IMPORTANT CONTACT INFORMATION

GRADUATE DIVISION

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E-mail: graddiv@ucmerced.edu
Web site: gradstudies.ucmerced.edu

Planning a Visit?

Campus visits can be scheduled online, by phone or by e-mail. Call us at (209) 228-6316, e-mail us at tours@ucmerced.edu or visit our Web site at tours.ucmerced.edu to reserve space using our online calendar.

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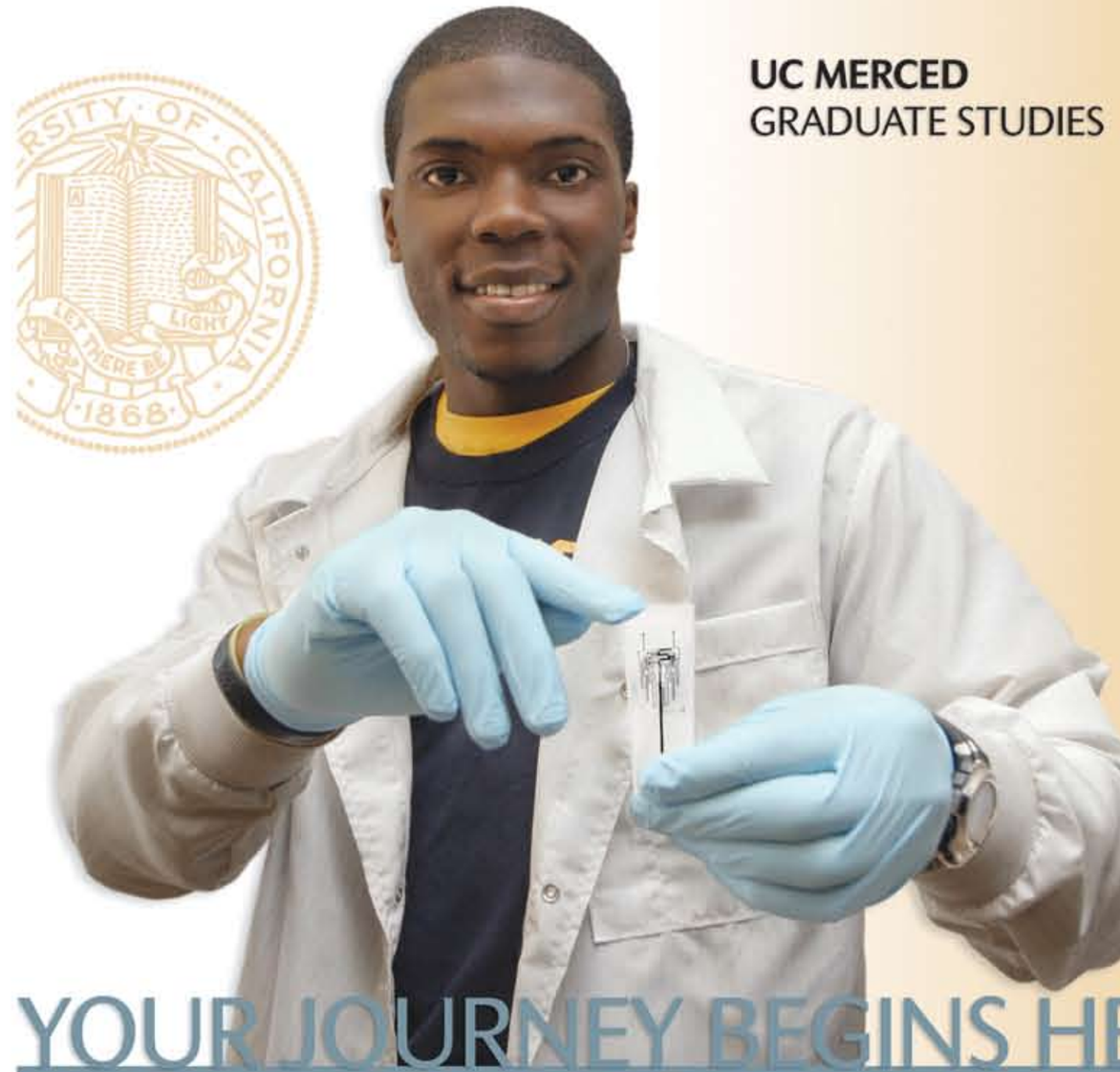
GRADUATE STUDIES



