Message from the Dean

Dear Graduate Student,

Over the course of your time at UCLA, you have in all likelihood met two very important members of the Graduate Division leadership: Shirley Hune and John V. Richardson. Senior Associate Dean Hune has been among the prime movers of the Graduate Division’s diversity initiatives, and Associate Dean Richardson has provided leadership in implementing human resources policies for postdoctoral and visiting scholars and served as the Division’s liaison to the Graduate Councils Committee on Degree Programs. It is with regret that I pass along the word that both are leaving their offices.

Dean Hune has been with the Graduate Division for 15 years, serving throughout that period as chair of the executive committee of the Institute of American Cultures, a consortium of UCLA’s four ethnic studies centers. For the last 10 years, she has been primarily dedicated to expanding the outreach and diversity activities in the Graduate Division’s portfolio, providing leadership for four major diversity initiatives: the Louis Stokes Alliance for Minority Participation, the UC Alliance for Graduate Education and the Professoriate, the University of California Diversity Initiative, and UC Leadership Excellence Through Advanced Degrees. Dean Hune will be taking up a position at the University of Washington’s Seattle campus; her husband, Kenyon Chan, has been named chancellor of that University’s Boethel Campus.

Dean Richardson became part of the Graduate Division team in 2002. His areas of responsibility included the Social and Life Science Division in the College, Academic Health Sciences in Medicine, Oral Biology in Dentistry, the ACCESS program, and the Schools of Public Affairs and Theater, Film, and Television. In particular, he played a key role in the oversight of APM 390, governing the appointment of postdoctoral and visiting scholars. John has worked effectively with graduate students, postdoctoral fellows, and their faculty supervisors, and he became our resident expert on campus practices related to dissertation and copyright issues. He is returning to full-time service as Professor of Information Studies.

It is perhaps mere serendipity that this issue of the Graduate Quarterly contains articles about subjects dear to their hearts. In addition to our annual feature on the winners of the Chancellor’s Award for Postdoctoral Research, we have a story about the lower profile but no less significant roles postdoctoral scholars play as mentors, campus leaders, and ambassadors to the world. And we offer feature stories about two graduate students whose careers are evidence of the excellence achieved by scientists and engineers who are people of color.

I’m sure that Shirley and John are proud of these young people, as we are proud of Shirley and John. Please join me in wishing them the very best in the new paths their careers are taking—and stop by to say good-bye, if you have the chance.

Claudia Mitchell-Kernan
Vice Chancellor Graduate Studies
Dean, Graduate Division
FEATURES
4  It's Not Your Mother’s Women's Studies Program
A Widening of Research Projects Organized by Gender
8  Women’s Studies Branches Out
With a Transnational Perspective
12  The Chancellor’s Award for Postdoctoral Research
Honoring the Work of Five Outstanding Scholars
18  The Accidental Mentor
and Other Unexpected Benefits of Being a Postdoc

PROFILES
22  José Maldonado
Neurobiology
24  Audrey Pool O’Neal
Mechanical Engineering

NEWS
27  Graduate Student Accomplishments

ON THE COVER: Khanum Shaikh and Sharmila Lodhia, Women's Studies Program, pg 8
Gwen D’Arcangelis is studying biological threats—a combination of bioterrorism and emerging infectious diseases. Anna E. Ward is studying orgasm. They are in the same academic program, and it’s not biology. It’s Women’s Studies—a field that has experienced a remarkable widening in research topics since 1975, when the interdepartmental program was established at UCLA. Women’s Studies “is no longer just about particular groups of women but about issues that affect women,” says the program’s director, Professor of Law Christine Littleton. “There are other places to study bioterrorism, but those others do not include gender in their work. Whatever we’re looking at, gender is organizing our approach.”

Out near the discipline’s cutting edge is Gwen’s work, looking at the politics and media coverage related to biological threat. The “masculinist discourse” of national security is making a gendered distinction “between masculine wielders of intentional biological weapons and feminine embodiments of unintentional disease threats,” Gwen says, using gender in an almost abstract fashion as a cluster of characteristics. With an overlay of race, Arabs and Muslims—seen as potential bioterrorists—are masculinized, while the Chinese—associated with SARS and bird flu—have been presented as a feminized threat.

The field’s traditional repertoire is more identifiable in Anna’s work on women’s orgasm. Anna is looking at the “cultural understandings and representations of orgasm and how they’ve shifted historically.” Before modern times, orgasm was viewed as a mechanism “not that much different than sneezing,” she says, whereas modern descriptions of orgasm are “now tied to sexuality, pleasure and an ecstasy that is almost spiritual.” St. Teresa and Anaïs Nin may be talking about vastly different things, but they use quite similar descriptions, she says. Anna’s interest in the subject began with an undergraduate paper on the famous faked-orgasm scene in When Harry Met Sally. The scene is proof of a cultural script describing “what an orgasm should look like.” Indeed, director Rob Reiner took actress Meg Ryan aside and “told her she was doing it wrong,” then demonstrated the “correct” way, Anna says.

As Professor Littleton describes it, Women’s Studies is broad enough to include both women’s work—and an even wider variety of topics, from biology and politics, to religion, language and the law. It has transformed scholarship with two ideas, she says: (1) The experience of women is a necessary component of human experience, even when (perhaps especially when) it differs from men’s experience; and (2) Many things thought of as neutral are not neutral. In biology, for example, what is seen as “objective” may be the dominant group’s way of viewing a subject. “If you create knowledge from the experience of marginalized groups,” Professor Littleton says, “you’ll see something very interesting, something you missed.” As a result

It’s Not Your Mother’s Women’s Studies Program

by Jacqueline Tasch

Gwen D’Arcangelis

As Professor Littleton describes it, Women’s Studies is broad enough to include both women’s work—and an even wider variety of topics, from biology and politics, to religion, language and the law. It has transformed scholarship with two ideas, she says: (1) The experience of women is a necessary component of human experience, even when (perhaps especially when) it differs from men’s experience; and (2) Many things thought of as neutral are not neutral. In biology, for example, what is seen as “objective” may be the dominant group’s way of viewing a subject. “If you create knowledge from the experience of marginalized groups,” Professor Littleton says, “you’ll see something very interesting, something you missed.” As a result

It’s Not Your Mother’s Women’s Studies Program

by Jacqueline Tasch

Gwen D’Arcangelis
of this broadening of its inquiry, Women’s Studies is experiencing a current resurgence, she says.

A marker of the UCLA program’s vitality is its recent application for departmental status. “A department can initiate its own hiring in areas it needs,” Professor Littleton notes, instead of negotiating with traditional disciplines to hire people who can contribute to the program. Being a department also offers a range of administrative efficiencies and advantages in recruiting both faculty and graduate students. Finally, it adds an official recognition that she believes is well-deserved. “Women’s Studies at UCLA has a reputation as one of the best and most respected programs in the world,” she says. “It’s surprising to people outside UCLA that we’re not a department already.” Indeed, Berkeley, Riverside and Santa Cruz have already given their programs department status, while the UCLA program is the only one in the UC system to grant a PhD.

