

Award-Winning Faculty

September 2007



Kathrin Plath
New Innovator Award
National Institutes of Health

October 2007



Dr. Patricia Ganz
American Cancer Society
Distinguished Service Award



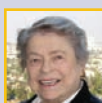
Anne Coscarelli
Los Angeles County
Psychological Association
Distinguished Service to the
Profession of Psychology
Award

Dr. Patricia Ganz

Institute of Medicine
Member

Kathrin Plath

V Foundation
V Scholar

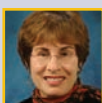


Helene Brown
American Cancer Society
Woman of Courage Award

November 2007



Michael Phelps
Meira and Saul G. Massry
Foundation
2007 Massry Prize



Rita Effros
Gerontological Society of
America
2007 Kleemeier Award

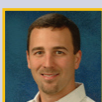


Dr. Lawrence Bassett
Radiological Society of North
America
Award of Honor for the
Annual Oration in Diagnostic
Radiology

April 2008



Utpal Banerjee
American Academy of Arts
and Sciences
Member



Dr. David Dawson
AACR/Pancreatic Cancer
Action Network
Career Development Award

May 2008



Michael Grunstein
National Academy of the
Sciences
Member



Dr. Steven Dubinett
American Thoracic Society
Scientific Achievement Award

June 2008

Dr. Patricia Ganz
American Society of Clinical Oncology
American Cancer Society Award

July 2008

Helene Brown
American Cancer Society
St. George National Award



Dr. Fritz Eilber
Sarcoma Foundation of
America
Shelby Richter Memorial
Research Award

October 2008



Dr. Michael Teitell
Leukemia & Lymphoma Society
Stohlman Scholar Award

December 2008



Dr. Dennis Slamon
Van Andel Research Institute
The Daniel Nathans' Memorial
Award

January 2009



Christopher Saigal
American Urological Association
Gallagher Health Policy Scholar



Simin Liu
Burroughs Wellcome Fund
Institutional Program
Unifying Population and
Laboratory Based Sciences
Award

February 2009

Dr. Dennis Slamon
UCLA Medical Alumni and Aesculapians
Association
Medical Science Award

March 2009



David Eisenberg
Harvey Foundation
Harvey International Prize in
Human Health

April 2009

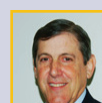
Dr. Patricia Ganz
UCLA School of Public Health
Dean's Distinguished Scholar

James Heath

American Association of Cancer
Researchers
Irving Weinstein Award and Distinguished
Lectureship



Dr. James Economou
Society of Surgical Oncology
Vice President



Dr. Jonathan Fielding
UCLA
UCLA Medal



Luisa Iruela-Arispe
North American Vascular
Biology Organization
Judah Folkman Award for
Excellence in Vascular Biology

May 2009



Linda Sarna
UCSF School of Nursing
29th Helen Nahm Award



Annette Stanton
Cancer Council Queensland,
Australia
William Rudder Fellowship

Linda Sarna

Oncology Nursing Society
Oncology Nursing Distinguished
Researcher Award

June 2009



Dr. Noah Federman
St. Baldrick's Foundation
St. Baldrick's Scholar Award

Kathrin Plath

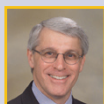
David Geffen School of Medicine at UCLA
John H. Walsh Young Investigator
Research Prize

Award-Winning Faculty

June 2009



Dr. Kathleen Sakamoto
St. Baldrick's Foundation
Research Grant Award



Dr. Owen Witte
Academy of Clinical
Laboratory Physicians and
Scientists
Earnest Cotlove Lectureship

