

## USC GRANTS AND CONTRACTS AWARDED October-December 2005

### College of Letters, Arts & Sciences

- **Margaret Gatz**, professor of psychology, and **Beth Meyerowitz**, professor of psychology: \$78,334.00 by the National Cancer Institute for research on a twin study of cognitive outcomes in older adult cancer survivors. (Project duration: 9/30/2005 – 8/31/2007)
- **Stanley Huey**, assistant professor of psychology: \$261,593.00 by the National Institute of Mental Health for research on an intervention for antisocial gang-affiliated youth. (Project duration: 9/1/2005 – 8/31/2009)
- **Leigh Silverton**, research assistant professor of psychology, and **Sarnoff Mednick**, professor of psychology: \$70,000.00 by the American Foundation for Suicide Prevention for research on the genetics of suicide: an adoption study. (Projection duration: 9/1/2005 – 8/31/2007)
- **Xianghong Zhou**, assistant professor of computational and molecular biology, **Michael Waterman**, professor, and **Caleb Finch**, professor of gerontology: \$150,000.00 by the Seaver Institute for research on gene aging nexus: a web platform for integrated data mining. (Project duration: 9/1/2005 – 8/31/2006)

### Independent Health Professions

- NIH has awarded \$2.5 million for *health-care study of ethnic minorities*. Previous research has documented health care disparities for minorities independent of socio-economic status, but few have suggested strategies to help those patients improve their outcomes, according to occupational therapy professor **Mary Lawlor**. Lawlor and **Cheryl Mattingly**, also a professor of occupational therapy, will draw upon their previous research in this next study of how patients and doctors establish relationships and communicate with each other, and how that affects their treatment.  
*HSC Weekly*, 10/21/05  
Go to article: <http://uscnews.usc.edu/hscweekly/detail.php?recordnum=11738>

### Keck School of Medicine

- **Leslie Bernstein**, professor of preventive medicine: \$37,973.00 by Memorial Sloan Kettering for research on the interaction of radiation, BRCA 1/2, and breast cancer. (Project duration: 9/1/2005 – 8/31/2007)
- **Myles Cockburn**, assistant professor of preventive medicine: \$81,292.00 by the National Cancer Institute for research on melanoma genes in high-risk twins. (Project duration: 9/1/2005 – 8/31/2007)
- **Lucio Comai**, associate professor of molecular microbiology and immunology: \$50,000.00 by the Progeria Research Foundation, Inc. for research on the functional analysis of Hutchinson-Gilford Progeria Syndrome. (Project duration: 9/1/2005 – 8/31/2006)
- **Wendy Cozen**, assistant professor of preventive medicine: \$81,500.00 by the National Cancer Institute for research on cytokine polymorphisms and Hodgkin Lymphoma risk. (Project duration: 9/30/2005 – 8/31/2007)

- **Cheryl Craft**, professor of ophthalmology, cell & neurobiology: \$366,563.00 by the National Eye Institute for research on the mechanisms of cone pigment deactivation. (Project duration: 9/30/2005 – 8/31/2010)
- **Laurie Deleve**, professor of medicine: \$343,688.00 by the National Institute of Diabetes, Digestive & Kidney Diseases for research on endothelial repair response to liver injury. (Project duration: 9/15/2005 – 5/31/2010)
- **Timothy Fisher**, associate professor of physiology & biophysics: \$121,907.00 by the National Human Genome Research Institute for research on a simple vaso-occlusion model for SCD drug discovery. (Project duration: 9/26/2005 – 7/31/2007)
- **Jerry Gates**, director of Pacific Aids Education & Training: \$69,400.00 by the Center for Disease Control for research on the diffusion of partnership for health to health care and medical agencies serving persons living with HIV/AIDS. (Project duration: 9/30/2005 – 9/29/2007)
- **Michael Goran**, professor of preventive medicine and physiology & biophysics: \$2,435,089.00 by the National Cancer Institute for research on trans-disciplinary research on energetics and cancer. (Project duration: 9/19/2005 – 8/31/2010)
- The National Cancer Institute has awarded researchers at the Keck School of Medicine \$12.1 million over five years to create a center to study the relationship between obesity and cancer. The Keck School is one of four institutions nationwide selected by the NCI to conduct the five-year, \$54-million *Transdisciplinary Research on Energetics and Cancer (TREC)* initiative, which will unite researchers who focus on diet, weight and physical activity and their effects on cancer.

