Report card charts 37 years of cancer diagnoses

By Zen Vuong

Prostate and lung cancer are the No. 1 and 2 cancers among men. Stomach cancer, the third leading cause of cancer deaths worldwide, has been on a steady decline among Koreans and Japanese. Black men have the highest overall rates of cancer. Thyroid cancer — which is relatively treatable — has the highest overall rates of cancer. Thyroid cancer — which is relatively treatable — has

First-years don white coats

By Amanda Busick

It was a hot afternoon Aug. 12, but spirits were high when a procession of first-year Keck School of Medicine of USC students entered an enormous white tent on the Broad Lawn. They were there to receive some words of wisdom from faculty leadership and — for the first time — don the white coats that are emblematic of their new careers in medicine.

“The white coat that you will receive today is a symbol of the oath that you will take to be a physician. It represents an extraordinary privilege and solemn responsibility that comes along with an ability to heal and serve our community,” said Rohit Varma, MD, MPH, interim dean of the Keck School and director of the USC Gayle and Edward Roski Eye Institute.

The white coat ceremony, carried out annually at the beginning of the school year, is celebratory but weighty, an important milestone that signifies the beginning of their medical career. The students, their families and the many faculty and staff members in attendance were welcomed by Varma, PhD, MBA, vice dean for medical education at the Keck School, who spoke of both the challenges and positive outcomes of medicine.

Research funding programs available

Keck School of Medicine of USC Interim Dean Rohit Varma, MD, MPH, has announced two funding programs that support the investigation of new research areas. The Pilot Funding Program targets junior and established investigators interested in launching or transitioning to a new area of research. Proposals are due by Sept. 2. The Bridge Funding Program supports the investigation of new research areas. The Pilot Funding Program targets junior and established investigators interested in launching or transitioning to a new area of research. Proposals are due by Sept. 2. The Bridge Funding Program targets junior and established investigators interested in launching or transitioning to a new area of research. Proposals are due by Sept. 2.

Program invites children to ‘come read with me’

By Meg Aldrich

“Come read with me.”

Those can be some of the most powerful words in the development of any child’s ability to read and write. For children who are deaf or hard-of-hearing and living in bilingual homes, the “come read with me” invitation becomes even more crucial to literacy development.

That’s why the USC Caruso Family Center for Childhood Communication is getting creative in tackling challenges that children with hearing loss face in learning to listen, talk, read and write. Its innovative program — called “Come Read With Me, at USC” — is a three-week summer intervention and grant-funded research project designed to help develop early literacy skills in oral deaf and hard-of-hearing children from bilingual (Spanish-English) homes.

Throughout the program, USC seeks to support everyone involved in a child’s education — the children, their parents and teachers of the deaf and hard-of-hearing and living in bilingual homes.

The results are promising.

During the summer session, children receive daily lessons in shared reading, dialogic reading, writing and awareness of the sounds of speech. They learn concepts of print and word knowledge developed through interactions with peers, parents and teachers.

2 Zika proteins responsible for microcephaly ID’d

By Zen Vuong

Researchers have tracked down two Zika proteins potentially responsible for thousands of microcephaly cases in Brazil and elsewhere — taking one small step toward preventing Zika-infected mothers from birthing babies with abnormally small heads.

The Zika virus contains 10 proteins, but only NS4A and NS4B matter when it comes to microcephaly, according to a USC-led study published in the journal Cell Stem Cell on Aug. 11. These mischievous proteins, researchers discovered, have two shared life goals: to handicap fetal brain formation and to mobilize their malevolent forces.

Researchers said they are the first to examine strains of Zika in second trimester human fetal neural stem cells. Previous studies created tiny neural stem cell organoids from adult origin.

The study, a collaborative effort between the virology and neurobiology disciplines, is also the first to examine Zika virus on the molecular level, said Jae Jung, PhD, assistant professor and chair of the Department of Molecular Microbiology and Immunology at the Keck School of Medicine of USC.

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By Amanda Busick

Building on its reputation as a major player in genomics science, the Keck School of Medicine of USC has established the Center for Genetic Epidemiology under the leadership of Christopher A. Haiman, ScD, professor of preventive medicine. Genetic epidemiology identifies the genetic factors that contribute to disease. The identification of such factors may be used to uncover novel biology and to classify the population based on risk for screening and disease prevention.