Dr. Noah Federman

Today's and Tomorrow's Children Fund
Faculty Presentation Award

Luisa Iruela-Arispe

UCLA Academic Senate
Undergraduate Mentorship Award

August 2009

Dr. Mark Litwin

UCLA
2009 Leonard Tow Award for Humanism
in Medicine



Shimon Weiss
UCLA
Dean M. Willard Chair in
Chemistry



Dr. Hong Wu
UCLA
David Geffen Chair in Medical
Research

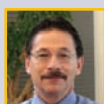
September 2009

Cho-Lea Tso

National Institutes of Health
New Innovator Award



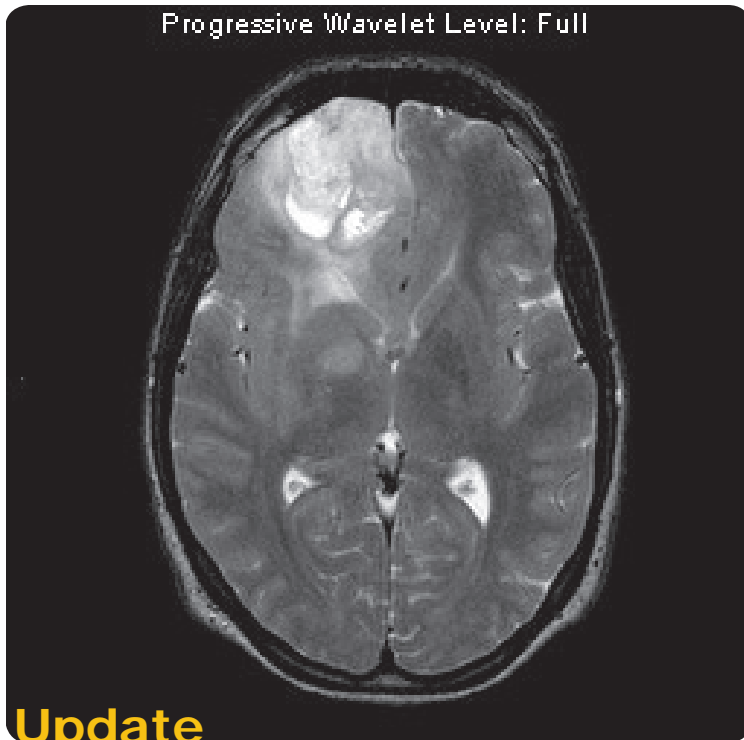
Dr. Siavash Kurdistani
National Institutes of Health
New Innovator Award



Dr. Donald Kohn
Doris Duke Foundation
Innovations in Clinical
Research Award



Dr. Edward De Robertis
Pope Benedict XVI
Pontifical Academy of
Sciences



Science Update

Decreased Expression of Tumor Suppressor Gene Turns Benign Tumors into Sarcomas

Researchers at UCLA's Jonsson Comprehensive Cancer Center showed for the first time that the loss or decreased expression of the tumor suppressor gene PTEN plays a central role in the malignant transformation of benign nerve tumors called neurofibromas into a malignant and extremely deadly form of sarcoma. The work, a collaboration between the Institute for Molecular Medicine, the Department of Molecular and Medical Pharmacology and the cancer center's Sarcoma Program, could lead to the development of new therapies that target the cell signaling pathway regulated by PTEN. A novel mouse model of neurofibromatosis type 1 (NF1) developed at UCLA first illustrated the importance of PTEN tumor suppressor in malignant transformation and this finding was validated in human malignant peripheral nerve sheath tumors, the deadly sarcomas. The study, conducted by Drs. Hong Wu and Fritz Eilber, was published Oct. 12, 2009 in the early online edition of the peer-reviewed journal Proceedings of the National Academy of Sciences.

Is Excessive Use of Antioxidants Depleting our Immune Systems?

For years, health conscious people have been taking antioxidants to reduce the levels of reactive oxygen in their blood and prevent the DNA damage done by free radicals, which are the result of oxidative stress. But could excessive use of antioxidants deplete our immune systems? Research at UCLA's Jonsson Comprehensive Cancer Center has raised that question. It has been known for decades that reactive oxygen species (ROS) — ions or very small molecules that include free radicals — damage cells. But much to their surprise, Jonsson Cancer Center researchers found that in *Drosophila*, the common fruit fly, moderately elevated levels of ROS are a good thing. These small molecules act as an internal communicator, signaling certain blood precursor cells, or blood stem cells, to differentiate into immune-bolstering cells in reaction to a threat. After the progenitor cells differentiate, the ROS levels return to normal, ensuring the safety and survival of the mature blood cells, said Utpal Banerjee, a Jonsson Cancer Center researcher and senior author of the study. The study is published in the Sept. 24, 2009 issue of the peer-reviewed journal Nature.

