

USC Chan

FALL 2023/WINTER 2024

MAGAZINE



PHOTO BY STEVE COHN



HEDGE FUN

At the 2023 Commencement ceremony, USC Chan bachelor's-to-doctorate students stand and cheer amid the crowd of 19,000-plus Trojan graduates. Pictured (from left to right) are Associate Professor of Clinical Occupational Therapy Samia Rafeedie; Nmachi Obiwuru '23, OTD '25; Erin Chung '23, OTD '25; Samantha Osuna '23, OTD '25; and Melanie Kijel '23, OTD '25.



Dear Alumni and Friends,

As occupational therapists and occupational scientists, we all appreciate the transformative power of occupation to change people, places, organizations and populations for the better. This issue of the *USC Chan Magazine* celebrates the many impacts that Trojans are making in today's ever-changing conditions and contexts.

Our cover story follows the growth — pun intended — of the USC Peace Garden, a new grassroots, community-centered project spearheaded by faculty member and alum Camille Dieterle. On an approximately 10,000 square-foot lot in the heart of downtown's University Park Campus, the Peace Garden is bringing together people from all walks of life to learn-by-doing about a number of critical topics, including food justice, greenspace access, ethical and place-sensitive landscape design and environmental sustainability. It's a beautiful space where growth, in more ways than one, is happening every day, and I'm sure Dr. Dieterle would love to welcome you for a tour the next time you're nearby.

On p. 6, learn about our inaugural gamechanger, a new team-based challenge that accelerates ways in which we can better move academic knowledge into the real world. That process, known as Knowledge Mobilization (KMb), breaks knowledge free from the ivory towers of academia through reciprocal and purposeful collaboration with community partners. See more about our new conceptual model of KMb on p. 9, and learn about the three winning gamechanger teams and their KMb products, which I know will shift real-world health behaviors and outcomes for the better. On p. 10, hear from the trio of Trojans who recently won their respective elections to leadership positions in the American Occupational Therapy Association, the fulcrum for so many policy, advocacy and educational decisions that affect occupational therapists from coast to coast. I know they will make a difference for all practitioners.



PHOTO BY NATE JENSEN

Together, as USC faculty, staff, students, alumni and friends, let's continue leveraging the transformative power of occupations to connect, diversify and empower all those whom we encounter in our personal and professional lives.

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

USC Chan MAGAZINE

ASSOCIATE DEAN
AND CHAIR
GRACE BARANEK

DEAN
AVISHAI SADAN MBA '14

DIRECTOR OF
EXTERNAL RELATIONS
**MIKE McNULTY '06,
MA '09, OTD '10**

PHOTOGRAPHY

OLIVER BAKER
HANNAH BENET
PHIL CHANNING
STEVE COHN
CHRISTINA GANDOLFO
FADY HABIB OTD '25
NATE JENSEN
AMY JOHNSON
HENRY R. JONES II
GLENN MARZANO
MIDNIGHT HOUR STUDIOS, INC.
LIQUO QIAN MA '18, OTD '19
MOLLY CASTLE WORK

CONTRIBUTORS

ERNA BLANCHE MA '88, PHD '98
KATHERINE DUMANGAS MA '22, OTD '23
LEIGH HOPPER
MIKE McNULTY '06, MA '09, OTD '10
SIDNEY TAIKO SHEEHAN
ELLIE TAYLOR PHD '25

DESIGN
JHK CREATIVE

The magazine of the USC Mrs. T.H. Chan Division of Occupational Science and Occupational Therapy is published twice yearly. For questions, comments, updates or story suggestions, contact Mike McNulty at mmcnulty@chan.usc.edu or (323) 442-2850.

USC
University of
Southern California

NEWS

BRAIN AGE LINKED TO STROKE OUTCOMES, USC STUDY FINDS

| P. 14

A team of researchers led by Sook-Lei Liew finds that the younger a person's "brain age" — a neuroimaging-based assessment of global brain health — the better their outcomes after stroke, which may help improve predictions and prognosis for rehabilitation.

NEW RESEARCH STUDY LOOKS TO MITIGATE ON-THE-JOB STRESS

| P. 22

An interdisciplinary team led by Shawn Roll, funded by \$1.1 million National Science Foundation grant, is using artificial intelligence tools to develop person-centered, automated and technology-supported strategies for better managing work-related stress.

