Rohit Varma installed as medical school dean

By Douglas Morino

Rohit Varma, MD, MPH, the noted physician and scientist recognized across the globe as a visionary leader in the epidemiology of eye diseases, has been formally installed as dean of the Keck School of Medicine of USC and the May S. and John Hooval Dean’s Chair in Medicine. Varma was honored by a standing-room-only crowd of USC officials, staff, faculty and students during a Jan. 25 ceremony on the Health Sciences Campus. He was announced as dean of the Keck School in November, after serving as interim dean of the school since March. USC President C. L. Max Nikias, PhD, called Varma’s appointment as dean a “transformative milestone” for the university and medical school. “Dean Varma will accelerate us into the future,” Nikias said. “Healing, passion and hope — these words speak to the character of our new dean. His journey to today’s celebration is the result of dedication, determination and a heart that can teach us all about compassion.” Varma, who was joined at the ceremony by his family, said he will focus on strengthening a spirit of collaboration, creativity, compassion and community among faculty, students and staff. “There is a sense of real optimism that all of us are on the

Employee of the year: We are advocates

By Douglas Morino

Thank you cards hang on a bulletin board above Gloria Jimenez’ workstation inside the USC Norris Comprehensive Cancer Center. “You provide me hope of a longer future with my family,” reads one. “Many thanks.” The handwritten cards, from grateful patients and family members, serve as a reminder for the important work Jimenez and her colleagues do each day to ensure patients have access to the medications they need. “We are advocates for our patients,” said Jimenez, the Keck Medical Center of USC 2016 Employee of the Year and a pharmacy

Keck School NIH funding ranking rises

By Cynthia Smith

The Keck School of Medicine of USC recently received the school’s highest ranking in National Institutes of Health (NIH) funding since the Blue Ridge Institute for Medical Research began its annual ranking of medical schools in 2006. The rankings represent total NIH funding granted from Oct. 1, 2015, through Sept. 30, 2016, with the Keck School receiving more than $140.8 million in NIH grants during this time.

‘State of the Cancer Center’ presentation points to growth, promising discoveries

By Mary Dacuma

The USC Norris Comprehensive Cancer Center had an outstanding 2016, as reported by Stephen Grobler, MD, PhD, MPH, director of the USC Norris Comprehensive Cancer Center, in his annual “State of the Cancer Center” presentation on Jan. 17. “The cancer center is flourishing,” said Grobler, professor of medicine and H. Leslie Hoffman and Elaine S. Hoffman Chair in Cancer Research at the Keck School of Medicine of USC. “We are growing in faculty, we are growing in publications and we are growing in grants. Most importantly, our science is exceptional.” Funding for USC Norris grew significantly over the past year, from $85.6 million in funding, including $31 million from the National Cancer Institute (NCI), in 2015 to $104 million in funding, including $33 million from the NCI, in 2016. The center finished 2016 with a healthy financial operating margin. The increase in funding is tied to the growth and excellence of USC Norris’ faculty. USC Norris now represents 224 faculty members across eight schools within the university, up 3 percent from 2015. Over the past year, these members authored 945 publications, up 29 percent from 2015 and a record number for USC Norris. Of these publications, 31 percent are a result of
In Memoriam: John Davis, founder of Med-COR program

By Hope Hamashige

John Albert Davis, PhD, former assistant professor of medical education at the Keck School of Medicine of USC, died on Jan. 13. He was 82.

Davis left a lasting mark on the Keck School and the lives of thousands of young people by establishing a nationally recognized program designed to boost the number of minorities in the biomedical sciences, called Med-COR.

Davis joined the Keck School in 1968 as a research associate with responsibility for recruiting and counseling minority students. Med-COR grew out of a realization that diversifying medical schools required an effort to reach students before college, improve their skills and introduce them to careers in health care.

Initially, 15 students from four inner city Los Angeles Unified School District high schools joined the program, spending Saturdays at the Keck School for tutoring in core skills — math, science and English — that would help them get into college. Davis kicked off each Saturday gathering with words of encouragement for the students or a short discussion about a topic he thought might help them in the future, such as professionalism in the workplace.

David’s son Keith said that Med-COR held a special place in his father’s heart. “Med-COR was a big part of our family,” Keith Davis said.

Their father spent nearly every Saturday at Med-COR gatherings from 1969 until 2011. In the early years, his wife, Judith, was assistant director and the couple brought their three children to every Med-COR event, including all the Saturday sessions.

Davis’ commitment to diversifying institutions of higher education was born of his own experience as a UC student in the 1960s and his involvement in civil rights organizations that connected the underrepresentation of minority students on campus to the underrepresentation of minorities in many professions, including medicine.

“He was an influential figure in expanding the reach of the Keck School of Medicine into the surrounding communities,” said Rohit Varma, MD, MPH, dean of the Keck School and director of the USC Gayle and Edward Roski Eye Institute. “The effects of his forward-thinking Med-COR program continue to be felt today, as dozens of underrepresented students flourish in college, medical school and beyond.

