

Researchers developing ‘bionic suit’ to help people

By Erica Rheinschild

People with paraplegia due to spinal cord injury may eventually get a chance to suit up, walk out the door and feel the ground beneath their feet, thanks to a five-year, \$8 million Cyber-Physical Systems Frontier grant from the National Science Foundation. Awarded to three Southern California institutions — the Keck School of Medicine

of USC, the University of California, Irvine (UCI) and Caltech — the grant will fund the development of a fully implantable brain-machine interface device that aims to restore the ability to walk and restore lower extremity sensation. The brain-machine device will transmit commands to a robotic exoskeleton for walking that will, in turn, transmit sensory information back to the brain.

“The restoration of walking is a very significant goal for patients after spinal cord injury,” says Charles Liu, MD, PhD, professor of clinical neurological surgery and principal investigator at the Keck School, and director of the USC Neurorestoration Center. “New solutions are possible with the recent advances in neuroprosthetics and regenerative medicine. We’re at the point where we

can create solutions similar in concept to Tony Stark’s Iron Man suit, which is neurally integrated with him. Tony Stark’s brain interacts with the suit, and the suit interacts with his brain. Everything the suit feels, his brain feels. That’s the idea.”

The project will draw on the combined expertise of all the collaborating investigators. The first phase of the project

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“The restoration of walking is a very significant goal for patients after spinal cord injury.”

— Charles Liu, MD, PhD



Steve Cohn

From left, C. L. Max Nikias, Mark Humayun, Edward Roski, Gayle Roski, Rohit Varma and Tom Jackiewicz are seen during the Sept. 7 unveiling of the remodeled USC Roski Eye Institute clinical space on the Health Sciences Campus.

USC Roski Eye Institute celebrates new look for

By Leigh Bailey

University and hospital leaders gathered during a lively ceremony recently to celebrate the opening of the remodeled clinic space for the USC Gayle and Edward Roski Eye Institute. Keck School of Medicine of USC Dean Rohit Varma, MD, MPH, was joined by USC President C. L. Max Nikias, PhD, USC Trustee Edward Roski and Gayle Roski during the Sept. 7 celebration on the fourth floor of Healthcare Center 4.

Varma, who also serves as director of the USC Roski Eye Institute, presented opening remarks.

“This is a very special day for us because we are unveiling our newly remodeled eye clinic, and for this, we are deeply grateful to Gayle and Ed Roski, whose gift has allowed us to be in this new space,” Varma said.

Nikias added, “Together, we have celebrated many successes at the USC Roski Eye Institute, but today stands out as particularly special. This beautifully remodeled clinic is all about vision — saving it, preserving it and restoring it. You, the doctors and the staff who bring this clinic to life, stand at the fore of these important efforts and are the finest in the nation.”

“Dean Varma and Dr. Mark Humayun, the clinic’s co-directors, have assembled a team of doctors and staff who are expert at lifting the clouds from our vision,” Nikias continued.

Nikias then expressed his profound gratitude to the Roskis for their vision and generosity.

Gayle Roski, a noted artist in addition to her work as a philanthropist, was treated for

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Pasadena Magazine honors Keck Medicine doctors

Keck Medicine of USC physicians continue to be recognized among the best in the region in an annual ranking of doctors in the San Gabriel Valley.

In all, 364 physicians have been included in Pasadena Magazine’s 2017 roster of “Top Doctors,” representing 36 different specialties, including oncology, radiology, neurology, orthopaedic surgery, ophthalmology and cardiology.

The list includes faculty physicians from the Keck School of Medicine of USC, 45

of whom practice at Children’s Hospital Los Angeles or Los Angeles County + USC Medical Center.

To be considered for inclusion in the list, physicians in the San Gabriel Valley and Los Angeles area were nominated and then voted on by their peers, who submitted confidential ballots. Doctors cannot pay to be included on the list.

Pasadena Magazine serves the greater San Gabriel Valley area. It has published the list since June 2008.



Ricardo Carrasco III

In this Town Hall Meeting we will provide updates on the many cancer-related activities underway at the USC Norris Comprehensive Cancer Center and Keck Medicine of USC.

Dinner offers chance to interact with community



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By Virginia Baca

Faculty and staff from across Keck Medicine of USC are coming together to provide healthy meals to our local community.

Each month more than 20 staff members, physicians and leaders from the Keck School of Medicine of USC and Keck Medicine spend an afternoon working together to purchase, prepare and serve dinner to more than 60 patrons of Proyecto

Pastoral at the Dolores Mission.

