USC targets neurosciences as key university-wide focus

By Jon Nalick

Provost’s Professor Pat Levitt has been named chair of a faculty committee that will work to raise USC’s neuroscience programs to a level of undisputed academic excellence and to recruit transformative faculty to accelerate that rise.

Elizabath Garret, provost and senior vice president for academic affairs, announced the appointment on Jan. 12, saying that the Neuroscience Advisory Committee will work with the more than 90 faculty members involved in the neuroscience program “to recommend ways to better transcend school and disciplinary boundaries.”

The group will also propose ways to integrate research and teaching university-wide, said as “to collaborate on significant proposals for external funding and philanthropic support, and to ensure that the research done at USC has the impact and influence it merits.”

Levitt, director of the Zilkha Neurogenetic Institute of the Keck School of Medicine, called participating in the committee’s work “a once-in-an-academic-career opportunity” and said that because the field of neuroscience impinges on so many other disciplines, its mastery is crucial to reach the highest levels of academic distinction.

He noted, “When one looks at the common thread of excellence at the top universities in the United States, neuroscience is the discipline that is outstanding at each and every institution.”

—Provost’s Professor Pat Levitt

Major project to improve hospital network connectivity under way

By Tania Chatila

An infrastructure project launched on the USC University Hospital campus is expected to expand network connectivity and decrease the amount of downtime for employees and medical staff during IT-related outages.

The project is part of the USC Health Sciences Information Technology Department’s strategic infrastructure plan. It involves creating a “fiber ring” on the campus, affording network circuits two points of entry into every building—USC University Hospital, the Doheny Eye Institute and Healthcare Consultation Centers I and II.

“Today, many of our patient care buildings have a single point of entry for network connectivity,” said Kent Paul, chief technology officer for USC Health Sciences. “If one of those circuits goes down, then the whole building could lose computer access. What we are doing now is creating redundant network connections, so if something happens to one circuit, there is a second pathway for network data to flow.”

Contractors began laying new fiberoptic cables on Jan. 10, starting at the loading dock behind the Norris Inpatient Tower. Over the next few weeks, they will work their way around the western USC University Hospital property line to the main driveway in front of the Doheny Eye Institute.

The project does involve some significant construction, such as trenching and digging in driveways and near pedestrian walkways. But contractors, IT and Facilities Management staff are working to ensure minimal disruption to staff, patients and visitors.

“This project is an important step in building our IT infrastructure,” said Paul. He added it is part of the overall plan to prevent outages—such as those experienced on the campus recently—from happening in the future.

“When all is said and done, this will provide a stronger network backbone for our clinical buildings,” he said.

Construction is expected to be completed on Feb. 22.

Experts discuss causes of, solutions to geographic cost variances in health care

By Sara Reeve

Does market share influence how much hospitals charge patients? Does health care cost more in Los Angeles than in San Diego? And why has a small town in Colorado been able to control health care costs better than elsewhere in the country? These were among the questions posed at a pharmaceutical economics and policy seminar held on Jan. 13 in the Ronald Tutor Center on the University Park Campus.

The discussion brought together renowned health economists, as well as Keck School of Medicine Dean Carmen A. Puliafito, a practicing physician, to discuss geographic variations in health care costs. Moderated by Darius Lakdawalla, associate professor in the USC School of Policy, Planning and Development, speakers examined not only the causes of geographic variations, but also how causes differ between public and private payers.

Jonathan Skinner, economics and health policy expert at Dartmouth, dispelled some of the common misconceptions surrounding geographic differences.

He argued that new innovations in cost and outcome measurements could help reduce the cost variances, but that there will continue to be challenges as accountable care organizations try to maximize profits.

“One thing economists are cynical about, and understand, is that if there is some way to work the system, institutions will figure it out,” Skinner said.

Robert Kaplan, distinguished professor of UCLA’s Department of Health Services in the School of Public Health, stunned the audience when he showed that health care costs are dramatically higher in Los Angeles than in San Diego area.

Kaplan stated that much of the price discrepancies could be attributed to the fact that Los Angeles doctors performed more services per patient than their counterparts in San Diego. He also pointed to a lower use of hospice care and more days in the intensive care unit at end of life in Los Angeles-area hospitals.

“We think the most likely explanation… is the volume—more tests, more procedures and more pre-

See CARE, page 2
Study shows pharmacists improve clinical outcomes for diabetes patients

George J. Higué, School of Dentistry alum and supporter, 95

George J. Higué, a 1940 graduate of the Herman Ostrow School of Dentistry of USC, passed away on Dec. 31 at his home in Huntington Harbour, Calif. He was 95.

A lifelong resident of Los Angeles, he attended George Washington High School and Los Angeles City College before entering the Ostrow School of Dentistry. After graduating with his doctorate of dental surgery, he served in the 417th Artillery Field Unit of the U.S. Army and was honorably discharged in 1946 with the rank of major in the Dental Corps. He went on to practice dentistry in the city of Bell for 45 years, garnering a reputation as a strong advocate for children’s oral health care and earning several commendations from organized dentistry, the Bell Chamber of Commerce, the California State Assembly and more.

