Panama summit stokes vision of health equity in the Americas

By Larissa Puro

From the northern tip of Alaska to the northern coast of Chile, the Americas host some of the most diverse — and disparate — populations in the world. However, despite progress in medicine and economic development, health inequalities prevail, leading to avoidable premature illness and death among millions of disadvantaged people.

With a goal of reducing disparities, researchers, policymakers and civil society members spanning 13 countries gathered in Panama Oct. 7-9 for a landmark meeting. The objective: to form partnerships and promote future research and training collaborations to further health equity — people’s attainment of their highest attainable levels of health, regardless of who they are and whatever their circumstances may be.

“We live in a time of transformation in the Americas,” said Lourdes Baizconde–Garbanati, PhD, MPH, director of the new Center for Health Equity in the Americas (CenHealth) and professor of preventive medicine at the Keck School of Medicine of USC, which organized the conference. “Coming together to share our vision ensures that we unify efforts on behalf of health equity in some of the most vulnerable populations in the Western hemisphere.”

According to a World Health Organization report on cancer in vulnerable populations in the Western hemisphere, “lifestyle” cancers — like stomach and cervical cancers — whereas more affluent nations, such as Argentina and Brazil, experience higher incidences of so-called “lifestyle” cancers — like prostate and breast cancer.

“The summit, ‘Promoting Health Equity and Transnational Partnerships in Cancer Prevention and Control in the Americas,’ presented a unique opportunity to strengthen the bonds among partners and expand reach across 13 nations in Latin America, Canada and the United States, Baizconde–Garbanati said.

“USC is uniquely positioned, both culturally and geographically, to lead this initiative,” said Rohit Varma, MD, MPH, interim dean of the Keck School and director of the USC Gayle and Edward Roski Eye Institute.

Keck Medical Center is cleaning house

By Virginia Baca

From Nov. 4-8, Keck Medical Center will conduct Klean Keck, a five-day fall cleaning event.

During this period, hospital leadership and staff will work side-by-side to get rid of clutter and expired items in the hospital and clinics. This will further enable Keck Medical Center to continue delivery of quality, safe and patient-centric care, while engaging staff and improving teamwork and collaboration. This also will be an opportunity to do a deep clean of the house and take care of facilities issues.

While keeping the work place in great shape is a daily priority, Klean Keck will maximize the effectiveness of these efforts. Facilities and environmental services will increase their support to address immediate repair and cleaning needs in a timely manner. A central location will be set up to collect extra inventory items to be used by other departments or donated. The five days of Klean Keck also will include prizes to celebrate the most engaged teams.

“Our environment of care is a key contributor to our reputation and is perceived by many as a reflection of our quality,” said Rod Hansen, CEO of Klean Keck Medical of USC and CEO of Keck Medical Center. “Our goal for Klean Keck is to create a safer and more welcoming environment for our patients and their families.”

Open enrollment is coming

Open enrollment starts Monday, Nov. 7 and will end Sunday, Nov. 20. Benefits fairs will be held the following days and locations:

Oct. 26 USC Verdugo Hills Hospital
Nov. 9 Health Sciences Campus
Nov. 10 University Park Campus

For more information, visit the employee gateway at https://employees.usc.edu.

By Zen Vuong

The USC Laboratory of Neuro Imaging of the USC Mark and Mary Stevens Neuroimaging and Informatics Institute has received a $21.7 million National Institutes of Health grant to study epilepsy, a condition that currently is incurable.

Arthur Toga, PhD, Provost Professor of Ophthalmology and director of the USC Mark and Mary Stevens Neuroimaging and Informatics Institute, is the study’s contact principal investigator. The grant will support a project titled the Epilepsy Bioinformatics Study for Antiepileptogenic Therapy and a team of international researchers working to identify both a cure for epilepsy and treatments to prevent it from developing. Researchers will identify biomarkers associated with the development of epilepsy and possibly discover therapies to prevent epilepsy.

Deadline nears for receiving mandatory flu vaccine

By Douglas Marino

With flu season approaching, Keck Medicine of USC physicians, nurses and staff are being reminded that flu vaccinations are an important step toward protecting patients.

All Keck Medicine health care workers are required to receive a flu vaccine before Nov. 1.

That flu is a contagious respiratory illness that, in serious cases, can result in hospitalization or death.

