UCLA Graduate Quarterly

Volume 15 Number 3
SPRING 2006

Message from the Dean

Phillip Channing

Dear Graduate Student,

As our Spring issue reaches you, my thoughts are turning toward the annual Hooding Ceremony, which is perhaps my favorite academic occasion. The procession of the faculty—all of them garbed in the colors of the university that granted them degrees—brings to my mind the continuous flow of knowledge through the centuries and across national boundaries. And as each newly made doctor is hooded with UCLA's colors, I think of the future that awaits them as they build upon the gains of those they follow.

Although I've been known to quip that the new graduates should "write when they get work," many have already identified their first professional job in academia or industry. And in a real sense, even those who haven't obtained a position have already begun their professional careers. Indeed, the transition from graduate student to new professional can be more like a bend in the river than a doorway into another building.

While their contributions in undergraduate education and in the output of our many research projects are widely recognized, graduate students also play a role in the dynamic evolution of UCLA's academic profile. In this issue, you'll read about some of the graduate students whose work is helping to reshape UCLA's academic portfolio through the innovative use of new technologies and the application of computational methods to biology.

Today, members of our community can see detailed and historically accurate representations of buildings that exist many miles or even centuries from this campus. The Experiential Technologies Center, which works these small miracles, grew from the kernel of a graduate student's dissertation research. Dean Abernathy is now part of the stream of doctoral students who have moved on to build careers, but Chris Johanson continues his graduate studies in the Classics while serving as the Center's associate director. Also working under the leadership of Professor Diane Favro is Associate Director Lisa M. Snyder, who came to UCLA in mid-career to study new ways to teach architectural history. The project provided the terrain for her dissertation, and now she continues to help build this important resource.

In another corner of the campus, graduate students are being prepared to join a new cadre of scientists who will use the tools of mathematics and computer science in the study of biological phenomena. Associate Professor Christopher Lee took the lead in designing the program, and Professor Fred Fox is principal investigator of the National Science Foundation grant that was used to build it. However, while he was a graduate student here, Parag Mallick collaborated with Professor Lee in developing the project. Ironically, he didn't leave with a certificate in bioinformatics because he didn't do the coursework—he helped teach it.

Although these present and former graduate students are clearly exceptional, their work is no exception to the rule. In similar ways, large and small, graduate students are contributing to the university where they study—and in so doing, enhancing their career prospects when they leave us. Our thanks to all of you.

Claudia Mitchell-Kernan
Vice Chancellor Graduate Studies
Dean, Graduate Division

GRADUATE QUARTERLY

a publication of the UCLA Graduate Division

Editor, Designer and Photographer
Mary Watkins

Writer
Jacqueline Tasch

Please send correspondence to:
1237 Murphy Hall, Box 951419
Los Angeles, CA 90095-1419
graduatequarterly@gdnet.ucla.edu

The Graduate Quarterly is published Fall, Winter, and Spring quarters by the UCLA Graduate Division. We welcome suggestions and comments. Current and archived copies of this publication are available to view or to download in PDF format on the Graduate Division web site.

www.gdnet.ucla.edu

PRINTED WITH SOY INK

CONTENTS

Spring 2006

Parag Mallick, p. 16

FEATURES

NEWS

ON THE COVER: (from left to right) Jesse Byock (Professor of Germanic Languages), Davide Zori, Marianna Betti (Archaeology graduate student), Ashley Byock (Northwestern Graduate Student), Asdis Hermonowiz (UCLA undergraduate student), in southwestern Iceland.

Davide Zori (p. 10) in Eric the Red's house, with weaponry.

virtual locality

the experiential technologies center

by Jacqueline Tasch

The Cathedral of Santiago de Compostela, one of Europe's great pilgrimage basilicas. Bolivia's Island of the Sun, a sacred Inca precinct. Jamaica's Port Royal, the famous 17th-century pirate colony. The prehistoric burial tumulus of Löfkend in Albania.

Once separated by oceans and centuries, these far-flung subjects of scholarly interest, both sacred and profane, now co-exist in the computer banks of UCLA's Experiential Technologies Center (ETC), along with the flagship of the ETC enterprise: the Forum buildings of imperial Rome. Visitors to UCLA's Visualization Portal experience a "fly through" in these settings, and portable computers bring the projections into the classroom.

The Experiential Technologies Center (ETC) puts the technical and aesthetic expertise of architecture to work in the service of historical and cultural research projects and reconstructions. For example, Steven Guban created this model for minimal housing in Sendai, Japan (right) as a graduate student in architecture, while using his skills to refine the model of the Basilica of Maxentius (left) in his part-time job at ETC.

All of these virtual realities—and many others, as well—were brought to life with major contributions from UCLA graduate students, many of them in architecture but also students in the humanities.

Dean Abernathy, now a lecturer in the Department of Architecture and associate director of the Institute for Advanced Technology at the University of Virginia, created a schematic reconstruction of imperial Rome while he was a graduate student in architecture at UCLA. With a significant influx of grant money from the Mellon Foundation, that seed has blossomed into what will eventually be a complete reconstruction of imperial Rome, including a sense of the terrain and the residential or commercial setting of the ceremonial buildings—not only the Forum, but the Colosseum and various temples.

The Forum of Caesar

Chris Johanson, a doctoral student in Classics, came along early in the Rome project and was present through the formation of the Experiential Technologies Center. His stamp is on a variety of projects. In particular, he developed software that can simulate changing angles of the sun from hour to hour and even season to season, an important element in some research. Today, he is associate director of the Center—while he continues his studies.

As time went on, the Center added graduate students from the School of Arts and Architecture's professional master's degree programs to its staff. The "extraordinarily powerful influence of a professional architecture program for this kind of work," Chris says, distinguishes UCLA's historical reconstructions. Their "real world experience of producing a project" means student architects know how to make models aesthetically pleasing and provide an important attention to detail, he explains.

However, historical reconstructions are not the Center's only contribution to graduate education. As the Experiential Technologies Center emerged from previous projects, its goal grew from "making models for research purposes" to "serving as a place where students get training and where faculty can learn about technologies," says Center Director and Professor of Architecture Diane Favro.

As Chris Johanson explains it, "we're not really trying to transport someone back in time as much as we want to develop tools that help us think about how someone would have lived in a particular time and place." Project teams may include social scientists, computer scientists, artists, historians, linguists, and musicians. For example, chanting of 12th-century music found at Santiago del

The empty Visualization Portal

Director of the Experiential Technologies Center and Professor of Architecture Diane Favro with Chris Johanson in the control room of the Visualization Portal

Compostelo fades in and out as visitors move through its virtual reconstruction at UCLA.

Projects like Santiago del Compostelo and the Forum have been used as part of lecture courses for graduate and undergraduate students. The virtual realities "help students visualize," says Associate Director Lisa M. Snyder. "You see the whole thing—you understand it in context. It's engaging."

New projects are always coming into the Center, often as a result of graduate students' dissertation research. While many of the students are from architecture, others are from the humanities. In some cases, the Center provides a solution to a specific problem, while in others, the visualization technology is a core component of the entire dissertation project. Through their contributions, professional architecture students are also enhancing their education.

In the following vignettes, we meet several graduate students whose graduate work has been furthered through their connection with the Experiential Technologies Center.

Chris Johanson: a Leadership Role

Chris Johanson was a sophomore computer science major at Iowa State when he took a couple of Latin classes and fell in love with the classical world. "The richness of the language comes from the culture that's hiding behind it," he says. Studying the Latin language was a way to "open a window into the world of the past," Chris says, an opportunity "to dive into the mind of someone living 2,000 years ago and try to understand what it was like to live then."

So Chris made the "tough decision" to pursue a Classics major "based more on the idealistic pursuit of knowledge," he says. Nevertheless, he used his computer skills to create his senior project, what he calls "a Gumby version of the Forum"—a virtual reality application that "was not aesthetically well thought out." He was drawn to UCLA by the more sophisticated Forum project already under way then and by the excellence of the Classics Department.

His dissertation research involves the "core political and spectacular spaces" of Rome, including Capitoline Hill, Palatine Hill, and the Roman Forum, but the well-known ETC Rome project will not be much help. ETC's imperial Rome existed 200 years and more

Chris Johanson lecturing in the Visualization Portal

after the republican period Chris is studying. They're about as similar as colonial Boston and the present-day city. In addition, Chris is less interested in building the model than in comparing information from different sources and testing its accuracy.

Reconstructions of ancient sites have always involved "the merger of what the archaeological data on the ground says" and descriptions found in a variety of texts. In combining literature and archaeology, there's been a tendency toward "simply cherry-picking the text," Chris says, looking for text that confirms the archaeology. Chris hopes to achieve a higher degree of historical accuracy by "looking critically at the sources of topographical information and textual references," he says: What was the author's background, for example, and what motivated his writing.

