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\$5 million Whittier Foundation gift to fund new cancer therapies

By Meghan Lewit

Continuing its support of medical innovation, the L.K. Whittier Foundation announced it is expanding upon the cutting-edge research initiatives at the USC/Norris Comprehensive Cancer Center.

A \$5 million gift will extend funding of the L.K. Whittier Foundation Innovative Tailored Therapies Initiative at USC/Norris and the Keck School of Medicine. The foundation previously supported the establishment of this initiative back in 2002.

Created in 1955 by Leland K. Whittier and the Whittier Family, the Los Angeles-based foundation supports innovative endeavors in education, the sciences, and health and medicine.

The L.K. Whittier Foundation Innovative Tailored Therapies Initiative at USC/Norris is a multi-year program to assist scientists in developing successful new therapies to treat cancer patients. This latest gift will support the program for five years.

Obtaining funding for the early stages of a research idea-no matter how exciting-can be extremely difficult. Among other things, it requires writing extensive proposals to committees that rule on scientific merit-a process that takes time and effort that would otherwise be spent in the laboratory. This gift will help alleviate some of those pressures.

"The Whittier Initiative has been instrumental in enabling more than 40 faculty physicians to conduct pilot research studies," said Peter Jones, director of USC/Norris. "These studies have led to additional federal funding, clinical trials and publications, and continue to push the cancer research frontier in our quest to deliver more effective therapies."

Funding from the Whittier Foundation has led directly to patients receiving access to new non-toxic therapies, the development of new detectors for lung cancer, plus the discovery of new markers to predict the response of colon and breast cancer patients to therapy.

A USC/Norris committee created by the initiative makes funding decisions and monitors the project all the way through, said Jones.

Tailoring therapies for individuals

and predicting a patient's cancer risk is a hallmark of USC/Norris, said Jones. And that is the sort of science the Whittier initiative was designed to fund-science that could make a difference in the lives of USC/Norris cancer patients and, ultimately, cancer patients everywhere.

weekly

"A researcher's success is usually measured by how much grant funding he or she receives," said Jones. "Here, we want to measure them by the fact that they actually did something to help patients. The foundation's gift allows us to do that."



WALKING FOR A CURE—The USC/Norris Comprehensive Cancer Center's team raised more than \$2,000 during the May 10 Revlon Run/Walk for Women at Los Angeles Memorial Coliseum. A por-tion of the proceeds will support the Cancer Center and the work of Michael Press, the Harold E. Lee Chair in Cancer Research

School of Pharmacy shares \$5 million NIH grant to seek novel compounds

By Kukla Vera

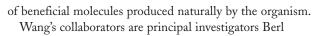
Clay C. C. Wang, assistant professor in the Department of Pharmacology and Pharmaceutical Sciences, is leading the USC effort on research that seeks natural compounds with the potential to be used as new chemotherapies and antimicrobials.

The effort to find a compound that may serve as the basis of the next new wonder drug has kicked off an extensive search.

"This is tough work and takes an army to accomplish it," said Wang.

Wang and his colleagues have found support for their search at the National Institutes of Health, which has awarded them a \$4.9 million grant to fund a three-site project to mine the Aspergillus nidulans secondary metabolome in search of promising new therapeutics.

The metabolome is the complete set of small-molecule metabolites found within a biological sample, such as a single organism. The secondary metabolome is a subset consisting



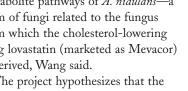
Oakley, Ohio State University, and Nancy Keller, University of Wisconsin-Madison.

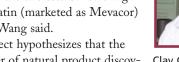
The project will delve into the metabolite pathways of A. nidulans-a form of fungi related to the fungus from which the cholesterol-lowering drug lovastatin (marketed as Mevacor) is derived, Wang said.

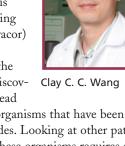
The project hypothesizes that the next frontier of natural product discov- Clay C. C. Wang ery is not unknown to us but instead

undiscovered in the genomes of organisms that have been looked at in laboratories for decades. Looking at other pathways, or secondary pathways, of these organisms requires a collaborative approach using the latest molecular genetic

See WANG, Page 2







Regenerative Medicine and Stem Cell Research at USC Keck

The new Web site for the Eli and Edythe Broad CIRM Center for Regenerative Medicine and Stem Cell Research at USC is located at stemcell.usc.edu

USC launches stem cell research site

By Veronica Jauriqui

A new Web site for USC's stem cell initiative offers information for both scientists working in this evolving field of study, as well as lay people interested in learning more about the promise of stem cells in research and therapy.

