STEPPING TO A STIGMA-FREE FUTURE | Nearly 40 Trojan occupational therapy students took to the streets of Downtown Los Angeles in early October as part of NAMIWalks Los Angeles County. The annual event is sponsored by the National Alliance on Mental Illness, the nation’s largest grassroots mental health organization with hundreds of affiliate organizations throughout the country. The 5K walk is designed to change how the public perceives mental illness by promoting awareness, debunking stigma and showing support for people living with a mental health condition. Together, the USC Chan team raised nearly $3,500 for NAMI programming. “Seeing students working together to gather people and raise money was incredible,” said Stephanie Chi MA ’17, OTD ’18. From left to right: Stephanie Chi, Psalm Chang ’17, MA ’18, Alison Ulie MA ’18, Phoebe Yam MA ’18, Samantha Okawa MA ’18 and Grace Cho MA ’18 (taking selfie).
Dear Alumni and Friends,

It has been said that the modern university, in many ways, functions like a city in miniature.

Every morning, its population swells as students, faculty and staff arrive on campus. While the day’s teaching and scientific activities begin anew, the “city” buzzes to life. Its sanitation, transportation, housing, logistical and hospitality infrastructures keep the place tidy, moving, sheltered, supplied and well-fed. Events and engagements enrich a diverse cultural life that complements its intellectual mission. Both inside and outside of the classroom, the safety, accessibility, equity and health of the populace are chief concerns of the university’s administrative and faculty leaders.

This issue of the USC Chan Magazine highlights the various ways in which Trojan occupational therapists help keep our “city in miniature” moving towards an optimally healthy campus. From a new class helping to guide today’s freshmen through what can often be a bumpy college transition to a faculty resident living in a dormitory who inspires health-promoting habits, occupational therapy is literally on the front lines of student life. On the faculty and staff side, the USC Occupational Therapy Faculty Practice offers approaches to healthier lifestyles that account for the realities of daily ups and downs.

I came to USC less than one year ago, but with every passing day, I grow even more proud of the many accomplishments of our faculty, staff, students and alumni. This year, the first in occupational therapy’s second century, I look forward to continued great work enacting effective solutions for healthy living and participation.

In that spirit, I would like to thank you for all that you do on behalf of our USC Trojan Family and for the collective advancement of the great profession of occupational therapy and vital discipline of occupational science.

Fight On!

Grace Baranek PhD, OTR/L, FAOTA
Associate Dean, Chair and Professor
USC Mrs. T.H. Chan Division of Occupational Science and Occupational Therapy
Herman Ostrow School of Dentistry of USC
FIRST YEAR FORTUNES | 19
Receiving a new NIH award to help parents with infants at risk for an autism diagnosis, along with hosting a symposium of autism identification and intervention experts, highlight Associate Dean and Chair Grace Baranek’s first year at USC Chan.

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How former makeup artist Veronica Lorenz, with USC occupational therapist Janice Rocker at her side, reclaimed her rehab after cancer surgery to reemerge as an entrepreneur.

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VIRTUAL REALITY REHAB | 16-17
Sook-Lei Liew builds a brain-computer interface system with a laptop, an off-the-shelf VR rig, a $9 swim cap and mom’s sewing machine.
Meaningful occupations: I started playing the drums when I was 12, and it’s always served as a perfect source of creativity, stress outlet and cardio workout.

On writing Finding Your Way:
Dr. Ashley Uyeshiro Simon spoke about how she introduced the OT 101 students to gratitude journaling: Every day for 30 days, write down three aspects for which you are grateful. The practice resonated with me, and I plan on incorporating it into my life.

Meaningful occupations: My 9-month-old son, Kingston.

On writing An/Aesthetic:
Veronica’s injuries kept her from holding her baby. As a mother, I can’t imagine that. Through amazing determination and strength, she was able to care for her child.

Meaningful occupations: Learning about constellations with my two young astronomy-loving sons, spending summers on boats, riding horses.

On writing Virtual Reality Rehab:
I learned that VR’s effects can extend into the real world: When you exist in a virtual world as a tall person, you continue to act like a tall person for a period of time even after the goggles are removed.
What was your initial reaction to the 2027 doctoral-degree announcement?

I was equally surprised and unsurprised. I knew it was inevitable, although no one could predict exactly when this decision would happen. The profession’s point-of-entry has been a topic of discussion, through various informal and formal channels, for nearly 10 years. The pros greatly outweighed the cons, in my opinion. A single point of entry at the doctoral level is what’s best for the future of occupational therapy. Ultimately, OTs will have more opportunities for leadership in health care with advanced skills and knowledge in evidence-based practices. Now that there is a definitive due date, we can move forward building the best program we possibly can.

USC Chan currently has an entry-level master’s-degree program and a post-professional OTD doctorate program; What will the transition process to an entry-level doctorate program look like?

First, I want to acknowledge the hypothetical curriculum studies that have already been conducted by our faculty, especially Drs. Florence Clark and Julie McLaughlin Gray, to start preparing for this shift. The timing is fortuitous because we’re embarking on a new strategic planning process this spring semester, and setting strategic priorities for the foreseeable future. We will reflect on the stellar outcomes of our current degree programs that serve as guideposts, while at the same time focus on what the new entry-level OTD could — and should — look like. There is nothing more invigorating than envisioning the many new opportunities for occupational therapists in the next decade and beyond.

A common concern is that the mandate likely adds a third year of study time and tuition to what are currently two-year master’s degree programs; What do you say to those who are worried about these additional barriers to entry?

We have already seen tremendous growth in our post-professional OTD program — enrollment has more than doubled in the last five years, and the average GRE scores have increased by more than 100 points. A majority of our OTD students come directly from our master’s program, which means that they are already spending three consecutive years at USC Chan. Altogether, this bodes well for student supply and demand for a three-year, entry-level OTD program in the near future. Currently, there are more than 430 USC Chan doctors of occupational therapy already out in the workforce leading our profession forward in evidence-based specialty practices, graduate education, research, administration and policy. I think they could all attest to the impact that the additional year at USC has made upon their careers and the quality of care and programs that they provide.

USC is a large, private research university located in a diverse urban setting; How will those factors aid in the transition to an entry-level OTD program?

We are fortunate to be part of a large and diverse urban community with many unique resources and ample opportunities for occupational therapists to make a difference in people’s health and quality of life. Our current post-professional OTD program already has relationships with over 80 residency sites. Plus, when you take into consideration our five-person fieldwork team and USC’s longstanding ties with hundreds of sites across Southern California, the state and nation, I think we are well-positioned to navigate potential bottlenecks or shortages of clinical experiences, which is a constant concern for so many educators around the country. There’s a saying, “many hands make light work.” Considering the significant size of our faculty, our dedicated staff and the resources of the alumni Trojan Family, I know that everyone will be working together towards making our entry-level OTD the gold standard.
News Briefs

Lectures, grants, awards — there’s always so much going on at the USC Chan Division of Occupational Science and Occupational Therapy. Keep your finger on the pulse with these division news briefs:

**AWARDS**

**EIGHT TROJANS RECEIVE AWARDS AT OTAC ANNUAL CONFERENCE**

It was another trophy year for USC Chan at the Occupational Therapy Association of California’s annual conference, with eight Trojans walking away award-winners. Associate Clinical Professor Sarah Bream MA ’96, OTD ’09 was the recipient of the Media Award. She also won the Vision Award, alongside Associate Clinical Professors Celso Delgado Jr. ’03, MA ’05, OTD ’10 and Samia Rafiee MA ’05, OTD ’06 and alumni Arameh Anvarizadeh ’05, MA ’06, OTD ’07 and Bryant Edwards MA ’05, OTD ’06, for their years-long efforts to bring the OTAC Centennial Rose Parade float to fruition. Associate Clinical Professor Deborah Pits PhD ’12 took home an Award of Excellence, alumna Janet Daimaru MA ’98 received a Fieldwork Educator Award and alumna Aviril Sepulveda OTD ’17 earned an Award of Appreciation.

**GRANT TO IMPROVE PHYSICIAN VISITS FOR ADULTS WITH AUTISM SPECTRUM DISORDER**

Assistant Professor of Research Leah Stein Duker MA ’06, PhD ’13 has been awarded an AOTF grant for a study that she and her colleagues hope will improve primary care health visits for adults with autism spectrum disorder. “There is limited research detailing the specific needs of adults with ASD during primary health care encounters,” Duker said. “They are often fraught with serious difficulties for the patients, their caregivers and their practitioners, [which] means that the quality of medical care is not what it could be or what it should be.” As part of the study, Duker and her team are interviewing adults with ASD, their caregivers and providers to better understand the problems they face during appointments.