Meantime, his role at the Experiential Technologies Center has taken him not only to Rome but to an Iron Age grave mound in Albania and the Temple of Artemis in Turkey. While still a graduate student, he often finds himself in the role of expert, advising faculty on technological aspects of their work.

"One of the most positive parts of the experience"—not just for himself but for other graduate students linked to the Center, he says—"is that you very quickly have a leadership role that is not common for graduate students [and] take the first baby steps toward other parts of the academic life."

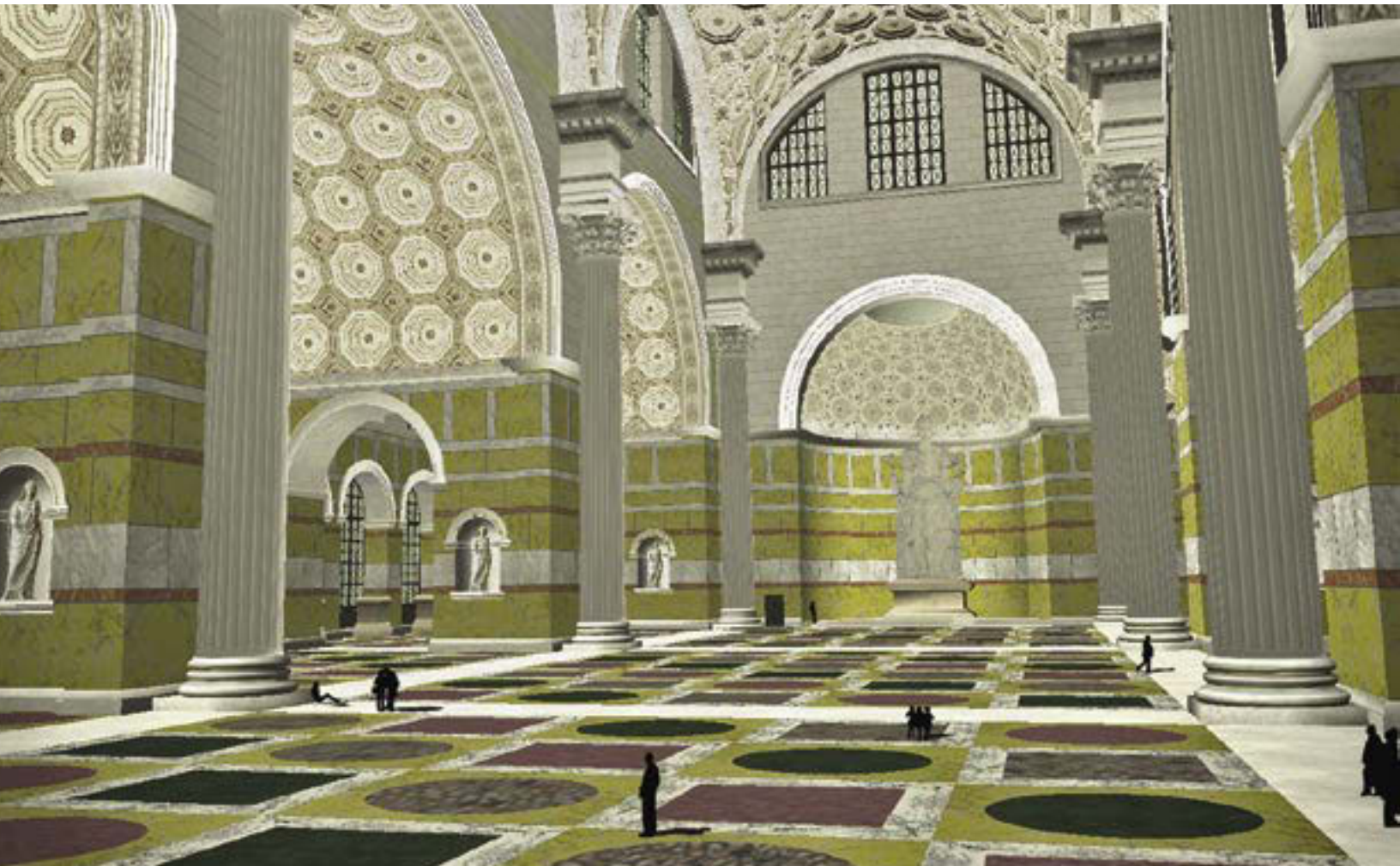
Rebeka Vital: Bringing a Culture Alive

To the array of reconstructions of ancient buildings, many of them widely renowned for their place in history, Rebeka Vital has added a 20th-century Jewish community center in Thessaloniki, Greece. Though it is more recent and less well known than the other projects, the building is no less treasured among those who retain a memory of it.

As the administrative heart of 60,000 Jews in that part of Greece, the Jewish center had its offices upstairs, while the synagogue shared the ground floor with some commercial enterprises. The Holocaust reduced Thessaloniki's Jewish population to barely 1,000 by the end of World War II, and in the early 1970s, the building was razed and replaced by a modern office building.

Now it stands again in the virtual reality of the Experiential Technologies Center. Rebeka was aiming for more than "a sterile computer model." Instead, she hoped "to create an atmosphere, an ambience of that time period, that attaches to the model, puts the building in context, and brings it alive." Indeed, her dissertation research focuses "on how we can use the tool of virtual reality to do historical reconstruction and at the same time reconstruct the cultural identity of the building."

Basilica of Maxentius, textured interior view with marbles and materials that existed from around 415 AD, including reconstruction of barrel vaults and cross vaults, with examples of some of the statuary.



Rebeka Vital

Viewers of Rebeka's work see the Jewish community center through the passage of years from 1900 to the early 1970s. Before World War II, they hear the liturgy in Ladino, an archaic Spanish language used by the community; after, they hear it in Hebrew. Outside of the building, viewers hear market noises, which grow muffled as they move into the interior.

Perhaps most movingly, as they move around the center, viewers hear the voices of "very old people who remember the building" and who told their stories to Rebeka. Pictures of the actual building fade in and out, along with billboards from the various time periods. While some reconstructions allow viewers to move at their discretion, Rebeka lays out a path for them. "I don't want my viewers to miss things I want them to see," she says. "I'm trying to put them in the past."

Rebeka hoped "to create an atmosphere, an ambience of that time period, that attaches to the model, puts the building in context, and brings it alive."

Rebeka came to UCLA because of its specialization in the digital reconstruction of historical buildings, and she quickly made contact with Experiential Technologies Center Director Diane Favro. As a graduate student researcher, she worked on several Center projects, including a reconstruction of the Second Temple of Jerusalem based on the writings of Josephus. She has also helped to turn some of the virtual models into videos for the Web site.

Her reconstruction of the Thessaloniki Jewish center is based on a few pictures rescued from an archive or private collections and some architectural drawings for a planned renovation, as well as the memories of the community's elders. When her project is completed, it will be displayed at the Jewish Heritage Museum in Thessaloniki, her family's hometown.

Rebeka Vital's synagogue complex model

Davide Zori , who was recently awarded a Fulbright Fellowship, with Guðmundur Ólafsson, Head of the Archaeological Department, National Museum of Iceland, at their site in Hrísbrú, Mosfell Valley.

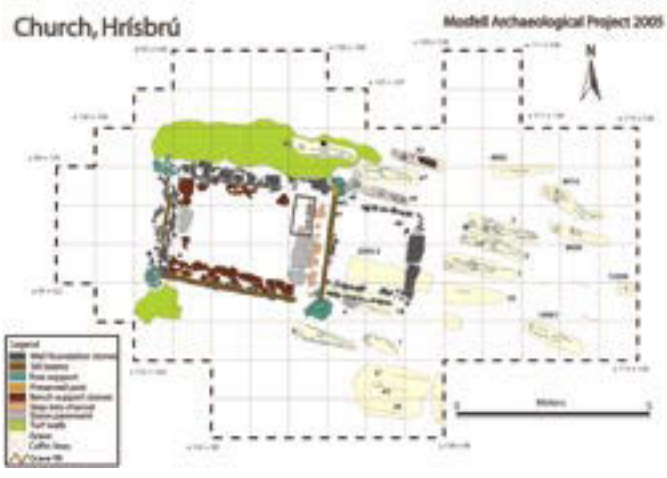
Davide Zori: A New View of the Viking Age

For the last four years, Davide Zori has worked at the Hrísbrú site in the Mosfell Valley in southwestern Iceland, part of an international team led by his mentor, Jesse Byock, which is studying the Viking Age. Over time, they had mapped artifacts at the site using different computer programs, and as Davide approached his dissertation writing, he didn't know how to integrate the data.

