USC physical therapy expert lauded in key publication

By Cathy Curtis

Carolee J. Winstein, professor of biokinematics and physical therapy and director of the Motor Behavior and Neurorehabilitation Laboratory at USC, was heralded in a full-page article in the February issue of Neurorehabilitation and Neural Repair.

Winstein—who also holds a joint appointment as associate professor in the Department of Neurology at the Keck School of Medicine of USC—directs an interdisciplinary research program focused on motor control and learning, with a special emphasis on recovery and rehabilitation of function and motor control after brain damage.

The article notes that Winstein led the first Physical Therapy Clinical Research Network, which supported clinical research on the effectiveness of task-specific and muscle-specific training to enhance muscle performance and functional activities for adult spinal cord injury, children with cerebral palsy, adult stroke and lower back pain patients.

Winstein is in the fourth year of leading a multisite Phase III randomized controlled trial, the Interdisciplinary Comprehensive Arm Recovery Evaluation (ICARE) stroke initiative to improve outpatient therapy for arm paralysis.

With her colleagues at USC and Rancho Los Amigos National Hospital, Winstein established the Rehabilitation Engineering Research Center to study the challenges of growing older with existing and acquired disabilities, and the positive effects that new technologies can have on patient health, independence and quality of life.

Grants obtained by Winstein for these and other significant research projects include funding from the National Institutes of Health, the Foundation for Physical Therapy, the National Institute on Disability and Rehabilitation Research (NIDRR)/Department of Education, and the American Heart Association.

An active member of the neurorehabilitation community, Winstein sits on the board of directors of the American Society of Neurorehabilitation and on the advisory boards of several professional organizations, including the NIDRR-funded Machines Assisting Stroke Recovery Rehabilitation Engineering Research Center at the Rehabilitation Institute of Chicago. She is a member of the World Federation for Neurorehabilitation. Her research to date has yielded more than 70 peer-reviewed articles, many of which were co-authored by graduate students and postdoctoral scholars she mentored in her laboratory.

The American Physical Therapy Association has frequently recognized Winstein; her honors include the Anne Shumway-Cook Lecture Award (2012), the 40th Mary McMillan Lecture Award (2009) and the Marion Williams Award for Research in Physical Therapy (2006).

By Jon Nalick

Beginning in July, dozens of senior surgeons from hospitals across China will come to USC for training in minimally invasive surgery as part of a new educational and research exchange agreement formalized late last year.

Dilip Parekh, Keck School Department of Surgery section chief for Hepatobiliary and Pancreatic Surgery, and Brad Selby, chief administrative officer of the department, helped ink the agreement, which they said provides for as many as 75 Chinese surgeons each year to undergo training in the Department of Surgery at the Health Sciences campus.

They said that the agreement represents the fruition of three years of discussion between the Keck School Department of Surgery and top Chinese government representatives for medicine, science and technology—as a major effort to establish a strong USC presence in the eastern Pacific Rim medical community.

Parekh said the relationship is a natural fit for the Chinese because USC already “has an excellent reputation in China and we’re located in Los Angeles, which has a large Chinese community and infrastructure.”

For USC, training China’s top surgeons, including senior faculty from the country’s major medical schools—who will in turn train countless others—positions the university as an influential collaborator.

Parekh said, “This puts us front and center with opinion leaders in China.”

Parekh noted that USC will offer a structured training program that incorporates observation in the operating room at Keck Hospital of USC, online education, a skills lab and mentoring by USC faculty. The program has tremendous potential for growth, he added, saying that there are about 140,000 minimally invasive surgeons in China today who could benefit from the program.

Calling USC a “gateway to the Pacific Rim,” Vaughn Starnes, chair of the Department of Surgery and surgeon-in-chief of the Keck Medical Center of USC, said the agreement is a natural extension of China’s growing interest in USC.

“China wants to build the best medical schools in the world and they are looking at what we’re doing as a model,” Starnes said.

“This campaign is intended to increase awareness of the need for screening and education about colorectal cancer,” said Jane Brust, associate senior vice president for USC Health Sciences Public Relations and Marketing. “In the event of a positive diagnosis of colorectal cancer, we have skilled and innovative care providers in the Keck Medical Center of USC who are ready to address this challenging disease.”

By Leslie Ridgeway

The Keck Medical Center of USC is launching a colorectal cancer awareness campaign on CBS Television during March, Colorectal Cancer Awareness Month. This paid television advertising campaign will include spots airing on KCBS-TV (CBS 2) and KCAL-TV (KCAL 9).