The site for the Eli and Edythe Broad CIRM Center for Regenerative Medicine and Stem Cell Research at USC is located at stemcell.usc.edu. It was designed to complement the center's objectives, said Julie Kelly, center program manager.

"We wanted to design a site that would be a hub for infor-

mation, connecting researchers from across the state and potentially fostering scientific collaborations," she said. "But we also wanted to provide a resource for the general public, providing information on how stem cells are changing medicine and how USC fits in."

The site includes a page of answers to frequently asked questions and a "Stem Cell Basics" section with fundamental information on the biology of stem cells and their potential for treatments. A weblog written by center Director Martin Pera, will comment on breaking See CIRM, Page 2



Public Health faculty among most productive in U.S.

USC's Public Health faculty placed fourth on the "Top Research Universities Faculty Scholarly Productivity Index" as ranked by Academic Analytics for 2007 and reported in the *Chronicle of Higher Education*.

The program in the Institute for Health Promotion and Disease Prevention Research (IPR) at the Keck School of Medicine of USC follows only Yale University, University of Washington and Johns Hopkins University.

"One factor that distinguishes IPR from most doctoral programs is that we started first and functioned for many years solely as a research institute," said C. Anderson Johnson, who was director during the ranking period. "Quality scientific research is at the core of our self-identity. Our training programs have been built on our research excellence, and in essence, we are a niche program, providing training almost exclusively in those aspects of population health in which we excel. Hence, our productivity rate is high, and students appreciate that. They are drawn to USC because of that."

The index examines faculty members who are listed on the Web site for Ph.D. programs —25 at USC. The productivity of each faculty member is measured on as many as five factors, depending on the most important variables in the discipline: books published, journal publications, citations of journal articles, federal grant dollars awarded, and honors and awards. For each discipline, Academic Analytics assigns a weight to each variable and aggregates the scores for all the faculty members in a particular institution.

USC ophthalmologist receives \$1.2 million NIH grant

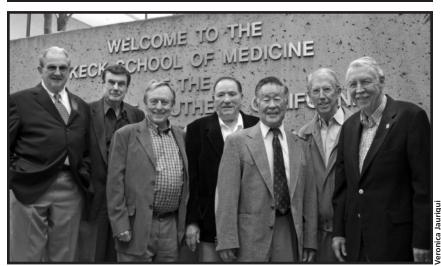
Doheny Eye Institute researcher and ophthalmologist David Huang has received a \$1.2 million grant from the National Institutes of Health to study the treatment of anterior eye diseases with optical coherence tomography (OCT).

The goal of this project is to utilize newly available high-speed OCT technology to guide surgical treatments of anterior eye diseases. Measuring aberrations in the optical surfaces of the cornea requires great precision.

OCT is well known for its exquisite spatial resolution, but until recently it has not had sufficient speed to overcome the inherent biological motion of the eye and capture the shape of the cornea. The development of Fourier-domain OCT technology has made the requisite speed possible.

Co-invented by Huang, Keck School Dean Carmen A. Puliafito and others, OCT technology is considered by *Ocular Surgery News* as one of the top 10 ophthalmic innovations of the past 25 years. He is the medical director of the Doheny Laser Vision Center and the Charles C. Manger III, MD Chair of Corneal Laser Surgery at USC.

DID WE SAY THAT?



Due to an editing error, a caption in the May 9 issue of HSC Weekly identified the names of visiting members of the Keck School of Medicine's Class of '57 out of their proper order. The correct names of the alumni are: (from left) Fredrick Lieb, Edward Woerz, Robert Francis, Daniel Hillman, James Chung Jr, Timothy Lefevre and Laird Facey.



Demetrios Demetriades (left), chief of the Keck School Department of Surgery's division of trauma and critical care and LAC+USC Medical Center's Surgical Intensive Care Unit, reunites with trauma patient Gary Hilliard (right) and wife at the center's first Trauma Reunion on May 10. The event reunited 16 former patients with their healthcare providers to celebrate their remarkable recoveries. Case studies of each patient were presented.

