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named California

Assembly Speaker

The California State Assembly

elected former Keck School of

Keck School alumna

MARCH 14, 2008

USC study sees benefit in combining PET, CT scans

By Meghan Lewit

Combined positron emission tomography (PET) and computed tomography (CT) imaging of lymphoma patients is a more effective method to evaluate response to radiation therapy, and may help patients avoid unnecessary follow-up treatments, a study by USC researchers suggests.

weekly

The findings of the study will be published in the March 18 issue of the journal Radiology, now available online.

The clinical study is the first to show the advantage of combined PET-CT imaging in evaluating radioimmunotherapy for patients with non-Hodgkin's lymphoma, says Gary Ulaner, radiology resident and nuclear medicine fellow at the Keck School of Medicine and the principal investigator of the study.

"Combined PET-CT imaging is more accurate in defining a complete response to radioimmunotherapy treatment," Ulaner says. "Specifically, PET-CT is able to correctly label inactive scar masses, which are sometimes mistaken for active cancer when CT is used alone."

Radioimmunotherapy is a type of radiation treatment that targets cancer cells through antibodies. The therapy causes less harm to healthy cells and usually results in fewer side effects than other cancer treatments, Ulaner notes. Typically, the treatment has been evaluated by use of CT imaging alone, which uses special x-ray equipment to produce multiple images of the inside of the body.

PET is a type of nuclear medicine imaging that uses very small amounts of radioactive material to diagnose or treat disease and other abnormalities. When PET and CT scans are combined they can produce a more complete image of the cancer metabolism, he says.

Researchers from the USC Positron Emission Tomography Center evaluated five men and five women-ranging in age from 38 to 70 years-who underwent PET and CT imaging both several weeks before and several months after radioim-See SCANS, page 2

Good Neighbors Campaign raises \$1 million for local programs

By David Galaviz

For the first time in its 14-year history, the Good Neighbors Campaign has topped \$1 million mark, thanks to a strong response from university faculty, staff, alumni and friends.

A celebration held at the Health Sciences Campus on March 10, featured a lunchtime performance by the Spirit of Troy and the student-led a cappella group "The Trojan Men," as well as cake and refreshments. Faculty, staff and administrators were joined by students and community partners in commemorating the landmark occasion.

This year, nearly 500 employees pledged one percent of their salaries, and some 4,400 employees also made generous contributions.

Since its inception in 1993, the Good Neighbors Campaign has awarded nearly 300 grants, totaling more than \$8 million to fund partnerships between the university and the communities surrounding both campuses.

Proposals are now being accepted for the 2008-2009 grant cycle. Faculty and staff are invited to apply for grants to create new programs or assist current outreach efforts. All applications must serve the communities surrounding either campus and must clearly reflect a partnership between the University and the community.

A final mandatory grant writing workshop will be held on March 28. The deadline for all applications is March 31.

For more information, please visit http://www.usc.edu/ext-relations/gnc.





as its 67th speaker. She is the first African-American woman and the

first Democratic

Medicine faculty

alum Karen Bass

member and

By Jennifer Chan

Karen Bass

woman to hold the position. Bass has been a State Assembly Member since 2005, representing Los Angeles' 47th District. She will be replacing current speaker, Fabian Nunez.

"I look forward to [California's] caucus uniting in the effort to address the current fiscal crisis and the other challenges and opportunities that we will face together and will solve together in California," Bass said in a written statement.

Bass graduated from USC's physician assistant program and worked for several years at the LAC+USC Medical Center emergency room. She founded the Community Coalition for Substance Abuse, Prevention and Treatment in South Central Los Angeles to address the increase of drug abuse cases that came through the hospital. It is one of the first organizations in the country to deal with the drug epidemic and is nationally recognized as a model for grassroots organizing and a center for training the next generation of social justice activists and leaders.

Bass served as a clinical instructor at the Keck School of Medicine from 1986 to 2004 when she left to join the State Assembly.

"From the beginning as a new physician assistant faculty member, Karen demonstrated not only concern with the health and welfare of individual patients, but also a deep concern with the conditions that affected her patients and their families," said Jerry Gates, chair, Department of Family Medicine. See **BASS**, page 3





Deepankar Roy, a Department of Biochemistry and Molecular Biology doctoral student in the lab of Michael Lieber, recently published a paper about the way in which antibodies change so as to be able to travel to all locations in the body. This process, called class switch recombination, is particularly important for humans so that they can avoid pneumonia.

The paper was featured on the cover (pictured above) of the January 2008 issue of *Molecular and Cellular Biology*.

