-Based Organization in the South Bronx as a Catalyst for Activism: Observing the Dynamics of a Youth Initiated Participatory Research Project" (2013)

## Service

Women in Non-Profits NYC Group (2013)

Assisting The Point Community Development Corporation (Bronx NY) with their evaluation needs (2012)

Action Evaluation Collaborative – website and newsletter (2011)

Archivist, Visual Resources Collection, University of Washington

Architectural archivist, UW special collections—review, catalog and archive drawings by Roland Terry

## Teaching

Adjunct Faculty, School of International and Public Affairs, Columbia University, teaching Professional Economic Development Workshop/Capstone Advisor – Media Development Investment Fun: The Case Study of El Periodioco, Guatemala (2013)

Adjunct Faculty, School of International and Public Affairs, Columbia University, teaching Program Evaluation for Nonprofits and Social Enterprises (Fall 2012 and 2013) Workshops

Capacity Builders Collective, co-facilitating a multi-day evaluation capacity building workshop -Evaluate for Change. New York, NY (2011)

- Quebec Ministry of Education (Ministre de L'Education, Loisir et Sport), co-facilitated a multiday Theory of Change workshop (2010)
- Partnership for After-School Education (PASE Setters), co-facilitated a four-day evaluation workshop for community-based organizations and providers of youth programs. New York NY (2008 and 2009)

Shalini Priyadarshini (entered A10, PhC Su13)

Presentations

- Dr. Giovanni Migliaccio, Mariella D'Incognito, Shalini Priyadarshini, Tiger Tai (2011) "Construction Safety Performance Assessment", Construction Industry Research Conference (CIRC), Pacific Northwest Center for Construction Research and Education, University of Washington.
- Presenter "Applicability and use of physiological status monitoring in the Construction Industry" at the First Annual Safety & Technology Expo, Associated Builders & Contractors of Western Washington held at PNCCRE, UW, 2012.

Publications

- Umberto Gatti; Giovanni Migliaccio; Susan M. Bogus; Shalini Priyadarshini; Amelia Scharrer (2012) "Using Workforce's Physiological Strain Monitoring to Enhance Social Sustainability of Construction" ASCE Journal of Architectural Engineering, Special Issue on Emerging Trends of Sustainable Engineering, Design and Construction. Accepted.
- Yong-Woo Kim, Seung-Heon Han, Shalini Priyadarshini (2012) "Towards Supply Chain Cost Model for Integrated Projects", Seventh International Structural Engineering and Construction Conference; Honolulu, June 2013. Abstract accepted.

## Resear ch

RA, optimization of resource allocation in natural disasters

RA, grant proposal for construction supply chain cost optimization

Teaching

TA, CM 588 Construction Operations and Productivity

TA, CM 340 Sustainable Building Design and Construction Practices

## Jayde Lin Roberts (entered A04, PhC S06, PhD S11)

Awards and Honors

2008–2009 Fulbright-Hays Doctoral Dissertation Research Abroad Award

2006-2007 Blakemore Freeman Fellowships for Advanced Asian Language Study

2006–2007 FLAS for Burmese (declined)

2004-2005 FLAS Fellowship for Hindi

Conference Invitations and Presentations

Seminar on Myanmar at Xiamen University/Hong Kong

Interactions in the 21st Century between China and Southeast Asia with a special reference to Myanmar (May '08)—presented paper on Chinese in Yangon

"Patterns of Development—Lessons from China for the architects and planners in Burma?" talk to the Myanmar Architecture Association at the Yangon Institute of Technology (Feb 08)

SEASSI Student Conference, "Uncanny Parallels—Tourism and Colonialism in Burma" (June 06) conference in Hawaii

2008 IASTE Conference: Performances of Tradition by the Sino-Burmese - Chinese New Year in Yangon, Burma

2010 IASTE: Qingfu Gong Temple: A Carefully Negotiated Microtopia

Service

Work with the Women's Development Association in Yangon to establish English classes for their teachers and to begin a preservation project for their historic building built by a wealthy Indo-Burman during the colonial period (07–08)

#### Consultation

Worked with Wu He Architecture and Urban Planning Co. in Beijing, China to design alternative solutions for the revitalization of a historic street in Quanzhou, Fujian, China (summer 05) Chinese overseas villages in Fujian, China, on-site research for Dan Abramson

## F. Ozge Sade Mete (entered A06, PhC S09, PhD Su12)

## Awards and Honors

Koç University Research Center for Anatolian Civilizations Fellowship, 2009-2010 Conferences

- 04.2010 Paper presentation "Archaeology contested: Ways to Remember Anatolian Civilizations" International Conference "Archaeology in Conflict", 6-10 April, 2010, Vienna, Austria
- 03.2010 Paper Presentation "Modernity, Identity, Representation: Turkish Museums between 1960 and 1980" Mini Symposia 2010 by RCAC Fellows, March 12 May 21 2010, Koç University RCAC, Istanbul
- 11.2009 Invited presentation "Modernization and Memory: Selective Remembrance in Archeological and Ethnographic Museums in Turkey, 1960-1980", Museums and Display: (Hi)stories in a Showcase, November 13-14, 2009, Istanbul.
- 10.2009 Paper presentation "Selective Remembrances Embodied in Modern Vernacular: Archeological and Ethnographic Museums in Turkey", Revitalizing Built Environments: Requalifying old places for new uses International Symposium October 12-16, 2009, Istanbul 06.2009 Attended the "4th PhD Jamboree at the University of British Columbia, June 8-14 2009"
- 05.2009 Attended the "4th Frid Jamboree at the Oniversity of British Columbia, Julie 8-14 2009 05.2009 Paper presentation "Harem Suare: From Harem's Women to Placeless Women", "Spanning Time and Place: An Interdisciplinary Student Conference on Near and Middle Eastern Studies, May 14 2009", University of Washington, Seattle.

# Publications

- "Selective Remembrances Embodied in Modern Vernacular: Archeological and Ethnographic Museums in Turkey", Revitalizing Built Environments: Requalifying old places for new uses Proceedings, eds. Hulya Turgut and Yasemin Ince Guney, Istanbul: Istanbul Technical University, 2009.
- "Identity, Modernity, Tradition: Two Commemorative Structures for the Founder Hero of Modern Turkey" Column 5, vol. 21, pp. 46-49. Seattle, WA: Department of Architecture, UW, 2007
- "Türkiye'de Tasarlanmış Müze Yapıları" [Designed Museum Buildings in Turkey], /Bilim E//şiği 3//:// Sanat Tarihinde Gençler 2005 Semineri/, Istanbul: Arkeoloji ve Sanat Tarihi Press (Forthcoming)
- "Türkiye'de Tasarlanmış Müze Yapıları" [Designed Museum Buildings in Turkey], /Arredamento Mimarl/////k/, vol.100+95, 2006, pp.115-121.
- With Z. Kuban, "Erken Cumhuriyet Döneminde Milli Müze" [Idea of a National Museum in the Early Republican Era], in Sanat Tarihi Defterleri [Notes on Art History] Semra Ögel (ed), 55-66, Istanbul: Ege Press, 2006.

Related Work Experience

Castanes Architects, Seattle, WA, 06/2008-08/2008, Summer Intern

Jeong Wook Son (entered S07, PhC A09, PhD S11)

Awards and Honors

- Best paper award, Construction Research Congress 2010, American Society of Civil Engineers (ASCE)
- Best poster award, Conference on Statistics and the Social Sciences, Center for Statistics and the Social Sciences, University of Washington
- 2nd place award, Research poster session for doctoral student, Construction Research Congress 2009, American Society of Civil Engineers (ASCE)

Conferences Invitation and Presentations

- Son, J., Han, S., Rojas, E., and Park, H. (2010). "Embeddedness and collaborative networks for overseas construction projects." Proc., Construction Research Congress 2010, Banff, Canada, 1325–1334.
- Son, J. and Rojas, E. (2010). "The evolution of collaboration within inter-organizational networks of temporary project teams." Proc., Construction Research Congress 2010, Banff, Canada, 789–798.
- Son. J. and Rojas, E. (2009). "The Evolution of cooperation within social network of large-scale project teams." Poster, Conference on Statistics and the Social Sciences, Seattle, WA.
- Son, J. and Rojas E. (2009). "Understanding collaborative working processes of temporary project teams in large-scale construction projects." Proc., Construction Research Congress 2009, Seattle, WA, 856–865.

Publications

- Son, J., Han, S. Rojas, E. (2010). "Embeddedness and collaborative venture networks among Korean firms for overseas construction projects." Journal of Construction Engineering and Management, (under review).
- Son, J. and Rojas, E. (2010). "The evolution of collaboration in temporary project teams: agentbased modeling and simulation approach." Journal of Construction Engineering and Management, (under review).
- Lin, K, Son, J. and Rojas, E. (2010). "Safety director a 3d environment for construction safety education." Journal of Information Technology in Construction, (under review).
- Park, H., Han, S., Rojas, E., Son, J., and Jeong, W. (2010). "Social network analysis of collaborative entries for overseas construction projects." Journal of Construction Engineering and Management, (under review).
- Son, J. and Rojas, E. (2010). "The impact of Optimism Bias on organizational issues during construction planning." Journal of Construction Engineering and Management, (in press).
- Son, J., Aziz Z., and Feña-Mora, P. (2008). "Supporting disaster response and recovery through improved situation awareness." Structural Survey, 26(5), 411-425.

# Tyler Sprague (entered A08, PhC S10, PhD W13)

Awards/Research:

- Wendell Lovett Travel Award to attend 2011 Annual Conference, Marion Dean Ross, Northwest Chapter of SAH, Boise ID
- John Nolen Research Fund Award, Cornell University, 2011 to research the history of American urban planning and architecture at the Rare and Manuscript Collection. Proposal: "The Life and Work of Matthew Nowicki"
- Elisabeth Walton Potter Research Award, Marion Dean Ross (NW) Chapter of Society of Architectural Historians, Proposal: "A Preservation Survey of Hyperbolic Paraboloids in the Pacific Northwest" (2012)
- Center for the Study of the Pacific Northwest Research Travel Grant, University of Washington, Proposal: "A Preservation Survey of Hyperbolic Paraboloids in the Pacific Northwest" (2012)

Publications

Turkiyyah, George M, and Tyler S. Sprague. Optimization-based Methods for Road Image Registration. Seattle, Wash: Transportation Northwest, 2008. Internet resource.

Sprague, Tyler S. "Lighted Fair and the City: The Lighting of the 1909 Alaska-Yukon Pacific Exposition and it's Seattle Legacy" forthcoming in Proceedings of Luminous Architecture in the 20th Century (1909-1977), Nantes, France Dec. 10-12, 2009

Sprague, Tyler S. "Lighted Fair Is Magic Landscape": the AYP at Night." Pacific Northwest Quarterly. 100.2 (2009): 70–8. Print.

"Reframing Chandigarh's 'World Heritage' Legacy beyond Le Corbusier's Modern Monuments" Planning Perspectives, co-author with Manish Chalana (2013)

Sprague, Tyler S. "Eero Saarinen, Eduardo Catalano and the Influence of Matthew Nowicki: a Challenge to Form and Function." Nexus Network Journal. 12.2 (2010): 249–258. Print.

"The Deliberate Designer: Integrating Research into an Interdisciplinary Design Studio", Theory by Design Conference Proceedings, primary author with Ken P. Yocom, Manish Chalana. (29-31 October 2012, Antwerp Belgium)

#### Service

Secretary of Association of Preservation Technology, Northwest Chapter Presentations/Workshops

Sprague, Tyler S. "Lighted Fair Is Magic Landscape": the AYP at Night." presented at "Meet me at the Fair: Exploring the Alaska-Yukon-Pacific Exposition", Pacific Northwest Historians Guild, March 6, 2009

"Hyperbolic Paraboloids: A Module of Northwest Modernism", 2011 Annual Conference, Marion Dean Ross (NW) Chapter of Society of Architectural Historians, Boise ID

Sprague, Tyler S. "Lighted Fair and the City: The Lighting of the 1909 Alaska-Yukon Pacific Exposition and it's Seattle Legacy" presented at Luminous Architecture in the 20th Century (1909–1977), Nantes, France Dec. 10–12, 2009

# Nanching Tai (entered A04, PhC S07, PhD S10)

## Current Position

Assistant Professor, Department of Architecture, Tamkang University, Taiwan

## Awards & Honors

Young CAADRIA Award, The Association for Computer-Aided Architectural Design And Research in Asia, 2009.

## Invited Presentation

"Applications of High Dynamic Range Imagery in Architectural Research and Practice." College of Design, National Taipei University of Technology, April 21, 2009.

## Publications

- N. Tai and M. Inanici. "Space Perception and Luminance Contrast: Investigation and Design Application through Perceptually Based Computer Simulations". Symposium on Simulation for Architecture and Urban Design (SimAUD), Orlando, April 12–15, 2010.
- N. Tai and M. Inanici. "Lighting in Real and Pictorial Spaces: A Computational Framework to Investigate the Scene Based Lighting Distributions and Their Impact on Depth Perception." Association of Computer Aided Design and Research in Asia (CAADRIA) 2010 Conference, Hong Kong, April 7–10, 2010.
- N. Tai and M. Inanici. "Depth Perception as a Function of Lighting, Time, and Spatiality," Illuminating Engineering Society (IES) 2009 Conference, Seattle, November 15–17, 2009.
- N. Tai and M. Inanici. "Depth Perception in Real and Pictorial Spaces: A Computational Framework to Represent and Simulate the Built Environment". Association of Computer Aided Design and Research in Asia (CAADRIA) 2009 Conference, Yunlin, Taiwan, April 22–25, 2009.

N. Tai and J. Hou. "Investigation on Perceptual Spatial Experience of the Vernacular Taiwanese Temple from Its Conceptual Architectural Configuration." The 7th Annual Hawaii International Conference on Arts and Humanities, Honolulu, January 9–12, 2009.

## James Thompson (entered A11, PhC A13)

Awards

"Authors Meet Critics" Fellowship, International Journal of Urban and Regional Research (2013) "Critical Design" Graduate Interest Group Grant, UW Simpson Center for the Humanities (2012-13)

Graduate Scholar Award, Conference on the Constructed Environment (2012) Conference Invitations and Presentations

"Beyond the Neighborhood: Community at the Urban Scale" at Conference on the Constructed Environment (Vancouver, BC): October 26, 2012

#### Consulting

Research for concept generation for Astana 2017 competition entry, with Arno Matis Architecture, Vancouver, BC

#### Publications

"Beyond the Neighborhood: Community at the Urban Scale" International Journal of the Constructed Environment (forthcoming)

"Bringing Theory into Practice: seeking constitutive utopian potential in Astana" (in review) Utopian Studies

Presentations

"Louis Wirth's Urbanism as a Way of Life" and "The Global North and South" for URBDP 200 course (Professor Mark Purcell): April 10, 2013

Service/Outreach

Creator, Contributor, "Critical Design" graduate interest group blog (2012-)

Contributor, "Becoming Poor" doctoral reading group blog (2012-)

Jury Member for Architecture Student Reviews (2012-)

Senator, Graduate and Professional Student Senate (2012-)

Associate Editor, The International Journal of the Constructed Environment (2013)

Chief Organizer and Panel Moderator, BE+ More Symposium (2013)

Coach, Hamilton International Middle School Girls Volleyball team (2013)

Graduate Student Representative, "Huskies on the Hill" Lobby Day, Olympia, WA (2013)

Volunteer, MLK Day of Service, United Way (2013)

Contributor, "Nomad Scholarship" collaborative online reading group blog (2012)

Founder, Member, Organizer of "Critical Design" Graduate Interest Group, UW Simpson Center for the Humanities (2012–13)

Creator, Contributor, "Astana-topia" blog (2011)

Member, "Becoming Poor" doctoral reading group

Teaching

Teaching Assistant, Architecture 351, Romanesque, Gothic, and Renaissance Architecture (2013) Teaching Assistant, Urban Design and Planning 200 Introduction to Urbanization: Planning and Designing Alternative Urban Futures (2013)

Teaching Assistant, Architecture 350 Architecture of the Ancient World (2012)

## Holly Taylor (entered A13)

Invited talk

Featured speaker at quarterly membership meeting of Historic Seattle, an organization dedicated to the preservation of Seattle and King County's architectural legacy (November 4, 2013)

Public presentation

Panelist for Pacific Northwest Historians Guild presentation "New Research on the History and Landscape of the Pacific Northwest" (January 15, 2014)

Consulting

Providing historic preservation consulting services to the cities of Auburn and Tukwila (2013)

Service

Served as a member of the King County Historic Preservation Program Strategic Plan Citizen Advisory Committee (2013)

Amber Trout (entered A10, PhD A12)

Awards

AAAS-Emerging Leaders in Science and Society Fellow (2014-2015)

Currently

Full-time visiting professor in Community health at Western Washington, teaching 4 classes/quarter (2013–2014)