YOUR JOURNEY BEGINS HERE

UCMERCED
www.ucmerced.edu

UNIVERSITY OF CALIFORNIA, MERCED

The University of California, Merced, opened Sept. 5, 2005, the 10th campus in the renowned University of California system. It is the first American research university to be built in the 21st century and the first new UC campus to open in 40 years.

UC campuses – Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, San Francisco, Santa Barbara and Santa Cruz – offer exciting learning environments that foster world-class educational and research opportunities. The system also generates a wide range of benefits and services that are recognized nationally and internationally.

Diversity and Ecological Richness

UC Merced rests on rolling grasslands that climb to the spectacular peaks of the Sierra Nevada, offering a quiet, close to nature allure. The new campus uses principles of sustainability in its designs and operations and is a model for sustainable use of energy and other resources.

The cultural diversity of the San Joaquin Valley and the ecological richness of the Sierra Nevada and Pacific Coast Ranges offer abundant and unique living, learning and research opportunities. The interdependence of the Valley and the surrounding mountains provides a natural laboratory for studying environmental issues and a growing diverse population.

Commitment to Excellence

UC Merced brings the University of California's tradition of commitment to excellence in teaching, research and public service to the state's great San Joaquin Valley.

More than 100 world-class professors have answered the call to found California's newest research university. Faculty members are working in cutting-edge areas such as sustainable energy, the effects of climate change on natural systems in the Sierra Nevada, cancer treatments, antibiotic resistance, genomics, nanotechnology, language acquisition and integrating mathematics and computing with other sciences.

STUDENT PROFILE

Benjamin Balaguer
Paris, France
Second Year, Ph.D. Student
Electrical Engineering and Computer Science

"The most rewarding thing about being part of UC Merced is knowing that what I am achieving in my research will directly influence how others perceive our young campus. Here, we have a direct impact on the University's long-term success!"

Research Focus: I have been working extensively on real-time three-dimensional robotic simulators, which provide an advanced research framework aimed at experimenting in realistic scenarios with a multitude of robots. In fact, I recently placed second in the 2008 RoboCup Competition, Rescue Simulation League, competing against universities from all over the world.

Educational History: Born and raised in the suburbs of Paris, France, I came to the United States with my family to advance my studies. I received my Bachelor's in Computer Engineering from the University of Maryland, College Park, in May 2007 and am now pursuing a Ph.D. at UC Merced where I am specializing in robotics.

Benjamin Balaguer, pictured above, placed second in the 2008 World Robocup Competition.

INTERDISCIPLINARY RESEARCH AT UC MERCED

The distinguishing feature of UC Merced's graduate programs is their interdisciplinary nature, which provides a breadth of knowledge that helps put studies into a wider context.

Biomedical Sciences Research Institute

The Biomedical Sciences Research Institute was conceptualized and developed by the UC Merced faculty based on technology centers such as genomics, computational biology and informatics. These technologies can be used in population-based health research that will emanate from links between existing faculty and future faculty in broad areas of social and behavioral sciences, economics, community and cultural factors that influence human health and well-being.

med.ucmerced.edu

Sierra Nevada Research Institute

Using the San Joaquin Valley and the Sierra Nevada as their "outdoor laboratory," faculty, researchers and students in the Sierra Nevada Research Institute (SNRI) conduct basic and applied research on issues surrounding natural resources, air, water and soil pollution, climate change and competing land uses. SNRI's mission is to discover and disseminate new knowledge through integrated research in the natural, social and engineering sciences.