Timothy Charlton was inducted as a Fellow of the American Academy of Orthopaedic Surgeons on March 5, during ceremonies at the academy's 75th Annual Meeting in San Francisco. Charlton was one of 675 new members inducted. The academy has 31, 000 members worldwide.

An assistant professor of clinical orthopaedic surgery at the Keck School of Medicine, Charlton is author of numerous scientific articles and book chapters specializing in surgery of the foot and ankle. His interests include cartilage and degenerative conditions of the ankle and Achilles tendon.

The academy is the largest medical association for musculoskeletal specialists. It is a not-for-profit organization that provides education programs for orthopaedic surgeons, allied health professionals and the public. It is participating in the Bone and Joint Decade, as declared by President George W. Bush, in the global initiative to raise awareness of musculoskeletal health.

Leslie Weiner, professor of neurology, recently published *Neural Stem Cells*, 2nd Edition.

The latest edition expands upon the most current laboratory protocols to ensure investigators are able to produce ideal specimens for study, as well as for transplantation into disease models. It includes chapters on developed alternative methods for both human and rodent neural stem cells, karyotyping, migration, apoptosis and markers. *Neural Stem Cells, 2nd Edition* is listed on Amazon.com.

SCANS: Hybrid imaging may aid treatment

Continued from page 1

munotherapy for non-Hodgkin's lymphoma.

After evaluation of CT images alone, eight of 10 patients were classified as responders to treatment, and two patients were classified as having a complete response to the treatment.

After reevaluating with the fused PET-CT scans, researchers found that two patients who had residual lesions had been misclassified. Both of the patients were free of evident disease, and remained healthy after 18 or more months of follow up.

"Using this relatively novel hybrid imaging means that some patients will only require a one-day treatment of radioimmunotherapy instead of several rounds of chemotherapy," says Peter Conti, professor of radiology at the Keck School of Medicine. "We will have a more accurate image that will identify the patients who have a complete response to the treatment."

Conti is a national leader in treatment of non-Hodgkin's lymphoma with radioimmunotherapy.

"We hope this research will result in PET-CT imaging becoming the standard for evaluating patients after treatment," he says. "Greater accuracy will improve how physicians care for lymphoma patients."

Gary A. Ulaner, Patrick M. Colletti and Peter S. Conti. "B-Cell Non-Hodgkin Lymphoma: PET/CT Evaluation after Y-Ibritumomab Tiuxetan Radioimmunotherapy—Initial Experience." *Radiology* (2008). 10.1148/radiol.2463060588.

CHLA study illuminates how predisposition to obesity may affect brain's development

USC research scientists working at The Saban Research Institute of Childrens Hospital Los Angeles have discovered a link between predispositions to obesity and formation of brain connections that likely impact weight regulation and appetite later in life.

The research was conducted in the Neuroscience Program of The Saban Research Institute. Results of this study were reported in the Feb. 6 issue of the journal *Cell Metabolism*.

The cover article documents the surprising finding that rats genetically predisposed to develop obesity display marked differences in development of the brain circuits that are known to regulate appetite and body weight.

The researchers studied two types of rats: obesity-prone rats and obesity-resistant (lean) rats.

"Our results suggest that the development of the brain connections controlling feeding and body weight regulation is comprised in individuals predisposed to develop obesity, as compared to obesity-resistant individuals," said Richard B. Simerly, director of the Neuroscience Program at The Saban Research Institute of Childrens Hospital Los Angeles and a professor of pediatrics at the Keck School of Medicine of USC.

Their work is based on an earlier finding that a hormone called leptin influences brain development. Leptin is a fat-derived hormone that acts on the brain to reduce food intake in adults. In newborns, it acts as a neurotrophic growth factor to promote the normal innervation of brain regions controlling hunger.

Specifically, the scientists wanted to determine if the changes in brain wiring observed in obesity-prone animals were due to reduced ability of leptin to promote brain development.

"We found that the neurodevelopmental abnormalities observed in these animals are due to reduced responsiveness of specific neurons to the growth-promoting action of leptin that normally occurs during postnatal life," said Sebastien G. Bouret, a co-investigator, also in the Neuroscience Program at The Saban Research Institute of Childrens Hospital Los Angeles and an assistant professor of pediatrics at the Keck School of Medicine.

Alumnus gives \$100,000 for stem cell research

Johanna and Jeffrey Gunter have pledged \$100,000 in support of the Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC. Jeffrey Gunter graduated from the Keck School of Medicine in 1987 and completed his dermatology residency at the LAC+USC Medical Center in 1991.