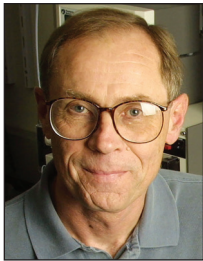
Proyecto Pastoral is a local nonprofit organization established to improve the quality of life in the Boyle Heights neighborhood. Proyecto Pastoral is associated with the Dolores Mission, which offers an elderly women’s shelter and adult men’s shelter.

Keck Medicine has an ongoing commitment through 2018 to provide nutritious meals to Dolores Mission patrons.

“Preparing the meals is not only a great opportunity to give back to the community, it is a chance to roll up your sleeves and work side by side with colleagues from across our medical enterprise,” explained Paul Craig, chief administrative officer for Keck Medicine.

“At recent dinners we had faculty and staff participating from Keck Hospital, the Keck School, USC Norris and

See **DOLORES MISSION**, page 3



xxxx Pace



xxxx Knight



Jeff Gordon

DOLORES: offers chance to interact

Continued from page 1

Alhambra,” he added. Keck Medicine also hosts a weekly farmers market in Hazard Park each Tuesday. Profits from the market provide funding for fresh fruits and vegetables for the local community. “They are many volunteer opportunities coming up that Keck Medicine faculty and staff can participate in to help our local community,” added Char Ryan, Keck Medicine Chief Patient Experience and Employee Engagement Officer. “We have events happening year-round.” Upcoming opportunities include Boxes of Love, which provides a complete Thanksgiving dinner to families over the holidays; Adopt a Family, which provides holiday presents to members of the community; and the annual holiday toy drive. Additionally, volunteers are needed to cook and serve food at Dolores Mission each month. For more information, contact Lusine. Davtyan@med.usc.edu.

Psychologist speaks on bisexual-positive clinical practice

By Amanda Busick
Noted psychologist, educator and advocate Mimi Hoang, PhD, spoke on the importance of creating a positive, accepting environment for bisexual patients in clinical practice and everyday life before a capacity crowd recently on the Health Sciences Campus. Using historical information, statistics, research and her own experience as a bisexual clinician and LGBTQ+ community leader, Hoang, a professor of clinical psychology at Antioch University Los Angeles and staff psychologist at Loyola Marymount University, led the audience through some of the obstacles that bisexual people face. The Sept. 13 event was the latest installment in the Diversity Seminar Series, presented by the Keck School

of Medicine of USC’s Office of Diversity and Inclusion. Hoang listed common misconceptions, including that bisexuality equals polyamory or promiscuity; that bisexuality is just a phase; and that bisexual people don’t maintain their orientation when in a monogamous relationship. She likened bisexuality to being ambidextrous. “Just because you are using your right hand or your left hand,” she began, “doesn’t mean that you don’t have that internal capability to use either hand.” Hoang also shared some serious health care issues that the bisexual community may encounter. Bisexual people have higher rates of anxiety and mood disorders, and higher occurrences of binge drinking and smoking. According to

many studies, she said, bisexual women specifically experience higher rates of depression, eating disorders and suicide ideation than straight or gay women or men. In fact, the most basic health care communication can be challenging: More than a third of bisexual people do not disclose their orientation to their physician, out of fear of facing bias, erasure and discrimination. Clinicians, she said, must be aware of how their practice can be influenced by their personal experience. “You need to have awareness about your own identity, and your own assumptions and biases. Is it your assumption that everyone who walks through your door is straight? Or your assumption that they will tell you?” she asked. “Because if you ask them, you’re letting



Ricardo Carrasco III

Mimi Hoang, PhD, is a nationally recognized psychologist, author and advocate on diversity issues, specifically the Lesbian, Gay, Bisexual, Transgender (LGBT) and the Asian Pacific Islander (API) communities.

them know that you care and that you are comfortable talking about that topic.” Hoang concluded her lecture with comments on how to be inclusive and not marginalize bisexual patients.

“Your job is beyond just numbers and diagnosing,” she said. “Your job is also about compassion, humanity and understanding diverse issues and communities.”