An annual flu vaccination is the best way to prevent the flu. The Centers for Disease Control and Prevention estimates that as many as 3,300 die each year from the flu.

Transmission of the flu virus can occur even before the illness is evident, said Stephanie Hall, MD, chief medical officer, Keck Medicine of USC.

“Protecting our patients against exposure is an important part of care delivery,” Hall said. “One way to do this is to get vaccinated to reduce the risk of unintended exposure and transmission of the flu virus.”

A flu vaccination is not only a requirement of Keck Medicine: the Los Angeles County Department of Public Health mandates that health care personnel in acute care hospitals, long-term care facilities and intermediate care facilities in Los Angeles County be vaccinated against influenza or wear a protective mask.

Flu vaccine available

Flu vaccines will be available to all faculty, nurses and Keck Medicine of USC staff at Employee Health Services, Monday through Friday from 7:45 a.m. to 4 p.m. and the Evaluation & Treatment Clinic, Monday through Friday from 4 p.m. to 7:45 a.m., weekends and holidays.

Preservative-free and egg-free vaccines are available on request. Flu season stretches to March 31.

$21.7 million NIH grant to fund study of epilepsy

By Zen Vuong

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Young cancer patients get new virtual reality program

By Mary Dacuma

The USC Norris Comprehensive Cancer Center has teamed with a nonprofit on a virtual reality (VR) initiative for patients in the Adolescent and Young Adult Cancer program at USC (AYA@USC). “The Virtual Reality Patient Initiative will provide an important emotional benefit to our patients that cannot be achieved through medicine alone,” said Fariborz Haj-Ali, PhD, assistant director, Campaign of the USC Norris Comprehensive Cancer Center, and co-director of AYA@USC.

Research has demonstrated the benefit of VR technology for a variety of medical, psychological and educational challenges, including reducing side effects and fatigue in cancer patients undergoing chemotherapy treatments. Cancer patients with access to VR experiences had improved emotional well-being and fewer negative psychological symptoms.

“As a parent of a cancer survivor, I am extremely excited to be partnering with the USC Norris Comprehensive Cancer Center and School of Medicine on this groundbreaking program,” said Steven-Charles Afflalo, chief operating officer of Springbrook Entertainment. “Having lived with a child who was a patient during her battle with cancer, I personally know there is a void in a healthy escape for entertainment for patients that this program will fulfill. VR technology’s ability to virtually transport a patient out of the confinement of a hospital bed or chemotherapy session is not only beneficial, but critical for a patient’s experience.”

AYA cancers represent all cancer types in individuals who are between 15 and 39 years old. In the United States, cancer is the leading disease-related cause of death for AYA patients. More than 70,000 people in this age group are diagnosed with cancer each year, including more than 4,000 in the Los Angeles area.

“We are looking to replace a few of the strategies that we have centered around the environment such as strength training, stretching and movement practice, it was discovered recently that these strategies may not lead to long-term motor learning by themselves,”explained John Hobbs, assistant professor, director, and movement practice, it was discovered recently that these strategies may not lead to long-term motor learning by themselves,“they have a motor learning perspective, we now know that learning and long-term retention are optimized when the patients have a focus on the movement’s effect on the environment such as ‘step over the obstacle’ rather than on performing the movement itself—‘Flex your hip!’”

The proposed VR-based system will allow patients to experience and practice challenging movements, like negotiating obstacles, walking through crowds, dealing with obstacles, or negotiating obstacles, while reducing fear of falling and maintaining balance. The program, which will be available to everyone for one year, $450,000 grant from the National Institutes of Health to develop and test a virtual reality-based program for walking rehabilitation in patients with Parkinson’s disease. Symptoms such as resting tremor, shaking and balance problems can cause people with the degenerative brain disorder to have difficulty walking. While traditional physical therapies have centered around strength training, stretching and movement practice, it was discovered recently that these strategies may not lead to long-term motor learning by themselves.

Grant to fund virtual walking therapy study

By John Hobbs

A trip to the physical therapist could soon feel a bit more like a trip to the arcade, thanks to a new multidisciplinary study being conducted at USC. James Finley, PhD, and Beth Fisher, PhD, MS, of the USC Division of Biokinesiology and Physical Therapy and Maricentina Gotsis, MFA, of the USC School of Cinematic Arts recently received a two-year, $450,000 grant from the National Institutes of Health to develop and test a virtual reality-based program for walking rehabilitation in patients with Parkinson’s disease.