"There are so many technologies that you need to know," Davide says. "It's virtually impossible for one person." However, he learned from a colleague that people at the Experiential Technologies Center had several computer programs and the knowledge to connect them. For Davide's project, that meant "pulling out the relevant mapping data from each program and making a better map in one program," he says. "That simplified matters and made good maps." The mapping program Davide settled on was ArcGIS, a system that handles geographically referenced information and makes it easier to record, store, update, edit, analyze and display a large amount of data. The maps produced by this system are no ordinary maps. If you click on a particular object or feature, the program will bring up all the pertinent information researchers at the site discovered about it.

clench bolts

So far, the program has provided Davide and his mentor with maps to submit with articles for publication, but the possibilities are broader. For example, the program will help Davide plot the instasite distribution of particular artifacts found at the archaeological sites in the Mosfell Valley. Davide has a particular interest in a certain



the Hrísbrú site

kind of nail used in ship construction — a clench bolt, analogous to a modern screw-postulating that parts of ships might have been symbolically included in Christian burials as a reference to the old pagan Scandinavian beliefs. The program could help him test his theory. Moreover, ETC connected Davide and his mentor with Jennie Dillon, an MA student in the Architecture Department who is helping with additional projects, including a three-dimensional projection of what one church looked like. "It's opened up a brand new arm of our study of the Viking world," Davide says, as the reconstructions help researchers "visualize what the landscape and buildings looked like."

steven guban & stephen deters: mingling the old and new

While they've been designing West Los Angeles homes and Sacramento housing projects as part of their graduate studies, Steven Guban and Stephen Deters have also been hard at work on the Basilica of Maxentius in imperial Rome and the decorative detail of Louis Sullivan buildings in the American Midwest at the turn of the last century.

Students in the School of Arts and Architecture's three-year master's program (MArchI), the two are also on the staff of the Experiential Technologies Center. While Stephen Deters has been helping to develop a visual animation of how Sullivan's ornamentation was created, Steven Guban has been engaged in refining the Basilica reconstruction.

His work, Guban says, may involve combining components from different computer programs, checking size and scale, and adding textures to make the final effort look more realistic. Appearance, however, is not the first priority. Movie makers who re-created Rome's Colosseum for *Gladiator,* for example, were more concerned with getting the best visual effect, whereas the Center's first goal is the highest possible degree of historical accuracy.

To accomplish this means "finding every existing document" that describes a site, Guban says, and in some cases, working with scholars in different corners of the world. Last summer, he was part of an ETC crew based in Rome, discussing various reconstructions with Italian archaeologists and scholars, editing, fine-tuning, and "making sure that everybody can agree on what actually existed back then."

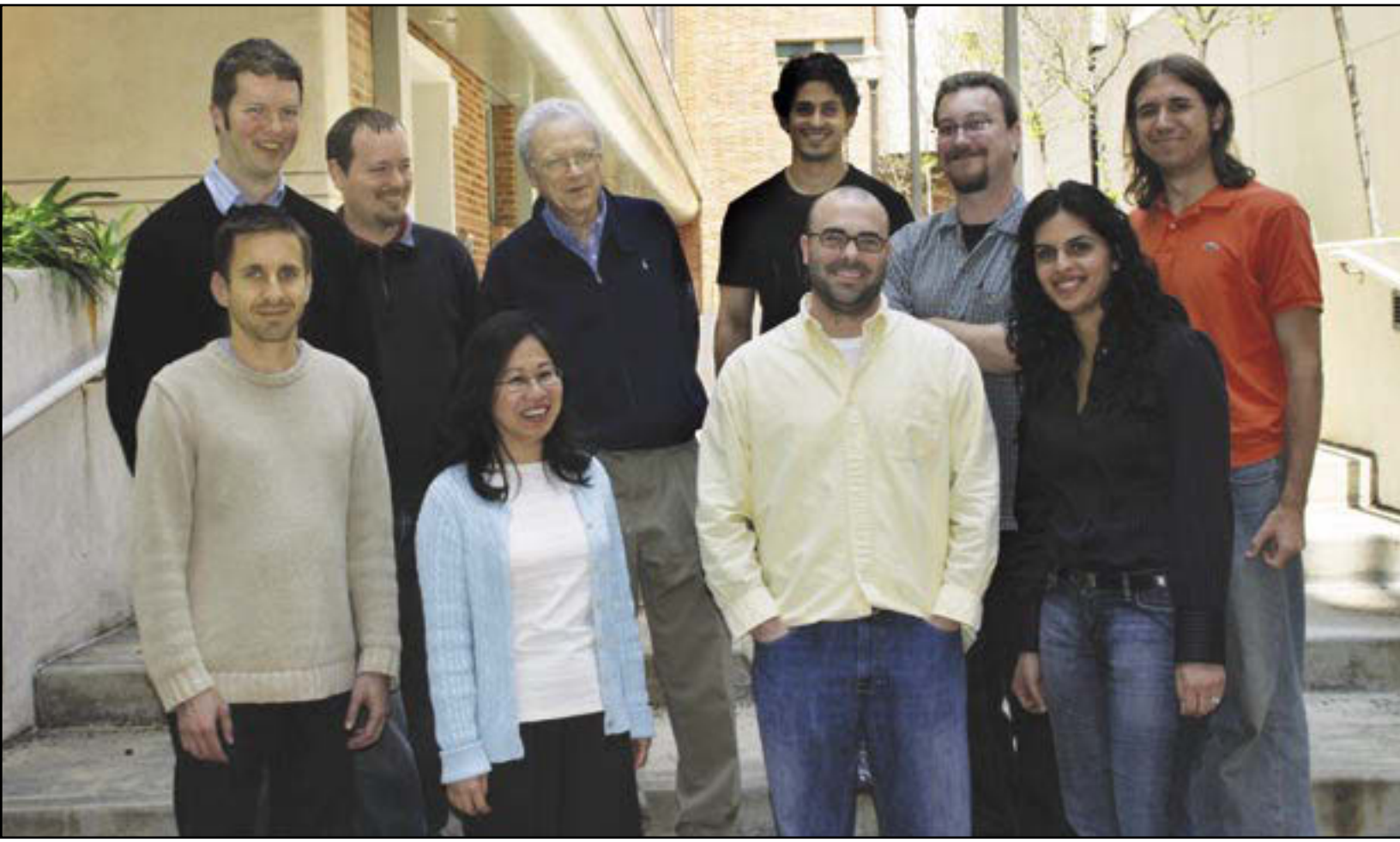
Besides supporting his studies and offering travel opportunities, his ETC assignments further Guban's architectural education. As a professional architect, Guban says, he will be called on "to simplify the visualization of a project and discuss it with clients," presenting proposals to people who may know little about design. This task is central to ETC assignments, and he has also enhanced his modeling skills.

For Deters, the contribution may end up being more direct. Sullivan's work was part of a tradition, dating back to the ancient Greeks and Romans, in which proportioning systems, based on geometric shapes and prescribed ratios, was a determining factor in architectural design. That tradition fell out of use in the 20th century but has seen something of a revival recently. For now, Deters isn't using that tradition directly, but "it has started to influence my way of thinking," he says.

Steven Guban in Italy

HYBRIDS

THE UCLA BIOINFORMATICS PROGRAM MIXES IT UP WITH AN NSF GRANT



The Bioinformatics program develops scientists who combine the knowledge and skills of biology, computer science, and mathematics to do research in genomics and proteomics. A recent graduate, Todd Mocker, left, works with *Brachypodium* on research that may help develop new fuels. Above, current graduate students gather with Principal Investigator Fred Fox: Front row (left to right): Robert Riley, Linh Tran, Aaron Day, Sara Tajar. Back row (left to right): Michael Janis, Simon Galbraith, Fred Fox, Stuart Sievers, Richard Hayes, Ryan Skophammer. Not shown and still completing UCLA PhD: Allen Day, Danny Eller, John Klejnot, Rebecca Krupp and Scott Westenberger.

When Parag Mallick was an undergraduate at Washington University in St. Louis, he needed seven different academic advisers to help him get the education he wanted: knowledge and skills that would blend molecular biology, biochemistry, mathematics, and computer science. Even when he arrived at UCLA for graduate studies, he found himself more or less unwelcome in the computer sciences area—he was a *biochemistry* student, after all—and something of an anomaly in his home department—"Parag the not quite biochemist"— because of his strong computer science background.

In a short period, however, others—students and faculty—started turning up with the same background and interests. Crucially, Christopher Lee took up residence as an assistant professor in the Department of Chemistry and Biochemistry, bringing to UCLA his novel approach to the study of genomics. The human genome has more than 3 billion gene bases—represented by single letters, As, Cs, Gs,

and Ts—together they comprise more than 32,000 genes. Scientists had believed that alternative splicing was relatively rare, but Dr. Lee's research turned up an estimated 60,000 different splice forms.

