2014-19 Five Year Perspective
University of California, Irvine
Program Summaries
Updated – New Entries in Red
Contact Information
Oladele A. Ogunseitan, Ph.D., M.P.H.
Professor and Chair
Department of Population Health and Disease Prevention
Program in Public Health
University of California, Irvine, CA 92697

Phone: 949-824-0611  E-mail: Oladele.Ogunseitan@uci.edu
Transitioning from Program to School of Public Health

The mission of the proposed School of Public Health at the University of California, Irvine is to organize the existing academic and professional programs focused on creating, integrating, and translating population-based knowledge into preventive strategies for reducing the societal burden of human disease and disability through excellence in research, education, and public service.

When established, the UC Irvine School of Public Health will be the third School dedicated to public health within the UC System, the youngest of which was established more than 50 years ago (UCLA). UC Irvine’s School will be distinctive in its situation in the largest research university in the sixth most populous county in the United States, and more than 30% of residents in our county community are foreign born with more than 35 different languages spoken at homes. Therefore, our vision is to be the leading academic resource for research, education at the baccalaureate and graduate levels, and outreach service in suburban settlements where emphasis is placed on the sociocultural diversity and global context of public health.

The ten-year old Program in Public Health at UC Irvine has evolved rapidly, having laid a solid foundation for innovative approaches to public health research and practice, and is at an opportune time to transition to School status. The major accomplishments of the Program in Public Health that provide the propellant for this transition are as follows:

2. Robust and highly competitive undergraduate degree programs (B.A. and B.S.) in public health enrolling approximately 1,200 students.
3. Strong professional Master’s degree in Public Health (M.P.H.) with three areas of emphasis, enrolling approximately 40 students.
4. Innovative research-focused Ph.D. degree in Public Health to begin enrolling students in 2013-2014; jointly sponsored M.S. and Ph.D. in Environmental Health Science; collaboration with the Ph.D. in Epidemiology.
5. A Department of Population Health and Disease Prevention with approximately 40 core and affiliated faculty members; 14 members of staff; approximately 25,000 sq. ft. of office and laboratory space; and research activities budget exceeding $50 million.
6. Community engagement network including partnerships with more than 200 public health agencies.
7. External advisory board members who are distinguished leaders in public health practice to support the mission of the Program. See appendix for letter of support from the board members to Chancellor Drake about the proposed School of Public Health.
8. Vigorous organized research centers, including GHREAT: Global Health Research, Education and Translation.
9. Partnerships with the Institute for Clinical and Translational Science in research and education.

10. Founding member of the national Association of Schools and Programs in Public Health (ASPH).

The proposed School can be established without infusion of new resources beyond those necessary to create an administrative structure for participating units and to support the academic and administrative leaders of the School. As the School grows in terms of research needs, student enrollment, and public engagement, it is expected that resource requirements will increase commensurably, and the administration will go through the well-established campus-wide processes to request and acquire additional resources.

To be considered eligible for accreditation review by CEPH, a school of public health shall demonstrate the following characteristics\(^1\). The text in bold blue font indicate the status of the current program and what needs to be accomplished to establish UC Irvine’s School of Public Health as an accredited academic unit:

a. The school shall be a part of an institution of higher education that is accredited by a regional accrediting body recognized by the US Department of Education or its equivalent in other countries. (UCI Status: Satisfied).

b. The school and its faculty and students shall have the same rights, privileges and status as other professional schools that are components of its parent institution. (UCI Status: The proposal for School status will accomplish this goal, with the necessary appointment of a Dean for the new School).

c. The school shall function as a collaboration of disciplines, addressing the health of populations and the community through instruction, research and service. Using an ecological perspective, the school of public health should provide a special learning environment that supports interdisciplinary communication, promotes a broad intellectual framework for problem solving and fosters the development of professional public health values. (UCI Status: The proposal for School status will serve as the vehicle to communicate the accomplishment of this goal. The current department of population health and diseases prevention already functions as stated, and the functions will be expanded to accommodate additional units that may join the new School initiative).

d. The school shall maintain an organizational culture that embraces the vision, goals and values common to public health. The school shall maintain this organizational culture through leadership, institutional rewards and dedication of resources in order to infuse

public health values and goals into all aspects of the school’s activities. **(UCI Status: The proposal for School status will accomplish this goal, with the necessary appointment of a Dean for the new School and necessary administrative infrastructure).**

e. The school shall have faculty and other human, physical, financial and learning resources to provide both breadth and depth of educational opportunity in the areas of knowledge basic to public health. At a minimum, the school shall offer the Master of Public Health (MPH) degree, or an equivalent professional degree, in each of the five areas of knowledge basic to public health and a doctoral degree in at least three of the five specified areas of public health knowledge. **(UCI Status: Partly satisfied. We already have three areas of emphasis in our MPH program, and three more (global health, clinical and translational science, and health informatics have been suggested for development over the next five years; Doctoral training requirement is satisfied with the Ph.D. in Public Health; Ph.D. in Environmental Health Science, and Ph.D. in Epidemiology).**

f. The school shall plan, develop and evaluate its instructional, research and service activities in ways that assure sensitivity to the perceptions and needs of its students and community and that combines educational excellence with applicability to the world of public health practice. **(SUCI Status: Partly satisfied with the establishment of a self-study process for accreditation review, which was successfully completed to gain accreditation for the Program in Public Health. The evaluation procedures will be expanded to include collaborating units in the School initiative).**
Appendix

Letter from the External Advisory Board of the Program in Public Health to Chancellor Michael V. Drake about the Proposed School of Public Health at UC Irvine.
28 June 2013

CHANCELLOR MICHAEL V. DRAKE
UNIVERSITY OF CALIFORNIA, IRVINE

RE: TRANSFORMATION OF THE PROGRAM IN PUBLIC HEALTH TO THE SCHOOL OF PUBLIC HEALTH AT THE UNIVERSITY OF CALIFORNIA, IRVINE

UC Irvine’s Program in Public Health is a ten-year old academic unit that has grown rapidly to make impressive contributions to the research, education, and community service mission of the university. The undergraduate program enrolls 1,200 students and graduates 500 students a year. The alumni are employed in various public health sectors in the community. The professional Master’s program is small, but of very high quality, and research doctorate training programs have been launched successfully. The faculty members are engaged in extramurally-funded research activities advancing the mission of evidence-based public health at various levels, including community based interventions and investigations of risk factors and vulnerable populations. Based on these accomplishments, the Program earned full accreditation by the Council on Education for Public Health granted from 2012 – 2017.

Members of the External Advisory Board of the Program in Public Health believe that this is an opportune time to advance to the next stage of the strategic vision for organizing diverse public health initiatives at UC Irvine. We believe that the next accreditation review of the academic unit should occur with the plan to gain accreditation as a School of Public Health. For this to happen, the support of your administration is needed for the proposal to establish a School of Public Health and to shepherd the proposal through the systemwide review process and endorsement by the Regents of the University of California, Irvine. There are several reasons to embark on the creation of a School of Public Health at this time:

1) The future of health care is requiring a focus on prevention and population health management. It is critical that these foundational elements of public health be visible at UCI at the level of a School.

2) Orange County does not have a School of Public Health. In order for UCI to demonstrate its leadership and prominence in the field of public health it needs this level of prominence to differentiate itself from other programs in the County.
3) A School of Public Health provides a stronger platform to seek private and government funding to support public health research, as well as to recruit top students and faculty.

We note that the University of California System has only two Schools of Public Health (UCLA and UC-Berkeley) both established more than 50 years ago. UC Irvine is primed to be the next School of Public Health within the UC System. With the solid foundation, unique academic features, and accomplishments of the current Program in Public Health, we expect that a new School of Public Health will be a major asset for the university and for the Orange County region.

Sincerely,

Signatures:

[Signatures]

Sincerely,

America Bracho, MPH, CDE

Sincerely,

Eric G. Handler, MD, MPH, FAAP
Deputy Agency Director/Health Officer

Health Care Council Orange Co
Global Health Research, Education and Translation (GHREAT) Center

30 August 2013
Contact Information
Oladele A. Ogunseitan, Ph.D., M.P.H.
Professor and Chair
Department of Population Health and Disease Prevention
Program in Public Health
University of California, Irvine, CA 92697

Phone: 949-824-0611 E-mail: Oladele.Ogunseitan@uci.edu
Transitioning from Program Research Center to Campus-wide Organized Research Unit

In 2009, the Program in Public Health received a grant from the National Institutes of Health’s John E. Fogarty International Center for Advanced Studies in the Health Sciences to develop a Framework Program in Global Health (FRAME grant; R25TW008125). We are one of ~ 35 institutions in the country to have this award, aimed at developing academic programs in global health supported by a sustainable administrative structure. More than 30 faculty members support this initiative. Professor Guiyun Yan and Professor Oladele Ogunseitan served as director and co-director of the global health FRAME grant. In 2010, we received a Graduate Growth Incentive Awards (GgIA) from the UCI Graduate Division to develop Global Health emphases in our graduate programs, including the new Ph.D. in Public Health with concentrations in global health and in disease prevention. Professor Ogunseitan served as the Principal Investigator of the award, which, in concert with the NIH FRAME-Global Health award, has facilitated the development of a strong academic curriculum, graduate student engagement, and research community in global health at UC Irvine.

Faculty members in the UC Irvine global health framework program have been very productive in winning research grants, including $20 million from the Bill and Melinda Gates Foundation, to develop new methods for controlling the transmission of vector-borne diseases. The NIH awarded $40 million on biodefense and emerging infectious disease, and $20 million to support various topics, including malaria, natural disasters, and transboundary movement of health hazards. UC Irvine is home to the Global Infectious Disease Research Training Program funded by the NIH Fogarty International Center for Advanced Study in the Health Sciences.

The UC Irvine Framework Program in Global Health had thirty-two supporting faculty members drawn from:

The Program in Public Health
Program in Nursing Science
Department of Pharmaceutical Sciences
The Institute for Clinical and Translational Sciences - The School of Medicine
Department of Emergency Medicine
Department of Pediatrics
The global health framework award enabled us to develop new curricula in global health for undergraduate and graduate students; we have established a strong research-training program in global health for graduate students and junior faculty. We have also created an administrative structure to coordinate global health education, research and outreach activities at UC Irvine. We have funded 30 graduate students and faculty to conduct research all over the world, including Argentina, Mexico, Kenya, Sweden, India, Ghana, Uganda, Thailand, Philippines, China, and Indonesia. We host an annual spring colloquium featuring a keynote speaker and the work of fellows supported by the framework program. The 2012 colloquium occurred on May 4 at the Cal-IT2 auditorium, and the keynote speaker was Dr. Segundo Leon from the University of Cayateno, Peru.

At the conclusion of the NIH FRAME grant, we established a Program initiative, entitled Global Health Research, Education and Translation (GHREAT) with Dr. Brandon Brown as the Director. He joined UC Irvine’s Program in Public Health after earning a Ph.D. in International Health at Johns Hopkins University followed by postdoctoral research at UCLA’s Institute for Global Health. The Global Health Research Education and Translation (GHREAT) program is committed to promoting global health awareness and developing a comprehensive global health

1 Program in Public Health at UC Irvine - Global Health Framework. http://publichealth.uci.edu/gh_docs/index
2 http://ghreat.uci.edu/globalhealth
research, education and training program. Since the establishment, demand from undergraduates, graduate students, and faculty members to conduct global health research at UCI and in developing countries has grown rapidly. Affiliated faculty and students have received support from major organizations, including the National Institutes of Health, UC Global Health Institute, Bill and Melinda Gates Foundation, Merck pharmaceuticals, USAID, and the Global Infectious Disease Research Training Program. Recent work includes creation of a compendium of videos as a tool to illustrate the effect of our research activities on the human beings afflicted with disease and infirmity in developing countries including Peru, Thailand, China, and Myanmar.

GHREAT activities include the global health journal club, the global health seminar series on OpenCourseware, the global health certificate program, the global health peer mentor program, and the integration of UC Irvine into the UC Global Health Institute, all which are listed on the GHREAT website (http://ghreat.uci.edu/globalhealth). Our quarterly GHREAT newsletter highlights faculty and student-led global health projects and includes articles in which students analyze global health issues of interest. Participation in UC Global Health Day has allowed the GHREAT team to share the achievements of the GHREAT Program with other members of the UC community and to establish connections for future collaborative efforts.

We believe that GHREAT is ready to transition to a formal campus-wide organized research unit (ORU) to facilitate broader research collaborations; disseminate research results through research conferences, meetings and other activities; strengthen graduate and undergraduate education by providing students with training opportunities and access to facilities; and to seek extramural research funds; and carry out university and public service programs related to the global health. Moreover, we intend for GHREAT to become the main portal for UC Irvine to interact with the UC Systemwide Global Health Institute³.

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³ [http://www.ucghi.universityofcalifornia.edu/](http://www.ucghi.universityofcalifornia.edu/)
Proposal for B.A. in the Philosophy of Law
Department of Philosophy
School of Humanities
UC Irvine
2014-19 Five Year Perspective

Campus: UCI

Name and Anticipated Action: Philosophy of Law undergraduate major in the Department of Philosophy

Description of and Reasons for Anticipated Action: The undergraduate major in philosophy is arguably the very best training for students who want to go on to law school. The Philosophy major features intensive work in conceptual analysis, logical reasoning, and argumentation, as well as historical conceptions of law and ethics and political theory. And these are precisely the intellectual skills most needed in jurisprudence and the practice of law. Given the growing prominence of UCI’s new Law School, and given the number of faculty in the Department of Philosophy whose work relates to legal theory (five out of ten faculty members), we feel that UCI’s Department of Philosophy is uniquely situated to train future students of law. The Department of Philosophy already houses the minor in Humanities and Law and it offers together with the Law School a joint Ph.D./J.D. program.

Relationship to Existing Campus Programs, Units, and Mission: Courses relating to legal theory are already offered regularly in the Department of Philosophy. The major in Philosophy of Law will use these courses and organize them into a coherent program. In future, as the Law School continues to grow, we hope to work with faculty in Law, planning our curriculum in cooperation with the Law School.

Resources: We need at least two new senior faculty positions to draw level with our peer Departments, but we are prepared to start the new major in Philosophy of Law with just the current faculty.

Funding: no new funding

Students: The existing major in Philosophy has about 100 students. When the new major in Philosophy of Law is at a steady state we expect it to have about 150 students.

Employment Implications: The Philosophy of Law major will give students substantive knowledge about law and society (broadly defined) with an emphasis on law's societal, political, and humanities contexts. It is an excellent preparation for Law School as well as for many other professional jobs.