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SUMMIT: Gathering a chance to improve care

The increasing globalization of our society brings both challenges and opportunities for health care worldwide. By bringing together visionary leaders for this summit and future endeavors, CenHealth is making important progress toward worldwide access to lifesaving treatments, medications and preventive care. Attendees included more than 60 representatives from 38 organizations, such as ministries of health, Centers for Disease Control, National Alliance for Hispanic Health, Healthy Americas Foundation, CenHealth, University of South Florida Foundation, and the Pan American Health Organization at the Pan American Health Organization, among others.

From USC, 11 faculty represented the Department of Preventive Medicine and the USC Norris Comprehensive Cancer Center, which supports the efforts of CenHealth. Funded by the Keck School of Medicine Dean’s Office, CenHealth began in 2015 and operates out of USC’s Institute for Health Promotion and Disease Prevention Research, in the Department of Preventive Medicine. The center fosters and facilitates research, training and partnerships to advance health equity in the Americas.

VACCINE

The goal of the order is to lower the rate of transmission of influenza among health care personnel and the vulnerable populations that they serve.

To accommodate Keck Medicine physicians, nurses and staff who have a documented allergy to the flu vaccine, history of Guillain-Barre Syndrome, or who may have religious beliefs that precludes them from accepting the vaccine. Wearing a mask will be permitted during the flu season wherever inside a Keck Medicine building or within the vicinity of a patient. Employees must sign the Employee Health Declaration form, that provides reasons and support for the declination.

Epilepsy, seizure disorders affect 5.1 million people in the U.S., are unpredictable times and can vary greatly in severity. Most epilepsy is acquired — it develops as a result of a traumatic brain injury. Being a good neighbor begins with you.

What role does technology play in the effort to cure diseases of the brain?

AT: This grant will also bridge the gap between the epilepsy community and centers for traumatic brain injuries. Resources will be created to educate patients and their families about the importance of research on how the brain develops epilepsy. Scientists will have the opportunity to learn about the most pressing research needs and concerns patients and their families have. An important goal is to encourage individuals to participate in clinical studies on this topic.

Q: Do health care personnel have the opportunity to participate in clinical studies on this topic?

AT: Yes, health care personnel can participate in clinical studies on this topic.

Q: What is noteworthy about this study?

AT: This study calls on interdisciplinary experts around the world to work together to attack a problem of paramount importance. Epilepsy, like Alzheimer’s disease, Parkinson’s disease, multiple sclerosis and autism, is a disorder affecting the human brain. Understanding the brain in all its complexity is impossible for any group to accomplish in isolation. Large-scale collaborative efforts like the one we’re undertaking are the only hope we have for unlocking the secrets of brain function and eventually curing diseases of the brain.

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New training course offered for aspiring ophthalmic technicians

By L. Alexis Young

The USC Gayle and Edward Roski Eye Institute has established the Ophthalmic Technician Education Program (OTEP) to prepare highly skilled allied health care professionals to serve the eye care needs of individuals of all ages. The 21-month program, one of only 14 programs nationally, is the only one in California that prepares individuals to become Certified Ophthalmic Technicians (COT).

OTEP is a non-degree, certificate-educator training program that integrates core academic knowledge with clinical and occupational skill mastery. Course content ranges from the basics of history taking, patient safety, ethics, eye and visual system anatomy, physiology, and pathology and patient care in specialty areas including: lensometry, refractometry, optical imaging, slit lamp microscopy, ophthalmic imaging and surgical assisting.

OTEP provides practical professional and technical skills through weekly clinical rotations at the USC Roski Eye Institute, LAC+USC Medical Center and Children’s Hospital Los Angeles.

Joseph Ciccozza, second from left, is leading the establishment of an ophthalmic technician training program at the USC Gayle and Edward Roski Eye Institute. Pictured with him are Ray Yamamoto, left, Ryan Imagery, second from right, and Liz Capati, right.