“Obesity and related factors such as poor diet and inactivity are known to contribute to cancer risk, and these are factors we can actually do something about,” said **Michael I. Goran**, Keck School professor and associate director of the USC Institute for Prevention Research and director of the new TREC Center at USC. “Our goal is to study obesity from all directions—from physiology to behavior—and focus on children from high-risk ethnic groups to further understand ethnic disparities in the relationships between obesity, metabolism and health.”

**Leslie Bernstein**, AFLAC Chair in Cancer Research and KSOM professor, serves as associate director of the USC TREC Center and also leads the center’s training and career development component. Bernstein is known for her extensive studies examining links between hormone exposure, obesity and physical activity and cancer risk.

“We know that being overweight or obese raises risk for several types of cancer—including breast, kidney, colon, esophageal and endometrial cancers—and that physical activity reduces risk of some cancers,” Bernstein said. “By focusing on children, we hope to learn how to impact obesity early in life by increasing physical activity and changing environmental factors, and to uncover some of the biological mechanisms that link obesity and physical activity to cancer risk.”  
*HSC Weekly*, 10/14/05

Go to article: <http://uscnews.usc.edu/hscweekly/detail.php?recordnum=11686>

- **Robert Haile**, professor of preventive medicine: \$272,801.00 by Dartmouth Medical School for research on colorectal chemoprevention with calcium and vitamin D. (Project duration: 9/1/2005 – 6/30/2012)
- **Robert Haile**: \$152,251.00 by Memorial Sloan Kettering for research on the interaction of radiation BRCA 1/2/ and breast cancer. (Project duration: 9/1/2005 – 8/31/2006)
- **Han K. Huang**, professor of radiology, and **Michael C.K. Khoo**, professor of biomedical engineering: \$235,750.00 by the National Institute of Biomedical Imaging & Bioengineering for

research on biomedical imaging informatics training program. (Project duration: 9/1/2005 – 8/31/2010)

- **Michael Jerrett**, associate professor of preventive medicine, and **Rob McConnell**, professor of occupational & environmental health: \$81,292.00 by the National Institute of Environmental Health Sciences for research on socioeconomic status, stress, air pollution and asthma. (Project duration: 9/1/2005 – 8/31/2007)
- **C. Anderson Johnson**, professor of preventive medicine: \$1,754,568.00 by the National Cancer Institute for research on genes, environment and tobacco use across cultures. (Project duration: 9/30/2005 – 8/31/2009)
- **Andrea Kovacs**, professor of pediatrics: \$379,466.00 by the Health Resources & Services Administration for research on HRSA title IV youth: portals into care. (Project duration: 9/1/2005 – 8/31/2006)
- **Robert Ladner**, assistant professor of pathology, **Heinz-Josef Lenz**, professor of medicine-oncology, and **Susan Groshen**, professor of preventive medicine: \$100,000.00 by the V-Foundation for Cancer Research for research on histone deacetylase inhibitors as a novel approach to combination chemotherapy in colon cancer.
- The Keck School of Medicine and USC/Norris Comprehensive Cancer Center will be part of a new consortium of researchers embarking upon an intensive quest to pinpoint breast-cancer biomarkers—unique proteins in the blood that may signal the presence of cancer at its earliest stages, when survival rates are highest.