Doing this kind of biological research required analyzing millions of pieces of data and finding the hidden relationships between them.

no single person can be expert at computer science, statistics, *and* biology

"You couldn't do it manually," Dr. Mallick explains. "It just wasn't possible." The tools of computer science and the methodologies of statistics were needed, but relatively few traditional biologists had those skills.

So how would you create scientists who could deal with this new flood of genomic information, people who would understand not only biology, but also computer science and statistics? This is the question that Dr. Lee and Dr. Mallick pondered, usually over Thai spicy pan-fried noodles at Westwood's Noodle Planet. Out of their conversations came the framework for a bioinformatics program and an application to the National Science Foundation for an Integrative Graduate Education and Research Traineeship (IGERT) grant.

As a result, graduate students arriving at UCLA today with Dr. Mallick's interests can find a home in a comprehensive program—bioinformatics—which helps them develop into multidisciplinary professionals in their field through prescribed coursework, a network of potential mentors, and collaborative meetings and projects. Dozens have been supported during their studies by the IGERT grant. Quite soon, it may be possible to acquire a PhD or master's degree in Bioinformatics at UCLA.

When UCLA began to consider a bioinformatics program, more than two dozen professors were already blending the fields of biology and mathematics in their work, and computers were in every laboratory, along with the more traditional tools of biology. A faculty of 16 professors was assembled, and another 10 professors were listed as resource faculty.

The UCLA bioinformatics program posits that no single person can be expert at computer science, statistics, *and* biology. Rather, "they need to understand and care about biology, but their tools have to be fundamentally different than the tools of a lab biologist," Dr. Mallick says. UCLA's goal is to "create multiple different types of people who speak each other's language but have an expertise of their own."

Simon Galbraith

Thus, bioinformatics students affiliate with an existing department at UCLA—say, chemistry and biochemistry or computer science. Besides their department's requirements, they take three core courses in statistics and bioinformatics, and they assemble what amounts to a "graduate minor" in mathematics, computer science, or biology—a discipline that is not part of their home department.

For example, Michael Janis, an undergraduate in biochemistry with industry experience in research and development, is part of the Chemistry and Biochemistry Department and taking a statistics minor. Simon Galbraith, who spent his childhood "breaking and fixing computers" for fun, is in the Computer Science Department, taking a biology minor. Both came to UCLA because of its bioinformatics program and have been supported by IGERT fellowships for three years.

Based in the discipline of computer science, Simon is studying transcription factors, proteins that bind DNA to a specific site in the cell and then control the gene's expression there. He creates algorithms and software to explain the rapid growth of bacteria. Based in the discipline of chemistry and biochemistry, Michael Janis looks at RNA, primarily a messenger molecule that transmits information from DNA to the proteins during gene expression. He uses computational and statistical models to predict processing events in this chain reaction from DNA to the creation of functional molecules.

UCLA's goal is to "create multiple different types of people who speak each other's language but have an expertise of their own."

IGERT students have the extra burden of completing their home department's requirements in addition to those of bioinformatics. However, Professor Fred Fox, principal investigator of the bioinformatics IGERT, says there's been no overall impact on time to degree. "Once our students get this additional training under their belts," he says, "often they can move much faster than their peers because they have more at their fingertips."

Participants in the bioinformatics program meet every week, providing opportunities for people from different backgrounds and scientific cultures to talk to each other. Simon welcomes the opportunity to meet and interact with biologists and chemists, people he might otherwise not encounter as he acquires a degree in computer science. He appreciates "the exposure to many different ways of thinking about problems." By discussing their work with the group, graduate students learn how to explain their research in terms nonspecialists can understand, Simon says, and listening to talks by others lets him know "what problems are solvable" in other fields.

Michael values "the cohesive group of mentors"—an extraordinary array of interdisciplinary experts—he can go to for advice on his research. The program also provides a biannual review by experts outside of the graduate student's main discipline: "This type of rigorous feedback and advice—I can't overestimate how important it is," Michael says. In addition, the bioinformatics programs links

Michael Janis

Parag Mallick in his Cedars-Sinai office, practicing his other field of study: juggling

"They constitute a new breed," Professor Fox says. "I'm quite satisfied that they will make their mark."

computers to provide the kind of power required to deal with data counted in terabytes—1,000 gigabytes at a pop.

An important piece of the program has been to find ways to foster interdisciplinary collaboration among both students and faculty, to "create a community of unlikely interactants by setting up interactions around problem areas," Professor Fox says. At the end of their participation, bioinformatics students should have learned each other's scientific language and culture well enough to collaborate effectively, he says: "I think we've succeeded there."

The overall goal of UCLA's bioinformatics program is to train future leaders in the scientific community to meet the challenges of the next decades, as biology and biochemistry continue to adapt to the post-genomic, post-proteomics world. Professor Fox believes that goal has been achieved, too. Graduates of traditional doctoral programs "are frequently lacking in the ability to do high-level computational science," he says. "Our bioinformatics students have tool sets that enable them to go well beyond the norm."

Several graduates have found homes in industry as well as the academy, another IGERT goal. Indeed, alumni are working at the Centers for Disease Control, Merck's Bioinformatics Institute, Johnson and Johnson, and Genentech. Dr. Mallick has managed to bridge both worlds, holding appointments as an adjunct faculty at UCLA and as director of clinical proteomics in the Center for Applied Molecular Medicine at Cedars-Sinai Medical Center.

And alumnus Todd Mockler was a perfect match for a new position at Oregon State University in Corvallis. Through its Computational and Genomic Biology Initiative, the University has hired five young bioinformatics experts to set up a new program in bioinformatics and genomics. UCLA's bioinformatics program was a key to Dr. Mockler's selection as one of those five: "I couldn't have had a better foundation for this job," he says.

Choosing a brand new area of science marks bioinformatics students as risk takers who are comfortable with the unknown. "It takes a kind of fearlessness," Dr. Mockler says. "You're not intimidated by large amounts of data, you're not going to shy away from mining some data because the tools aren't available." In fact, one thing that sets bioinformaticists apart from their peers is their ability to create new tools and write new programs to fit the questions they want to ask.

"They constitute a new breed," Professor Fox says. "I'm quite satisfied that they will make their mark."

from switchgrass to the stock market

As the U.S. government seeks alternatives to gasoline as a fuel, Todd Mockler thinks he may be able to play a significant role. A key line of research involves using switchgrass for making ethanol, so creating a switchgrass with more leaves would mean more fuel. However, switchgrass grows eight feet tall, making it inconvenient for the kind of laboratory experimentation that would lead to such an outcome.

Dr. Mockler's strategy is to establish that a much smaller and lab-friendly plant, called *Brachypodium,* can serve as a surrogate. If he were able to identify the genetic pathway that controls when *Brachypodium* stops making leaves and begins to flower, his results might be applied to switchgrass. Delaying flowering for as long as possible would mean bushier plants and more resulting fuel.

Meanwhile, at Cedars-Sinai Medical Center, Parag Mallick, is using similar tools toward a different goal. "We hope to be able to take a drop of blood and measure the quantities of its molecular components comprehensively and precisely and based on what we find, say to somebody, you have cancer, or you don't," Dr. Mallick says, "and ideally go one step further and say, if you take this drug, it's the one that's going to work."

Drs. Mockler and Mallick have doctoral degrees from UCLA, where both became proficient in the emerging field of bioinformatics, the study of the inherent structure of biological information and biological systems. Bioinformatics brings together the avalanche of data provided by genomics—the genomes of nearly 200 organisms have been sequenced so far—with the analytic theory and practical tools of mathematics and computer science.

To reach the outcomes Drs. Mockler and Mallick envision means identifying and characterizing the processes or pathways by which the instructions embedded in DNA become actual cellular structures or activities. A present graduate student, Michael Janis, offers a useful metaphor.

Think of proteins as the workers in a cell, getting their instructions from the DNA library. A third kind of molecule, RNA, can fill in as a worker, but most often it is the messenger that brings information (like a library book) from the library to the workers. In the best of all possible worlds, all of this goes smoothly: The RNA gets the right book, delivers it promptly, and then disappears without doing any harm.

In the real world, however, a lot can go wrong. Metaphorically speaking, the RNA might bring the wrong book, or too many books; it might deliver the book with changed or mangled contents. And after it has made its delivery, the RNA "might go back to the library and lock up a room or get into other mischief," Michael says. To complicate things still more, the cell constantly reviews requests to the library, and it may order proteins to intercept the RNA and destroy some library books before they can be read. Finally, some library books contain a wide array of instructions with different outcomes, so that RNA has to step in as a worker to ensure a good outcome.

