

Research retreat explores future model for collaborations

By Jane Brust

When Keck School of Medicine Cardiovascular Medicine Chief Leslie Saxon met Viterbi School of Engineering's Toni Levi, a professor of electrical engineering, she said her "socks were knocked off" to learn of their similar interests in devices to monitor functions such as heart rate and stroke.

Viterbi Assistant Professor of Aerospace and Mechanical Engineering Andrea Hodge introduced herself to Keck's Chairman of Dermatology, David Woodley, expressing interest in lending her expertise in the mechanical behavior of materials to his need for measuring skin plasticity in the wound healing process.

These were only two of the new connections made as more than 100 faculty from USC's medical and engineering schools spent a weekend together Oct. 17-19 exploring opportunities for enhanced collaboration.

Already faculty from the two schools have worked together on development of an artificial retina and neuromuscular stimulation to minimize swallowing difficulties in cancer patients—among many other projects. However, the schools' two deans see even greater potential.

"Collaboration between Keck and Viterbi can lead to increased research funding for USC—definitely a priority—as well as enhanced learning experiences for all kinds of students," said Dean Carmen A. Puliafito

of the Keck School.

According to Viterbi Dean Yannis Yortsos, "Engineers develop tools to help answer questions. Our engineering faculty are eager to learn more about the questions the medical school faculty want to answer, so we can see where we might come together."

Program organizers Elizabeth Fini, Keck's vice dean for research advancement, and Maja Mataric, senior associate dean for research at Viterbi, agreed that enhanced synergy is the ultimate goal—synergy to leverage and nurture existing partnerships, collaborative grants and research activities.

Among the areas of potential collaboration explored during the retreat were:

- Brain, vision, hearing, speech and neuro-rehabilitation
- Biomedical imaging (from molecular to whole body)
- Diagnostics and therapeutics (including nanomedicine and ultrasound)



From left, Viterbi's Dean Yannis Yortsos and Research Dean Maja Mataric join Martha Gray and the Keck School's Dean Carmen A. Puliafito and Vice Dean for Research Advancement Elizabeth Fini at the joint Keck-Viterbi research retreat.

Brittany De La Torre

- Health informatics and bioinformatics
- Regenerative medicine, cancer and stem cells
- Systems biology, multi-scale modeling in bio medicine, drug design/delivery
- Developmental and metabolic disorders and environmental health
- Surgical/clinical applications of robotics, virtual reality, advanced microelectronics, low-cost/portable/wearable technology.

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LAST CALL—Good Neighbors Campaign draws to a close Oct. 31

By Jon Nalick

The University's Good Neighbors Campaign will draw to close Oct. 31 with a strong turnout being crucial to reaching this year's goal of \$1.1 million.

Campaign coordinators are urging individuals and academic units to surpass last year's giving, which exceeded its goal of raising \$1 million. Moreover, leaders on the Health Sciences Campus are challenging academic units to raise their participation rates, which hover as low as 10 percent.

In 2007, the USC School of Dentistry boasted the highest participation rate on the Health Sciences Campus, with 42 percent of the school giving to the campaign and raising \$55,000. The School of Pharmacy mustered a 31 percent participation rate, with donations from the school reaching \$14,000. The Keck School of Medicine raised \$80,500, while only garnering a 10 percent participation rate, reflecting generous donations from a small number of donors.

USC Neighborhood Outreach (UNO), the non-profit organization funded by the Good Neighbors

Campaign, was born from the desire to focus the University's philanthropy efforts in the communities surrounding the Health Sciences and University Park campuses.

The campaign has raised more than \$9 million since its inception 14 years ago.

Every dollar of contributions designated to USC Neighborhood Outreach is distributed to programs that benefit children and families living in the immediate neighborhoods around both campuses.

The programs support science, health, literacy and math education, as well as sports, arts and safety.

For information about the Good Neighbors Campaign, including a full list of programs funded, visit www.usc.edu/ext-relations/gnc.