The CBS Health Watch campaign features Anthony Senagore, professor and chief of colorectal surgery, and Heinz-Josef Lenz, professor of medicine and preventive medicine and chair of the GI program, at Keck Medical Center of USC.

Both physicians are associated with the National Cancer Institute-affiliated USC Norris Comprehensive Cancer Center and Hospital. Frank Castro, a La Mirada resident who is one of Senagore’s patients, is also interviewed in the campaign.

“The minute-long spots are airing in Los Angeles from March 1 to April 6 as part of regular CBS programming but not part of CBS News broadcasts.”

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CAMPAIGN: Segments will highlight research at Keck Medical Center

Continued from page 1

Faculty physicians who offer many treatment options for patients who come to USC. The spots promote USC's expertise in colorectal cancer and treatment options at USC.

Postdoctoral fellowships offer crucial support for young researchers

By Sara Reeve

Postdoctoral fellowships are very competitive and can mean the difference between a research career that takes off and one that languishes. After receiving word that she had received a prestigious fellowship from the science and advocacy group Autism Speaks, postdoctoral researcher Allison Knoll felt a mix of honor and gratitude. “Postdoctoral fellowships help build an early foundation of funding and research success that is increasingly important for becoming an independent scientist.”

Knoll was awarded the Autism Speaks Postdoctoral Fellowship in Translational Research, which is designed to support promising, well-qualified postdoctoral scientists, encourage new investigators to enter the field of autism spectrum disorders, and remove barriers and develop better communication and collaboration among basic scientists, applied researchers and clinicians. The fellowship requires a multidisciplinary setting and training plan that includes experience in both the laboratory and clinical settings. Trainees are required to have a primary mentor, the faculty member with whom they directly carry out their research, as well as one or more secondary mentors, who will provide integrated training experiences in different disciplines. Knoll’s primary mentor will be Pat Levitt, Provost Professor and director of the Zilkha Neurogenetic Institute. “The [purpose of this] award is specifically to give a young scientist an opportunity to incorporate the best of clinical and basic science worlds in order to be able to design more effective and meaningful studies,” said Levitt, who is also chair of the Department of Cell and Neurobiology at the Keck School of Medicine of USC. “In Allison’s case, it is bringing the basic and clinical research worlds of autism together in a unique way. “Autism Speaks has done a brilliant job of designing its postdoctoral research fellowship program to encourage this. The training will be really unique among her peers nationally. Learning this skill now, as a trainee, will give Allison a competitive advantage when she seeks academic or industry positions and in starting her own research laboratory.”

Knoll will study disrupted social engagement, a defining feature of autism spectrum disorders, by reviewing variations in several neurochemical systems that are implicated in adult social behavior and motivation. “I hope to emerge with a diverse skill set, which will help equip me for a career in research that brings the best of neurobiology and behavior together to address challenging clinical problems in children,” she said. In addition to working with Levitt, Knoll will be co–mentored by Michele Kipke, professor of clinical psychology and preventive medicine at the Keck School and principal investigator of the Autism Treatment Network at Children’s Hospital Los Angeles, and Nathan Fox, director of the Child Development Laboratory at the University of Maryland.

Dentistry to offer new online program

By Beth Dunham

A new program at the Ostrow School of Dentistry of USC allows dentists from around the world to enrich their clinical skills—all from the convenient location of their practices. The Ostrow School of Dentistry Master in Orofacial Pain and Oral Medicine program, which will begin in May, is a three-year online curriculum designed to give dentists a stronger understanding of how to treat patients.

Graduates of the program can better treat patients with mouth and facial pain, sleep-disordered breathing, oral and maxillofacial infections, temporomandibular joint disorders and other complex issues that affect the mouth and face, said USC professor Glenn Clark, director of the Orofacial Pain and Oral Medicine Center at the Ostrow School. Designated for full-time dentists in an academic or clinical environment, the curriculum involves video lectures, weekly videoconferences regarding patient cases, a short visit to campus each summer and the preparation of a research article on an oral medicine topic. “This program is for the motivated general dentist who’d like to have a more medical perspective when addressing these types of complex patient issues,” Clark said. “If more dentists are better equipped with a medical model of problem-solving, it brings great benefit to the patients facing these complicated problems.”

Clark is the editor of Orofacial Pain: A Guide to Medications and Management, a new book to be released next year. The text, a collection of guidance and information on the use of medications for the treatment of chronic orofacial pain, is another effort aimed at helping dentists and other clinicians effectively address their patients’ multifaceted oral and facial pain problems.