Science Update

Use of the Targeted Therapy Avastin Increases Response Rates and Survival in Brain Cancer

The targeted therapy Avastin, alone and in combination with the chemotherapy drug CPT-11, significantly increased response rates, progression-free survival times and survival rates in patients with a deadly form of brain cancer that had recurred. Patients with recurrent glioblastoma have grim prognoses, and conventional treatments were typically limited to largely ineffective and highly toxic chemotherapies. Only about 5 percent of patients respond to further treatment – meaning their tumors shrink by 50 percent or more. And only 15 to 20 percent of patients make it to the six month mark before their disease progresses again. Survival is limited to six to seven months. But a randomized Phase II study of Avastin alone and Avastin given with CPT-11 have improved those statistics, dramatically increasing response rates, progression-free survival times and overall survival, said Dr. Timothy Cloughesy, director of the Neuro-Oncology Program at UCLA's Jonsson Comprehensive Cancer Center and senior author of the study. The study was published Sept. 3 in the early online version of the *Journal of Clinical Oncology*.



Unique Model Developed to Help Further Investigation into Lung Cancer Stem Cells

Researchers at UCLA's Jonsson Comprehensive Cancer Center, on a quest to find lung cancer stem cells, have developed a unique model to allow further investigation into the

cells that many believe may be at the root of all lung cancers. If researchers could find a way to isolate and grow lung cancer stem cells, they could study their biologic mechanisms and perhaps identify targets for new therapies, said Dr. Raj Batra, an associate professor of medicine and senior author of the study. The model will allow Batra to test, in patient specimens, which markers indicate the presence of lung cancer stem cells. The goal is to define lung cancer and the cells that cause it so more effective therapies can be developed. The study appeared in the June 2009 issue of *PLoS One*, a peer-reviewed journal of the Public Library of Science.

Common Treatments for Prostate Cancer Significantly Impact Quality of Life

A long-term study by researchers at UCLA's Jonsson Comprehensive Cancer Center found that the three most common treatments for localized prostate cancer had significant impacts on patients' quality of life, a finding that could help guide doctors and patients in making treatment decisions. The four-year study, which followed 475 men treated for early stage prostate cancer, also resulted in the development of "probability plots," gauges which can be used to predict when treatment side effects such as urinary incontinence, sexual dysfunction or bowel problems might return to normal, or whether the patient will ever fully recover. Such predictions could be used to determine whether further treatments or surgeries are needed to deal with adverse side effects, said Dr. Mark Litwin, a professor of urology and the study's senior author. The study appeared June 9, 2009 in the early online edition of the *Journal of the National Cancer Institute*.

Intestinal Inflammation Linked For the First Time With Systemic Chromosome Damage in Mice

Scientists for the first time have linked intestinal inflammation with systemic chromosome damage in mice, a finding that may lead to the early identification and treatment of

human inflammatory disorders, some of which increase cancer risk. Jonsson Cancer Center researchers found that local intestinal inflammation induced DNA damage to lymphocytes of the peripheral blood circulating through the body – meaning the chromosome damage was not limited to the intestine but involved distant body tissues. The team found single- and double-strand DNA breaks in the blood, indicating systemic genetic damage. Inflammatory diseases have been linked to some lymphomas and abdominal, liver and colorectal cancers, said Robert Schiestl, a professor of pathology, radiation oncology and environmental health sciences and senior author of the study. If inflammation can be found early – before any symptoms arise – and the diseases treated immediately, it may prevent the damage that eventually leads to these cancers. The study appeared in the June 1, 2009, edition of *CANCER RESEARCH*.

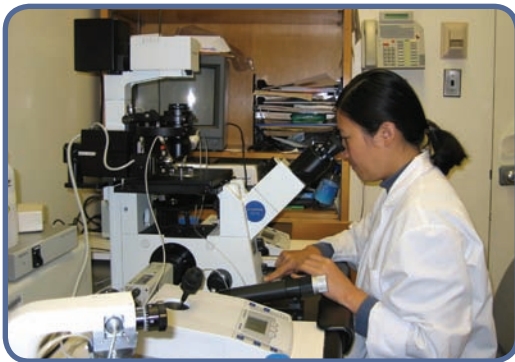


Response to Cancer Treatment can be Determined After a Single Cycle of Chemotherapy

Oncologists often have to wait months before they can determine whether a treatment is working. Now, using a non-invasive method, researchers at UCLA's Jonsson Comprehensive Cancer Center have shown that they can determine after a single cycle of chemotherapy whether the toxic drugs are killing the cancer. Using a combination Positron Emission Tomography and computed tomography scanner, researchers monitored 50 patients undergoing treatment for high-grade soft tissue sarcomas. The patients received chemotherapy to shrink their tumors prior to surgery. The study found that response could be determined

Science Update

about a week after the first dose of chemotherapy. Typically, patients are scanned at about three months into treatment to determine whether it's working. The question was, how early could response be picked up? If a patient is not responding, there's no point in administering toxic therapies that make them sick, said Dr. Fritz Eilber, an assistant professor of surgical oncology and the study's senior author. The study appeared in the April 15, 2009 issue of the journal *Clinical Cancer Research*.