Calendar of Events

Monday, Sept. 25
Noon. Southern California Clinical and Translational Science Institute’s Workforce Development Core Discussion. “What Issues are Raised by Research on Medical Practices?” Alexander Capron, LL.B. Aresty Auditorium. Info and RSVP: Karen Kim, (323) 442-8281, wd@sc-ctsi.org, https://redcap.sc-ctsi.org/surveys/?s=R39X48H97C. A light lunch will be provided.
Tuesday, Sept. 26
9 a.m.-6 p.m. USC Tina & Rick Caruso Department of Otolaryngology – Head & Neck Surgery Seminar. “Identity, Function, Dysfunction, and Restoration of Sensory Transduction Channels in the Inner Ear,” Jeffrey R. Holt, PhD, Harvard Medical School. Eli and Edythe Broad CIRM Center Auditorium. Info: Cristy Lytal, lytal@stemcell.usc.edu, http://stemcell.usc.edu/events
3 p.m.-6 p.m. USC Tina & Rick Caruso Department of Otolaryngology – Head & Neck Surgery Seminar. “Identity, Function, Dysfunction, and Restoration of Sensory Transduction Channels in the Inner Ear,” Jeffrey R. Holt, PhD, Harvard Medical School. Eli and Edythe Broad CIRM Center Auditorium. Info:

Jacqueline Jimenez, (323) 442-5579, jimenez1@med.usc.edu
5:30 p.m. Department of Ophthalmology Grand Rounds. Tiffany Ho, MD, and Andy Han, MD. USC Roski Eye Institute, HC4, 6th floor conference room. Info: Tyasha Christopher, (323) 409-5233, tyasha.christopher@med.usc.edu, http://eye.keckmedicine.org/grand-rounds/
Wednesday, Sept. 27
11 a.m. USC/Amgen Seminar. “Nav1.7 drug development for pain,” Bryan Moyer. Eli and Edythe Broad CIRM Center Auditorium. Info: Cristy Lytal, (323) 442-2172, lytal@med.usc.edu, http://stemcell.usc.edu/events
Noon. Zilkha Neurogenetic Institute Seminar. “Rare and Common Risk Variants for Late Onset Alzheimer’s Disease Implicate Myeloid Cell Function,” Alison Goate, DPhil, Icahn School of Medicine at Mount Sinai. Herklotz Seminar Room, ZNI 112. Info: Emily Chu, (323) 442-3219, Emily.Chu@med.usc.edu, http://www.usc.edu/zni
Thursday, Sept. 28
Noon. Integrative Health Interest Group and USC Institute for Integrative Health Talk. “Medicinal and Recreational Uses of Cannabis,” Rolando Tringale, MD. McKibben Lecture Hall 249. Info: Torey Alling, (206) 335-2372, ihigusc@gmail.com

Noon. Keck Medicine of USC Discussion. “What Changed the Way I Practice Medicine,” Afsaneh Barzi, MD. LG 503-504, Norris Research Tower. Info and RSVP: Mary Aalto, mary.aalto@med.usc.edu. Seating is limited, RSVP does not guarantee seating for late arrivals.
1 p.m. Center for Work and Family Life Workshop. “How to Manage Burnout and Compassion Fatigue in Ourselves and Staff.” Keck Hospital Silver Room 34. Info: Center for Work and Family Life, (213) 821-0800
4:30 p.m. Norris Medical Library Film Screening. “It’s Kind of a Funny Story.” Aresty Auditorium. Info: Karin Saric, (323) 442-1125, ksaric@usc.edu. RSVP: http://norris.usc.libguides.com/filmology/funnystory
Friday, Sept. 29
Noon. USC Research Center for Liver Diseases Seminar. “The Central Role of the Liver in Systemic Iron Regulation,” Tomas Ganz, MD, PhD, University of California, Los Angeles. Hastings Auditorium. Info: Dolores Mendoza, (323) 442-1283, dmmendoz@usc.edu. Free seminar.
Sunday, Oct. 1
7:30 a.m.-4:45 p.m. USC Quench the Fire 5K/10K Run~Walk~Roll & 1 Mile Fun Walk. 6350 Woodley Avenue Van Nuys. Info: Lynne