snri.ucmerced.edu

UC Merced Energy Research Institute

UCMERI's goals are to generate knowledge that leads to new and improved renewable and sustainable energy technologies, examine global energy policy, set the standard for institutional energy efficiency and sustainable energy futures, and educate the next generation of energy scholars and practitioners.

eng.ucmerced.edu/ucmeri

Center for Computational Biology

The Center for Computational Biology (UCM-CCB) is a new research and education center that sponsors interdisciplinary scientific projects in which biological understanding is guided by computational modeling. The center also facilitates the development and dissemination of undergraduate and graduate course materials based on the latest research in computational biology.

ccb.ucmerced.edu

Roy Family Genome Center

The Roy Family Genome Center was founded in 2007 to promote and develop the use of molecular biology in research programs at the University of California, Merced and fulfill the needs of the research faculty in a consistently rapid, dependable, and economical fashion.

genome.ucmerced.edu

UC Merced Stem Cell Research Consortium

The Stem Cell Research Consortium at UC Merced consists of a multidisciplinary group of faculty that are focused on understanding the mechanisms that control cell fate decisions and also on ways to predict cell behavior.

stemcells.ucmerced.edu

Research and graduate programs at UC Merced are interdisciplinary in nature, composed of faculty from multiple schools and disciplines.

UC Merced offers unique graduate programs designed to encourage interactions among faculty and students from a broad scope of academic disciplines.

STUDENT PROFILE

Beth Hernandez
Fresno, California
Third year, Ph.D. Student
World Cultures

"What I like best about UC Merced is it feels like I'm at a small private university, and professors have more time to spend with me and with other students. I am able to craft independent study classes with various professors, so my study of Chicano literature is now enriched with classes on Anglo-American, African-American, and Spanish literatures."

Research Focus: I am studying the use of Spanish and English in Chicano novels, plays and poetry. I want to know why authors choose to write bilingually, who reads bilingual literature, and who publishes bilingual Chicano literature. This combines literature, some linguistics, cultural identity, literary history, y mas!

Educational History: I attended high school at Roosevelt School of the Arts in Fresno, part of California's Central San Joaquin Valley, and have an international baccalaureate diploma from Atlantic College in Wales. I also have a B.A. in Spanish and International Studies from George Fox University, in Oregon.

ACADEMIC PROGRAMS

Applied Mathematics

PROFESSOR MICHAEL SPRAGUE, *Program Chair*
Office: (209) 228-4179
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Web site: appliedmath.ucmerced.edu/grad.html

Applied Mathematics at UC Merced explores the applications of mathematics in the development of natural sciences, engineering and social sciences. The graduate program offers an interdisciplinary research and training program for M.S. and Ph.D. students. Coursework provides training in the fundamental tools of applied mathematics, including ordinary and partial differential equations, asymptotics and perturbation methods, numerical analysis and scientific computing. The Applied Mathematics graduate program offers opportunities for students interested in interdisciplinary mathematics projects at the interface with life sciences, physical sciences, engineering and social sciences.

We invite applications from a wide variety of undergraduate majors including, but not limited to, mathematics, engineering, physics and chemistry.

Biological Engineering and Small-Scale Technologies

PROFESSOR KARA MCCLOSKEY, *Program Chair*
Office: (209) 228-7885
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Web site: best.ucmerced.edu

The engineering sciences are undergoing a vast and fundamental metamorphosis from isolated disciplines to more integrative and interdisciplinary topics. The Biological Engineering and Small-scale Technologies (BEST) graduate program at UC Merced offers an interdisciplinary research and training program for M.S. and Ph.D. students who want to be at the forefront of this revolution in biologics engineering and nanotechnology. Research projects are available on topics ranging from fundamental characterization of materials to tissue engineering, and coursework provides a background in the tools of biologics and integration of modern materials. The graduate group offers opportunities for students interested in interdisciplinary projects at the interface between biological engineering, nanotechnology, bioelectrical engineering, mechanical engineering, computer science and materials characterization and design.