Conference Attendance

Built Environment workgroup participant, Environmental Section, American Public Health Association Conference (2011)

Travel grant to attend the International Livable Cities Conference in Portland, Oregon (June 2012)

Presentation, International Association for Environmental Philosophy (2013)

Service

- Volunteer, walkability tours & walkability scoring, American Public Health Association Conference (2011)
- Abstract reviewer for the Environmental Section, American Public Health Association conference (Fall 2012)
- BE program representative, UW Graduate and Professional Student Senate (GPSS) (with Daniel Coslett, 2011–2013)

Executive committee, UW GPSS Senate (2012–2013)

Participant, GPSS lobby day in Olympia (February 2012)

Working group participant for the CBE student council (2012)

Participant through GPSS, departmental review of Landscape Architecture for the Graduate School (2012)

GPSS Travel Grant Committee (2012)

Participant, CBE Dean's Review Committee (2012)

Co-facilitated Northgate Focus Group, Lake City Court Community Builder for community input for the Urban Design Framework for Northgate and light rail station (January 2013)

Mentored two CEP students (2012–2013)

North End Health and Human Service Providers Co-op (2013)

- Site Preceptor for UW Bothell Nursing Graduate Program mini community health fair (2013)
- Site Preceptor for UW Nutrition Master students- nutrition presentations for low-income seniors and youth (2012–2013)
- Site Preceptor for UW School of Public Health, MPH in Health Services community assessment of little brook (2013)
- Site Preceptor for UW BE Landscape Architecture, youth community-based design process in the NSFC computer lab in Lake City (2013)
- 33rd street Basketball court workgroup-Lake City Community Council and North Seattle Family Center (2012–2013)

Related Work Experience

Community Outreach Worker at North Seattle Family Center Program focused on empowering and education individuals to build skills to make practical, lasting changes to lead to healthier lives (June 2012–August 2013)

Course instructor, UrbDP 498/598 The next generation of built environment and public health specialists (Summer Quarter, 2012)

Course Instructor, UrbDP 520 Quantitative Methods—basic concepts of statistics applicable to urban planning students (Fall 2012)

RA, Dean's Office, College of Built Environments, UW Partnership of with School of Public Health and Forterra (2011–2012)

Teaching Assistant, URBDP 598 Healthy Community Design- Andrew Dannenberg, MD, MPH and Fritz Wagner, PhD (Winter Quarter 2012)

- Presentations & Invited Talks
  - Presentation on current work, Drexel University School of Public Health Career Day/Alumni Network (February 20, 2014)
  - Presented report findings at Forterra quarterly executive meeting for RA position through the Dean's Office under Daniel Friedman (2012)
  - Youth presentation on need of 33rd Street Basketball court at Lake City Community Council meeting (2012)
  - APA Coffee Talk on Diversity, invited by Lake City Neighborhood Alliance to speak to the community about community engagement and diversity (2013)

## Workshops

Design and Health Working Group Participant for American Institute of Architects, Washington, DC (date?)

FEMA disaster preparedness in Youth Programming, Red Cross (2013)

PRECEDE–PROCEED Down the Yellow Brick Road: Using the model for optimal program planning, implementation and evaluation-Larry Green (2013)

#### Publications

- Bennett, Deborah, Michael Apte, Xiangmei (May) Wu, Amber Trout, David Faulkner, and Doug Sullivan (2012) Ventilation, Temperature, and HVAC Characteristics in Small and Medium Commercial Buildings (SMCBs) in California, Indoor Air.
- Bennett, Deborah, Michael Apte, Xiangmei (May) Wu, Amber Trout, David Faulkner, Randy Maddalena, and Doug Sullivan (University of California Davis). 2011. Indoor Environmental Quality and Heating, Ventilating, and Air Conditioning Survey of Small and Medium Size Commercial Buildings: Field Study. California Energy Commission.
- Bennett, D.H., Trout, A., Faulkner, D., Apte, M. (2009) Pilot Report: Ventilation and Indoor Air Quality (IAQ) in Small and Medium Commercial Buildings (SMCB) Phase II Field Study. Report Submitted to State of California Air Resources Board.
- Dillon, J.G., Mc Math, L.M., and Trout, A.L. (2009). Seasonal changes in bacterial diversity in the Salton Sea, Hydrobiologica. doi: 10.1007/s10750-009-9827-4

## Alexander Tulinsky (entered A07, PhC S11)

#### Presentations

"Overload: Bicycling in Urban Japan in terms of 'Shared Space' and 'Loose Space',"

International Bicycle Urbanism Symposium, Seattle, Washington, June 19-22, 2013.

#### Awards

Society of Architectural Historians, Scott Opler Endowment for New Scholars Study Tour Fellowship, for the 2013 SAH Study Day at the J. Paul Getty Museum and Hammer Museum, July 19, 2013. Shannon Tyman (entered A09, PhC W13)

Publications

- "Anthroposophy," Berkshire Encyclopedia of Sustainability: The Spirit of Sustainability, Volume 1, (Berkshire Publishing, 2009).
- "Biophilia," Berkshire Encyclopedia of Sustainability: The Spirit of Sustainability, Volume 1, 2009.
- "Beyond Organic," Green Food. The SAGE Reference Series on Green Society: Toward a Sustainable Future-Series (Sage Publications, 2010).
- "Composting," Green Food. The SAGE Reference Series on Green Society: Toward a Sustainable Future-Series (Sage Publications, 2010).
- "Healthy Foods Here: Recommendations for Future Programming," co-authored with Tammy Morales, Kara Martin, and Molly McNees (Publication Pending).
- "Applying Lessons Learned about Food Hubs in Seattle, Washington to Enhance a Collective Understanding," co-authored with Megan Horst, Eva Ringstrom, Michael Ward, Virginia Werner, and Dr. Branden Born, Journal of Agriculture, Food Systems, and Community Development (Winter 2012).

Conference Invitations and Presentations

- "Urban Agriculture as Democratic Redesign: from policy to infrastructure", at the annual Association of Environmental Studies and Sciences conference.
- "From Food Deserts to Just Deserts: Moving Food Planning to Democracy," The Association of Collegiate Schools of Planning (ACSP) (November 2012). Co-authored with Branden Born and Mark Purcell.

"What does democracy look like? Examining democratic discourse in alternative food movements," American Association of Geographers (AAG) (February 2012).

# Related Work Experience

- Helped organize Designing for Urban Food, a one-day design charrette at UW http://cbeurbanfood.wordpress.com
- Urban Food Link (March 2012 Present). Food systems research assistant.
- Community Alliance for Global Justice (April 2012 July 2012). Co-coordinated a 400 person fundraising dinner for food justice.
- Instructor, URDBP 498/598: "Social Justice in the City: Spatiality and Injustice" (Summer 2012).

# Service

Helped organize Designing for Urban Food, a one-day design charrette at UW http://cbeurbanfood.wordpress.com

Working on the Healthy Foods Here project with King County Public Health

Central Co-op Board of Trustees Secretary & Vice-President (November 2012 - Present)

Workshop, "Food Systems Mapping," Aesthetic Evolution, co-facilitated with Dane Garfield Wilson (June 2012).

# Kevin Van Den Wymelenberg (entered A06, PhC Su09, PhD Su12)

# Current Position

Assistant Professor, Department of Architecture, University of Idaho

Director, Integrated Design Lab, University of Idaho - Boise, ID

# Awards and Honors

- Richard Kelly Grant, Illuminating Engineering Society of North America [2008] funding as yet unawarded
- Robert E. Thunen Memorial Scholarship, Thunen Scholarship Fund, Illuminating Engineering Society of North America [2007-08] \$6,500
- Edison Price Fellowship, Nuckolls Fund for Educational Lighting [2007-08] \$10,000 Lighting Design Alliance Scholarship, International Association of Lighting Designers [2007] \$2,500

Funded Research

- Principal Investigator, Contract with Idaho Power Company [March 2010–December 2012] \$1,040,000
- Principal Investigator, Contract with Lawrence Berkeley National Lab [August 2010–September 2010] \$11,400
- Principal Investigator, Contracts with Green Building Services [August 2010–September 2010] \$19,500
- Principal Investigator, Contract with Quality Electric [June 2010–September 2010] \$7,500
- Principal Investigator, Contract with Idaho National Lab (BEA) [October 2009–November 2009] \$2,000
- Principal Investigator, Contract with New Buildings Institute [July 2009–March 2011] \$106,000
- Principal Investigator, Contract with Idaho Power Company [February 2009–December 2009] \$285,000

Principal Investigator, Contract with Idaho National Lab [February 2009–April 2009] \$5,685 Principal Investigator, Contract with Idaho Power Company [November 2008–December 2008] \$50,000

Principal Investigator, Contract with Engineering Incorporated [July 2008–December 2008] \$14,250

Principal Investigator, Contract with HDR Architecture [February 2008 – April 2008] \$4,000 Principal Investigator, Contract with Idaho Power Company [January 2008 – April 2008] \$5,000 Presentations/Workshops/Service

- June 2008, University of Idaho Lunch and Lead, Design Healthy Environments, 1.5 hour workshop with Sherry McKibben Boise, ID
- May 2008, LightFair International, LightFair Institute, Simulating Daylight—workshop with Christoph Reinhart, Las Vegas, NV

May 2008, LightFair International, LightFair Institute, Simulating Daylight—An Overview of Physical and Digital Modeling, 3 hour workshop with Christoph Reinhart, Las Vegas, NV

May 2008, West Coast Energy Management Congress, Integrating Project Delivery, 2 hour workshop with Gary Christensen, Amy Hellmund, Rick Hunter, and Ken Baker, Seattle, WA

May 2008, Office Ergonomics Research Council, Office Lighting Ergonomics and Energy Savings, 30 minute presentation, Seattle, WA

March 2008, Idaho Environmental Educators Conference, The Value of Integrated Design for Idaho Schools, 1 hour lecture, Boise, ID

January 2008, East Side Preparatory School, Sustainability and Reconnecting to Nature with Architecture, 1 hour lecture, Bellevue, WA

January 2008, National Electrical Contractors Associations Idaho Chapter Annual Meeting, Integrating the Lighting Environment—Research and Practice of Daylight Sensing Lighting Controls, 1 hour workshop with Frank Rice, Sun Valley, ID

December 2007, ASHRAE Utah Chapter Meeting, The Role of Daylight in Integrated Design, 1 hour seminar, Salt Lake City, UT

July 2007, Society of Building Science Educators Annual Retreat, The Educational Benefits of Creating Synergies Between Professionals and the Academy, with G.Z. Brown, Joel Loveland, & Judy Theodorson, two-hour workshop, Bainbridge Island, WA

- June 2007, American Association for the Advancement of Science, Project Based Education, A Model for Integrated Design, 1 hour presentation, Boise, ID
- May 2007, LightFair International, LightFair Institute, Emerging Daylight Metrics, 1.5 hour workshop with Lisa Heschong, New York, NY

October 2006, Idaho Energy Conference, Integrated Design Case Studies

Publications

Books

Daylighting Design in the Pacific Northwest, University of Washington Press; Christopher Meek, Kevin Van Den Wymelenberg, (2012).

- Academic Journals
  - Oversizing of HVAC System: Signatures and Penalties, Energy and Buildings, Ery Djunaedy, Kevin Van Den Wymelenberg, Brad Acker, Harshana Thimmana (Submitted for Peer Review July 2010)
  - The Effect of Luminance Distribution Patterns on Occupant Preference in a Daylit Office Environment, Leukos; Kevin Van Den Wymelenberg, Mehlika Inanici, Peter Johnson (Submitted for Peer Review July 2010)
  - Facing the Challenges of Integrated Design and Project Delivery, Strategic Planning for Energy and the Environment, V28, N1, pp. 69-80, Spring 2008; Amy Hellmund, Kevin Van Den Wymelenberg, Kenneth Baker

Conference Presentations/Proceedings

- "Measuring a Decade of Market Transformation—the Pacific Northwest Integrated Design Lab Network," American Council for an Energy Efficient Economy 2012 Summer Study on Energy Efficiency in Buildings, August 12-17, 2012, Kevin Van Den Wymelenberg, G.Z. Brown, Joel Loveland.
- "Plug Load Energy Profiles and Energy Saving Interventions in Office Environments", American Council for an Energy Efficient Economy 2012 Summer Study on Energy Efficiency in Buildings, August 12-17, 2012, Brad Acker, Kevin Van Den Wymelenberg.
- "Patterns of Occupant Interaction With Window Blinds: a Literature Review," Energy and Buildings, v.51, 165–176, 2012, Kevin Van Den Wymelenberg.
- "Understanding Controls, Behaviors and Satisfaction in the Daylit Perimeter Office: A Daylight Design Case Study," Journal of Interior Design, v.37, n.1, pp. 17-34, 2012, Julia Day, Judy Theodorson, & Kevin Van Den Wymelenberg.
- "Simulation-Based Daylighting Design Education and Technical Support," Building Simulation 2011 Annual Conference Proceedings, November 14-16 2011, Sydney, Australia; Kevin Van Den Wymelenberg, Christopher Meek.
- "Rightsizing: Using Simulation Tools to Solve the Problem of Oversizing," Building Simulation 2011 Annual Conference Proceedings, November 14-16 2011, Sydney, Australia; Ery Djunaedy, Kevin Van Den Wymelenberg, Harshana Thimmanna.
- "A Guide to Daylighting Success, Lighting Design + Application," Illuminating Engineering Society of North America, Christopher Meek & Kevin Van Den Wymelenberg, September 2011.
- "Using Building Performance Modeling as a Vehicle for Re-Integration," American Society of Engineering Education 2011 Annual Conference Proceedings, June 26-29, 2011, Vancouver, British Columbia, Canada; Jacob Dunn, Gunnar Gladics, Kevin Van Den Wymelenberg, Ery Djunaedy, Sherry McKibben. (Best Paper – Architectural Engineering Division)
- "Oversizing of HVAC System: Signatures and Penalties," Energy and Buildings, 43(2-3) [2011], 468-475; Ery Djunaedy, Kevin Van Den Wymelenberg, Brad Acker, Harshana Thimmana.
- Using Post Occupancy Evaluation to Refine and Improve Utility Building Efficiency Programs, World Energy Engineering Congress, Annual Conference Proceedings, December 2010, Washington DC; Gunnar Gladics, Kevin Van Den Wymelenberg (Abstract Accepted)
- 61 Flavors of Daylight, American Council for an Energy Efficient Economy, Summer Study Conference Proceedings, August 2010, Pacific Grove, CA; Mudit Saxena, Lisa Heschong, Kevin Van Den Wymelenberg, Seth Wayland
- Zero Saving Technologies, Why Commissioning is Needed—M&V Case Studies, West Coast Energy Managers Congress Annual Conference Proceedings, May 2010, Seattle, WA; Brad Acker, Kevin Van Den Wymelenberg

- A Study of Luminance Distribution Patterns and Occupants' Preferences in Daylit Offices, Passive and Low Energy Architecture, Annual Conference Proceedings, June 2009, Québec City, Canada; Kevin Van Den Wymelenberg, Mehlika Inanici (Finalist for Best Paper)
- A Climate Responsive Design Tool to Promote Passive Low Energy Design, American Solar Energy Society, Annual Conference Proceedings, May 2009, Buffalo, NY, G.Z. Brown, Kevin Van Den Wymelenberg, Jeff Kline, Ery Djunaedy
- Design Lab: Exploring synergies of outreach, research and teaching while innovating classroom design, American Collegiate Schools of Architecture, Annual Meeting Proceedings, March 2009, Portland, OR; Kevin Van Den Wymelenberg, Jim Coles, Brad Acker, Ery Djunaedy
- Facing the Challenges of Integrated Design and Project Delivery, Strategic Planning for Energy and the Environment, V28, N1, pp. 69-80, Spring 2008; Amy Hellmund, Kevin Van Den Wymelenberg, Kenneth Baker

#### Professional Magazines

- "Designing the Lit Environment, Techniques and Technologies for Holistic Lighting Design", Architectural Lighting, May 2008
- "Daylight Dialect," Architectural Lighting, March 2008

## Other papers

- Evaluating Human Visual Preference and Performance in an Office Environment Using Luminance-based Metrics, PhD Dissertation, University of Washington – College of Built Environments, Summer 2012, Kevin Van Den Wymelenberg.
- "Lighting Measurement #83 (LM-83), Spatial Daylight Autonomy and Annual Sunlight Exposure," July 2012, Illuminating Engineering Society of North America - Daylight Metrics Committee (Vice Chair).
- "Prioritizing and Visualizing Energy Management and Control System Data to Provide Actionable Information for Building Operators," Western Energy Policy Research Conference, August 25-26, 2011, Boise, ID; Carlos Duarte, Brad Acker, Ray Grosshans, Milos Manic, Kevin Van Den Wymelenberg, Craig Rieger.
- "Northwest Net Zero Homes: An investigation of Five Home that Targeted Net Zero Energy Use." Northwest Energy Efficiency Alliance, Jake Dunn, Gunnar Gladics & Kevin Van Den Wymelenberg, April 1, 2011. Available at: http://www.northwestenergystar.com/partners/blog/2011/06/08/nw-pet-zero-homes-

http://www.northwestenergystar.com/partners/blog/2011/06/08/nw-net-zero-homes-report

Professional Meeting Papers, Workshops, Showings, Recitals

# International

- December 2011, New Buildings Institute Webinar, The Daylight Pattern Guide: Developing a Visual Vocabulary for Daylighting Design Decision Making, 60 minute international webinar (live + recorded).
- National Presentations
  - June 2012, Society of Building Science Educators Annual Retreat, Interdisciplinary Team Management and Building Simulation, 1.5 hour presentation with Jacob Dunn.
  - May 2012, LightFair International, LightFair Institute, Annual Daylight Performance Metrics, 3-hour workshop with Lisa Heschong - Las Vegas, NV
  - November 2011, Workshop on Energy Security and Resilient Control Systems, Targeted Energy Management Toolset for Comfort and Savings Based on Advanced Computational Intelligence Techniques, poster presentation with Milos Manic of University of Idaho Craig Rieger of Idaho National Lab, John Gardner of Boise State University, Washington DC.
  - November 2011, Workshop on Energy Security and Resilient Control Systems, Existing Targeted Energy Management System Toolset, 30 minute presentation, Los Angeles, CA.