One of Dr. Mallick's favorite tools for cancer research was developed by the Department of Defense to differentiate jeeps from rocket launchers.

This is the world where scientists in genomics, proteomics, and bioinformatics feel at home. When they understand a pathway from its DNA instruction to its cellular outcome, they may be better able to intervene in ways that produce useful results. What the pure science establishes about how a cell responds can lead to pragmatic applications, for example, how to isolate a virus where a vaccine can attack it or how to develop a kind of wheat that can adapt to global warming. In cancer treatment, conventional chemotherapy attacks all fast-multiplying cells, killing not only cancer but healthy cells. Thanks to new research, Michael says, it may be possible to find defects in pathways that are unique to cancer and target therapeutics there.

Although so far, bioinformatics has worked largely with the pool of data supplied by genome sequencing, the possibilities are larger. One of Dr. Mallick's favorite tools for cancer research was developed by the Department of Defense to differentiate jeeps from rocket launchers. IGERT Director Fred Fox points out that the underlying strategy of bioinformatics is to look at large amounts of data, assemble it, and make accurate predictions. "Some people who train in bioinformatics go to work at securities firms," he says. Whether it's the human body or the stock market, "precisely the same mathematical principles apply."

Certainly, new scientific discoveries and new applications are likely to multiply, and that's part of what drew Dr. Mockler to one of his primary research areas, the study of RNA binding proteins. In that work, he uses another laboratory-adaptive plant called *Arabidopsis,* systematically mutating nearly all of the 300 or so RNA-binding proteins to see what effect that has. Until his work, detailed information was available on only 15 of the proteins. "For the vast majority of them, we didn't have a clue how they work or what they do," Dr. Mockler says. It's "largely an open space in science . . . It gives me an opportunity to hopefully make some fundamental discoveries."

As Michael looks forward to a career path that offers him "the most freedom and challenge in terms of my own research," one thing is certain, he says: "We're at the very edge of a profound change in biological research." Professor Fox goes one step further: "By and large," he says, "these scientists are trying not just to be *at* the forefront but to look *beyond* the forefront."

Postdocs Rock

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 22, 2006, honored the work of five outstanding scholars.

adam aron

Adam Aron studies how human impulses are controlled—or not—in terms of the underlying brain systems. Why, for example, do some people give in to an impulse to repeatedly wash their hands, even when they don't want to be doing this—behavior typical of obsessive compulsive disorder? The same question could be asked in drug addiction or impulsive behavior in manic and aggressive disorders. Could alterations to brain circuitry increase the power of the impulse or decrease the power of control?

These are central questions in Dr. Aron's research. His work with brain-damaged patients established the critical importance of the inferior prefrontal cortex of the right hemisphere for cognitive control. Through the interpretation of neuroimaging results, Dr. Aron has developed a cognitive-control/frontal-cortex biomarker for research into attention deficit hyperactivity disorder and other impulse control disorders. He is currently examining how the frontal cortex interacts with the motor system to control responses.

Educated at the University of Cape Town, South Africa, and the Universities of Edinburgh and Cambridge in the United Kingdom, Dr. Aron came to UCLA for the opportunity to work with Dr. Russell Poldrack and the diverse neuroscience community at UCLA. Living in Los Angeles—with its fine food, rich cultural life, excellent climate, and scenic environment—was another attraction.

Dr. Aron looks forward to obtaining an assistant professor position and building his own cognitive neuroscience lab as a setting for collaborative projects in basic and clinical neuroscience.

thomas cubaud

THOMAS CUBAUD IS FASCINATED BY FLUIDS, PARTICULARLY THE SCIENCE of miniaturization of fluid flow, which facilitates study of many physical, chemical, and biological phenomena. He has been working on the motion of gas bubbles in microchannels to optimize the performance of a micro Direct Methanol Fuel Cell, a primary candidate for future portable energy sources. He has examined the process by which two droplets merge to enhance biochemical reactions in lab-on-a-chip devices. These projects are evidence of his long-term goal: to merge the classical approach to doing fundamental science with the inventive nature of applied research.

Most recently, he has discovered micro-scale flow instabilities between liquids with large viscosity contrasts. These instabilities can be used to rapidly mix the liquids, overcoming one of the most challenging problems in microfluidics. For this work, Dr. Cubaud received the Annual Gallery of Fluid Motion Award from the American Physical Society.

Dr. Cubaud became interested in fluids during his undergraduate studies in physics at Paris-Sud University in France. He obtained his doctoral degree there and at the École Supérieure de Physique et Chimie Industrielles de Paris.

He came to UCLA because of its worldwide reputation as a pioneer in micro-fluidics and nanofluidics, and he has found it a dynamic and fertile environment for his postdoctoral assignment with Thomas Mason. He also enjoys the campus's green spaces and diverse facilities, as well as the world-class culture environment and outdoor activities of the Los Angeles area.

gang li

Gang Li has developed a high-efficiency polymer (or plastic) solar cell, as well as solid-state lighting applications of organic semiconductors, and UCLA has filed for several patents on his work. While he was obtaining his doctoral degree in physics at Iowa State University, Dr. Li became intrigued by organic semiconductors because of their potential to provide energy in a way that doesn't degrade or deplete the environment and that is inexpensive enough to be accessible to all.

Although solar energy is a clean and abundant resource, the challenge to widespread use has been the high manufacturing cost of silicon solar cells. Polymers, however, are inexpensive and widely available. Dr. Li was able to increase the thickness of the polymer cell, achieving a combination of good absorption and carrier transport. The resulting solar cell—a single layer of plastic sandwiched between two conductive electrodes—has a record high 4.4 percent power conversion efficiency. Dr. Li is also interested in solid-state lighting applications of organic semiconductors and has developed a plastic white light-emitting device that has greater power conversion efficiency than an incandescent light bulb.

A native of China, Dr. Li has an undergraduate degree in space physics from Wuhan University. He cherishes the opportunity to work in a cutting edge laboratory with Professor Yang Yang and other top researchers in his field. He has also enjoyed exploring Southern California with his young daughter, and he's becoming a basketball fan.

Gang Li and his family

weidong li

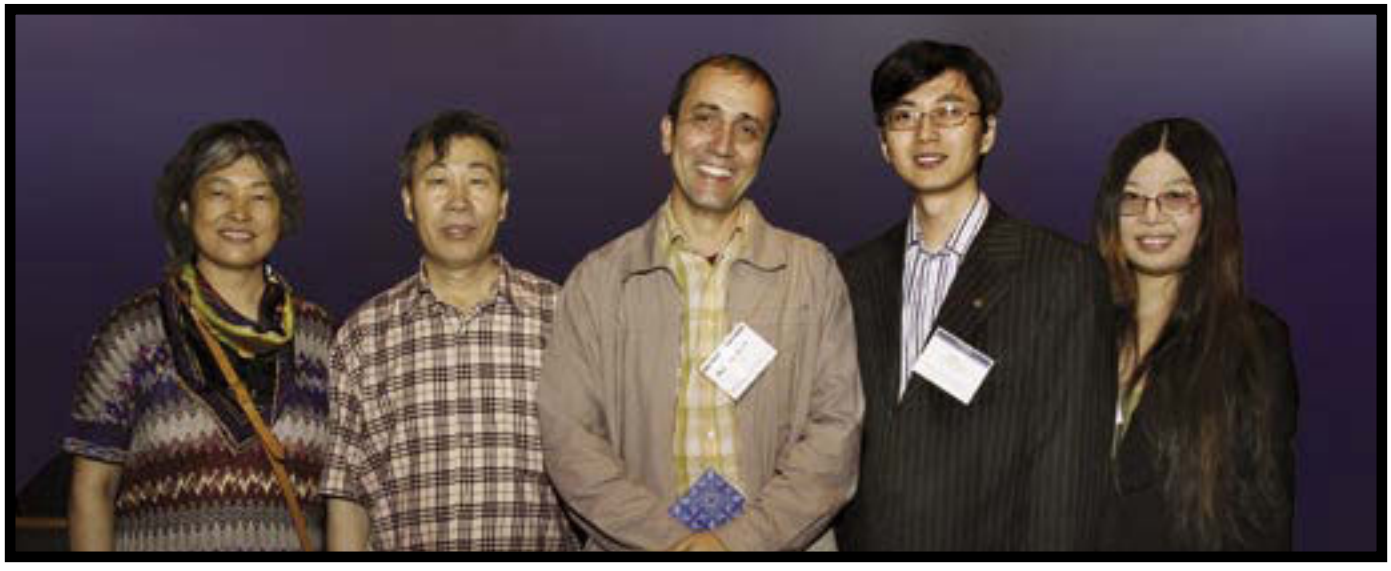
Weidong Li has shown that symptoms of Neurofibromatosis Type 1 (NF1) —a disorder that affects 1 in 3,500 people worldwide—can be reversed in mice by treating them with lovastatin. These findings suggest that the disabling cognitive deficits associated with NF1 could be treated with a class of relatively safe drugs that millions of people have taken for extended periods in the last 20 years to reduce cholesterol levels. FDA-approved clinical trials are now under way to test the prediction that stems from this study.