That consortium—consisting of internationally recognized scientists at seven leading biomedical research institutions—announced it had received a three-year, \$9 million award from the Entertainment Industry Foundation (EIF) and its Women's Cancer Research Fund (WCRF). Known as the EIF/WCRF Breast Cancer Biomarker Discovery Project, the effort brings together researchers in the fields of proteomics, informatics and clinical breast-cancer care to share research methodologies, critical data and tissue and blood samples from human subjects to speed the discovery of biomarkers that may lead to a blood test for early detection of breast cancer.

The USC/Norris group, led by **Peter Laird**, associate professor of surgery and biochemistry and molecular biology at the Keck School of Medicine, joins researchers from Fred Hutchinson Cancer Research Center, Pacific Northwest Research Laboratory, Dana-Farber Cancer Institute, the Institute for Systems Biology, the Broad Institute of the Massachusetts Institute of Technology and Harvard and the University of Texas M.D. Anderson Cancer Center in this quest.

*HSC Weekly*, 10/14/05

Go to article: <http://uscnews.usc.edu/hscweekly/detail.php?recordnum=11690>

- **Amy Lee**, professor of biochemistry & molecular biology: \$121,937.00 by the U.S. Army Medical Research and Materiel Command for research on novel mechanism of anti-estrogen resistance in breast cancer. (Project duration: 9/1/2005 – 9/30/2006)
- Recipients of the first *stem cell training grants* include the Keck School of Medicine of USC, Childrens Hospital Los Angeles and Caltech from the California Institute for Regenerative Medicine (CIRM). Among the named institutions were the Keck School of Medicine of USC, which received a three-year, \$3.16 million stem cell training grant, and Childrens Hospital Los Angeles, which received a three-year, \$2.3 million grant. Overall, the agency—created by the passage of the California Stem Cell Research and Cures Initiative in November 2004—promised some \$39 million to 16 institutions. The agency is currently unable to distribute the money due to pending litigation brought by opponents of the California Stem Cell Research and Cures

Initiative. The \$2.39 million grant to the Saban Research Institute at Childrens Hospital, combined with the Keck School's \$3.16 million, makes USC the largest single recipient of CIRM grant awards.

The Keck School's grant will be used to train graduate students as well as postdoctoral and clinical fellows across 27 departments at USC, with trainees being recruited from existing doctoral programs at the Keck School and at USC's Davis School of Gerontology and the College of Letters, Arts and Sciences.

**Robert Maxson**, Ph.D., professor of biochemistry and molecular biology at the Keck School and principal investigator on the grant, says the funding also will be used to recruit 16 "highly qualified individuals" to be funded and designated CIRM Scholars and to "support seminars and retreats that will build a larger community for stem cell research by involving and facilitating collaboration among students and faculty."

*USC Health Magazine*, Winter 2006

<http://www.usc.edu/hsc/info/pr/hmm/06winter/celling.html>

- **Alison Morris**, assistant professor of medicine: \$454,573.00 by the National Heart, Lung, and Blood Institute for research on pneumocystis in pathogenesis of HIV-associated emphysema. (Project duration: 9/29/2005 – 6/30/2010)
- **Jacek Pinski**, assistant professor of medicine-oncology: \$610,453.00 by the Department of Defense Medical Research Acquisition Activity for research on prognostic molecular markers for prostate cancer. (Project duration: 11/1/2005 – 11/30/2008)
- Researchers from the Keck School of Medicine of USC and Childrens Hospital Los Angeles will receive a five-year, \$9 million grant from the National Cancer Institute of the National Institutes of Health to explore how information derived from comprehensive molecular and genetic analyses can be used to impact the care of cancer patients, and ultimately improve outcomes. **Timothy J. Triche**, chief of the department of pathology and laboratory medicine at Childrens Hospital, vice chair of the Keck School department of pathology and professor of pathology and pediatrics, will be the principal investigator of the project at Childrens Hospital.