Non-invasive Imaging Approach Developed to Evaluate Tumor Response Before Therapy

For many cancer patients, chemotherapy can be worse than cancer itself. A patient may respond to one drug but not another - or the tumor may mutate and stop responding to the drug - resulting in months of wasted time, ineffective treatment and toxic side effects. Now, scientists at UCLA's Jonsson Comprehensive Cancer Center have tested a non-invasive imaging approach that may one day allow doctors to evaluate a tumor's response to a drug before prescribing therapy, enabling physicians to quickly pinpoint the most effective treatment and personalize it to the patient's unique biochemistry. The *Proceedings of the National Academy of Sciences* published the findings in its Feb. 2, 2009 advance online edition. This will represent the first time researchers will be able to watch a chemotherapy drug working inside the living body in real time, said Dr. Caius Radu, an assistant professor of molecular and medical pharmacology and lead author of the study. Previous studies

were done in mice. Radu's method will be tested in healthy volunteers to determine whether the results can be replicated in humans.

Low-income Men More Likely to Present with Advanced Prostate Cancers

Low-income men are more likely to present with advanced prostate cancers, most likely because they don't receive screening services shown to reduce the diagnosis of later-stage cancers, Jonsson Cancer Center researchers found. The study focused on 570 disadvantaged men enrolled in the state's IMPACT (Improving Access, Counseling and Treatment for Californians with Prostate Cancer) program, which provides high-quality care to poor, underinsured and uninsured men. Of the men studied, 19 percent had metastatic cancer at diagnosis, compared to 4 percent of men from the general population. Previous studies showed that widespread adoption of PSA screening for prostate cancer has resulted in more men being diagnosed with organ-confined, low-risk disease. This trend has not been mirrored among the disadvantaged IMPACT patients, who don't have access to or don't take advantage of screening. Published in the February 2009 issue of the *Journal of Urology*, the study sheds light on the challenges that public assistance programs face in reducing cancer-related socioeconomic disparities.

Cell Pathway Linked to Breast Cancer Drives a Highly Lethal Sub-type of the Disease

An intracellular pathway not previously linked to breast cancer is driving a sub-type of the disease that is highly lethal and disproportionately over-represented in African American women. The pathway regulates how cells identify and destroy proteins and represents a class of genes called proteasome targeting complexes. The work by Jonsson Cancer Center researchers shows that basal cancer cells degrade the tumor suppressor gene p27 by making a new type of proteasome targeting complex. The gene p27 is one of a handful of proteins that are expressed in normal cells and act to prevent the rapid cell

growth indicative of cancer. Beyond chemotherapy, no therapeutic target has been identified for this sub-type of cancer, found in between 12 to 15 percent of breast cancers in the general population and up to 25 percent of cases in African American women, where mortality rates are very high, said Tim Lane, an associate professor of obstetrics and gynecology and senior author of the paper. The research, done in animal models and human breast cancer cell lines, was published in the Nov. 15, 2008 issue of the journal *Genes and Development*.

HPV Allows Infected Cervical and Head and Neck Cancer Cells to Become Therapy Resistant

The human papillomavirus (HPV) allows infected cervical and head and neck cancer cells to maintain internal molecular conditions that make the cancers resistant to therapy and more likely to grow and spread, resulting in a poor prognosis for patients, Jonsson Cancer Center researchers found. Virtually all human cancers experience a state called intratumoral hypoxia, or low oxygen within the tumor. In the study, researchers showed that the HPV-positive cancer cells adapted to and took advantage of the hypoxic environment by expressing a protein that activates a cell signaling pathway that helps the cancers survive, grow and spread. The study was published in the Nov. 4, 2008 issue of the journal *Cancer Cell*. The research, done on cells in culture and in animal models, may lead to the development of new therapies that target the cell signaling pathway, thereby interrupting ability of the cancer cells to thrive, said Dr. Matthew Rettig, an associate professor of urology and medicine and the study's senior author.