Dr. Li was a medical student at China Medical University in China when he first became interested in the mechanisms of brain disease. As he pursued his doctoral studies in neuroscience at Shinshu University in Japan, he developed an interest in neurological and psychiatric disorders as a way of integrating his clinical training and research goals.

Working with Alcino Silva and Tyrone Cannon was his first choice as a postdoctoral assignment. His research more generally involves the molecular mechanisms of disorders that affect cognition—not only NF1 but also schizophrenia. Dr. Li has developed genetically mutant mice lines with inducible mutations of a gene associated with schizophrenia. The mice show behavioral abnormalities similar to those associated with the human disorder, including changes in sociability and latent inhibition.

While he came to UCLA for the research resources, he has also enjoyed the people, as well as the nearby beaches and the excellent Chinese restaurants. And the weather is fabulous, too.

BELOW: Weidong Li with his family and Alcino Silva (center), professor of Neurobiology.



endawoke yizengaw

Born in a small village of northwestern Ethiopia where he once watched over the family's herd of cattle and oxen, today Endawoke Yizengaw tracks the many satellites circling the Earth and studies the structure and dynamics of the surrounding plasma environment. An assistant research professor at UCLA's Institute of Geophysics and Planetary Physics, he also participates in a project coordinated with the Jet Propulsion Laboratory and NASA to improve the accuracy of Global Positioning System (GPS) navigation.

It was his dissertation research on ground-based tomography using GPS-measured data and space-based tomography using GPS receivers on Low Earth Orbit (LEO) satellites that earned him international recognition and led to his postdoctoral position at UCLA with Mark Moldwin. Dr. Yizengaw is also interested in studying magnetosphere-ionosphere coupling during severe storm events, which can create power outages, diverted airplanes, knocked out satellites, and interrupted spacecraft communication.

Dr. Yizengaw persevered in pursuing his education despite many obstacles. He had a bachelor's degree in physics and was teaching at Bahir Dar Teachers College (now Bahir Dar University) when a Sunday morning radio broadcast featuring an Ethiopian engineer at JPL/NASA inspired him to pursue a similar career. He earned scholarships to Tromso University in Norway and then to La Trobe University in Australia.

Dr. Yizengaw is helping to prepare the African Small Instrument Array for the International Heliophysical Year and he recently received the NSF GEM/CEDAR Postdoc Fellowship, in which his proposal was rated No. 1. He looks forward to a career in academic research.

Graduate Student Accomplishments

FEATURED ACCOMPLISHMENT

ART HISTORY

Angelica J. Afanador Pujol: (Panelist) "Whispering the Secrets of the State: The Story of an Adulterous Ear." Presented at the College Art Association 94th Annual Conference, Boston, MA, February, 2006.

ARCHITECTURE & URBAN DESIGN

Shohreh Rashtian: [1] "Buildings of Future." Presented at the Fourth Annual Hawaii International Conference on Arts and Humanities, Waikiki, HI, January, 2006. [2] "Architectural Practice." Presented at the 2006 Math/Science Conference, Whittier, CA, February, 2006.

ART HISTORY

Angelica J. Afanador Pujol: (Panelist) "Whispering the Secrets of the State: The Story of an Adulterous Ear." Presented at the College Art Association 94th Annual Conference, Boston, MA, February, 2006.

M Legier Biederman: [1] (Co-curator) Exhibit of Art Interactive Gallery, Cambridge, MA, February, 2006. [2] (First author) "What are Proper Responses? Hip hop, aesthetics, race and feminist politics." Forthcoming in *Philament: Online Journal of Arts and Culture*, vol. 9, September, 2006.

ASIAN AMERICAN STUDIES

Paul-Julian Nadal: (Panelist) "National Narratives, Unnatural Bodies: Reading the Problematic of the Nation in Younghill Kang's East Goes West." Presented at the 4th Annual Crossing Borders Ethnic Studies Conference, USC, Los Angeles, CA, March, 2006.

CHEMISTRY & BIOCHEMISTRY

Gavin O. Jones: (First author) "Diels-Alder Reactions of Cyclopentadiene and 9,10-Dimethylanthracene with Cyanoalkenes: The Performance of Density Functional Theory and Hartree-Fock for the Prediction of Substituent Effects." Published in the *Journal of Physical Chemistry A*, vol. 110, pp. 1216, January, 2006.

Susan N. Pieniazek: (First author) "The Origin of the Halogen Effect on Reactivity and Reversibility of Diels-Alder Cycloadditions Involving Furan." Published in *Angewandte Chemie International Edition*, vol. 45, pp. 1442, March, 2006.

Jennifer A. Robbins Luft: (First author) "On the stability of the pi-allyl intermediate in molybdenum-catalyzed asymmetric alkylations." Published in *Tetrahedron: Asymmetry*, vol. 17, pp. 716, February, 2006.

COMMUNITY HEALTH SCIENCES

Yasamin Y. Kusunoki: [1] (Co-author) "Adolescent Sexual Relationships and Reproductive Health Outcomes: Theoretical and Methodological Challenges." Chapter published in *Romance and Sex in Adolescence and Emerging Adulthood*, A. Crouter and A. Booth (Eds.), January, 2006. [2] (First author) "A Characterization of Young Adults' Nonmarital Sexual Relationships: Findings from the National Longitudinal Study of Adolescent Health." Presented at the Population Association of America Conference, Los Angeles, CA, March, 2006.

COMPARATIVE LITERATURE

David A. Fieni: [1] (Panelist) "Language as a Symptom of Social Vitality in *al-Shidyaq* and *Céline*." Panel: Language, Ideology, and the Human, at "The Human and Its Others" Conference, Princeton, NJ, March, 2006. [2] (Panelist) "A Poetics of Postcolonial Decadence: Abdelwahab Meddeb's Walking Cure." Presented at "Fractured Reflections: The Breaking Point Between Text/Image," New York City, NY, February, 2006.

Barbara L. Hui: (Panelist) "Internal and External Memory in W.G. Sebald's Historical Narrative." Presented at American Comparative Literature Association 2006, Princeton, NJ, March, 2006.

Emad Mirmotahari: [1] "Islam, Text, and Nation in Two East African Novels: Nurrudin Farah's *Sardines* and Abdulrazak Gurnah's *By the Sea*." Presented at the British Commonwealth and Postcolonial Studies Conference, Savannah, GA, February, 2006. [2] "The (Im)possibility of African Philosophy." Presented at the American Comparative Literature Association, Princeton, NJ, March, 2006.

Sarah M. Older Aguilar: (Panelist) "Navigating by the Stars: Justice and Social Trauma in Roberto Bolaño's *Estrella Distante*." Presented at the Entralogos 2006 Conference, Cornell University, Ithaca, NY, February, 2006.

Theri A. Pickens: "This Woman's Work: Living with Ghosts, Storyteller, Black Girl II, Like Girls & Smoldering (revised)." Presented at the College English Association conference, San Antonio, TX, April, 2006.

Jordan Y. Smith: [1] (Co-chair) Hip Hop Film Festival and Conference. UCLA Working Group in Hip Hop Studies, Los Angeles, CA, January, 2006. [2] (Moderator) "International Hip Hop: Transnational 'Flows'." Hip Hop Film Festival and Conference, UCLA, Los Angeles, CA, January, 2006. [3] (Chair) "Transculturation and National Signifiers: 'Japan' In, After, and Via Diaspora and Return." UCLA Center for Japanese Studies' Annual Graduate Student Conference, Los Angeles, CA, April, 2006.

DESIGN | MEDIA ARTS

Aaron M. Koblin: [1] (Director) "Flight Patterns." Presented at the Computer Animation Festival at SIGGRAPH, Boston, MA, Summer, 2006. [2] "Flight Patterns" won an award at the Japan Media Arts Festival, February, 2006.

ECOLOGY & EVOLUTIONARY BIOLOGY

Julianne E. Kalman: (Co-author) "A new species of Malmiana (Oligochaeta: Hirudinida: Piscicolidae) from tidepool fishes in northern California." Published in the *Journal of Parasitology*, vol. 92, pp. 89-92, February, 2006.