"It's our honor to help," said Jeffrey Gunter. "The Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC is poised to be one of the leading centers in the world, truly on the cutting edge of regenerative medicine. As a family, we've benefitted from the early advances of cell culture and research, so it was just logical to join the Center at the Keck School in pursuing their USC vision for medical research to benefit current and future generations."

In recognition of their support, the Keck School will name a conference room in the Gunter family's honor. Jeffrey Gunter also has recently joined the Keck School's Broad Task Force, which plays a leadership role in promoting awareness and raising funds in support of the Broad Center's research and educational programs.

The gift was coordinated by the Keck School of Medicine development office in conjunction with the USC Associates Program, the University of Southern California's premier academic support group.

DID WE SAY THAT?

A headline in the March 7 issue of *HSC Weekly* misstated the date of the "HSC Innovator Reception and Conversation" to be hosted by the USC Stevens Institute for Innovation and the BioMedTech Park development team. The event will be from 4–6 p.m. on March 19 at the Edmondson Faculty Center, as correctly reported in the body of the story. To RSVP for the reception, visit www.usc.edu/esvp and enter code: "innovation."

HS weekly

Next Issue: March 21

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Assoc. Senior Vice Pres., Health Sciences Public Relations and Marketing: Jane Brust Executive Director of Communications and Marketing: Ina Fried Editor: Jon Nalick Senior Vice President, University Relations: Martha Harris Contributors: Eva Blaauw, Jennifer Chan, David Galaviz, Veronica Jauriqui, Meghan Lewit, Katie Neith and Kukla Vera

USC School of Pharmacy faculty members join Pan-Pacific International conference

By Kukla Vera

Five faculty members from the USC School of Pharmacy highlighted their research at the Fourth Pan-Pacific International Partnership Conference on Pharmaceutical and Life Sciences, Feb. 22-23 in Nagoya, Japan.

Jointly organized by the USC School of Pharmacy and its affiliated pharmacy

schools in Japan, the conference strives to strengthen research in the pharmaceutical and life sciences through international cooperation and collaboration. The event, held at a different university each year, was hosted this year by the Nagoya City University.

Ronald Alkana, professor at the School of Pharmacy who serves on the

BASS: Called 'champion of the underserved'

Continued from page 1

"Today, as one of the leading legislators in California, one sees in Karen a demonstration of the core values of family medicine at work."

Bass also served as the vice chair of the Legislative Black Caucus. She was the driving force behind the State of Black California, which highlighted the disparities between Blacks and other ethnic and minority groups throughout the state. She is also the chair of the California Assembly Select Committee on Foster Care. Under her leadership, the committee secured more than \$82 million in funding, and eight new laws were signed to help improve the state's foster care system.

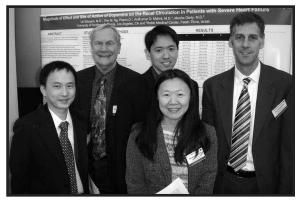
"Through her commitment to improve the life of all Californians, she has already been an incredible force for change in the Legislature," said Carolyn Webb de Macias, vice president, USC External Relations. "We are delighted to continue to work with Ms. Bass on health care issues and the many pressing issues facing California that she will oversee as speaker."

Bass was raised in the Venice/Fairfax neighborhood. She graduated with a B.S. degree in health services from the California State University, Dominguez Hills, before attending USC for her Physician Assistant certification. advisory board of the conference, was featured with a presentation on treatments for alcohol disorders. Alkana showed his lab's research findings on the identification of molecular targets in the brain that may lead to future pharmacotherapeutic agents for alcohol abuse.

Alkana's talk was part of the "Drug Action and Therapy" section of the conference moderated by Paul Beringer, associate professor at the School

of Pharmacy. Beringer also presented a poster at the conference detailing his work on optimizing the use of pharmacologic agents in the treatment of cystic fibrosis.

Other School of Pharmacy faculty displayed posters highlighting the work from their labs and the labs of their collaborators. These presenters included assistant professors Tien Ng on the effect of dopamine on renal circulation



School of Pharmacy faculty members Clay Wang, Bangyan Stiles (both in the front row), Ron Alkana, Tien Ng and Paul Beringer at the Pan-Pacific International Partnership Conference in Japan.

in patients with heart failure; Bangyan Stiles on new therapeutic targets based on the deletion of liver PTEN, a gene that is found in almost all cells of the body; and Clay Wang on the reengineering of E. coli to create a cancer drug.

The annual event was organized by eight universities, with the addition this year of the University of Sydney in Australia.

HRSA taps School of Pharmacy to help identify what makes a successful clinical practice

By Kukla Vera

Health Resources and Services Administration (HRSA), part of the U.S. Department of Health and Human Services, visited the USC School of Pharmacy and the School's safety-net clinic practice sites as part of a national initiative to identify the elements that contribute to a successful clinical pharmacy practice.