Higué devoted much of his time and resources to the Ostrow School of Dentistry, USC, the dental profession and the community. He served as president of the Ostrow School of Dentistry’s Century Club and the Dental Alumni Association and was also a member of the School’s Board of Counselors. His generosity made the Ostrow School of Dentistry’s George J. Higué Student Lounge a reality, helped the School build the Oral Health Center and more.

At the University level, he was a founding President and a member of the Scholar-Ship Club, and he was awarded both the Alumni Service Award and the USC President’s Award for his service to USC as a proud alumnus.

In lieu of flowers, the family has asked that donations be sent to the Ostrow School of Dentistry.

About 44 million people in the United States are uninsured, low-income uninsured, Medicaid beneficiaries or patients with special health care needs who do not receive regular medical care.

George J. Higué and Associated Student Body President Anahita Taraporewalla cut the ribbon on the George J. Higué Student Lounge in 2008.

By Kukla Vera

A study led by USC School of Pharmacy faculty members Kathleen Johnson, Steven Chen, Mel Baron and Jeffrey McCombs demonstrates that integrating pharmacist-led management of type 2 diabetes into safety net clinics with the patient-centered medical home model improves clinical outcomes.

The study appeared in the December issue of The Annual of Pharmacotherapy. Other authors on the study included Paul Gregerson, a physician and chief medical officer at the JWCH Institute, L-Ning Cheng, a clinical pharmacy specialist at HealthCare Partners; and Carla Biscelen, a clinical pharmacist, and Mimi Lou, project manager, both at the USC School of Pharmacy.

Johnson, holder of the William A. and Josephine A. Heeres Endowed Chair in Community Pharmacy, said, “While several previous studies have acknowledged the expanded role of pharmacist services in the U.S. health care system, most lack comparison groups to evaluate outcomes of these clinical services. Our study evaluates the outcomes of patients with type 2 diabetes who received care from pharmacists in safety net clinic settings, compared to the outcomes of patients in clinics receiving ‘usual care’ that is without a clinical pharmacist on the team.”

The study evaluated changes in A1C levels, a test that measures an individual’s average blood glucose level over a two- or three-month period. The test, which provides an indication of how well a treatment plan is working for the patient, is the current standard for correlating blood glucose control with risk of diabetes-related complications. Patients were included in the study if they had poor diabetes control, defined as an A1C level greater than 9 percent.

The study found that patients who received care that included pharmacists had adjusted A1C levels reduced, on average, by 1.58 percent—points compared to those without pharmacist involvement in treatment. This is a clinically meaningful improvement, making it three times as likely for patients to achieve an A1C level of less than 7 percent, the typical treatment goal in the study.

Landmark studies also have shown that a 1 percent decrease in A1C likely for patients to achieve an A1C level of less than 7 percent, the typical treatment goal in the study. About 44 million people in the United States are uninsured, low-income uninsured, Medicaid beneficiaries or patients with special health care needs who do not receive regular medical care.

Ectetera

The U.S. Bureau of Health Professions recently named 14 USC Primary Care Physician Assistant Program students National Health Service Corps (NHSC) Scholars. The NHSC, through scholarship and loan repayment programs, helps health professional shortage areas in the U.S. get medical, dental and mental health providers to meet their tremendous need for health care.

The competitive federal program, which awards scholarships to students pursuing primary care health professions training, attracted 2,000 applicants this year.

The scholars are: third-year students Tina Carbajal, Anoosheh Nikkar and Rachel Newgard; second-year students Valerie Aguilar, Luke Ardill, Jessica Jimenez, Janice Matias, Stephen Neel, Erinne Orts Jr., Claudia Solis, Susanne Valenti and Julie Vuong; and first-year students Sara Coburn and Lalia Gerges.

CARE: No ‘one-size-fits-all’ solution seen

Continued from page 1

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CARE: No ‘one-size-fits-all’ solution seen

Continued from page 1

Market forces present in Boston help to shift patients from low-cost to high-cost providers. The bigger you are, the more money you have—the more power you have to control the marketplace, said Paltufo. “This is bad. It’s very bad.”

The roundtable discussion that followed the individual presentations gave the speakers the opportunity to outline their prescriptions for reducing geographic variations in health care costs. While they agreed that there is no “one-size-fits-all” solution, they offered the following starting recommendations:

• Make cost variations between major medical providers transparent;
• Develop and share community consensus of best practices of care;
• Give physicians the right to estimate and effective care; and
• Monitor expenditures and penalize inefficiencies.

By Kukla Vera

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A team of researchers led by Victor Colan, director of Clinical Imaging at The Saban Research Institute of Children’s Hospital Los Angeles, determined that the onset of puberty was the primary influence on adult bone mineral density, or bone strength. Length of puberty did not affect bone density.

Reduced bone mineral density leads to osteoporosis, resulting in bones becoming increasingly brittle and at risk for fracture. Osteoporosis is a significant public health issue with the cost of treatment in 2010 estimated at $10 billion. This condition affects 55 percent of Americans aged 50 and older.

The Bone MineralDensity in Childhood Study is an ongoing multicenter study examining bone development in healthy children and teenagers of both sexes and ethnic populations in the United States. For this analysis, the investigators studied 78 girls and 84 boys who had just entered puberty, until they reached sexual maturity.