UC Campuses and Other California Institutions with Similar Offerings: To my knowledge, no other Department of Philosophy in the UC system offers a major in Philosophy of Law.

Anticipated Campus Review and Implementation Dates: We hope to start the campus review in the Winter 2014 and implement the M.A. program in Fall 2015.
Campus Contact Person: Sven Bernecker, Professor and Chair of Philosophy, Department of Philosophy, University of California – Irvine, Irvine CA 92697-4555, s.bernecker@uci.edu, (949) 824-3896
August 22, 2013

ROB AMEELE
ASSISTANT VICE PROVOST

RE: Progress Report on Plans for a Bachelor’s Degree in Statistics

The Statistics Department is planning to submit a proposal for a Bachelor's Degree in Statistics as soon as we think the appropriate resources are available to deliver the degree. We have made some progress on this in the past two years, and are hoping that we can propose the degree either this coming year or during the 2014-15 academic year. The resource issue involves two components. One is having enough courses in place at the undergraduate level, and the other is having the faculty to teach them. We have been preparing the courses during the past year. In particular, we have taken the following actions:

1. Submitted a proposal to separate Statistics 110 and 201 (which have been taught as concurrently listed courses for Statistics minors and graduate students from other departments), and concurrently list Statistics 201 with a new undergraduate course that will be more appropriate for Statistics majors. This proposal is currently under revision for technical reasons – working out what the appropriate numbering should be for these courses.

2. Submitted a proposal to teach Statistics 240 with more of an applied, data analysis emphasis, and concurrently list it with a new course Statistics 140, which will be appropriate for the Statistics major.

3. Created a committee to investigate our multiple offerings in Bayesian Statistics, and create an undergraduate course appropriate for Statistics majors, to be concurrently listed with a course for graduate students from other departments. That course is under development and a course proposal will be submitted this fall.

We are also investigating ways in which we can streamline some of our graduate offerings, to free up faculty resources to teach courses for the major. And finally, we are hoping to hire at least one new faculty member in the near future, which would provide us with enough faculty resources to begin offering the undergraduate major.

Sincerely,
Jessica Utts
Profess
or and
Chair
Department of Statistics
BS in Speech, Language, and Hearing Sciences  
School of Social Sciences  
UC Irvine  
2014-19 Five Year Perspective

• **Campus**: UC Irvine

• **Name and Anticipated Action**: BS in Speech, Language, and Hearing Sciences, an undergraduate program of the School of Social Sciences, with participation from faculty in the Center for Hearing Research

• **Description of and Reasons for Anticipated Action**: The BS in Speech, Language, and Hearing Sciences (SLHS) seeks to give students a broad understanding of language and communication related science. Courses will provide a foundation in psychology and cognitive science and then provide more detailed coursework in linguistics, psycholinguistics, language development, communication disorders, the cognitive basis of reading, sound and hearing, phonetics, anatomy and physiology of hearing and speech motor control, genetics of hearing, and the neuroscience of speech, language and hearing. SLHS is a large and active field with dedicated journals on the topic (*J. of Speech, Language & Hearing Research*) and national societies (*American Speech Language Hearing Association*). The program also fills an important gap in UC Irvine's undergraduate offering, which currently lacks a language/communication oriented program.

• **Relationship to Existing Campus Programs, Units, and Mission**: UC Irvine is particularly strong in hearing research and has a small but well-recognized core of faculty working in the speech and language sciences. Hearing research faculty members are distributed in several departments including Cognitive Sciences, Neurobiology and Behavior, Anatomy and Neurobiology, and Otolaryngology. The group is brought together via the Center for Hearing Research. Speech and language research faculty can be found in Cognitive Sciences, Psychology and Social Behavior, Education, and Neurology. The Center for Language Research brings this group of faculty together. There is significant overlap between these two research groups and there is a history of collaboration between a number of faculty members both in research and in graduate and undergraduate education. The mission of the proposed SLHS is to provide undergraduate training in this area of strength on the UC Irvine campus.

**Resources**: The program will require the creation of a new core sequence and capstone class. Other course offerings will be proposed, but the bulk of the curriculum will consist of existing courses in the participating units. No new library collections are neither necessary nor are new facilities. Designed to be resource neutral at the initial stages, the program will as it grows require the recruitment of new faculty and lecturers commensurate with program size.

• **Funding**: Funding for new FTE and lecturers will be obtained through the campus' and participating Schools' normal allocation process based on students' served and program size.
**Students:** The new major is expected to be a mid-sized major for the Irvine campus, reaching 200-250 over 5 years.

- **Employment Implications:** Students earning a degree in SLHS will be well suited for clinical graduate programs in Speech-Language Pathology and Audiology as well as for research graduate programs in these and related areas. Students with undergraduate degrees in SLHS will also qualify for SLP and Audiology assistant positions.

- **UC Campuses and Other California Institutions with Similar Offerings:** UCSB is the only UC campus that offers a degree in speech and healing sciences. Their program is exceptionally small (three faculty members) and has very limited course offerings. The proposed program will therefore distinguish UC Irvine among UC campuses.

- **Anticipated Campus Review and Implementation Dates:** The proposal is currently being drafted for review of the relevant participating units during the 2013-14 academic year, for submittal to the Academic Senate in Spring, 2014. The preferred date for enrolling new students is Fall 2014.

- **Campus Contacts:**

  Greg Hickok, Professor of Cognitive Sciences and Director, Center for Language Science
  2308 Soc and Beh Gateway
  Building UC Irvine
  Irvine, CA 92697-5100
  greg.hickok@uci.edu
  949-824-1409

  Bill Maurer, Dean
  School of Social Sciences
  3151 Social Sciences Plaza UC Irvine
  Irvine, CA 92697-5100
  w.m.maurer@uci.edu
  949-824-6802
Proposed Ph.D. Program in Critical and Curatorial Studies
Claire Trevor School of the Arts
UC Irvine
2014-19 Five Year Perspective

- **Campus**
  
  UC-Irvine, CTSA Department of Art

- **Name and Anticipated Action**
  
  Ph.D. in Critical and Curatorial Studies

- **Description of and Reasons for Anticipated Action**
  
  The Department of Art, through its MFA and undergraduate programs, has established a national reputation for its critical approach to art and art-making. A concentration in this area already exists and has been successful. The University Art Galleries will be prominently featured in the curriculum, serving as laboratories for cultural research conducted by the Critical and Curatorial students and faculty. The curriculum is interdisciplinary, taught and administered by a core faculty selected from Studio Art and the Visual Studies PhD program in the School of the Humanities. The Critical and Curatorial curriculum and resulting degree combine aspects of MA and MFA training, reflecting the Concentration's location in the School of the Arts and its partnership with the School of Humanities.

- **Relationship to Existing Campus Programs, Units, and Mission**
  
  Though drawing on resources in Visual Studies, the doctoral program in Critical and Curatorial Studies does not replicate material in any other extant campus program.

- **Resources**
  
  Core faculty for the program is already in place:

  Juli Carson, Ph.D. Massachusetts Institute of Technology  Associate Professor, Modern and Contemporary Art History  Director, Critical and Curatorial Concentration  Director, University Art Galleries
  Kevin Appel, M.F.A. University of California, Los Angeles  Professor, Painting
  Miles Coolidge, M.F.A. California Institute of the Arts  Professor, Photography
  Daniel Martinez, B.F.A. California Institute of the Arts  Professor, Public Art, Sculpture, Installation, Performance
  Litia Perta, Ph.D. UC Berkeley  Assistant Professor, Art Writing

  The doctoral program will make use of the existing exhibition spaces in the CTSA (the University Art Gallery), the Beall Center, and other venues in the School. Other sites will develop along with the program.

- **Funding**
  
  As an extension of the extant concentration in Critical and Curatorial Studies, the doctoral
program will begin and remain highly selective and small. Given UCI’s mandate to create new graduate/doctoral program, additional doctoral student funding will be applied for through Graduate Division. The department will create a funding line for support from off-campus donors.

• Students

The first cohort of doctoral students will consist of two students. Steady state for the program is anticipated as 10-12 students.

• Employment Implications

Critical & Curatorial Studies educates graduate students to pursue a career in the fields of curatorial practice, art criticism, and public programming. Upon completion of the program, the student will be well versed in debates that define art and visual culture from Modernism to the present, capable of conceiving new models of contemporary exhibition and criticism, and trained to execute professional, innovative projects in the field. The collaboration between Studio Art and Visual Studies is designed to prepare doctoral students for careers in such visual art venues as museums, art galleries, publications, and archives.

• UC Campuses and Other California Institutions with Similar Offerings

UC-Berkeley PhD in History of Art
Many MA programs in museumship and curatorial studies exist in California, but very few offer PhDs.

• Anticipated Campus Review and Implementation Dates

The program will be ready for campus review in 2015; anticipated implementation Fall 2016.

• Campus Contact Person

Department of Art Chair David Trend, c/o Claire Trevor School of the Arts, UC-Irvine, 92697. dtrend@uci.edu, Tel 949-824-2667 Fax 949-824-5297

Associate Professor Juli Carson, c/o Claire Trevor School of the Arts, carsonj@uci.edu, Tel 949-824-2384 Fax 949-823-5297
Proposal for M.A. and Ph.D. in Integrated Composition, Improvisation, and Technology (ICIT)
Claire Trevor School of the Arts
UC Irvine
2014-19 Five Year Perspective

- **Campus**

UC-Irvine, CTSA Department of Music

- **Name and Anticipated Action**

MA and PhD, Integrated Composition, Improvisation, and Technology (ICIT)

- **Description of and Reasons for Anticipated Action**

ICIT represents a new approach to graduate music education, merging traditionally separate fields of music study in a way that better reflects actual professional music practice in the creative fields of new music composition, improvisation, and digital technology. Graduate music degrees in the United States are structured around categories that have changed little in the last fifty years. In particular, there has been a division between composition, improvisation, and technology. However, the musical creativity of the last three decades has shown that this division is no longer relevant. Though traditional binaries (jazz/classical, composer/performer, electronic/acoustic, Western/non-Western) are insufficient for understanding and teaching the vast complexity of contemporary musical practices, university programs for the most part have not addressed this new synthesis.

- **Relationship to Existing Campus Programs, Units, and Mission**

The Music Department currently offers an MFA degree with emphases in ICIT and in various areas of traditional instrumental performance; ICIT students comprise approximately half of the graduate student body in Music. The MFA, while standard in the disciplines of Art, Drama, and Dance, is not a standard degree type in Music. In response to the need for a doctoral program that trains future professors to address recent changes in the music world, and in response to the UCI initiative to increase its PhD student population, the Music Department intends to convert its existing ICIT MFA into a MA program and a PhD program. The existing MFA programs in performance, conducting, and musicology will remain unchanged. The PhD program will increase and improve enrollments in ICIT, and will raise the profile of the Department and the School within the UCI campus and externally.

- **Resources**

Because the MFA is considered a terminal degree (albeit a nonstandard one in the field of music), the ICIT MFA program has already been structured as a sort of fledgling PhD. The current MFA program in ICIT is quite demanding, requiring a substantial written thesis, a major capstone project, coursework covering each of the three component areas, and ongoing production of new creative work. In the new program, the thesis demands of the MA will be reduced slightly, while the intense research and dissertation aspects will be shifted upward to the PhD level. ICIT has recently added two Senate faculty lines thanks to the Scholarship on Diversity initiative, so ICIT currently enjoys a favorable teacher-student ratio and can accommodate the increase in enrollment and teaching needs foreseen as a result of this new program.
The computer and equipment resources of ICIT are already substantial, due in large part to the Remi Gassmann endowment in support of electronic music and the diverse facilities that have been installed using Gassmann funds. Improved staff support for these facilities will likely be needed as the PhD program grows. Library resources, graduate student workspace, and administrative assistance are also adequate for the initial stages of the PhD, and will be subject to normal growth needs thereafter.

**Funding**

The University’s rebenching initiative aims to have 12% of the campus’ total student population be PhD students, placing the Irvine campus on a track to increase PhD students by 200 over 4 years. A memo from the UCI Graduate Dean and the Graduate Council Chair, distributed earlier this year, states that the campus will provide new funding to promote growth in new PhD enrollment. Funding for the 2013-14 academic year will increase $25,000 to $30,000 per PhD student enrolled above the previous year’s numbers. This is indicative of the positive and timely climate within which we propose our ICIT PhD program. Although there is never a guarantee that such sources of funding will continue to be made available on a regular basis, the current multi-year horizon of positive outlook towards increased funding in PhD programs encourages us to pursue the implementation of this new MA/PhD with the confidence that funding demands for teaching assistantships, tuition waivers, and fees for most students will be met. Given the University’s current mission to expand degree programs at the doctoral level, we anticipate procuring additional funding to support the financial needs of PhD students in ICIT. With the addition of PhD students comes an increase in high-quality teaching assistance in support of undergraduate courses to larger numbers of students, improving the Department's service to the campus as a whole.

**Students**

The existing ICIT MFA is a 2-year program in which the total group of students in any given year has ranged from 8 to 12. The projected number of students to be admitted at the PhD level is 4 students per cohort each year. Based on the normative in-residence (pre-candidacy) period of the combined MA/PhD, it is anticipated that the total number of graduate students in ICIT will therefore increase somewhat in its first year (2015-2016) and could be significantly larger by its third year. As noted above, the Department can accommodate this projected initial growth. Because the ICIT program addresses multiple approaches to contemporary music, the range of students is quite broad demographically and stylistically. ICIT opens the door for a diversity of students with different approaches to music making who would not likely be considered in a traditional PhD music program.

**Employment Implications**

Although most UC campuses have doctoral programs in music, few are explicitly designed to focus on integrating diverse creative and scholarly approaches to music. The absence of existing doctoral programs similar to the one proposed here makes an assessment of opportunities for placement of graduates difficult. However, it is well understood that most departments seek new faculty who can address multiple areas of expertise. By providing integrated training in composition, computer music, and improvised music, ICIT graduates are prepared to fill many sorts of roles. Nearly all of the alumni of the existing ICIT MFA program who have applied for doctoral studies have been accepted. This success rate demonstrates that the students in our existing Master’s program are receiving valuable training, are producing impressive work, and are following diverse paths in existing doctoral programs. One can infer from the success rate of ICIT MFA graduates entering doctoral programs elsewhere that a) the various types of graduates produced by ICIT are valued by universities that currently have
high-level music departments with doctoral programs, and b) the UCI Music Department’s ICIT program is succeeding at the Master’s level and is itself poised to offer doctoral-level professional training.