**FACULTY**

**ADJUNCT FACULTY MEMBER RE-ELECTED ACOTE CHAIR**

Adjunct Assistant Professor of Clinical Occupational Therapy Pamela Roberts has been re-elected the chairperson of the Accreditation Council for Occupational Therapy Education (ACOTE), the national accrediting agency for all occupational therapy educational programs across the nation. Roberts became an ACOTE member in 2008, after serving on the Roster of Accreditation Evaluators for seven years. In 2015, she began her first three-year term as the organization’s chairperson. In addition to her responsibilities with ACOTE, Roberts also recently became president-elect of the American Congress of Rehabilitation Medicine, an interdisciplinary organization of rehabilitation specialists who advocate on behalf of research to improve the quality of life for people with disabilities.

**INTERNATIONAL OCCUPATIONAL THERAPY PROGRAM WELCOMES RECORD 50 ATTENDEES**

This year, USC Chan’s Summer Occupational Therapy Immersion (SOTI) Program — a summer program for international occupational therapists interested in studying or working in the United States — welcomed a record 50 attendees, hailing from 16 countries on six continents. The four-week program aims to familiarize students with American occupational science and occupational therapy as well as help them develop a more global perspective of the profession. As part of SOTI, students take part in seminars led by experienced USC faculty members, visit various occupational therapy practice settings and enjoy cultural and recreational outings in Los Angeles.

**GLOBAL INITIATIVES**

**USC CHAN WELCOMES PROFESSOR JOHN SIDERIS**

This summer, John Sideris was appointed professor of research at USC Chan. The biostatistician and research methodologist will be responsible for fortifying the division’s research infrastructure by supporting faculty in the design and evaluation of psychometrically valid clinical assessments and outcomes measures to be used in intervention studies and other research projects. Sideris comes to USC from the University of North Carolina at Chapel Hill, where he earned his master’s degree in psychology and his PhD in quantitative psychology. For the past 13 years, he has served as an advanced research scientist at the Frank Porter Graham Child Development Center, where he worked extensively in the critical research areas of instrument development, factor analysis and latent modeling. He has invaluable experience in grant writing and research methods for intervention designs applicable to early childhood settings with special populations including children with autism.
The National Institutes of Health has announced it will extend the Rehabilitation Research Career Development Grant (RRCD) program until 2022, with a cash infusion of $3.5 million.

The K12 training grant, which was originally funded in 2007, aims to strengthen rehabilitation therapy’s evidence-based foundation by identifying promising young researchers in both occupational therapy and physical therapy and providing them with the training and mentorship necessary to become independent researchers.

It is particularly important for occupational therapy as it continues to move toward “therapy that is evidence-based, client-centered and cost-effective,” as outlined in AOTA’s Vision 2025, the profession’s strategic plan guiding its growth for the coming seven years.

“Now more than ever it is crucial that our profession build the capacity to engage in scientific inquiry and produce the evidence needed to meet the ongoing needs of society,” said AOTA Chief Professional Affairs Officer Neil Harvison, who is appointed to the RRCD’s External Advisory Board. “Building our scientific community through the training, support and mentoring of young scientists is essential for our continued viability as a profession.”

One-on-one mentorship

The five-year RRCD program consists of two phases. During Phase 1, which can last up to three years, investigators travel to one of three research-intensive institutions — including USC, the University of Texas Medical Branch and the University of Florida — and are paired with a lead mentor under whose supervision they conduct research in their area of interest.

It is during this first phase that researchers develop an individualized research plan with their lead mentors and receive further training on their proposed research project as well as the grant-writing process and budget development.

Researchers move to Phase 2 once they have acquired major external funding for their research. They continue to work with their lead mentors and members of their research team, though often after having returned to their home institutions.

Several USC researchers — from both occupational therapy and physical therapy — have participated in the program, including from USC Chan: Assistant Professor Sook-Lei Liew MA ’08, PhD ’12; Assistant Professor of Research Stacy Schepens Niemiec; and Associate Professor Shawn Roll.

“The structured activities that are embedded in the program allow for early-career scientists like myself to have regular contact and candid conversations with major players in rehabilitation research,” said Schepens Niemiec, whose research on activity-based lifestyle management to improve the health and well-being of older adults is in Phase 2 of the program. “Being afforded the opportunity to receive this ongoing one-on-one mentorship has not only strengthened the quality of research I am presently conducting, but has also helped me to identify the path I must take to achieve my long-term career goals.”

Several USC faculty members from both occupational therapy and physical therapy serve as lead mentors, including Associate Dean Grace Baranek, who mentors investigators researching sensory features of children with autism spectrum disorder, Associate Professor Lisa Aziz-Zadeh, Professor Sharon Cermak and Professor Mary Lawlor. Baranek also serves as the associate program director of the grant.

The program is funded by the National Center for Medical Rehabilitation Research (part of the Eunice Kennedy Shriver National Institute of Child Health and Human Development) and the National Institute of Neurological Disorders and Stroke, both of which fall under the auspices of the National Institutes of Health.
MINDFUL MATTERS
Mark Hardison PhD ’19 received a $3,000 research grant from the California Foundation for Occupational Therapy. The grant, titled “Integrating Mindfulness-Based Interventions with Outpatient Rehabilitation in Hand Therapy,” will support Hardison’s dissertation to better understand the psychosocial needs of individuals receiving hand therapy and will evaluate the integration of mindfulness-based activities as part of the recovery process. Hardison is studying client experiences and the effects of brief, guided mindfulness meditations on a weekly basis immediately prior to participating in therapy sessions. The study will provide an important preliminary step toward better understanding how to best integrate mindfulness-based interventions during recovery following a musculoskeletal injury.

SOUTHERN DRAW
In October, the division hosted a lecture by Frank Kronenberg, a prominent activist and co-founder of “Occupational Therapists without Borders,” which has inspired a number of international publications. Kronenberg’s presentation at USC Chan was titled “Humanizing Praxes: Generating Occupational Therapies from the ‘South.’” Kronenberg, who has worked with programs to improve the lives of children and adults living with disabilities and at-risk youth in the United States, Nepal, Pakistan, India, Mexico and Guatemala, also met with faculty members and students during his time on campus.
CHAN GOES TO CHINA
Associate Dean Grace Baranek recently delivered a lecture, titled “Occupational Therapy and Occupational Science: Essentials for Rehabilitation and Beyond,” at a meeting of the Chinese Association of Rehabilitation Medicine at the China National Convention Center in Beijing. Among the audience of nearly 3,000 were a wide range of medical professionals, including psychiatrists, rehabilitation therapists, occupational therapists and psychologists. CARM is China’s national association which represents and unites the interests of the country’s approximately 2,800 occupational therapists.

LEGACY AWARD LECTURE HIGHLIGHTS STRENGTHS OF STUDENTS WITH AUTISM
In November, the division welcomed Kristie Patten Koenig as the 2017 recipient of the Patricia Buehler Legacy Award for Clinical Innovation. The annual award named in honor of alumna Patricia Buehler ’49, a pediatric occupational therapist who worked with children with neurodevelopmental disabilities, is designed to advance and disseminate clinical research and best practices. Koenig, who also met with USC Chan students while on campus, is chair of the Department of Occupational Therapy at the New York University Steinhardt School of Culture, Education and Human Development. Her research focuses on the efficacy of interventions used in public schools for children and adolescents with autism spectrum disorders, with a special emphasis on strength-based paradigms and applications in inclusive settings. See more photos from Koenig’s visit at tinyurl.com/buehler2017.

PHOTO BY HONG LE
A BREAKTHROUGH FOR PAIN RESEARCH

A new USC Chan study published in the American Journal of Occupational Therapy is believed to be the first to directly find quantitative positive effects of a lifestyle-based occupational therapy treatment.

Chronic pain affects 100 million Americans, more than diabetes, heart disease, stroke and cancer combined. The high prevalence of chronic pain, coupled with what's been called “epidemic-level” opioid use during the past decades, led the Centers for Disease Control to develop clinical guidelines that emphasize interventions for treating chronic, non-cancer pain conditions that don't rely on opioids or prescription medications.