Adding a doctoral program was a major milestone in the growth of Women’s Studies at UCLA, with the first students admitted in Fall 2001. Despite small classes—typically four to six new students each year and a total of 20 students in all—Women’s Studies has staked out turf in several areas, one of them being international and transnational women’s issues (see accompanying story). Related fields of interest are area and ethnic studies. “We’ve made consistent efforts to have strong ties with these programs, as more and more researchers are working in the area where race and gender intersect,” Professor Littleton says. Recently, Women’s Studies has made joint appointments with Asian American Studies and Chicana/o Studies.

Another area of research strength, suggested by Professor Littleton’s presence in the School of Law, is law and public policy. Among its small graduate cohort are a number of lawyers, including Laura Foster, who took a joint master’s/law degree from the University of Cincinnati.

Laura’s work on international patent law is built around a case study involving the hoodia plant of South Africa. The nomadic San people long ago discovered that hoodia could be used as an appetite suppressant, and colonial visitors from Europe took note of this usage in their diaries. In 1936, the South African Council for Science and Industrial Research decided to see if there might be military applications and got a patent. More recently, that patent was sold to Unilever and Phytopharm—ironically, Dutch and British companies, respectively—for development as a diet aid. The San were able to negotiate a 6% to 8% share of the royalties South Africa will collect.

Again, this topic may at first glance appear to be oddly placed in Women’s Studies, but Laura’s work is a woman-centered examination of relationships of power. One might call such a perspective “feminist,” and the women interviewed for this article agreed that the term—although variously defined, perhaps—characterizes themselves and their work.

Raised by a single mother, Gwen says, “I’ve been a feminist since I was two.” Anna was only 10 or 11 when she had an opportunity to meet Gloria Steinem, an activist in the U.S. women’s liberation movement. “She’s so charismatic and has such a presence,” Anna recalls, “and I actually got to sit down and talk to her, one on one, as a fifth grader.” The several women of color in the program endorse feminism, too, but with a caveat that issues of race and ethnicity must also be considered in gender studies.

All of these definitions suit the program. “We have self-consciously decided to let a thousand flowers bloom,” Professor Littleton says, “so we embrace work that is not explicitly feminist but is about women.”

“We have self-consciously decided to let a thousand flowers bloom,” Professor Littleton says, “so we embrace work that is not explicitly feminist but is about women.”
Uncovering and documenting the experience of women—both here and around the world—“may or may not have political connotations of equality,” she says. “We have no party line that people have to ascribe to, but people who are interested in women’s experience tend to be feminist.”

Does a different culture result from the feminist orientation of the program and the fact that it is mostly women, faculty and students? Professor Littleton says, “our students say they find us more encouraging of their efforts, but not less rigorous.” A feminist pedagogy prescribes “helping students to work better rather than simply being critical of their failings,” she says. “There are many ways to help students achieve excellence, some of them more democratic than others.” The goal is to treat each as a person and an individual, not as a commodity to be pushed through the system, Professor Littleton says. “We’re working to make our students our equals—or even to surpass us—that’s our job.”

Graduate students come to the doctoral program from different backgrounds and by different roads. Some were undergraduate majors in Women’s Studies, while others take their first courses in the field as graduate students. Some come directly from their undergraduate work, while others have more or less extensive careers before settling into Women’s Studies. The openness characteristic of a new discipline is what drew Anna, as early as her undergraduate years at UC Santa Cruz. “Undergraduates played a role in shaping the field,” she says. “That was exciting for me.” Laura also liked the idea of helping to develop a discipline, and her choice of Women’s Studies was deliberate. “Going into the PhD program is a political risk and a political commitment,” she says. “I felt passionate about Women’s Studies.”

Some students deliberately choose Women’s Studies even when their research area could belong to an older, more established field. Karina Eileraas, part of the first doctoral class, had always been interested in Francophone studies and began her doctoral studies in French. She decided to switch to Women’s Studies when she heard from her adviser about the exciting new program just beginning at UCLA. She did so, as she said at the time, because “It’s not a parenthesis or an add-on; Women’s Studies is the main thing.”

Dr. Eileraas’ dissertation addresses art and autobiography by contemporary North African and Southeast Asian women. It examines the relationship between fantasy, identity and transnational trauma such as war, colonization and sexual violence. Eileraas is especially interested in how women are evoked in national memory and how feminist artists and writers have chosen to negotiate or rewrite these “official” representations. For example, one “public fantasy” is that women actively participated in combat roles during the Algerian revolution, whereas writers like Assia Djebar and Marie-Aimee Helie-Lucas highlight the national symbolism that facilitated women’s confinement to traditionally “feminine” roles.

Dr. Eileraas has just completed a prestigious Mellon postdoctoral fellowship at Carleton College in Minnesota but is looking for a tenure-track position. Although her passion for Women’s Studies still defines and animates Eileraas’ career path, she has seen some disadvantages to her choice. Most conventional departments, such as French, still hire people with PhDs in their own departments; direct appointments in Women’s Studies, she says, “are few and far between,” although “there are more postings each year. It’s been a real challenge.” Professor Littleton acknowledges that when Women’s Studies jobs are filled through traditional departments, potential employers may think of their program first and then look for someone “with a little bit of women’s studies—not too much.” She foresees an increasing need for faculty in Women’s Studies departments, however, and believes that the transition of UCLA’s program to departmental status may help graduates obtain these positions.

In the meantime, Dr. Eileraas is returning to teach at UCLA this spring. As a student, she says, “I had a great experience at UCLA, and I was surprised by that. Coming from Wesleyan, a small liberal arts college, I expected to find less of a commitment to critical inquiry and less engagement at a large public university.” The key factor in her positive experience was one mentioned by a number of students. “The community in Women’s Studies at UCLA is dynamic, rigorous and invigorating,” she says. “It is rich with opportunities for lively intellectual exchange across traditional disciplinary boundaries.”

Professor of Law and Women’s Studies Director Christine Littleton
Women’s Studies Branches Out

In their early years, both women’s studies and feminism were criticized as being the province of middle-class American white women, with no relevance to women of color, the poor, or women outside of the United States. UCLA has been in the forefront of a movement to bring a transnational perspective to women’s studies. Three of its most advanced doctoral students—Azza Basarudin, Khanum Shaikh, and Sharmila Lodhia—are in different ways both a cause and an effect of that new academic direction.
Professor of Anthropology and Women’s Studies Sondra Hale, mentor to all three women, says the women’s backgrounds—they hail from Malaysia, Pakistan, and India via South Africa, respectively—indicate the diversity of the Women’s Studies graduate group. “Since our curriculum has included quite a bit of transnational and postcolonial material, we’ve been attracting women from other countries,” Professor Hale says.

Their work emphasizes the transnational direction: Azza researching organizations of Muslim women scholar-activists struggling for gender justice in Islam, Khanum Shaikh looking at a fast-growing Muslim women’s reform movement, and Sharmila examining legal advocacy for Indian women, both in their home country and in U.S. immigrant communities. “A lot of people talk about doing transnational studies,” Professor Hale says, “but very few are actually following the flow of people, ideas, and commodities transnationally.” Clearly, her students are in that unusual group. Here are their stories.