DEPARTMENTS

UP FRONT | P. 5

Inside China Initiative externship; Recapping inaugural gamechanger team challenge; OTAC awardees and election winners; New initiative supporting students; Sexuality and intimacy text co-authors; Primary care text co-authors; Knowledge mobilization visualized; Trojan trio win AOTA elected offices; 34 Trojans in new "50 Studies" book; *AJOT* op-ed on the coming mental health tsunami; Key updates to post-professional OTD program requirements; Lawlor is 16th Trojan winner of AOTA Slagle; LA County taps OTs to help homelessness crisis

NEWS BRIEFS | P. 13

GENNEXT: ADITYA JAYASHANKAR PHD '24 | P. 15

5 THINGS TO KNOW ABOUT: CANDACE CHATMAN OTD '20

| P. 23

RESEARCH BUZZ: BEYOND THE SPECTRUM | P. 24

IN PRINT: AI COULD HELP IN THE EARLY DIAGNOSIS OF AUTISM, USC STUDY FINDS | P. 25

A DEEPER MEANING: ERNA BLANCHE MA '88 PHD '98 | P. 27

OBITUARIES: ANNE HENDERSON '46, ABBEY MARTERELLA PHD '10, MARY FOTO '66 | P. 28



COVER STORY

GOOD TO GROW | P. 16

This issue's cover story follows the first year's growth of the new USC Peace Garden, a collaborative community project located in the University Park neighborhood spearheaded by Camille Dieterle, pictured on the cover, and designed by Heritage Conservation/Landscape Architecture + Urbanism student Daniela Velazco.



A STRESS-FREE FUTURE? | P. 22

Workplace stress experiences can be vicious cycles that are difficult to break. But Professor Shawn Roll hopes his four-year, \$1.1 million grant from the National Science Foundation will help do just that. “For this project, we’ll be using technologies to help individual workers understand their own stress on their own terms. It’s analogous to precision medicine — identifying what works best for each individual.”

CONTRIBUTORS



Katherine Dumangas MA '22, OTD '23
Writer, *New Team Challenge Looking to Change the*

Game, p. 6

Meaningful occupations: Writing food reviews and taking food pics as a Yelp Elite Squad member; walking in nature; playing board and tabletop games.

Lessons learned from organizing gamechanger: This process helped me to better understand how knowledge mobilization could transform our everyday lives when we collaborate and communicate effectively with the communities we serve.



Leigh Hopper
USC Media Relations Specialist and writer, *AI Could Help in the Early Diagnosis of*

Autism, p. 25

Meaningful occupations: I’m training to walk a half marathon with a group in Santa Monica; those early morning treks are the best part of my week.

What do you enjoy most about scientific research media? It’s the best feeling in the world to translate and write about a scientist’s research in a way that gets non-scientists excited.



Sidney Taiko Sheehan
Communications Manager, USC Stevens Neuroimaging and Informatics

Institute, and writer, *International Study Shows Link Between Brain Age and Stroke Outcomes*, p. 14

Meaningful occupations: Lead editor of the long-standing independent literary journal *Storm Cellar*.

About writing *Brain Age*: I’m thrilled to be collaborating with the incredible researchers at the Stevens INI, including Dr. Liew, whose work to create open science resources to uplift the entire scientific community and propel discovery to help all those impacted by stroke is truly inspiring.



Ellie Taylor PhD '25
Writer, *Beyond the Spectrum*, p. 24
Meaningful occupations:

Writing, dancing, petting critters and supplying my friends and family with groan-inducing dad jokes.

Best part about working in the DREAMS lab?: I’m thankful to be a part of a lab culture that is inclusive of differing abilities, identities and experiences. I enjoy how we come together to collaborate in sharing our perspectives and, occasionally, our snacks.

CHINA INITIATIVE STUDENT EXTERNSHIP AT PKU THIRD HOSPITAL

In 2023, **Tina Peng** MA '23, OTD '24 completed part of her master's degree externship experience at Peking University (PKU) Third Hospital in Beijing. Peng was born in China and immigrated to the US when she was nine years old.

"I have family in China, and when I told them I was going to USC for occupational therapy, I observed a lack of understanding and awareness of occupational therapy's value and scope of practice," Peng said. "I thought that this experience at PKUHSC could help me understand China's perception of OT and what's possible for OT there, like learning about what Western health care looks like in Eastern culture and environment. How do they define 'holistic?' PKUHSC provided me with the perfect opportunity to explore this by providing a supportive environment and the opportunity to meet five amazing OTs who each work in their own specialty."