At the annual USC Health and Science Expo, students from nearby partner schools examine a booth that investigates the water-absorbing properties of toilet paper. Funded by the Good Neighbors Campaign, the expo introduces local children to science principles and potential careers.

Jon Nalick

HEALTH SCIENCES ACADEMIC DEPARTMENT CAMPAIGN LEADERS

- Keck School of Medicine (Faculty): John Cleary
- Keck School of Medicine (Staff): Eva Blaauw
- Occupational Therapy (Faculty): Linda Fazio
- Occupational Therapy (Staff): Jacalyn Mardirossian
- Physical Therapy (Faculty): Cheryl Resnik
- Physical Therapy (Staff): Lydia Vasquez
- School of Dentistry (Faculty): Kelley Randle
- School of Dentistry (Staff): Meredythe Mann
- School of Pharmacy (Faculty): Mel Baron
- School of Pharmacy (Staff): Kukla Vera

Keck School researchers awarded grants from Arthritis Foundation

Four Keck School researchers were recently awarded \$190,000 to pursue studies of arthritis and related diseases. Rheumatology Division Chief **William Stohl**, Assistant Professor of Clinical Medicine **Bracha Shaham**, and two post-doctoral fellows at the Institute for Genetic Medicine, **Yankel Gabet** and **Sanjeev Baniwal**, were awarded grants from the Arthritis Foundation, Southern California Chapter.

"With federal funding being as tight as it is, and with the low probability of the National Institutes of Health funding high-risk innovative areas of research, funding from organizations such as the Arthritis Foundation is very important," said Stohl. "They provide seed money to allow researchers to test new ideas, and to build proof of new principles. We can then take those preliminary findings to larger funding organizations like the NIH. Research funding from outside foundations is fundamental to the pursuit of ideas not yet adequately proven."

Victoria Fung, Arthritis Foundation senior vice president for public health and research, said "The Arthritis Foundation is committed and pleased to support the invaluable work of USC's arthritis researchers." She added, "This type of local collaboration and support holds the key to tomorrow's advances in the understanding, treatment and prevention of arthritis."

Gabet received the Meyer Young Investigator Award, which funds \$50,000 to support postdoctoral fellows pursuing careers in rheumatic diseases.

Stohl was awarded the \$60,000 Tina C. Foundation Lupus Research Award. This grant will provide funding to research B-cells, and the factors that modulate them, in order to learn about potential treatments for lupus and rheumatoid arthritis.

Shaham, director of education at Childrens Hospital Los Angeles, received a \$30,000 Clinical Rheumatology Pediatric Fellowship Training Award, to continue selection of trainees for the CHLA fellowship program in pediatric rheumatology.

Baniwal received the \$50,000 California Community Foundation Award, which will support his research on the role of estrogens in skeletal metabolism.

Panel to explore racism's role in infant mortality on Nov. 5

At a Nov. 5 forum hosted by the California Endowment, a panel of USC experts will examine the causes and potential solutions to the disproportionately high infant mortality rate experienced by the black community.

The panel—including Tyan Parker Dominguez, assistant professor of social work; Jack Turman, director of the USC Center for Premature Infant Health and Development; and Lavonna Blair Lewis, clinical associate

professor of policy, planning and development—will explore the reasons that blacks in the U.S. suffer double the infant mortality rate of white Americans.

The panel will also discuss how the causes of this persistent disparity is not entirely explained by medical, behavioral or economic risk factors and will highlight recent research that suggests that the chronic stress of racism may play a critical role.

The event also will feature a screening of "When the Bough Breaks" from the PBS series "Unnatural Causes: Is Inequality Making Us Sick?"

The forum will be at the California Endowment, 1000 N. Alameda St. in Los Angeles from 3-6 p.m. and is free and open to the public. Light refreshments will be served.

For more information or to RSVP, email swevents@usc.edu.

RETREAT: New model for physician-engineer partnerships

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Beyond the grassroots connections for collaborative projects, faculty heard a discussion of different models for creating a new collaborative program between the two schools.