Treatments for chronic pain focus on function, coping and quality of life rather than simply pain reduction (as is often the goal of acute pain management), and a client-centered, whole-person approach is widely accepted as best practice.

That's why we believe occupational therapists are primed to be at the forefront of chronic pain treatment. Our expertise in occupation-based rehabilitation and habilitation, as well as our bio-psycho-social training in physical disability, mental health and aging across the lifespan are all valuable tools that can be used to empower people living with pain, even if the pain itself can't be resolved.

At the USC Occupational Therapy Faculty Practice, we provide Lifestyle Redesign interventions to help patients change their daily habits and routines to promote health and improve self-management of chronic conditions. Lifestyle Redesign was originally created in the 1990s and was tested in the USC Well Elderly Studies, which demonstrated that preventive occupational therapy can improve function and quality of life in an aging population. Since then, it has been applied to a variety of populations with chronic conditions, including pain.

Our chronic pain program utilizes components of Lifestyle Redesign in individualized treatment to help clients understand their health conditions, analyze their behavior and implement strategies to improve pain management and day-to-day functioning. We go over self-care topics, including healthy eating, exercise, sleep routines, stress and mood management, coping skills, time management and how to engage in pacing and energy conservation. We also discuss how to increase community participation, socialization, pain “flare-up” planning and communication, in addition to some of the more traditional functional rehabilitation topics like body mechanics, positioning and adaptive equipment.

From anecdotal and clinical evidence, we knew our program was helpful for many individuals. Patients not only reported how their lives had been improved, they also made clinical gains and improved outcome scores.

But we wanted to know if our program was effective overall. We also wanted to contribute to the body of literature addressing occupational therapy’s role in chronic pain, because clinical research is so often used to influence reimbursement and health care policy-making these days.

Our study reviewed the clinical outcomes of 45 patients who completed our Lifestyle Redesign for Chronic Pain program, attending on average more than nine therapy visits over 18 weeks. Excluding those individuals who attended our program specifically for chronic headaches, the most common diagnoses in this study were low back pain, myalgia (including fibromyalgia) and complex regional pain syndrome. These conditions are notoriously difficult to manage and are rarely resolved quickly.

We found significant improvements in occupational performance and satisfaction, pain self-efficacy (a person’s confidence in their ability to function and manage pain) as well as in certain quality of life aspects such as functional limitations due to physical or emotional health and social function. Pain itself was reported to improve only slightly but did not show any statistically significant change, which is consistent with the goals of chronic pain treatment as mentioned earlier.

These positive findings support the use of Lifestyle Redesign for people living with chronic pain, and we hope that this study will empower other occupational therapists to use lifestyle-based treatments in their own clinical settings to help those with chronic pain diagnoses.

On a broader scale, we aspire to complete additional studies to support insurance reimbursement and funding of lifestyle-based occupational therapy services, increase occupational therapy’s role and visibility in chronic pain management and influence legislation and policy efforts through evidence-based practice.

Read “Lifestyle Redesign for Chronic Pain Management: A Retrospective Clinical Efficacy Study” by visiting tinyurl.com/ajotpain.
Meet the occupational scientists and therapists pushing the profession forward.

SAMAR AL-HASSANI MA '18

BY BRYAN KANG MA '18

Age: 27
Hometown: Bethlehem, Palestine
Undergraduate studies: Bachelor’s degree in occupational therapy from Kuwait University
OT areas of interest: Pediatrics, Sensory Integration, driving rehabilitation and Lifestyle Redesign
Meaningful occupations: Swimming, riding a bicycle, reading
Describe OT in a few words: Enabling people to participate in everyday occupations they want and need to do

When did you first want to pursue occupational therapy?
I initially wanted to study medicine to become a pediatrician. While I was taking the premedical requirements, I accidently came across an orientation lecture about occupational therapy, which was a new program to be started in a few months. I fell in love with all aspects of OT and knew that OT was what I am meant to be!

You were born in Kuwait and moved to California; what was that transition like?
It was hard at first when I suddenly found myself out of my comfort zone and away from my social network and meaningful occupations. Fortunately, I was soon able to establish a new meaningful routine and social support system. The great support provided by USC Chan to international students has made it much easier to adapt to this transition.

What are the differences between how OT is practiced in the U.S. and in Kuwait?
OT is a newly developing profession in Kuwait and is currently limited to the main practice areas (pediatric, neurology and hand therapy) in hospital and school settings. OTs in Kuwait face many challenges, including a lack of resources and awareness. However, occupational therapy is making steady progress each year with great efforts to raise awareness among health care professionals and the public.

As you finish your post-professional degree, what advice would you give to incoming students?
I encourage all students to take full advantage of all the great learning opportunities and resources that the division has to offer. Sometimes it can get challenging, but the final outcome is really worth it, and everybody in the division is here to help you make your dream a reality. Fight On!
In commemoration of the profession’s centennial anniversary and USC occupational therapy’s 75-year anniversary in 2017, we journey into the division’s recently renovated archives, located at the Center for Occupation and Lifestyle Redesign, to dig up some precious gems that represent the evolution of the profession and Trojan education.

INTO NEW DIMENSIONS
“A Proposed Handbook in Ceramics Techniques for Use in Occupational Therapy” (1949), written by Elizabeth “Bekke” Squire Engelke, is the earliest master’s thesis in the Chan archives. “The Occupation of Mate Selection” (1995), written by Sheama Seshagiri Rao Krishnagiri, is the division’s first doctoral thesis in occupational science. USC has long set the educational standards for the profession, establishing the first post-professional degree program in occupational therapy in 1947 and the first doctoral program in occupational science in 1989.
WAVES OF NOSTALGIA
Long before occupational therapy visionary Florence Cromwell MA ’52 made her indelible mark on the profession as a fierce advocate and esteemed leader, she served in the U.S. Naval Reserve as a WAVES (Women Accepted for Volunteer Emergency Service) officer. The WAVES program was meant to release men for sea duty during the Second World War by replacing them with women in shore establishments. Cromwell served as an administrative assistant at the Radio Maintenance Division of the Bureau of Aeronautics in Washington, D.C. This hat, worn by Cromwell in her post from 1943 to 1946, pays homage to a time that Cromwell described as providing an important beginning to her occupational therapy career. After serving the country, Cromwell used the GI Bill to pursue her graduate studies before eventually becoming a USC faculty member, two-time president of the American Occupational Therapy Association and a recipient of the esteemed AOTF/ AOTA President’s Commendation.

SPINNING OUR TALES
The spinning wheel — which spins fibers into weavable yarn — represents an earlier time in occupational therapy’s history when crafts like weaving were predominantly used with patients, thanks to their appreciable therapeutic and restorative value. That practice remained popular in the profession until the mid-century, when occupational therapy began focusing increasingly on medical models of physical rehabilitation. USC Chan remains one of the few educational programs that still integrates arts and crafts into its curriculum as a means for students to explore and develop their own creativity to one day foster the skills and spirits of others.
SALUTING HISTORY
During World War II, occupational therapists were in high demand in military hospitals throughout the nation. Mary Reilly ’51, who would go on to be known as the “godmother” of the philosophical base of occupational therapy, enlisted as a civilian therapist with the U.S. Army Medical Specialists Corps from 1941 to 1955. Reilly’s Army jacket reflects her success in the armed forces, where she not only rose to the rank of captain but also earned the Army Meritorious Civilian Service Award and an Army Certificate of Achievement for her service at San Francisco’s Letterman General Hospital.

YESTERDAY’S SCRAPS
Margaret Rood’s personal scrapbook is just one of the many items housed in the Chan archives. In 1943, Rood was named the first chair of the USC Department of Occupational Therapy, a position she held until 1952. In 1958, she received the profession’s highest academic honor, the American Occupational Therapy Association’s Eleanor Clarke Slagle Lectureship Award. Rood practiced as both an occupational therapist and physical therapist. She returned to the university to chair the USC Department of Physical Therapy from 1960 to 1966. “Roody,” as she was known to many, died in 1984 but her legacy still looms large — in 2016 she was named to AOTA’s list of occupational therapy’s 100 most influential people in celebration of the profession’s centennial anniversary.
Announcing . . .