Sharmila Lodhia: Activism in the Academy

A graduate of Santa Clara University, a Jesuit school with a social justice orientation, Sharmila Lodhia went to Hastings College of the Law with an eye on future advocacy work. Afterward, she got a job as an attorney on the Breast Cancer Legal Project at the California Women’s Law Center. There, she “got some insights into the lack of access to the legal system for poor women, women of color and immigrant women,” she says. She also met Professor of Law Christine Littleton, who served on the Center’s board of directors. Professor Littleton told her about what was then a new graduate program in Women’s Studies, and Sharmila signed on for a master’s degree as part of the first class.

At UCLA, she added Women’s Studies teaching experience to her background in legal education and outreach work, concluding that a PhD and an academic career were her goals. “I think of teaching as a form of activism,” she says, “particularly in a field like women’s studies.” Activism also plays a role in her dissertation research, which views domestic violence laws through the eyes of advocacy groups in both India and the United States. “What engages me is using transnational feminist ideas to analyze constraints on contemporary anti-violence advocacy, which can be traced through various local, national, and global sites,” she says. “My doctoral research highlights how this work has been altered by a growing interconnectedness between the United States and India that has been engendered by globalization. I also look at new patterns of marriage and migration and the specific forms of violence these shifts have enabled.” One aspect of this research involves an analysis of recent changes in laws on domestic violence in both countries.

In 2005, after years of dedicated advocacy by women’s groups, India passed a civil law on domestic violence that includes prohibitions against physical, emotional, sexual, and economic abuse. The civil law also contains an innovative remedial framework for safeguarding the rights of women, including a “right of residency” provision that allows a woman to remain in the family home, regardless of whether she has a legal claim or share in the property.

“I think of teaching as a form of activism, particularly in a field like women’s studies.”
Sharmila Lodhia

In the same year, the Violence Against Women Act in the United States was reauthorized with an amendment of great significance to battered immigrant women. Previously, the wives of professionals who were working in the United States through the H1-B visa program were not legally allowed to work in the United States until the green card process began, which could take several years. In addition they are unable to obtain social security numbers and in some states need the consent of their spouse to obtain a driver’s license. Indian wives in these circumstances are often “trapped in abusive marriages” because they are entirely dependent on their spouses both financially and in terms of their legal status, Sharmila says. One Silicon Valley-based women’s advocacy group estimates that 40 percent of its clientele are Indian wives of H1-B visa holders. The VAWA 2005 contains a provision, promoted by activists, that allows the spouses of non-immigrant professionals to obtain work authorizations if they can prove abuse.

Sharmila believes it is important to link researchers and teachers with people in the activist and service community. “That’s why I crafted my project the way I did,” she says, and she also encourages her students to investigate what non profits in their area of study are doing and “to build their research around the needs of advocacy groups.”

Khanum Shaikh: Exploring the Politics of Gender in Muslim Reform Movements

As an undergraduate economics major at UCLA, Khanum Shaikh felt her studies had “no relevance to my life.” A class in Third World Development Studies was fascinating—“I was hanging off the edge of my chair every single lecture,” she says—and eventually led her to take a master’s degree in international development at the University of Oregon.

However, she still hadn’t settled on a long-term career direction when she took a job as a community activist at the California Women’s Law Center—and met Sharmila. One day while they were walking along in a breast cancer march, Sharmila told Khanum she
belonged in the UCLA Women’s Studies program; Khanum applied and, somewhat to her surprise, was accepted. "It just kind of happened," she says.

Sharmila may have brought her to UCLA, but world events created a crucial turning point in her academic career. Khanum was in Pakistan on September 11 and, in the next couple of weeks, worried about whether she and her family might lie beneath America’s retaliatory bombing. When she returned to the United States, she experienced "feeling under scrutiny," along with a considerable amount of hostility from her students. "In an ideal world, I might have done research on music in Trinidad," she says, but after September 11, "I realized I can’t get away from my Muslim heritage, you know. I need to do this work, I need to understand more; this stuff is not going away."

Khanum Shaikh

A topic came easily to mind. Khanum’s aunt had been transformed by Al-Huda, a women’s reform and educational movement founded in Pakistan by Farhat Hashmi. With a doctoral degree in Islamic studies, Hashmi began to hold weekly study sessions in the homes of well-off Pakistani women, teaching them about Islam from a women’s perspective. Hashmi’s guiding principle is that “Islam itself is an incredibly just and equitable religion for men and women,” Khanum says, “but it’s the cultural adaptation of religion that has distorted our knowledge and its applications.”

Hashmi’s teachings, now spread to other countries through formal educational institutes, videocassettes, and a web site, have transformed lives in ways that are seen as both liberal and fundamentalist. While critics from the right argue that her teachings are antisectarian, critics from the left point out that her teachings promote orthodox values. Hashmi, for example, always appears in public fully veiled.

Khanum’s research describes Al-Huda’s growth and how it “managed to mobilize hundreds of thousands of women, particularly women from the upper classes, who had not historically been politically active.” Her degree in hand, Khanum will look for a job as a university teacher but hopes to remain involved in both local and international activism.

Azza Basarudin: Negotiating Gender, Religion, and Feminism

Azza Basarudin was an undergraduate in her native Malaysia when she became interested in how the implementation of the Islamic legal system affected Muslim women’s lives. A heightened consciousness encouraged her to pursue an MA in Women and Gender Studies at Roosevelt University in Chicago. Because of the transnational appeal of the Women’s Studies program—and her “profound interest in and respect for the scholarship of Dr. Sondra Hale and Dr. Karen Brodkin”—she decided to pursue a PhD at UCLA.

Azza’s research examines how Muslim women intellectual-activists negotiate issues of gender, Islam, and feminism in order to advocate for gender justice. She began her graduate career by researching gender politics and religious activism in the Middle East. Her interest in Southeast Asia was piqued after discovering “the ground-breaking work” of an organization in her home country, and she decided to redesign her project to “incorporate women’s advocacy there through a transnational feminist analysis.” Islam and Islamic practices in Southeast Asia, Azza says, “more often than not have been understudied in relation to Middle Eastern Islam.” She hopes the portion of her research on Southeast Asia can contribute toward "a better understanding of Islam and Muslim women."

Last spring, Azza taught her own class, “Gender, Islam, and Feminism,” focusing on the Middle East, North Africa, and...
THE WOMEN’S STUDIES PROGRAM AND THE CENTER FOR THE STUDY OF WOMEN are collaborating on the Global South Gender Initiative, which links UCLA with women’s studies programs at nine universities in India, Lebanon, Egypt, Palestine, Pakistan, Iran, Malaysia, and the Sudan. An outgrowth of consulting projects by Professor of Anthropology and Women’s Studies Sondra Hale, the Initiative is seeking funds to fully implement its activities.

The goal is “what amounts to an enormous exchange program” bringing together students and faculty at all of the universities, Professor Hale says. This year, a scholar from Pakistan will spend a month at UCLA on a Fulbright Fellowship, and Professor Hale has traveled to the Sudan and Egypt. Also on the agenda are shared research, a web site, teleconferencing, and shared pedagogical strategies. “I think we will learn a great deal,” Professor Hale says. For example, students at participating Ahfad University in Sudan are “encouraged to do some applied aspects of theoretical research,” she says. “That might be quite a gift to our graduate program, offering ideas about how to link up more directly with communities.”