The discussion was led by Martha Gray, visiting associate dean for health science and technology, who recently arrived from the Massachusetts Institute of Technology (MIT).

She is charged with advising USC faculty on the creation of a program similar to the Harvard University-MIT model called "HST" for Health Science and Technology. The proposed new program is referred to as "HST at USC."

"The premise is that many important health and medical problems are too big and too complex to be addressed by a single discipline," Gray explained. "Engineers and physicians look at problems differently, and they need to work together in universities, teaching hospitals and research centers."

Gray recommended an organizational model in which some faculty serve as good stewards of their separate disciplines while other faculty embrace a new approach to steward a network of disciplines and translation of the work.

"You can't do both of these things within a single academic unit," she said, "and faculty and senior leadership



USC Viterbi School of Engineering

have to drive the cultural change that is required for a new model."

Among the issues to be overcome, said Gray, are infrastructure needs and faculty appointments.

"The new entity could create opportunities to recruit outstanding faculty and students who otherwise would not come," she said.

Gray pointed out that 95 percent of the HST alumni work in the biomedical arena, many in leadership positions. More than 400 students are currently enrolled in the program.

Research awards available for liver and digestive tract disease studies

The USC Research Center for Liver Diseases is offering awards of \$10,000-50,000 to support pilot studies in the field of liver and digestive tract function and disease.

Funds are available to support studies for one year beginning April 15, 2009. Awards are potentially renewable for two to three years, contingent on progress.

Collaborative projects among different laboratories are encouraged, and especially meritorious projects that appear likely to be successful in leading to R01 funding will be given preference.

Eligible applicants include new investigators without peer-reviewed support, established investigators in another field who are interested in redirecting work and expertise to digestive disease and established investigators in digestive disease who wish to make a major shift in emphasis.

Hard copies of letters of intent, biographical sketches and other support must be received by Dec. 15 by Laurie DeLeve, Mail Code: HMR 603, HSC.

For more information, contact DeLeve at (323) 442-3248 or deleve@usc.edu.

ETCETERA

Robert Rude, professor of medicine in endocrinology and diabetes, has been named the recipient of the American College of Nutrition's Seelig Magnesium Award.

The award, which recognizes outstanding contributions defining the role of magnesium in nutrition, was presented

at the organization's annual meeting Oct. 2-5 in Arlington, VA. On behalf of Rude, USC Endocrinologist **Frederick R. Singer** accepted the award and also presented a lecture on "Skeletal and Hormonal Effects of Magnesium Deficiency."

USC University Hospital Guild honors Harlyne J. Norris

By Ina Fried

USC Trustee Harlyne J. Norris was honored by the USC University Hospital Guild at an Oct. 14 luncheon celebrating the Guild's 15 years of service to the hospital and the Keck School of Medicine of USC. Some 200 people attended the event at the Wilshire Country Club.

A USC trustee since 2000, Norris is a trustee and past chairman of the Kenneth T. and Eileen L. Norris Foundation and serves on the advisory board of the USC/Norris Comprehensive Cancer Center. Through the Norris Foundation, the Norris family has given nearly \$50 million to USC.

Congratulating Norris, USC President Steven B. Sample pointed to USC's Harlyne J. Norris Cancer Research Tower as "a testament to her compassion, her dedication and her generosity." He also noted her support and guidance of many non-profit organizations in Southern California that advance health care, research, education and the arts.

Sample, who also spoke at the Guild's charter ceremonies in 1993, thanked the Guild members as dedicated volunteers and ambassadors for the USC University Hospital and the Keck School of Medicine. "You reach out to support our doctors, our staff and medical students at every turn, and you give care and comfort to countless patients," he said.

Keck School of Medicine Dean Carmen A. Puliafito thanked the Guild for their commitment to sup-

porting medical student scholarships and programs at the hospital.