TRAINING IN OCCUPATIONAL THERAPY

THE UNIVERSITY OF SOUTHERN CALIFORNIA PRESS
LOS ANGELES 7, CALIFORNIA

November, 1945

THE FIRST PAGE
This 1945 admissions pamphlet outlines both the Bachelor of Science degree program as well as the Certificate in Occupational Therapy program for college graduates without a major in occupational therapy. The curricula include “basic training in the biological sciences, psychology, arts, and crafts.” Students were required to complete an eight-month clinical experience at hospital centers, including Los Angeles General Hospital, and take an entrance exam for official registration with AOTA’s National Registry of Occupational Therapists before entering the profession. The tuition price was $11 per semester while “rooms and meals” cost approximately $55 per month. How times have changed!

TEST CASE
The Sensory Integration and Praxis Test (SIPT) was published by former faculty member A. Jean Ayres ’45, MA ’54, Ph.D. ’61 in 1989 to evaluate sensory processing and praxis functions in children ages 4-8 years, 11 months. The 17-item SIPT evolved from the original tests, known as the Southern California Sensory Integration Tests, that Ayres developed beginning in the early 1960s. The SIPT administrator uses objects from the case to test children’s visual, tactile, kinesthetic and motor skills based upon neurodevelopmental principles that were hallmarks of Ayres’ research.
husband got a job in the Mixed Reality Lab at the Institute for Creative Technologies — and, between the two, a brain trust was born between VR and stroke rehab.

For Liew, the light bulbs really started to flash when she attended the Neurotech conference — a big, industry-academic partnership featuring the latest in tech advances. Liew had already been working on stroke rehab for awhile and worked on brain-feedback interfaces, devices that essentially allow patients to see what is going on inside their brains to encourage them to build circuitry.

At the Neurotech conference, something clicked.

“There was a lot of tech, but not a lot of science behind it,” says Liew, who also has joint appointments with the USC Division of Biokinesiology and Physical Therapy as well as the Department of Neurology and the Mark and Mary Stevens Neuroimaging and Informatics Institute at the Keck School of Medicine of USC.

Liew started to dig into VR research and found some fascinating studies about bodies inside a VR system. One study showed that if you give someone an avatar with long arms in the virtual world, they interact for people recovering from a stroke, even the simplest motions can become a struggle. To lift a hand, for example, requires a signal from the brain that travels all the way down an arm to the hand. That’s a lot of moving parts — and when something is damaged, it makes regaining those skills an arduous and slow process.

That could all change, though, with the help of some innovation and advances in virtual reality.

It was almost by chance that USC researcher Sook-Lei Liew started thinking about virtual reality. She was a neuroscientist, and so was her husband. When she became a USC faculty member in 2015, her

ASSISTANT PROFESSOR SOOK-LEI LIEW MA ’08, PHD ’12 IS EXPLORING NEW BRAIN-COMPUTER INTERFACES THAT CONNECT STROKE SURVIVORS TO THE WORLDS OF TECH AND MEDICINE.

BY KATHARINE GAMMON

For people recovering from a stroke, even the simplest motions can become a struggle. To lift a hand, for example, requires a signal from the brain that travels all the way down an arm to the hand. That’s a lot of moving parts — and when something is damaged, it makes regaining those skills an arduous and slow process.

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with the real world as if they had long arms. The effect even lasts for 10 or 15 minutes after a person removes the VR headset.

And another study showed if you give someone a child-like body in VR, that person starts to have more child-like features in the real world.

That made Liew wonder something that would change her work forever: “If you give someone a healthy body in VR, will that help them recover their health?”

She launched a project in January 2016 with a grant proposal to the American Heart Association and received $150,000 to explore the possibility of a VR brain-computer interface to treat stroke survivors.

She and her colleagues (initially her husband, but then other researchers) wanted to create something that was low-cost and portable. Her lab, the Neural Plasticity and Neurorehabilitation Laboratory, was home base for the work.

Most brain-computer interfaces use functional magnetic resistance imaging (fMRI), a huge and expensive technology that measures brain activity by detecting changes associated with blood flow.

“The problem is that it’s really hard to get somewhere if you have a severe stroke,” Liew says. “Typically you can’t drive and your mobility is impaired.”

That made it all the more vital to get the device to people, rather than have people come to the tool. The team built a prototype using a laptop computer, an off-the-shelf VR rig, a $9 swim cap and an open-source brain-computer interface electroencephalogram (EEG) system. Liew used her mother’s sewing machine to stitch the electrodes to the cap. The whole system costs less than $5,000. It’s called REINVENT: Rehabilitation Environment using the Integration of Neuromuscular-based Virtual Enhancements for Neural Training.

This is how it works: The system uses virtual reality as well as brain and muscle sensors to show arm and hand movement in the virtual world when the patient has activated the correct brain and muscle signals, even if the patient cannot move his or her arm or hand in the real world. Over time, they can train the damaged circuits to work again.

So far, the system has only been tested on healthy older adults, but in the next six months it will be tested on people recovering from a stroke.

Ryan Spicer, a programmer analyst on the project, pointed out that older adults are generally a population that isn’t thought of as VR adopters — but some of them were very interested. The initial results showed that the healthy older adults were happy to use VR. Spicer says that, in the future, the activities and art could be tailored to each person’s interests.

The team demonstrated the project at the South by Southwest festival this year, and the experience was mind-bending for Liew.

“Our booth was across the hall from NASA, and they had a Mars habitat. Whereas we had a system that was sewn together with my mom’s sewing machine,” she says, with a laugh.

Still, she says they received great feedback during the conference. Out of 38 VR demonstrations, REINVENT won a special prize: Special Jury Recognition for Innovative Use of Virtual Reality Technology in the Field of Health.

“Most of the demonstrated uses for VR are gaming or entertainment right now,” Liew points out. “But the future has got to include VR for health care, too.”

Are people in the future going to be controlling houses and cars with their brains? Liew thinks it’s unlikely.

“If you can use your hands, your brain has lots of experience telling your hand to manipulate things,” she says. “The area where VR is the most useful is where they allow us to do things we can’t otherwise do.”

That could include, for example, immersive worlds to distract people while they’re getting chemo in the hospital. “It’s a way to take your body out of a situation,” Liew says.

David Krum, a computer scientist on the team, agrees.

“Everyone is excited about entertainment, but there are other uses for VR,” he says. “A lot of companies are more interested in monetizing games. Some of these other applications are a really important social good, but the economics of it are different.”

Liew sees VR as a true interdisciplinary venture.

“It’s a blend of tech, industry, science and the clinic,” she says. “It really takes it to a whole new level.”
It’s safe to say that Celso Delgado Jr. bleeds cardinal and gold. The associate professor of clinical occupational therapy has been at USC, in one capacity or another, since 2001. Whether he’s in the classroom teaching students, working with partners and patients in the community or cheering on the Trojan football team from the grandstands, he truly embodies the spirit of “Fight On!” Here are five more things to know about Celso Delgado Jr.:

1. He first heard about occupational therapy in, of all places, his USC dorm. During his undergrad days at USC in the early ‘00s, Delgado was a resident advisor charged with keeping an eye on the well-being of students living in the North Residential College dormitory. That was where he learned about occupational therapy, thanks to Dr. Florence Clark, who was also living in the residential housing complex as its designated “faculty master” at the time. “Dr. Clark knew I had an interest in working with youth in low-income communities, and she told me about all the ways that occupational therapy makes a difference in people’s lives.”

2. He is the faculty advisor to USC’s Troy Camp. An alumnus of Troy Camp — one of the university’s oldest and largest philanthropic organizations through which USC students provide sustained mentorship to South Los Angeles elementary students throughout the school year and host them at a week-long camping experience in the San Bernardino Mountains — Delgado is now its faculty advisor, mentoring the next generation of mentors. “The kids and families describe the one-week camp experience as life-changing.”

3. He knows that fall is for football. A self-described Trojan football fanatic, Delgado has crisscrossed the country to watch his beloved Trojans play at away and bowl games, and on any given autumn Saturday, you can find him somewhere on campus or in the L.A. Coliseum. That’s because Delgado, a longtime football season ticket-holder, has missed only a handful of USC’s home football games since 2001.

4. His own family experiences shape his perspective on giving back. As a child of immigrant parents from Mexico — his mother is a housekeeper, and his father is a gardener — Delgado was raised in Los Angeles in what he calls “a very humble home.” That background inspires his attitude and outlook to this day. “I help others reach their highest potential by encouraging them to take advantage of the resources they have available to them in their community.”