John Davis is survived by his wife, Marie Davis, who he married after his first wife, Judith, passed away. Three children — Gregory Davis, Deanna Sweeney and Keith Davis — and eight grandchildren also survive him.

INSTALLATION: Varma’s research focuses on minority populations

Continued from page 1

“There is a sense of real optimism that all of us are on the precipice of something amazing.” — Rohit Varma, USC to change the world,

Varma said. “I am extraordinarily grateful to be a part of the incredibly supportive community we enjoy at Keck Medicine and, more broadly, across the university. It’s this environment that will be a foundation for our next wave of great accomplishments.”

Varma also touched on the transformative work being done by Keck School faculty and said that physicians must ensure their work embodies compassion.

“The human touch and strong connections with our patients can never be automated,” Varma said. “We must ensure that our medical education instills compassion, empathy and understanding in the physicians of tomorrow, so that the human connections remain at the center of healing.”

In addition to his role as dean of the Keck School of Medicine, Varma serves as director of the USC Gayle and Edward Roski Eye Institute and holds the Grace and Emery Beardsley Chair in Ophthalmology. For the past 50 years, he has been one of the leading recipients of research funding from the National Institutes of Health.

“...as we have found in other areas of health from Johns Hopkins University, has spent much of his career focusing on minority populations. His primary research focuses on epidemiologic studies of eye disease in children and aging populations. He also has been a principal investigator of eye studies focusing on Latino, Chinese-American and African-American populations.

‘He is driven by an energy unknown to most people,” Nikias said. “By focusing on biomedical research interests that are all too often ignored, Dr. Varma has cemented his reputation as a trailblazer.”

Varma joined the USC faculty in 1993, obtaining a professorship in 2003 with appointments in ophthalmology and preventative medicine. He is the 21st dean of the Keck School, the oldest medical school in Southern California. Varma said he envisions new, strong partnerships being created between the medical school and the university’s other professional schools.

‘I have an enduring belief in the power and potential of...”

Notice: Calendar items are due at least 10 days before publication date. Timely submission does not guarantee publication in print. See more calendar entries at hscnews.usc.edu/calendar-of-events. Submit items at tinyurl.com/calendar-hsc. Include day, date, time, title of talk, first and last name of speaker, affiliation of speaker, location and a phone number/email address.

Calendar of Events
Friday, Jan. 27
11 a.m. Jane Anne Nohl Director of Hematology and Center for the Study of Blood Diseases Grand Rounds: Integrating Somatic Mutations Into the Clinical Care of Patients with MDSC. Rafael Raje, MD, PhD, UC San Diego LAC-USC Medical Center Instructor Tower Conference Room A Info: Carolyn Castellanos, (323) 865-6193, carenn.res_off@med.usc.edu Friday-Saturday, Jan. 27-28
Saturday, Feb. 4
9 a.m.-5 p.m. USC-IGM Art Gallery Seminars: “To Lead is to Serve — 3 Hour Fundraising Seminar.” USC IGM Art Gallery Info and RSVP: Lynn Crandall, lynncrandall@gmail.com, http://bit.ly/2Nv5z. Please register online.
Thursday, Feb. 9
Tuesday, Feb. 14
7:30 a.m. USC “State of the University Address.” President C. L. Max Nikias.
Auditorium. Info: iusc.edu/erp, Code: HSC17, (213) 740-­‐7474
Wednesday, Feb. 15
Noon. The Sahn Research Institute Seminar: “Cardiovascular Development and Regeneration.” Zebrafish, Neonatal Mouse and Beyond.” Chang-Ling (Ellen) Lien, PhD, Sahn Research Building Auditorium, 4661 Sunset Blvd. Info and RSVP: chli@usc.edu http://cll.usc.edu/tpregal
Thursday, Feb. 16
5 p.m. USC Women in Management. “WIM Puca Tea at HSC.” Norris Medical Library West Conference Room. Info and RSVP: http://uwim.ucsc.edu calendar.asp. WIM members free; non-members $10.

“...as we have found in other areas of health...”

By Steve Cohn

RIBBON-CUTTING: Janice and Bob Hall recently joined Anthony El-Khoueiry, MD, associate professor of medical education at the Keck School of Medicine of USC, to mark the opening of the Jane and Robert Hall Clinical Trials Bexiscope Laboratory at the USC Norris Comprehensive Cancer Center. The laboratory is a result of a generous donation from Hall, one of El-Khoueiry’s former patients, and her fundraising efforts.

JANUARY 27 • 2017
By Hope Hamashige

By Hope Hamashige
Wisdom can increase with age, but healing power does not. USC Stem Cell scientist Joseph T. Rodgers, PhD, is exploring the biology behind this fact, thanks to a grant from the American Federation for Aging Research (AFAR).

The grants provide $100,000 of flexible support to early-career researchers focusing on aging processes and age-related diseases. Since 1981, AFAR, which is a national nonprofit organization, has awarded more than 700 of these awards to junior faculty at the critical juncture in their career development when research funding is most difficult to obtain.