EDUCATION

Alice Y. Ho: [1] "Achievement Values During Early Adolescence: Do Students Admire or Look up to High Achieving Peers?" Poster presented at the Society for Research on Adolescence Biennial Meeting, San Francisco, CA, March, 2006. [2] (Co-author) "Pro-Bully Norms and Antisocial Behavior: Evidence for Emulation of 'Cool Kids'." Presented at the Society for Research on Adolescence Biennial Meeting, San Francisco, CA, March, 2006.

ENGLISH

Erin M. Suzuki: "Consuming Desires: Melancholia and Consumption in *Blu's Hanging*." Published in *MELUS*, vol. 31.3, April, 2006.

FILM, TV, & DIGITAL MEDIA

Patrick C. Perez: [1] (Producer/Director) "Outsiders Guide to Independent Film." Awarded a Student Emmy in the Magazine Format TV Show Category, March, 2006. [2] (First author) "Fashion House Episode #15." Screenplay for 20th Television, January, 2006.

John Slattery: (Director) "Casablanca Mon Amour." Casablanca, Morocco, December, 2005.

FRENCH & FRANCOPHONE STUDIES

Ruthemma J. Ellison: [1] (Panelist) "A Shady Mirror of Civilization: Madness in the Medieval Forest." Presented at the Entralogos Conference, Cornell University, Ithaca, NY, February, 2006. [2] (Panelist) "A Shady Mirror of Civilization: Madness in the Medieval Forest." Presented at the 10th Annual Expanding the Visual Field Graduate Student Symposium, USC, Los Angeles, CA, March, 2006. [3] (Panelist) "A Shady Mirror of Civilization: Madness in the Medieval Forest." Presented at the Defining Spaces: 19th Annual Graduate Student Symposium, University of Wisconsin-Madison, Madison, WI, April, 2006. [4] (Panelist) "A Shady Mirror of Civilization: Madness in the Medieval Forest." Presented at the 2006 UCSB Medieval Studies Graduate Conference, Santa Barbara, CA, April, 2006.

Christine S. Thuau: (Panelist) "Specialization & Mediation: Private Reading and the Domestic Sphere in the Later Middle Ages." Presented at the 2006 UCSB Medieval Studies Graduate Conference, Santa Barbara, CA, April, 2006.

Jennifer T. Westmoreland: "The Chaâba Writes Back : Language, Space, and the Postcolonial Immigrant." Presented at the French Department Graduate Student Conference, University of Wisconsin-Madison, Madison, WI, March, 2006.

GERMANIC LANGUAGES

Jonathan T. Jones: "Walking Among the Dead: The Spectacle of Gunther von Hagens' *BodyWorlds* and the Crisis of Visuality." Presented at the American Comparative Literature Association (ACLA), Princeton University, Princeton, NJ, March, 2006.

Andrea Kindler: (Panelist) "'My medical training helps me to understand the problem of human conduct': The Influence of Medicine on the Works of Arthur Schnitzler." Presented at the American Comparative Literature Association (ACLA), Princeton University, Princeton, NJ, March, 2006.

HEALTH SERVICES

Shana B. Traina: [1] (Co-author) "The application of explicit process of care measurements to rheumatoid arthritis: Moving from evidence to practice." *Arthritis Care & Research*, in press. [2] (Co-author) "Etanercept in ankylosing spondylitis results in a rapid and sustained improvement in quality of life and utility in NA and Europe: 72-week results from an open-label extension trial." Poster presented at EULAR, Amsterdam, The Netherlands, June, 2006. [3] (Co-author) "US and UK EQ-5D scoring algorithms result in different utility estimates: Results from an Etanercept open-label extension trial in ankylosing spondylitis." Poster presented at EULAR, Amsterdam, The Netherlands, June, 2006.

HISTORY

Brandi C. Brimmer: (Panelist) "'Please Take Up My Claim!': Poor Black Women, the Professional Class and the Pension Process in Eastern North Carolina, 1889-1894." Presented at UCLA/USC Thinking Gender: The 16th Annual Graduate Student Research Conference, Plenary Session, Los Angeles, CA, March, 2006.

Joshua A. Paddison: "Kenneth N. Owens, Gold Rush Saints: California Mormons and the Great Rush for Riches." Book review published in *Montana: The Magazine of Western History*, vol. 56.1, pp. 84-85, Spring, 2006.

INFORMATION STUDIES

Rebecca J. Cohen: "Sex education and the American public library: A pilot study of institutional barriers to sex education collection development and programming in three Southern California public libraries." 2006 Frances Henne YALSA/VOYA (Voice of Youth Advocates) Research Grant, January, 2006.

Katherine H. Gaidos: "Access to Vice Presidential Records in the Aftermath of Executive Order 13,233: From Haphazard Past to Uncertain Future." Forthcoming in the *Government Information Quarterly*, 2006.

Lindsay J. Hansen: [1] "Thawing the Cold War in Los Angeles." Poster presented at the Oregon Library Association Annual Conference, Salem, OR, April, 2006. [2] "Musical Remnants of the Cold War." Presented at the Music Library Association West Coast Conference, Berkeley, CA, April, 2006.

Janet Kaaya: "Review: Globalisation, Information and Libraries: The Implications of the World Trade Organisation's GATS and TRIPS Agreements by Ruth Rikowski." Book review published in *InterActions: UCLA Journal of Education and Information Studies*, vol. 2.1, February, 2006.

Allison B. Lew: (Producer) "Culture Shock: Coming to America for College." UCLA Office of Residential Life (ORL) resTV, UCLA On-Campus Cable Channel 22, Los Angeles, CA, February, 2006.

ITALIAN

Tiziana Serafini: (test bank reviewer) *Oggi in Italia*. Book published in April, 2006.

Maria Cristina Villa: [1] "*Il silenzio dei vivi. La letteratura della deportazione razziale nell'Italia del boogie boogie, della rivolta studentesca e del terrorismo*." Presented at "Italian Fiction in the Sixties and the Seventies," Salford, England, March, 2006. [2] "*Il mondo silenzioso e spettrale dei sopravvissuti. La letteratura ebraica e la Shoah in Italia.*" Presented at "*Tutta un'altra letteratura*: Authors and Approaches beyond the Italian Canon," Harvard University, MA, Cambridge, April, 2006.

LAW

James M. Mize: "Lessons in State Implementation of Marine Reserves: California's Marine Life Protection Act." Published in the *Environmental Law Reporter*, vol. 36, May, 2006.

MECHANICAL & AEROSPACE ENGINEERING

Zeljko G. Sakota: (First author) "Out of Autoclave Curing of Composites." Presented at the SAMPE 06 Conference, Long Beach, CA, May, 2006.

MOLECULAR, CELLULAR & INTEGRATIVE PHYSIOLOGY

Sarah N. Ahn: (First Author) "Use of c-fos to identify activity-dependent spinal neurons after stepping in intact adult rats." Published in *Spinal Cord*, in press.

MOVING IMAGE ARCHIVE STUDIES

Amy J. Sloper: (Co-presenter) "Sex Mis-Education: The Role of the Sex-Ed Film in the Moving Image Archive." Presented at the Orphans Film Symposium, Columbia, SC, March, 2006.

MUSIC

Daniel Rosenboom: CD Release: "Bloodier, Mean Son," on the Nine Winds Records label, February 2006.

MUSICOLOGY

Philip Gentry: [1] "John Cage, Paul Goodman, and the Corruption of America's Youth." Presented at the Society for American Music National Meeting, Chicago, IL, March, 2006. [2] "Doris Day, Calamity Jane, and the Sound of Whiteness." Presented at the IASPM-US National Meeting, Nashville, TN, February, 2006.

ORAL BIOLOGY

Marcela Romero Reyes: [1] (First author) "Inhibition of TNF alpha production enhances functional activation of immune effectors against oral cancers." Poster presented at the AADR/Pfizer Hatton Awards Competition, Orlando, FL, March, 2006. [2] (Recipient) Awarded 1st place in the Post-doctoral category for PhD thesis work at the AADR/Pfizer Hatton Awards Competition, AADR meeting, Orlando, FL, March, 2006.

PHYSICS & ASTRONOMY

David S. Hecht: "Invited Talk: 2D Carbon Nanotube Network, A New Material for Electronics." Presented at the American Physical Society March Meeting, Baltimore, MD, March, 2006.

POLITICAL SCIENCE

Etienne Poliquin: "Signaling Foreign Policy Disagreement among Allies." Presented at the 47th Annual International Studies Association Convention, San Diego, CA, March, 2006.

Rebekah E. Sterling: "'Beyond the Smoak of Their Own Chimneys': Travel Literature and the Lockean Encounter with Difference." Presented at the Western Political Science Association Annual Meeting, Albuquerque, NM, March, 2006.