- September 2011, New Buildings Institute—Deep Savings in Existing Buildings Summit, Existing Building Renewal Initiative, 15 minute presentation, Boulder, CO.
- May 2011, LightFair International, LightFair Institute, Daylight Fundamentals: Design and Analysis Strategies for Comfortable and Energy Efficient Buildings, 2-day (14 hours) workshop with Christopher Meek – Philadelphia, PA
- March 2011, Harvard Graduate School of Design, The Daylight Pattern Guide: Developing a Visual Vocabulary for Daylighting Design Decision Making, 2 hour workshop with Christopher Meek – Cambridge, MA.
- Regional and Local Presentations
  - June 2012, Integrated Lighting Controls Commissioning, 45 minute presentation with Joel Lovel and of the University of Washington, PNW Building Commissioning Association quarterly meeting, Spokane, WA.
  - February 2012, Energy Efficiency in Idaho Research and Practice, 45 minute presentation with Todd Schultz of Idaho Power Company, Center for Advanced Energy Studies 2012 Idaho Research Symposium, Boise, ID.
  - January 2012, Energy Efficiency Update, Idaho Energy Collaborative Legislative Luncheon, 20 minute briefing, Boise, ID.
  - November 2011, Existing Building Renewal Process, 90 minute lecture with Mike Hatten of Solar AE, Integrated Design Lecture Series, University of Idaho-Integrated Design Lab, Boise, ID.
  - November 2011, Overview of the Daylight Pattern Guide, 30 minute online presentation, New Buildings Institute Quarterly Board Meeting, with Christopher Meek of the University of Washington.
  - October 2011, Existing Building Renewal Panel, 60 minute panel discussion with representatives from Blue Shield, Thorton Olliver Keller, Northwest Energy Efficiency Alliance and Idaho Power Company, Idaho Energy and Green Building Conference, Association of Idaho Cities, Boise, ID.
  - October 2011, Daylighting Best Practices, 75 minute lecture, Idaho Energy and Green Building Conference, Association of Idaho Cities, Boise, ID.
  - September 2011, Integrated Design & Energy Efficiency Charrette, 6 hour workshop with Gunnar Gladics and Sherry McKibben of UI, Bonneville Power Administration, Portland, OR.
  - September 2011, Integrated Design Theory & Case Studies, 4 hour workshop with Jason Butler of CTA A&E, AIA+2030 Lecture Series, AIA Idaho Chapter, Boise, ID.
  - August 2011, Western Energy Policy Research Conference, Prioritizing and Visualizing Energy Management and Control System Data to Provide Actionable Information for Building Operators 30 minute presentation with Carlos Duarte, Boise, ID
  - August 2011, Integrated Design Process, 60 minute lecture, AIA Idaho Chapter, Boise, ID.
  - May 2011, Center for Advanced Energy Studies Energy Efficiency Research Institute, 30 minute lecture, Yellowstone Business Partnership Annual Conference, Jackson Hole, WY.
  - April 2011, University of Idaho Integrated Design Lab Research Update, 60 minute lecture to Idaho Power Company's Spring Meeting for Customer Representatives, Idaho Power Company, Boise, ID.

- April 2011, AIA-Seattle & Seattle City Light, The Daylight Pattern Guide: Developing a Visual Vocabulary for Daylighting Design Decision Making, 2.5 hour workshop with Christopher Meek – Cambridge, MA.
- March 2011, A Decade of Energy Savings: The Pacific Northwest University Integrated Design Lab Network, 30 minute lecture for the President's Sustainability Symposium, University of Idaho, Moscow, ID.
- March 2011, Integrated Design Lab Update, 45 minute lecture for North Central Idaho Green Technology Workshop, Clearwater Economic Development Association, Moscow, ID.

#### Service

Peer Reviewer, SimBuild Annual Conference Proceedings [Summer, 2010]

- Selection Committee, Energy Efficiency and Conservation Block Grants to Idaho from American Recovery and Reinvestment Act of 2009 [Spring, 2010]
- Committee Member, Northwest Power and Conservation Council, Regional Technical Forum [2010–Present]
- Vice Chair, Illuminating Engineering Society of North America, Daylight Metrics Subcommittee [Fall 2009–Present]
- Chair, Idaho State Governor's Strategic Energy Alliance, Energy Efficiency and Conservation Task Force [Spring 2009–Present]
- Committee Member, American Recovery and Reinvestment Act 2009—Idaho Energy Efficiency and Conservation Block Grant Selection Committee, Office of Energy Resources, Idaho [Spring 2009–Present]

Committee Member, American Recovery and Reinvestment Act 2009 - Idaho K-12 Energy Efficiency Project Selection Committee, Office of Energy Resources, Idaho [Spring 2009 -Present]

- Session Chair, American Collegiate Schools of Architecture, 2009 Annual Meeting, Research Value of Design [2009]
- Task Force Member, Idaho State Governor's Strategic Energy Alliance, Energy Efficiency and Conservation Task Force [Spring 2008–Spring 2009]
- Subcommittee Member, Illuminating Engineering Society of North America, Daylight Metrics Subcommittee [Summer 2007–Fall 2009]

#### Invited Workshops

- August 2010, Idaho Strategic Energy Alliance Roundtable on Industrial Energy Efficiency, 4 hour workshop moderator with Don Sturtevant—Idaho National Lab, Idaho Falls, ID
- June 2010, Tallinn University of Technology PhD Curriculum, Passive Design Strategies + High Performance Envelopes, 4-day (32 hour) Intensive Summer PhD Course, Tallinn, Estonia
- May 2010, Daylight Forum 2010, Delight + Efficiency—Accelerating Daylight as a Light Source for Net Zero Energy Buildings, 2 hour panel discussion with Lisa Hesschong, Hayden McKay, Matthew Tanteri, Neil Deigert, and Amy Keller—Las Vegas, NV
- May 2010, Daylight Forum 2010, IES Daylight Metrics Subcommittee Goals and Progress, 30 minute presentation—Las Vegas, NV
- May 2010, LightFair International, LightFair Institute, Daylight Fundamentals: Design and Analysis Strategies for Comfortable and Energy Efficient Buildings, 2-day (14 hour) workshop with Christopher Meek—Las Vegas, NV
- October 2009, Parsons New School for Design MFA Lighting Program—High Dynamic Range Imaging as a Luminance Analysis Technique in Buildings, 2.5 hour workshop—New York City, NY
- October 2009, IESNA New York City Chapter Kelly Grant Awards—Physical Models, Digital Models and Light of the Real, 1 hour presentation—New York City, NY

- October 2009, 2008 International Radiance Workshop—A Comparative Discussion; Using Radiance, DAYSIM and Physical Models in Architectural Practice, 0.5 hour presentation— Harvard GSD, Boston, MA
- October 2009, AIA Idaho Chapter—Daylighting Design; Getting the Details Right, 1 hour presentation—Boise, ID
- June 2009 Passive and Low Energy Architecture 2009 Conference A Study of Luminance Distribution Patterns and Occupants' Preferences in Daylit Offices, Passive and Low Energy Architecture, 0.5 hour presentation - Quebec City, Canada
- May 2009 American Collegiate Schools of Architecture Annual Meeting Research Value of Design, American Collegiate Schools of Architecture 1 hour workshop with GZ Brown, Judy Theodorson and Joel Loveland - Portland, OR
- April 2009 Northwest Energy Coalition, Idaho's Energy Future, 1.5 hour panel discussion with Ric Gale and John Gardner - Boise, ID
- April 2009 Idaho Society for Healthcare Engineering, Integrated Design and Healthy Hospitals, 1.5 hour workshop McCall, ID
- April 2009, Green Building Seminar III Green Homes, Integrated Design, Putting it All Together, 1 hour workshop - Idaho Falls, ID
- January 2009, Wisconsin Energy Center, Integrate Design for Energy Efficiency, two 8 hour workshops and one 1 hour web archived video lecture Green Bay, Madison, and Delafield, WI
- October 2008, Integrated Design Lab Fall Education Series, Commissioning: Getting High Performance Systems to Perform, 1.5 hour workshop with Brad Acker - Boise, ID
- October 2008, Idaho Sustainability Conference, Lessons Learned in Integrated Design Processes, 1.5 hour workshop Sun Valley, ID
- October 2008, Idaho Energy and Green Building Conference, Light and Health in Buildings, 1.5 hour workshop Boise, ID
- October 2008, Boise Public Library, Energy Efficiency and Green Living Series, 2 hour workshop moderator with panel members Jim Miller, Byron Defenbach, and John Gardner - Boise, ID Articles About His Work
  - "University of Idaho Lab's Work Aids Idaho Power's Energy Efficiency Initiatives," Idaho Business Review, April, 2009
  - "Green Scene—University of Idaho's Integrated Design Lab," Sources+ Design Magazine, September, 2008

# Jeremy A. Watson (entered A03, PhC S07)

Publications

- "Wolves Return to Yellowstone," Encyclopedia of Environmental Ethics and Philosophy (New York: Macmillian Library Reference, November 2008), Volume 2, pp. 363-367. Co-authored with Bob Mugerauer.
- Crater Lake National Park, Rim Drive Cultural Landscape Report (CLR). National Historic Roads Conference, Portland, Oregon, 2003
- Rim Drive Cultural Landscape Report, Crater Lake National Park, Oregon. Co-authored with Steven R. Mark 2009.
- "National Park Service," Encyclopedia of Environmental Ethics and Philosophy (New York: Macmillian Library Reference, November 2008), Volume 2, pp. 363–367. Co-authored with Bob Mugerauer.

Presentations

Crater Lake National Park, Rim Drive Cultural Landscape Report (CLR). National Historic Roads Conference, Portland, Oregon, 2003

Research/Service

Klondike Goldrush National Historical Park, Chilkoot Trail Cultural Landscape Analysis and Evaluation of Existing Conditions (CLI), Skagway, Alaska, 2004

Analysis and Evaluation of the cultural features (CLR) of the 1898 Goldrush era Dyea town site located within the boundaries of Klondike Goldrush National Historical Park, Dyea, Alaska, 2004

Crater Lake National Park, Rim Drive Cultural Landscape Analysis and Evaluation of Existing Conditions (CLR), Crater Lake, Oregon, 2005

Crater Lake National Park, Rim Drive Cultural Landscape (CLR) Treatment Recommendations. Crater Lake, Oregon, 2006

Rim Drive in Crater Lake National Park, Crater Lake, Oregon is designated a National Historic Landmark with the Cultural Landscape final Report (CLR) used as the nominating document, 2007

Conceptual development of an interdisciplinary design and planning project for the city of Hamilton, Montana, 2008

#### A. Meriwether Wilson (entered A04, PhC S06, PhD A09)

Current position

Lecturer in Environment, Sustainability and Development, School of GeoSciences, Institute of Geography, University of Edinburgh.

#### Awards and Honors

2005–2006 Henry Luce Fellowship

2008–2010 Honorary Fellow, University of Edinburgh School of GeoSciences

#### Chiao-Yen Jewel Yang

Awards and Honors

Chester Fritz Grants For International Study and Exchanges, 2010

2011–2012 Dissertation Fellowship, Chiang Ching-kuo Foundation for International Scholarly Exchange

#### Ken Yocom (entered A03, PhC S05, PhD W07)

#### Awards and Honors

2002–2006 National Science Foundation Integrative Graduate Education and Research Traineeship (IGERT) Fellowship

#### Publications

With S. Dooling and G Simon. 2006. "Place-Based Urban Ecology: A century of park planning in Seattle." Urban Ecosystems 9(4): 299–321.

#### Resear ch

Watershed Analyst, Wild Fish Conservancy (formerly Washington Trout, Inc.), Duvall, WA, 2006

Watershed Resource Specialist, Seattle Public Utilities, Natural Resources Section, Seattle, WA, 2002–2006

#### Service

Part of three-person teaching team for an intensive training course at the Urban Ecological Restoration Training Program, Seoul, South Korea, supported and funded by the UN-Habitat Programme, 2007

Part of interdisciplinary team teaching Urban Ecology, Program on the Environment, University of Washington, 2005

Assisted unofficially with both studio and lecture course organization and teaching, Natural Processes Studio and Ecological Design and Planning, University of Washington, 2002–2005 Appendix F: Student Flow Chart: Progress to Degree

Table 1: Current Students

Table 2: Program Graduates

I Next Step	Reading Committee	Form Committee	Reading Committee	Research Proposal	or Final Exam	Reading Committee	ng Reading Committee	ng Reading Committee	Research Proposal	General Exam	Research Proposal	Reading Committee	Research Proposal	
Final Exam					W14 or S14		Thinking W14	Thinking S14						
Reading Comm					14-Jan-14									
Research Proposal	approved		23-Apr-13	exp. A13	6-Jul-10	?-Jul-12	S12	4-Jun-12				28-May-13		
PhC	8-Jun-07		10-Jun-11	16-Dec-11	11-Jun-10	16-Dec-11	16-Dec-11	16-Dec-11	16-Mar-12		22-Mar-13	22-Mar-13		
General Exam	21-May-07		10-Jun-11	15-Dec-11	24-May-10	27-Oct-11	13-Oct-11	1 7 - Oct - 1 1	27-Jan-12	thinking S14	9-Jan-13	18-Jan-13	19-Jul-13	
Members	Findlay (GSR, Hist), Hill		Wieczorek (GSR, Art H), McLaren, Prakash	Howard (GSR, Comm), Neff (Comm), Burpee	Harrell® (GSR, Anth), Hou®, Chalana	Furness (GSR, Engineering), Lin, Neff (Comm)	Tweedie (GSR, Comp Lit), Huber, Purcell	Harold (GSR, Comm), Anderson, Mugerauer	Kahn (GSR, Anth), Abramson, Hou	Sanders (GSR, Educ), Kleit, Loveland	Litfin (GSR, PoliSci), Manzo, Purcell	Kahn (GSR, Anth), Mugerauer, Chalana	Crowder (GSR, Sociology), Lin, Nemati	Nurius (GSR, Soc
Chair	Streatfield / Mugerauer		Oshima	Dossick	Mugerauer ®	Dossick	Mugerauer	Purcell	Mugerauer	Manzo	Born	McLaren	Migliaccio	
Committee Formed	21-Feb-06		23-Feb-11	12-Sep-11	20-Nov-09	19-Sep-11	10-May-11	2-Jun-11	7-Jun-11	16-Oct-12	19-Apr-11	29-Feb-12	1-Oct-12	
Research Meth	UrbDP 591; UrbDP 598E	Arch 598E;	Hist 595; Arch 597	UrbDP 520; Arch 598E	Anth 551; UrbDP 519	Com 513; INSC 572	UrbDP 519; BE 600	UrbDP 519; Eng 562	Anth 551; UrbDP 519	EDPSY 588 & 594; SocWk 585	Com 513; UrbDP 519	Arch 598E; BE 600	UrbDP 519; Soc 504	
553	_	60S	60S	60S	60S	S11	S11	S11	S11	S11	S11	S11	S11	
552	W04	60M	W08	60M	60M	W10	W10	W10	W10	W10	W10	W11	W11	
551	A03	A0.7	A04	60M	60M	A09	A09	S08	A09	A09	A09	A10	A10	
550	7	ш	7	7	~	~	7	~	7	7	7	7	7	
Track	НТК	НТВ	НТВ	Comp	Sus	Comp	НТВ	НТВ	SUS	SUS	SUS	НТВ	Comp	
Yr Adm	A03	A07	A07	A08	A08	A09	A09	A09	A09	A09	A09	A10	A10	
Name	J. Watson	Amy Dobrowolsky	Alexander Tulinsky	Hoda Homayouni	Chiaoyen (Jewel) Yang	Anne Anderson	Cheryl Gilge	Keith Harris	Jiawen Hu	Julie Kriegh	Shannon Tyman	Daniel E. Coslett	Shalini Priyadarshini	