"We are using genomic technology to identify which genes indicate particular properties of the tumor," Triche said. "So far, this technique has allowed us to make highly accurate diagnoses, and we have been able to redefine several tumors that were thought to be something else," he added. Triche and his team use these refined diagnoses – these so-called "cancer signatures" – to better predict outcome or prognosis. The signatures "seem to work better than anything we have seen previously," he said.

*USC News*, 12/21/05

Go to article: <http://www.usc.edu/uscnnews/stories/11938.html>

### School of Dentistry

- **Yang Chai**, associate professor: \$354,656.00 by the National Institute of Dental and CranioFacial Research for research on the molecular regulatory mechanism of calvarial morphogenesis. (Project duration: 9/1/2005 – 8/31/2010)
- **Reyes Enciso**, assistant professor: \$109,318.00 by the National Institutes of Health for research on 3D CT cephalometrics and family history in sleep apnea. (Project duration: 9/30/2005 – 8/31/2009)
- **Janet Moradian-Oldak**, assistant professor: \$308,908.00 by the National Institute of Dental and CranioFacial Research for research on mechanisms of action and function of MMP-20 during enamel bio. (Project duration: 9/1/2005 – 8/31/2009)

## School of Pharmacy

- **Wei-Chiang Shen**, professor, and **Curtis Okamoto**, assistant professor: \$267,450.00 by the National Institute of General Medical Sciences for research on membrane transduction peptides for drug delivery. (Project duration: 9/1/2005 – 8/31/2009)
- **Clay Chia Chun Wang**, assistant professor: \$285,250.00 by the National Institute of General Medical Sciences for research on platforms for nonribosomal peptide manipulation. (Project duration: 9/23/2005 – 7/31/2008)
- **Clay Chia Chun Wang**, assistant professor: \$62,500.00 by the Universitywide Aids Research Program for research on the development of new DNA binding HIV-1 integrase inhibitors. (Project duration: 9/1/2005 – 8/31/2007)
- **Junming Wang**, research scientist of molecular pharmacology & toxicology, and **Roberta Brinton**, professor of molecular pharmacology & toxicology: \$55,000.00 by the Alzheimer's Association for research on the differential regulation of ApoE expression by ER alpha and beta. (Project duration: 10/1/2005 – 9/30/2007)
- **Liqin Zhao**, research scientist of molecular pharmacology & toxicology, and **Roberta Brinton**, professor of molecular pharmacology & toxicology: \$50,000.00 by the Alzheimer's Association for research on ER subtype-selective phytoestrogens for prevention of neurodegeneration. (Project duration; 10/1/2005 – 9/30/2007)

## School of Policy, Planning, and Development

- **Tridib Banerjee**, professor: \$34,312.00 by Smart Growth America for research on smart growth year three. (Project duration: 9/1/2005 – 9/30/2006)
- **James Ferris**, professor: \$65,000.00 by the Irvine (James) Foundation for research on California foundations. (Project duration: 9/10/2005 – 3/09/2007)
- **James Ferris**: \$10,000.00 by the Weingart Foundation for research on the Los Angeles Foundation Leadership Group. Project duration: 9/15/2005 – 9/14/2006)
- **James Ferris**: \$10,000.00 by the Parsons (Ralph M.) Foundation for research on the Los Angeles Foundation Leadership Group. (Project duration: 10/1/2005 – 9/30/2006)

## School of Social Work

- **Bradley Zebrack**, assistant professor: \$81,292.00 by the National Cancer Institute for research on the families of childhood cancer survivors. (Project duration: 9/30/2005 – 8/31/2007)

## Viterbi School of Engineering

- **Qifa Zhou**, research assistant professor of biomedical engineering, and **K. Kirk Shung**, professor of biomedical engineering: \$20,000.00 by Geospace Research, Inc. for research on bridging the 40-100 mhz gap in medical ultrasound arrays. (Project duration: 11/1/2005 – 4/30/2006)