- **UC Campuses and Other California Institutions with Similar Offerings**

There are extremely few comparable programs that exist among UC campuses and other California independent universities. The vast majority of Music programs delineate specialties in traditional ways. A very few programs do embrace interdisciplinarity, but a curriculum such as that of ICIT—designed specifically to target the nexus of composition, improvisation, and technology—is unique to the UC system. One doctoral program that is related to ICIT, while still reflecting a distinct profile in crucial ways, is the “Integrative Studies” (IS) emphasis at UC San Diego. However, it is important to note that the UCSD Music Department offers distinct and traditional doctoral emphases in Composition, Computer Music, and Performance; in contrast, ICIT brings together Composition, Improvisation and Technology under the same umbrella, and emphasizes the ways in which those disciplines are intensely interrelated in modern practice. Many doctoral students in UCSD’s IS emphasis focus strictly on scholarly writing and go on to pursue careers as musicologists or ethnomusicologists; ICIT, on the other hand, is focused fully on those who wish to engage a new and integrative model of music making. The Performer-Composer DMA at CalArts, a relatively new program designed “for artist-scholars whose work exhibits an integration of their compositional and performance practices,” also appears to bear some similarity to the proposed ICIT PhD. At the CalArts program, however, only 2-3 applicants are admitted each year; such low enrollment numbers do not oversaturate what is perceived to be a growth area in graduate music programs.

- **Anticipated Campus Review and Implementation Dates**

The MA and PhD should be ready for campus review in 2014-15; implementation anticipated 2015.

- **Campus Contact Person**

Dr. Christopher Dobrian, Professor of Music, 303 Music and Media Building, UC Irvine, Irvine CA 92697-2775, dobrian@uci.edu, Tel 949-824-7288, Fax 949-824-4914.
Proposal for an MFA with Concentration in Screendance and Digital Media
Claire Trevor School of the Arts
UC Irvine
2014-19 Five-year Perspective

• Campus
UC-Irvine, CTSA Department of Dance

• Name and Anticipated Action
MFA Concentration in Screendance and Digital Media

• Description of and Reasons for Anticipated Action
As per Graduate Division guidelines, the Department of Dance’s MFA Concentration will be “loosely defined as a sub curriculum” consisting of "a coordinated set of courses (usually 4 or more) ... joined with the curriculum of one or more established graduate programs in a manner such that the requirements of the graduate program and of the concentration are met concurrently." The Concentration will enhance the growing presence in the department of digital dance courses and performances, as area of increased interest internationally.

• Relationship to Existing Campus Programs, Units, and Mission
The Concentration will be an adjunct to the extant MFA programs. Research areas include Dance and Technology, Dance History and Theory, and Critical Issues in Dance. No other similar programs at UCI exist.

• Resources
Core faculty will include:
Associate Professor John Crawford
Professor Lisa Naugle

The Concentration will rely on existing physical resources within the CTSA and in related programs at UCI.

• Funding
The Concentration will be small, but will require additional funding for added students. Added TA support will allow for enhanced undergraduate course offerings in digital media.

• Students
The Concentration anticipates accepting 2 students per year; steady state 6-8.

• Employment Implications
Both screendance and digital performance are increasingly at the center of dance and other performing arts programs nationwide. The Concentration will allow for significantly increased breadth of expertise for students wishing to enter academia or the professional world.
• UC Campuses and Other California Institutions with Similar Offerings

CalArts’ Center for Integrated Media
York University Certificate in Digital Media

• Anticipated Campus Review and Implementation Dates

The Concentration will be ready for campus review in 2014; anticipated implementation Fall 2015.

• Campus Contact Person

Dance Chair Lisa Naugle, c/o Claire Trevor School of the Arts, Inaugle@uci.edu, Tel 949-824-3209 Fax 949-824-4563.
Proposed MFA Degrees in Musical Direction, and Projection Design
Claire Trevor School of the Arts
UC Irvine
2014-19 Five Year Perspective

• Campus
UC-Irvine, CTSA Department of Drama

• Name and Anticipated Action
MFA in Musical Direction
MFA in Projection Design

• Description of and Reasons for Anticipated Action
The Music Theatre program (B.A. and B.F.A.) in the UCI Department of Drama is the largest single program in the CTSA, nationally known for the quality of its performance work. The addition of an MFA in Musical Direction will complete the music theatre repertory offered by the department. Because of the very selective nature of openings in musical direction, the program will remain small.

The Design specializations in the Department of Drama have in recent years become increasingly aware of the extended options for performance in the digital media world and through projections. Technology has dramatically improved in the past decade, resulting in its increased use on stage and in other performance venues.

• Relationship to Existing Campus Programs, Units, and Mission
No other comparable program to either of the proposed MFAs exists.

• Resources
The UCI Drama Music Theatre Program faculty will participate in the MFA program:

- Senior Lecturer Dennis Castellano
- Associate Professor and Chair of Drama Dr. Gary Busby
- Lecturer Dr. Myrona Delaney
- Assistant Professor Andrew Palermo

Drama Design faculty associated with the Projection Design MFA will include:

- Head of Lighting Design Lonnie Rafael Alcaraz
- Cliff Faulkner, Scene Design
- Michael Ganio, Head of Scene Design
- Mike Hooker, Head of Sound Design
- Vincent Olivieri, Associate Head of Design
- Jaymi Lee Smith, Head of Design
• Funding
Additional funding sources from on- and off-campus will be identified to allow for the added MFA student numbers.

• Students
The MFA in Musical Direction will accept 1-2 students per year; steady state 5-6.

The MFA in Projection Design will accept 2 students per year; steady state 6.

• Employment Implications
Since opportunities for musical direction are not plentiful, the MFA will provide graduates with a unique academic history which will greatly enhance employment opportunities.

Given the inevitable rise in the presence of digital and other technologies in performance, the MFA in Projection Design, combining various design disciplines with new and ever-changing technology, will provide a greatly-widened employment spectrum to students graduating from the program.

UC Campuses and Other California Institutions with Similar Offerings
No other California institution offers an equivalent degree.

CalArts Program in Film and Video, Program in Experimental Animation

• Anticipated Campus Review and Implementation Dates
The MFA in Musical Direction will be ready for campus review in 2014; anticipated implementation 2015.

The MFA in Projection Design will be ready for campus review in 2015-15; implementation anticipated 2015.

• Campus Contact Person
Dennis Castellano, c/o Claire Trevor School of the Arts, drcastel@uci.edu, Tel 949-824-4902.

Jaymi Lee Smith, c/o Claire Trevor School of the Arts, jaymis@uci.edu, Tel 949-824-6614
Proposal for a Professional Fee Program
M.S. in Conservation and Restoration
School of Biological Sciences
UC Irvine
2014-19 Five Year Perspective

1) Aims and objectives of the program.

The goals of a Professional Fee Program in Conservation and Restoration Science through the Department of Ecology and Evolutionary Biology in the School of Biological Sciences include: (1) filling a demand for practical professional development of students entering the workforce in the broad areas of environmental management, conservation, restoration and sustainability, (2) developing formal programs using community-engaged scholarship with key university partners to advance our faculty’s research capacity through a focus on local, critical needs and translation of knowledge to practice, and (3) aligning training programs with the School of Biological Sciences with campus-wide priorities in the environment, sustainability and global change to guide the research and teaching mission of the department in the next decade.

The program will provide:

(1) a balance of classroom training, practical experience and professional development
(2) experience in core ecological and evolutionary principles underlying conservation and restoration;
(3) interdisciplinary training in the earth and environmental sciences important for a modern perspective of system-based conservation and restoration;
(4) training in professional skills required for effective practice and success in leadership positions in non-profit, institute, profit and agency settings;
(5) research experiences in community-engaged projects to build bridges between communities of research capacity (universities, institutes, agencies) and need (non-profits, land management agencies, private land-holders, and governments), and;
(6) exposure to social, political and economic principles that guide the application of science to conservation and restoration.

2) Justification or rationale for the need of the program.

Ecology and Evolutionary Biology are sciences in transition. In the life sciences and public health, application of basic evolutionary principles and environmental context has helped in understanding and treating human disease, improving agriculture and even decision-making within the legal system. All of this has had major impacts on humanity’s standard of living and quality of life. At the same time, it is clear that the natural world that surrounds us is coupled to society in many ways, and principles of ecology and evolution are used in many contexts and sectors. Put simply, ecology is becoming a profession, where the active management of biodiversity, evolutionary potential, biogeochemistry and physical landscapes occurs throughout most of the surface of Earth and is connected to political, social, economic, and demographic processes in society.

As such, there is a developing industry in conservation and environmental science, beyond the monitoring and mitigation of the negative impacts of society on natural landscapes. The vision of many efforts is to create robust environments that are valued by society and contribute to the sustainability of our livelihoods. This need is encompassed in the call for ‘sustainability science’ from many sectors. In general, ecology and evolution train basic scientists in university settings, and these emerging professionals struggle with career placement, skill
development and retention in the profession. This neither serves the development of our discipline or the community that demands practitioners.

The Professional Fee Program in Conservation and Restoration Science through Ecology and Evolutionary Biology will be aimed at training professional students and tackling these important issues during a time of transition in our discipline. Three areas of activity provide a foundation for a new professional fee program: (1) the success of the Center for Environmental Biology, which connects the substantial university research capacity held in world-class faculty with the needs of the community; (2) the Global Sustainability Minor, which has been embraced by the campus community as a component of sustainability programs to grow in the near future; and (3) the strategic community-university partnerships that have been developed in the last five years that place a context to the science and learning.

Specifically, the development of a robust undergraduate internship program (see – uciceb.com/student-internship-program), relationship building with community partners (Irvine Ranch Conservancy, Crystal Cove State Park, Anza-Borrego State Park, Southern California Coastal Water Research Project, among others), and the long-term visioning of the collective partners of the Nature Reserve of Orange County (NROC – see – naturereserveoc.org), all point to a need for high quality science to be used in local decision making over the next five decades, resulting in a long-term environment for blended training, education and research. We anticipate the participation of the professional scientists in these partner organizations in the curriculum and training to take place in this degree program. This is also true for a number of university programs that potentially may find overlap, such as Earth System Science. Thus, the curriculum, the partnerships, the local community need, and the student demand are all aligned to suggest success in this new professional program.

It is also important to note that the development of this program would also benefit the existing Ecology and Evolutionary Biology undergraduate and graduate program by developing course offerings that would complement existing curriculum with modern topics and also in developing demand for existing class experiences. At the same time, there is an opportunity to align with efforts of the major professional societies in the field, which have professional certification programs that could be aligned with curricular activities.

3) Timetable for development of the program.

**Academic Year 2013-2014** – Development of a vision statement and overarching program structure; alignment of faculty research, teaching and service interests; program linkages among existing academic units; branding and marketing material development; external program evaluation (programs in other universities, identifying program niche, etc.); development of a student recruitment strategy, including inclusion of traditionally under-represented groups.

**Academic Year 2014-2015** – Development and approval of a curriculum and program structure, including trial collaborative programs with important community partners (internships, small research projects, etc.); initial recruitment; development of community affiliates to guide engagement projects; development of an advisory board;

**Academic Year 2015-2016** – First year of student enrollment; initial curricular offerings; continued program engagement trial exercises; new student recruitment.

**Academic Year 2016-2017** – Second year of student enrollment; first year of active community engagement projects; second year of curricular offerings; new student recruitment; first graduates.

**Academic Year 2017-2018** – Second graduates; Program Assessment; continued curricular offerings and community engagement projects; new student recruitment; alumni program development and performance tracking.
Responsible Faculty and Department Affiliations

- Laurence D. Mueller, Chair and Professor, Ecology and Evolutionary Biology (EEB)
- Kathleen K. Treseder, Vice-Chair, Professor, EEB
- Steven D. Allison, Associate Professor, EEB
- John Avise, Distinguished Professor, EEB
- Peter A. Bowler, Senior Lecturer SOE, EEB
- Matthew Bracken, Associate Professor, EEB
- Diane R. Campbell, Professor, EEB
- Bradford A. Hawkins, Professor, EEB
- Travis E. Huxman, Professor, EEB
- Adam Martiny, Associate Professor, EEB
- Jennifer B.H. Martiny, Professor, EEB
- Kailen Mooney, Associate Professor, EEB
- Sergio Rasmann, Assistant Professor, EEB
- Ann K. Sakai, Professor, EEB
- Cascade Sorte, Assistant Professor, EEB
- Stephen G. Weller, Professor, EEB
- To-be-hired, Lecturer SOE, EEB
Proposal for a Master’s Degree in Embedded & Cyber-Physical Systems
Howard Samueli School of Engineering
UC Irvine
2014-15 Five Year Perspective

- **Campus** – UC Irvine

- **Name and Anticipated Action** – Master of Embedded & Cyber-Physical Systems (MECPS)

- **Description of and Reasons for Anticipated Action** - A group of faculty in HSSoE and ICS affiliated with the Center for Embedded Computer Systems (CECS) are proposing a CECS-managed Interdisciplinary self-supporting Masters in Embedded & Cyber-Physical Systems (MECPS) consisting of a pre-sequenced pace of 7 foundational courses plus two project courses leading to a final project. The Master’s of ECPS program proposed here is developed, in part, to serve the needs of such students, or working professionals among whom the leaders of the “Embedded & Cyber Physical Systems” are especially likely to come.

- **Relationship to Existing Campus Programs, Units, and Mission** – There are currently no Master’s degree programs on campus in the Embedded or Cyber-Physical Systems. The proposed program will be a nice complement to our undergraduate degree offerings. Graduates of our undergraduate programs (BS EE and CpE in EECS and BS CS in CS, and CSE jointly managed by both departments) are ideally suited to apply and enter the MECPS program. In recent years, we find that as these undergrads work on senior design projects get familiar with Embedded and Cyber-Physical Systems and gain an appreciation for the domain. Indeed, many of these students state that hands-on knowledge of systems is a highlight of their educational experience at UCI, and want to see more of it in the future. We feel that the MECPS program directly addresses that point through the project students are required to do to fulfill their MECPS graduation requirement.

- **Resources**
  - **FTE Faculty**: One full time lecturer will be hired to help teach the courses in this program. Additionally, existing faculty will be compensated for: (1) teaching courses in this program either as buyout or stipend, (2) supervising students in project and case studies courses and (3) administrative duties related to the program.
  
  - **Staff**: Staff support will be provided by the Center for Embedded Computer Systems. The CECS staff will provide day-to-day operational and administrative support including that for admissions, fellowships, appointments and general student affairs. The staff will also assist with the development of promotional and advertising materials to recruit students and with providing other administrative support. Some of the staff lines will be funded from the tuition revenues.
  
