

RESEARCH OMNIBUS

A Newsletter for the Cal State L.A. Research Community

Office of Research and Development, Academic Affairs, Cal State L.A.
Office of Research and Sponsored Programs, University Auxiliary Services, Inc.

Fall Quarter 2010

New Award Highlight: Nancy McQueen – “California Statewide Biotechnology Clinical Laboratory Consortium Project”



Nancy McQueen (Biological Sciences) has received a subcontract from San Jose State University for the “California Statewide Biotechnology Clinical Laboratory Consortium Project.” The \$41,216 contract is part of a grant from the U.S. Department of Labor, with funding from the American Recovery and Reinvestment Act. The program, designed to address the critical shortage of clinical laboratory scientists (CLS), will establish a postbaccalaureate certificate program at two CSU campuses – L.A. and Pomona – in partnership with a consortium of hospitals for the required bench training.

Students will work four days per week at a hospital gaining practical experience at the bench. Students will enroll in eight units per quarter at the University and will spend one day a week in a real-time on-line lecture setting taking the didactic coursework needed to pass the licensing exam. Faculty at Cal State L.A. and Cal Poly, Pomona will develop the didactic coursework, help the partnering hospitals acquire the appropriate state licensure for their training facility, and coordinate the interactions of the student trainees and the training hospitals.

A second postbaccalaureate certificate program in the specialized Clinical Genetic Molecular Diagnostic Scientist licensure category will be developed by the L.A., Pomona, and San Jose campuses, with Cal State L.A. faculty developing the didactic courses for one quarter. In addition, local community colleges are pairing with hospitals to develop similar programs for Medical Laboratory Technician and phlebotomist training. It is anticipated that some of the students who complete this training will decide to continue their education to the B.S. degree and subsequent CLS training. Cal State L.A. will help to develop articulations between the CSU and the community colleges to help facilitate this transition.

Two Cal State L.A. Students Receive Awards at CSU Student Research Symposium at San Jose State



At the CSU Student Research Symposium held at San Jose State University April 30 and May 1, Cal State L.A. students garnered one first-place and one second-place award. Each CSU campus selects up to 10 presenters through its campus competition.

Dominique Richardson, who is pursuing a master's degree in environmental science – biology option, placed first in the Biological and Agricultural Sciences graduate category for her presentation about her study of seahorse feeding behavior, “Incorporating animal behavior and environmental education into conservation biology.” Her faculty mentor is Paul Narguizian (Biological Sciences). Richardson compared the feeding

Dominique Richardson and Coleman Dobson (l. to r.) display their award certificates following the awards luncheon.

behavior and diet of seahorses in captivity with those in nature. The results offer insights that could aid conservation efforts. As part of the project, Richardson also developed a conservation education activity for use at the Cabrillo Marine Aquarium in San Pedro.

Coleman Dobson, undergraduate student in mathematics - pure and applied mathematics option and physics, placed second in the Physical and Mathematical Sciences undergraduate category with her presentation entitled "Ring Particle Temperature Variation with Changing Geometry." Her mentors are Susan Terebey (Physics and Astronomy) and Linda Spilker (NASA JPL). In her study, Dobson reviewed thermal data on Saturn's lit and unlit rings and, using a mathematical model, examined how heat is transported among clouds of particles in the rings. The research compared measurements to model predictions, and considered solar phenomena, spacecraft elevation, and other factors.

Congratulations to all of the students who presented their work at the symposium!



CSULA delegates (1st row, l. to r.): Natalie Sandoval, Coleman Dobson, Jackie Kiwata. Second row (l. to r.): Juan Landeros, Dominique Richardson, Jessica Alvarenga. Third row (l. to r.): Hector Ramirez, Connie Lee, Charissa Kim, Erin Thomason, Eden Chavez.

Reminder: RSCA Minigrant Applications Due November 29!

The 2010 Research, Scholarship, and Creative Activity Minigrant competition will fund projects of up to \$5,000 that can allow faculty to test promising ideas and obtain preliminary results prior to seeking external support. One hard copy with all approval signatures and one electronic copy are due in the Office of Research and Development by **5:00 p.m.** on **Monday, November 29**. Visit the ORAD website, www.calstatela.edu/academic/aa/orad/MinigrantCompetition2010.doc for the application form and the complete submission guidelines.



Panel Discusses Student Research at October ORAD Café



L. to r., moderator Cheryl Ney (Academic Affairs) and panelists Anne Hafner (Applied and Advanced Studies in Education), Simeon Slovacek (Applied and Advanced Studies in Education), Margaret Jefferson (Biological Sciences), and Jose Galvan (Extended Education and Research) at the October 21 ORAD Café seminar, “Engaging Students in Research: Assessing the Impact on Student Success.” The discussion focused on ways to determine if and how student engagement in research helps students succeed in their educational pursuits.