“Given our strong history at the Keck School, a major emphasis will continue to be disease, said Haiman, who also holds the AFLAC Chair in Cancer Research. “However, we plan to widen the research to other diseases as well. A major focus will be studying diverse populations that have different risks of developing disease, such as the community surrounding the Keck School.

“Los Angeles is an optimal environment for such a center, given its large, diverse population,” Haiman said.

The center also will concentrate on the establishment of population-based resources as well as the development and application of genomic methods for understanding the genetic basis of disease. Over the next five years, faculty recruitment will take place in concert with the departments of Preventive Medicine and Translational Genetics, as well as the Department of Computational Biology and Bioinformatics in the USC Dornsife College of Letters, Arts, and Sciences, to fill the field that support the Keck School’s initiatives in genetic research, including precision medicine.

Haiman has been a leader in genetic epidemiology research for more than 10 years, serving as principal investigator and co-principal investigator of significant federal grants including projects from the National Institutes of Health and Department of Defense.

His research has contributed to placing the forefront of population-based genetic research and he is currently leading a number of genomics consortia of common cancers in men and women of African ancestry as well as bringing the co-principal investigator of the MultiCohort. The center will be located within the USC Norris Comprehensive Cancer Center.

Haiman’s appointment is the latest in a series of changes at the Keck School of Medicine in recent years. The school has established the Center for Genetic Epidemiology, the Center for the Study of Blood Diseases Grand Rounds, and the Norris Research Tower.

By L. Alexis Young

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The report card project was funded by the Keck School, the Keck Medical Center of USC, and by the A.P. Giannini Foundation 2017 Postdoctoral Research Fellowship Program. The R3 Initiative is a joint university-wide effort to reduce hospital operating costs, increase patient safety, improve quality of care, and continuously improve hospital operations. The competition was orchestrated by the Interprofessional Finance Council and R3 Innovation Challenge Committee, who are planning another innovation challenge to engage employees.

The Keck School of Medicine of USC, the nation’s largest public biomedical graduate medical school, today hosted an R3 Innovation Challenge Appreciation Luncheon to thank more than 100 employees who submitted ideas for the first R3 Innovation Challenge.

Steve Kay to lead USC Michelson Center

By Eddie North-Hage

Steve Kay, PhD, has been appointed to lead the USC Michelson Center for Convergent Bioscience and named the Provost Professor of Neurology, Biomedical Engineering and Biological Sciences. Kay took a leave last year to serve as the president of The Scripps Research Institute.

“We are delighted to have Steve Kay return to USC to lead our efforts in convergent biosciences,” said USC Provost Michael Quick, PhD. “We are poised to become a leader in this field as we bring together faculty and students from across disciplines to tackle the most critical health issues of our time. USC will fast-track the development of devices and therapeutics that will go a long way toward finding solutions to such health and medical issues as cancer, aging and heart disease. The Michelson Center for Convergent Bioscience is an ambitious effort and one that will succeed with the leadership of Steve Kay.”

In this vital new role, Kay will lead the USC Michelson Center in bringing together interdisciplinary teams of researchers from across the university to advance our understanding of human health and accelerate the development of new life-saving biomedical devices and therapeutics.

In addition, he will work with deans and faculty to transform other leading interdisciplinary faculty, develop cutting-edge undergraduate and graduate academic programs. He also will work with the Michelson Advisory Committee and Capital Construction Development to bring to fruition Michelson Hall, a state-of-the-art facility that will serve as the hub for scientific collaboration in the convergent biosciences.

Kay brings a wealth of experience and a vision of advancing biomedical research to tackle the major challenges of the 21st century. Recognized as one of the world’s top experts on circadian rhythms, Kay has published more than 200 papers and has been cited in Science magazine’s “Breakthroughs of the Year” three times since 1997.

“I am thrilled to be returning to USC to lead the Michelson Center for Convergent Bioscience,” Kay said. “By leveraging talent across our broad community in medicine, engineering and the sciences, we are creating a completely new research ecosystem that will position USC to be a leader in the discovery and development of novel therapeutics and diagnostic devices.”