  - **Courses**: Ten new courses will be developed specifically for this program.
  
  - **Laboratories**: Two new laboratories will be developed to provide hands-one training for students, complementing the classroom instruction the courses above. Anticipated space needs: 1000 sq. ft./lab for a total of 2000 sq. ft.
  
  - **Library**: No additional library resources are anticipated. Students may make use of
existing library subscriptions (e.g. ieeexplore, Springer, Elsevier) in their courses.

- **Funding** - The program will be funded through tuition assessment. A market study has concluded that a tuition level of $30,000 is appropriate. Given an anticipated enrollment of 50 students at steady-state the program will be self-sufficient in its third year of operation. A seed loan will be sought form campus to fund the degree establishment expenses and will be paid back once the program becomes self-sufficient.

- **Students** - We have applied for funding from the Graduate Division to fund one graduate student to help in the initial development phase of the program. At steady state, the program anticipates hiring one teaching assistant for each course that is offered. Additionally, 50% of the surplus will be set aside for fellowships supporting students in EECS and CS departments. Finally 33% of surplus will be set aside for financial aid of students in the self-supporting program.

- **Employment Implications** - Owing to its interdisciplinary nature, program graduates will be able to seek employment in electronics, aerospace, automotive, biomedical, manufacturing, robotics, defense, and construction industries. While a decline is observed nationwide in job demands, it is still a very healthy field with over 40000 job postings nationwide in 2013. The market study conducted by UNEX concludes that “...students receive higher starting salaries, over $100,000 at jobs that require CPS skills…”.

- **UC Campuses and Other California Institutions with Similar Offerings** - the Master of Engineering degree at UC Berkeley is offered by the Civil and Environmental Engineering Program and has a track called Large CPS. However, this is one of over 20 tracks in the program and has only 6 students enrolled. The program at Berkeley emphasizes a Civil Engineering aspect of CPS, targeting Civil Engineering majors. Our proposed degree targets a completely different sector which is students in CS/EE/CpE/CSE who seek to gain deeper knowledge of embedded system and their application in the Cyber-physical systems domain.

- **Anticipated Campus Review and Implementation Dates** - We anticipate submitting a proposal to campus committees (GC, CPB) in May 2014. If resources are in place, we anticipate developing the program and courses during the 2014-2015 academic year. Ideally, the program should accept its first cohort in Fall 2015 for the 2015-2016 academic year.

- **Campus Contact Person** - Fadi Kurdahi, Director, Center for Embedded Computer Systems (CECS), 3207 Engineering Hall, University of California, Irvine, CA 92697, +1 949 824-8104 (Office), +1 949 400-9499 (Mobile). **SUBMITTED 4/29/14**
Proposed Graduate Program

Master of Computer Science (MCS)
UC Irvine
2014-19 Five Year Perspective

- **Campus:** UC-Irvine

- **Name and Anticipated Action:** Master of Computer Science (MCS), new professional master’s degree

- **Description of and Reasons for Anticipated Action**
  This new degree would provide a high-quality professional masters education for 21st century Computer Science workers to prepare them for careers in high-technology industry, business, and government. The course of study would involve 11 Computer Science and Software Engineering courses, including a technical writing course and a capstone design course. At most 10 percent of the courses would be taught online, with the majority of the lecture courses taught by ladder-rank faculty in the UC-Irvine ICS School. Each course would be a (standard) 4-credit course, with 3 hours of instructor contact time (or equivalent, in the case of online courses). The degree offered upon completion of the requirements would be a professional master’s degree entitled “Master of Computer Science” or MCS.

- **Relationship to Existing Campus Programs, Units, and Mission**
  Unlike the existing research-oriented M.S. in Computer Science (which has the same course requirements as the Ph.D. in Computer Science), the courses in the MCS program would focus on the applications and practical knowledge for using Computer Science concepts in industry, business, and government. The program would also include a technical writing course, which focuses on communication skills in Information Technology settings, and a capstone design course, which focuses on the creation of a working Computer Science solution. The MCS program would be a full-time course of study, and the program would include an internship placement service, to provide MCS students with valuable real-world experience in the summer between their 3rd and 4th quarters in the program.

- **Resources**
  The resources needed are seed funding for a market study and marketing materials.

- **Funding**
  The proposed MCS degree would be funded as a self-sustaining program within the Donald Bren School of ICS.

- **Students**
  The audience for the MCS degree is foreign and domestic students who are interested in a professional master's degree in Computer Science. Students entering the MCS program would already have a bachelor’s degree, or equivalent, in a technical field that includes some background in Computer Science. The initial anticipated size of enrolled students would be 50, with the number of newly enrolled students gradually growing to around 100 over the subsequent five years. It is anticipated that 75% of
these students would be coming from Asia (e.g., China, Taiwan, South Korea, and India), with the remaining 25% coming from Europe, the Middle East, and the U.S. This data is based on an estimate derived from current demand for the research-oriented MS in Computer Science, which has roughly 1000 foreign applications per year and 100 domestic applications per year, but with approximately two-thirds of the roughly 75 annual acceptances being foreign and one-third being domestic.

- **Employment Implications**
  Based on BLS data, there should be a high demand for professional Computer Science graduates to work in careers in high-technology industry, business, and government. Moreover, it is quite likely that an MCS student’s permanent employment opportunity would be a follow-up to the internship they performed in the summer between their 3rd and 4th quarter in the program.

- **UC Campuses and Other Institutions with Similar Offerings**
  Other universities that offer a Master of Computer Science (MCS) degree include University of Illinois (Urbana-Champaign), Rice University, University of Minnesota, North Carolina State University, University of Iowa, Arizona State University, Utah State University, and Illinois Inst. of Technology. Other universities with similar professional-degree programs under different names (such as professional degrees that use the title Master of Science in Computer Science or Master of Engineering in Computer Science) include Stanford University, University of Southern California, Cornell University, Johns Hopkins University, University of Chicago, and University of Washington. In addition, UC-Berkeley recently just introduced a new degree in Master of Engineering in the Electrical Engineering and Computer Science. These should not be confused with the many universities, including UC-Irvine, that offer a research-oriented Master of Science in Computer Science degree, which is the more proper use of this degree name. For instance, see the following web sites concerning how universities that offer both an MS in CS degree and an MCS degree distinguish these two degrees:


  http://cidse.engineering.asu.edu/forstudent/graduate/computer-science/

- **Anticipated Campus Review and Implementation Dates**
  The new degree is anticipated to be reviewed in the 2013-14 academic year and approved in time to begin admitting students for the Fall 2015 quarter.

- **Campus Contact Person**
  Michael T. Goodrich, Chancellor’s Professor and Department Chair, Computer Science, goodrich@uci.edu
  Donald Bren School of Information and Computer Sciences
M.S. Human Computer Interaction and Design
Donald Bren School of Information and Computer Science
University of California, Irvine
Five Year Perspective 2014-19

- **Campus** Irvine

- **Name and Anticipated Action** – Masters of Human Computer Interaction and Design

- **Description of and Reasons for Anticipated Action** - Over the last several years, the Department of Informatics has fielded inquiries from an increasing number of students interested in a professional program in HCI, who were disappointed to learn of our research heavy MS in ICS-Informatics. Additionally, as the field has grown, our faculty are increasingly called upon to deliver professional training courses to industry partners whose employees need additional skills and knowledge in HCI and design. Finally, the improvement of online educational tools and the increasing acceptance of this platform as a means for delivering high quality professional education indicate that now is the time to design, develop, and deliver an innovative professional Masters program in HCI and design. During the Informatics department faculty retreat of 2013, such a program was deemed to be a high priority for the department going forward.

- **Relationship to Existing Campus Programs, Units, and Mission**
  The Masters of Human Computer Interaction and Design is completely new and overlaps very little with any existing programs.

  *Comparison with existing MS in ICS:* The existing program is heavily focused on theory and research in Informatics broadly, is for students who use the program as a stepping stone toward a Ph.D. program, and takes two years to complete. The new Masters program, instead, targets working professionals who want to advance their knowledge, skills, and careers in the area of user experience design. The courses are therefore professional in nature, rather than research-focused, and also focus much more narrowly on user experience design throughout. Additionally, the new Masters will be offered substantially online and on a different timetable than our existing program (roughly 1 year for completion).

  *Comparison with existing MS in Software Engineering:* The two programs draw upon a very different audience, and therefore are rooted in a very different set of courses. No significant overlap exists.

  *Comparison with existing MS in Computer Science:* The two programs are different. In terms of course requirements, the focus of the proposed MHCID is on human and social aspects of computing and technology, and all core courses are offered by the Department of Informatics. The CS degree focuses on core computer science (algorithms, operating systems, programming languages), and all its courses are offered within the CS department.

  *Comparison with existing MS in Statistics:* There is no overlap with this program.

- **Resources** – We anticipate hiring a lecturer as well as other staff to support the program. All such resources will come from the self-supporting program budget.
• **Funding** – The program will be a self-supporting graduate program.

• **Students** – We estimate enrolling between 30 and 80 students per year.

• **Employment Implications** - There are a large number of positions open for graduates of this program, under the titles of “Web Developer,” “Front-end Developer,” “User Experience Architect,” “User Experience Designer,” “User Experience Engineer,” “Usability Specialist,” etc. On Monster.com, there are today over 1,000 jobs listed under these titles.

  The companies that hire people with the skills our graduates will have range from small consultancies, all the way up to Amazon, Microsoft, IBM, eBay, Yahoo, MATLAB, Accenture, Whirlpool, Bloomberg, Honeywell, Northrop Grumman, etc. And the need in this area of technology design is growing as technology and its control is imbedded in larger and larger numbers of places, from watches to recommending goods and services to you, to smart houses and cars. California is the top state employing students with HCI degrees (see Figure 1).

  There are a number of professional organizations that serve the continuing professional growth people with these skills: The Association for Computing Machinery (ACM) has a large number of special interest groups (SIGs). The SIG for Human Computer Interactions (SIGCHI) is one of the largest, and has a sister organization, SIGGraph, that is the largest. The CHI conference has an annual

![Figure 1: Top States for HCI professionals, according to market research](image)
attendance at its conference of around 2500 students, faculty, and professionals. Two key professional
publications, Interactions and UX Magazine, have tens of thousands of readers, over 15,000 subscribers.

- **UC Campuses and Other California Institutions with Similar Offerings** – No other UC campus
currently offers a professional degree in human-computer interaction. Stanford’s design school is the
closest similar offering in the state.

- **Anticipated Campus Review and Implementation Dates** – Grad council review at UCI should occur
in November 2014 with the goal of enrolling students in Fall 2015.

- **Campus Contact Person** –

  Gillian R. Hayes  
  Associate Professor & Vice Chair for Graduate Affairs Robert A. and
  Barbara L. Kleist Chair in Informatics  
  Department of Informatics
  Donald Bren School of Information and Computer Sciences
  949-824-1483 (office), 949-824-4056 (fax), 678-575-6622 (mobile)
gillianrh@ics.uci.edu
Joint Doctoral Program in Computational Science
University of California, Irvine
and
San Diego State University
2014-19 Five Year Perspective

- **Campus** – UCI and San Diego State University

- **Name and Anticipated Action** – Joint Doctoral Program in Computational Science

- **Description of and Reasons for Anticipated Action** - The mission of the Ph.D. program in Computational Science is to train professionals capable of developing novel computational approaches to solve complex problems in both fundamental sciences and applied sciences including engineering. The natural career path of a Computational Science Ph.D. graduate is a research position, either in academia, government laboratories, or industry, typically in an interdisciplinary team. Furthermore, graduates will be particularly well prepared for teaching, industry, business, and government positions that require strong analytical and computational skills, a broad background in science, and the capability to relate topics in different areas of science and engineering. A program of study combining applied mathematics, computing, and a solid training in basic science will culminate in doctoral research focused on an unsolved scientific problem. The proposed program will build on existing strengths at UCI and SDSU. The emphasis here is to create an organizational structure to bring together faculty at UCI and SDSU to collaborate on interdisciplinary science and engineering research, facilitated by the proposed doctoral degree program in computational science.

- **Relationship to Existing Campus Programs, Units, and Mission** - Mathematical and Computational Systems Biology (MCSB): MCSB is the most similar existing UCI program to that proposed, both as an interdepartmental graduate program under the auspices of the Graduate Division, and as a particular kind of Computational Science. MCSB student requirements are much deeper in biology than Computational Science requirements will be; also Computational Science students may specialize in non-biological sciences or in methods that are expected to work well across many domains including the living/nonliving divide in science or engineering.

- **Resources** - Each campus will have a separate budget. Budget decisions will be made by the program directors at each campus. The items below refer to the UCI component.
  1. FTE faculty (28 FTE, existing -- $0 additional) The program does not plan to request any additional FTE faculty positions.
  2. Library acquisition ($0) No additional library acquisition is expected.
  3. Computing costs ($0 above existing equipment) No additional computing costs are expected directly to the program; individual PIs have substantial computing resources and will be responsible for providing resources for their students.
  4. Equipment ($0 above existing equipment) No additional equipment is requested. Many of the participating labs have extensive equipment related to their areas of expertise.
5. Space and capital facilities ($0 above existing space and facilities) No additional space or facilities are requested. The participating labs have sufficient space and facilities.
6. Other operating costs ($47,600)

**Director Remuneration** ($20,000): Funds are requested to compensate the Director for the added responsibility of overseeing the program. We thus request a permanent source of funding to support this additional effort. The Director may share the funds with the Associate Director(s). The funds may be used for salary, research or to purchase course releases. No increase in cost annually is expected. No support staff will be required.

**Part-Time Student Affairs Office graduate advisor** ($21,200): Funds are requested to support a graduate student to assist the director with the administrative responsibilities associated with the full year--round cycle of events and deadlines.

**Summer Seminar** ($2000): Funds are requested to organize an annual summer matchmaking meeting between students and faculty. The faculty will give short presentations on their research, and there will be time for the students and faculty to meet and discuss potential projects.

**Recurring office expenses** ($4400):
- Telephone and Fax Line: $600
- Mail Delivery (shared with CCBS): $440
- Paper Supplies: Copy paper, toner, name badges, labels, envelopes: $3,000
A 2% increase annually is estimated. We request a permanent source of funding for recurring office expenses.

- **Funding** – This will be an academic program, and will be state-supported.

- **Students** – We estimate that we will admit 20 students per year, based on historical levels for the SDSU-Chapman joint degree program.