USC Chan and PKU Health Science Center have a longstanding relationship through the China Initiative, which includes a dual-degree program for graduates from the PKUHSC master's degree in rehabilitation therapy program to earn their Doctorate in Occupational Therapy degree at USC. Read the full Q&A with Peng at tinyurl.com/beijing-externship-2023.



TINA PENG, LEFT, AND LI YANG OTD '23/PHOTO COURTESY OF TINA PENG



PENG, AT CENTER, LAUGHS WITH MOUWANG ZHOU, CHINA INITIATIVE CO-LEAD AND PKUHSC PROFESSOR OF REHABILITATION MEDICINE/PHOTO BY LIGUO QIAN

gamechanger

Knowledge Mobilization Team Challenge

New team challenge looking to change the game

The inaugural gamechanger team-based challenge finds new ways of moving academic knowledge into the real world to benefit people's everyday lives and occupations.

BY KATHERINE DUMANGAS MA '22, OTD '23

Academic researchers are highly skilled at generating new knowledge. But they have long faced significant barriers to mobilizing knowledge, the process of intentionally and effectively sharing, accessing and promoting information through skillful partnerships with those who have the most to gain from it. To close that gap between knowledge generation and knowledge mobilization (KMb), last summer the USC Chan Division hosted its inaugural gamechanger Knowledge Mobilization Team Challenge.

Gamechanger's development was led by Professor of Clinical Occupational Therapy **Rebecca Aldrich** '05, MA '06 and post-professional OTD residents **Emily Rourke** MA '22, OTD '23, **Yen Wen Pan** MA '20, OTD '22 and **Katherine Dumangas** MA '22, OTD '23. The format included a hybrid

launch event, an eight-week incubator and a closing ceremony where teams gave their KMb product presentations and three winners were announced.

At the May launch event, attendees learned about KMb and explored their potential for building gamechanger teams to develop products that could eventually be disseminated to the public. The event featured keynote speakers Associate Dean and Professor Lourdes Baezconde-Garbanati from the Keck School of Medicine of USC, and Professor Sheila Murphy from the USC Annenberg School for Communication and Journalism. Baezconde-Garbanati and Murphy spoke about the power of narrative-based media to promote health equity. Among their transformative previous work is "Tamale Lesson," a short video intervention

about cervical cancer education and prevention aimed at Mexican-American women. The project is an example of how KMb, in collaboration with community partners with shared priorities, can shift real-world health care behaviors and outcomes for the better.

For eight weeks throughout the summer, seven gamechanger teams spent approximately 20 hours putting their KMb skills to work through an incubator experience. Teams participated in virtual workshops hosted by experts on digital accessibility and digital storytelling, and met with consultants on media, marketing, graphic design and game design. Projects included the creation of a pediatric pain toolkit, a card game on lifestyle and wellness concepts for undergraduate students and short videos on topics such as stroke symptoms, mealtime practices, sleep health and autism spectrum disorder.

"Coming up with the idea for a KMb product was a challenge, but networking with other people who had similar interests allowed me to step out of my comfort zone," said gamechanger participant and post-professional OTD student **Iana Cornelius** MA '22, OTD '23. "The virtual workshops we attended were really helpful in enhancing the messaging of our product; in the digital storytelling workshop, we learned that the way we use a catchy phrase or title is important for engaging our audiences."

Three winning teams to continue work

At the closing ceremony in late July, the seven teams celebrated their progress and pitched their innovative KMb products. The gamechanger judges, adjunct faculty member **Christopher Laine** and Board of Councilors member **Terri Nishimura** MA '85, participated in a blind judging process to review and score all seven product submissions. Winners were recognized for being "Most Polished," "Most Outside-the-Box" and "Best Designed," and each received a cash prize to continue developing and deploying their creations.

The "Most Polished" award went to the team led by Assistant Professor of Clinical Occupational Therapy **Julia Lisle** MA '21, OTD '22, which developed a decision tree infographic in order to better support clinicians for screening autism in pediatric populations. Additional team members included students **Tiffany Cha** MA '22, OTD '23, **Stephanie Magana** OTD '25, **Savannah Gluck** PhD '27 and **Emily Campi** MA '20, PhD '24; and faculty members **Allison Phillips** OTD '19, **Emily Sopkin** MA '16, OTD '17, **Grace Baranek** and **John Sideris**.