Southeast Asia. It was an “incredibly satisfying and rewarding experience,” she says. “I had a wonderful group of students, who, while having little or no knowledge of gender in Islam, were nonetheless enthusiastic to learn about religious-based feminist projects.”

Once her PhD is in hand, Azza hopes to find a position in a Women’s Studies program that has a strong transnational focus while continuing her involvement in community-based activism.

Khanum, Sharmila, and Azza are all aware of the white, middle-class bent of old-fashioned women’s studies, but they also know things are changing—with their help. If there are still too few women of color among the faculty, they can help change that as well, and in the meantime, they have each other. Her outstanding fellow students are “a great base of support for each other,” Khanum says. “We’ve learned a lot together—hey, how do you do footnotes?”
The UCLA Postdoctoral Scholars Reception was established in 1998 to recognize the important contributions that postdoctoral scholars make to the interrelated missions of research, teaching, and public service at UCLA. At this ceremony, the Chancellor’s Award for Postdoctoral Research is conferred on particularly accomplished individuals. The nominees come from virtually every discipline at UCLA, from the basic and applied sciences to the professional schools, the social sciences, and the humanities. This year’s ceremony, held on March 14, 2007, honored the work of the following five outstanding scholars.
“I am exceedingly impressed by Dr. Eisenberger’s intellectual and professional maturity to generate hypotheses of broad conceptual importance and depth and to carry her research efforts forward at all practical levels. She is an emerging star in psychology and in the area of neuroscience—and a major asset for the UCLA community.”

Michael Irwin

Cousins Center for Psychoneuroimmunology

Why does rejection hurt? Naomi Eisenberger is using neuroimaging techniques to examine the pain that results when social connection is lost or threatened. Her findings, published in Science, show that the social pain resulting from rejection produces a pattern of neural activity that is strikingly similar to the activity occurring during physical pain, a finding with implications for understanding how physical and social perceptions are linked.

“I first became interested in science after learning about the intricate ways in which mind and body are linked,” she says, “for example, learning that social support makes people live longer or that stress can make people sick. This is one of the main reasons that I got interested in psychoneuroimmunology.” Dr. Eisenberger came to UCLA as an undergraduate and stayed on to do her doctoral degree and now a postdoctoral fellowship with Dr. Michael Irwin at the Semel Institute for Neuroscience and Human Behavior.

Today, she is focusing on the relationship between social ties and health. “In other words, why is it that being or feeling socially connected keeps us healthy, whereas being alone or feeling disconnected puts us at a greater risk for all kinds of negative health consequences,” she says. “The connection between social support and health is one of the most documented relationships but one of the least well understood.” Her research is the first to investigate the neural underpinnings that link physical inflammation and depression. In particular, she is examining whether immune system activation, which increases inflammation, also increases sensitivity to social pain, which might make depression more likely. She is the first UCLA recipient of funding from the Dana Foundation in the program area of neuroimaging and immunology.

In July, she will join the Psychology Department as an assistant professor, and she plans to continue both teaching and research at UCLA.
“Dr. Groth’s work represents a technical tour de force rarely seen in postdoctoral research, and it has had a deep impact on the field of cryptography. His work has revolutionized cryptographic proofs, which are a fundamental building block for countless security applications.”

Amit Sahai
Department of Computer Science

One of the greatest challenges in electronic security has been to provide verifiability and privacy at the same time—for example, to prove you hold an odd number without revealing anything about the actual number or about yourself, a so-called non-interactive zero knowledge proof (NIZP). Jens Groth has provided the first highly efficient constructions of NIZPs, with potential applications from e-cash, to electronic voting, to anonymous whistle blowing. In each case, the buyers/voters/whistle blowers would be able to deliver a message that the recipient would know was true without revealing their identity or any other personal information.

To achieve this remarkable result, Dr. Groth used pairing-based cryptography drawing on algebraic geometric techniques from numbers theory. Besides protecting the user’s identity, his NIZP also guarantees that the user’s secrets are mathematically safe regardless of the diligence of a potential hacker, even one with unlimited computational power; the guarantee includes any future advances in computing. The discovery will have a tremendous number of important implications in cryptography and will expand the use of NIZP in practical settings.

Dr. Groth was introduced to cryptography during his undergraduate work at the University of Aarhus in Denmark. “I took some courses in cryptography during my math studies and liked to see real world applications of advanced math,” he says. He came to UCLA because of its strong cryptography group, but the decision had some important bonuses: He met his wife, Anna, here, and they welcomed a son, Viggo. “When I first came to UCLA, I didn’t know anybody,” he says, so he took dance classes at the Wooden Center—“which were great fun”—and attended get-togethers sponsored by the Society of Postdoctoral Scholars. “I recommend both activities,” he says, “but after getting married and having a baby I have less time to participate myself.”
“Dr. Fathpour stood out from the crowd because of his pioneering PhD thesis, and he has been remarkably productive during his stay at UCLA. His work on energy-efficient silicon photonics represents an entirely new and highly relevant direction in the field. As a result, he is well-positioned to be a leader in emerging device technologies.”

Bahram Jalali
Department of Electrical Engineering

If optics and electronics could be merged on the same microchip, the outcome might be faster, smaller, and cheaper computers and Internet networks. Sasan Fathpour has been working to remove the biggest hurdle to this achievement: Silicon, the bread-and-butter material of the electronics industry, becomes opaque at high optical powers. So that light can pass through, a diode has to be attached to the optical components to vacuum out the blocking electrons—with an unacceptable increase in the electrical power dissipation of the chips. Working with a team of researchers, Dr. Fathpour has found an innovative and clever way to hook up silicon so that the lost optical energy is not wasted as heat but actually harvested into useful electrical power. In other words, instead of using electrical power to clear the material standing in the way of light travel, the device actually generates electrical power.

Inspired by a couple of “wonderful high school physics teachers,” Dr. Fathpour got an engineering degree at Isfahan University of Technology in Iran. “I found the field more practical—making real things and getting them to work,” he says, but he never lost that initial interest in physics. He earned a master’s degree at the University of British Columbia, researching on the physical modeling of transistors, and a doctoral degree at the University of Michigan, with a thesis on high-performance quantum dot lasers and spin-polarized light sources.

The emerging field of silicon photonics caught his attention, and UCLA has one of the leading research groups in this field. Besides its first-rank research, UCLA has an atmosphere that is “lively, friendly, and fun,” Dr. Fathpour says. “Certainly the landscape and the weather play a part, but I think the spirit of the founders of the university and the people they put together is the most important factor.”

Dr. Fathpour plans to continue his research career through a faculty position at a major university.
“During the process of this extremely difficult project, Dr. Kawaguchi demonstrated superb ability to overcome technical challenges, as well as tenacity in pursuing the best experimental conditions. He is a very intelligent and productive scientist whose research at UCLA led to a major breakthrough.”

Hui Sun
Department of Physiology

Vitamin A is essential for such vital functions as vision, reproduction, immune responses, neuronal signaling, and embryonic development. Vitamin A is carried through the bloodstream by retinol binding protein (RBP). Whether an RBP receptor exists in the human body that mediates vitamin A uptake “has been a scientific puzzle for the last three decades,” Dr. Kawaguchi says. “We believed that there must be a receptor for RBP since vitamin A requirements vary tremendously in different organs and in different stages of human development,” he says. Working with Dr. Hu Sun, he reasoned that “the RBP receptor had eluded discovery due to the fragility of the receptor and the transient nature of the receptor-RBP interaction.” He and Dr. Sun devised a novel strategy followed by mass spectrometry to identify the receptor, which is found on cell membranes in the nervous system, the reproductive systems, the immune system, and the respiratory system.