5. He puts the “partner” in partnership with vulnerable Angelenos. Based out of the USC University Center for Excellence in Developmental Disabilities at Children’s Hospital Los Angeles, Delgado delivers occupational therapy services to unserved and underserved children and adolescents living with mental health and wellness concerns. Thanks to the publicly-funded Children’s Full Service Partnership program, Delgado meets with clients and their families in homes, schools and community settings for up to one year. “It is a privilege to have families trust me and welcome me into their homes to support them with their needs; through the process, I end up becoming part of the family.”
In August, the National Institutes of Health awarded Baranek a new grant in the role of principal investigator, alongside Professor Linda Watson from the University of North Carolina at Chapel Hill's Division of Speech and Hearing Sciences. Officially titled “Evaluation of a Novel Intervention for Infants at Risk for Neurodevelopmental Disorders,” the two-year R21 award, totaling more than $400,000, is funded by the NIH Eunice Kennedy Shriver National Institute of Child Health and Human Development.

The project will develop and test a new model designed to help parents improve their responsiveness to their infants ages 11-15 months who are at-risk for a later diagnosis of autism spectrum disorder. In what is known as the “Parents and Infants Engaged” or “PIE” model, a trained coach facilitates parents’ observations and interpretations of their child’s behaviors, specifically reactions to sensory stimuli and pre-linguistic communication, deficits in which are considered typical features of ASD. The coach will also collaborate with parents to explore alternative responses and to reflect upon whether or not different responses helped the infants better engage with their environment and with their parents.

Continued on page 30
Life in modern American society can seem awfully complicated, what with its salacious scandals, political dust-ups, too-frequent violence and wall-to-wall media coverage amplifying it all. Add to that the typical daily stressors of making ends meet, performing well on the job or in class and staying physically and mentally healthy, and there is plenty to keep any Trojan awake at night. Occupational therapy cannot solve these problems by itself, but it can help make everyday life seem a little more peaceful, pleasant and purposeful. Explore the many ways that occupational therapy helps quell the chaos, from the classroom to the campus dormitory to the clinic, to keep USC students, faculty and staff at their very best.
“Rough.” That’s how Rachel Blocher ’18 describes her transition from high school to college.

Hailing from the Bay Area and dealing with the typical waves of homesickness, she found it difficult to click with her new peers on campus. To make matters worse, poor time management led to a failing grade in chemistry, which might not have been such an issue if she weren’t in the pre-med program.

Now a senior majoring in business administration with an emphasis on marketing, Blocher reflects back to the tools that could have helped her better navigate that crucial first year.

“It would have been nice to have support in the beginning,” she says. Thankfully, USC Chan is doing just that by offering a new course this semester geared toward helping students adjust to college life.

FEWER COPING SKILLS

Taught by Ashley Uyeshiro Simon ’08, MA ’10, OTD ’11, assistant professor of clinical occupational therapy and an expert in lifestyle-based occupational therapy, OT 101: Caring for Your Self: Engaging in Healthy Habits and Routines strives to empower freshman students’ capacity for self-care, aid in their ability to cope with stress and decrease attrition rates from year one to year two.

The course was developed in response to an early 2017 retreat hosted by USC Provost Michael Quick, during which USC Chan faculty members were invited to present ideas to better assist first-year students in making the transition to college.

In addition to the standard challenges incoming students face, Uyeshiro Simon says each year, the acceptance pool from which USC admits its incoming freshman class grows larger and more qualified, with higher GPAs and SAT scores. In turn, the competition (and pressure) on academic performance is increasingly greater.

“There’s a realization in college that you can’t be top of your class and you’re not going to get an A in everything like you did in high school,” Uyeshiro Simon says. “A lot of the students who worked so hard to get good GPAs and SATs are perfectionists and overachievers, and they’ve lived that way their whole lives. They get to college and can’t do that anymore because it’s not sustainable, but they don’t know how else to do it.”

Students are also coming to USC with fewer coping skills as a result of more and more “helicopter” parenting, according to Uyeshiro Simon.

“There is a lot of change between external motivation in high school, like your parents telling you to study and then giving you a bedtime at night, versus college where there’s no one to tell you to study. It’s all up to you, and it has to be this intrinsic motivation instead,” Uyeshiro Simon explains. “At the same time, you’re living alone for the most part, so you have to develop life skills while you’re trying to cope with all of the academic stuff. It’s a very difficult and tense transition period for our first-year students, because they’re going through so much.”

Post-secondary schools are seeing higher rates of mental health issues among students. As a result, many universities across the nation have instituted either a class during welcome week or a mandatory class similar to OT 101 specifically for this reason.

BODY, MIND AND SOUL

OT 101 meets once a week in a residential dorm building for 90 minutes to promote the daily implementation of self-care, which Uyeshiro Simon describes as any activity that improves an overall sense of well-being.

“If your body is healthy but not your mind — you’re feeling anxious or depressed — then you’re not healthy,” she says. “Self-care focuses on body, mind and soul, and they’re all equally important.”

Topics covered include identity and diversity; healthy eating, sleep and exercise routines; stress, anxiety and depression; coping mechanisms and finding restorative occupations; substance use; time management; forming healthy relationships; and assertive communication.

A menu of coping strategies is provided, and after students figure out which ones work best for them, their literal homework is to try implementing them within their daily routines. Activities in class run the gamut from yoga to deep breathing, meditation, coloring mandalas and journaling — a therapy dog has even made a guest appearance.

PRIORITIZING SELF-CARE

For freshman psychology major Emma Collins ’21, OT 101 is not only helping her balance her class load and social life, but it has also opened career avenues she never considered previously.

“I didn’t really know what I wanted to do coming into college,” Collins says. “I started as a business major, but after a couple of weeks in this class, I decided to switch to psychology since it matches with the most occupational therapy prerequisites for the master’s program at USC. I’m minoring in occupational science. After learning about it just a little bit, I knew it was a better fit for me.”

The discussions in class that resonate most with Collins covered sleep and exercise, two aspects of college life she believes many students take for granted.
USC has long championed the role of residential faculty in the lives of freshman as they are adapting to the demands and culture of campus life.

The residential faculty program was launched in 2012 under the leadership of former USC Provost Elizabeth Garrett.

Garrett, who was a strong advocate for healthy student life, recalled a conversation with a student who approached her after an event. The student shared that he was finally able to see that people can indeed disagree about politics while still having civilized, productive discussions that don’t devolve into shouting matches.

“That’s what a university is supposed to be about,” said Garrett, who died in 2016 from cancer. “It would be a really great thing if all our students left their experience in the residential colleges with an even greater appreciation for the life of the mind and for the value of intellectual discourse, and for the ability to recognize and appreciate differences while working toward common ground.”

This valuable blend of living and learning now defines the USC student life experience. As of 2012, USC freshmen have been housed in residential colleges, where they benefit from the strong involvement of resident faculty.

EXPERTISE NEXT DOOR

Myka Winder ’07, MA ’10, OTD ’11 is one of those faculty members. Winder, an assistant professor of clinical occupational therapy at USC Chan, has been living in the South Residential College in Pardee Tower since the program started. These days, her “roommates” include her husband, Shiloh, and 1-year-old daughter, Amelia. Winder even lived in that very tower during her own time as a USC undergrad.

“The building still smells the same, and I have tons of memories from living here. Now I have my own bathroom, which makes a big difference!” she says, with a laugh.

While her residence is (sort of) the same, her role today is very different.

“I would say I serve primarily as a neighbor, mentor and community leader, who is a faculty member and occupational therapist by profession,” Winder says.

Winder’s OT background lends itself well to her residential faculty role. She believes that Lifestyle Redesign — an occupational therapy approach to promoting wellness by helping people build, enact and sustain healthier lifestyles — has direct applications for students who are living away from home for the first time.

“Occupational therapy faculty members are an ideal fit for faculty-in-residence work to engage in meaningful occupations outside the classroom with students and support students in healthy behaviors,” Winder says. “My background in Lifestyle Redesign is a perfect fit to support programming for healthy lifestyles and holistic wellness for students.”
Because of her training and positioning, Winder can provide a lot of value to on-campus residents.

“I live among students and engage in my daily occupations in the residence halls and on campus,” Winder says. “Research has shown that faculty engagement with students outside of the classroom promotes student satisfaction and positive academic outcomes, and can positively affect psychological health.”