Recent Grant and Contract Awards

A number of new and continuing grants and contracts have been awarded since April 1, 2010 in a wide range of disciplines. Funding levels shown are annual amounts. Congratulations to these PIs on their awards!

Principal Investigator	Project Title	Funding Source	Awarded Amount
Konrad Aniol	“Precision Electromagnetic Studies of the Structure of Nuclei and Nucleons”	NSF	\$396,490
Yong Ba	“RUI: Diffusion of Cyclodextrins and Cyclodextrin Polymeric Nanoparticles in Mucus Studied by ¹⁹ F Diffusion NMR”	NSF	\$250,000
David Blehman	“Sustainable Hydrogen Fueling Station”	U.S. Dept of Energy	\$475,750
Karin Elliot Brown	“Inter-University Consortium – Child Welfare Training Project”	L.A. County Dept of Children & Fam Svcs	\$1,771,299
Karin Elliot Brown	“MSW/MSN Bridges to the Ph.D. Program”	Univ of Mich (NIH)	\$229,905
Karin Elliot Brown	“CALSWEC-Mental Health Educational Stipend Program”	UC Regents (CA Dept of Social Svcs)	\$181,438
Laura Calderon	“Strengthening and Expanding a Public Health/Community Nutrition Focus in the CSULA Nutritional Science Curriculum”	USDA	\$290,000
Fred Daneshgaran	“Novel Protocols for Quantum Key Distribution Communications”	SA Photonics Inc. (DOD STTR)	\$34,603
Jane Dong	“Enhance Computer Network Curriculum Using Collaborative Project-based Learning”	NSF	\$167,469
Ramani Durvasula	“Personality Disorders, Decision Making and Sexual Risk Behaviors”	NIH	\$374,624

Christine Dy	"Building Healthy Partnerships Community Benefit Grant"	Kaiser Fdn Hospitals	\$6,000
Mary Falvey	"Pre-College and Pre-Services Program"	LA Unified School Dist	\$6,180
Diane Fazzi	"National Leadership Consortium on Sensory Disabilities (NLCSD) Subcontract form Salus University"	Salus Univ (USDoEd)	\$28,247
Carolyn Frank	"Los Angeles Writing Project at Cal State L.A."	USDoEd	\$46,000
Jennifer Garrison	"Collaborative Research: Rear-arc Magmatism in the Northern Volcanic Zone of the Andes: Processes and Timescales in a Continental Rear-arc Setting"	NSF	\$87,275
Frank Gomez	"Collaborative Research: U.S.-Brazil IRES"	NSF	\$53,355
Darrell Guillaume	"Scholarship for Socioeconomic Disadvantaged Students for STEM Collaborative Learning Development and Information Dissemination"	UCSD (NASA)	\$10,000
Carlos Gutierrez	"LSAMP Bridge to the Doctorate Program Phase VIII"	CSU Sacramento (NSF)	\$486,000
Carlos Gutierrez	"Undergraduate Students Training in Academic Research (MARC)"	NIH	\$649,328
Bianca Guzman	"CHOICES' CAMP School Project"	CA Dept of Public Health	\$127,000
Hassan Hashemian	"FY2010 National Summer Transportation Institute Program"	Caltrans (USDOT)	\$60,400
Hassan Hashemian	"Fellowship Program – 2010 Eisenhower HSI Fellowship Grant"	U.S. Dept of Transportation	\$20,500
James Henderson	"Improving Quantitative Skills of Life Science Majors at Cal State Los Angeles (UMARC)"	NIH	\$239,555
John Hernandez	"Homeland Security Grant Program for 08-09"	CSU Trustees (DHS)	\$25,000
Cynthia Hughes	"On-Site Nursing Program (BSN)"	USC Univ Hospital	\$199,715
Margaret Jefferson	"CSU-LSAMP Statewide Scholars Program 10/11"	CSU Sacramento	\$10,000
Margaret Jefferson	"LSAMP Phase IV"	CSU Sacramento (NSF)	\$187,245
Robert Kennison	"Longitudinal Assessment of Cognition in Adults" supplement	USC (DHHS)	\$27,283
Crist Khachikian	"CREST Center for Energy and Sustainability (Oak Crest subcontract)"	NSF	\$99,997
Crist Khachikian	"CREST Center for Energy and Sustainability (Portland State Univ subcontract)"	NSF	\$100,000
Vincent Lopez	"CSU College Corps (CCC)" supplement	CSU Trustees (AT&T Fdn)	\$47,965
Sachiko Matsunaga	"Strategic Language Initiative (SLI)"	CSULB Fdn (NSEP)	\$206,238
Don Maurizio	"CCRAA Engineering Transfer to Pathway Cooperative"	East L.A. Comm Coll	\$431,474

