Keck School Dean proclaims Match Day 2014 school’s best ever

By Amy E. Hamaker

Voices rose and fell at a fevered pitch around Kathleen Seaton as white envelopes were opened. The Keck School of Medicine of USC fourth-year student took a deep breath and tore open the envelope that would reveal her fate.

Kathleen glanced down and immediately shouted in celebration as she saw she had matched to Stanford — her first choice in residency programs in psychiatry — where she hopes to develop software solutions to treat patients.

Welcome to Match Day 2014, where on March 21 more than 17,000 United States medical school seniors and 16,000 other applicants learned simultaneously where they would spend the next few years of their residencies. A private, not-for-profit corporation, the National Resident Matching Program, provides a uniform date to learn of appointments to graduate medical education positions.

Keck School students and their families and friends gathered in the Harry and Celeste Pappas Quad with their instructors for a buffet breakfast and welcoming remarks from class co-presidents Kristina DeMaster and Jean Sun.

“This one day truly seems to represent the culmination of our dreams, our potential and even our identity in the world,” said Sun. “For us, medical school is defined by the relationships we formed and the experiences we endured together.”

Keck School Dean Carmen A. Puliafito, MD, MBA, led the students in a celebratory toast. “Matching in medicine is not getting any easier — it is, in fact, becoming much, much more difficult. This was the best match in the history of the Keck School of Medicine.”

New leadership structure to strengthen to Keck Medicine of USC

Strong leadership is vital to Keck Medicine of USC’s strategy to become one of the nation’s great academic medical centers and to develop a comprehensive system of acute care and ambulatory centers. To help consolidate leadership across USC’s medical enterprise, Tom Jackiewicz, MPP, senior vice president and CEO of USC Health, recently announced some upcoming personnel and organizational changes.

Jackiewicz has begun the search for three new executive positions:

• A chief operating officer of USC Health to help integrate inpatient care services and health delivery across the organization. “With focused effort, our health system can do things better, less expensively and with greater quality and sophistication than each entity could achieve on its own,” explained Jackiewicz.

• A CEO of USC Physicians and Ambulatory Care, ideally a physician executive who will build the USC Medical Foundation and ambulatory strategies simultaneously. “These functions need to be under the direction of a single executive leader, and must be designed and guided by involved clinicians,” said Jackiewicz.

• A chief financial officer of USC Health to oversee fiscal operations, such as all-fund financial statements, cross-entry funds flow and revenue cycle, of Keck Hospital of USC, USC Norris Cancer Hospital and USC Verdugo Hills Hospital, as well as USC Care. “With our health system revenues now exceeding $1 billion, we also need strong financial oversight in areas that are system focused,” added Jackiewicz.

Leaving USC are Keith Gran, chief executive officer of USC Care, and Bill Gorrenstein, chief financial officer of Keck Medicine of USC. “I want to personally express my appreciation to Keith and Bill for their service over the past few years,” said Jackiewicz. “They were integral to supporting our growth and development as we began the new era of Keck Medicine of USC.”

Jackiewicz also announced transitional changes to the leadership team during the search for the new executive position candidates. Robert Allen, MBA, Keck Medical Center chief financial officer, and Christian Lant, a consultant from Grant Thornton who has previously assisted USC, will oversee financial operations and report directly to Jackiewicz. Additionally, Allen will continue to report to Scott Evans, PharmD, MBA, chief executive officer of USC Norris Cancer Hospital and Keck Hospital of USC, for the financial operations of these two hospitals.

In addition, Jackiewicz plans to hire an experienced health care executive to serve as chief of staff in his office to support the organization during the transition.

“Keck Medicine of USC has never been in a better place,” Jackiewicz said. “Organizational changes such as these require a period of transition, which can be both exciting and challenging. But we are stronger today than ever before in every way — and we look forward to an exciting and successful future.”

USC to host LA Times Festival of Books

As part of multi-year partnership with the Los Angeles Times, USC will host the LA Times Festival of Books at the University Park campus April 12 and 13.

In its fourth year at the USC campus, the Festival of Books will include signings and performances by authors, poets, musicians, USC faculty and students, as well as a host of vendors spread throughout campus.