While the weekly commitment can vary, Winder regularly hosts events focusing on time and stress management and serves as a day-to-day role model to promote healthy behavior. She also coordinates activities such as hiking, stand-up paddle boarding and tours of the Huntington Library and Gardens. Winder and other faculty residents host dinners and invite alumni to join in order to share their career journeys with students.

“I remember the first time I was invited to someone’s home during my undergrad. I felt like I had not been in a ‘home’ for so long, in my temporary dorm room. I wanted to help make a home-like atmosphere for current residents by welcoming them into my home and engaging in activities with them, such as hiking and being in nature.”

For students, the activities can serve as an outlet to detach from studies and the pressures of day-to-day life.

“I can say without a doubt that these events and activities have nothing but positive effects during this turbulent stage in many people’s lives, including my own,” says Pardee Tower resident Seth Mitchell ’21, who is an occupational therapy major.

“After being stuck inside studying all day, activities like going on hikes and making smoothies not only are healthy ways to take a break, but they are enjoyable! Having these events and activities organized for you provides that convenience and yields something that is much more beneficial to the mind and body.”

For others, a faculty resident can serve as a trusting safe haven while away from the comfort of their own homes and families.

“Having a faculty resident live in my same building is a unique and definitely important aspect of my residential experience,” says Natalia Wurst ’21, a pre-law student living in Pardee Tower. “Being away from the familiarity of my home, it’s comforting to know that I have a mentor available to me to help with the sometimes-overwhelming transition.”

Winder says she wants to represent USC residential faculty beyond the South Residential College. She hopes to serve as a healthy role model to students across the university, whether that’s at the Lyon Center gym where she works out and swims, in dining halls discussing healthy meal options or at the on-campus pharmacy where she runs errands and picks up prescriptions for her family.

“As an occupational therapist with a special interest in working with college students, what an amazing opportunity to be in a sort of living-learning laboratory,” Winder says. “I get to engage in daily occupations alongside students. Working with college students is my professional passion.”
THE RESET BUTTON

Struggling with anxiety? Trying to manage your diabetes? Aiming to lose weight? A Lifestyle Redesign from the USC Occupational Therapy Faculty Practice might be just what you need.

BY HOPE HAMASHIGE

Manuel Rivera was in such a rush to pay off his bills that he took on a part-time job even though he was already working full-time at USC.

Before long he was socking away extra money, but he was also working seven days a week, sleeping less and had no time for exercising or seeing friends or family.

In early 2015, he ended up in the emergency room thinking that he was having a heart attack.

Rivera’s primary care physician at Keck Medicine of USC determined that his schedule brought on a panic attack and wrote him a referral that he didn’t expect: to the USC Occupational Therapy Faculty Practice for help through the Lifestyle Redesign program.

Rivera admits the referral puzzled him initially because he thought occupational therapists helped people through rehabilitation following a hospital stay, which of course they do. But he soon discovered much more to occupational therapy than he ever knew.

POWER OF PREVENTION

In addition to providing the USC community with top-rated rehabilitation services, the faculty practice provides a suite of preventive health care services to help patients make lifestyle choices that achieve optimal wellness.

The practice offers programs to manage health problems like diabetes and chronic headaches. Its clinicians have developed effective programs to help patients deal with a range of mental health concerns, including anxiety, stress and depression. They have also proved to be an effective tool for many on both USC campuses to jump start and maintain healthy weight loss.

“People tell us we are the best kept secret on campus because many people who come to us don’t know the range of services we offer,” says Chantelle Rice Collins ’07, MA ’08, OTD ’09, director of the USC Occupational Therapy Faculty Practice.

The programs offered by the occupational therapists, all of whom are also faculty members at USC Chan, are a complement to medical care, not a replacement for it. Physicians diagnose, prescribe to and treat patients while their occupational therapist can help them understand, through detailed lifestyle evaluations, how they can better structure their daily activities and what impact that has on their health.

Such evaluations help patients understand the underlying causes and lifestyle decisions that make their conditions either worse or better. The faculty practitioners help patients identify the triggers and behaviors that lead to poor decision-making. Identifying those
individual triggers can help them understand the interplay between lifestyle factors — such as lack of exercise or failing to eat breakfast — and their overall health. It also helps them restructure their lives to avoid triggers or react to them in a more positive way.

Rice Collins notes that while most people understand that a healthy lifestyle is critical for everyone — especially those living with chronic health problems like Parkinson’s disease, cardiovascular disease or depression — few people know how to create a plan for executing daily activities that will help them be at their best.

“Individual triggers can help them understand the interplay between lifestyle factors — such as lack of exercise or failing to eat breakfast — and their overall health. It also helps them restructure their lives to avoid triggers or react to them in a more positive way.”

— Rice Collins

In fact, she found that occupational therapy helped her cope with grief so well that she has continued to work with the therapists to learn to manage her time better so that she could achieve a dream: Lundsten has longed to pursue a master’s degree. But with a full-time job at USC, serious creative pursuits outside of her job, and a husband she wants to spend quality time with, she couldn’t imagine where to squeeze it in.

Working with her occupational therapist, Lundsten made adjustments to the way she structured her day, prioritizing those things that are most important and learning to let go of things that aren’t. The end result has been more time available to pursue achievable steps toward her academic goals.

“I have been blown away by how small changes can lead to huge differences,” says Lundsten, who is now pursuing a master’s degree in visual anthropology at USC.

A DREAM COME TRUE

Apryl Lundsten first made an appointment with the USC Occupational Therapy Faculty Practice to help her navigate a series of personal losses. The approach of evaluating her lifestyle and making deliberate changes is one that she responded to well.

“The complexities of implementing changes for individuals, the problem-solving piece, requires a lot of work on a regular basis,” says Rice Collins, who is also an associate professor of clinical occupational therapy at USC Chan.

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STRIKING A BALANCE

Part of the reason so many patients respond well, Rice Collins notes, is because the faculty clinicians know that the Lifestyle Redesign approach works because of its evidence-based approach.

For more than two decades, USC Chan faculty have been conducting randomized controlled trials to study the efficacy of preventive occupational therapy services. In fact, 2017 marked the 20th anniversary of the publication of the USC Well Elderly Study results in the Journal of the American Medical Association, the first occupational therapy study to ever earn a spot within the journal’s prestigious pages.

Thanks to working with a USC occupational therapist after his panic attack, Rivera has learned that his bills weren’t as much of a problem as was the fact that he wasn’t managing his daily activities particularly well. Today he is paying down his debt, albeit more slowly than he initially hoped, but he has also struck a balance between caring for his finances while caring for his mind and body.

Rivera is working that second job, though not as intensely as he once did, and he has realized that he cannot sacrifice downtime and gym time without ending up in the hospital again. Most importantly, he has learned what triggers his financial stress, and he has proactively changed the way he reacts to it.

“Once I started to analyze what was triggering me, I started to be able to handle it better,” Rivera says. “I have learned a lot from occupational therapy and it has been really helpful.”

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In 1995, Veronica Lorenz was first diagnosed with ependymoma tumors in her spine. “I turned 27 in the hospital,” she says of what would become the first of many surgeries to treat the central nervous system tumors. “I was OK for about 16 years, but after I had my daughter and my mother passed away, everything took a turn.”

The tumors returned in 2011, and Lorenz opted for radiation, hoping to avoid another painful procedure. But six months later, she was on the operating table again. What followed was a series of complications and surgeries, including a serious infection and surgical placement of facia from her hip into her spine.

“I had three surgeries in six weeks; it was incredibly hard on my body,” recalls Lorenz, a former Hollywood make-up artist and Los Angeles-based entrepreneur. Lorenz was still recuperating in the summer of 2013, “when everything started going backwards again,” she says.

Her neurosurgeon found a large cyst pushing on her spinal cord. After three attempts to drain the cyst, Lorenz had her final and most aggressive surgery. “They got the cyst and 98 percent of the tumor,” she says. “But I ended up losing the feeling in my hands and arms. I have a little bit of feeling in my left thumb and a small amount in my left pointer finger, but that’s it.”

The surgery caused Lorenz to lose her sense of proprioception — the brain’s innate sense of the body’s position within 3-D space. “If I have my eyes closed, I can’t tell where my arms are in space,” she says. “They move like a normal person’s arms, but they don’t react the same way.”