WANG: Grant funds search for antimicrobials

Continued from Page 1

tools, increased understanding of the regulation of these secondary metabolites and analytical tools designed to identify these new pathways. These skills are not to be found under one roof.

"Together, we'll be able to elucidate the products of these pathways, building on each other's work," said Wang. "We expect the project to generate a substantial number of new natural products for development as therapeutics."

The researchers see potential for these new compounds as chemotherapy and antimicrobial agents. Further, the tools and methods developed in this program project can be translated to other fungal genomes as they become known.

Wang's part of the project utilizes his expertise in natural product chemistry to analyze *Aspergillus* strains that will be provided by his collaborators. Wang will purify and elucidate the structure by sequencing the genome and, he hopes, ultimately identifying the various new compounds.

The five-year grant of \$4.9 million will be divided among the three institutions. According to Wang, "This collaborative approach realizes the best of three disciplines and takes us closer to finding the next best compound."

Wang's research is also supported by another NIH grant, an American Cancer Society award and a grant from the State of California.

CIRM: Stem cell site will provide research updates

Continued from Page 1

news in the field, as well as provide updates on USC's research projects.

The center was founded in 2006 with a \$25 million gift from philanthropists Eli and Edythe Broad and the Broad Foundation. On May 7, 2008, the center was one of 12 California institutions to receive additional funding from the California Institute for Regenerative Medicine (CIRM). The CIRM grant of nearly \$27 million will help fund construction of a new five-story stem cell research building on USC's Health Sciences campus.

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hone: 323-442-2830 Fax: 323-442-2832 Email: hscwkly@usc.edu Web: uscnews.usc.edu/hscweekly/

Next Issue: May 23

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Charles Meyer Goldstein, 'father of USC School of Dentistry mobile clinic,' 87

Charles Meyer Goldstein, a champion of efforts to bring dental care to poor and underserved communities throughout Southern California and beyond, died May 11. He was 87.

His death came one day after he was honored with the first California Dental Association Foundation Humanitarian Award.

"Charlie," as he preferred to be called, devoted his career to providing access to care for underserved populations, especially the children of California. He spearheaded the creation of the USC School of Dentistry Mobile Clinic, a program that brought dental care to communities throughout the state.

In 1970, he was appointed faculty director of the mobile clinic. One of the first tasks of Goldstein and the dental students he supervised was to provide comprehensive care for the children of migrant farm workers in Central and

Southern California.

With just one trailer, portable dental chairs made of cardboard and "The Octopus," a makeshift dental device created by the students,

Goldstein and his team provided 30 weekend clinics in one year. The group treated approximately 250 children each weekend during the early days. Since its inception, the clinic has treated more than 93,000 children.

In an interview with USC Dentistry Magazine shortly

before his death, Goldstein said, "When I was in dental school, I thought it would be just wonderful to practice dentistry and not only be able to make a living, but also take care of people that really needed it and couldn't afford it."

In 2000, Goldstein also helped create the USC Dental Clinic at the Union Rescue Mission Downtown on 5th and San Pedro streets to provide care for the homeless.

Harold Slavkin, dean of the School of Dentistry, said Goldstein's life

> was dedicated to championing the cause of the poor and working poor of California.

"Through 'service-learning," our residents, dental students and dental hygiene students learned clinical dentistry and experienced the needs of the underserved," Slavkin said. "Our community outreach pro-

grams have become one of the signatures of the USC School of Dentistry."

Goldstein led the students tirelessly during his 12-year tenure as mobile clinic director. Even after he left the position in 1982, he continued to participate in the mobile clinics until spring 2006. His failing health kept him from physically going on the road, but he stayed up-to-date on daily activities and acted as an adviser.

Jane Caballero, a 2008 School of Dentistry graduate, said she grew close to Goldstein after volunteering in the mobile clinic and participating in health fairs: "I was privileged to get to know him not only as an academic, but also as a beautiful human being. During these times, I experienced his humble and caring manner of treating people. It was very clear to all of us that he had a beautiful soul. The USC dental community will surely miss him. Again, not just as a faculty member but as a kind human being."