Electrical Engineering and Computer Science

PROFESSOR STEFANO CARPIN, *Program Chair*
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Web site: eecs.ucmerced.edu

UC Merced's graduate program in Electrical Engineering and Computer Science offers individualized, strongly research-oriented courses of study leading to the M.S. and Ph.D. degrees. The program is organized to allow students to pursue cutting edge research in modern fields of computer science. Current research topics include: computational neuroscience, digital information processing and informatics, database design and development, mobile ad-hoc and sensor networks, distributed computation, algorithm design and testing, artificial intelligence and robotics, computer graphics and animation, and image processing and analysis.

Together with UC Berkeley, UC Davis and UC Santa Cruz, UC Merced is part of CITRIS, the Center for Information Technology Research in the Interest of Society. The EECS faculty is involved in various activities and research projects supported by CITRIS.

Electrical Engineering and Computer Science is highly cross-disciplinary with connections to faculty from all three schools at UC Merced.

Environmental Systems

PROFESSOR TOM HARMON, *Program Chair*
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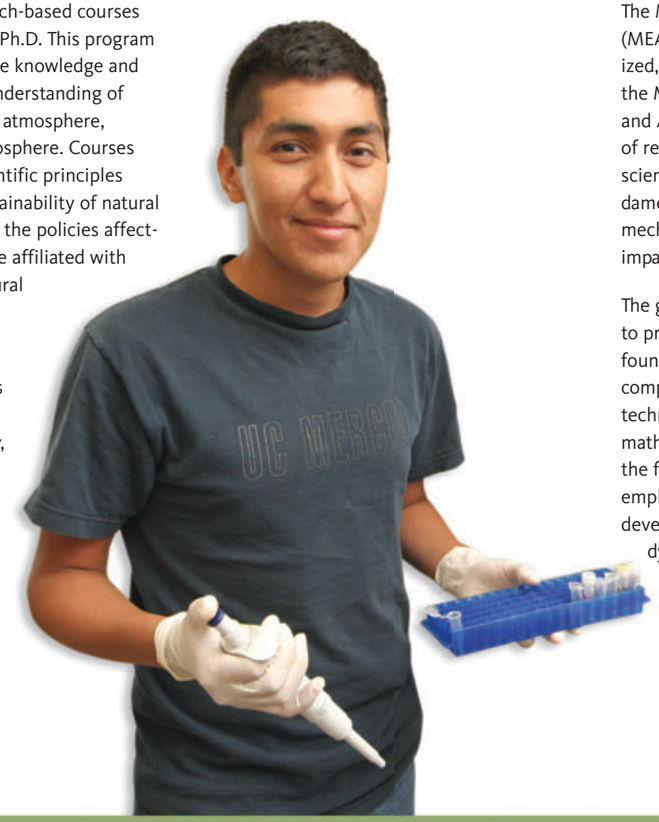
Web site: es.ucmerced.edu

The Environmental Systems (ES) graduate program engages in individualized, research-based courses of study leading to the M.S. and Ph.D. This program strives to equip students with the knowledge and skills to improve the scientific understanding of Earth as an integrated system of atmosphere, hydrosphere, lithosphere and biosphere. Courses are designed to provide the scientific principles underlying the function and sustainability of natural and engineered ecosystems, and the policies affecting them. Participating faculty are affiliated with the Schools of Engineering, Natural Sciences, and Social Sciences, Humanities and Arts.

The ES faculty research strengths include Earth systems science, ecology and evolutionary biology, spatial analysis, environmental engineering, air quality, geochemistry, solar energy, climatology, hydrology, policy and economics.



Mechancial Engineering and Applied Mechanics

PROFESSOR CARLOS COIMBRA, *Program Chair*
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E-mail: ccoimbra@ucmerced.edu
Web site: gradstudies.ucmerced.edu

The Mechanical Engineering and Applied Mechanics (MEAM) graduate program engages in individualized, research-based programs of study leading to the M.S. and Ph.D. degrees. Mechanical Engineering and Applied Mechanics includes a broad spectrum of research activities that are based on well-defined scientific principles. Judicious application of the fundamental principles of mechanics allows specialized mechanical engineers and applied mechanicists to impact virtually all fields of science and technology.