- **Employment Implications** - It is needless to say there has been a steady rise in the need for computational expertise in various disciplines of science that has also led to a very active job market for PhD computational scientists. Another currently emerging area of need within computational science is for “big data” approaches to science. In essence a computational science graduate has to be an expert in an area of basic science with a strong grasp of mathematics and computing, have a profound understanding of emerging advances in computing resources and algorithms, and demonstrate ability to synthesize this interdisciplinary knowledge to solve problems and/or advance knowledge and discovery in their respective fields. Such an ambitious educational goal greatly exceeds the scope and level of what can be achieved in a M. S. degree program. Doctoral level programs in the sciences have long been intended primarily to produce future academic professionals with deep knowledge in a small slice of a specific technical discipline. It remains a goal of doctoral education to train the scholars and university researchers of tomorrow, but it is also a documented fact that an increasing number of US Ph.D.s in science and engineering are pursuing research careers outside academia with private companies. In a knowledge-driven economy PhD graduates can significantly contribute to innovation and discovery in non--academic settings. However, at present, the number of science Ph.D.s entering the industrial research workforce (~20--30%) is rather low. Science graduates entering industrial research and development workforce often do not find an employment directly related to the specific subject of their
graduate research training, and sometimes not even in the same discipline or general area of science. On the bright side, the average unemployment rate for science and engineering Ph.Ds. has been consistently much below the national average. This indicates that science doctoral degree graduates entering industrial research jobs adapt and demonstrate the expertise and skills needed for employment outside their immediate field of expertise. This is presumably due to their general aptitude at tackling complex tasks, which is a direct outcome of their research training. Doctoral degree trainees can be better prepared to find suitable employment if their training has emphasized versatility in problem solving irrespective of the research project studied in detail. The fundamental approach followed in the computational science training at SDSU since its inception was to expose doctoral trainees to a broad range of problems in science and engineering. SDSU computational science graduates through coursework, projects and research are provided opportunities to accumulate a wide variety of strategies for problem solving over a broad spectrum of challenges. The engagement in courses and research in an interdisciplinary environment allows students to understand how a method used in for solving a problem in aerospace engineering is also appropriate for a problem in biotechnology or geology. Students are strained to think and identify themselves primarily as “problem solvers” armed with a wide variety of tools in mathematics and computation that can be applied to new and unforeseen specific future tasks.

- **UC Campuses and Other California Institutions with Similar Offerings** - There are several relevant programs in the UC system (e.g. those at UCSB, UCSD, and UC Merced) that allow a student to obtain a PhD degree in one of the science or engineering programs with an emphasis or specialization in computational science. At UC Davis, students in the Applied Science doctoral program have an option of specializing in Computational Science. However, none of these programs offer an interdisciplinary PhD degree.

- **Anticipated Campus Review and Implementation Dates** – Ideally, we would like to begin admitting students for Fall 2015.

- **Campus Contact Person** –
  Eric Mjolsness, Professor, Computer Science (emj@uci.edu) and Daniel Whiteson, Associate Professor, Physics & Astronomy (daniel@uci.edu)
Proposal for MD/MS-BATS Program
School of Medicine
UC Irvine
2014-19 Five Year Perspective

- **Campus** – UC Irvine.

- **Name and Anticipated Action** – Combined M.D./M.S. Program in Biomedical and Translational Science in the School of Medicine.

- **Description of and Reasons for Anticipated Action** – The proposed action would create a new dual degree program allowing students to concurrently pursue M.D. and M.S. degrees. In the present situation, some medical students have taken a one-year leave of absence to pursue the M.S. degree in the BATS program. However, it is very difficult to complete the entire BATS curriculum in one year and it would significantly enhance the academic experience for those students if they were able to take some of the BATS course during their medical school training.

- **Relationship to Existing Campus Programs, Units, and Mission** – This program would allow students to concurrently pursue graduate study in two existing programs at UC Irvine, the School of Medicine M.D. program and the Biomedical and Translational Science M.S. program.

- **Resources** – The combined program would not require any additional resource, as it will be administered through the MS-BATS program.

- **Funding** – This program would not require any additional funding. Students in the program would pay medical school tuition and fees for four years and graduate school tuition and fees for the one year in which they are primarily involved in the M.S. program.

- **Students** – It is anticipated that approximately six medical students would participate in this program in each medical school class. Students would apply to the program during the first two years of medical school and participate during their third year in training, so the total number of students participating at any one time would be approximately 18.

- **Employment Implications** – Graduate of this program with both M.D. and M.S. degrees and training in translational research will be very competitive for positions in academic and research institutions, healthcare financing and delivery systems, governmental health agencies and non-governmental health agencies and organization. The American Associate of Medical Colleges reports that 40% of open positions for assistant professors of medicine in patient-oriented (clinical) research remained unfilled between 2002-2004 (AAMC Analysis in Brief, December 2007 Vol. 7 No 5).

- **UC Campuses and Other California Institutions with Similar Offerings** – In the UC system, UC San Francisco offers a clinical translational degree granting program, but it is not combined with the M.D. program.

- **Dates Anticipated Campus Review and Implementation** – We anticipate that the proposal for this program will be submitted to Graduate Council during the 2014 year, with an anticipated start during Fall 2014.

- **Campus Contact Person** – Francine Jeffrey, Director of Graduate Studies, School of Medicine (fmjeffrey@uci.edu) and Sherrie Kaplan, Director of M.S.-BATS, School of Medicine (skaplan@uci.edu).
Proposal for MD/MA in Medical Humanities
Schools of Humanities, Arts, and Medicine
UC Irvine
2014-19 Five Year Perspective

• **Campus:** UC Irvine

• **Name:** Creation of a joint degree program, MD/MA in Medical Humanities

• **Description:**
The proposed masters’ program is part of a larger Medical Humanities initiative emerging from the School of Medicine, School of Humanities, and School of the Arts. The three schools recently submitted a joint proposal to the provost’s Interschool Excellence initiative. The larger initiative’s purpose is to address complex social challenges posed by advances in biomedicine and medical research, so that medicine remains a person-centered, human enterprise at the service of the sick and vulnerable patient. The master’s program addresses the emerging fields of medical humanities and spiritual care with medical ethics.

Each of the foundational courses for the degree will be team-taught by faculty from multiple schools. A course in medical ethics, for example, could include faculty from the School of Medicine (physicians, nurses, hospital chaplains), the Department of Philosophy, the School of Law, and the School of Social Sciences (e.g., Center for the Scientific Study of Ethics). So not only the entire degree, but each of the core courses within the degree, will be truly interdisciplinary.

We hope to also offer the master’s degree as a co-terminal 5-year bachelor’s/master’s degree in the School of Humanities and School of Medicine, which would be attractive to UCI pre-medical and pre health professional students.

• **Relationship to Existing Campus Programs:**
This combined MD/master’s option will be an analogous model to the MS currently offered for medical students in Translational Sciences, the PRIME-LC MA or MS, and the Merage School of Business MBA.

• **Resources and Funding:** We are in the initial stage of planning, and the resources needed to offer the joint degree program has not yet been determined.

• **Students:**
We anticipate substantial academic enrollment, as the degree will attract both SOM students and students from other disciplines.

• **Employment Implications:**
There is currently a high professional demand for clinical ethicists to staff hospital ethics committees; and many students intending to apply to medical school will seek to strengthen their applications by obtaining a master’s degree.

• **UC Campuses and other California Institutions with Similar offerings:**
No other UC campuses offer such a joint degree.

• **Anticipated campus review and implementation dates:**
The anticipated date to initiate this new degree program is 2017-18.

• **Campus Contact person:**
Doug Haynes, Associate Professor of History, 4-6341
Proposal Professional MS Degree in Clinical Pharmacology
University of California Irvine
2014-19 Five Year Perspective Updated

• **Campus** - UCI

• **Name and Anticipated Action** - Initiate a new professional Master’s Degree in Clinical Pharmacology.

• **Description of and Reasons for Anticipated Action** - It is intended to meet the need for individuals with training in planning, running, and monitoring clinical trials of new drug candidates. This specialty is in demand both in hospitals and in industry. It will include both classroom instruction and internships.

• **Relationship to Existing Campus Programs, Units, and Mission** - There are no existing programs of a similar nature that we are aware of, and we are exploring intern partnerships with the School of Medicine, the Cancer Center, the ICTS, local companies, and the local branch of the FDA.

**Resources** - No new resources needs are anticipated.

• **Funding** - We are planning to design a self-supporting professional MS program.

• **Students** - Although our feasibility studies are still underway, we anticipate admitting approximately 10 students, which for a two year program would result in a steady state enrollment of 20 students.

• **Employment Implications** - Employment opportunities after degree completion will include positions in hospitals, medical schools, and especially industry supporting clinical research.

• **UC Campuses and Other California Institutions with Similar Offerings** - We are not aware of any similar program.

• **Anticipated Campus Review and Implementation Dates** - A proposal will be ready to begin campus review by the end of the current academic year, and we would like to begin implementing the program the following year, with the first enrolling students entering Fall of 2013 or 2014.

• **Campus Contact Person** - Professor Richard Chamberlin, Chair of Pharmaceutical Sciences, 147 Bison Modular, Phone: 824-1239, Email: richard.chamberlin@uci.edu
Proposal for M.A. Degree in European Intellectual and Cultural History (EICH)
Department of European Languages and Studies
School of Humanities
UC Irvine
2012-19 Five Year Perspective

• **Campus:** The new program would be housed in the Department of European Languages and Studies in the School of Humanities on the UC Irvine campus.

• The proposed academic program is an M.A. Degree in European Intellectual and Cultural History (EICH)

• **Description of and Reasons for Anticipated Action:** The Department of European Languages and Studies currently houses a Ph.D. program in German, which confers an M.A. only for students en route to the Ph.D. (unless it serves as a terminal degree for students not qualified for continuing in the program). The Ph.D. in French is currently suspended due to insufficient faculty numbers in the program after a period of retirement. There is no M.A. program (either stand-alone or 4+1). The proposed program will provide students with a rigorous course of study in the foundational cultural products and philosophical texts produced in Europe during the modern era (from approximately 1450 to the present). The program will have students entering in two ways: (1) Students with a B.A. degree can apply to the “stand-alone” program and pursue a one-year degree consisting of nine courses, plus either a comprehensive examination or a thesis. (2) This will also be a 4+1 M.A. program so that top UC Irvine undergraduates can apply in their third year, begin coursework during their senior year, and spend a fifth year at UCI completing their nine courses, plus either a comprehensive examination or a thesis. The objective of this program is to train individuals in interpreting and writing about fundamental cultural products (literature and the arts) and philosophical texts (broadly speaking, including works in political theory, the history of science, and theology) from the European tradition. The program will also emphasize the legacy and transformation of this tradition, in both recent developments in the broad area of “literary and critical theory” and in colonial, postcolonial, and other non-European contexts. The program targets three groups of students: (1) recent B.A.s or UCI undergraduates interested in pursuing Ph.D. or other postgraduate degrees in any number of humanistic or social scientific fields, for whom a firmer foundation in European intellectual history would be desirable; (2) high school teachers in European history who desire a broader and deeper background in cultural and intellectual history; and (3) members of the community interested in the studying significant works of modern Europe and their varied reception.

• **Relationship to Existing Campus Programs:** On the UCI campus, the Department of Philosophy in the School of Humanities has a strength in Continental Philosophy from the Early Modern and Modern periods and offers a master’s degree in philosophy, but little focus on the history of philosophy or the historical interrelations between cultural and intellectual developments. The M.A. program in History likewise has little overlap with our proposed program. Both programs would, in fact, find ours a beneficial complement (we have received letters of support).

In fact, the proposed program would be open to students currently enrolled at UCI in other Ph.D. programs who wish to pursue coursework and an M.A. in EICH at the same time. Some students in the Ph.D. program in Culture and Theory, for example, might benefit from developing their background to the theories of ethnic, feminist, and queer studies that are their focus.
There are no programs at UC and very few programs nationwide that are comparable to this proposed M.A. in EICH. While some Ph.D. programs in history have subfields in Intellectual History, they do not offer terminal masters. This program would fill a significant academic niche.

- **Resource Requirements:** No new resources are required. The only new course is the proseminar sequence and it can be covered by existing ELS faculty. Other courses will be covered by ELS and affiliate faculty as part of their normal teaching load.

- **Funding:** The students will have to rely on self-funding or on extramural funds. Because this is a terminal M.A. program, no guaranteed graduate student support will be provided, though we will support applicants in securing any forms of funding possible.

- **Students:** The program targets three groups of students: (1) recent B.A.s or UCI undergraduates interested in pursuing Ph.D. or other postgraduate degrees in any number of humanistic or social scientific fields, for whom a firmer foundation in European intellectual history would be desirable; (2) high school teachers in European history who desire a broader and deeper background in cultural and intellectual history; and (3) members of the community interested in the studying significant works of modern Europe and their varied reception.

The Department anticipates a pool of 4-6 incoming students per year.

- **Employment Implications:** We anticipate that the majority of students in the 4+1 program and recent B.A. students in the stand-alone M.A. program will be interested in pursuing advanced degrees in either professional schools (e.g., law) or Ph.D. programs. The M.A. in EICH will undoubtedly make them more competitive for admissions and funding opportunities. We hope to use the program to recruit some of the best students into Ph.D. programs at UCI.

High school teachers will benefit academically, pedagogically, and financially by receiving an M.A. degree.

- **UC Campuses and Other California Institutions with Similar Offerings:** No such program exists in the UC system. There are also no M.A. programs in European Intellectual and Cultural History at major universities. There are some Ph.D. programs (e.g. UCLA and Harvard) that include European Intellectual and Cultural History as subfields. The Ph.D. program in the History of Consciousness at UC Santa Cruz has little overlap with our proposed program. The Committee on Social Thought at the University of Chicago offers a Ph.D. granting program that is broader in scope. The two closest programs are the John D. Draper Interdisciplinary Master’s Degree in Humanities and Social Thought (New York University) and the graduate program, MA and Ph.D. in Social and Political Thought (York University, Ontario, Canada).

- **Anticipated Campus Review and Implementation Dates:** As of February, 2014, the Department has drafted a full proposal that is already being reviewed by the Associate Dean of Graduate Study in the School of Humanities. During the remainder of winter quarter and through spring quarter of 2014 the Department will finalize the proposal, consult with all School of Humanities and School of Social Science units that could be affected. The initial School-wide review (Humanities Executive Committee and Dean) should be complete by the end of spring quarter 2014, for the beginning of campus review.

Implementation would begin with the first students joining the program in fall quarter, 2015.