Alison McCurdy	“Development of a Photoreversible Ca ²⁺ Chelator to Mimic Calcium Signaling”	NIH SCORE	\$108,375
Nancy McQueen	“California Statewide Biotechnology Clinical Laboratory Consortium Project”	San Jose State Univ (U.S. DOL)	\$41,216
Keith Moo-Young	“ECST Valdry Engineering, Science, Technology Enrichment and Development Summer Program (VESTED) Academy”	Young Black Scholars	\$9,900
Keith Moo-Young	“Professional Practice Program”	Space Systems Loral	\$20,000
Keith Moo-Young	“Professional Practice Program”	Aerospace Corp	\$20,000
Keith Moo-Young	“STEM-Up Initiative”	Great Minds in STEM (DOD)	\$170,000
Keith Moo-Young	“Strategic Alliance Initiative”	The Boeing Company	\$25,000
Keith Moo-Young	“Summer 2010 Professional Practice Program”	The Boeing Company	\$3,000
Keith Moo-Young	“Professional Practice Program 09-10”	Northrop Grumman Corp	\$20,000
Keith Moo-Young	“Professional Practice Program”	Southern Calif Edison	\$65,000
Keith Moo-Young	“Professional Practice Program”	Southern Calif Edison	\$40,000
Keith Moo-Young	“LATTC/CSULA STEM Success Program” supplement	LA Trade Tech Comm Coll (USDoEd)	\$64,383
Keith Moo-Young	“J-2X Cooperative Education Program” supplement	Pratt & Whitney Rocketdyne	\$140,958
Keith Moo-Young	“MESA Engineering Program”	UC Regents	\$11,500
Robert Nissen	“Health Careers Advisement Office Pipeline Programs”	California Wellness	\$125,000
Arturo Pacheco-Vega	“Funding Request for Educational Particle Image Velocimetry Suites”	Interactive Flow Studies (NSF)	\$105,000
Arturo Pacheco-Vega	“Analysis and Redesign of a Terahertz Camera”	RadiaBeam Technologies LLC (NSF)	\$105,000
Trinh Pham	“Non-Intercepting Thermal Imaging System for LANSCE 1L Target”	Harvey Mudd College (Los Alamos Natl Lab)	\$30,000
Rupa Purasinghe	“Encouraging Students into Civil Engineering”	Sanitation Dist of Los Angeles	\$10,000
Jaime Regalado	“Public Policy Education Program”	Edison Intl/So Calif Edison	\$105,000
Jaime Regalado	“2010 Conference Support”	California Wellness	\$3,000
Patricia Ramirez-Ulloa	“California State Pre-School Program”	CA Dept of Education	\$187,114
Patricia Ramirez-Ulloa	“General Child Care and Development Programs”	CA Dept of Education	\$379,886

Patricia Ramirez-Ulloa	“Child Care Access Means Parents in School (CCAMPIS)”	USDoEd	\$149,159
Tony Ross	“TRIO – Disabled Student Support Services”	USDoEd	\$290,500
Tony Ross	“WorkAbility IV (WAIV – ARRA)”	CA Dept of Rehabilitation	\$54,745
Tony Ross	“WorkAbility IV (WAIV)”	CA Dept of Rehabilitation	\$231,411
Tina Salmassi	“Planetary Protection: Shielding of Spacecraft Surface Associated Bacteria from the Sterilizing Effect of UV Radiation”	Tennessee State Univ (NASA/JPL)	\$26,500
Susan Terebey	“Taurus 2: Finishing the Spitzer Map of the Taurus Molecular Clouds” supplement	NASA Jet Propulsion Lab	\$15,000
Linda Tunstad	“Project SEED at Cal State L.A.”	American Chemical Society	\$11,800
David Weiss	“Analyzing Projected Behavioral and Emotional Responses to Terrorist Events” supplement	USC (Dept of Homeland Security)	\$50,000
Gay Yuen	“CSULA/Montebello Multi-District Intern Project”	Mtb Unified Schl Dist (CTC)	\$117,318
Marlene Zepeda	“Nuestro Niños Program” supplement	Univ of North Carolina	\$96,156
Andrea Zetlin	“State Personnel Development Grants Program”	CA Dept of Education (USDoEd)	\$55,000
Andrea Zetlin	“State Personnel Development Grants Program” supplement	CA Dept of Education (USDoEd)	\$55,000
Andrea Zetlin	“CSULA/Alhambra Special Education Alternative Certification-Intern Program”	Alhambra Unified (CTC)	\$308,864
Andrea Zetlin	“CSULA/Alhambra Special Education Alternative Certification-Intern Program”	Alhambra Unified (CTC-ARRA)	\$54,703