The goal of the MEAM program at UC Merced is to provide its graduate students with a very solid foundation in mechanical sciences and a strong and comprehensive exposure to modern research techniques. Courses are designed to provide the mathematical and scientific principles underlying the foundations of applied mechanics, with emphasis on applications and novel research developments in diverse topics such as advanced dynamics, modern control systems, continuum mechanics, viscous flows, rheology, mass transfer and so on.

Physics and Chemistry

PROFESSOR ANNE MYERS KELLEY, *Program Chair*
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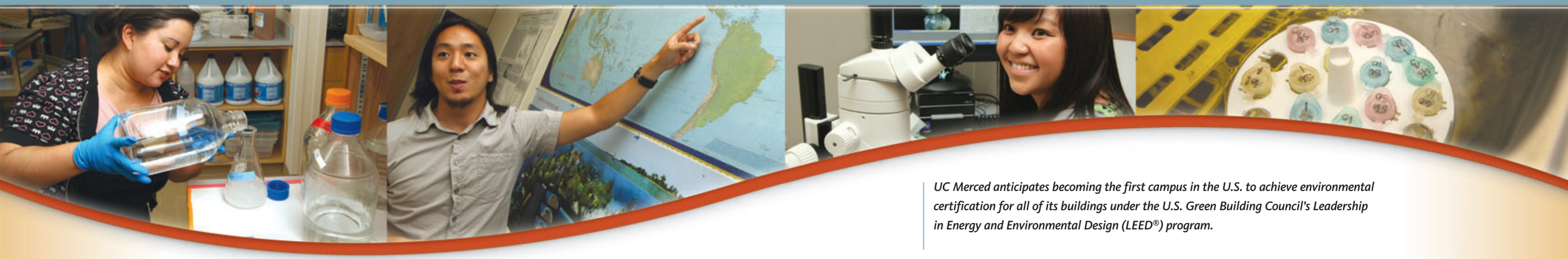
Web site: physics-chemistry.ucmerced.edu

Research in the Physics and Chemistry graduate program spans the traditional disciplines of physics, chemistry, and related interdisciplinary fields. The program is directed towards understanding the physical and chemical behavior of individual molecules, nano- and meso-scale molecular assemblies and macroscopic materials. This knowledge can be used to design new molecules and materials for applications including biology and medicine, energy conversion, optics, information storage and transmittal and structural materials.

The Physics and Chemistry group offers individualized research-based courses of study leading to the Ph.D. degree. While the M.S. degree is also offered, admission normally is granted only to students who intend to pursue a Ph.D. Interdisciplinary projects are highly encouraged, as are interactions with faculty or senior scientists outside UC Merced as collaborators, graduate committee members or co-advisors. We invite applications from a variety of undergraduate majors including, but not limited to, chemistry, physics, biochemistry, materials science and engineering, and electrical engineering.

UC Merced continues the University of California's tradition of a world-class education while retaining a warm, welcoming and personal environment.



UC Merced anticipates becoming the first campus in the U.S. to achieve environmental certification for all of its buildings under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) program.

Quantitative and Systems Biology

PROFESSOR ANDY LIWANG, *Program Chair*
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Web site: qsb.ucmerced.edu

The life sciences are undergoing a vast and fundamental metamorphosis from a discipline based on qualitative observation and description into a quantitative science based on comprehensive datasets and predictive models. Study in the Quantitative and Systems Biology graduate program at UC Merced provides individualized, research-based courses of study leading to M.S. and Ph.D. degrees.

Research projects are available on diverse topics, including biomolecular interactions, genomics and proteomics, cellular interactions and signal transduction, organ systems and whole animals (both vertebrate and invertebrate), comparative ecology, evolution and organismal biology, and computational biology. Because of the interdisciplinary nature of the program and faculty, research projects often span multiple topics to address more complex and systems-level questions.