- **Campus Contact Persons:**
  Jane O. Newman, Chair
Department of European Languages and Studies
243 Humanities Instructional Building
University of California, Irvine
Irvine, CA 92617-3150
jonewman@uci.edu

Professor John H. Smith, Coordinator of M.A. Proposal
Department of European Languages and Studies
Professor of German
243 Humanities Instructional Building
University of California, Irvine
Irvine, CA 92617-3150
jhsmit@uci.edu
Proposal to Create a 5-year BA/MA Program in East Asian Studies
Department of East Asian Languages and Literature
School of Humanities
UC Irvine
2014-19 Five Year Perspective

• Campus
UCI

• Name and Anticipated Action
The Department of East Asian Languages & Literatures is exploring the possibility of creating a 5-year combined BA/MA in East Asian Studies. This will be a 4+1 M.A. program, so that, similar to 4+1 programs at other universities, Irvine undergraduate EALL majors will apply to spend a fifth year at UCI to earn a master’s degree.

• Reasons for the Anticipated Action
The proposal is still being deliberated in the department, but we are including it in our 5-Year Plan Update now, because we would like to consider it simultaneously with the proposed reconfiguration/consolidation of our departmental majors into a single East Asian Studies major with three emphases in Korean, Chinese, and Japanese, which is going forward this next year. The main goal of the reconfiguring of the majors is to facilitate the teaching and learning of each of the three cultures in the larger context of “East Asia,” which has emerged as one of the most vibrant economic regions in the world, and to emphasize the dynamic interactions among the three cultures that have been taking place both historically and at the present time. We believe that adding an MA to the existing BA would have a number of positive effects for our students, including an additional year of work in languages and advanced work in inter-cultural East Asian studies that should give them an edge in applying to graduate school or finding employment in fields where knowledge of East Asian languages and cultures are essential. It is also likely to bring us more majors (many students now enrolled in our classes are minoring) and help fill out our first year graduate classes.

• Relationship to Existing Campus Programs, Units, and Mission
We anticipate the proposed action will have a positive effect on our relationships to existing campus programs and units such as History, Art History, and Political Science by increasing the overall number of East Asian graduate students and helping those departments become conscious of the importance of “East Asia” as an intellectual and cultural concept and the need to study as well as teach it.

• Resources
To be determined. Although normally we would say that the proposed action could be accomplished without additional resources, we are currently reduced to two FTE in Japanese Studies, from our original five (we are waiting to replace positions in Modern Japanese Lit, Premodern Japanese Lit, and Japanese Religions/Buddhism). It would be difficult to mount the advanced language and culture classes necessary without those FTE being replaced.

• Funding
Other than the reinstatement of the FTE mentioned above, the proposed action should be accomplished without additional resources.

**Students**

Currently there are approximately 140 students in our existing degree programs. We would expect that the proposed 5-year BA/MA program change would increase those numbers.

**Employment Implications**

We believe the additional year of advanced (4\textsuperscript{th} or 5\textsuperscript{th} year) language work and more advanced work in East Asian cross-cultural studies would increase employment opportunities for students since East Asia has emerged as one of the most important economic regions in the world and as the United States is shifting its focus of attention to the Pacific region.

**UC Campuses and Other California Institutions with Similar Offerings**

We are still in the very early stages of considering this program and what it should entail. We know that a 4+1 program in Philosophy of Logic, Political Science and Economics is currently under consideration, and we would be looking at other programs at UC, Cal State, and across the country for purposes of comparison.

**Anticipated Campus Review and Implementation Dates**

To be determined. We will be considering it in conjunction with the proposed new configuration of departmental majors, which is slated to go forward later this spring for campus review, but realistically we are aiming for implementation in 2016.

**Campus Contact Person**

Susan Klein, Associate Professor (sbklein@uci.edu)
Proposal for M.A. Degree in American Studies
School of Humanities
UC Irvine
2014-19 Five Year Perspective

• **Campus:** Irvine

• **Anticipated Action:** Formation of a new terminal M.A. degree program called “American Studies.”

• **Description and Reason:** A group of faculty in the School of Humanities has proposed the development of an American Studies MA degree that emphasizes hemispheric, trans-Pacific and global studies but also retains the finest nation-based work in the field. We anticipate submitting a proposal to the School of Humanities and the Graduate Council in Fall 2013. In the spring more than 30 faculty expressed interest in being part of this program.

• **Relationship to Existing Campus Programs, Units and Mission:** The program will establish connections with the following departments on campus: English, History, Asian American Studies, African American Studies, Chicano/Latino Studies, Film and Media Studies, and others that offer graduate courses that could be part of the curriculum. The goal is to have American Studies students enroll in courses offered already by these departments and programs. The Department of English has expressed interest in housing the program.

• **Resources:** In its initial years the program will need a director, an office, .5 FTE staff to help with administration. The program anticipates running two core courses (annually) that will be staffed by existing faculty. The rest of the curriculum will draw from offerings in our units. In other words, most of the curriculum will draw from courses we offer already.

• **Funding:** Specific requests forthcoming as part of the proposal.

• **Students:** The department anticipates enrolling 10-15 students in its initial years. It will not offer TA funding; it will function as a state-supported program (meaning California students will pay in-state tuition) that students can complete in 4-5 quarters of work. We anticipate offering a 5-year BA/MA track for outstanding undergraduate students coming from existing majors in the Humanities and Social Sciences. We also hope to recruit and enroll international students interested in the graduate-level study of US cultures and institutions.

• **Employment Implications:** Forthcoming in a proposal.

• **Institutions with Similar Offerings:** Most UC campuses do not currently offer degrees in American Studies, and none of them offer a stand-alone master’s program. UC Berkeley offers an undergraduate major in American Studies, while UC Riverside and UC Santa Cruz run programs in ethnic studies. Our program would be unique not only as a stand-alone MA but also because of its international emphasis.

• **Anticipated Review and Implementation Date:** Proposal will be ready in Fall 2013.
• **Campus Contact Person:** Rodrigo Lazo, associate professor of English.
Proposal for Master of Laws (LL.M.)
School of Law
UC Irvine
2014-19 Five Year Perspective

• CAMPUS
  UC Irvine

• NAME AND ANTICIPATED ACTION
  Creation of new degree program: Master of Laws (LL.M.)

• DESCRIPTION OF AND REASONS FOR ANTICIPATED ACTION
  Of the 203 U.S. law schools accredited by the American Bar Association, 157 have LL.M. programs. Typically, such programs are designed for international attorneys, judges, government officials, and recent law graduates who seek a degree in American law and the U.S. legal system. Elite U.S. law schools often offer additional subject-specific LL.M. programs, such as Tax Law, Entertainment Law, or Intellectual Property & Patent Law. UC Irvine School of Law seeks to establish a program with a strong focus on one or two subject areas, preventing the program from becoming merely a revenue source as sometimes happens at other law schools. A law faculty committee has been convened to propose specifics of a UCI LL.M. program.

• RELATIONSHIPS TO EXISTING CAMPUS PROGRAMS, UNITS AND MISSION
  There are no existing UC Irvine programs, academic units, and/or research units that are similar to the LL.M. program. No existing program, units or missions will be created, changed, or ended.

• RESOURCES
  No new facilities are needed for the creation of an LL.M. program. Existing faculty would teach in the proposed new program. Depending on the subject area(s) of concentration ultimately approved by the faculty, the program should require 1-3 new courses, otherwise LL.M. students will attend existing law courses. One additional staff person would be hired to manage the program.

• FUNDING
  All students in the LL.M. program would pay full law student tuition/fees—currently $53,802.50 for non-resident students, likely to make up most of the program’s student body. Current resident tuition fees are $47,308.50. As at all other law schools with a LL.M. program, the program would quickly become a profit-center for the School of Law.

• STUDENTS
  The LL.M. program would likely begin with 10-12 students. By definition, all applying students would possess a U.S. J.D. or international equivalent. The program would likely grow to 40-50 students within 3 years. The School of Law already receives frequent inquiries regarding a LL.M. Program, particularly from lawyers and prosecutors in China and South Korea.
• **EMPLOYMENT IMPLICATIONS**
  The LL.M. degree is an enhancement to international law students with law degrees, increasing a graduate’s marketability. Depending on the LL.M. area of specialty (e.g. Intellectual Property/Patent Law, U.S. Tax Law), graduates are typically in high demand.

• **UC CAMPUSES AND OTHER CALIFORNIA INSTITUTIONS WITH SIMILAR OFFERINGS**
  Of the 20 other California law schools accredited by the American Bar Association, only one lacks a LL.M. program. All other UC law schools have a LL.M. Program: Berkeley, Davis, Hastings, and UCLA.

• **ANTICPATED CAMPUS REVIEW AND IMPLEMENTATION DATE**
  UC Irvine School of Law may establish a LL.M. program following the granting of permanent accreditation by the American Bar Association, expected July 2014. Following accreditation, the ABA must acquiesce to the establishment of the program upon agreement that the LL.M. Program will not detract from the soundness of a law school’s J.D. program. The ABA does not directly accredit LL.M. programs. Following ABA acquiescence, UC Irvine and UC approvals would be sought, anticipating that the Master of Laws Program would enroll its first students fall 2016.

• **CAMPUS CONTACT**
  Erwin Chemerinsky, Dean
  School of Law
  401 East Peltason Drive
  Irvine, CA  92697-8000
  echemerinsky@law.uci.edu
  tel. (949) 824-7722
  fax (949) 824-7336
Graduate Program in Pharmaceutical Sciences (PharmD)
Department of Pharmaceutical Sciences
UC Irvine
2014-19 Five Year Perspective
Reinstatement of 2008 Proposal

- **Campus**: UC Irvine

- **Name and Anticipated Action**: PharmD to be offered by the Department of Pharmaceutical Science in the College of Health Sciences.

- **Description of and Reasons for Anticipated Action**: On the basis of interviews with representatives of the pharmaceutical and biotechnology industry and the USC School of Pharmacy, and an evaluation of the strengths on the UC Irvine campus in various areas that make up contemporary pharmaceutical sciences, a campus committee concluded several years ago that a traditional PharmD degree was not advisable. It has become clear since then, however, that it is and should be revisited. The dynamics and needs of the pharmaceutical community have changed since the plans for Pharm Sci were first initiated. According to a subsequent study (April 2004) from the UC Office of the President, there is a shortage of pharmacists nationwide and in California, and the demand for acceptance to Schools of Pharmacy has continually increased. The number of applicants increased 24.6% from 2001 to 2002 and 41.7% from 2002 to 2003. In California, two UC campuses and four private universities offer pharmacy degree programs. The number of first-year positions at California schools ranges from 25-30 students at UC San Diego’s new School of Pharmacy, to a high of 200 at the University of the Pacific. With plans to increase enrollments at Loma Linda University and the UCSD campus, and maintain enrollments at other schools, California will contribute an estimated 4,500 new graduates to the pharmacy workforce by 2010. Despite this gain, the total number of pharmacists is still expected to fall short of both the national average and the number needed to meet state needs based on population growth and health care utilization trends. Reflecting national trends, the number of qualified applicants to California’s pharmacy programs exceeds the number of available positions as indicated in the following table (2004).

<table>
<thead>
<tr>
<th>School</th>
<th>Loma Linda</th>
<th>UCSF</th>
<th>UCSD</th>
<th>USC</th>
<th>Western</th>
<th>UOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicants</td>
<td>475</td>
<td>1236</td>
<td>1071</td>
<td>1300</td>
<td>1053</td>
<td>1875</td>
</tr>
<tr>
<td>Positions</td>
<td>55</td>
<td>122</td>
<td>30</td>
<td>185</td>
<td>120</td>
<td>200</td>
</tr>
</tbody>
</table>

Even if UCSD reached the level of first year acceptances to that of UCSF, yet another School of Pharmacy in California would have a large applicant pool with a very little change in selectivity. The data available strongly indicate that a School of Pharmacy at UCI would fill an important need.

- **Relationship to Existing Campus Programs, Units and Mission**: Given the successful launch of a strong Pharmaceutical Sciences program in the form of a department, a pharmacy program would be a logical outgrowth that would not require enormous amounts of additional resources to launch. The PharmSci teaching program would already include many of the necessary courses, taught by faculty in Pharmaceutical Sciences. This new degree program, which would train students for careers in Pharmacy both in industry and in academia, certainly is an appropriate component of the mission of the College of Health Sciences. Other than serving as an extremely popular option for postgraduate training for UCI undergraduates, the impact on the main campus would be minimal.

- **Resources**: Most of the basic science expertise needed for a PharmD program will already be at UCI in the Department of Pharmaceutical Sciences. The new program will require a few additional research active faculty with research interests and areas of specialization related to the more clinical areas of pharmacy. Space for these additional faculty members will also be needed, as will the corresponding additional administrative infrastructure.

- **Funding**: Aside from the substantial commitments to PharmSci already made by the campus administration, a new PharmD degree program will provide a number of new opportunities for extramural research funding, infrastructure, and graduate student support with a pharmacy emphasis. In addition to overall increases at UCI in National Institutes of Health (NIH) individual investigator
(R01) grants to faculty newly recruited into the program, the interdisciplinary nature of the program opens a number of new avenues for bringing extramural support to the campus. Private funding for a named school of pharmacy is always a possibility, as at UCSD.

- **Students:** A graduate PharmD program would expand the biomedical degree offerings at UCI, increase the allure to potential students interested in biomedical research, and attract significantly more graduate students to campus. In a survey of more than 1000 UCI sophomore and junior Biological Sciences and Chemistry majors, we found that two-thirds of our own majors were interested specifically in a Pharmaceutical Science degree. This strong preference suggests that a graduate pharmacy program would attract a significant number of students from Biological and Physical Sciences programs around the country, including graduates of our own Pharmaceutical Sciences bachelor’s degree program.

- **Employment Implications:** As the UCOP study described above concluded, there is, and will continue to be, a large unmet demand for graduates with PharmD degrees, both in California and nationwide. There appears to be virtually no danger of overbuilding capacity for graduate training in the field.

- **UC Campuses and Other California Institutions with Similar Offerings:** There are several traditional Pharmacy Schools in the state, including UCSF and USC, in addition to a new program at UCSD. As discussed above, there is still considerable unmet demand for training in this field statewide.

- **Additional Campus Review and Implementation Dates:** The proposal for the bachelor’s degree program has been approved and implemented, and an interdepartmental gateway graduate program (Medicinal Chemistry and Pharmacology), administered by PharmSci, is admitting its first class this year for entering UCI in the Fall of 2008. A proposal to establish MS/PhD degrees in Pharmaceutical Sciences will be submitted in late 2008. Building on these three elements, it is expected that a proposal for a PharmD degree will be developed and refined for submission in 2011 and implementation the following year.