The Keck Medicine of USC Health and Wellness Pavilion will again have a large presence at the festival. The pavilion will host several health-related screenings, including those for skin cancer, sleep apnea, glucose, BMI, blood pressure and oral health.

More details about the Health and Wellness Pavilion schedule, festival programming, parking and inter-campus shuttle services can be found at http://festivalofbooks2014.usc.edu.

These are the events scheduled for each day of the festival at the pavilion:

Saturday, April 12
10 a.m. - 4 p.m.
Free skin cancer screenings. Appointments are recommended by calling (323) 442-0804, but are not required.

10 a.m. - 6 p.m.
Free screenings: Glucose level, blood pressure, body mass index (BMI), oral health.

See FESTIVAL, page 3
By Amy E. Hamaker
Colon cancer research at USC received a boost from the Southern California-based Dhont Family Foundation, as the foundation renewed its commitment of its $1 million gift to fund Heinz J. Lenz’s research in colorectal cancer at the USC Norris Comprehensive Cancer Center.

Lenz, MD, who is the associate director for clinical research and co-leader of the Gastrointestinal Cancers Program at the USC Norris Comprehensive Cancer Center, has conducted several breakthrough research studies, including:

• Showing that the drug PRI-724 has efficacy for gastrointestinal cancers and leukemia. (Lenz and Michael Kahn, PhD, Provost Professor of Medicine and Pharmacy, were instrumental in developing PRI-724.)
• Identifying novel genetic markers and pathways in colon and gastric cancer to tailor therapies to individual patients and to develop new drugs.
• Leading two major clinical trials using biomarkers to assign therapies, and developing the largest patient-derived explant mouse models to test new drugs.

Lenz attributes his success to receiving needed funding at a critical time. “Without the Dhont Foundation’s support, we wouldn’t have the leading program in colon oncology, and we wouldn’t have the National Institutes of Health funding that we do,” he said. “We perform high-risk, high-impact research, and the foundation’s commitment means that we can immediately act on theories and translate them into experiments.”

Currently, Lenz and his team are researching molecular predictors of tumor recurrence. “We have been successful in identifying DNA variations, but the next step would be to understand the generic makeup of tumors and predict tumor recurrence,” he explained.

“We have been impressed with Dr. Lenz’s research, and are happy to commit to supporting his work to find appropriate therapies and cures for colon cancer,” said Andre Dhont, executive officer of the Dhont Family Foundation.

The Dhont Family Foundation was founded in 1996 and helps fund local projects in Southern California.

**USC researchers test new drug that may aid patients with Lou Gehrig’s disease**

By Alison Trinidad

Keck School of Medicine of USC neuroscientists have unlocked a piece of the puzzle in the fight against Lou Gehrig’s disease, a debilitating neurological disorder that robs people of their motor skills.


“We know that both young and transgenic rodents afflicted with this disease develop spontaneous breakdown of the blood-spinal cord barrier, but how these microscopic lesions affect the development of the disease has been unclear,” said Berislav V. Zlokovic, MD, PhD, the study’s principal investigator and director of the Zilkha Neurogenetic Institute at USC.

“In this study, we show that early motor neuron dysfunction related to the disease in mice is proportional to the degree of damage to the blood-spinal cord barrier and that restoring the integrity of the barrier delays motor neuron degeneration. We are hopeful that we can apply these findings to the corresponding disease mechanism in people,” he said.

In this study, Zlokovic and colleagues found that an experimental drug now being studied in human stroke patients appears to protect the blood-spinal cord barrier’s integrity in mice and delay motor neuron impairment and degeneration.

The drug, an activated protein C analog called 3KIA-APC, was developed by Zlokovic’s start-up biotechnology company, ZZ Biotech.

Lou Gehrig’s disease, also called amyotrophic lateral sclerosis, or ALS, attacks motor neurons, which are cells that control the muscles. The progressive degeneration of the motor neurons in ALS eventually leads to paralysis and difficulty breathing, eating and swallowing.

According to The ALS Association, about 15 people in the United States are diagnosed with ALS every day. It is estimated that as many as 30,000 Americans live with the disease. Most people who develop ALS are between the ages of 40 and 70, with an average age of 55 upon diagnosis. Life expectancy of an ALS patient averages about two to five years from the onset of symptoms. ALS’s causes are not completely understood, and no cure has yet been found. Only one Food and Drug Administration-approved drug called riluzole has been shown to prolong life by two to three months. There are, however, devices and therapies that can manage the symptoms of the disease to help people maintain as much independence as possible and prolong survival.