Coursework in this graduate emphasis provides a background in the tools of modern biology, including computational biology, genomics and advanced instrumentation. The Quantitative and Systems Biology emphasis offers particular opportunities for students interested in interdisciplinary projects at the interface of biology, computer science and bioengineering.

FAST FACTS ABOUT UC MERCED

- Total student population reached 2,700 in Fall 2008, including 180 graduate students.
- Our campus has one of the most ethnically diverse student bodies in the UC System: 31% Asian/Pacific Islander, 31% Hispanic, 24% White and 6% African-American.
- The university consists of three schools: School of Engineering, School of Natural Sciences and School of Social Sciences, Humanities and Arts. Planned schools include a School of Management and a School of Medicine.
- There are over 200 faculty and lecturers committed to student success and research excellence.
- As of April 2008, UC Merced has been awarded nearly $50 million in research grants, one of the highest per-capita in the country.

STUDENT PROFILE

Joseph Heras
Los Angeles, California
Second Year, Ph.D. Student
Quantitative and Systems Biology

"The best thing about our campus is the strong community among the graduate students. It helps to know that there are students sharing the same experiences as I am and being able to reach out to one another for support."

Research Focus: I'm interested in the genes that may be responsible for the rapid diversification of species within the genus Sebastes (Rockfish). I'm using bioinformatics and molecular tools to identify these genes, which will help elucidate the understanding of the microevolution of this group of fish.

Educational History: I received my B.S. in Biology from the University of California at Riverside. I also hold an M.S. degree in Biology from California State University, Los Angeles.

UC Merced is strategically located in the central San Joaquin Valley, one of the most diverse and environmentally rich areas in the state of California.

Social and Cognitive Sciences

PROFESSOR MICHAEL SPIVEY, *Program Chair*
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Web site: scsgrad.ucmerced.edu

Social and Cognitive Sciences is currently organized as five tracks: anthropology, cognitive science, economics, political science, and psychology. In addition there are individual faculty members with interests in public policy and sociology. Graduate study at UC Merced will involve working closely with one or more professors, so prospective applicants should carefully consult the faculty list for current research topics.

- **Anthropology.** This track explores contemporary and historical cultures and societies by studying the practices and processes that entwine the individual in social structures, social relations and power dynamics. Areas of focus include health and nutritional status, migration, demography, identity, culture and citizenship and globalization, with attention to the Americas.
- **Cognitive science.** This track provides interdisciplinary training in computational modeling, high-level cognition, including reasoning, categorization and decision-making, psycholinguistics, cognitive linguistics, visual perception, cognitive engineering, artificial intelligence, computer vision, philosophy of mind and cognitive neuroscience.
- **Economics.** This track provides training in such applied microeconomic fields as labor economics, public economics, law and economics, industrial organization and political economy.
- **Political Science.** This track provides training in quantitative approaches to American Political Behavior and Institutions.
- **Psychological Sciences.** This track provides training in developmental psychology, health psychology and quantitative psychology. Areas of particular strength include experimental design; meta-analysis; health in children, adolescents and young adults; development of social stereotypes and prejudices; and language and cognitive development.

World Cultures

PROFESSOR IGNACIO LOPEZ-CALVO, *Program Chair*
Office: (209) 228-7742
E-mail: ilopezcalvo@ucmerced.edu
Web site: wcgrad.ucmerced.edu

The World Cultures graduate program offers individualized, research-based courses of study. The program explores cultures in both their local manifestations (by focusing on the rich cultural and historical heritage of California, the San Joaquin Valley , and the Sierra Nevada), and in a global context. The program pays particular attention to world cultures in their historical, political, and literary manifestations, and to the effects of immigration and migration on society and cultural change.

Students will understand and use the methods by which historians, literary scholars, artists, philosophers and other humanists and social scientists examine societies and cultures. The program will offer concentrations in History, Literatures and Cultures of the Spanish-speaking World and Literatures and Cultures of the English-speaking world.