Dr. Kawaguchi’s work provides a better understanding of how human tissues absorb vitamin A. Because derivatives of vitamin A play positive and negative roles in many pathological conditions, among them cancer, infectious diseases, diabetes, and birth defects, the new understanding of its uptake may have significant medical implications. His work has been published as a research article in Science.

Dr. Kawaguchi has been hoping to make a discovery like this since he was an undergraduate in bioengineering at the Tokyo Institute of Technology in Japan. “As a scientist, the moment you identify a gene that has been sought for many years by many scientists is an exhilarating experience,” he says. His path to that achievement led through the University of California at Riverside, where he learned genomics and bioinformatics during his doctoral studies. Interviewed by Dr. Sun for a postdoctoral position, “I was excited about this challenging project,” he says. “I believed this must be one of the best chances I would ever encounter.”

“As a scientist, the moment you identify a gene that has been sought for many years by many scientists is an exhilarating experience.”

In addition to his research, Dr. Kawaguchi has enjoyed the cultural diversity and geographical richness of Southern California. He is looking for a scientific position where he can continue his creative work.
“Dr. Zhang came to us as one of the world’s experts on plant transposon biology. He contributes tremendously to the intellectual life of the lab by his frequent suggestions about the projects being run by others. He has a very unique way of looking at problems, and I expect that he is going to be a major player in the field of plant epigenomics.”

Steve Jacobsen
Department of Molecular, Cell, and Developmental Biology

Arabidopsis, a small flowering plant of little agricultural importance, has characteristics that make it a widely used model organism in plant biology, particularly for research on genetics and molecular biology. Using Arabidopsis, Xiaoyu Zhang led a project that resulted in the first genome-wide high-resolution mapping and functional analysis of DNA methylation in any organism. Employing high-throughput genomic tools with biochemical and genetic methods, he also studied the production, processing, channeling, and function of small RNAs, which are thought to control many biological activities in a cell. In what may well be a landmark study, he recently performed the first genome-wide characterization of histone (a kind of protein) modifications in plants and gathered data on thousands of genes that are epigenetically regulated. He has also contributed to several other Arabidopsis projects.

Dr. Zhang has been interested in the natural sciences since he was very young. With his parents’ encouragement, he earned a degree from the University of Science and Technology of China in Anhui, then traveled to the University of Georgia, where he did his doctoral studies on plant transposable elements, which are “mobile genetic entities that can move from one location on the chromosome to another,” Dr. Zhang explains. “Most of them are normally not moving because they are ‘silenced’ through epigenetic mechanisms. I became more and more interested in epigenetics and decided to learn more in this area after getting my PhD.” Dr. Steve Jacobsen of UCLA runs one of the best plant epigenetics labs in the world. “He was the first and only person I contacted,” Dr. Zhang says, “and fortunately he took me.”

Xiaoyu Zhang
Expert on Plant Transposon Biology
The Accidental Mentor
and Other Unexpected Benefits of Being a Postdoc

If you go by the conventional wisdom, postdoctoral fellowships are research opportunities: time to complete a research thread begun as a graduate student or to round out your doctoral portfolio with new research topics or strategies; an opportunity to work with highly regarded scientists and expand your network of contacts.

Hardly anyone mentions that a postdoctoral fellowship gives you the chance to mentor undergraduate and graduate students, manage a range of research projects, become involved in charitable projects around the world, or initiate a program that benefits your fellow fellows. And yet, the latter is just what many postdoctoral fellows find themselves happily doing.

Take the example of Nate Kornell, a postdoctoral fellow in psychology. “The whole point of a postdoc is to do research,” he says. “Everyone says the last thing you want to do is teach or mentor because it takes time.” Yet, Professor Robert A. Bjork told Dr. Kornell up front that being a postdoctoral fellow in his lab would involve plenty of the latter.

Knowing that he was going to be department chair, Professor Bjork says, he was looking for a postdoctoral fellow who could step into some of the roles the professor might normally handle: to keep a day-to-day eye on a variety of projects and to be accessible to students, both undergraduate and graduate. “It was important to me that the postdoc be involved in everything,” Professor Bjork says, “and Nate was the perfect choice for that.” Although he’s spent a good deal more time mentoring than he had expected, the choice has turned out to be perfect for Dr. Kornell, as well. “It’s been really rewarding,” he says.

With undergraduates on his own projects, mentoring means that “I work through the experimental process with your fellow fellows. And yet, the latter is just what many postdoctoral fellows find themselves happily doing.”

Nate Kornell
them, and as we do that, they learn how to work through it themselves.” In one experiment, Dr. Kornell and his students are letting students study for a test in two different ways, then checking the results. Both experimental groups study works by different artists, but in one case, they see all works by the same artist at one time, then go onto the next; in the other, they see works by all the artists mixed together. On the test, they’re shown new pictures and asked to identify the artist. While the research participants say they learn more studying one artist at a time, the results show that they learn better when they study the artists mixed together. Dr. Kornell’s undergraduate team—Makah Leal and Tim Wong—“played a role in selecting the pictures, helping to design the experiments, and implementing and running them,” he says. Moreover, the undergraduates’ presentation of the research “was so good that Professor Bjork and I use their slides” as a basis of their own presentations, he adds.

Beyond his own student team, Dr. Kornell also interacts with the other undergraduate and graduate students in two labs. His office is located adjacent to those rooms, and he has “people coming in and out all the time,” he says. “I’m available and I encourage students to come in and talk to me. These conversations naturally evolve into projects.”

As Professor Bjork puts it, “Everybody knows Nate, and he knows every experiment that’s going on. I can’t tell you how often I’m working with someone, and they say, ‘I talked to Nate about that.’” Collaborating with students “is a lot more fun than doing research alone,” Dr. Kornell says. “I’m really proud of the students I’ve worked with—they’ve done such a great job.” Asked whether his mentoring activities have compromised his own research goals, he points out that “some scientists are known because their students have gone on to do great research. I find that impressive and something I’d like to strive for.”

Dr. Kornell’s situation is somewhat unusual but hardly unique. In fact, mentoring and managing may be part of a postdoctoral fellow’s job because of the nature of the fellow’s research or the lab’s activities—regardless of whether the faculty leader has administrative assignments.

For example, Noosha Niv’s research in biobehavioral science involves developing treatments for people who have substance abuse disorders simultaneously with psychiatric problems. Graduate students in clinical psychology, doing a required last-year internship, are testing her manualized treatment with a small group of patients at the West Los Angeles Veterans Administration Hospital. “They’ve been really helpful in giving me feedback on what’s working and what’s not working so well, so I can make adjustments to the treatment,” she says. Dr. Niv never attends the sessions: “Because I’ve developed the treatment, I’m obviously much more invested in it,” she says. As a result, she might be “a more enthusiastic therapist than the average therapist in that situation,” she says, and “if the treatment works, it might be because of a therapist effect rather than a treatment effect.”