The international research team included scientists from the Scripps Research Institute, University of Rochester Medical Center, Sichuan University’s West China Hospital, and Ludwig Institute for Cancer Research at the University of California, San Diego. Grants from The ALS Association (1859) and National Institutes of Health (AG039452, AG23084, NS34467, HL031950, HL052246, NS27836) supported their research.
MATCH DAY: Medical students learn their fate in emotional ceremony

Continued from Page 1

According to Donna Elliott, MD, EdD, senior associate dean for student affairs, 157 Keck School students participated in the main match, with nine more students matching early in the military, urology and ophthalmology matches.

Internal medicine had by far the largest number of resident matches, with 37 students; 22 of those students will remain at USC for their training. The number of students matching in other specialties included emergency medicine 17, pediatrics 15, otolaryngology 12, psychiatry 12, general surgery 10, and OB/GYN, family medicine and radiology, each with nine students.

Sarah Russell, who attended USC for her undergraduate, graduate and medical degrees, will stay at USC for radiology and go to Huntington Memorial Hospital for her intern year. “This is very emotional for me and my family because USC is where I’ll do my training for the next five years,” she said. “I want to go into academic medicine in radiology, so I’m really excited to be at an academic institution like USC, where I can teach and do research.”

One hundred fourteen Keck students will complete all or part of their training in California, with 49 of those students staying at Los Angeles County-USC Medical Center. Another 62 students will travel outside of California for at least some of their training to 28 different states and the District of Columbia. New York was the most represented state, other than California, for the fifth year in a row.

Seattle native Tavis Dickerson-Yong will return to his hometown for his residency. “I got my first choice of Seattle Children’s Hospital for pediatrics,” he said. “Match Day is the culmination of everything we’ve worked for over the last four years. It’s very exciting, it’s a lot of fun to see everyone celebrating and finding out where they’re going to be.”

Left: Tavis Dickerson-Yong is heading to Seattle Children’s Hospital to begin his residency in pediatrics. “I want to be involved with medical education, and I’m also really passionate about global health.” Right, medical students and friends (from left) Stephanie Whitman (headed to USC for OB/GYN), Caryn Brenn (headed to CHLA for pediatrics), Rebecca Simon-Freeman (headed to UC Irvine for OB/GYN) and Norianne Pimenteo (headed to CHLA for pediatrics) celebrated together on Match Day. “It’s just so exciting!” said Brenn. “We’ve worked very hard for four years, and it’s great to see our hard work paying off.”

Henti Ford, MD, MHA, vice dean, medical education, agreed. “This is one of the best days of the year — this is what we work for.” A complete match list is available at the Office of Student Affairs.

Study examines stem cell interactions in the body

By Beth Newcomb

A new Ostrow School of Dentistry of USC study not only uncovered new details on how bundles of nerves and arteries interact with stem cells but also showcased revolutionary techniques for following the cells as they function in living animals.

Principal investigator Yang Chai, DSN, PhD, director of the Center for Craniofacial Molecular Biology at the Ostrow School, and research associate Hu Zhao authored the article, which appeared Feb. 6, 2014, in the journal Cell.

The study focused on neurovascular bundles (NVB) — groupings of nerves and blood vessels intertwined throughout the body — and their interactions with mesenchymal stem cells, or MSC. The team specifically examined how the cells operated in the incisors of mice; those teeth continually regrow over a mouse’s lifespan, indicating that stem cells are present.

Typically, MSC are studied in vitro, or harvested from animals and examined outside of their natural environment. However, Chai and his team used a different molecular marker to highlight the cells’ expression of the protein Glit1 and follow MSC in living mice. They discovered that the bundles are rich in stem cells — including MSC that would not have been detected using conventional markers and techniques.

It turns out that this newly uncovered population of MSC helps maintain a normal cellular environment, while stem cells normally detected by the more well-known markers focus on injury repair, Chai said.