Institutional Review Board—Human Subjects News

If a research project involves human subjects, approval must be obtained from the Cal State L.A. Institutional Review Board-Human Subjects (IRB) prior to beginning the project. This includes biomedical, behavioral, survey, and educational projects, and both funded and unfunded research projects by faculty, staff, and students. The purpose of the review is to assess risk to and protect the rights of human research subjects, in accordance with federal regulations. Please contact Ellen Stein at estein@cslanet.calstatela.edu or x3798 if you have any questions regarding IRB requirements.

New IRB Application Form to Debut during Fall Quarter

A new IRB application form, developed by the IRB over a period of time and piloted over the summer, will be implemented during fall quarter. The new form requires considerably less narrative, instead having many new items presented in list format, for check-off as appropriate. Use of the new form should reduce the amount of time spent by both the applicants and the reviewers in preparing and reviewing applications, respectively, and further streamline the review process.

Key changes include:

- Faculty advisers on student research will serve as the principal investigator on the application, for IRB purposes only, with the student listed as co-investigator. This more accurately reflects the delineation of responsibilities in the conduct and oversight of human subjects research at Cal State L.A.
- All researchers – faculty, students, administrators, staff – must complete the online IRB tutorial and attach the proof of completion (quiz score email) to the application. The tutorial certification is valid for three years. Other comparable training (e.g., CITI) is accepted by the Cal State L.A. IRB.

Look for further information in your inbox regarding the new application, along with its posting on the ORAD website. The current application form will be accepted until January 1.

Next Quarterly IRB Workshop to be Offered on February 2

On **Wednesday, February 2**, from **4:00-5:30 p.m.**, ORAD will be offering the second of three quarterly workshops for students who are planning to conduct research with human subjects. Faculty advisers are also encouraged to attend. The workshop will be held in the Library Conference Room (LibN B530). Space is limited, so reserve a space early by contacting Ellen Stein at estein@cslanet.calstaetla.edu or x3798.

The final workshop date for 2010-11 is **Thursday, April 21, 4:00-5:30 p.m.**

2010-11 IRB Meeting Calendar

<i>Fall Quarter</i>	<i>Winter Quarter</i>	<i>Spring Quarter</i>
November 19	January 14	April 8
	February 11	April 22
	March 4	May 20

Meetings take place from 10:00 a.m. to 12:30 p.m. in Administration 313. Contact Ellen Stein at estein@cslanet.calstatela.edu or x3798 for more information.

No meetings are scheduled at this time for the summer, but may be arranged if needed.

Note: Download the *new CSULA IRB Application and the Guidebook from the ORAD website, www.calstatela.edu/academic/aa/orad*

Institutional Animal Care and Use Committee News

The use of animals in instructional activities or research (whether funded or unfunded) requires prior approval from the Cal State L.A. Institutional Animal Care and Use Committee (IACUC). The IACUC maintains oversight of University animal facilities and animal care procedures, and carries out such activities as required by law to assure the humane treatment of animals, in compliance with federal regulations.

2010-11 IACUC Meeting Calendar

<i>Fall Quarter</i>	<i>Winter Quarter</i>	<i>Spring Quarter</i>
December 2	January 6	April 7
	February 3	May 5
	March 3	June 2

No meetings are scheduled during the summer. New protocols may be submitted at any time for consideration at the first fall quarter meeting in October.

Meetings take place from 2:30 to 4:00 p.m. Contact Ellen Stein at estein@cslanet.calstatela.edu or x3798 for meeting location.

Note: The latest versions of Animal Protocol forms A and B may be found on the ORAD website, www.calstatela.edu/academic/aa/orad

This newsletter is published quarterly and is transmitted via email to all faculty, senior administrators, and ORSP and ORAD staff. For further information on newsletter content, email Ellen Stein, Regulatory Compliance and Research Development Analyst, at estein@cslanet.calstatela.edu or Philip LaPolt, Director of Research and Development, at plapolt@exchange.calstatela.edu. We welcome your comments and suggestions on how to improve this publication.