Santos Cortez Jr., a 1976 graduate of the School of Dentistry, attended the Humanitarian Award presentation at Goldstein's home May 10.

"Dr. Goldstein has been my close friend and mentor for many years. He has been a constant source of encouragement and inspiration to me and all who had the privilege of knowing him," Cortez said. "He made an impact in so many personal and professional lives. He will be deeply missed."

Goldstein is survived by his brother Mort and sister Clara; children Jeffrey, Jonathan, Judith and Joel; eight grandchildren; and five great grandchildren.

In lieu of flowers, friends and colleagues may make a gift in Goldstein's memory to the USC Mobile Clinic Fund. Donations to the USC Mobile Clinic Fund can be sent to the USC School of Dentistry, 925 W. 34th Street, Suite 202, Los Angeles, CA 90089.



Charles Meyer Goldstein

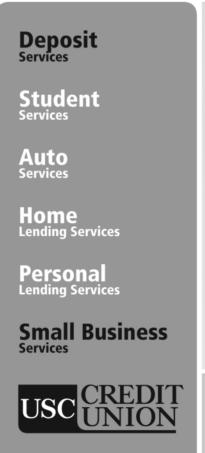
In Case of An Emergency...

Visit the USC Web:

http://emergency.usc.edu This page will be activated in case of

an emergency. Backup Web servers on the East Coast will function if the USC servers are incapacitated. Call the Emergency Information Phone: 213-740-9233

The emergency telephone system can handle 1,400 simultaneous calls. It also has a back up system on the East Coast.



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Calendar of Events

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

Monday, May 19

8 A.M. "Radiation Therapy – Non-Invasive Surgery for Rectal Cancer," Stanley Goldberg, Univ. of Minnesota. NOR 7409. Info: (323) 865-3873

NOON. Fellows' Core Curriculum Conference. "Late Medical and Surgical Complications Post Transplant," Miroslaw J. Smogorzewski, USC. GNH Drs. Dining Rm. A & B. Info: (323) 226-7307

NOON. "Single Molecule View of DNA Replication," Samir Hamdam, Harvard. NOR 7409. Info: (323) 442-1144

Tuesday, May 20

9 A.M. Neurology Grand Rounds. "Clinical and Genetic Studies of Familial Amyloid Polyneuropathy Related to Transthyretin: From the Bedside to the Bench to the Test Tube and Back," Joel Buxbaum, Scripps Research Inst. ZNI 112. Info: (323) 442-7686

11 A.M. "Reciprocal Regulation of Bone and Energy Metabolisms," Gerard Karsenty, Columbia Univ. HMR 100. Info: (323) 442-2806

1**1:30 A.M.** Psychiatry Grand Rounds. "Sexual Medicine: The State of the Art," Waguih IsHak, Cedars-Sinai. ZNI 112. Info: (323) 226-5572

NOON. Cancer Ctr. Grand Rounds. "Annual Poster Session for Graduate Students and Postdoctoral Fellows." NOR 7409. Info: (323) 865-0801

Wednesday, May 21

7 A.M. Medicine Grand Rounds. "Coccidioidomycosis," Michael Vu, USC. GNH 1645. Info: (323) 226-7556

8:30 A.M. "Respiratory Issues in Neuromuscular Diseases," Ahmet Baydur, USC. GNH 11-321. Info: (323) 226-7923 NOON. Renal Grand Rounds. "Radiology of Vascular Access," Sue Hanks, USC. GNH

6441. Info: (323) 226-7307 NOON. "Deep Ancestry: Inside the

Genographic Project," Spencer Wells, National Geographic. CSC 250. Info: (323) 442-1144

Friday, May 23

9 A.M. C-TREC Seminar. "Evaluating the Links Between Obesity and Leukemia Relapse Using Mouse Models," Steven Mittelman, USC. CSC 250. Info: (323) 442-4101

11 A.M. "Multiple Myeloma: Translating the Evidence into Clinical Practice," Rafael Fonseca, Mayo Clinic. GNH 14-441. Info: (323) 865-3914

Tuesday, May 27

11 A.M. "Vitamin D Deficiency," William Malone. HMR 100. Info: (323) 442-2806

Wednesday, May 28

NOON. Renal Grand Rounds. "Resistant Hypertension," Mitra K. Nadim, USC. GNH 6441. Info: (323) 226-7307

Friday, May 30

8 A.M. Pathology and Laboratory Medicine Grand Rounds. "Clinical Application of Therapeutic Apheresis," Joshua Levy, HemaCare Corp. NOR 7409. Info: (323) 442-1180

Sat., June 7

9 A.M. "Prostate Cancer Screening and Epidemiology," David Penson, USC. KAM Mayer Aud. Info: (323) 442-2555

10 A.M. "Treatment of Localized Disease," Eila Skinner, USC. KAM Mayer Aud. Info: (323) 442-2555

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.