Popadak, (818) 288-0754, quenchthefire@gmail.com, http://www.quenchthefire.org/ Pre-registration fee: \$30, \$10 discount w/code 2017QTFUSC10.
Monday, Oct. 2
8-11 a.m. The DHS Endocrinology Primary Care/Specialty Care Workgroup and USC Office of Continuing Medical Education. “4th Annual Los Angeles County Department of Health Services (DHS) Diabetes Day.” The California Endowment, 1000 N. Alameda St. Info: Lysandro Valenzuela, (323) 442-2555, uscme@usc.edu, https://cmetracker.net/KECKUSC/Catalog
Wednesday, Oct. 4
Noon. Southern California Clinical and Translational Science Institute. “Digital Scholar Webinar Series: Disseminating Scientific Papers via Twitter: Practical Insights and Research Evidence,” Stefanie Haustein, PhD, University of Montreal. Info: Katja Reuter, katja.reuter@med.usc.edu. RSVP: http://bit.ly/2u5vgRr
Noon. The Saban Research Institute Seminar. “TSRI Core Facility Seminar: Flow Cytometry Core (FACS),” Michael Sheard, PhD. Saban Research Building Auditorium, 4661 Sunset Blvd. Info and RSVP: Sandy Wang, (323) 361-7489, tecpad@chla.usc.edu, http://chla.org/tecpad

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.



Ricardo Carrasco III

FACULTY, STAFF WELCOME NEW CHAIR

Faculty and staff from the Keck School of Medicine of USC gathered recently to welcome John Oghalai, MD, as the new chair of the USC Tina and Rick Caruso Department of Otolaryngology – Head and Neck Surgery. Oghalai has been serving as chair since Aug. 1. The reception, which was held Sept. 8 on the Health Sciences Campus, included remarks from Oghalai; Rohit Varma, MD, MPH, dean of the Keck School; and Tom Jackiewicz, MPH, senior vice president and CEO of Keck Medicine of USC.

Baxter Foundation supports two new early research projects

By Adriana Cho and Zara Abrams

Two junior faculty members at the Keck School of Medicine of USC have each been awarded \$100,000 grants by the Donald E. and Delia B. Baxter Foundation. Crystal Marconett, PhD, from the Department of Surgery, and Hosung Kim, PhD, from the Department of Neurology, were chosen on the basis of their outstanding research during their time as assistant professors at the Keck School.

“The Foundation supports researchers at this early stage so that they can conduct innovative research that has strong future potential and could have a significant impact,” said Jane Haake Russell, director of the Baxter Foundation. “We are proud to support both Dr. Marconett and Dr. Kim, whose research we believe will lead to new therapies and approaches to disease prevention.”

Marconett’s lab is studying how a novel class of regulatory molecules, lncRNAs, affects the ability of cancer

cells to repair DNA damage in lung cancer.

She hypothesizes that LINC00261, an lncRNA whose function is as yet unknown, works as a tumor suppressor gene and enhances cells’ ability to detect DNA damage as they prepare to divide.

Her lab has found that the reintroduction of LINC00261 into lung cancer cell lines inhibited their mobility and growth, and turned on signals related to DNA damage.

“It is my hope that funds from the Baxter Foundation will enable us to leverage our basic science research insights into the function of LINC00261 towards the development of novel therapies,” she said.

Kim received the grant for his research that aims to predict neurodevelopmental impairments in early childhood among preterm newborns by using Magnetic Resonance Imaging (MRI) technology to document and better understand the impact

of prematurity-related brain injuries on neurological development. First, he’s developing specialized machine-learning algorithms to compute structural and networking features that characterize various aspects of early brain development. He’ll then use this software to predict language, motor, and cognitive outcomes two- to four years after birth.

“Even with existing treatments, up to half of preterm newborns develop deficits in motor function, language, or IQ,” he explained. “We may be able to predict these impairments using brain scans, and eventually prevent them.”

Another \$100,000 grant was awarded to the medical student summer research program, currently led by Nuria Pastor-Soler, MD, PhD, as-associate professor of medicine and assistant dean for research mentoring. The program has received this support from the Baxter Foundation for the past few years.

USC ROSKI EYE INSTITUTE: celebrates new look for clinic

Continued from page 1

cataracts by Keck Medicine ophthalmologists, and as a result, “she and Ed resolved to find an institute with the most ambitious goal possible – to eliminate blindness,” Nikias said.

“With their support, the USC Roski Eye Institute is stronger than ever. It’s one of the top two funded eye institutes in the nation and a leader in research funding from the National Institutes of Health,” Nikias continued. “Its residency program runs in the top ten nationwide, and it just expanded for the first time in years. And in 2016 this institute, my fellow Trojans, treated more than 100,000 patients.”

“It’s an honor to help support people who

will be behind the new breakthroughs in the future of this field,” Gayle Roski said. “And I want you to know that Ed and I are grateful for your presence here today and thankful for the work you do each and every day.”