“There’s been many times in the shower when I’ve had my eyes closed and I’m like, ‘Who’s touching me?’, ” Lorenz continues. “I think it’s my husband but it’s just me — the stranger within.”

Following her surgery, Lorenz started seeing Janice Rocker OTD ’14, an assistant professor of clinical occupational therapy at USC Chan. “Her child was an infant at the time, and [Veronica] came in crying because she couldn’t hold her baby,” says Rocker, who treated Lorenz for about three years. “That was devastating for her.”

During their initial sessions, Rocker says that occupational therapy was a safe place for Lorenz to find emotional release. “She could let it out,” Rocker says. “Her main challenge was recognizing what she had been through and that she was a survivor.”

Even to Rocker, who is also a certified hand therapist, Lorenz’s injury was unique. “I see a lot of people with devastating trauma, but this was so different,” Rocker says. “Her sensation was so absent. If she closed her eyes, and I bent her arm, she couldn’t tell if her hand was up or down.”

Rocker worked with Lorenz to develop strategies to care for her child including bathing, diapering and feeding. Cooking also posed challenges. “I was getting a lot of burns because I couldn’t feel, but I had to cook for my daughter,” Lorenz explains. “Every day Janice took inventory of my hands, treated them and took care of them.”

Lorenz also gave Rocker the nickname “MacGyver” after she fashioned a pair of custom orthotics on the spot using nothing more than Velcro, braided elastic and elastomer putty to pad her delicate, insensate hand.

“Her hand was going into a claw position, and she didn’t have the strength or sensation to put on [more traditional] orthotics,” Rocker says. “We explored adaptive equipment based on what she felt she needed; showed her options and she liked being considered a partner in her rehabilitation process.”

Lorenz’s treatments included a lot of body–mind work and weights to build her strength. “She wanted to do straight exercises because she used to lift weights,” Rocker recalls. “Whatever she wanted to work on, I would try to make that part of her routine.”

“Janice really thought outside the box,” Lorenz says. “She listened to what I had to say, and we worked together to get things done.”

Lorenz so benefited from her sessions with Rocker that she fought her insurance company to continue treatment.

“I see a lot of people with devastating trauma, but this was so different.”

“When my coverage changed, I had to see whoever the HMO recommended, and it was kind of a joke,” Lorenz recalls. “The therapists had me do these textbook exercises that weren’t addressing me. I needed real therapy.”

Despite the many gains Lorenz made during her recovery, she couldn’t continue her career as a makeup artist. “Janice even helped me when I was applying for disability,” Lorenz says. “She gave me keywords to use and helped me find the information I needed. She took the time to go above and beyond; she really cares.”

While working on the The Hunger Games in 2012, Lorenz came up with the idea of an eyeliner stamp to easily create a cat-eye makeup look. “It gives you continuity when you [film] out of order, and it would be quick and easy to do,” she says. “I was starting to have difficulty with eyeliner because my hands weren’t working quite the way I wanted them to. I think subconsciously I could see the writing on the wall.”

Following a product video that went viral online, Lorenz officially launched Vamp Stamp last spring. The product is designed to make eyeliner application easy, and doubles as an adaptive device.

“We see posts on our [social media accounts] all the time, especially from women with MS, Parkinson’s or even carpal tunnel,” Lorenz says. “They’re grateful and thankful, this helps them feel empowered again.”

Once again, Rocker was there for support. “I gave her a few strategies for how to market it to people,” says Rocker, who has also recommended the product to clients. “She made lemonade out of lemons. She saw there was a need for this and did it. I’m beyond proud of her.”

Learn more about the Vamp Stamp online at thevampstamp.com and on Instagram @the_vampstamp.
Is exercise more enjoyable with a dog? According to new research by Assistant Professor Olga Solomon, the answer to that question is “paws-itive.”

Solomon and her colleagues at the University of Texas MD Anderson Cancer Center and the USC Department of Preventive Medicine published “Does the Company of a Dog Influence Affective Response to Exercise? Using Ecological Momentary Assessment to Study Dog-Accompanied Physical Activity” in the September 2017 issue of the American Journal of Health Promotion.

The researchers examined whether dog owners were more likely to be physically active while with a dog, and whether or not simply being with a dog during physical activity increased positive affect and decreased negative affect.

To do so, they used a real-time self-report method called ecological momentary assessment. Here’s how it worked: A digital survey was sent via a mobile phone app to participants at eight pre-programmed but random times every day for 12 consecutive days. Each survey included a question about current activity, questions about positive and negative affect and a question about the presence of a dog. Data from 71 adults who own dogs were used in the authors’ analysis.

Results showed that the presence of a dog did not increase the likelihood of being active versus being sedentary at any given time. However, while in the company of a canine during physical activity, participants reported greater positive affect, as compared to not being with a dog.

The research provides preliminary evidence for the power of pooches for positively reinforcing daily physical activity. Man’s best friend may indeed be his best workout partner, too. — Mike McNulty

Access the journal article “Does the Company of a Dog Influence Affective Response to Exercise? Using Ecological Momentary Assessment to Study Dog-Accompanied Physical Activity” at tinyurl.com/solomondogs.
Grace Baranek was the lead author of “Cascading Effects of Attention Disengagement and Sensory Seeking on Social Symptoms in a Community Sample of Infants At-Risk for a Future Diagnosis of Autism Spectrum Disorder,” published in Developmental Cognitive Neuroscience. Baranek was also a co-author of “Initially Intact Neural Responses to Pain in Autism are Diminished During Sustained Pain,” published in Autism; “Heterogeneity of Sensory Features in Autism Spectrum Disorder: Challenges and Perspectives for Future Research,” published in Autism Research; and “A Retrospective Video Analysis of Canonical Babbling and Volubility in Infants with Fragile X Syndrome at 9-12 Months of Age,” published in the Journal of Autism and Developmental Disorders.

Stefanie Bodison was a co-author of “Using a Multifaceted Approach to Working with Children Who Have Differences in Sensory Processing and Integration,” published in the American Journal of Occupational Therapy. Alumnae Karla Ausderau MA ’00, PhD ’09 and Kimberly Wilkinson MA ’01, PhD ’09 were also co-authors.

Michael Carlson was a co-author of “Deciphering Participation: An Interpretive Synthesis of its Meaning and Application in Rehabilitation,” published in Disability and Rehabilitation. Alumna Alison Cogan MA ’12, PhD ’17 was the article’s lead author.

Michael Carlson, Stacey Schepens Niemiec, Cheryl Vigen and Florence Clark were co-authors of “Understanding the Mechanisms of Change in a Lifestyle Intervention for Older Adults,” published in The Gerontologist.


Leah Stein Duker was the lead author of “Parents’ Perceptions of Dental Care Challenges in Male Children with Autism Spectrum Disorder: An Initial Qualitative Exploration,” published in Research in Autism Spectrum Disorders. Sharon Cermak was also a co-author.

Judy Hopkins was the lead author of “Oral Feeding Difficulties in Children With Short Bowel Syndrome: A Narrative Review,” published in Nutrition in Clinical Practice. Sharon Cermak was also a co-author.

Sook-Lei Liew was a co-author of “Visuomotor Adaptation in Head-Mounted Virtual Reality Versus Conventional Training,” published in Scientific Reports. USC Chan staff member Julia Anglin was also a co-author.


Shawn Phipps was the author of the chapter, “Evaluation and Intervention for Perceptual Dysfunction,” in the eighth edition of Pedretti’s Occupational Therapy: Practice Skills for Physical Dysfunction, published by Elsevier. He was also the co-author, along with Pamela Roberts, of the chapter, “Motor Learning,” published in the same text. Phipps was the author of the chapter, “Managing Change and Solving Problems,” in the second edition of Leading & Managing Occupational Therapy Services: An Evidence-Based Approach, published by F. A. Davis Company. Phipps was also a co-author of the chapter, “Strategic Planning,” published in the same text.

Shawn C. Roll was a co-author of “Direct and Precise Quantification of Forces Applied by Sonographers during Abdominal Imaging,” published in the journal Work. Roll also co-authored “Hand Therapy Interventions, Outcomes, and Diagnoses Evaluated over the Last 10 Years: A Mapping Review Linking Research to Practice,” published in the Journal of Hand Therapy. Sandy Takata MA ’15, OTD ’16, PhD ’21 and Emily Wade ’14, MA ’15, OTD ’16 were also co-authors.