“Puberty has a significant role in bone development,” Gilsanz said. “During this time, bones lengthen and increase in density. At the end of this period of time.

Given that the rate of decline of bone mass in adulthood is approximately 1 percent to 2 percent each year, a 10 percent to 20 percent increase in bone density resulting from a normal early puberty corresponds to an additional 10 to 20 years of protection against the normal age-related decline in bone strength.

Collaborators on this study included Tishya Wren and James Chalfant, Children’s Hospital Los Angeles; John Shepherd, University of California, San Francisco; Heidi Kalkwarf, Cincinnati Children’s Medical Center; Babette Zemel, Children’s Hospital of Philadelphia; Joan Lappe, Creighton University; Sharon Oberfield, Columbus University; and Karen Winet, National Institute of Child Health and Development. The article was published in the Journal of Pediatrics.

Age of onset of puberty linked to adult osteoporosis risk

Article quoted Robert Klonek, professor of medicine, about his research published in the journal Clinical Cardiology.

The research showed that, for two weeks following the 1980 Super Bowl, heart attacks and deaths among fans of the defeated Los Angeles Rams increased. The study also showed increased death rates for women. Klonek said patients and families should be aware that stressful games might elicit an emotional response that could trigger a cardiac event.

The research was also covered by USA Today, U.S. News & World Report, the Daily Mail, WebMD, Bloomberg News, the Pittsburgh Tribune-Review, and the Wall Street Journal.
**DIABETES: Study links pharmacists’ care with better health**

Continued from page 4

specific risk experiencing medical complications if their disease is not managed properly. These complications include cardiovascular disease, which accounts for the majority of diabetes-related mortality, nephropathy and end-stage renal disease, retinopathy and neuropathy.

Patient self-management skills are essential to the success of diabetes management, and these skills typically were taught by a pharmacist in the study’s clinic settings. In addition, the pharmacists review medical, laboratory and medication histories, evaluate and modify drug therapy under an established protocol, order routine laboratory tests, monitor adherence to drug therapy regimens and provide follow-up care. Pharmacists work with all members of the patient-centered medical home; when appropriate, referrals are made to physicians, social workers and mental health professionals.

“Our study shows that when a pharmacist is on the team, the outcomes are better,” Gregerson said. “Pharmacists fulfill the pivotal role of medication expert on today’s health care team.”

Studies like this one provide evidence that the expanded role of the pharmacist can have a positive impact on the health outcomes of at-risk patients.

The USC School of Pharmacy currently provides clinical pharmacy services to 12 safety net clinics in the Los Angeles area.

**NEURO: USC seeks ‘outstanding’ new neuroscientists**

Neuroscience Advisory Committee

- **Pat Levitt**, Provost’s Professor of Neuroscience, Psychiatry & Pharmacy
- **Roberta Brinton**, R. Pete Vanderween Chair in Therapeutic Discovery and Development and Professor of Pharmacology and Pharmaceutical Sciences
- **Antonio Damasio**, David Dornsife Professor of Neuroscience
- **Mark Humphrey**, Cornelius J. Pings Chair in Biomedical Sciences and Professor of Ophthalmology, Biomedical Engineering, and Cell & Molecular Biology
- **Larry Swanson**, Mills Don and Lucile Appleman Professor of Biological Sciences

Continued from page 1

neuroscience, and the many disciplines that it impacts—

from economics, law, social sciences and business to biol-

gy, chemistry, psychology and medicine. New faculty hires will occur in some of these disciplines university-wide.”

Levitt said the areas in which USC is poised to make a significant impact include biomedical neuroimaging.

“We have outstanding neuroimaging led by the Dana & David Dornsife Cognitive Neuroscience Imaging Center at the University Park Campus, which focuses on high level questions of consciousness, perception and social and moral behavior.

“These are important questions. We hope to complement that by making a major growth effort in biomedical neuroimaging, so that we can contribute to both the understanding of brain diseases and new treatments and interventions for these conditions that impact people and their families very severely,” he said.

He added that this growth effort “will complement our strengths in genetics and basic neuroscience studies of brain diseases, creating a fabulous, interdisciplinary, collegial community of scientists and students.”

Garrett is now soliciting from USC’s schools the names of outstanding neuroscientists with records of accomplishment that distinguish them as major scholarly figures and with convincing evidence of future productivity and influence.

She said that consideration “will be given to the proposed faculty member’s success in mentoring Ph.D. students, in attracting top post doctoral fellows and junior faculty, and in interdisciplinary collaboration. In addition to providing a CV, nominators should discuss the likelihood that such recruitment will be successful, and how the work of the scholar will complement the work being done by our own exceptional faculty. Hitting clusters of faculty will also be considered.”

The Neuroscience Advisory Committee will review submissions and advise Garrett on the candidates’ strengths and weaknesses. Her office will then work with school deans to determine the types of university-level assistance and resources that can be provided to achieve success in recruiting the candidate.

To submit candidate names for consideration, or for additional information, please contact Executive Vice Provost Michael Quick at expv@usc.edu.