Kay received his PhD from the University of Bristol in the U.K. In 2008, he was elected as a member of the National Academy of Sciences; in 2009 he was elected as a fellow of the American Association for the Advancement of Science; and, in 2010, he was awarded the University of California, San Diego Chancellor’s Associates Faculty Award for Excellence in Research.

Additionally, he was chosen to receive the 2011 Martin Gibbs Medal by the American Society of Plant Biologists as recognition for pioneering work in plant sciences and was also recently recognized as a Thomson Reuters Highly Cited Researcher

Physicians, nurses honored at inaugural patient care awards

By Douglas Marinio

Keck Hospital of USC nurses and physicians were honored recently for their commitment to compassion and exceptional patient care at a special dinner and ceremony marking the inaugural USC Choi Family Awards for Excellence in Patient-Centered Care.

Due to a generous gift that established the Choi Family Excellence in Patient-Centered Care Endowment, awards will be given annually to honor nurses, residents, physicians and non-clinical staff who consistently demonstrate the ideals of patient-centered care, compassion and excellence. All members of the Keck Medicine community are eligible for these prestigious awards.

Recipients of the inaugural Choi Family Awards were: Keck Hospital 5 West ICU; Fernando Fleischman, MD; Lindaka P. Garage, RN; Patricia Nereal, RN; and Raine Shihoko, MD.

Each individual recipient received $2,000, along with an additional $2,000 for the department and the team received $4,000 to be used for programs, training and activities that support and foster the culture of excellence in patient-centered care. Each recipient’s name will appear on a perpetual plaque and be in a place of prominence at Keck Medical Center of USC.

“We are deeply grateful to the Choi family for their commitment to patient-centered care,” said Tom Jackiewicz, MPH, senior vice president and CEO of Keck Medicine of USC. “From surgeons, physicians, nurses and staff, everyone at Keck Medicine of USC understands that a patient’s outcome is deeply influenced by the commitment and communication of our caregivers. We are devoted to making the patient experience beyond exceptional.”

“This ceremony, which was held May 25, was marked by a surprise announcement that the Choi family will be making an additional commitment to the endowment.”

“Our family experienced first-hand what this institution stands for — respect, compassion, integrity and professionalism,” said Henry Choi, a USC alumnus.

In addition to the USC Choi Family Awards for Excellence in Patient-Centered Care, The USC Choi Family Patient-Centered Care Endowment also has established the USC Choi Family Patient-Centered Care Symposium and the USC Choi Family Patient-Centered Care Program.

The Choi family chose to support the Keck Medical Center Patient Experience Department after a family member received exceptional care from Keck Hospital nurses and physicians, including the recipients of the inaugural award.

“My team and I are very grateful to the Choi family for this endowment,” said Char Ryan, patient experience and employee engagement officer at Keck Medicine.

READ: Children more engaged in reading, writing at home and increase conversations

Continued from page 1

Parents say their children are more engaged in both reading and writing at home. After a three-week session, youngsters demonstrated increased conversational turn-taking during reading activities and more purposeful interaction during writing activities.

Parents receive 12 hours of group instruction on how to develop their children’s reading and writing at home. With this knowledge, they start viewing themselves as change agents who can actively help their children gain literacy skills. They share their new usually digest and kills pathogens; however, when a family of viruses called flaviviruses (dengue, hepatitis C and Zika) infects a cell, autophagy helps the virus proliferate.

In short, Zika NS4A and NS4B proteins stunt brain development and prod autophagy to mushroom so that the virus could spread. When these two key proteins hijacked fetal neural stem cells, the size of brain organoids were, on average, halved, according to the study.

The research was supported by the Hastings Foundation, Fletcher Jones Foundation, Global Research Lab Program, National Research Foundation of Korea, Alzheimer’s Association and Cure for Alzheimer’s Fund. Lead author Qiming Liang, PhD, is a special fellow of the Leukemia & Lymphoma Society and is supported by the Shanghai Institutions of Higher Learning.