"USC University Hospital is a very special place with special traditions," Puliafito said. While the hospital and medical faculty members who practice there are known for their world-class medical services, he said, "One of the things that's characterized the place is something that we saw today—that very personal, 'welcome to my home' attitude."

He thanked the Guild for contributing greatly to that "family feeling" for patients, their families and friends.

Guild President Kay Maselter named Norris an honorary member of the Guild in recognition of her contributions to the USC Health Sciences campus.

She presented Norris with a clock encased in a pyramid. The clock represents "the gift of time that she has made available to so many because of her generosity and that of the foundation. We have chosen a pyramid because of its representation of healing in so many cultures throughout time," Maselter said.

Norris was invited to present two Celebrate Life Scholarships, funded by the Guild, to medical students Michael Marques and Maria Victoria Peralta.

Another scholarship in memory of Guild member Darlene Dufau Reid went to student Neda Roosta.

For more information about the Guild, please call Candy Duncan at (310) 545-2239.



USC Trustee Harlyne J. Norris gets a hug from Keck School of Medicine student Michael Marques, after presenting scholarships to Marques and Maria Victoria Peralta. The scholarships, funded by the USC University Hospital Guild, were presented during the Guild's 15th anniversary luncheon.

Carol Matthieu

USC University Hospital Guild Activities

Support for USC University Hospital:

- Surgical information desk;
- TLC Program – holiday gifts;
- Tours conducted by docents;
- Magazines for patients;
- Books and toys for young patients;
- Holiday decorations for the lobby;
- Music and tapes for the digital piano in the lobby;
- Medical equipment.

Education:

- Speakers Series and Outreach Programs featuring lectures by USC physicians and researchers;
- Teen Focus workshop for students at Bravo Medical Magnet High School, featuring The Doctors of USC;

- Health-related tours for freshmen at Bravo.

Support for Keck School of Medicine:

- Scholarships for medical students;
- Contributions to the Surgical Skills Center and other areas;
- Fundraisers such as annual "Walk the 5K for Keck."

Support of Community:

- Outreach programs on the Westside, in Orange County and in Pasadena;
- Outstanding Student Book Award to Bravo High School;
- Gifts and toiletries for patients through the USC Violence Prevention program.

School of Pharmacy students host annual Legislative Day with elected officials

By Elizabeth Chapin

Pharmacy students got a glimpse of how the political process impacts their careers at Legislative Day, Oct. 17 at the Davidson Conference Center.

Legislative Day provides a forum for various perspectives on the pharmacy profession and the legislative issues that surround it.

Sponsored by the American Pharmacy Student Alliance, the event brings pharmacists, students, legislators and other community leaders together to discuss the pivotal pharmacy issues on the legislative agenda.

Legislative Day promotes student awareness and involvement in legislative issues and educates legislators about pharmaceutical issues. It also gives today's pharmacists a chance to voice their concerns to politicians.

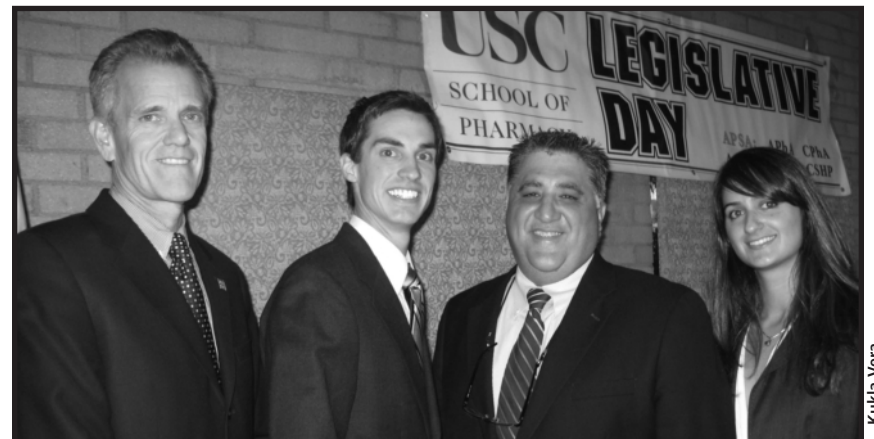
"Our profession is impacted by numerous outside forces," said David Breslow, School of Pharmacy alumnus and chief executive officer of United Pharmacists Network Inc. "The legisla-

ture will make changes happen. Pharmacists must be on the political frontlines to have their voices heard."