Concentrations include multidisciplinary and interdisciplinary courses, and the concentrations are conceived as mutually complementary. Since proximity to the Sierra and the other splendid natural features of California has significantly influenced the cultural and historical development of the state, students will also benefit from the intersections of interests between the World Cultures Institute (WCI) and the Sierra Nevada Research Institute (SNRI), particularly in the area of the cultural understanding of wilderness and the environment.

FUTURE PLANS

We have exciting plans in the works. New interdisciplinary groups are being created. We are developing a Management School to open as early as 2009. We are also in the planning stages of a medical school, which is remarkable for a young campus. To read about the medical education initiative, visit med.ucmerced.edu.

PROSPECTIVE APPLICANTS

How to Apply

Information about all aspects of graduate study, including the online application, is available at **graduatedivision.ucmerced.edu.**

When to Apply and Fees

Prospective students are encouraged to begin the admissions process as early as possible in the prior academic year. The nonrefundable application fee is $70 for domestic students and $90 for international students. The application deadline for all programs is Jan. 15.

Graduate Student Health Insurance Program (GSHIP)

UC Merced offers its graduate students one of the best, most comprehensive health care packages in the nation. Please visit somerton-ins.com for more information.

International Students

Students with credentials from universities outside the United States should begin the application process well in advance of the deadline date. Applicants whose native language or language of instruction is not English must show evidence of having recently taken the Test Of English as a Foreign Language (TOEFL) or the International English Language Testing Service (IELTS) examination. For further information log onto the Graduate Division Web site at **graduatedivision.ucmerced.edu.**

Financing Your Education

Financial support is available through graduate student research positions, teaching assistantships, fellowships and loans. To review the types of aid available, click "Prospective Students" on the Graduate Division Web site at **graduatedivision.ucmerced.edu.**

HOUSING

Students can choose from a wide variety of options in the Merced community including condos, houses, room rentals and apartments. For more detailed information about off-campus housing, visit housing.ucmerced.edu, where you will find a list of apartment complexes, details about your rights and responsibilities as a tenant, ideas about what to consider when looking for a compatible roommate and much more.

In addition, getting to and from campus and selected housing complexes and community sites is easier using CatTracks, our campus shuttle service.

CHOOSE UC MERCED

- Access the quality of UC in small group settings.
- Work and interact with internationally acclaimed scientists and policy makers on groundbreaking research and discoveries.
- Take advantage of some of the world's most advanced research, powerful instrumentation and state-of-the-art library resources.
- Experience a vital campus that is setting new standards for energy efficiency, water conservation and overall environmental sustainability.

STUDENT LIFE

What's there to do on campus?

- Be an athlete on one of UC Merced's sports teams (including baseball, lacrosse, cheerleading, volleyball, soccer, softball, badminton, archery, aquatics and ultimate Frisbee), organize the sport of your choice, or participate in intramural athletics.
- Serve on UC Merced's student government and help shape the direction of your school.
- Participate in student life activities and events like movie nights, guest lectures, student concerts, and socials.
- Get involved in the community. Become a mentor for elementary school children or volunteer at a local hospital.

What about off-campus?

- Catch CatTracks (UC Merced's shuttle system) that will take you just about anywhere in the city.
- Hang out downtown, enjoy a coffee or great meal, check out the current exhibit at the Multicultural Arts Center or watch a movie at the Main Place Stadium Cinema.
- Enjoy the plethora of delicious choices offered by our multicultural community, ranging from traditional American to exotic Thai cuisine.
- Walk, ride your bike or drive to Lake Yosemite, adjacent to the UC Merced campus, and rent personal watercraft and paddleboats, have picnics or barbecues or go sailing.
- Take day trips to the beach, the mountains, San Francisco and Yosemite National Park.

Merced is a dynamic community of about 75,000, with friendly, small-town living in a mid-sized city, offering a diverse blend of rural and in-town environments.