USC is one of 10 sites across the country visited as part of this project. Ultimately, the information garnered will be synthesized and incorporated into an initiative that HRSA will launch nationwide in the summer. The initiative primarily focuses on the ingredients that result in improved health outcomes and improved patient safety.

The HRSA representatives who visited the School were Asta Sorensen and Molly Lynch, both researchers from RTI International, a North Carolinabased research group working with HRSA on the project. Sorensen and Lynch spent three days at the School and its clinics, interviewing School of Pharmacy Dean R. Pete Vanderveen, faculty, residents, on-site clinical pharmacists, clinic medical directors, administrators and other staff to get a sense of the elements that have made the School of Pharmacy practice in safety-net clinics a national model.

Kathleen Johnson, chair of the Titus Family Department of Clinical Pharmacy and Pharmaceutical Economics & Policy, explained to the



Researchers Asta Sorensen and Molly Lynch learn about the School of Pharmacy work in safety-net clinics from Carol Lam and Dave Chian, both pharmacy residents.

researchers the importance of

California's practice protocols that allow pharmacists the ability to effectively work in the clinic environment. Also, she identified the importance of a supportive medical director and staff acceptance of the pharmacist's role in the clinic.

The researchers questioned pharmacy residents who work in the safety-net environments about their experiences. Resident Stephanie Iniguez noted, "I speak Spanish, so I'm able to build a rapport more easily with some patients. This makes it easier, for example, to better explain how to use medications and the importance of diet for patients with diabetes."

In response to patients who speak other languages or are unable to read, Steven Chen, an associate professor, developed a pictorial medication guide. This device has proven to be a very powerful tool for such patients, providing medication information that they can understand and easily follow. The researchers are very interested in uncovering these kinds of techniques.

Johnson, holder of the William A. and Josephine A. Heeres Chair in Community Pharmacy, also told the researchers about the School's SHARE program, which provides students with volunteer opportunities at the safety-net clinics during the first two years of their pharmacy education.

According to Iniguez, who participated in the program while a student, "SHARE is a great way to see first hand how clinical pharmacists can work with physicians and other health professionals in a clinical setting."

In the clinics, pharmacists regularly see patients for disease management services.

For example, a patient with diabetes may see a pharmacist weekly or every other week, more than they would typically see a physician. This allows the pharmacist to keep a close eye on the patient's health status. Also, the pharmacy team has implemented a computerized dispensing system in the clinics, safeguarding against medication interactions, incorrect dosing and other medication issues.

The HRSA researchers asked about challenges at the clinics. Resident Dave Chian explains, "At the clinics, we have blind people, those who are hard of hearing, homeless people—these patients require special techniques for managing diseases. As an example, a patient with diabetes might have to fill syringes with insulin or take multiple pills on a definite schedule or eat a structured diet—hard to do if you're blind or homeless. We help them figure out creative solutions that take into consideration their limitations."

Calendar of Events

The HSC Calendar is online at www.usc.edu/hsccalendar

Saturday, Mar. 15

8 A.M. – NOON. USC/Norris Ctr. for Colorectal Diseases and the Office of Continuing Medical Education. "Case Presentations and Round Table Discussions: Medical and Surgical Management for Primary & Recurrent Colorectal Cancer," Robert Beart and Heinz-Josef Lenz. NRT Aresty Conf. Ctr. Info: (323) 442-2555

Monday, Mar. 17

NOON. Fellow's Didactic Teaching Conference. "Hematurial/IgA Nephropathy," Hosameldin H. Madkour, USC. GNH Drs. Dining Rm. A & B. Info: (323) 226-7307

NOON. "Genomic Encoding of Positional Identities," Howard Chang, Stanford Univ. NOR 7409. Info: (323) 442-1144

Tuesday, Mar. 18

9 A.M. Neurology Grand Rounds. "Overview of Insomnia," Judy Chang, EBSCO Publishing, Inc. ZNI 112. Info: (323) 442-7686

11:30 A.M. Psychiatry Grand Rounds. "Management of Aggressive Behavior in the Agitated Patient," Darin Signorelli, USC. ZNI 112. Info: (323) 226-5572

NOON. Cancer Ctr. Grand Rounds. "A Role of Maspin in Prostate Tumor Progression," Shijie Sheng, Wayne State Univ. NOR 7409. Info: (323) 865-0801