Dr. Niv also supervises undergraduate students who are doing the data collection in a study comparing users and nonusers of the drug ecstasy in their perceptions of the continued on page 21
Necessity Inspires Creativity
As Postdocs Help Disadvantaged Communities

Both Joshua Dusick and Diego Rosso have spent brief intervals in their postdoctoral careers in Guatemala. Working on a team led by Dr. Jorge Lazareff, Dr. Dusick helped to do surgery for selected children with neurological problems. As part of an Engineers Without Borders (EWB) Team, Dr. Rosso helped to install a photoelectric generating facility to power a day care center. Both see their volunteer activities as building blocks of their long-term careers.

As a graduate student, Dr. Rosso was one of the early members of UCLA’s EWB chapter, the second in the nation, and served as its president. During that time, he helped to design and build a small building and its necessary utilities for a medical clinic in northern Thailand, where the nearest hospital is a week away traveling by foot. Now as the EWB chapter mentor, he will go to Mexico this spring to help install a potable water pipeline for a small village in central Mexico.

Dr. Rosso’s postdoctoral research involves state-of-the-art wastewater treatment. His volunteer work provides the challenge—and rewards—of “extending my knowledge of low-technology, low-maintenance wastewater treatment systems, which are more suitable to disadvantaged communities,” he says. “They can’t finance or maintain a mechanically complicated operation, so we must use natural processes to reclaim wastewater.”

Dr. Dusick’s postdoctoral research involves developing treatments for traumatic brain injury. Although his volunteer work is not directly related, he has taken lessons away from his surgical missions to Guatemala and Romania. Working in places with limited facilities has given him an appreciation of the resources he enjoys at home and has inspired creativity “to figure out how to get the job done with the barest essentials.” Poor nutrition in third world countries means the doctors see more cases of spina bifida, a malformation of the nervous system and spine that is relatively rare in the United States.

Dr. Dusick hopes to continue such work. “It brings back why a lot of people go into medicine in the first place,” he says, “to try to help people who need help.” A similar altruism motivates Dr. Rosso: “I grew up in a rather privileged setting in Italy,” he says. “I always had food on my table and electricity in the house. I went to school for my whole life without spending a penny, so I think I owe something back to the people who are not as advantaged in life.”

**ABOVE LEFT:** Joshua Dusick with a baby in a Romanian orphanage/children’s hospital. **ABOVE RIGHT:** Diego Rosso working at the Engineers Without Borders Guatemala Project. **CENTER:** Diego Rosso testing equipment in Simi Valley.
drug’s risks and ways to reduce them. Undergraduates respond to e-mails from potential participants, set up and do interviews, and enter the data. "They’re fabulous," she says. Part of her mentoring strategy is to keep an eye out during their initial meeting for students who make a good match with her. “I try to figure out what they want out of this experience—perhaps to participate in writing or presenting their work,” she says. “I find that students become more invested in what we’re doing if I can carve out a small niche for them so they have ownership.” Two undergraduates have coauthored papers with her, actually writing part of the manuscript.

Working with graduate students is a “very different and more complicated relationship,” in part because Dr. Niv is closer to their experience level and in part because “clinical work brings up personal issues.”

It’s clear from these two examples that undergraduate students often play key roles in the research done at UCLA. Indeed, speaking of the undergraduates who participate in spinal cord experiments in his physiological science lab, Ronaldo Ichiyama says, “Without them, we would have no results.”

Several years ago, Dr. Ichiyama’s adviser, Professor V. Reggie Edgerton, discovered that the spinal cord can learn to do things—including walking and standing—“without any help from the brain,” Dr. Ichiyama says. That finding has important implications for people who suffer spinal cord injuries that, in effect, cut the spinal cord off from the brain, leading to paralysis. Today, his lab is devoted to understanding “the mechanism by which the spinal cord is learning these tasks,” he says. “The more we understand, the more help we can give to people with spinal cord injuries, even without regeneration.”

Experiments involve working with injured rats, exercising them on a treadmill, and teaching them how to step again. “It’s not any trivial task,” Dr. Ichiyama says, “so I train the undergraduates very carefully and I supervise them. We all work together as a team in the end.” Student volunteers usually begin at the lab through UCLA’s undergraduate research program, which provides credit for specific authorized activities, but many don’t leave when they’ve completed the requirements because they are so interested in the work.

Dr. Ichiyama estimates that he’s mentored more than 100 undergraduates since he joined Dr. Edgerton’s lab in September 2002, and up to 15 are usually working with him at any given time. While his interactions with them take quite a bit of time, “I couldn’t do my research without them,” he says. Also, “it’s something that I really enjoy. I learn a lot from teaching, and it’s very fulfilling to be able to share knowledge with people who are interested. I think that’s my calling.”

When he arrived, Dr. Ichiyama “had no clue” that he would become so involved in mentoring undergraduates. “It was a big challenge, and I liked it, and I think I’ve been very successful,” he says. “Students are happy to come in, and they’re happy to come back month after month, sometimes until they graduate. It makes me very proud of them and of our work.”

---

**POSTDOCS GET ENTREPRENEURIAL**

As a postdoctoral fellow in the Molecular Biology Institute, Eric Shiozaki studied membrane proteins and how to manipulate them in ways that might have applications in treating diseases like cancer. Thinking that such research might provide the basis of a startup company, he looked for ways to educate himself about entrepreneurship and business development.

He found no resources available to postdocs elsewhere on campus, so “I took it upon myself to start this project”—the Entrepreneurship and Business Development Committee of the Society of Postdoctoral Scholars (SoPS)—“not only to teach myself but to help others learn as well,” he says. Along with other postdoctoral scholars having similar interests, he created a series of seminars on intellectual property, fund-raising, and other issues of interest to people just going into business. The four seminars in that first year drew about 40 or 50 people each.

More recently, the committee is collaborating with Tech Coast Angels, a group of private funders who provide much of the content for seminars. A program to provide individual coaching is also in the works. “Someone who’s been in a lab for five or ten years doesn’t have much experience running a company,” Dr. Shiozaki says. The seminars provide “tips on what to do, what not to do, taking you through the process step by step.”

Like Dr. Shiozaki, dozens of postdoctoral fellows are taking the time to participate in SoPS, which offers a range of programs and services for the postdoctoral community. See postdoc.ucla.edu for details.

---

The Accidental Mentor
José Maldonado

Neurobiology

José Maldonado was sitting in a large undergraduate biology class at UCLA when a guest lecturer delivered the astounding news: There is cell division in the central nervous system of adults. For more than 100 years, science had held that brains stopped developing after birth. You arrived with a complete set of brain cells, and that’s all you could count on to get you through life. To learn now about something scientists call adult neurogenesis “was really mind blowing,” José says.
Fast forward a couple of years and José was telling a friend about his interest in adult neurogenesis when an eavesdropping teaching assistant told him her lab was working in that area and suggested he look them up. Another fast forward, and José, now a graduate student, had joined Michael Sofroniew’s research team, which studies the response to injury and degeneration in the nervous system. Through a bit of serendipity, Professor Sofroniew says, “We had bred some mice to study an injury model, and we noticed that adult neurogenesis was missing,” and the result was “a unique model to study the role of adult neurogenesis.” Stepping forward enthusiastically to pursue the new agenda was José, whom Professor Sofroniew describes as “inquisitive, persistent, and patient with things that are sometimes tedious,” qualities that would serve him well.