Jonathan Childer s	A11	Sus	ш	A11 W12		S13	Biost 512; UrbDP 519							Form Committee
Aran Osborne	A11	Sus	ш	A11	W12	S13	ш							Form Committee
James Thompson	A11	НТК	~	A11 W12		S13	Com 501; UrbDP 592	23-May-13	Anderson + Purcell	Herrenkohl (GSR, Education), Robertson	7-Nov-13			Resear ch Proposal
Eyun Jennifer Kim	A12	HTR/S US	ш	A12	W13	S13	COM 501;							
Seung Yeon Lee	A12	Sus	Е	A12		S13								
Wonil Lee	A12	Sus	Е	A12	W13	S13	Soc 505; Soc 506							
Leann Andrews	A13	Sus	ш	ш										
Naeun Gu	A13	SUS	ш	ш										
Yue Liu	A13	Comp	ш	ш										
Christopher Monson	A13	Sus	ш	ш										
Valerie Segrest	A13	sus	ш	ш										
Holly Taylor	A13	НТВ	ш	ш										

КЕҮ

i = completed
 i = incomplete
 E = currently enrolled
 a = reading committee member

Name	Year	Track	550	551 5	552	553	Research ( Meth	Com mittee Formed	Chair	Members	General Fxam	РЬС	Research Proposal	Reading Comm	Final Fxam	Grad	Yrs/ Qtrs to Degree	s to
Rahman Azari Najafabadi	A08	Sus	~	1 60M	60M	ر 60s	UrbDP 519; Soc 506	10-May-10	Kim®	Herting (GSR, Nursing), Daniali®, Peña, Schaufelberger®	16-Mar-11	18-Mar-11	21-Nov-11	4-Apr-13	4-Jun-13	S13	5 Υ / 15 (	σ
Kuangting Huang	A05	НТК	~	A05 \	W06	s06	GEOG 505; GEOG 600	23-Jan-08	Abramson ® / Hou®	Whiting (GSR, Poli Sci)® , Chan (Geog)®	29-May-08	13-Jun-08	11-Feb-09	7-Nov-11	6-Jan-12	S12	6 Y / 18 Q	Ø
Shu-Mei Huang	A07	Sus	~	A07 V	W08	60S	UrbDP 600; UrbDP 519	4-Nov-09	Mugerauer ®	Lawson® (GSR, Geog), Chalana®, Hou®	19-May-10	11-Jun-10	6-Jul-10	28-Sep-12	20-Nov-12	A12	5 Y / 13 (	Ø
Namhun Lee	W04	Comp	~	A04 \	W04	s05 <sup>T</sup>	TC 517; CM 598	19-Oct-05	Rojas®	Furness® (GSR, Ind E), Dossick®, Schaufelberger®	17-May-06	90-1un-06	approved	19-Oct-05	13-Jul-09	60S	5 Y / 16 Q	σ
Kuei-Hsien Liao	A06	Sus	7	A06 \	W08	S07	Geog 460; UrbDP 422	7-May-08	Alberti / Mugerauer	Naiman (GSR, Fisheries), Konrad (USGS)	6-Nov-08	12-Dec-08	approved	13-Apr-12	22-May-12	S12	6 Y/ 18	18 Q
Joshua Miller	A05	НТВ	7	A05 \	W06	soe L	UrbDP 600; Anth 536	15-Jun-07	Mugerauer	Hoffman® (GSR, Anth), Huber®, Tweedie® (Comp Lit)	7-Dec-07	14-Dec-07	approved	10-Apr-08	14-Jun-10	S10	4 Y / 12	Ø
Paula Patterson	A03	НТВ	7	A03 \	W04	S05	Arch 600; CLit 599	4-Apr-06	McLaren®	Searle® (GSR, Engl), Anderson, Mugerauer®, Perez Gomez (McGill)	31-Jul-06	18-Aug-06	approved	28-Apr-09	5-Jun-09	Su09	6 Y / 16 (	Ø
Ashish Nangia	A05	НТВ	7	A05 \	W06	S05 F	Paris work; Hist 530	28-Oct-05	Prakash	Yang® (GSR), Anderson®, Clausen, McLaren, Mugerauer®	29-May-06	9-Jun-06	approved	6-Dec-07	6-Jun-08	S08	3 Y / 9 I	Ø
Julie Poncelet	A05	Sus	7	A05 \	W06	soe <sup>L</sup>	UrbDP 519; EdPsy 501	11-Feb-08	Sutton®	Evans-Campbell (GSR, Soc W), Kemp® (Soc W), Hou®	22-May-08	13-Jun-08	6-Aug-09	13-Jun-12	14-Nov-13	A13	8 Y / 24	Ø
Jayde Roberts	A04	НТВ	7	A04 \	W05		UrbDP 519; Anth 600	10-Feb-06	Mugerauer ®	Keyes® (GSR, Anth), Callahan® (Int St), Prakash®	16-Oct-06	12/15/06; officially A06	approved	6-Oct-09	25-May-11	S11	7 Y / 21	Ø
F. Ozge Sade Mete	A06	НТВ	7	A06 \	W08	S07	Geog 425; Arch 600	2-Oct-08	McLaren®	Kasaba (GSR, Intl Stds)®, Prakash®, Mugerauer®	3-Jun-09	12-Jun-09	28-Jun-09	12-Feb-12	31-May-12	Su 12	6 Y / 19	Ø
Jeong Wook Son	S07	Comp	7	A07 V	W08	s07	CS&SS 527; CS&SS 567	1-Apr-09	Rojas®	Furness (GSR, Engineering), Dossick®, Schaufelberger®	1-Sep-09	18-Dec-09	16-Nov-10	19-Nov-10	4-May-11	S11	4 Y / 12 Q	σ
Tyler Sprague	A08	нтк	~	V 60M	60M	808	Arch 597; Arch 598E	8-Feb-10	Anderson®	Hevly® (GSR, History), Clausen®, Ochsner®	7-Jun-10	11-Jun-10	10/?/2010	23-Oct-12	12-Mar-13	W13	5 Y / 17 Q	σ
Nanching Tai	A04	Sus	7	A04 \	W05	S05	Arch 588; DXARTS 411	21-Mar-07	Inanici®	Palmer (GSR, Psych), Ching®, Hou®	20-Sep-07	14-Dec-07	approved	22-Oct-08	2-Apr-10	S10	6 Y / 18	Ø
Kevin Van Den Wymelenberg	A06	Sus	7	A06 \	W08	so7 E	EdPsy 490; EdPsy 591	13-Mar-09	Inanici®	Johnson (GSR, Public Health)®, Loveland®, J.H. Heerwagen (Heerwagen & Assoc.)®	17-Jul-09	21-Aug-09	24-May-10	29-Feb-12	20-Jun-12	Su 12	6 Y / 19	σ
Meriwether Wilson	A04	Sus	7	A04 \	W05	806 C	UrbDP 519; Ocean 452; UrbDP 600	25-Feb-06	Klinger® (Marine) / Mugerauer ®	Bitz (GSR Atmos Sci), Rottle®	29-May-06	90-Jun-06	approved	17-Oct-08	29-Sep-09	A09	5 Y / 16 Q	σ
Ken Yocom	A03	Sus	~	A03 \	W04	soe	UrbDP 591; UrbDP 592	21-Dec-04	Ë	Zumbrunnen (GSR, Geog), Findlay® (Hist), Mugerauer®	10-May-05	9-Jun-05	approved	21-Dec-04	17-Nov-06	W07	4 Y / 14 Q	σ

KEY V = completed @= Reading committee member

# Appendix G: Student Placement

- Rahman Azari Assistant Professor (tenure track) at University of Texas, San Antonio
- Kuangting Huang Assistant Professor (tenure track) at Chinese Culture University, Taipei, Taiwan
- Shu-Mei Huang
   Assistant Professor at Chinese Culture University, Department of Architecture and Urban
   Design
- Namhun Lee
   Assistant Professor (tenure track) at Central Connecticut State University
- Kuei-Hsien Liao
   Assistant Professor (tenure track) at Chinese University of Hong Kong
- Joshua Miller
   Bike Program Manager at Bicycle Alliance of Washington
- Paula Patterson
   Principal, BKNYdesign
- Ashish Nangia ENSA-V Ecole Nationale Supérieure d'Architecture de Versailles
- Julie Poncelet Adjunct faculty, Columbia University School of International and Public Affairs (SIPA)
  Javde Roberts
  - Lecturer (tenure track) at University of Tasmania, Australia
- F. Ozge Sade Mete
   Lecturer, Bellevue Community College
- JeongWook Son Assistant Professor (tenure track) at Ewha Womans University Department of Architectural Engineering
- Tyler Sprague Assistant Professor (tenure track) at Univ. of Washington Department of Architecture
  Nanching Tai
- Assistant Professor (tenure track) at Tamkang University Department of Architecture
- Kevin Van Den Wymelenberg Assistant Professor (tenure track) at University of Idaho Department of Architecture Director, Integrated Design Lab
- Meriwether Wilson Lecturer (tenure track) at University of Edinburgh School of Geosciences
- Ken Yocom Assistant Professor (tenure track) at University of Washington Department of Landscape Architecture

# Appendix H: University Exit Surveys

Summer 2006–Spring 2007 Summer 2007–Spring 2008 [no grads 2008–2009] Summer 2009–Spring 2010 Summer 2010–Spring 2011 Summer 2011–Spring 2012

Summer 2012–Spring 2013

Exit Questionnaire Summer 2006 - Spring Summer 2006 - Spring Ph.D Students in Built Environment (	g 2007		ort)			
Built Environment	Acaden		School/	College	Unive	ersity
Average Ratings (scale of 1 to 5, 5 being highest)	Average	St. Dev	Average	St. Dev	Average	St. Dev
Rating of departmental academic standards	N/A *	N/A *	N/A *	N/A *	4.3	0.77
Response of recent developments or trends	N/A *	N/A *	N/A *	N/A *	4.4	0.77
Adequacy of research and professional training	N/A *	N/A *	N/A *	N/A *	4.2	0.85
Adequacy of space, facilities, and equipment	N/A *	N/A *	N/A *	N/A *	3.72	1.1
Satisfaction with supervision and/or guidance	N/A *	N/A *	N/A *	N/A *	4.21	0.97
Confidence in preparation for teaching	N/A *	N/A *	N/A *	N/A *	3.71	1.11
Adequacy of teaching preparation for students	N/A *	N/A *	N/A *	N/A *	4.13	0.82
Quality of the faculty	N/A *	N/A *	N/A *	N/A *	4.49	0.7
Satisfaction with career mentoring	N/A *	N/A *	N/A *	N/A *	3.84	1.07
Confidence as an independent scholar/researcher in field	N/A *	N/A *	N/A *	N/A *	4.18	0.73
Overall quality of the program	N/A *	N/A *	N/A *	N/A *	4.3	0.68
Percent who had a paper published in a journal while in the program					66.33%	
Percent who are publishing based on thesis or dissertation					90.93%	
Average Number of Papers Published	N/A *		N/A *		3.1	
					40.040	
Percent incurring no debt to finance education					46.34%	
Under \$5,000					5.35%	
\$5,000-10,000					7.72%	
\$10,001-20,000					10.69%	<u> </u>
Above \$20,000					16.04%	
Teaching Experience at U of W						
Served as grader and/or tutor					44.36%	
Taught laboratory/quiz sections					56.04%	
Taught own class					28.51%	
Other					13.86%	
Immediate Post-graduation Plans						
Further graduate study					1.01%	
Postdoctoral fellowship or research associateship					32.86%	
Governmental employment					3.65%	
Self-employment					3.04%	
Business/industrial employment					19.68%	
Research University					15.82%	
Comprehensive university or college					7.51%	
Liberal arts college					5.27%	
Community college					1.62%	
School (K-12)					2.64%	
Not seeking employment or further formal education					0.81%	
Other					6.09%	
					70 7 1	
Percentage having secured a position					70.72%	<u> </u>
Secured position preference (first choice)					89.11%	<u> </u>
Secured position preference (second choice)					10.32%	

Secure	d position preference (third choice)					0.57%	
Percent	tage indicating the position is in Washington State					44.61%	
Numbe	er of Respondents	1		1		488	
*Notes:							
1.	All figures are calculated based on the number of responses received, not the nu	umber of grad	duates for t	he reporting	period.		
2.	Standard deviation (St. Dev) is calculated using the population method.						
3.	Columns with values of "N/A" are shown when the number of total respondents in	s equal to or	e (1).				
						Results as o	f 5/7/2013

Exit Questionnaire Summ Summer 2007 - Spring Ph.D Students in Built Environment (	g 2008	•	ort)			
Built Environment	Acaden		School/	College	Unive	ersity
Average Ratings (scale of 1 to 5, 5 being highest)	Average	St. Dev	Average	St. Dev	Average	St. Dev
Rating of departmental academic standards	N/A *	N/A *	N/A *	N/A *	4.24	0.77
Response of recent developments or trends	N/A *	N/A *	N/A *	N/A *	4.3	0.83
Adequacy of research and professional training	N/A *	N/A *	N/A *	N/A *	4.13	0.87
Adequacy of space, facilities, and equipment	N/A *	N/A *	N/A *	N/A *	3.63	1.1
Satisfaction with supervision and/or guidance	N/A *	N/A *	N/A *	N/A *	4.1	1.05
Confidence in preparation for teaching	N/A *	N/A *	N/A *	N/A *	3.6	1.09
Adequacy of teaching preparation for students	N/A *	N/A *	N/A *	N/A *	4.06	0.87
Quality of the faculty	N/A *	N/A *	N/A *	N/A *	4.43	0.65
Satisfaction with career mentoring	N/A *	N/A *	N/A *	N/A *	3.7	1.17
Confidence as an independent scholar/researcher in field	N/A *	N/A *	N/A *	N/A *	4.1	0.75
Overall quality of the program	N/A *	N/A *	N/A *	N/A *	4.15	0.74
Percent who had a paper published in a journal while in the program					68.14%	
Percent who are publishing based on thesis or dissertation		 		 	92.25%	<u> </u>
Average Number of Papers Published	N/A *		N/A *		3.4	
	,	,	,	,	011	
Percent incurring no debt to finance education					52.17%	
Under \$5,000					8.47%	
\$5,000-10,000					6.97%	
\$10,001-20,000					7.72%	
Above \$20,000					15.07%	
Teaching Experience at U of W						
Served as grader and/or tutor					45.95%	
Taught laboratory/quiz sections					60.08%	
Taught own class					35.97%	
Other					12.81%	
Immediate Post-graduation Plans						
Further graduate study					0.98%	
Postdoctoral fellowship or research associateship					35.49%	<u> </u>
Governmental employment					3.73%	
Self-employment					1.57%	
Business/industrial employment		i		i	20.59%	
Research University		i		i	13.73%	
Comprehensive university or college					7.65%	
Liberal arts college		[		[	4.71%	
Community college					1.76%	
School (K-12)					2.35%	
Not seeking employment or further formal education		<u> </u>		<u> </u>	0.98%	
Other					6.47%	
Percentage having secured a position		ļ		ļ	72.50%	
Secured position preference (first choice)					83.55%	
Secured position preference (second choice)					14.10%	

Secured position preference (third choice)					2.35%	
Percentage indicating the position is in Washington State					40.31%	
Number of Respondents	1		1		517	
*Notes:						
1. All figures are calculated based on the number of responses received, not the n	umber of grad	duates for th	ne reporting	period.		
2. Standard deviation (St. Dev) is calculated using the population method.						
3. Columns with values of "N/A" are shown when the number of total respondents	is equal to or	ie (1).				
					Results as o	f 5/7/2013