Wednesday, Mar. 19

7 A.M. Medicine Grand Rounds. "Aspergilloma," Helen Lee, USC. GNH 1645. Info: (323) 226-7556

NOON. Renal Grand Rounds Conference. "Secondary Hyperparathyroidism and Kidney Transplantation," Hosameldin Madkour, USC. GNH 6441. Info: (323) 226-7307

Thursday, Mar. 20

NOON. "Are you Conducting Human Subjects Research for the First Time?" Susan L. Rose, USC. MCH 149. Info: (213) 821-1154

Friday, Mar. 21

11 A.M. Hematology Grand Rounds. "Stem Cell Transplantation in Non-Hodgkin's Lymphoma - When and What Type?" Auayporn Nademanee, City of Hope. GNH 14-441. Info: (323) 865-3950

NOON. "Cryo-EM of Biological Nano-machine and Cell," Wah Chiu, Baylor College. ZNI 112. Info: (323) 442-3219

Monday, Mar. 24

NOON. Fellows' Didactic Teaching Conference. "NEPHSAP: Acute Renal Failure (2007)," Mitra K. Nadim, USC. GNH Drs. Dining Rm. A & B. Info: (323) 226-7307

4 P.M. "Transplant Conference," Various faculty speakers. UH Salerni Rm. Info: (323) 226-7307

Tuesday, Mar 25

NOON. Cancer Ctr. Grand Rounds. "Functional & Molecular Imaging in Monitoring and Guiding Cancer Treatment," Walter Wolf, USC. NOR 7409. Info: (323) 865-0801

Wednesday, Mar. 26

NOON. Renal Grand Rounds Conference. "Renal Biopsy," Michael Koss, USC. GNH 6441. Info: (323) 226-7307

Thursday, Mar. 27

11 A.M. "What's New With Bone and Fat?" Cliff Rosen, Maine Medical Ctr. Research Inst. CSC 250. Info: (323) 442-1144

Notice: Deadline for calendar submission is 4 p.m. Monday to be considered for that week's issue—although three weeks advance notice of events is recommended. Please note that timely submission does not guarantee an item will be printed. Send calendar items to HSC Weekly, KAM 400 or fax to (323) 442-2832, or e-mail to eblaauw@usc.edu. Entries must include day, date, time, title of talk, first and last name of speaker, affiliation of speaker, location, and a phone number for information.

HSC NEWSMAKERS

A Mar. 11 Newsweek article featured research led by obesity expert Amytis Towfighi about an increase in strokes among women aged 35 to 54 due to expanding waistlines.

A Mar. 11 Health Magazine article noted cancer researcher Giske Ursin's study on the protective benefits of breast-feeding, which may reduce the risk for breast cancer.

A Mar. 11 Daily News article mentioned colorectal cancer surgeon Robert Beart will give a talk at Verdugo Hills Hospital.

On Mar. 10, the Discovery Channel aired a story with Doheny ophthalmologist Alfredo Sadun on the human body and sight.

On Mar. 6, ABC "Good Morning America"

interviewed USC/Norris cancer expert Heinz-Josef Lenz about pancreatic cancer.

Complete listing at: www.usc.edu/uscnews/usc_in_the_news/

On Mar. 5, KABC-TV Channel 7 and KNBC-TV Channel 4 interviewed USC/Norris cancer expert Syma Iqbal about Patrick Swayze's diagnosis of pancreatic cancer.

A Mar. 5 Cape Times article highlighted research by neurosurgeon Michael Apuzzo on laser technology that may eventually revolutionize brain surgery.

On Mar. 4, the Discovery Channel aired a story with biokinesiologist E. Todd Schroeder about the human body in extreme conditions. Schroeder also served as a scientific advisor on the show.

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populations. The symposium will fea-

Calories, Bad Calories" who will offer

his analysis of nutrition strategies for

The event will be at the Aresty

Auditorium at the USC Norris Cancer

Center from 9 a.m. - 5 p.m. on April

10. An evening reception will follow.

For more information, please visit

improving health outcome.

childhoodobesitycenter.org.

ture Gary Taubes, author of "Good

WELCOME ABOARD-M. Elizabeth Fini, senior associate dean for research advancement at the

Keck School of Medicine, greets faculty members at a reception in her honor on March 10. A molecular cell biologist. Fini joined the Keck School in February to advance the medical

Childhood obesity forum slated for April 10

school's research mission

The USC Childhood Obesity

Goran, will present a symposium on

experts working in childhood obesity.

obesity, as well as intervention strate-

gies, offering a wide range of perspec-

tives with a special emphasis on how

these factors are affected in minority

Topics will include studies on the basic biology and genetics of childhood

April 10 featuring some of the top

Research Center, directed by Michael I.