John Sideris was a co-author of “Mediating Parent Learning to Promote Social Communication for Toddlers with Autism: Effects from a Randomized Controlled Trial” and “Assessing Quality of Program Environments for Children and Youth with Autism: Autism Program Environment Rating Scale (APERS),” published in the Journal of Autism and Developmental Disorders. Sideris was also a co-author of “Multi-Informant Assessment of Transition-Related Skills and Skill Importance in Adolescents with Autism Spectrum Disorder,” published in Autism.

Olga Solomon was a co-author of “Understanding Parents’ Concerns about their Children with Autism Taking Public School Transportation in Los Angeles County,” published in Autism. Solomon was also a co-author of “If I was a Different Ethnicity, Would She Treat Me the Same?: Latino Parents’ Experiences Obtaining Autism Services,” published in Disability and Society. Amber Angell PhD ’16 was the lead author of both articles.

Cheryl Vigen was a co-author of “Metabolic Conditions and Breast Cancer Risk among Los Angeles County Filipina Americans compared with Chinese and Japanese Americans,” published in the International Journal of Cancer.
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The risk of ASD in infants, without known familial risk, cannot be easily detected through biomarker screening. This study will help clarify whether parent responsiveness to infants’ sensory regulation and social-communicative development is effective at preventing the cascading effects of atypical neurodevelopment on later adaptive outcomes.

“Occupational therapists are key providers of early intervention,” Baranek says, “yet we’re in desperate need of efficacy research, such as PIE, on parent coaching models for sensory regulatory challenges in infants. Our study hopes to change developmental trajectories of infants at risk for a later diagnosis of ASD for more optimal engagement with the world around them.”

PEARLS OF WISDOM

The PIE study is an outgrowth of Baranek’s nearly 20-year-long relationships with various ASD experts at UNC Chapel Hill, where she was a founding director of the Program for Early Autism Research, Leadership and Service before coming to USC Chan. PEARLS, as it’s otherwise known, is an interdisciplinary project aimed at developing early assessment tools and interventions for ASD. Over the years, the PEARLS team, including Baranek, has produced dozens of publications and conducted NIH-funded research programs.


Nancie Furgang MA ’78 delivered the keynote address, entitled “Vision Through a Political Lens,” at the Annual Fieldwork Education Appreciation Event of the University of New Mexico’s Occupational Therapy Graduate Program.

Pollie Price MA ’94, PhD ’03 and Sheama Krishnagiri MA ’89, PhD ’94 were co-authors of “A Way of Seeing: How Occupation is Portrayed to Students When Taught as a Concept Beyond its Use in Therapy” and “Explicit or Hidden? Exploring How Occupation is Taught in Occupational Therapy Curricula in the United States,” published in the American Journal of Occupational Therapy.


Bill Wong MA ’11, OTD ’13 co-authored “Increasing Diversity and Inclusive Leadership Communities Within Occupational Therapy,” published in OT Practice magazine.

With Baranek’s arrival at USC Chan in early 2017, PEARLS became both an interdisciplinary project and an intermural one.

In November, USC Chan hosted the first of what is expected to become an annual meeting of PEARLS experts who are researching early identification of, and interventions for, infants at-risk for a future diagnosis of ASD. At the table were faculty members hailing from USC Chan, the USC Division of Biokinesiology and Physical Therapy, the USC Viterbi School of Engineering, UNC Chapel Hill and Vanderbilt University, representing the fields of occupational science and occupational therapy, physical therapy and movement science, engineering and computer science, speech and hearing sciences and psychology.

The invited participants convened at USC Chan to discuss their cutting-edge research, potential collaborations and translational projects. Additional experts even video-conferenced into the symposium from destinations as far away as Europe, and because one goal of PEARLS is student training and mentoring, a dozen graduate students from USC and UNC joined the day’s discussions.

“It was inspiring for someone like myself, who has little research experience, to be surrounded by such successful researchers who have been and currently are performing ground-breaking work in the field of infants at-risk for autism,” Lauren Hastings MA ’17, OTD ’18 says.
Wayne Hinthon MS ’79 has been called many things throughout his life. The retired mechanical engineer has a USC graduate degree in Systems Management. His late wife, Micky ’53, was a beloved occupational therapist and proud Trojan. Now, thanks to a recent bequest gift, the Hinthorns’ legacy will shine brightly at USC Chan for decades to come.
The new year is a natural time for reflection, and recently I have found myself reflecting on “themes of meaning,” a core concept of occupation introduced to me by former faculty member Jeanne Jackson MA ’86, PhD ’95. Our recent occupational therapy graduate student project was the occupational therapy centennial float in the Annual Tournament of Roses Parade, an endeavor to honor the 100th anniversary of the occupational therapy profession. That dream was made reality, thanks to years of grassroots advocacy and fundraising by a team of more than 50 occupational therapy practitioners and students from around the country. But only recently have I come to appreciate just how much that multi-year effort and the occupational therapy centennial float itself have also meant to me personally.

As a child growing up in Minnesota, it was a family tradition of ours to wake up on the first day of the year and watch the Rose Parade on television. The streets of Pasadena seemed like a world away from the freezing, snowy tundra of Minnesota ... sunshine?! warmth?! The floral floats glistening in the sun were utterly amazing. But what also struck me were the thousands of smiling people along the parade route wearing t-shirts; no jackets, no scarves, no bulky layers of winter survival gear, and in January?! The seed was planted very early in my mind: “One day, I will make it to this place called California.”

I moved to Los Angeles for my occupational therapy graduate education in the ’90s and have been here ever since. About a dozen years ago, my husband and I went to the Rose Parade in person for the very first time, along with our young children, both suited up in diapers and Baby Bjoens. The floats, the bands and the pageantry viewed up close in person were more spectacular than I could have ever imagined! We were instantly hooked on this annual tradition, and our family has only missed a single Rose Parade ever since.

Occupational science literature points to the power of rituals. Counting the television audience of 73.5 million viewers in 2017, the Rose Parade is the largest social ritual in the entire world. Interestingly enough, the Rose Parade has also been an incredibly powerful ritual for my family, past and present. Bringing the occupational therapy centennial float to life, I have realized, has been a culmination of my family history, my personal experiences and my professional passions. Intensely meaningful experiences like this lie at the intersection of people, communities and traditions. As it turns out, the Rose Parade has become a foundation of one of my own themes of meaning.

Throughout the past year, I have heard countless stories from people far and wide about their gratitude, connections to the profession and how much it meant to have occupational therapy represented in the Rose Parade. In these stories — told by float riders themselves, fellow practitioners and viewers on the sidewalks or watching from home — the essence of occupation is made loud and clear. It is deeply rewarding to have participated in something that resonates so profoundly with others. But it is especially humbling to realize the impact you can make on people whom you didn’t even expect to.

That’s one of the things I love most about occupational therapy and about my position here at USC Chan. Students often begin their very first clinical practice immersion with questions like, “What did I get myself into? Am I in the right place? What is occupational therapy?” Yet in a few short years they become confident, competent, articulate and empowered professionals. Playing a part in this growth process, to help plant a few seeds and contribute in some way to students’ professional transformation, is so special to me. When a seed is planted, it’s incredibly exciting to watch it grow.

One of the greatest lessons I have learned is that growth, both personal and professional, requires a tolerance for ambiguity and a capacity for becoming comfortable with the uncomfortable. When students are faced with difficult challenges and are struggling to make “the right” decision, I often say, “Make the decision, and then make it right.”

I first came upon this quote when I played on a volleyball team. As a former NAIA volleyball student-athlete, I can tell you that in volleyball there is not much time to make decisions. The ball moves pretty darn fast and you have to make split-second choices and you have to live with their outcomes.

Make the decision, and then make it right has served me well throughout my life. It lends itself to forward momentum, which is so key because it prevents you from getting stuck when worrying about making “the right” decision. Instead, it frees you to a new perspective of knowing that you are equipped to handle whatever evolves from any given decision — whether it be choosing a career path, moving to an unknown place, creating opportunities to facilitate client progress, developing sustainable occupational therapy programs or proposing a grandiose idea to build a parade float on behalf of occupational therapy.
USC Chan would like to thank the following for their gifts of support. Their generosity improves the health and quality of life for people across the globe today and decades into the future.

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