- **Campus Contact:** Richard Chamberlin, Chair, Department of Pharmaceutical Sciences, 147 BSA, 949-824-6478.
M.S./Ph.D. Program in Mathematical, Computational and Systems Biology
Graduate Division
UC Irvine
2014-19 Five Year Perspective

- **Campus** - Irvine

- **Name and Anticipated Action** - A Program of Graduate Studies in Mathematical, Computational and Systems Biology leading to the M.S. or Ph.D. Degree is proposed. The Dean of Graduate Division will oversee the program.

- **Description of and Reasons for Anticipated Action**

  With financial assistance from a 3-year, $1M grant in 2006 from the Howard Hughes Medical Institute (HHMI) to support new graduate training initiatives at the interfaces between biology and the quantitative sciences, UCI took the first steps toward developing a training program plan that culminates in the present proposal.

  The first stage of this plan was to implement a “gateway” graduate program, entitled *Mathematical and Computational Biology* (MCB; http://mcsb.bio.uci.edu/), which was approved by graduate council, and admitted its first class of students in Fall 2007. This program enlists the training support of faculty in 10 departments (Biological Chemistry, Biomedical Engineering, Chemistry, Computer Science, Developmental & Cell Biology, Ecology & Evolutionary Biology, Molecular Biology & Biochemistry, Microbiology & Molecular Genetics, Mathematics, Physics & Astronomy) in 5 schools (Biological Sciences, Engineering, Information and Computer Sciences, Medicine, Physical Sciences), and provides an avenue by which students from a variety of undergraduate backgrounds (e.g., math, physics, chemistry, engineering, computer science, biology) can focus on common themes in mathematics, computation and systems biology during their first year of training, followed by thesis research in a traditional department (leading to a departmental degree).

  The current MCB gateway program provides intense, one-year, interdisciplinary training that allows students to join traditional departments with a breadth of skills and knowledge that enhance their ability to contribute to the “New Biology”. This approach serves the needs of many students, as attested to by the great success (both in terms of student numbers and quality) that the MCB program has enjoyed since its inception. However, for some students, particularly those seeking to undertake the most creative, forward-looking research, the requirement to complete a Ph.D. within a traditional department can be a hindrance. For such a student, the curricular requirements of no single department may be appropriate.

  Thus, we believe that it is time to develop a stand-alone interdisciplinary graduate program in Mathematical, Computational and Systems Biology (MCSB) leading to M.S. and Ph.D. degrees. This effort also dovetails with other campus initiatives in this area, including the NIH-funded National Center for Excellence in Systems Biology (Center for Complex Biological Systems) and the excellence cluster hiring of 7 faculty members in Systems Biology in several departments across the UCI campus.

  The MCSB program proposed here is developed, in part, to serve the needs of students who wish to work at the boundaries between disciplines, among whom the leaders of the “New Biology” are especially likely to come. In addition, the MCSB program is designed to serve the needs of students who, for various reasons, would benefit by a short-term M.S. degree program in mathematical, computational and systems biology.

  In fulfilling these functions, the proposed MCSB program will be able to attract new, highly qualified students to UCI, beyond those now already enrolling in MCB, and to provide them with a unique academic experience of the highest quality and greatest societal and career relevance.
The proposed MCSB program will preserve the current MCB structure, while presenting new options to graduate students. Specifically, the new program will provide more extensive interdisciplinary training than currently available. Once the MCSB program is approved, the current MCB gateway graduate program will become the “Department Option” of the MCSB program, through which students complete their graduate training in a traditional department setting. However, through the new “M.S.” or “Ph.D.” options, the MCSB program will now permit students to complete their graduate training in a fully interdisciplinary setting, at the conclusion of which they will receive a MCSB degree. All of the program’s core courses are already taught regularly. In the MCSB program, there will be two categories of faculty participants: (1) Faculty who participate solely in the Department Option and (2) Faculty who participate in the M.S. and Ph.D. Options. The latter group of faculty members will be expected to make funding commitments to their MCSB trainees according to guidelines established in this document. A modest amount of funding is requested for start-up and annual costs. The MCSB graduate program is not planning to request additional FTE faculty positions.

- **Relationship to Existing Campus Programs, Units, and Mission**

As described above, a graduate gateway program in Mathematical and Computational Biology (MCB) has been in existence at UCI since 2007. The activities of MCB would remain largely unchanged as a result of this proposal, but they would be renamed the “Departmental Option” of the MCSB program.

The departments that currently participate in MCB each have their own graduate programs, and each has some potential for overlap with the MCSB program. These include programs in Cellular and Molecular Biosciences, Developmental and Cell Biology, Ecology and Evolutionary Biology, Molecular Biology and Biochemistry, Biological Chemistry, Microbiology and Molecular Genetics, Mathematics, Physics, Computer Science, and Biomedical Engineering. Several of these departmental programs allow a limited number of MCSB courses to satisfy elective requirements. Overall, however, the MCSB curriculum differs greatly from the core curricula of every individual graduate program at UCI.

- **Resources**

The program is not planning to request additional FTE faculty positions. A campus excellence initiative has already allocated 7 FTEs for the area of systems biology (not tied to any particular department). All seven positions have now been filled and the current faculty should meet the resource needs of the proposed MCSB program.

In the MCSB Program, there will be two types of faculty members: (1) Participating faculty in the Department Option and (2) Participating training faculty in the MCSB Stand-Alone Option. This distinction is made because the Stand-Alone Option requires a more focused research direction as well as additional time and financial commitments than does the Department Option. The only criteria for a faculty member to be a participant in the Department Option is that they hold primary or joint appointments in a participating department; whereas a participating member of the Stand-Alone Option must demonstrate that they maintain or are starting up an active research program suitable for Ph.D. training in mathematical, computational and systems biology. This may require showing the existence of research funding and/or a track record of past research in the area. As of the inception of the Program, 52 faculty members, distributed among several academic units, have been identified and indicated their interest as participants as M.S./Ph.D. trainers.

A new staff member will be recruited to manage graduate admissions and training grant administration, arrange graduate student recruiting trips, plan social activities for students, track progress toward degrees, maintain a historical database of students after graduation and to provide general support for the Program Director, Associate Director and Gateway and Executive Committees.
No additional significant library acquisition is expected. In addition, no additional computers for program administration are expected, although funds for laptop computers for students are requested. No additional equipment is requested.

There is adequate space for first-year students; most will be working in the laboratories of the faculty members overseeing the quarterly lab rotations. Beyond the first year, students will be housed in the laboratory of their thesis advisor or in departmental offices.

- **Funding**

Students will be provided fellowships for their first year of graduate study from training grants, CCBS funds, UCI Block Grant, campus fellowships, and extramural fellowships such as the NSF Graduate Fellowship and the NIH Ruth L. Kirschstein Research Awards, etc. The amounts will be competitive with market rates in the Biological Sciences. This “MCSB rate” will be established annually by the director in consultation with the executive committee.

Students in the MCB gateway program are currently supported by a combination of the sources listed above. In particular, the Graduate Dean provides Block funds at a base rate of $20,000 for ten students totaling $200,000. The Graduate Dean will continue to provide these Block funds for the new MCSB program. In addition, the Graduate Dean may raise the rate for each additional student enrolled, above the ten originally allocated. For example, in 2013-2014, the new rate is $35,000 for each additional student above the base. Because we anticipate that the program will increase in size (15 Ph.D. students and 4 M.S. students) and because the Graduate Dean’s new rate for students may increase, the funds provided in the MCB Block grant are expected to increase significantly. This will help to provide a permanent source of funds for the MCSB program that can aid to buffer unanticipated changes in funding from extramural grants that could create funding gaps.

In addition, the Departments of Biomedical Engineering, Computer Science, Developmental & Cell Biology, Ecology & Evolutionary Biology, Mathematics, and Physics & Astronomy, have all offered to provide TA slots to the MCSB program, based on each department’s needs and student backgrounds, if a teaching component is required for the MCSB program. This provides another potential source of funds for the MCSB program that could also help to cover gaps in extramural funding should they arise (including TA positions for first-year students).

Through their faculty mentors and advisory committees, students will be strongly encouraged to apply for extramural fellowships (e.g., NSF, NIH, etc.), which could also provide potential sources of extramural funding for the MCSB program.

Other sources of income for the program include $4,000 per student, as part of the NRST funding that will be returned to the MCSB program. We also plan to explore donations and other sources of development funds for graduate fellowships both through CCBS and through the Graduate Division to provide additional sources of funding that are independent of federal grants.

In order to continue after the first year in the Ph.D. Option, a MCSB student must demonstrate that there is a faculty member willing to take financial responsibility for that student for as long as the student remains in good academic standing and within maximal time to degree. This includes fees/tuition and a stipend. Faculty advisors will be required to sign a letter of agreement that confirms this responsibility.

We recognize that it may happen that a faculty member may be unable to honor financial agreements regarding student support, e.g. because of loss of funding or departure from the program or campus. In such a case, the Program Director may negotiate with participating MCB gateway Departments for the temporary use of a TA slot. The Program Director, in consultation with the MCSB Executive Committee and the Graduate Dean, may provide bridge funding, if such funds are available and needed. The student may also choose, if eligible, to
switch to the stand-alone M.S. degree program. Additionally, funds are requested for a full-time Student Affairs Officer (staff) and for remuneration of the Director and Associate Director.

• **Students**

It is expected that 20 current UCI graduate students will transfer into the MCSB Ph.D. program from either the MCB gateway graduate program or traditional departmental graduate programs most likely from advisors who join the program. In addition, the program will begin accepting applications in its first year of operation. Based on the current MCB gateway numbers, we anticipate an incoming class of 20 students – 15 Ph.D. students and 4 M.S. students. As new faculty members join the program, we anticipate the number of students will grow proportionally. We expect that within 5 years, the program will have roughly 50 students.

• **Employment Implications**

There are many opportunities for graduates in mathematical, computational and systems biology. These include positions in academic departments, including Systems Biology Departments, National Laboratories, the National Institutes of Health, etc. Numerous opportunities exist for placement of students in industry, including the pharmaceutical, bioinformatics, biomedical and insurance industries. Job opportunities for graduates likely exceed the supply in both academia and industry.

• **UC Campuses and Other California Institutions with Similar Offerings**

Many campuses of the University of California, and other Universities in California, now offer graduate programs in fields related to mathematical and computational biology and/or systems biology. These range from concentrations in specific programs within existing Departments, sometimes accompanied by an interdisciplinary designated emphasis, to several stand-alone graduate programs. For example, at UCLA there is a Biomathematics Department, which is located in the School of Medicine. Stand-alone graduate programs exist at UC Berkeley (Biophysics, Biostatistics), UC San Diego (Bioinformatics and Systems Biology), UC Merced (Quantitative and Systems Biology), UCSF (Biological and Medical Informatics, Integrative Program in Quantitative Biology), UCSB (Biomolecular Science and Engineering Program), Caltech (Control and Dynamical Systems), Stanford University (Chemical and Systems Biology), USC (Computational Biology and Bioinformatics Program).

The large number and rapid growth of such programs at UC campuses, and other campuses in California, attests the growing importance of quantitative, interdisciplinary approaches in biology. The UCI MCB program is already one of the largest and most established of these programs. With approval of MCSB, UCI will acquire a pipeline for interdisciplinary training that will be exceptionally broad and deep, providing students with training opportunities that are unique among UC campuses, other Universities in California and within the nation overall.

• **Anticipated Campus Review and Implementation Dates**

The MCSB program was submitted to the Graduate Dean for campus review in January, 2014. The program will become operational as soon as it is approved.

• **Campus Contact Person**
John Lowengrub, Chancellor’s Professor of Mathematics, Biomedical Engineering, and Chemical Engineering & Materials Science. 540H Rowland Hall, UC Irvine, 92697. lowengrb@math.uci.edu, 949-751-9700 (cell).
Program Proposal  
Masters of Legal and Forensic Psychology  
UC Irvine  
2014-19 Five Year Perspective  

- **Campus** UC Irvine  

- **Name and Anticipated Action** - The School of Social Ecology proposes to develop a self-sustaining online Master of Legal and Forensic Psychology. Two departments and one Center (all housed within the School of Social Ecology) will provide the programmatic anchor for the proposed program: The Department of Criminology, Law and Society (CLS); the Department of Psychology and Social Behavior (PSB); and the Center for Psychology and Law.  

- **Description of and Reasons for Anticipated Action** - Drawing on distinguished faculty in two nationally ranked departments in the School of Social Ecology (Criminology, Law and Society; Psychology and Social Behavior), the Masters of Legal and Forensic Psychology can become an instant leader in the field of law and psychology and a premier program for working professionals in associated fields. We have an unusually large group of faculty at UCI who are conducting cutting edge work in this area; indeed, several of these faculty members are considered the world’s leading experts in their areas of research. In fact, “psychology and law” is routinely recognized as an area of excellence in research and teaching at UCI. By developing a Master’s program in this area, we will solidify our standing the field as one of the premiere institutions to study Psychology & Law and to serve the public in demonstrable ways by doing so. Additionally, the part-time nature and online forum of the program allows non-traditional, non-residential students to pursue graduate education that will prepare them for careers in legal and forensic psychology. This is a unique aspect of our program that will allow us to reach a broader range of students, including those who are already working within the community and who are committed to gaining additional knowledge and skills to enhance their professional performance and facilitate their advancement in their field.  

- **Relationship to Existing Campus Programs, Units, and Mission** - We are not aware of any other comparable programs within the University of California, and therefore, there does not appear to be any issue concerning the possibility of cooperation or conflict with any other such institution. The only program that we are aware of that is “competitive” with our program is the Master of Advanced Study in Criminology, Law, & Society. This is primarily due to the fact that several faculty who will contribute to the proposed program are already affiliated with the MAS in CLS. However, these programs will differ largely with respect to the topic of study. The Master of Legal and Forensic Psychology program will focus on the intersection of psychology and legal issues, with a greater emphasis on the use of psychological principles, theories, and research to better understand legal processes and systems. One of the strengths of this program is its promotion of interdisciplinary learning. At its core, the forensic and legal studies program will integrate facets of psychology, forensics and the law.  

It is important to note that the majority of students in the MAS in CLS (about 75%) are from law enforcement and related fields. This includes police, probation and parole officers, FBI, Border Patrol, Homeland Security, and correctional officers and administrators. A minority of the students enroll in the program directly after college without prior job experience (about 10%). The remaining students (about 15%) come from a variety of professional backgrounds including attorneys, victim advocates, educators, loss prevention managers, private investigators, fraud investigators, and retired public servants. The MAS in CLS receives frequent inquiries from students seeking training related to psychology and forensics. These
students go elsewhere because the MAS in CLS does not offer courses in these areas. Given the psychological and forensic emphasis of this new program, those that pursue a degree in Legal & Forensic Psychology will be qualitatively different students with different career aspirations than those with a more criminological focus from the MAS. Furthermore, CLS faculty consider the MAS program to be of optimal size. As the recruitment pool has increased, MAS admissions have become more selective rather than increasing cohort size.