Exit Questionnaire Sum Summer 2009 - Sprin	ng 2010	•	t)			
Ph.D Students in Built Environment Built Environment	Academ		ort) School/(	College	Unive	ersity
Average Ratings (scale of 1 to 5, 5 being highest)	Average	St. Dev	Average	St. Dev	Average	St. Dev
Rating of departmental academic standards	4.75		4.75	<u> </u>	4.36	0.73
Response of recent developments or trends	4.75	0.5	4.75	0.5	4.43	0.76
Adequacy of research and professional training	5	0	5	0	4.28	0.89
Adequacy of space, facilities, and equipment	5	0	5	0	3.95	1.07
Satisfaction with supervision and/or guidance	4.75	0.5	4.75	0.5	4.26	0.96
Confidence in preparation for teaching	5	0	5	0	3.8	1.06
Adequacy of teaching preparation for students	5	0	5	0	4.19	0.83
Quality of the faculty	4.75	0.5	4.75	0.5	4.56	0.65
Satisfaction with career mentoring	4.75	0.5	4.75	0.5	3.95	1.08
Confidence as an independent scholar/researcher in field	4.75	0.5	4.75	0.5	4.23	0.73
Overall quality of the program	4.75	0.5	4.75	0.5	4.35	0.71
						·
Percent who had a paper published in a journal while in the program	50.00%		50.00%		67.41%	
Percent who are publishing based on thesis or dissertation	100.00%		100.00%		95.04%	
Average Number of Papers Published	1.3		2.5		3.1	
						·
Percent incurring no debt to finance education	25.00%		25.00%		52.83%	
Under \$5,000	0.00%		0.00%		8.02%	
\$5,000-10,000	25.00%		25.00%		8.02%	
\$10,001-20,000	0.00%		0.00%		7.55%	
Above \$20,000	25.00%		25.00%		16.19%	
Teaching Experience at U of W						
Served as grader and/or tutor	75.00%		75.00%		45.75%	
Taught laboratory/quiz sections	75.00%		75.00%	<u> </u>	61.95%	
Taught own class	50.00%		50.00%	<u> </u>	35.22%	
Other	50.00%		50.00%		16.51%	
Immediate Post-graduation Plans				•		
Further graduate study	0.00%		0.00%		2.88%	
Postdoctoral fellowship or research associateship	0.00%		0.00%		40.27%	
Governmental employment	0.00%		0.00%		5.25%	
Self-employment	0.00%		0.00%		2.54%	
Business/industrial employment	0.00%		0.00%		16.41%	
Research University	25.00%		25.00%		17.60%	
Comprehensive university or college	75.00%		75.00%		6.09%	
Liberal arts college	0.00%		0.00%		0.34%	
Community college	0.00%		0.00%		0.85%	
School (K-12)	0.00%		0.00%		1.69%	
Not seeking employment or further formal education	0.00%		0.00%		0.85%	
Other	0.00%		0.00%		5.25%	
Percentage having secured a position	25.00%		25.00%		63.96%	
Secured position preference (first choice)	100.00%		100.00%	<u> </u>	85.02%	
Secured position preference (second choice)	0.00%		0.00%		12.08%	——I

Secure	d position preference (third choice)	0.00%	0.00%	2.90%				
Percent	tage indicating the position is in Washington State	0.00%	0.00%	42.62%				
Numbe	r of Respondents	4	4	608				
*Notes:								
1.	All figures are calculated based on the number of responses received, not the	ne number of graduates f	or the reporting period.					
2. Standard deviation (St. Dev) is calculated using the population method.								
3.	Columns with values of "N/A" are shown when the number of total responde	ents is equal to one (1).						
				Results as of 5/7/2013				

Exit Questionnaire Sum Summer 2010 - Sprin	g 2011					
Ph.D Students in Built Environment Built Environment	(Major-spe Academ		ort) School/(	College	Unive	rsity
Average Ratings (scale of 1 to 5, 5 being highest)	Average	St Dev	Average			-
Rating of departmental academic standards	4.5	0.71	4.5	0.71	4.37	0.72
Response of recent developments or trends	4.5	0.71	4.5	0.71	4.37	0.81
Adequacy of research and professional training	4.5	0.71	4.5	0.71	4.2	0.92
Adequacy of space, facilities, and equipment	2	0	2	0	3.94	1.01
Satisfaction with supervision and/or guidance	5	0	5	0	4.23	0.97
Confidence in preparation for teaching	3	0	3	0	3.68	1.09
Adequacy of teaching preparation for students	3.5	0.71	3.5	0.71	4.14	0.87
Quality of the faculty	4.5	0.71	4.5	0.71	4.51	0.67
Satisfaction with career mentoring	5	0	5	0	3.83	1.16
Confidence as an independent scholar/researcher in field	5	0	5	0	4.14	0.75
Overall quality of the program	4.5	0.71	4.5	0.71	4.29	0.75
		0.7.1		0		
Percent who had a paper published in a journal while in the program	50.00%		50.00%		72.93%	
Percent who are publishing based on thesis or dissertation	100.00%		100.00%		95.14%	
Average Number of Papers Published	2		4		2.9	
	50.000/		50.000/		50.0494	
Percent incurring no debt to finance education	50.00%		50.00%		52.24%	
Under \$5,000	0.00%		0.00%		5.82%	
\$5,000-10,000	0.00%		0.00%		8.96%	
\$10,001-20,000	0.00%		0.00%		6.87%	
Above \$20,000 Teaching Experience at U of W	50.00%		50.00%		16.27%	
Served as grader and/or tutor	50.00%		50.00%		44.18%	
Taught laboratory/quiz sections	0.00%		0.00%		61.19%	
Taught own class	50.00%		50.00%		32.99%	
Other	50.00%		50.00%		15.07%	
Immediate Post-graduation Plans						
Further graduate study	0.00%		0.00%		1.67%	
Postdoctoral fellowship or research associateship	0.00%		0.00%		45.15%	
Governmental employment	0.00%		0.00%		4.35%	
Self-employment	0.00%		0.00%		2.17%	
Business/industrial employment	0.00%		0.00%		17.39%	
Research University	100.00%		100.00%		16.22%	
Comprehensive university or college	0.00%		0.00%		5.69%	
Liberal arts college	0.00%		0.00%		0.00%	
Community college	0.00%		0.00%		1.17%	
School (K-12)	0.00%		0.00%		0.17%	
Not seeking employment or further formal education	0.00%		0.00%		1.34%	
Other	0.00%		0.00%		4.68%	
Percentage having secured a position	0.00%		0.00%		57.12%	
Secured position preference (first choice)	0.00%		0.00%		82.44%	
Secured position preference (second choice)	0.00%		0.00%		15.12%	

Secureo	d position preference (third choice)	0.00%	0.00%	2.44%				
Percent	age indicating the position is in Washington State	0.00%	0.00%	38.35%				
Numbe	r of Respondents	2	2	632				
*Notes:								
1.	All figures are calculated based on the number of responses received, not the	number of graduat	tes for the reporting pe	riod.				
2. Standard deviation (St. Dev) is calculated using the population method.								
3.	Columns with values of "N/A" are shown when the number of total respondent	s is equal to one (1	۱).					
				Results as of 5/7/	/2013			

Exit Questionnaire Sur Summer 2011 - Spr Ph D Studente in Ruitt Environmen	ng 2012	•	ort)			
Ph.D Students in Built Environmen Built Environment	Academ		ort) School/(	College	Unive	ersity
Average Ratings (scale of 1 to 5, 5 being highest)	Average	St. Dev	Average	St. Dev	Average	St. Dev
Rating of departmental academic standards	5		5	0	4.37	0.74
Response of recent developments or trends	5	0	5	0	4.35	0.82
Adequacy of research and professional training	4.33	0.58	4.33	0.58	4.22	0.9
Adequacy of space, facilities, and equipment	3	1	3	1	3.99	0.98
Satisfaction with supervision and/or guidance	4.67	0.58	4.67	0.58	4.25	0.98
Confidence in preparation for teaching	4	1	4	1	3.72	1.09
Adequacy of teaching preparation for students	4.67	0.58	4.67	0.58	4.16	0.85
Quality of the faculty	5	0	5	0	4.52	0.68
Satisfaction with career mentoring	3.67	1.53	3.67	1.53	3.87	1.12
Confidence as an independent scholar/researcher in field	4.67	0.58	4.67	0.58	4.21	0.73
Overall quality of the program	4.33	0.58	4.33	0.58	4.32	0.75
Percent who had a paper published in a journal while in the program	n 0.00%		0.00%		68.54%	
Percent who are publishing based on thesis or dissertation	100.00%		100.00%		95.21%	
Average Number of Papers Published	-		0		3.3	
Percent incurring no debt to finance education	66.67%		66.67%		43.44%	
Under \$5,000	0.00%		0.00%		6.91%	
\$5,000-10,000	0.00%		0.00%		8.74%	
\$10,001-20,000	0.00%		0.00%		5.92%	
Above \$20,000	33.33%		33.33%		12.98%	
Teaching Experience at U of W	_			-		
Served as grader and/or tutor	100.00%		100.00%		43.58%	
Taught laboratory/quiz sections	66.67%		66.67%		52.61%	
Taught own class	33.33%		33.33%		29.62%	
Other	0.00%		0.00%	i	10.16%	
Immediate Post-graduation Plans						
Further graduate study	0.00%		0.00%		1.27%	
Postdoctoral fellowship or research associateship	0.00%		0.00%		39.56%	
Governmental employment	0.00%		0.00%		4.72%	
Self-employment	0.00%		0.00%		1.63%	
Business/industrial employment	0.00%		0.00%		19.96%	
Research University	100.00%		100.00%		16.70%	
Comprehensive university or college	0.00%		0.00%		3.45%	
Liberal arts college	0.00%		0.00%		0.00%	
Community college	0.00%		0.00%		2.54%	
School (K-12)	0.00%		0.00%		1.81%	
Not seeking employment or further formal education	0.00%		0.00%		1.27%	
Other	0.00%		0.00%		7.08%	
Percentage having secured a position	0.00%		0.00%		61.27%	
Secured position preference (first choice)	0.00%		0.00%		84.14%	
Secured position preference (second choice)	0.00%		0.00%	İ	14.32%	

Secure	d position preference (third choice)	100.00%	100.00%	1.53%		
Percent	tage indicating the position is in Washington State	0.00%	0.00%	38.79%		
Number of Respondents			3	571		
*Notes:						
1.	All figures are calculated based on the number of responses received, not the number of graduates for the reporting period.					
2.	Standard deviation (St. Dev) is calculated using the population method.					
3.	3. Columns with values of "N/A" are shown when the number of total respondents is equal to one (1).					
				Results as of 5/7/2013		

Exit Questionnaire Sum Summer 2012 - Sprin	g 2013					
Ph.D Students	Academ	nic Unit	School/0	College	Unive	ersity
Average Ratings (scale of 1 to 5, 5 being highest)	Average	St. Dev	Average	St. Dev	Average	St. Dev
Rating of departmental academic standards	4.8	0.45	4.8	<u> </u>	4.41	0.76
Response of recent developments or trends	4.4	0.55	4.4	0.55	4.37	0.8
Adequacy of research and professional training	3.6	1.14	3.6	1.14	4.2	0.93
Adequacy of space, facilities, and equipment	3.4	1.34	3.4	1.34	3.95	1.02
Satisfaction with supervision and/or guidance	4.6	0.55	4.6	0.55	4.29	0.94
Confidence in preparation for teaching	4	1	4	1	3.8	1.04
Adequacy of teaching preparation for students	4.4	0.55	4.4	0.55	4.2	0.82
Quality of the faculty	4.6		4.6	0.55	4.58	0.66
Satisfaction with career mentoring	4	<u> </u>	4	0.71	3.91	1.1
Confidence as an independent scholar/researcher in field	4.6		4.6	0.55	4.22	0.79
Overall quality of the program	4.6		4.6		4.34	0.7
		0.00		0.00	1	0.70
Percent who had a paper published in a journal while in the program	60.00%		60.00%		71.85%	
Percent who are publishing based on thesis or dissertation	100.00%		100.00%		94.57%	
Average Number of Papers Published	2		2		3.1	
Percent incurring no debt to finance education	80.00%		80.00%		46.17%	
Under \$5,000	0.00%		0.00%		5.15%	
\$5,000-10,000	0.00%		0.00%		6.86%	
\$10,001-20,000	0.00%	<u> </u>	0.00%		5.54%	
Above \$20,000	20.00%		20.00%		5.01%	
Teaching Experience at U of W						
Served as grader and/or tutor	40.00%		40.00%		42.22%	
Taught laboratory/quiz sections	40.00%		40.00%		57.12%	
Taught own class	40.00%		40.00%		31.66%	
Other	20.00%		20.00%		16.23%	
Immediate Post-graduation Plans						
Further graduate study	0.00%		0.00%		2.25%	
Postdoctoral fellowship or research associateship	0.00%	<u> </u>	0.00%		41.22%	
Governmental employment	0.00%	<u> </u>	0.00%		3.06%	
Self-employment	0.00%		0.00%		1.93%	
Business/industrial employment	0.00%		0.00%		18.36%	
Research University	40.00%		40.00%		18.68%	
Comprehensive university or college	40.00%				4.35%	
Liberal arts college	0.00%	<u> </u>	40.00% 0.00%		0.00%	
Community college	0.00%	<u> </u>	0.00%		1.93%	
School (K-12)					0.81%	
Not seeking employment or further formal education	0.00%		0.00%		1.45%	
	ii	i			ii	
Other	20.00%		20.00%		5.96%	
Percentage having secured a position	40.00%		40.00%		57.97%	
Secured position preference (first choice)	100.00%		100.00%	i — –	83.41%	
Secured position preference (second choice)	0.00%		0.00%		14.63%	
Secured position preference (third choice)	0.00%		0.00%		1.95%	
Percentage indicating the position is in Washington State	0.00%	<u> </u>	0.00%		43.92%	
				•	-	

\*Notes:

- 1. All figures are calculated based on the number of responses received, not the number of graduates for the reporting period.
- 2. Standard deviation (St. Dev) is calculated using the population method.
- 3. Columns with values of "N/A" are shown when the number of total respondents is equal to one (1).

Results as of 1/17/2014

# Appendix I: Sample of Faculty Sponsor-Mentor Form for Admissions

Applicant:	OVERALL Ranking: This student ranks # of the students I         have been asked to review for the program         OR         I would rank the applicant high medium low priority				
	for the PhD program				
Faculty Member:	<u>MY Ranking</u> : This student is # of for my personal research interests <u>OR</u> I would rank the applicanthighmediumlow priority for my own research interests				

As you know, decisions about admission to the Ph.D. in the Built Environment involve not only students' qualifications, but their fit with the program, which includes an assessment of the level of faculty agreement in each case to mentor and support the students—as indicated by gradations of willingness to direct their work and include them in funded research. This is especially important since as a faculty we are making a collective commitment to generate more support funds.

This form is crucial in assessing the levels of support that applying students have. The Steering Committee is sending this form to faculty in the applicants' areas of interest. As the next step in the process, please fill out and return this form to Neile Graham, either by email response or in hard copy. We would love to have this as soon as you possibly can, by Monday, March 4 if possible. Applicant files (still on paper only) are available in Neile's office in Gould 410L. Thank you!

Degree of willingness to mentor applicant:

- \_\_\_\_\_ I would agree to chair the student's Dissertation Committee if asked
- I would agree to serve on the student's Dissertation Committee if asked
- \_\_\_\_\_ I agree to work positively with the student in my area of expertise, though would not participate on the student's Dissertation Committee
- \_\_\_\_\_ I prefer to interact with the student on same basis as the general student cohort
- \_\_\_\_\_ I am not willing to work with or take on this student given my commitments, etc.

Degree of willingness/ability to support applicant:

- I would be willing to support this applicant with funds from a grant/contract in their second year (2014–2015 for this cohort that starts in 2013–2014), and my best guess as to how likely it might be that I would have such funding is
  - \_\_\_\_\_definite \_\_\_\_\_very likely \_\_\_\_\_likely \_\_\_\_\_possible/hopeful
- \_\_\_\_\_ I would agree to include the student immediately in funded research projects as an RA and will have funds in 2013–2014 to support an RA
- I would agree to recommend the student for a TA in a regularly funded departmental TA position for a course I regularly teach that has such a position

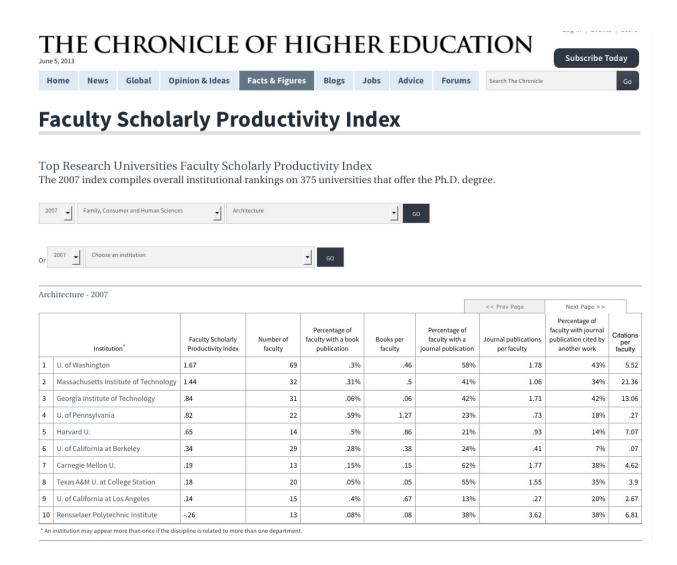
Please tell us which other CBE faculty in the student's intended area of interest you think we should contact as potential mentors/supporters (faculty consulted for applicants are listed on the chart):

Please include any notes about this applicant that you would like to convey to the Steering Committee doing admissions for the program.