To learn more about the online program, call the Ostrow School Office of Admissions at (213) 740-2841.
CHINA: Expanding professional networks to country expected to pay big dividends

By Leslie Ridgeway

When James Hu was deployed to Kuwait in October 2011 to serve as deputy commander of a combat support hospital serving military personnel in the Persian Gulf, he knew he was witnessing history.

The patients and soldiers that the 17-year US Army veteran, hematologist and oncologist was encountering at the 325th Combat Support Hospital were among the 30,000 personnel who left Iraq when President Barack Obama’s order to withdraw troops was implemented. After returning to Los Angeles in January 2012 following the three-month deployment, Hu reflected on what the experience taught him about leadership:

“I realized leadership is a complex thing,” said Hu, an Army colonel and oncologist at the USC Norris Cancer Hospital. “A good leader cares about the troops. He balances the risk and the mission. There’s no shortcut to leadership ability. It’s a combination of training and experience. President Obama understands this, and he’s been in the command-and-control role for a long time.”

Hu, active in the Army for 13 years, learned many leadership skills during a two-year course at the Army War College, but his experience in Kuwait showed him great leadership in action and enabled him to practice what he had learned.

“Fortunately, I was well trained and well prepared for this deployment, and I needed every bit of that knowledge to understand the complex situation in this operation,” he said.

It was Hu’s job to make sure the 30 military health care providers and ancillary staff under his command had the resources and understanding to do their jobs. The hospital, about an hour and a half from Kuwait City at Camp Arifjan, is under a joint command and was responsible for outfitting hospital sites close to the Iraqi border.

“The hospital has the capability to stabilize traumatic injuries of military personnel and civilians and also provide mental health services. Those with the most severe wounds are airlifted to Landstuhl Regional Medical Center in Germany. The 325th Combat Support Hospital, which closed in November, was the last combat support hospital remaining in the Iraq-Kuwait Theatre by the end of Hu’s tour. Hu commands the 325th combat support hospital based in Independence, Mo., and composed of more than 800 soldiers.

“The hospital responds to natural disasters, including Hurricane Katrina, as well as expeditionary operations such as in Iraq, Afghanistan and other parts of the world. Hu travels monthly to the hospital to participate in drills to ensure that soldiers are trained to provide hospital services and humanitarian relief for global deployments. This requires substantial preparation to ensure that the soldiers have the resources and training to set up a mobile hospital in austere conditions.”

Hu is a USC alumnus and native of East Los Angeles who grew up in the neighborhood next to USC Health Sciences Campus. A physician for more than 20 years, he sees parallels between military leadership and oncology: “Commanding is about risk management in achieving the end state,” he said. “Oncologists are probably the best risk managers. We are dealing with toxic therapies. We talk to our patients about the risks and help them think about what they’re gaining from therapy—a cure? Extended survival? A commander weighs risks and benefits every day when accomplishing a mission.”

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—James Hu, a U.S. Army colonel and oncologist at the USC Norris Cancer Hospital

The USC Norris oncologist takes leadership, medical skills to Kuwait hospital

By Debasish Tripathy

A March 4 report in USA Today quoted Roger Clemens, an adjunct professor of pharmacology and pharmaceutical sciences in the School of Pharmacy, about the amount of salt in bread.

A March column in the Las Vegas Review-Journal mentioned a recent opinion piece by Ken Murray, retired clinical assistant professor of family medicine at the Keck School. The piece, which focuses on the end-of-life decisions that doctors make for themselves, also was cited by Business Insider and Forbes.

The Feb. 25 edition of HemOnc Today featured an interview with Debashis Tripathy, professor of clinical medicine at the Keck School and co-leader of the Women’s Cancer Program at USC Norris Cancer Hospital, about the value of mentors and thinking outside the box.

A Feb. 24 broadcast of “TocoCall Connected” on KCET featured an interview with Andrea Hricko, associate professor of preventive medicine at the Keck School, about air pollution in Boyle Heights.

The February 2012 issue of EyeWorld News Magazine quoted Neda Shamie, associate professor of clinical ophthalmology at the Keck School, about lamellar corneal transplantation.