- **Resources** - Given the expertise of the faculty within CLS and PSB, there will be no need to hire new faculty to launch or maintain this program. The anticipated impact of this program on other course offerings within the department is minimal, given that the courses required for the program are already being taught by our faculty (with the exception of the 1 week in-residence course that orients the students to the program and the capstone course). In this manner, very little course development is necessary (current curriculum need only be modified to fit an online platform and be the appropriate level for the students in the program). Given the relatively minimal changes required, we therefore do not anticipate a negative impact on the current teaching program. In addition, as this is an on-line Master’s, space or facilities are not an issue for this program. Any space that is required will be provided by the School of Social Ecology. For example, any staff associated with the program will be housed in the School and the 1 week in-residence course has already been granted classroom space by the Dean of the School of Social Ecology (room 1517 of the Social & Behavioral Sciences Gateway). No other burdens will be placed on the campus (e.g., library, computers, etc.).

- **Funding** - The Dean of the School of Social Ecology and the leadership in the School (faculty chair, department chair, associate dean, etc.) have expressed strong support for the development of this program as a strategic initiative in the School of Social Ecology. As such, the Dean has invited a formal proposal and indicated a willingness to provide initial financial investment in the development of the program. Funding for course development will also come from UCI Extension, and a loan from the campus. We have already secured $10K in funding to conduct a market analysis.

- **Students** - We expect an initial enrollment of at least 15 students in the inaugural cohort. As recognition of the program grows, these numbers will increase substantially. One benefit of the program being predominately offered online is that it enables us to serve a large number of students wanting a UC education who are unable to relocate to the region to be in residence at UCI. The target population for this program is working adults and recent graduates who wish to further their education and gain skills that will help them obtain careers in fields related to legal and forensic psychology.

- **Employment Implications** - We will design the courses for the proposed program in consultation with local justice department officials (who would likely be a primary career avenue for graduates of our program) to ensure that our students are prepared with the skills necessary to become gainfully employed in forensic psychology careers. Graduates from the program will be well-prepared for careers as forensic psychologists, probation officers, jury consultants, court liaisons, expert witnesses, victims’ advocates, law enforcement advocates, case managers, and program directors; able to secure employment in a wide range of settings, including correctional institutions, psychiatric facilities, community-based agencies, jury consulting agencies, mental health centers, child welfare agencies, social service agencies and local law enforcement; and, once employed, well-suited to advance in an slew of related fields such that they ultimately become leaders in field related to law and psychology.

- **UC Campuses and Other California Institutions with Similar Offerings** - We are not aware of another Master’s program in Legal and Forensic Psychology within the UC.
Anticipated Campus Review and Implementation Dates - The proposal has been crafted and we anticipate review at UCI’s Graduate Council in either October or November 2014. We estimate that the Master of Legal and Forensic Psychology program will be approved and ready to begin in the fall quarter of 2016. However, the course development could likely be completed as soon as fall 2015.

Campus Contact Person

Name: Elizabeth Cauffman, Ph.D.
Position: Professor of Psychology & Social Behavior, Education and Law; Director of the Center for Psychology & Law
Phone: (949) 824-4075
Email: cauffman@uci.edu
Campus Address: 4308 Social and Behavioral Sciences Gateway
University of California, Irvine
Irvine, CA 92617
Proposal for AuD and PhD Program in the Hearing Sciences
School of Social Sciences
UC Irvine
2012-19 Five Year Perspective

- **Campus:** UC Irvine

- **Name and Anticipated Action:** AuD and PhD Program in the Hearing Sciences, a self-supporting AuD and academic PhD program of the School of Social Sciences

- **Description of and Reasons for Anticipated Action:** Hearing Research at UC Irvine is among the strongest in California, and is nationally recognized. This strength all but assures that a graduate program in Hearing Sciences at UC Irvine will immediately rise to prominence. UC Irvine’s unique strength has been in the basic sciences of hearing. The proposed programs in AuD and PhD will leverage this strength toward training clinical-scientists in hearing. Hearing loss is a significant Global Burden of Disease that affects 300 million people and is the second leading cause of YLDs (years living with disability). In the US, the number of people with hearing loss will increase significantly, with the first wave of 77 million baby-boomers reaching 67 years of age this year. The introduction in 2007 of the requirement for doctoral-level audiology training has left the state of California with only one program that can educate certified audiologists, a joint SDSU/UCSD program that came on board a few years ago. There clearly is a need for Doctoral training in hearing science, and the established base of hearing research at UCI is a uniquely suited foundation on which to build such a program. That program would issue two doctoral degrees, the AuD and PhD, with recipients of either degree qualified to seek licensure for clinical practice of audiology.

- **Relationship to Existing Campus Programs, Units, and Mission:** The proposed AuD/PhD draws on the campus’s excellence in hearing sciences across the Social Sciences and may involve collaborations across other units including Neurobiology and Behavior in the School of Biological Sciences, and Medicine.

- **Resources:** The program will require the creation of a new core sequence for the two degrees conjointly, and a separate track for the professional AuD degree. Other course offerings will be proposed, but the bulk of the curriculum will consist of existing courses in the participating units. No new library collections are necessary.

- **Funding:** Funding for new FTE and lecturers will be obtained through the campus’ and participating Schools’ normal allocation process based on students’ served and program size. The funding model is also based on the sustainability of a self-supporting AuD, which will provide additional revenue to support growth in the PhD.

- **Students:** The new AuD is expected to enroll 10-15 students per year. The PhD in Audiology will enroll 4-7 students per year.

- **Employment Implications:** Data on placement of AuDs demonstrates very high employability, with graduates often being placed in speech, language and communication disorders-related jobs immediately upon graduation. The prospects for PhD are in universities, research labs and industry. Given California clinical licensure requirements there is a high expectation of demand for these programs.

- **UC Campuses and Other California Institutions with Similar Offerings:** UCSD and San Diego State offer a joint AuD as well as a PhD in Audiology. UC Irvine boasts greater numbers of auditory scientists and will benefit from the colocaton of the programs on one campus.
• Anticipated Campus Review and Implementation Dates: A draft proposal has been written in response to the UC Irvine campus’s “Interschool Excellence” initiative; once the outcome of that initiative is known, the proposal will be revised and then submitted for the review of the relevant participating units, for submittal to the Academic Senate in the 2014-15 academic year. The preferred date for enrolling new students is Fall, 2015.

• Campus Contacts:

  Bill Maurer, Dean
  School of Social Sciences
  3151 Social Sciences Plaza
  UC Irvine
  Irvine, CA 92697-5100
  wmmaurer@uci.edu
  949-824-6802

  Kourosh Saberi, Associate Dean
  Professor of Cognitive Sciences
  School of Social Sciences
  UC Irvine
  Irvine, CA 92697-3440
  saberi@uci.edu
Proposal for M.S. in fMRI Methods
School of Social Sciences
UC Irvine
2014-19 Five Year Perspective

• **Campus:** UC Irvine

• **Name and Anticipated Action:** MS in fMRI Methods, self-supporting Master’s program of the School of Social Sciences

• **Description of and Reasons for Anticipated Action:** M.S. in fMRI Methods

The use of functional MRI in both research and clinical settings is undergoing a period of tremendous growth. Given the technical demands of the method the maintenance and operation of fMRI systems requires strong technical support. Currently such positions are filled by Ph.D. level personnel. However, the turnover rate is high because the majority of Ph.D.’s accept these positions as stop-gap career options while searching for higher-level positions. A masters-level degree will provide the necessary training to provide technical support for organizations using fMRI and allow individuals to pursue a technical career in imaging without the need to go through a doctorate program. The proposed MS in fMRI methods will be the first of its kind in the US. While there are several institutions that offer a concentration of courses in fMRI methodology (e.g., UCSD, UCLA), none offer a degree-granting or certificate program. This will likely change in the next decade as the demand for specialists in imaging technology in hospitals and academic institutions is expected to significantly increase. An MS in fMRI methods will establish UCI as a national leader in training specialists in brain-imaging technology.

• **Relationship to Existing Campus Programs, Units, and Mission:** The proposed MS draws in existing strengths in Social Sciences and may involve collaborations across other units including Biomedical Engineering in the Henry Samueli School of Engineering, Neurobiology and Behavior in the School of Biological Sciences, and Radiology in Medicine.

• **Resources:** The program will require the creation of a new core sequence. Other course offerings will be proposed, but the bulk of the curriculum will consist of existing courses in the participating units. No new library collections are necessary. The program will require the fMRI equipment beyond the campus’s current existing 3T magnet. The relevant units are currently devising a plan for the organizational structure governing neuroimaging on campus as well as exploring options for the financing of equipment needs.

• **Funding:** Funding for new FTE and lecturers will be obtained through the campus’s and participating Schools’ normal allocation process based on students’ served and program size. The program is intended to be self-supporting and to generate a revenue stream to assist in the operating costs of the campus’s fMRI facility/facilities.

• **Students:** The new MS is expected to enroll 25-30 students per year.

• **Employment Implications:** Students obtaining this degree will have transferrable skills for brain imaging in medical and research applications. Brain imaging is a growing field, with new national initiatives as well as increasing applications in medicine and applied science.

• **UC Campuses and Other California Institutions with Similar Offerings:** No other institution offers an MS in fMRI methods. UCSD offers a sequence of courses but no separate degree or specific program. UCLA has a neuroimaging training program that is mainly technical in nature. CSU Northridge offers a
certificate designed for continuing education of licensed Radiologic Technology Professionals. UC Irvine’s will be distinct in offering a Master’s level curriculum rooted in scientific and technical training.

- **Anticipated Campus Review and Implementation Dates:** The proposal will be drafted for review of the relevant participating units for submittal to the Academic Senate in AY2014-15. The preferred date for enrolling new students is Fall, 2015.

- **Campus Contacts:**

  Bill Maurer, Dean  
  School of Social Sciences  
  3151 Social Sciences Plaza  
  UC Irvine  
  Irvine, CA 92697-5100  
  wmmaurer@uci.edu  
  949-824-6802

  Kourosh Saberi, Associate Dean  
  Professor of Cognitive Sciences  
  School of Social Sciences  
  UC Irvine  
  Irvine, CA 92697-3440  
  saberi@uci.edu
ASSISTANT VICE PROVOST ROB AMEELE OFFICE OF ACADEMIC AFFAIRS

Re: Maintaining International Studies MA on the Five-Year Perspective

At your request, please see the attached updated summary of the School of Social Sciences' submissions for the Five-Year Perspective process. The proposed MA in International Studies has remained on the Five-Year Perspective for four years now. I am writing to request it remain there for at least one more year while the current Director of International Studies reengages with faculty stakeholders, the new Dean of Social Sciences (myself) and the Office of Graduate Studies.

Delay in formally proposing an International Studies MA stems from two main factors: a) the previous International Studies Director decided not to pursue an MA proposal due primarily to concerns about the competition in the market for such programs, and b) debate over the best format or formats under which to offer such an MA-freestanding, 2-year; freestanding, 1-year; or 4+1 model (BA+MA in 5 years). In the intervening period, however, International Studies obtained a new Director. She has begun research into different substantive and structural models that she is pursuing within the School and also Graduate Studies.

Also, please find attached a preliminary proposal for creation of a new B.S. program in Speech, Hearing and Language Sciences.

Please let Assistant Dean Leinen or me know of any questions or needs for additional information.

Bill Maurer Dean

Attachments (2)

C: Assistant Dean Leinen
   Undergraduate Associate Dean Petracca Graduate Associate Dean Saberi

Proposal to Reconfigure the Majors offered by the Department of East Asian Languages and Literatures
School of Humanities
UC Irvine
2014-19 Five Year Perspective
• Campus

UCI

• Name and Anticipated Action

The Department of East Asian Languages & Literatures is exploring the possibility of reconfiguring the majors it offers. Instead of offering four different majors (Chinese, Japanese, Korean and East Asian Culture) as we are currently doing, we are planning to consolidate them into only one major, namely, B. A. in East Asian Culture (exact wording yet to be decided), but, with three different emphases: Chinese, Japanese and Korean.

• Reasons for the Anticipated Action

Historically, China, Japan and Korea shared many common cultural heritages and the developments of the three cultures were mutually influenced and shaped throughout their respective histories. How to study one culture in the context of one another in this region is an issue whose importance many in the field have come to be increasingly aware of.

The main goal of the reconfiguring of the majors is to facilitate the teaching and learning of each of the three cultures in the larger context of “East Asia,” which has emerged as one of the most vibrant economic regions in the world and to emphasize the dynamic interactions among the three cultures that have been taking place both historically and at the present time.

• Relationship to Existing Campus Programs, Units, and Mission

We anticipate the proposed action will not have any significant impact on our relationships to existing campus programs and units except that other units (such as History, Art History, Political Sciences) will, we hope, become more conscious of the importance of “East Asia” as an intellectual and cultural concept and the need to study as well as teach it as such as a result of this proposed action.

• Resources

The proposed action could be accomplished without additional resources.

• Funding - The proposed action could be accomplished without additional resources.

• Students

Currently there are approximately 140 students in our existing degree programs. Since the anticipated changes of course offerings are limited as a result of this proposed action, students who have already chosen these existing majors should not have any problem completing the requirements and the transition should be relatively easy once the new degree program is implemented.

• Employment Implications

We believe the proposed change would make our degree programs more attractive to potential students and will increase the employment opportunities for the students once they graduate partly because the new degree emphasizes both “East Asia” as well as a particular culture/country such as “Chinese,” “Japanese” and “Korean”, especially during a time when East Asia has emerged as one of the most important economic regions in the world and when the United States is shifting its focus of attention to
the Pacific region.

- **UC Campuses and Other California Institutions with Similar Offerings**

  To the best of our knowledge, the East Asia-related majors offered at all other UC campuses and, for that matter, most universities throughout the country, are mainly in the form of individual B.A. degrees in a particular culture, such as Chinese, or Japanese or Korean. The proposed reconfiguration should help to better distinguish us from all these similar programs and add to the uniqueness of our undergraduate programs.

- **Anticipated Campus Review and Implementation Dates**

  We are aiming at the spring of 2014 to start the campus review process and hope to implement it in the fall of 2015.

- **Campus Contact Person**

  Bert Scruggs, chair of the committee on the reconfiguration of majors bscruggs@uci.edu