Appendix J: Chronicle of Higher Education Screen Saves

Chronicle of Higher Education Facts & Figures: Top Research Universities Faculty Scholarly Production Index

For the full information see <http://chronicle.com/stats/productivity/page.php?bycat=true& primary-234& secondary=56& year=2007#>



#### How The Index Works

The index examines faculty members who are listed on a Ph.D. program's Web sites, and includes a total of 217,254 names. A professor listed in both history and American studies would be counted twice. But at the next level of aggregation (the humanities in this case), the professor would be counted only once. The index creators call this "de-duplication." The total number of actual faculty members rated by the index is 164,843.

The productivity of each faculty member is measured, although the data are aggregated before being published. Faculty members can be judged on as many as five factors, depending on the most important variables in the given discipline: books published; journal publications; citations of journal articles; federal-grant dollars awarded; and honors and awards.

For each discipline, Academic Analytics assigns a weight to each variable. Publications, which include journal articles, citations of those articles, and in many cases, books, count as 60 points out of 100. Books are included in six of the eleven broad fields: Business; Education; Family, Consumer and Human Sciences; Health Professions Sciences; Humanities; and Social and Behavioral Sciences but not in Agricultural Sciences; Biological and Biomedical Sciences; Engineering; Natural Resources and Conservation; and Physical and Mathematical Sciences Books that were published from 2002 to 2006 were recorded using Baker and Taylor's database. When books are included, their weight is five times that of journal articles for the Humanities and three times that of a journal article in other broad fields. Journal articles are counted for the years 2004, 2005, and 2006. Citation counts cover a four year span so refer to citations to articles published for the years 2003, 2004, 2005 and 2006. The index uses Scopus, an abstract-and-citation database that covers more than 15,000 peer-reviewed journals.

Grants count as 30 points out of the 100, if they meet a threshold of importance in a particular discipline — that more than 10 percent of the programs in that discipline have received a federal grant. Grant data from 2004, 2005, and 2006 were collected from the National Institutes of Health, the National Science Foundation, the U.S. Department of Education, the National Endowment for the Humanities, and the U.S. Department of Agriculture, NOAA, and from three programs in the Department of Energy.

Awards and honors count as 10 points out of 100, as long as more than 10 percent of the programs in the discipline have received awards. Data are collected from the Web sites of 357 organizations that grant awards and honors and are matched to names and programs. Awards considered more prestigious are given more weight than others. For example, most awards, like Fulbrights, are counted only if they were awarded between 2002 and 2006. But a Nobel Prize can be counted in the 2006-07 index if it was awarded within the past 50 years.

If one or more variables are not used in the calculation of faculty productivity, that part of the equation is removed and the point scale reduced accordingly. So if honors are not included, the total possible score is reduced to 90 from 100. Institutions that pay for the data have the ability to reweight the variables in any category, according to their preferences. Starting with FSP 2006-07, subscribers to Academic Analytics will also have the option to obtain the complete dataset for disciplines of interest to them, so they can use the raw data as they please. For more information about the data, contact Academic Analytics.

The faculty's scholarly productivity in each program is expressed as a z-score, a statistical measure (in standard deviation units) that reveals how far and in what direction a value is from the mean. The z-score allows the performance of programs to be compared across disciplines. A z-score of zero indicates that the program is at the national mean for the discipline; a z-score of 1 indicates that the program is one standard deviation unit higher than the national mean.

# Appendix K: Departments providing research methodology classes

Range of Units in which B.E. students have successfully completed research methods courses:

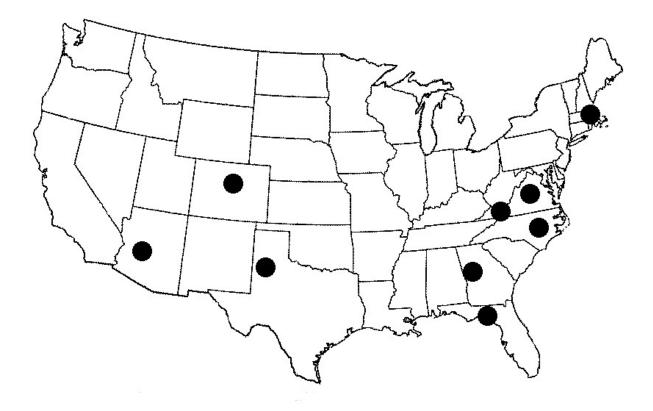
- Anthropology
- Architecture
- Biostatistics
- Center for Statistics and the Social Sciences
- Communications
- Comparative Literature
- Construction Management
- Digital Arts and Experiential Media
- Educational Psychology
- English
- Geography
- History
- Human Centered Design and Engineering
- Information Science
- Oceanography
- Social Work
- Sociology
- Urban Design and Planning

# Appendix L: Faculty with Ph.D.s

Faculty with Ph.D.s	1994-1995	2001-2002	2007-2008	2012-2013
Architecture	3 of 28	7 of 28	10 of 30 (33.3%)	15 of 37 (40.5%)
	(10.7%)	(25%)		
Construction Management	1 of 8 (12.5%)	6 of 8 (75%)	8 of 8 (100%)	9 of 9 (100%)
Landscape Architecture	1 of 7 (14.2%)	3 of 7 (42.8)	4 of  9 (44.4%)	5 of 10 (50%)
Urban Design and Planning	13 of 16 (81.2%)	14 of 15 (93.3%)	15 of 18 83.3(%)	17 of 19 (89%)
College	18 of 59 (30.5%)	30 of 58 (51.7%)	37 of 65 (56.7%)	46 of 75 (61.3%)

Research Grants& Contracts	1994-1995	2001-2002	2007-2008	2012–2013
	\$371,843	\$2,282,500*	\$5,423,813	\$2,757,878

Appendix M: Map of Built Environment Doctoral Programs



# Appendix N: Program Curriculum Overview & Flow Pattern

#### Ph.D. in Built Environment College of Built Environments University of Washington, Seattle

- 1. Master's Degree required for Admission
- 2. Core Courses
- a) History, Theory, Ethics
  - The Contemporary Built Environment (3 cr)
  - Theories of Knowledge and the Built Environment (3 cr)
  - Ethics in Practice, Research, & Teaching (3 cr)
- b) Colloquium-Practicum
  - (6 quarters focusing on Research, Practice, and Teaching at 1 credit each)
- c) Research Methods and Design
  - choice of 6 hours from listed courses, including both qualitative and quantitative
- 3. Advanced Coursework in one of the 3 Fundamental Areas 30 credit hours
- Sustainable Materials & Systems
- Computational Design and Research
- History, Theory & Representation

(The courses can be either within or outside of BE)

- 4. Comprehensive Exams after completion of coursework
- 5. After Comprehensive Exams, a Research Proposal is presented and defended
- 6. Dissertation Research Project to conclude with a final Oral Defense

30 credit hours

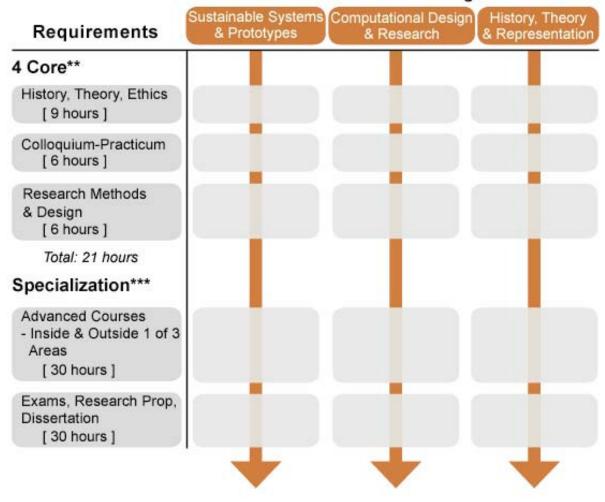
9 credit hours

6 credit hours

creart nours

21 credit units:

6 credit hours



# 3 Fundamental Areas of Knowledge & Practice:

Appendix O: Update status of responses to recommendations from the 2008-2009 program review

- 1. Update as of 2014
- 2. Responses to Review in 2009
- 3. Original Report of the Review Committee

# 1. Update as of 2014

In regard to issues needing resolution and recommendations and suggestions for change, here we follow the same format as in our Responses to Review in 2009: the following sections are preceded by numbers corresponding to the Review Committee's Report and thus also our 2009 Responses (consolidating numbering from the Report's section 5 "Issues needing resolution" and section 6 "Recommendations and Suggestions, slightly reordering some responses for the sake of non-repetition).

! See especially the update on Recommendation 12

Re 5.1 Financial Issues

5.2 Relationship between BE Ph.D. and Faculty Research

6.7, 6.8b, 6.9 Recommendations

Financial Issues—Research Funding and Student Support

A continuing problem. The gains that we have made with, for example, faculty research grants, have been more than offset by State-level budget cuts that translated into a notable reduction in the TAs departments have, by the State Legislature's law that no longer allows out-of-state students (or, of course, international students) to eventually be eligible for in-state tuition rates,

by inevitable tuition increases. <u>Graduate school support</u>, especially with <u>tuition waivers</u> is critical (for example the Top Scholar Program—without which the program would not function—and Global tuition waivers). This entire report is heavy on review of the funding-student support issues, especially the need for and efforts toward external funding.

Re 6.8 Recommendation—re CBE Indirect Cost Return funds

a) There is agreement about the idea of allocating ICR funds to support research. CBE however has only modest annual ICR funds; the distribution has been 30% to PI, 30% to PI's home department; 40% to the college—partly intended to seed future research projects. Again, this report covers our efforts to increase funded research utilizing Ph.D. students.

b & c) Dean Friedman had intended to use part of his appointment package from the provost to hire an associate dean for research. In the course of budget cuts he sacrificed this position so as to not push cutting a faculty member already here.

### Re 5.3 Structural Issues

5.4 Communication Issues

6.4 Recommendation

Accomplished. The recommendation to shift more emphasis to a written rather than an oral tradition has been taken up, but without abandoning the strong oral culture. More material has been put into a formal, explicit written format, material has been added to our web pages and periodically revised (including the specified dissertation research proposal process and details). We do continue the community interaction in person, for example with annual dedication of one or more colloquium sessions to topics such as general exams (presented by a team of faculty and students already Ph.C.)

## Re 6.1 Recommendation

Professor Vikram Prakash, one of the program's founding faculty members and currently a member of the Steering Committee served as Interim Associate Director for Autumn, 2013. Now that the college has a permanent Dean and eyeing the eventual retirement of the program director this agenda item can be taken up again.

# Re 6.2 Recommendation

Resolved. There have been positive, open, and fruitful communications between Interim Dean Schaufelberger and the program director. The Dean refreshingly is taking initiatives and seeking cooperation with many segments of the faculty regarding the need for more Ph.D. students, their opportunities to teach undergraduate classes, the upcoming capital campaign. There is every reason to think this positive communication will continue with the incoming dean.

#### Re 6.3 Recommendation

Not accomplished. Dean Friedman declined to discuss a five-year plan with the program director or steering committee, preferring unilateral leadership. In fairness, however, it should be noted that part of the recommendation assumes that the program director is involved in faculty hires, which is not the case since that is a departmental matter.

# Re 6.10 Recommendation

Accomplished and continuing, e.g. with this spring's student research and curriculum symposium.

# Re 5.3 Structural Issues

# 6.5 Recommendation

The Steering Committees and directors of both Ph.D. programs have continued various forms of investigation and again conclude that the two programs are significantly distinct and should remain so. There is no way to consolidate them; no way to realize more than minimal savings. To repeat here, for convenience, what is reported above in the heading of Part C: Issues Added at the Charge Meeting:

Relation to Interdisciplinary Urban Design and Planning Ph.D. program, also under review during 2013-2014

The question is regularly raised "why two Ph.D. programs?" Actually there aren't two in the college. The Build Environment Ph.D. is a college-wide program in the College of the Built Environment that is broadly conceived so as to be open to and inclusive of all the college's faculty. The Interdisciplinary Ph.D. in Urban Design and Planning is housed in the Graduate School, and operates with a faculty drawn from many departments across UW (including a limited number from CBE), to provide a classic planning degree. Thus the latter has the requirements and coursework that follow that planning degree format-none of which are especially relevant to the students in the B.E. program, who are pursuing different research tracks, agendas, and career trajectories. Parallel, though a few of the Interdisciplinary Ph.D. in Urban Design and Planning students occasionally take BE 552 (theories of knowledge) the BE core courses are not relevant to their specialization. The faculty of the two programs have regularly discussed the matter and reviewed offerings in order to consider possibilities of consolidating at least a course or two. For example, the Interdisciplinary Ph.D.'s Planning Theory is an extended, more rigorous version of one facet of the Planning History, Theory, and Ethics course offered in the Master's of Urban Design program-but the latter is not connected to the BE Ph.D. and does not remotely match up with any course there. Overall, through the years, the result comes out the same every time: the learning objectives of the two programs, the content of particular courses, and the research specializations are, in fact, too distinct to combine.

# Re 6.6 Recommendation

Accomplished. Faculty without Ph.D.s are encouraged to participate in dissertation research proposals and dissertation committees. Additionally, we actively work to fold junior faculty into the doctoral processes; in many cases that means "mentoring" a junior faculty member without a Ph.D. in the culture of advanced research. They are welcome and invited to participate; somehow an "urban myth" still persists that they cannot do so even while non-Ph.D. members of all departments in fact are on dissertation committees. We continue to promulgate the invitation.

Re 11 Recommendation

Occurring now with this review five years after the first

Re 12 Recommendation

Two interim requests:

a) By February 9, 2009:

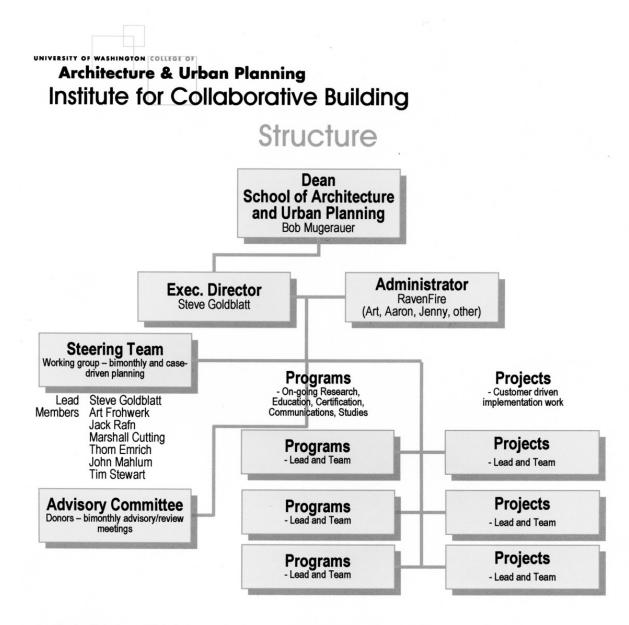
i—joint report by Dean and Director on future directions for the program (see 6.3) and ii—five-year fiscal plan in which sources are identified and strategies for approach and mechanisms for rewarding attempts and successes are developed (see 6.7, 6.8, and 6.9) —Dean Friedman declined both projects; but he did undertake several unilateral actions as indicated in this current 2013-2014 report

- b) By January 31, 2011:
- i. evidence of multiple approaches (e.g. proposals) for obtaining funding from a variety of sources; ii—at least two more Ph.D. graduates from the program.
- In regard to b-i, there has been substantial activity, though more is needed.

In regard to b-ii, we have exceeded that goal.

Details in regard to b-I -- Evidence of multiple approaches (e.g. proposals to obtaining funding from a variety of sources:

Development over three-year period of Institute for Collaborative Building (ICB). This was a long-term project bringing the college together with Capital Projects Office of the University of Washington, local construction and architectural firms, some larger corporations, and local political figures. The outcome was the participation of firms such as Rafn Construction, Howard S. Wright Construction, and Johnson Control at \$10,000 a year to establish the core which would then facilitate projects and fund research by B.E. Ph.D. students—as a first step we produced a video documenting the ICB approach in the project of the UW Speculative Technology building, thus having in hand a convincing product with which to recruit further members to join. As a second step, with the cooperation of the Regional Director of Johnson Controls, the program director visited their headquarters in Milwaukee and subsequently requested a grant of \$50,000 to fund research (the request was declined). At this point Dean Friedman cancelled all projects and dissolved the Institute. (Along the way the Steering Committee also involved faculty members Prakash and Rojas).



The Institute is a public/private organization managed within the University of Washington's College of Architecture and Urban Planning. A core staff ensures that objectives are met.

Industry, government and university members provide guidance through an Advisory Board and Steering Team. Specific project and research work is contracted to the University faculty and students, members of the Institute, and other industry experts.

Changing the way we build...



Initially, we will establish forums for industry leaders to present and discuss critical ideas. We will begin to collect benchmark data for key metrics of performance.

We will provide education in classroom and workshop settings and create a clearinghouse for members to have easy access to people and information.

Ultimately, we will acquire and design tools and introduce methods to help facilitate change.