“We have basically developed a system in which we can follow MSC in their natural environment and see how they contribute to homeostasis,” he said. The study revealed that the MSC populations within NVB are located around arterioles, or small arteries that branch off to bring blood to tissues. Sensory nerves within the bundles secrete a protein called Shh to regulate the stem cells, demonstrating a practical reason for the bundling of the nerves and blood vessels.

FESTIVAL: Festival events include free health screenings

Continued from Page 1

Talk to a Doc: Free, confidential answers to your health questions

2 p.m. - 3 p.m.

Special appearance by LA Lakers Nick Young

4 p.m. - 6 p.m.

Sports Safety And Injury Prevention: Learn how to protect yourself from common sports injuries

Sunday, April 13

10 a.m. - 2 p.m.

Free sleep apnea screenings

10 a.m. - 4 p.m.

Free skin cancer screenings: Appointments are required at (323) 442-0084, but not required.

10 a.m. - 6 p.m.

Free screenings: Glucose level, blood pressure, body mass index (BMI), oral health

Talk To A Doc: Free, confidential answers to your health questions

2 p.m. - 5 p.m.

Breast Cancer Awareness: Learn how to properly perform a breast self-exam

INSPIRE YOUR FIRE

Get ready for the Festival to dazzle your senses, spark new ideas and light up your imagination. It’s a two-day celebration of music, comedy, photography, film, art, food — and of course, books. But most of all, it will be 100% fun.

Free Admission | USC Campus | latimes.com/FestivalofBooks

April 12 & 13
USC launches master’s program in stem cell biology

By Cristy Lytal

USC is pleased to offer the first master’s program in stem cell biology and regenerative medicine in California.

“The program gives students a unique entry into the rapidly expanding field of stem cell biology in the globally-recognized capital of stem cell science, California,” said Henry Sucov, PhD, director of the master’s program.

Offered by the Department of Stem Cell Biology and Regenerative Medicine at the Keck School of Medicine of USC, the one-year program with an invited second research year will welcome its inaugural class in Fall 2014. Students will enjoy courses in cutting-edge biomedical science, including developmental and stem cell biology, human embryology, regenerative medicine, and the translation and therapeutic aspects of stem cell technology. They will also have the unusual opportunity to engage hands-on laboratory experience with stem cells.

At the conclusion of the program, graduates will have a competitive advantage in applying to medical or PhD programs, entering the growing stem cell pharmaceutical domain, or engaging in other academic, clinical or business efforts. They will possess a unique understanding of how the body’s own developmental and repair mechanisms can restore damaged cells, tissues or organs.

“There are only two other master’s programs in stem cell biology that I am aware of in the U.S., and neither of these take as rounded of an approach to the problem of translating research from the laboratory into the clinic,” said Andy McMahon, PhD, FRS, Director of the Department of Stem Cell Biology and Regenerative Medicine. “I’m particularly excited to bring in the field’s leading practitioners as visiting faculty to share their experience with business, regulatory oversight, clinical trials and the pharmaceutical industry. Our goal is to train our students to become the select group of leaders who will chart the course of the medicine of the future—regenerative medicine.”

USC invites prospective students to submit applications— including transcripts, GRE test scores, a personal statement and two letters of recommendation—at usc.edu/admission/graduate/apply. For more information, visit scm.usc.edu.

Etcetera

At the annual USC Women’s Conference, the university honored Global Medicine Program Director Elahe Nezami, PhD, as the faculty recipient of the 2014 Remarkable Woman Award. The award — bestowed March 6 by the USC Campus Activities Office, Women’s Student Assembly, and the USC Alumni Association — honors those demonstrating endless dedication to USC and those making an impact at the university. Nezami, who is also associate professor of clinical preventive medicine, was nominated for the award by her students.

The American Institute for Medical and Biological Engineering (AIMBE) has announced the induction of Cynthia A. Bir, PhD, research professor of emergency medicine at the Keck School of Medicine, to its College of Fellows.

Bir was nominated, reviewed, and elected by peers and members of the College of Fellows for pioneering accomplishments in the field of injury prevention in weapons and sports biomechanics. The College of Fellows is comprised of the top 2 percent of medical and biological engineers in the United States.

An induction ceremony was held during AIMBE’s 2014 Annual Meeting at the National Academy of Sciences Great Hall in Washington, D.C. on Mar. 24.

In case of an emergency…

Call the Emergency Information Phone: (213) 740-3933. 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.