PUBLIC HEALTH

Brandon J. Brown: [1] (Co-author) "HIV/AIDS and 'othering' in South Africa: the blame goes on." Published in *Culture, Health, and Sexuality*, vol. 8, pp. 67-77, January, 2006. [2] (Co-author) "Condom use among men who have sex with men in urban, coastal Peru." Poster presented at the CDC National STD Prevention Conference, Jacksonville, FL, May, 2006.

SOCIAL WELFARE

Maria L. Carpiac-Claver: (First author) "In a Manner of Speaking: Communication between Nurse Aides and Older Adults in Long Term Care Settings." Published in *Health Communication*.

Tsuann Kuo: [1] (First author) "The Effects of Eldercare on Work/Life Issues: Comparisons between Taiwanese Americans and Whites." Poster presented at the 2006 Joint Conference of the National Council on Aging and the American Society on Aging, Anaheim, CA, March, 2006. [2] (First author) "Effects of Volunteerism on Older Adults: Gender, Disability and Satisfaction." Poster presented at the 2006 Joint Conference of the National Council on Aging and the American Society on Aging, Anaheim, CA, March, 2006. [3] (Chair) "Taiwanese American Women in Literature and Films." 18th Annual Convention of the North America Taiwanese Women's Association, Houston, TX, April, 2006.

Sean E. Lynch: (Co-author) "Linking School Social Work Interventions to Educational Outcomes." Chapter published in *The School Services Sourcebook: A Guide for School-Based Professionals*, January, 2006.

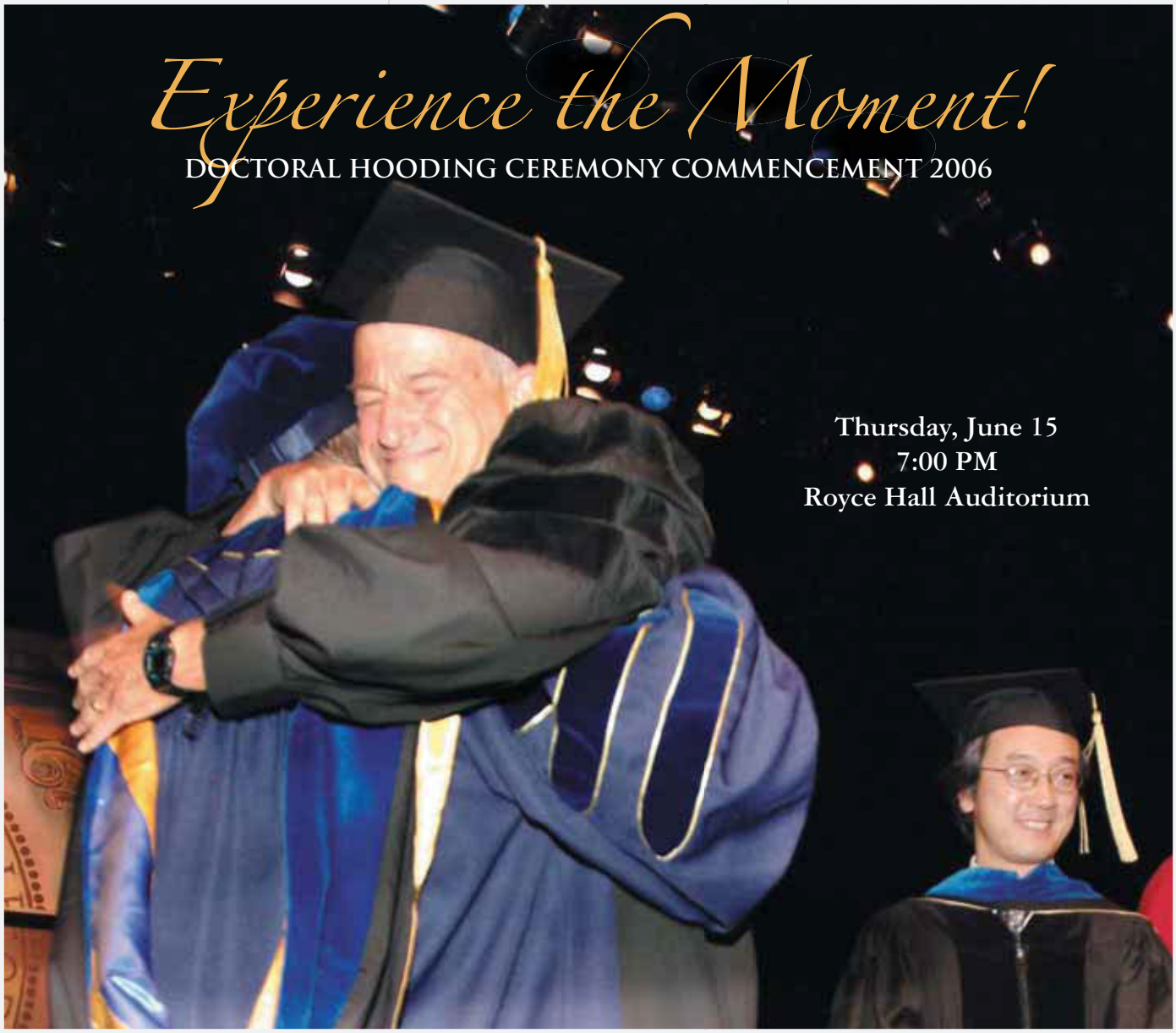
Darcey H. Merritt: [1] (Co-author) "Understanding the Ecology of Child Maltreatment." Published in *Child Maltreatment*. [2] "Review of the book *Social Work Practice with Children and Families: A Family Health Approach*." Book review published in *The Journal of Gerontological Social Work*, vol. 48.

URBAN PLANNING

Monique Chavoya, Norma Fernández and Veronica Saldaña: (Co-presenters) "Aga Khan Historic Cities Programme: A Possible Solution to Preserving Los Angeles' Historic Communities." Presented at the AUC/UCLA Environmental Economic Development Institute Initiative: A Joint Symposium for International Research, Collaboration and Cooperation-13th Annual AUC Research Conference, Cairo, Egypt, April, 2006.

WOMEN'S STUDIES

Bert Maria Cueva: (First author) "Economic Globalization New Threads of Imperialism: Impacts on Mexican and Indigenous Women." Published and presented at *Catedra de la Mujer: VI Taller Mujeres en el siglo XXI*, Universidad de la Habana, Habana, Cuba, November, 2006.



WHERE IN THE WORLD ARE UCLA 05-06 FULBRIGHT SCHOLARS?

Anjali Browning
Anthropology, Mexico
"Intercommunity Conflict in Oaxaca"

Abimbola Cole
Ethnomusicology, Botswana
"Striving for an AIDS-free Generation: Musical Arts and HIV/AIDS in Botswana"

Kate Foley
World Arts & Cultures, Croatia
"New Models for Dance Production: Networks, Collectives, and Multiple Media"

Pia Franzese
Public Policy, Spain
"Galician Rural Rehabilitation Program"

Robert Jansen
Sociology, Peru
"Populist Politics in Peru"

Eleanor Lipat
Ethnomusicology, Thailand
"Likay: Contemporary Creativity in Thai Folk Theater"

James Mize
Management/Law, New Zealand
"New Zealand's Experience with Marine Reserves"

Keith Murphy
Anthropology, Sweden
"Designers, Democracy, and the Production of Style"

Neil Peretz
Law, European Union
"EU Dispute Resolution Systems for Online Consumer Transactions Across National Borders"

Siddarth Puri
Art History, India
"Performance Art in Ethnic and Sexual Minorities in India"

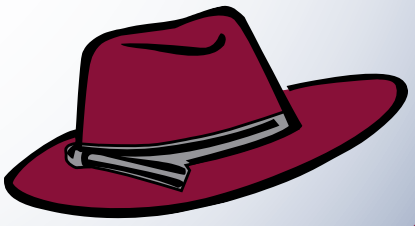
Megan Rancier
Ethnomusicology, Kazakstan
"Musical Formations of Post-independence National Identity in Kazakhstan"

WHERE DO YOU WANT TO GO IN 2007-2008?

The U.S. Department of State's Fulbright U.S. Student Program provides academic-year grants for post-baccalaureate research and study abroad in over 100 countries. Applicants must have senior or graduate student standing and be U.S. citizens at the time of application. Grants provide round-trip international airfare, a monthly stipend, and health insurance.

Application cycle opens May 1, 2006. Applications and program descriptions are available at www.fulbrightonline.org/us.

Application deadline for UCLA students is September 22, 2006.



GRADUATE QUARTERLY
University of California, Los Angeles
Graduate Division
1237 Murphy Hall
Box 951419
Los Angeles, California 90095-1419
GD32

Non-Profit Organization
U.S. Postage Paid
UCLA