Breslow was among the speakers at the breakfast event attended by nearly 200 people. Elected officials speaking at the event included California State Assemblymembers Mike Eng and Anthony Portantino, State Senator Mark Ridley-Thomas and Chair of the State Board of Equalization Judy Chu.

Other speakers included John Tilley, past president of the National Community Pharmacists Association; Jeffery Goad, president-elect of the California Pharmacists Association and an associate professor at the School of Pharmacy; and Victor Law, chairman of the United Pharmacists Network Inc. USC School of Pharmacy Dean R. Pete Vanderveen and Kathleen Johnson, chair of the Titus Family Department of Clinical Pharmacy and Pharmaceutical Economics & Policy, also spoke.

The event was sponsored by the



From left, School of Pharmacy Dean R. Pete Vanderveen, student organizer Tim Bensman, California Assemblyman Anthony Portantino and student organizer Maryam Nowakhtar at the School of Pharmacy Legislative Day.

Kukla Vera

United Pharmacists Network, Inc., California Pharmacists Association, Albertsons-SavOn, USC Graduate and Professional Student Senate and the Associated Students of the School of Pharmacy.

Pharmacy students Maryam Nowakhtar and Tim Bensman organ-

ized the event. Immediately following the formal program, students hosted a health fair at Alumni Park, giving guests an opportunity to be checked by student pharmacists for diabetes, cholesterol, hypertension and osteoporosis.

Calendar of Events

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

Monday, Oct. 27

4 P.M. "Transplant Conference," Various faculty speakers. UH Salerni Rm. Info: (323) 442-9093

5 P.M. Visions and Voices: The USC Arts and Humanities Initiative. "Black on Black," Geoffrey Cowan. UPC: Annenberg Aud. Info: visionsandvoices@usc.edu

Tuesday, Oct. 28

9 A.M. Neurology Grand Rounds. "Newest Findings Related to the Pathogenesis and Possible Treatment of Inclusion-body Myositis," Valerie Askanas, USC. ZNI 112. Info: (323) 442-7686

NOON. Cancer Ctr. Grand Rounds. "Molecular Imaging in Breast Cancer," Peter Conti, USC. NOR 7409. Info: (323) 865-0801

Wednesday, Oct. 29

11:30 A.M. "pHarmony," celebrating American Pharmacists Month. HSC Quad. Info: cqi@usc.edu

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

NOON. "Mir-302: Induced Pluripotent Stem Cell Generation and Reprogramming," Shi-Lung Lin, USC. ZNI 112. Info: (323) 442-1881

4 P.M. USC Ctr. for Excellence in Research. "Obtaining Research Funding from Foundations," Kim Alexander, USC. UPC: CUB 329. Info: (213) 740-6709

4 P.M. USC Ctr. for Excellence in Research. "Developing and Submitting a Department of Defense Grant Application," James Murday, USC. HSC: NML West Conference Rm. Info: (213) 740-6709

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 ebllaauw@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.