Teacher Ann Franklin leads a shared reading exercise as part of the innovative “Come Read With Me at USC” program.
Hematologist wins award from National Cancer Institute

THE NATIONAL CANCER INSTITUTE (NCI) has named Kevin Kelly, MD, PhD, associate professor of clinical medicine in the Jane Anne Nohl Division of Hematology and Center for the Study of Blood Diseases, one of 13 recipients of the 2016 Cancer Clinical Investigator Team Award (CCTA). The award recognizes and supports outstanding mid-career clinical investigators at NCI-designated cancer centers extensively involved in NCI-funded collaborative clinical trials. “This award will allow me to enhance the clinical trials infrastructure at USC Norris, as well as develop novel therapies, particularly for patients with blood cancers,” Kelly said. “It is an honor and a privilege to not only be recognized by the NCI, but also to receive the necessary support to continue the fight against cancer.” — Mary Dacuma

Multiple sclerosis awareness short film project recognized

LILYANA AMEZCUA, MD, assistant professor of clinical neurology at the Keck School of Medicine of USC, and her colleagues recently won an award at the 2016 Annual Conference of Multiple Sclerosis Centers for a platform presentation of their short film project. Dento is a short film featuring Hispanic patients and their personal narratives of multiple sclerosis (MS). The short film, which aims to raise MS awareness and foster cultural sensitivity, was recognized in the Platform category for “Best in Patient and Family Care.” Amezcua also was featured in an article in Momentum Magazine that discusses her training and research interests, particularly focusing on her work with Latinos with MS. — L. Alexis Young

Researcher wins NIH Pathway to Independence Award

YEARS AGO, LINDSEY BARSKE, PhD, pulled on a pair of tall rubber boots and began a journey that led from her college research experience on the muddy Alaskan tundra to her current postdoctoral studies in the USC Stem Cell Lab of Gage Crump, PhD. Now, she’s arrived at a key turning point, having been chosen, as her first project, to improve the experience of patients and families in the emergency department. The USC Care Ambulatory Services is focusing on improving the environment for patient portal. Council members commit two hours each month to help develop programs and policies that are relevant to our patient and family needs, promote advocacy and involvement, and volunteer as PFAC advisors for meetings and process improvement projects. For more information or to apply for membership, email PFAC@pimed.usc.edu. — L. Alexis Young

Meet the Faculty: Eric Chang, MD

ERIC CHANG, MD, professor and chairman of the Department of Radiation Oncology for the Keck School of Medicine of USC and medical director of radiation oncology services at USC Norris Comprehensive Cancer Center, helped pioneer the use of Gamma Knife technology to treat brain tumors. When he isn’t saving lives with advanced radiation treatment, you can find him happily racing down Eastlake Avenue on his URB-E, a foldable electric scooter that is convenient, environmentally friendly and exceptionally fun. “Not only is this a fun and efficient way to get from meeting to meeting, but I get lots of smiles and thumbs up when people see me riding my URB-E,” Chang said. “That’s definitely the part I enjoy most — making people happy.”

Pharmacy students don white coats

By Michele Keller

TAKING their first steps in the journey to become doctors of pharmacy, the 188 members of the Class of 2020 stood in front of the annual USC School of Pharmacy White Coat Ceremony on the Harry and Celeste Pappas Quad. The first-year pharmacy students, along with their family members and friends, were welcomed Aug. 19 by Interim Dean Glen L. Stimmel, PharmD, who informed them they were joining the profession at an important time when the scope of practice is expanding, putting pharmacists at the forefront of patient care. “We welcome you into a profession that will give you broad opportunity,” Stimmel said. “Today it’s white coats, in May 2020 it’ll be caps and gowns. You will be the best educated professionals we have ever graduated.” Stimmel also introduced incoming Dean Vassilios Papadopoulos, PharmD, PhD, who officially began his appointment at the USC School of Pharmacy on Oct. 1. Papadopoulos challenged the students to think beyond their degree and focus on finding ways they, as future medication-based experts, can innovate and improve the delivery of health care. “We need to continue to transform and change,” Papadopoulos said.

The keynote speaker for the ceremony was Susie H. Park, PharmD, associate professor of clinical pharmacy, who reflected on her own experience donning a white coat for the first time two decades ago, as a first-year USC pharmacy student in 1996. “You can never count down your days of learning,” said Park, encouraging students to pause and enjoy the moment. “As my father once told me, ‘You’re never done taking tests.’ You’ll learn that you’re never done with education that is as invaluable as time, so make the most of your time.”

The Class of 2020 collectively called each student to the stage to be officially coated, culminating with the administration of the “Oath of a Pharmacist,” led by Tien M.H. Ng, PharmD, associate professor of clinical pharmacy.