Changing the way we build...

Director Bob Mugerauer and Interim Dean Fritz Wagner spun off ICB to work on a contract with the Port of Seattle to participate in their project to develop their Seattle, Puget Sound property, especially Pier 11. But the project was cancelled with a change in port commissioners.

Dean Friedman, joined with Dean Frumkin of the School of Public Health and Lisa Graumlich, Dean of the College of the Environment (with the support of very experienced faculty grant writers) to submit a proposal for a University of Washington Sustainability Research Network (involving a national network of partners and institutions) to NSF. The project made it to the penultimate stage of interview with NSF staff in Washington, D.C. but in the end it was not funded.

Many individual faculty proposals for grants and contracts, especially note the broad success of CM department and Brandon Born with food security.

The Program Director in collaboration with other CBE units, such as Green Futures has made applications for several projects to fund Ph.D. students, e.g. from 2009-2013 to Skanl Design (some declined, some still pending), in 2013 to the TKF Foundation for its Open Spaces Sacred Places grant (not awarded);

The Director participated with the Sound Cities Association in applying for a UW Puget Sound Institute (PSI) grant to conduct an 18-month research project on Puget Sound ecosystem service values (was not funded).

Dean Schaufelberger already has begun to fold the Ph.D. program together with the four departments and real estate program in the earliest stages of the next capital campaign. The first steps of identifying compelling student stories is underway.

The Ad Hoc Strategic Planning Committee's project of research clusters is to identify the most promising areas for wide collaboration, fund several seed projects, and then use those to leverage substantial outside funding—with Ph.D. students explicitly in mind. Underway, with themes of urbanism and resilience.

The Program Director, a Landscape Architecture faculty member, and B.E. Ph.D. students made proposals made to NIH for Healing Gardens for veterans with PTSD—declined (criticized for being more therapeutic than interventional). In the next attempt we are developing a larger proposal for DOD for outdoor therapeutic gardens, and have succeeded in the large first step of having the Commander of U.S. military facilities in the Pacific agree to support the project.

# 2.Responses to Review in 2009

To: UW Graduate School

From: Ph.D. Program in the Built Environment (non-departmental), College of the Built Environments

By: Dean Daniel Friedman, College of Built Environments Prof. Bob Mugerauer, Director Ph.D. in the Built Environment Program

Date: January 20, 2009

Response to the Report of the Review Committee

Prepared by Steven Tanimoto, Professor Computer Science and Engineering (committee chair) Kim England, Professor of Geography Thomas Hinckley, Professor of Forest Resources Charles Eastman, Professor, College of Architecture, Georgia Institute of Technology Jacques Giard, Professor, College of Design, Arizona State University University of Washington, November 2008.

The Dean of the College of Built Environments, the Director of the Built Environment Ph.D. Program, the Program faculty, staff, and students wish to thank the Review Committee, GPSS, and Graduate School staff for their thoughtful expenditure of energy and their final Report.

Our responses to the particulars of the Fifth-Year Review of the Ph.D. Program in the Built Environment follow. However, as an initial and general point, we find that:

- the perceptions and analyses of the Review Committee and GPSS are fundamentally the same as those of the Program faculty, students, and administration
- the Committee's recommendations are sensible and the Program is ready to carry them out (indeed already is doing so in several instances).

Of course, we appreciate recognition of the many positive aspects of the program, especially its fit with the University's graduate education and scholarly research, its disciplinary diversity and interdisciplinary emphasis, its successes with collaboration and expansion of faculty research agendas (shifting from a historical orientation to professional practice), the strong commitment of Dean Friedman in regard to the Program's role in contributing to the College's and University's goals, and the positive characteristics and achievements of our community of students, faculty, and staff. To turn to Issues Needing Resolution and Recommendations and Suggestions for change, the following sections are preceded by numbers corresponding to the Review Committee's Report; but we consolidate numbering from the Report's section 5 "Issues needing resolution" and section 6 "Recommendations and Suggestions," thus reordering some responses for the sake of non-repetition. The GPSS observations are not separately noted, but clearly correlate to the listed compliments and concerns—especially concerning financial resources.

Re 5.1 Financial Issues

5.2 Relationship between BE and Faculty Research

6.7, 6.8b, 6.9 Recommendations

Financial Issues—Research Funding and Student Support

Clearly the most pressing, immediate problem is more adequate financial support for the students, both in terms of the number of students supported and the duration of support during their time here. Sources of funding need to include not only internal funding from the departments, college, and university, but substantial amounts from outside sources (fellowships, research grants, contracts, donors, sponsors, etc.)

We currently are working on the following:

# Internal Funding:

More TA positions

- Departmental
  - For example, the Urban Design and Planning Department has agreed to open more of its TA slots to the Built Environment Ph.D. students
  - The Construction Management Department should have an increased number of TA positions available in the future with growth of the undergraduate degree program.
  - Landscape Architecture has very few TA positions, but faculty do commit positions to BE students.
  - Architecture provides most of the TA positions and will continue to do so. Since unfortunately they were not able to so note during the Review Committee's time here, the Department Chair and Associate Chair would like to explicitly add the following: "The Department of Architecture's involvement in the program has been significant. Professors Anderson and Prakash have been members of the program's steering committee for the past six years. Professor Anderson has taught one of the three required seminars (BE 551) also for the last six years. Of the two graduates in the program one completed work under the direction of Professor Prakash. with Professor Anderson as a committee member. In addition a number other students in the program are currently working with Department of Architecture Faculty. Finally, the Department of Architecture regularly hires B.E. Ph.D. students as teaching assistants. This year, Ozge Sade, Alex Tulinsky, Tyler Sprague, Nan-Ching Tai, and Paula Patterson have been given teaching assistant positions -- for a total of 11 quarters of support."
- Non-departmental
  - College-wide BE courses offered as the Dean's newly created Vector Studios are

explicitly intended to provide teaching and support opportunities for BE students

Tuition waivers: we will continue working with UW Graduate School on programs such as Top Scholar Program

# External Funding:

## Faculty Research Grants and Contracts:

The faculty continue in their commitment to obtain research grants and contracts to support the Ph.D. students. In addition to the continued, indeed intensified, time-on-task of faculty currently engaged in research, as we enlarge the number of college faculty so engaged the result should be an increase in external support. In addition, as the Review Committee notes, increased "external research support, typically coming through competitively peer-reviewed funding programs would validate the research by faculty and students associated with the program."

## Donor Giving and Sponsorships:

Working in close consultation with the assistant dean for advancement and the Ph.D. program director, the dean proposes to develop and implement a strategic fundraising plan expressly aimed at supporting Ph.D. students. Our college's donors clearly understand and respond to the need for student scholarship resources. However, our donor base may not fully appreciate the increasing significance of research in the profession, nor the resources required to recruit and support advanced students for the length of work involved. The strategic plan will help introduce to the college constituency the importance of scholarly research to "address issues of broad contemporary concern to the professions and contribute to strengthening the professions and opening new areas for useful [inquiry]."

Re 6.8 Recommendation

a) In regard to the recommendation to review procedures for the use of indirect cost return funds, including that "perhaps some (even a small) part of them could be explicitly allocated to fostering development of new research projects, which in turn could convince faculty that initiating new research activities is valued and encouraged—in line with the theme that a good Ph.D. program requires a culture of research and that in turn requires some degree of funding":

CBE's current administration deeply appreciates the logic of allocating ICR funds to support the culture of research in the college and supports this principle unequivocally. CBE's modest annual ICR funds vary: \$123,105 this year; \$141,556 last year; \$119,827 in 2007. The college follows well-established university policy in the distribution of these funds: 30 percent to the principal investigator's home department; 40 percent to college (including 10 percent set aside as a discretionary resource to support and seed future research

activities). The current dean practices a policy established by his predecessors prior to his arrival in July 2006, which is to use the full college share of ICR funds to support an additional staff FTE in CBE's computing department dedicated to research activities across the college. The current annual commitment for this position is \$78,084, including benefits, well in excess of the college's annual share of ICR dollars, e.g. \$49,242 in 2009, \$56,622 in 2008, and \$47,931 in 2007. CBE's director of computing argues that the loss of this position would seriously reduce the quantity, quality, and timeliness of college-wide computing services, especially to computerintensive research centers (such as the Urban Ecology research Lab and the Design Machine Group), not to mention general faculty research initiatives. However, given this recommendation, the dean proposes to revisit current ICR policy with the college Executive Committee later this year.

In the development of the Five Year Strategic Plan, we will "define realizable paths for developing research funding: through new areas of activity, collaborative initiatives with other university units, and/or industry related funding."

b & c) In regard to the recommendation for improved administrative support for collegewide grants and contracts, including shepherding proposals through the university system and for the appointment of an Associate Dean for research:

As part of the college's long-range strategic thinking, developed in close consultation with the faculty, the dean proposed to dedicate one of two new FTE allocated to the college by the provost in the 2006 dean's appointment package to fund a new, permanent, tenure-track position, associate dean for research. The college froze its national search for this position in compliance with the governor's August 15, 2008, statewide budget directive. Moreover, in order to protect CBE's core mission, this line constitutes a portion of the college's total proposed budget reductions in each of the 8, 10, and 12 percent models requested by the provost, since the loss of a line not yet filled minimizes the impact on current programs. As we proceed into the next biennium, pending the final outcome of budget negotiations in July 2009, the college will explore alternative ways to use its remaining resources to strengthen research initiatives.

Re 5.3 Structural Issues

5.4 Communication Issues

6.4 Recommendation

Formalizing Dimensions & Communication:

The Program has been successful in its first phase, but has done so as a primarily oral culture—a valid point if not exaggerated. As it enters its second phase, more does need to be formalized in written documents, both to make definitions, procedures, expectations, parameters, etc. clear to the increasing number of participants, and also to ensure consistency and "quality control." Thus far, in addition to what is available on the web sites and in hard textual format (such as Program requirements, the comprehensive examination protocol, etc.), the Director has communicated information about committee formation, comprehensive examinations, research proposal defense, etc. to the students and faculty involved primarily on a case by case basis and at regular bi-annual student

meetings. Again, most information has been available, but we realize that does not mean it is consulted or is perceived to be readily available by students and faculty newly participating. The completion of a Faculty/Student Handbook (already underway, a fact somehow not conveyed to the Review Committee) should go a long way to alleviating problems in this area. This shift to a written culture, of course, will include the Review Committee's specific recommendation concerning "the dissertation proposal phase of the doctoral program [which] needs formal, written expectations (that clarify and lay out that the dissertation proposal, includes a written document, a formal presentation and oral defense which elicits feedback from the all of the student's committee members)." In fact, such a distinct research proposal phase using this format normally is our current procedure (with the exception that the formal presentation/oral defense has not been public); obviously, however, the process needs to be more formal, explicit, and publically announced in order to be clear and consistently implemented, thus providing the "written documentation for graduate students ... in line with current and upcoming directions from the Graduate School."

### Re 6.1 Recommendation

In regard to the idea of appointing an Associate Director who would assume leadership roles in recruitment, development of written programmatic guidelines, etc. and who would provide continuity for the program in the future is a good one, the dean and program director will continue to explore this administrative enhancement as part of their evolving agenda and strategic planning.

### Re 6.2 Recommendation

Additionally, it appears that as a small college with fairly dense interactions we have believed that communication has been consistent and effective. That apparently is not the case. We will work to remedy this in many ways. For example, it will be easy to schedule the recommended regular—at least quarterly—meetings of the Dean, the Director, the chairs of the four departments and the Director of the Interdisciplinary Ph.D. program in Urban Design and Planning to discuss doctoral education in the college.

Note, in regard to the structural communication issue noted in the Review Committee's comment Section 4.3 that "Unfortunately, the committee was unable to meet with the Chair or an alternate from Architecture, the largest department within the college." The Department Chair and Associate Chair add the following in our response: "This is indeed unfortunate as the Department of Architecture has provided strong academic and financial support to the Ph.D. in the Built Environment program from its inception, and will continue to do so for the foreseeable future. The relative lack of communication from the Department of Architecture at the time of the visit resulted from unavoidable circumstances: Both Professors Prakash and Miller were out of town at the time of the visit, and Professor Anderson was teaching in Rome fall quarter."

## Re 6.3 Recommendation

In regard to the recommendation that the director and dean "collectively explore productive ways to address the points raised under the section 'Issues needing resolution'," specifically that they "develop a jointly written document that provides a strategic plan for the B.E. Ph.D. program for the next five years. It should outline their strategies to address the above stated issues. The document should also contain a jointly agreed-on plan for the future for the B.E. Ph.D. program that speaks in specifics, such as graduate student recruitment, faculty hires, internal and external research support, continued leadership, etc. In part, this is to ensure that as the Program enters its second phase, it is clear on what the Self Study identifies as 'Future Directions', that is, "specificity in terms of potential actions, directives and deliverables that could be engaged in order to move the program forward and ensure its longevity, especially given the recently announced budget cuts":

The dean looks forward to the opportunity to articulate and prioritize the current and future goals of the Ph.D. BE program, in close consultation with its director, steering committee, and faculty leadership; and he will ensure the production of a planning document commensurate with this recommendation in its particulars by the end of AY 2009–10.

# Re 6. 10 Recommendation

Communication concerning the Program's achievements and outcomes within and outside the university will be improved and made more proactive. For example, we currently are planning a spring research symposium, to be held jointly by the Ph.D. in Built Environment and the Interdisciplinary Ph.D. in Urban Design and Planning, in which student work would be presented and then materials generated in the process effectively showcased to university, professional, and community leaders.

## Re 5.3 Structural Issues

6.5 Recommendation

## Structural Issues

Though it was not proposed as an area for current attention but only commended by the Review Committee for possible examination in the next major review, we want to put on record how problematic the possible merger of the two Ph.D. programs associated with the college (Built Environment and Interdisciplinary Ph.D. in Urban Design and Planning) would be.] Such action would, de facto, eliminate one of the programs and yet result in very minimal resource savings. Given the substantial difference in the two Programs' curricula, processes, and goals, it would make little sense to try to absorb the Built Environment Ph.D. into the Interdisciplinary Ph.D. in Urban Design and Planning. If that had been possible we would not have created the B.E. Program in the first place: it was and remains clear that the flexibility required for the largest number of College faculty (especially those from Architecture, Landscape Architecture, and Construction Management) to direct doctoral research cannot be done within the structure of the Interdisciplinary Ph.D. in Urban Design and Planning-in essence a traditional planning Ph.D. operating within all such required parameters. On the other hand, it would not work to try to absorb the Interdisciplinary Ph.D. in Urban Design and Planning into the very different and flexible structure and curriculum of the B.E. Ph.D. because the latter would not provide the more specific structure or coursework that has led the Urban Design and Planning degree to its success and wonderful record of research support for accepted students. Again, at this point, these comments are only for the record, since the Review Committee raised the issue for possible consideration in the next major review.

It should be noted that the Directors of the two programs are initiating a review and dialogue concerning areas in which the programs can cooperate more effectively and perhaps share or merge specific courses.

# Re 6.6 Recommendation

In regard to the Review Committee's recommendation to increase the potential involvement of non-Ph.D. holding faculty in chairing/supervising Ph.D. students (should they want to), we are glad to comply with whatever direction the Graduate School/Graduate Council provide. The current format results from the process of the creation of the Program developed in close consultation with a series of Graduate School administrators-in that process the Graduate School explicitly stipulated that they wanted only faculty with Ph.D.'s to chair Ph.D. committees (though faculty without the Ph.D. could serve on committees). This was explained as part of a policy to strengthen research at the doctoral level. Since we had many very competent faculty members with only the terminal professional Masters' degree, we asked for an exception-the result of which was the understanding that we could petition on a case by case basis, providing evidence that the faculty member had the same actual level of accomplishment and reputation as those with Ph.D.'s. Thus far we have done so with two senior faculty-both of whom were approved—Professors Jeffery Ochsner and David Streatfield. (See the Appendix below from the original, approved Program Description.) Pending any change recommended by the Graduate School/Graduate Council, this case-by-case approach has worked well so far at the scale of the program, and we can make increased efforts to determine if there are other faculty in this category who should participate in the program, and petition the Graduate School accordingly.

## Re 11 Recommendation

In regard to the Review Committee's recommendation that the program be reviewed again by the Graduate School in five years—it is not appropriate for the Program to respond to this item.

## Re 12 Recommendations

As to the Review Committee's proposal that the Graduate School request: a. By February 9, 2009: i. The joint report (by the Director and the Dean) regarding future

directions for the program that includes specific deliverables ii. A five-year fiscal plan in which sources are identified and strategies for approach and mechanisms for rewarding attempts and successes are developed (see 6.7, 6.8 and 6.9)— (see response to Recommendation 6.3 above).

# b. By January 31, 2011:

i. Evidence of multiple approaches (e.g., proposals) to obtaining funding from a wide variety of sources—we will have done this long before that date.
 ii. At least two more Ph.D. graduates from the program—we certainly will have exceeded this modest goal.