This supervised real-world experience prepares graduates to assist ophthalmologists in the prevention, detection, and treatment of vision impairments in a variety of settings including private practice offices, hospitals and community based clinics. A career as an ophthalmic technician offers the opportunity for professional advancement. Ophthalmic technicians may seek additional certification in subspecialty areas including Optometric Assistant, Surgical Assisting Certification (OSA), Ophthalmic Scribe Certification (OSC), Registered Ophthalmic Ultrasound Biomimic (ROUB), Certified Diagnostic OphthalmicSonographer (CDOS) and Corporate Certified Ophthalmic Assistant (C COA).

Classes for OTEP begin Jan. 9, 2017, and applications to the program are accepted on a rolling basis. Potential candidates for the program range from recent high school graduates to veterans interested in an allied health career. Financial aid through federal and private institutions is available to qualified students.

For more information about OTEP, including application materials, can be found at http://eye.keckmedicine.org/otep/. Interested individuals also may email questions to resttep@usceye.org.

Psychiatry chair welcomed to campus at reception

Leaders from Keck Medicine of USC and the Keck School of Medicine of USC were on hand Sept. 14 to formally welcome Steven Siegel, MD, PhD, as chair of the Department of Psychiatry and the Behavioral Sciences. At a reception held in the Eli and Edythe Broad CIRM Center Auditorium, Tom Jackiewicz, MD, MPH, senior vice president and CEO of Keck Medicine of USC, and Rohit Varma, MD, MPH, interim dean of the Keck School of Medicine of USC and director of the USC Gayle and Edward Roski Eye Institute, praised Siegel and predicted that he would be a transformative leader for the department in the years to come.

Siegel thanked leaders throughout the school and the health system, and acknowledged the engaged and dedicated faculty in the department.

Study takes first step to understand electric treatment

Rather than taking medication, a growing number of people who suffer from disorders such as pain, epilepsy and drug cravings are tapping their skills in the hopes that the weak electric current will jolt them back to health — “transcranial direct current stimulation” (tDCS) — a non-U.S. Food and Drug Administration approved treatment. Danny J Wang, PhD, MD, MSC, a professor of neurology at the USC Mark and Mary Stevens Neuroimaging and Informatics Institute, said his team is the first to develop a MRI methodology whereby the magnetic fields induced by tDCS currents can be visualized in living humans. Their results were published Oct. 4 in Scientific Reports, a Nature Publishing Group journal. “Although this therapy is taking off at the grassroots level and in academia (with an exponential increase in publications), evidence that tDCS does what is being promised is not conclusive,” said Wang, the study’s senior author. “Scientists don’t yet understand the mechanisms at work, which prevents the FDA from regulating the therapy. Our study is the first step to experimentally map the tDCS currents in the brain and to provide solid data so researchers can develop science-based treatment.”

By Zen Vuong

Vice President Joe Biden has announced that USC will participate in a new Cancer Moonshot project to create the world’s first global liquid biopsy database on cancer. The undertaking is designed to accelerate the development and approval of simple, accurate and reliable blood tests for biologically based precision treatment and disease monitoring.

USC and 19 representatives from government, academic, pharmaceutical and diagnostic companies are launching the new partnership to share protocols, data and results to create the Blood Profiling Atlas. The effort is designed to improve disease treatment and accelerate the development of new diagnostic and therapeutic approaches.

The Kuhn Laboratory at USC will contribute data from the High-Definition Single-Cell Assay (HD-SCA), an analysis framework that characterizes cancer from a single blood draw, analyzing the cells, proteins and genes shed from tumors.

“I’m excited to say this is the third USC partnership with Vice President Biden’s Cancer Moonshot initiative to understand the time-space continuum of cancer,” said Peter Kuhn, PhD, principal investigator of HD-SCA and a founding faculty of the USC Michelson Center for Convergent Bioscience. “For the Blood Profiling Atlas, our focus is to characterize cancer by identifying the proteins and genes in single cells found in simple blood draws taken from cancer patients. We are contributing data and methods to start and will work with the partners in the Atlas to design and execute future pilot projects in support of the Atlas.”

Kuhn is a dean’s professor of biological sciences and a professor of medicine, biomedical engineering, and aerospace and mechanical engineering at USC.

The Blood Profiling Atlas will use standardized methods that would allow the FDA to recognize it as a source of valid scientific evidence. The open but secure database will help accelerate cancer diagnostic and therapeutic research and development, will improve a doctor’s ability to track cancer progression and will improve disease treatment decisions.

By Zen Vuong

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