Using the mice whose genes had been altered so they produce no neural progenitor cells, José compared them with normal mice. The altered mice seem “fine and normal and healthy” in most respects, José says, but when their brains are examined, two areas are “about half the size of control animals.” The conclusion: Neurogenesis is replenishing brain cells throughout life, and the difference is “not just a small contribution.” The two areas that receive new cells are the olfactory bulb, which controls the sense of smell, and a part of the hippocampus related to short-term memories. The research team wonders why “only those two regions receive cells throughout life,” José says. “What are they doing on a cellular level that requires new cells?”

His dissertation research is the first to look at other questions. Research elsewhere has already shown that adult neuroprogenitor cells travel about a centimeter in rodents, and much farther in larger animals and humans, from where they are formed to where they are needed. This happens via a cell “that forms a well-defined tube” and, probably, some chemical cues. José would like to know what happens at the destination. Thinking of the new cells as new kids at school, he wonders: “How does that kid know who to hang out with? What classrooms to show up in? And how does it change the environment it finds.”

José’s research doesn’t involve humans. Nevertheless, diseases like Alzheimer’s and Parkinson’s have been associated with the disappearance of cells in certain parts of the brain. Understanding what happens during adult neurogenesis in mice “might suggest a way to help replace neurons that are lost in injury or disease,” Professor Sofroniew says. It may take a long time to achieve that outcome, he says, but “If we don’t work on it now, it won’t happen.”

Over the long-term, José is hoping to build an academic research career combining laboratory work with teaching. Besides serving as a teaching assistant in classes for undergraduates and for medical students, José has taken some time to return to his alma mater, the California Academy of Mathematics and Science, to talk with those who are following in his footsteps.

Located at Cal State Dominguez Hills, the California Academy introduces a select group of underrepresented minorities to science and math at an accelerated pace. Starting in 11th grade, students are required to take college classes—calculus, genetics, physics, and chemistry, in José’s case. As a result, his transition to UCLA was relatively smooth, and that’s a message he wants today’s academy students to hear. “It might not always be such a struggle,” he tells them. “You should be prepared to work hard, but if your attitude is really positive and your goals are well-defined and you’re motivated, there’s no reason why you can’t succeed.”

It also helps to have a timely push. José’s first push came from a sister who bought him a toy microscope when he was 8 years old, leading him to a closer examination of the leaves and rocks in his home environment. “I remember using the microscope until it broke,” he says. A second and more crucial push came from David Krantz, professor of Psychiatry and Biobehavioral Science and his undergraduate research mentor. As he went through college, José knew he was “in full-fledged love with science,” but he “had no idea how to turn that into a profession.” Professor Krantz showed him “what it’s like to come in every day and do the work of science, the work it takes to get a big project done,” José says, and encouraged him to consider graduate studies. For his part, Professor Krantz recalls that José “was one of the first people to join my lab when I got to UCLA, and he played a major role in helping me set up.” José “is a pleasure to work with and has an infectious enthusiasm for science,” Professor Krantz says. “I was thrilled when he decided to attend graduate school at UCLA.”

José is somewhat unusual in doing both his undergraduate and graduate studies at UCLA and even rarer in his choice to stay here for a postdoctoral year, when many newly minted PhDs “are looking to get far away from the home lab,” José acknowledges. His research is too compelling, however, to put down and walk away. “Here’s this giant puzzle,” he says, “and I happen to be alive at a time in history when it hasn’t been solved yet. I have an opportunity in some small part to help solve it.” In any case, he says, “I’ve been given so many opportunities here at UCLA that I haven’t had a chance to leave.”

“Here’s this giant puzzle, and I happen to be alive at a time in history when it hasn’t been solved yet.”
Audrey Pool O’Neal
Mechanical Engineering

Audrey Pool O’Neal was just 14 when she built a truss out of balsa wood that held 80 pounds of bricks. Her I-beam design “wasn’t the most aesthetically pleasing—the others were much prettier,” she admits, “but my truss held the most bricks.” As a result, she won first prize for her project in a Purdue University program for promising high school students. The rest—her college degree, a job at General Motors, a PhD in engineering at UCLA, and her work in a program much like the one in which she excelled—all of that became more or less inevitable.
Audrey went home to Inkster, Michigan, knowing what she wanted to be when she grew up. “The only thing that wavered was what kind of engineer I would be,” she says. Ironically, perhaps, it was a teacher of English rather than science or mathematics who set Audrey on her course. Deciding that Audrey “should be an engineer,” Martha Petroski not only arranged the Purdue opportunity but two summers later sent Audrey off to the University of Wisconsin for a similar but more intensive and longer program.

Audrey turned down a subsequent scholarship from Wisconsin to accept an offer from the General Motors Institute (now Kettering University), a small private college that provided plenty of face time with professors and was less than two hours from home. For five years, Audrey studied mechanical engineering for 12 weeks, then worked 12 weeks in GM’s Powertrain division, which designs and manufactures engines and automatic transmissions for all GM products. Her thesis involved a simplified process for welding high carbon steel directly with low carbon steel to make a material that was both hard and flexible.

Where she grew up, just about everyone worked for one of the automakers. “Many, many family members [including her father] worked for Ford,” she says, “so I was going to be the rebel and go to GM.” Her father had his revenge, however. “To make sure I didn’t forget where I came from,” she says, “when I graduated from high school, he bought me a brand new Ford, which I had to drive to the GM lot every day.”

After she got her bachelor’s degree, Audrey continued working at GM for more than a decade. In 1996, GM sent Audrey to UCLA for a master’s degree in Mechanical Engineering, specializing in fluid mechanics, preparing her to work on “the engine side” of its operations. Audrey didn’t go back, however, but stayed on for doctoral studies.

In the next few months, she’ll receive her PhD in mechanical engineering. Working in the Multifunctional Composites Lab, Audrey has developed a way to embed a nanocomposite barium titanate into the materials used to build machines that need capacitors to store and then release power. Barium titanate is a dielectric ceramic material, which does not conduct electricity but has the ability to support an electrostatic field while dissipating minimal energy in the form of heat. Structures built using her material won’t need separate capacitors—“You could save the weight and embed that functionality into the skin of an aircraft, for example,” she explains.

Engineering may be her oldest love. “I always liked taking things apart and putting them back together, even before I realized there was a field of engineering,” she says. “Sometimes I’d get it right and sometimes not exactly.”

Her newest love is teaching. There’s “that light bulb moment,” she says, “when you look at the face of a student and see that they get it. There’s something about that I enjoy too much”—at least too much to go back to GM or any job in industry. Instead, she’d “like to help students become engineers.” While she finishes her dissertation work, she’s been getting some practice in that arena at UCLA’s Center for Excellence in Engineering and Diversity (CEED), which offers a variety of pre-college programs to orient K-12 students toward engineering and computing, as well as undergraduate programs and services focused on the personal, academic, and career development of economically disadvantaged and underrepresented Engineering and Computer Science students at UCLA.