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## Appendix

In regard to recommendation 6.6: involvement of non-Ph.D. faculty. Here is the relevant section of the original Program Proposal, as approved by Graduate School, HEC Board, et al.

The most relevant wording is at the very end—shaded; this was written in close cooperation and with the advice of Dr. John Slattery, then Associate Dean of the Graduate School.

From the approved Program Proposal:

# A. Faculty Profile

One of the major motives for developing and proposing the Built Environment Program is that the College has a wonderful faculty in which there are many members with Ph.D. degrees who can provide the sophisticated and "longer-term" relationships necessary for sustained work at the highest levels and a vital component in forming research teams and obtaining funding, but who have no opportunity to work with doctoral students. Many of these faculty members have substantial experience supervising and serving on doctoral committees around the world and at U.W.; almost all of them have the expectation of—even need for—doing so here in the College of Architecture and Urban Planning.

Program Faculty are defined here as those who are able to Chair a student's Doctoral Supervisory Committee. (In order to Chair a student's Doctoral Supervisory Committee, that is to be the student's graduate supervisor and mentor-advisor, faculty "must be members of the Graduate Faculty with an endorsement to chair doctoral committees" [Graduate School Memo 13]. (Note the two "stages" of the process: a Department nominates those who become members of the Graduate Faculty; in addition, the Ph.D. in Built Environment Program would move that particular Graduate Faculty be endorsed to chair committees in that specific program.) In the initial determination of Program Faculty, the criteria we would use in granting someone the endorsement to chair a supervisory committee in the Built Environment Program would be:

- Holding a Ph.D.
- Having demonstrated expertise in the specific major field and/or sub-fields of research
- Currently conducting productive scholarly or research activity in these areas (publications, conference presentations, funded and grant or contract activity, and so on)
- Having a national reputation in the specialty, with recognized accomplishments such that peers would acknowledge appropriateness based on demonstrated competence (rather than the faculty member's terminal degree being the major indicator).
- Having experience on doctoral committees or, for the newest members of the College faculty, showing clear ability to serve in the capacity of Chair
- Evidencing interest and ability to actively contribute to the Ph.D. Program
- Being willing to mentor students and help support their advanced research with research funds from grants or contracts

Given the Governance system (described below in the section on "Administration and Governance"), the Executive Committee and the initial Program Faculty can appoint

additional faculty to the Program Faculty. It is expected that this soon will include several senior members from other units at UW, and future additions especially might be appropriate for CAUP faculty who gain the appropriate committee experience, establish a substantial research record, or otherwise develop the necessary credentials. (For example, though faculty without a Ph.D. can have the endorsement to serve as Chair, it is not common. Thus, whereas some of CAUP's 28 faculty with terminal professional Master's Degrees have substantial scholarly or research records, and national or international reputations rather than a Ph.D. [one listing of this set of faculty is presented in Appendix D- Part 4], the issue arises of when it is appropriate for these faculty to receive the endorsement to chair the Supervisory Committee. We propose that though unusual, it could be appropriate when the scholarly record is the same as one would expect of faculty holding the research-oriented Ph.D. degree—bulleted just above.)

# 3. Original Report of the Review Committee, November 2008

Fifth-Year Review of the Ph.D. Program in the Built Environment: Report of the Review Committee

# Prepared by

Steven Tanimoto, Professor Computer Science and Engineering (committee chair) Kim England, Professor of Geography

Thomas Hinckley, Professor of Forest Resources

Charles Eastman, Professor, College of Architecture, Georgia Institute of Technology Jacques Giard, Professor, College of Design, Arizona State University University of Washington, November 2008.

# 1. Background

The Ph.D. Program in the Built Environment (hereafter referred to as "the B.E. Ph.D. program") was launched by the College of Architecture and Urban Planning<sub>1</sub> in 2003. It is a college-wide program with faculty involvement from all four departments in the college (architecture, construction management, landscape architecture, and urban design and planning). The B.E. Ph.D. program involves a set of common core courses; subsequently, the students select one of three specializations about built-environment knowledge and practice:

1. Sustainable Systems and Prototypes;

2. Computational Design and Research;

3. History, Theory, and Representation Studies.

The B.E. Ph.D. program was created in order to achieve several objectives, including the broadening of graduate education; offering opportunities for involvement in Ph.D. education and scholarship by faculty who were not engaged in the pre-existing Interdisciplinary Ph.D. in Urban Design and Planning; and facilitating faculty involvement in research by all four departments in the college.

The program is now beginning its sixth year; it has graduated two students and currently has 22 students enrolled. According to the rules of the Graduate School, all new Ph.D. programs must be reviewed after five years. The review serves not only to advise the Dean of the Graduate School of the program's successes and shortcomings, but also provides guidance to the college, program director, and the four departments about the areas in need of improvement.

<sup>1</sup> The College of Architecture and Urban Planning has scheduled a change in its name for January 1, 2009. The new name is "The College of Built Environments." Thus, there is an alignment in name between the B.E. Ph.D. program and the college.

# 2. Review Procedure

The review committee was formed during the summer of 2008 and held its first meeting on October 8th for the purpose of developing the committee's charge. At that meeting, the committee members met each other, with the external members of the committee participating by speakerphone. The entire committee heard a description of the B.E. Ph.D. program from the Director Robert Mugerauer. He outlined its history and current situation. Subsequent to that meeting and before the site visit, the internal committee members had a conference call with Dean Daniel Friedman and met with a few faculty members and one student in an attempt to understand an array of viewpoints and to identify key issues prior to the site visit. The committee was provided with a set of documents that included the original program proposal and the fifth-year self-study report. The site visit took place from November 12th to 14th, beginning with a working dinner by the review committee on the 12th. The site visit included meetings with Director Mugerauer, Dean Friedman, several faculty and students, and the staff coordinator (or administrator) of the B.E. Ph.D. program.

## 3. Overview of Findings

In their various meetings with administrators, faculty and graduate students the committee heard many positive comments about the B.E. Ph.D. program, as well as a number of concerns. The review committee's findings are described in the following sections: (4) Comments about the Program, (5) Issues Needing Resolution, (6) Recommendations and Suggestions, and (7) Final Comments.

# 4. Comments about the Program

4.1 Comments for the University

This Ph.D. program fits directly into the University's mission of providing high quality graduate education and support for scholarly research.

4.2 Comments for the College

The review committee concluded that the disciplinary diversity and the interdisciplinary emphasis associated with the program are important and noteworthy strengths. The program has accomplished the intended goal of initiating the development of collaboration between the four units in the college and creating a culture valuing Ph.D. level graduate education and its associated research and scholarship. One original goal of the program was to move the culture of a historically, strongly professional practice oriented focus in certain disciplines towards a research orientation more appropriate to a tier one major research university like the University of Washington. A further goal was to increase the opportunities for faculty to be involved in research and graduate education at the Ph.D. level (especially those not involved in the Interdisciplinary Ph.D. in Urban Design and Planning; Construction Management was given as a specific example). The current Director, Professor Robert Mugerauer, was the Dean of the college when the program was launched, and as Dean he had strongly supported and assisted in the development of the college-wide B.E. Ph.D. program. The current Dean, Professor Daniel Friedman, is also very committed to this program. He clearly sees it as a critical component of moving the college's culture closer to university-wide expectations and aspirations, as well as part of his goal to preposition the college as a national and international power house. Dean Friedman also observed the importance of moving the college from traditional disciplinary-bound paradigms to more contemporary and interdisciplinary professional and academic goals, perhaps around a three-part focus on complexity, ecology and integration. He stated, and the review team concurred, that the nascent B.E. Ph.D. program has initiated and shows promise of moving the college towards a stronger culture of scholarly research, including both strong internal as well as external thrusts towards collaboration and an interdisciplinary approach to both research and teaching. The Dean also expressed a desire that the B.E.

Ph.D. program expand to address issues of broad contemporary concern to the profession, capable of strengthening links to the profession and offering new areas for research funding support.

Faculty in the college described the students as being of high quality and observed that the presence of such high quality, motivated students served to increase faculty morale and involvement in research.

4.3 Comments about the structure and leadership of the Program Programs of study were strongly student initiated and driven, facilitated first by the application review process to determine if an applicant's research direction could be supported, then later through faculty facilitation of the student's mentoring relations. The students spoke highly of the intellectual and moral support they received from the Director, supervising faculty and their committee members. Students appreciated the flexibility inherent in the B.E. Ph.D. program and the trust given them as they developed their own curricular research paths. Students uniformly cited that the program contained sufficient structure, sense of community or cohort-building, and felt that programmatic expectations were clear. Students all noted the high level of mentorship and contact they had with both Professor Mugerauer and their advisors. Furthermore, students also noted the ease with which they were able to connect with faculty inside and outside the college. Students were uniformly concerned about funding, although the committee observed that those students associated with the architecture or urban ecology program appeared to have greater and more consistent access to support.

Except for the problem of funding, the students were very pleased with the program, its content, its flexibility, and the culture and communication that it has enabled. The students did point out that the financial difficulties created incentives and opportunities for them to learn about grants and the process of writing and managing grants. The faculty associated with the program voiced similar positive points of view, but expressed concerns about funding. Additionally mentoring of junior faculty and students, though informal, seemed good. Several students and junior faculty specifically indicated the positive role that Professor and Director Mugerauer played. The department chairs from Landscape Architecture, Urban Design and Planning and Construction Management expressed strong support for both the mechanics and the outcomes of the program, though voicing some concern about their formal involvement in the program. The departmental chairs agreed that their programs had a significant vested interest in the program, each from the context of their field. Unfortunately, the committee was unable to meet with the Chair or an alternate from Architecture, the largest department within the college.

# 5. Issues needing resolution

5.1 Financial Issues

A key challenge for the program is creating financial stability for all incoming students for at least the first year, and preferably beyond.

Moreover, it is critical that the program and the college develop significant sources of outside funding (including grants) to supplement the limited funding for the program that comes from teaching assistantships. These issues can be potentially alleviated by the expansion of research directions proposed by the Dean.

5.2 Relationship between the BE Program and Faculty Research

The importance of developing a culture of research in the college stems not only from the financial needs of the Ph.D. program, but also from the need for intellectual support for, and professional development of, students and faculty. In addition, external research support, typically coming through competitively peer-reviewed funding programs, would validate the research by faculty and students associated with the program. 5.3 Structural Issues

There has been an ongoing lack of consistent and open communication between critical parts of the college and the administration of the B.E. Ph.D. program, e.g., between the program Director and the Dean, as well as between the program and the four participating departments. Communication issues are further discussed below. One aspect of the lack of open communication is that some faculty members expressed concern about what happens to the college and departments' portions of indirect cost return funds. In its deliberations the committee raised and discussed a long-term issue related to, but going beyond, the internal aspects of the Built Environment Ph.D. program. That issue is whether the two Ph.D. programs associated with the college (the other being the Interdisciplinary Planning Ph.D. program) should be merged.

# 5.4 Communication Issues

The program has managed to work reasonably well during its first five years using informal, oral channels of communication between the Director and students, the Director and faculty, and between faculty and students. Yet some elements of the program lack clear definitions, protocols and expectations and the committee is concerned about the potential negative impacts of this (e.g. different expectations of students compared with their advisors, different interpretations of the same 'rule' by advisors, etc). We strongly believe that communication must move beyond a strong oral to a written tradition of communication. Specifically, the dissertation proposal phase of the doctoral program needs formal, written expectations (that clarify and lay out that the dissertation proposal includes a written document, a formal presentation and oral defense which elicits feedback from the all of the student's committee members). Also students need to see suggested pathways through the Ph.D. that go beyond a suggested sequence of courses (e.g. First year, second quarter: begin discussions about possible dissertation topics and determine likely committee members. Second year: first guarter: begin looking for and perhaps applying for dissertation research funding; successfully complete Graduate School General Examination requirement by the third guarter, etc.).

The college is not effectively communicating the products of this program within the college or outside the college. The Ph.D. program needs to become more proactive in its communication both within and outside the university.

## 6. Recommendations and Suggestions

1. The appointment of an Associate Director who would assume leadership roles in recruitment, development of written programmatic guidelines, etc. In addition, the Associate Director would bring a different disciplinary perspective and would better assure the long-term continuity of the program. Looking to the future, an Associate Director might be groomed as the future Director of the program, or at least someone in addition to the current Director, who also holds a comprehensive repository of information about the program (given the previous reliance on an

## oral tradition).

2. In order to improve leadership, vision and communication, we strongly encourage the creation of a college-level committee including the Dean, the Director, Associate Director as well as the chairs of the four departments and the Director of the Interdisciplinary Ph.D. program in Urban Design and Planning. These eight people should be on a single committee that meets regularly to discuss doctoral education in the college (this committee should meet at least quarterly). 3. The Director, Associate Director and Dean must collective explore productive ways to address the points raised under the section 'Issues needing resolution' above. Following those discussions they should develop a jointly written document that provides a strategic plan for the B.E. Ph.D. program for the next five years. It should outline their strategies to address the above stated issues. The document should also contain a jointly agreed on plan for the future for the B.E. Ph.D. program that speaks in specifics, such as graduate student recruitment, faculty hires, internal and external research support, continued leadership, etc. In particular the committee thought the section in the self-study 'VII: Future Directions' lacked sufficient specificity in terms of potential actions, directives and deliverables that could be engaged in order to move the program forward and ensure its longevity, especially given the recently announced budget cuts. 4. The dissertation proposal phase of a student's path towards the Ph.D. should be much more formal with a combination of a public presentation of a written proposal and an associated oral examination by the student's committee. A more formal approach to the proposal phase would have the following potential benefits:

a. Protect the student

b. Provide clarity and rigor to the research and future dissertation

c. Assist in the culturally desired transition

d. Increase the quality of research

e. Be in line with current and upcoming directions from the Graduate School about written documentation for graduate students.

5. The two Ph.D. programs should not be merged in the near future, but the next major review should re-examine this proposition. However, pending budget cuts may necessitate an earlier appraisal of this merger question.

6. Increase the potential involvement of non-Ph.D. holding faculty in chairing/supervising Ph.D. students (should they want to). This is particularly important in the case of the B.E. Ph.D. program, because some of the participating units come from a more practice-oriented tradition where a Ph.D. has not always been a requirement for holding a faculty position. We suspect that this might become less of an issue in the future as it seems that it is increasingly common that newer hires hold doctorates. However, we do want to allow some flexibility here, as it is likely that future hires might still be practitioners with little interest or ability in supervising graduate students.

 7. Given limited budgets and using best practices, creative ways of stimulating or sustaining externally funded research pursuits of faculty need to be explored.
 8. Research funding and student support: Opportunities for graduate student and faculty research funding support from within and outside the college need to be provided. Included in this support should be:

a. The review of procedures for the use of indirect cost return funds. Perhaps some (even a small) part of them could be explicitly allocated to fostering development of new research projects, which in turn could convince faculty that initiating new research activities is valued and encouraged. This is in line with the theme that a good Ph.D. program requires a culture

of research and that in turn requires some degree of funding.

b. In the development of the Five Year Strategic Plan, define realizable paths for developing research funding: through new areas of activity,

collaborative initiatives with other university units, and/or industry related funding.

c. Improved administrative support for college-wide grants and contracts, including shepherding proposals through the university system (some faculty complained that in the past this had not been as smooth as it should be).

d. The appointment of an Associate Dean for research.

9. Ways to stimulate new research within the college (perhaps look towards the older Tools for Transformation and Royalty Research Fund for models of how this might be done).

a. It is critical that there is a clear future opportunity for research support from non-University sources.

b. The level of funding should be sufficient to stimulate and nurture rather than provide complete support.

10. Introduce an annual research symposium featuring the work of the graduate students (perhaps of both Ph.D. programs). Key university administrators could be invited. Consider making this a public event: make it open but also invite key people from the local area (city planning department, architecture and construction firms, etc) with a view to showcasing graduate student research to

'the public' but also potentially attracting donors, prospective employers for the graduate students or graduate student research opportunities.

11. We recommend that the program be reviewed again by the Graduate School in five years.

12. In the interim, the committee proposes that the Graduate School requests the following:

a. By February 9, 2009:

i. The joint report (by the Director and the Dean) regarding future directions for the program that includes specific deliverables (see 6.3).

ii. A five-year fiscal plan in which sources are identified and strategies for approach and mechanisms for rewarding attempts and successes are developed (see 6.7, 6.8 and 6.9).

b. By January 31, 2011:

i. Evidence of multiple approaches (e.g., proposals) to obtaining funding from a wide variety of sources.

ii. At least two more Ph.D. graduates from the program.

# 7. Final Comments

The Ph.D. Program in the Built Environment serves an important purpose of bringing research into the traditional disciplines that rely on practice for the generation of new knowledge. The program has had a successful launch, but work remains to be done to attain a solid financial footing, to maximize its positive impacts and to create a secure grounding as a nationally and internationally recognized program.