Noted physician Art Ulene speaks to USC/Norris and Keck School supporters at the Heritage Luncheon about the importance of a healthy lifestyle and of helping others.

Heritage Lunch celebrates planned giving

By Katie Neith

The USC/Norris Comprehensive Cancer Center and the Keck School of Medicine hosted a Heritage Lunch on May 7 to celebrate the tradition of planned giving at the Keck School.

Guests gathered at the Edmonson Faculty Center were treated to an inspirational speech by Art Ulene, advisory board member at the Cancer Center and medical expert known for his nationwide health campaigns.

Ulene, who is a board-certified obstetrician gynecologist, prepared two speeches for the event, starting off with a "lifestyle prescription," which he handed out to the crowd.

"This is the most powerful prescription I could write," said Ulene. "Every item has been proven scientifically to reduce morbidity or mortality."

The prescription included nutritional points such as to eat 25 to 35 grams of fiber every day, and psychosocial tips, like "volunteer to serve others." One of the most important points, said Ulene, was the last item on the list: "Constantly reevaluate your priorities."

With that idea in mind, Ulene continued on to his second speech titled, "My Next Life: A Work in Progress." He said he believes he has lived eight lives, as a child, student, husband, father, teacher, television commentator, businessman and retiree. His next, and ninth, life will consist of the legacy that he leaves behind.

Ulene highlighted the charity work that he and his wife have done around the world. He hopes the work will have meaning beyond his physical life. He pointed to the generosity of those who support the Keck School in building a legacy of extraordinary students, doctors and research scientists.

His remarks followed a talk by Giselle Petzinger, assistant professor in the Department of Neurology at the Keck School, whom Ulene called a "genius at work." She spoke about her current research looking at how exercise may be able to make chemical changes in the brain, particularly in regards to Parkinson's disease.

SAVE THE DATE—The Department of Preventive Medicine at the Keck School of Medicine will host population geneticist, National Geographic Explorer-in-Residence, Spencer Wells on May 21 to discuss his current research work leading the Genographic Project. The project is a global, anthropological research study to map humankind's ancient migratory routes. The Genographic Project aims to provide the first true 'snapshot' picture of how people moved out of Africa and around the globe 60,000 years ago and illustrates through DNA the similarities between different populations. The lecture will be held in the Harkness Assembly Room, IGM/CSC 250 on May 21 from noon to 2 p.m. To register for the event, email gracielm@usc.edu.

HSC NEWSMAKERS

On May 12, the American Association of Cancer Research featured researcher **Wendy Cozen's** study on Hodgkin Lymphoma in a newsletter to congressional members across 31 districts throughout the country.

A May 9 Los Angeles Times article noted that USC received a nearly \$27 million grant from the California Institute for Regenerative Medicine to build a stem cell research facility. Medical News Today, The San Diego Union-Tribune, The Orange County Register, The Chronicle of Higher Education, The Press Democrat, The San Francisco Chronicle, KNBC-TV Channel 4, KABC-TV Channel 7, KPCC-FM, KFWB-AM, KNX-AM, The San Francisco Business Times and The East Bay Business Journal ran similar stories. A May 9 Orange County Register article reported that many top medical centers, including hospitals at USC, have adopted minimally invasive brain surgery procedures.

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

On May 8, KABC-TV Channel 7 interviewed cardiologist **Ray Matthews** about carotid bruits and their link to heart attack risk.

A May 7 *Science* article quoted diabetes expert **Richard Bergman** on a study finding that extra subcutaneous fat improved the glucose and insulin levels in mice.

On May 6, Insider Medicine Online ran a video of cardiologist **Howard Hodis** discussing prevention of heart disease.

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