“AFAR has been a cornerstone of aging research,” said Rodgers, assistant professor of stem cell biology and regenerative medicine at the Keck School of Medicine of USC. “This generous funding is a critical juncture in many scientists’ careers. It’s a way to help young investigators get access to early training and support at a crucial time in their development when grant writing is a new skill to master.”

AFAR grants are available to junior faculty members and support a wide variety of work, from developing new models and methods to investigating new questions in existing fields.

Rodgers is using his AFAR grant to study neural stem cells that are responsible for hair growth. By developing strategies to stimulate these cells, he hopes to find ways to reverse the deadening of hair seen in some age-related conditions. His work could have implications for other age-related conditions that involve hair loss, such as alopecia areata.

The grant is the latest recognition of Rodgers’ promising research. He was recently named a 2023 Emerging Investigator by the American Society for Dermatologic Surgery and a 2023 Rising Star of Stem Cell Research by the California Institute for Regenerative Medicine. Rodgers is also a member of the American Society for Cell Biology and the American Association for the Advancement of Science.

Continued from page 1

The study, titled “TESLA-Stroke: Transcutaneous Electrical Stimulation for Improving Ambulation in Stroke,” builds upon a promising treatment modality called neuromuscular stimulation. It is a treatment during which electrical or magnetic stimulation is applied outside the body to treat problems ranging from spinal cord injury and incontinence to depression.

Finley’s research uses the treatment in a different way to treat stroke survivors, applying external electrical stimulation directly to the spine instead of the brain where it is most often used.

“We are going to learn,” Finley said. “We don’t want to ignore the role of the spinal cord, particularly as it pertains to walking,” Finley said.

If Finley’s proof-of-concept study is successful, it could offer physical therapists a promising new treatment to get survivors of stroke back on their feet.

Finley and his team are addressing the Centers for the Disease Control, more than 795,000 people have a stroke in the United States each year, one every 40 seconds — with more than 600,000 surviving.

Stroke is also the leading cause of serious long-term disability. Finley’s study pairs the stroke rehabilitation expertise of Division of Biomedical Engineering and Physical Therapy with spinal cord injury expertise from the Edgerton Neuromuscular Research Laboratory. The lab, part of the University of California, Los Angeles, is led by V. Reggie Edgerton, PhD, who has been studying spinal cord injury for more than 40 years.

Edgerton and his team have used electrical stimulation to treat patients with spinal cord injury. They have published a number of studies that demonstrate significant changes in lower extremity function as a result of coordinated electrical stimulation, Finley said.

“We hope to be able to use electrical stimulation the same way in stroke survivors, to actually show short-term improvements in walking function or even control of the legs,” he added.

The study will be conducted in multiple centers, with researchers focusing on asymmetry, determining which segments of the spinal cord were stimulated, and impact which muscle activity patterns in each leg.

Saleh and his team hopes to find optimal stimulation locations and combinations to help improve lower extremity function.

“If we could, for some subset of patients, find a way to improve their walking function beyond what is currently possible with standard techniques, we could imagine this becoming an actual intervention,” Finley explained.
Study uses social media to track hookah use

By Larissa Puro

Social media is giving researchers insight into the rising use of hookah, according to a study from the Keck School of Medicine of USC.

Hookah, smoked through a water pipe and also known as shisha, has harmful health effects similar to cigarettes. But as cigarette use declined between 2005 and 2015 in the United States, hookah use increased.

Investigators analyzed Instagram to capture and document the social and environmental context in which individuals use, are marketed, hookah-related products.

“By focusing on social media data, we can quickly discover emerging problems posed to public health, directly observing what the public is experiencing, doing and thinking at a real-time moment,” said postdoctoral fellow Jon-Patrick Allen, PhD, who led the study with research scientist Kar-Hai Chu, PhD.

The study, published Jan. 11 in Nicotine & Tobacco Research, describes how the researchers analyzed posts on Instagram between Feb. 19 and May 19, 2016, by combining the hashtag #hookah with a geolocation inside the continental U.S.

Their analysis of more than 5,000 posts determined overarching themes within the images. More than a third were promotional material for hookah lounges, restaurants, bars and nightclubs, while a quarter depicted people lounging and using a hookah. Other themes included photos of a person blowing smoke or of stylized pipes.

Hookah promotions on social media were not surprising, said Jennifer Unger, PhD, professor of preventive medicine and co-author of the study. However, a third of the images showcased or referenced alcohol, suggesting nightlife environment regularly depicts and promotes using multiple substances — “a clear justification for a public health response.”

“Instagram’s focus on images also facilitates picture-based advertising where using a hookah lounges promote drink specials at the same time nightlights promote hookah specials,” Chu said. “Our findings could be of great importance to public health. Tobacco use facilitates greater intake of alcohol and vice versa.”

Hookah is smoked through a water pipe.

HSC News

HSC News is published for the faculty, staff, students, volunteers and visitors in the University of Southern California's Health Sciences Campus community. It is produced by Keck Medicine of USC Marketing and Communications staff. Permission to reprint articles is available upon request. No artwork may be reproduced without the creator’s consent.

Editor: Melissa Macatani

Director, Internal Communications: Virginia Bacca

Next Issue: February 10

Hookah is smoked through a water pipe.