To start, Audrey was a volunteer facilitator for a workshop supporting underrepresented students entering mechanical engineering’s core courses. Then, she was a paid instructor for the Introduction to Engineering Disciplines course, adding a research module to the requirement for entering freshmen. That success led directly to her current position as the Associate Director of CEED. In this role, one of her main responsibilities is coordinating a new summer program, Research Intensive Series in Engineering for Underrepresented Populations (RISE-UP). As Audrey describes her work, she “puts undergraduate students at UCLA in research, I mentor their projects as they go along, and then I have them do a poster presentation at the end of the year.”

Rick Ainsworth, the Center’s director, says, Audrey’s “overall effort (volunteer or compensated) has made outstanding contributions to and positive changes in the engineering teaching and learning culture and, in particular, for the development and success for underrepresented engineering students.” RISE-UP’s success “not only produced increased diversity in the engineering research labs, but also faculty requested more CEED students,” he adds.

Apparently, everyone is learning the lesson that Audrey picked up some time ago. “Engineering in general isn’t necessarily a welcoming environment for women or people who are different,” she says. “But when you do well, people just come around.” She points out that she was also younger than the other students attending the Purdue University program, but her age didn’t matter: “My truss held the most bricks.”

“Engineering in general isn’t necessarily a welcoming environment for women or people who are different. But when you do well, people just come around.”
Graduate Student Accomplishments

AMERICAN INDIAN STUDIES


APPLIED LINGUISTICS & TESL


ARCHAEOLOGY


ARCHITECTURE & URBAN DESIGN


ART HISTORY


ASIAN AMERICAN STUDIES


ASIAN LANGUAGES & CULTURES


Karen Muldoon-Hules: (Panelist) “Brides of the Buddha, or How Vedic Marital Customs Served Buddhist Ends.” Presented at the Fourth International Vedic Conference at the University of Texas, Austin, TX, May, 2007.


BIOMEDICAL ENGINEERING


**BIOSTATISTICS**


**CHEMICAL & BIOMOLECULAR ENGINEERING**


**CLASSICS**


**COMMUNITY HEALTH SCIENCES**

Elizabeth L. Gant: (Co-presenter) ’Breaking Barriers and Building Quality Care to Optimize Health of Moms and Babies.” Presented at the Association of Maternal and Child Health Programs Annual Conference, Arlington, VA, March, 2007.


Typhanye V. Penniman: (First author) ’The Associations of Gender, Sexual Identity and Competing Needs with Healthcare Utilization among People with HIV/AIDS.” Published in *Journal of the National Medical Association*, vol. 99, pp. 419, April, 2007.


**ECOLOGY & EVOLUTIONARY BIOLOGY**

Erin L. Marmocha: (First author) ’Anthropogenic habitat alteration affects the form of selection in the brown anole.” Poster presented at Evolutionary Change in Human-altered Environments conference, Los Angeles, CA, February, 2007.


**EDUCATION**


Elissa M. Lappenga: New Professionals Case Study Competition - First Place: Western Association of College and University Housing Officers (WACUHO), Palm Springs, CA, April, 2007.


ENGLISH


ENVIRONMENTAL SCIENCE & ENGINEERING


EPIDEMIOLOGY


ETHNOMUSICOLOGY


FILM, TELEVISION, & DIGITAL MEDIA


Reuben Gonzalez: (First author) “The Boiler Room” (full length stage play). Performance at Teatro Vivo De Austin, Austin, TX, January, 2007.

David Harrison: (Director) “How Do I Say This?” Winner: 2007 SXSW Interactive Web Awards - Best Student Website, Austin, TX, March, 2007.


FRENCH & FRANCOPHONE STUDIES


GEOGRAPHY

Barbara Y. Maida: (First author) “Quality Of Life, Sustainability, and Urbanization of the Oxnard Plain, California.” Chapter published in book Sustainability and Communities of Place, April, 2007.

Michel Serres as the clinamen” Pacifica, The Association of Pacific Coast Geographers, April, 2007.


HEALTH SERVICES

HISTORY


INFORMATION STUDIES


ITALIAN


LAW

MANAGEMENT

MATHEMATICS

MOLECULAR, CELLULAR, & INTEGRATED PHYSIOLOGY

MOVING IMAGE ARCHIVE STUDIES

MUSICOLGY


Ljubica Ilic: “Mirrors and echoes: beyond the confines of the theatrical space.” Presented at the Figures of Comparison in the Humanities and the Social Sciences second graduate student conference organized by the Center for Comparative Literature and Society of Columbia University, New York, NY, March, 2007.


NEAR EASTERN LANGUAGES & CULTURE


NEUROSCIENCE


PHYSICAL SCIENCE


POLITICAL SCIENCE


PSYCHOLOGY

Adrian Aguilara: (First author) “Community Matters: Determinants of Latinos’ Use of Mental Health Services in Los Angeles, CA.” Poster presented at the International Conference of Community Psychology, San Juan, Puerto Rico, June, 2006.

NURSING


PUBLIC HEALTH


SOCIOLOGY


Danielle Pilet-Shore: Presenter at the American Sociological Association, Conversation Analysis and Sociolinguistics regular session, Montréal, Québec, Canada, August, 2006.

SPANISH & PORTUGUESE


WOMEN’S STUDIES


WORLD ARTS AND CULTURES


From the Archives: Graduate Student Housing at UCLA

Excerpts from the Announcements of the Graduate Division, Southern Section.

1934-1935: “The cost of board and lodging in privately owned residence halls near the University varies from $35 to $50 per month; private homes at a somewhat greater distance will offer lodgings as low as $10 per month, and board and lodging for $30 per month. Mira Hershey Hall, for women, made available by the will of the late Miss Mira Hershey, is the only hall of residence maintained by the University... Board and room will be furnished to residents of this hall for $45 per month. Women are not permitted to live in public apartments unless satisfactory arrangements concerning chaperonage are made in advance with the Dean of Women. Families or groups of mature students who wish to rent furnished houses or apartments should apply to the real estate agents in Los Angeles or in communities near the campus.”

1946-1947: “A list of approved accommodations for women students is prepared for distribution at the beginning of each semester by the Dean of Women... No woman is permitted to complete her registration until her living accommodations have received the approval of the Dean of Women. Women are not permitted to live in public apartments without University and parental approval. ...Self-supporting women students usually can get board, lodging, and $15 to $20 a month in exchange for three hours of household work daily.”

1949-1950: “The housing shortage in the Los Angeles area, although presenting a difficult problem for single students, has been critical for those who are married.”

1950-1951: “A housing shortage still exists in the Los Angeles area, especially in low-cost apartments and houses.”

1959-1960: “As suitable living accommodations for out-of-town graduate students are limited in comparison to the total enrollment, prospective students should give considerable thought and planning to their housing needs... Living accommodations for students who do not live with friends or relatives may be obtained in private homes which accept paying guests; in neighborhood apartments; or in the Veteran’s Housing Project for married students... Since the University is not prepared to go into the community and inspect housing accommodations and make rental or other arrangements on behalf of students, such transactions must be made individually and directly with landlords. There is no low-cost housing for married graduate students available in near-University areas. Apartment rentals are plentiful but monthly rates are high.”

- Mary Watkins