The Weekly NEWSMAKERS

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Calendar of Events
This Calendar of Events is also online at
www.usc.edu/hsccalendartool for the Health Sciences campus community

Tuesday, Mar. 13

Wednesday, Mar. 14

4:30 p.m. CHLA/SHS Research Institute Medical Device Roundtable. “Nanoparticles/Manotechnology for Pediatric Applications,” Travis Williams and Andy Chang, CHLA/USC. CHLA Anderson Pavilion Conference Rm. B. Info: (323) 660-2145

Thursday, Mar. 15
5 p.m. Department of Anesthesiology Journal Club. Ronald Pearl, Stanford University. LAG+USC Medical Center—IPT. Conference Rm. B. Info: (323) 409-6856

Friday, Mar. 16
6:30 a.m. Anesthesiology Grand Rounds. “Perioperative Management of the Patient with Pulmonary Hypertension,” Ronald Pearl, Stanford University. MGH 256. Info: (323) 409-6856


8:30 a.m. Surgical Grand Rounds. “Pediatric Gynecology,” Cathy Shun, USC. DOH 1st Floor Auditorium. Info: (323) 442-2145

10 a.m. – 4 p.m. Center for Craniofacial Molecular Biology. Tuoh School of Dentistry and Keck School of Medicine of USC Symposium. “Signaling Mechanism in Regulating Craniofacial Morphogenesis,” Yang Chai and Rob Messen. USC. CSE 250. Info: (323) 442-3170

Neon, Medicine Grand Rounds. “Liver Disease in HIV Disease,” Prebhat Mkerjee, USC. IPT Conference Rm. B. Info: (323) 226-7856

Monday, Mar. 19 - Wednesday, Mar. 21
9:30 a.m. – 5 p.m. USC Stem Cell Core Workshop. “Human Pluripotent Stem Cell Workshop.” Various speakers. BGC Lab 205B. Info: (323) 442-7034

Wednesday, Mar. 21, and Thursday, Mar. 22
7:30 a.m. – 4 p.m. Nurses of USC Critical Care Symposium. Speakers include Carol Jacobson, Karen Mazlin and Cindy Walmsley. CardiacVascular Nursing Education Associates. NIR. Arnesty Auditorium. Registration and Info: (323) 442-8660

Thursday, Mar. 22
Neon, Cellular Homeostasis Lecture Series. “Reticulon 4B (Rog4B): A Novel Regulator of Liver Diseases.” Yumiko Ishii, Yale University. MCH 156. Info: (323) 442-3109

4 p.m. Hematology Grand Rounds. “Transcobalamin I Deficiency: Rethinking a ‘Mystery’ Protein,” Ralph Carmel, Cornell University. WOB 7409. Info: (323) 865-3913

Friday, Mar. 23
8:30 a.m. Surgical Grand Rounds. “Reflections of a Starzl Student: A Progress Report Near the Three Decade Mark,” Ronald Busuttil, UCLA. DOH 1st Floor Auditorium. Info: (323) 442-2145

Friday, Mar. 23

NIH fellowship awarded to doctoral candidate
By Mike McNulty
USC doctoral candidate Sook-Lei Liew was recently awarded a prestigious postdoctoral fellowship at the National Institutes of Health (NIH) National Institute of Neurological Disorders and Stroke (NINDS). Liew is a current Ph.D. candidate in occupational science at the Division of Occupational Science and Occupational Therapy at the Herman Ostrow School of Dentistry of USC. She is a member of the social cognitive neuroscience research laboratory directed by Luis Araz-Zadeh, assistant professor co-appointed to the USC Brain and Creativity Institute and the Division of Occupational Science and Occupational Therapy.

As a USC Ph.D. student, Liew has been exploring the human brain’s ability to understand the actions and intentions of others, and how experience and disease might modulate activity in neural networks. Specifically, she has been studying how different regions of the brain are affected after neurological injury such as stroke, and how they may be engaged through alternative means during post-injury rehabilitation to enhance social and motor abilities. For instance, one promising technique is to have patients with muscle weakness caused by neurological injury to simply observe actions of other people in order to stimulate damaged motor regions.

Beginning in August, Liew will conduct research at the NINDS under the direction of senior investigator Leonardo Cohen. Cohen, a neurologist, uses advanced imaging techniques such as magnetic resonance imaging and positron emission tomography scans to study the mechanisms underlying the human central nervous system’s ability to change as a result of environmental input, known as neuroplasticity. Cohen’s work also explores how these mechanisms might be applied to therapeutic approaches.

Selected as a postdoctoral fellow through the NIH’s Intramural Research Training Award Program, Liew, who also earned her master’s degree in occupational therapy at USC and is a practicing occupational therapist, will research neuroplasticity and motor skill learning in healthy patients, as well as ways of promoting adaptive cortical reorganization in patients who have sustained a stroke or traumatic brain injury.

In case of an emergency...
Call the Emergency Information Phone: (213) 740-1350. The emergency telephone system can handle 1,400 simultaneous calls. It also has a backup system on the East Coast.

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.