Among the attendees to the event were USC Provost Michael Quick, PhD; Tom Jackiewicz, MPH, senior vice president and CEO of Keck Medicine of USC; and USC Trustee Gloria Kaufman. With the conclusion of remarks, the Roskis officially unveiled the clinic’s striking signage and Varma invited attendees to tour the new, state-of-the-art facilities, which includes 31 rooms for patient care, an outpatient surgical area, labs, a staff lounge and more.



Ricardo Carrasco III

Patient Kristopher (Kris) Boesen underwent spine surgery with Dr. Charles Liu where stem cells were injected to spine to help regenerate movement.

‘BIONIC SUIT’: to help people with paraplegia walk

Continued from page 1

will be to decode the signals generated by the brain that tell the legs to walk. Patients with epilepsy who have had electrodes implanted in the brain by Liu as part of their workup for surgical treatment of epilepsy will have brain signals recorded while they are walking. These signals will be decoded to control a wearable robotic exoskeleton by Zoran Nenadic, DSc, professor of biomedical engineering, and An Do, MD, assistant professor of neurology, from UCI., assistant professor of neurology, from UCI.

Richard Andersen, PhD, professor of neuroscience at Caltech, will work on methods of generating artificial sensation from the robotic exoskeleton by applying stimulation to the brain using implanted electrodes, allowing patients to “feel” while they walk. to “feel” while they walk.

Payam Heydari, PhD, the project’s lead principal investigator and professor of electrical engineering and computer science at UCI, will develop miniaturized electronics to make these processes fully implantable in patients. In the later phases of the project, these concepts will be tested in spinal cord injury patients. in spinal cord injury patients.

“We want to create a paradigm shift for what’s possible for patients who

are paralyzed by finding engineering solutions to medical problems,” Liu said.

The ambitious project is the culmination of longstanding and ongoing collaborations between Liu and his colleagues at UCI and Caltech through the USC Neurorestoration Center.

“With this grant, Dr. Liu and his counterparts at UCI and Caltech are poised to push the frontiers of medicine and engineering into uncharted territory,” said Rohit Varma, MD, MPH, dean of the Keck School. “It is this spirit of innovation that drives our clinician-scientists to find novel ways to prevent, treat or cure the most challenging health issues.”

The USC Neurorestoration Center is focused on developing new strategies for restoring neurological function for patients with neurological disabilities. This includes repair through regenerative medicine; replacing lost function with neuroprosthetics; and optimizing the function of the nervous system after injury.

The National Science Foundation’s Cyber-Physical Systems program provides funding for projects that integrate electronic, computing and information technologies to address critical problems.



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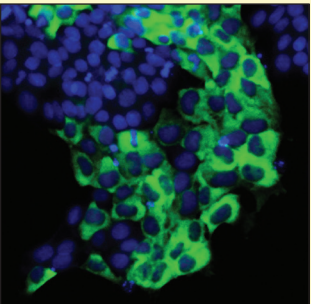
USC students lead public health camp in Uganda

AN INTERDISCIPLINARY TEAM OF PHARMACY AND PUBLIC HEALTH STUDENTS TRAVELED TO NORTHERN UGANDA from Aug. 8-12 to lead a public health camp alongside free soccer training clinics and tournaments for more than 1,000 youth. Nonprofit organization Ray United FC organizes the annual camp to promote healthy kids and communities through soccer and education. Each year, USC students and alumni participate as educators and facilitators to teach children and adolescents living in rural communities a variety of lessons in public health, citizenship and leadership. Donations garnered by RUFC and the USC students provided campers with free bags, shirts, public health workbooks, pens and pencils, as well as meals and clean water. The team of 15 Master of Public Health and Doctor of Pharmacy candidates, faculty, USC School of Pharmacy staff and USC alumni worked alongside students at Uganda’s Makerere University.