Thursday, Oct. 30

11:30 A.M. "Delaying the Degenerative Diseases of Aging," Bruce Ames, UC Berkeley. UPC: GER Aud. Info: (213) 740-0821

5 P.M. "Advances in the Treatment of CLL: Current Status, Future Directions," Marco Montillo, Niquarda Ca Granda Hospital, Milan, Italy. NOR 4444. Info: (323) 865-3950

Friday, Oct. 31

8 A.M. CHLA Grand Rounds. "What is New in Pediatric Pain Management," Giovanni Cucchiari, USC. CHLA Saban Aud. Info: (323) 361-2935

11 A.M. Hematology Grand Rounds. "Thalassemia Syndromes," Susan Claster, CHLA. GNH 14-441. Info: (323) 865-3950

Monday, Nov. 3

NOON. "Immune Regulation by the SLAM and SAP Families," André Veillette, Univ. of Montreal. NOR 7409. Info: (323) 442-1144

Wednesday, Nov. 5

NOON. "Mechanisms and Functions of Synaptic Plasticity," Robert Malenka, Stanford Univ. ZNI 112. Info: (323) 442-3219

NOON. "The IL-2/C225 Pathway Determines Susceptibility to T1D in Humans and NOD Mice," Linda Wicker, Univ. of Cambridge. CSC 250. Info: (323) 442-1144

4 P.M. USC Ctr. for Excellence in Research. "Adding Measured Genes to Social Behavior Research," Carol Prescott, USC. UPC: CUB 329. Info: (213) 740-6709



Jon Nalick

Students Reese Doughty and Evan Raff play ball at the Keck School of Medicine's Student Spirit Day on Oct. 21. Students enjoyed music, a baseball speed pitch game and Pink's hot dogs at the event, which was sponsored by the Keck School of Medicine.

Campus security improvements go into effect

As part of a \$3 million campus security upgrade, entering Health Sciences Campus buildings after hours will require electronic ID cards beginning Dec. 1.

Shane Hapuarachy, special project manager for the Department of Public Safety (DPS), said that the new electronic lock system would limit access to buildings after regular business hours—generally between 6 p.m. and 6 a.m., although some buildings may have different policies depending on the needs of their occupants.

Under the new system, personnel are issued USCards, which serve as their identification and are coded with their access authorization for the buildings in

which they work or are authorized to enter.

The cards permit access after hours and also log the times at which the user enters and leaves the building.

"Department heads make the decision concerning who is authorized and whether you are someone who needs access after hours. So if you try to come in at 10 p.m., and doors lock at 6 p.m., you need to be at an assigned access level or you won't get in," he said.

Hapuarachy said that employees should consult their home department coordinator for questions about whether they need their cards updated or replaced to access their buildings after hours.

Earthquake preparedness seminar for all

Students, faculty and staff are invited to attend a free, one-hour seminar on earthquake preparedness, held in Mayer Auditorium on the Health Sciences Campus from 11 a.m. to noon, Tuesday, Oct. 28. The program will be presented by Steven Goldfarb, a USC fire safety and emergency planning specialist, and is hosted by Health Sciences Public Relations and Marketing. Cookies and beverages will be provided, and attendees are welcome to bring their own lunch. For more information on earthquake preparedness, visit the Dare to Prepare Web site at daretoprepares.org.

HSC NEWSMAKERS

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

An Oct. 20 *Los Angeles Times* article featured Childrens Hospital Los Angeles in an article about Proposition 3, which would provide funding for children's hospitals in California.

An Oct. 20 *Los Angeles Times* article featured **Candace Brady** and **Mike Dubron**, who are members of the patient advisory council at USC/Norris. The article also noted that retired L.A.P.D. officer Candace Brady served on review boards helping assess grant proposals for cancer research at USC.

An Oct. 20 *Times of India* article quoted cancer researcher **Myles Cockburn** about melanoma, a potentially deadly form of skin cancer.

An Oct. 19 *Edmonton Journal* (Canada) article quoted environmental health expert **Scott Fruin** about air pollution.

An Oct. 14 Reuters article highlighted a new study by Alzheimer's expert **Lon Schneider** which found that high doses of B vitamins failed to slow cognitive decline in people with Alzheimer's disease. CBC News (Canada) also covered the research.

An Oct. 13 *Los Angeles Times* article quoted pharmacologist **Roger Clemens** about health effects of artificial food colors on children.

On Oct. 12, KABC-TV Channel 7 featured Childrens Hospital Los Angeles on an episode of "Vista L.A."

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