— Divya Verwa Mary and Larissa Puro

Protein TAZ sends “mixed signals” to stem cells

JUST AS BEAUTY EXISTS IN THE EYE OF THE BEHOLDER, a signal depends upon the interpretation of the receiver. According to new USC research published in Stem Cell Reports, a protein called TAZ can convey very different signals — depending not only upon the variety of stem cell, but also which part of the stem cell receives it. PhD student Xingliang Zhou and colleagues in the laboratory of Qi-Long Ying, MD, PhD, associate professor of stem cell biology and regenerative medicine at the Keck School of Medicine of USC, demonstrated that naïve mouse embryonic stem cells (ESCs) don’t require TAZ in order to self-renew and produce more stem cells. However, they do need TAZ in order to differentiate into slightly more differentiated mouse epiblast stem cells as well as so-called human ESCs — which may not be true ESCs at all. — Cristy Lytal



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Professor opens art exhibit at USC Hillel Art Gallery

JOEL SCHECHTER, PHD, PROFESSOR OF CELL AND NEUROBIOLOGY at the Keck School of Medicine of USC, recently opened an art exhibit at the USC Hillel Art Gallery featuring select drawings from his “Synagogue and Cathedrals” series. The exhibit, titled “An Artist’s View of the World,” is a religious and architectural series curated by Susie Gesundheit and Anne Marie Hromadka. It will be on display through Dec. 3 at the gallery, located on 3300 S. Hoover St. near the University Park Campus. Admission is free and open to the public.

Holly Muir named co-chair of mirror department of

By Adriana Cho
Holly Muir, MD, chair and professor of anesthesiology at the Keck School of Medicine of USC, has been named co-chair of the Vladimir Zelman Department of Anesthesiology of the Novosibirsk State University (NSU) Institute of Medicine and Psychology in Russia, as a part of a collaborative project between the Keck School and NSU.

“I am truly excited to be a part of this international collaboration,” Muir said. “I believe this project will foster the growth of both anesthesiology departments and encourage the advancement of global health.”

The project, called the ZELMAN project (Zeal, Education, Labor, for MANKind), establishes mirror departments of anesthesiology and resuscitation at the Keck School and NSU, which is located in Siberia. Focusing on lectures, discussion of clinical cases and research aimed at international collaboration on mutual interests, the ZELMAN project strives to create bridges for humanity and health care across borders,



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according to project leaders. To that end, the program will feature distance education opportunities, including lectures over Skype, an exchange of students and teachers, and remote working meetings with the heads of the two departments. Andrey Pokrovsky, MD, PhD, dean of the NSU medical institute, and Sergey Astrakov, MD, PhD, chair of the Department of Anesthesiology at NSU, visited the Keck School this summer and met with leading educators to work on the comprehensive program. “This is the first time that a mirror Department of Anesthesiology and Resuscitation has been established in Russia,”

Pokrovsky noted. “In this project, the emphasis is on the educational process.” The project was spearheaded by Vladimir Zelman, MD, PhD, clinical professor of anesthesiology (part-time) at the Keck School and honorary professor of the NSU Department of Anesthesiology. As a former student of NSU, Zelman wanted to give back to his alma mater, where he began his medical journey to become one of Siberia’s first anesthesiologists. “USC is already well-known as a leader of international cooperation,” Zelman said. “Now the Keck School of Medicine will be on stage as a frontrunner in international medical education and life

Program offers therapy for older adults,

By Adriana Cho
Older patients with a mental health diagnosis may feel helpless if traditional weekly therapy no longer meets their needs. For these patients and their families, a holistic therapy program at USC Verdugo Hills Hospital has stepped in to offer a solution. Stepping Stones is a geropsychiatric program at USC-VHH designed to help relieve emotional and personal distress for individuals age 50 or older. Through inpatient and outpatient programs, the experts at USC-VHH employ a variety of therapeutic options, including cognitive behavioral therapy, psychoanalysis, art, music and movement therapy to help patients.

The inpatient unit can accommodate 24 patients, while the outpatient program currently serves 40 patients, with capacity for 75. Outpatients generally attend three or more therapy hours a day for two to four days a week, depending on the need of the patient, for a duration of two to six months.

Stepping Stones provides one-on-one and small group therapy to help patients who are uncomfortable in larger group settings. But with techniques like recreational therapy, which involve going for walks and getting outside, patients also slowly learn to socialize again and interact with others.

“Socialization is a huge part of the process in getting patients back into having normal relationships with other people,” said Luke Jackson, MBA, JD, program director of Stepping Stones. “That’s a really important part of their recovery.”

The program continues to strive to improve treatment methods and patient outcomes. The nursing staff is training to communicate using techniques developed specifically for patients with mental health diagnoses or cognitive impairment. The existing forms of therapy, such as music, are expanding to go beyond being passive to more interactive experiences.

Stepping Stones also works to help patients with dementia regain their memories through creative therapy methods and allow them maintain as much independence as possible. For example, memories often can be accessed through smell, music or movement. “There’s something magical about the whole thing,” Jackson said. “It’s so rewarding to see people get better.”

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