SHEILA MURPHY AND LOURDES BAEZCONDE-GARBANATI/PHOTO BY GLENN MARZANO



AT LEFT, GRACE BARANEK AND REBECCA ALDRICH/PHOTO BY GLENN MARZANO

The “Most-Outside-the-Box” award went to the team led by Associate Professor of Research **Stacey Schepens Niemic** Postdoc '13. They developed a sleep health and hygiene video for late mid-life Latinos addressing sleep health myths and disparities prevalent within that community. Additional team members included promotora Laura Guzmán; students **Madison Jimenez** MA '23, **Anna Lynch** MA '22, OTD '23 and **Valeria Rios** OTD '25; faculty member **Rebecca Cunningham** MA '15, OTD '16 and physical therapist–researcher Matthew Niemic.

The “Best Designed” award went to the team led by Assistant Professor of Clinical Occupational Therapy **Sonia Trejo** MA '08, OTD '19, which created an educational toolkit with a video, handout and website that provides Hispanic caregivers with strategies to reduce stress with “picky” children in order to create more enjoyable mealtime experiences. Additional team members included Children’s Hospital Los Angeles dietitian Hope Wills, non-profit content creator Lindsay Crain and early childhood education director Veronica Montano Sanchez.

“The gamechanger experience was a positive, challenging and exciting experience,” Trejo said. “It pushed the boundaries of what is possible, pulled the best out of each of us through collaboration, allowed each team member to use their strengths and allowed important work to move forward for a good cause.”

Collaborations can benefit the general public

The first gamechanger helped advance the implementation of KMb and realize part of the USC Chan Division’s strategic plan. The push for real change begins when members of the Chan community with varying levels of experience, knowledge and expertise collaborate with community partners to create meaningful and educational KMb products. That will further enable the general public to understand the impacts of research beyond the academic sphere.

“It was great to see the results of each team’s hard work and collaborative efforts,” Aldrich said. “The range of products and diversity of approaches to mobilizing knowl-

edge illustrated the creative possibilities that exist within these partnerships.”

Gamechanger brought together faculty from across the Division, students from various academic programs and community members to think creatively about spreading knowledge about sleep health and wellness.

“We had an opportunity to share our skills, experiences and expertise with each other and discover, as a team, what we could build together that would benefit the community we intended to serve,” Schepens Niemic said. “This was truly a collaborative effort — everyone pitched in, whether it was opening their homes for us to take videos, offering their photographic eye, infusing clinical knowledge, sharing personal stories about experiences with sleep or aptly editing and adding special effects to the final product. Our team is proud of the work we have done and sees the outcome as one humble step towards addressing disparities in under-resourced communities.”



STEPHANIE MOON, SAMIA RAFEEDIE AND CARLIN DALEY REAUME AT 2023 OTAC CONFERENCE/PHOTO COURTESY OF SAMIA RAFEEDIE

OTAC ELECTED OFFICERS, AWARDS

Two faculty members won their respective races for elected office in the Occupational Therapy Association of California. Associate Professor of Clinical Occupational Therapy and Professional Program Director **Samia Rafeedie** MA '05, OTD '06 was elected OTAC President. Assistant Professor of Clinical Occupational Therapy and Pediatrics Academic Fieldwork Coordinator **Candace Chatman** OTD '20 was elected OTAC Treasurer. Their office terms begin in mid-2024.

Seven USC alumni were recognized with annual awards and honors during OTAC's 2023 Conference in Pasadena, Calif. **Carlin Daley Reaume** MA '06, OTD '07 received the Award of Appreciation. **Heather Kitching** MA '02, OTD '10 received the Janice Matsutsuyu Outstanding Service Award. **Zoe Mailloux** '77, MA '81, OTD '12 received the Occupational Therapy Practice Award. **Ingrid Leu** MA '13, OTD '14 received the OT/OTA Partnership Award. **Stephanie Moon** MA '17, OTD '18 received the Spirit of Occupational Therapy Award. **Jayson Davies** '11, MA '12 received the Susan J. Harris OT Entrepreneur Award. Adjunct Clinical Instructor **Lisa Deshaies** was the Honored Lecturer at the California Foundation for Occupational Therapy's 2023 Symposium.



NEW STUDENT SUCCESS INITIATIVE

In 2023, the division launched Student Success Initiative, a range of resources and dedicated contacts for empowering USC Chan students to more fully engage with, and thrive in, their academic programs.

The initiative increases the availability of tuition scholarships for both continuing and incoming students for the next three years. It also supports curricular and co-curricular activities such as community-building events, resources and tools to promote classroom learning, academic tutoring and mentoring access, financial awards for conference travel and the continuation of USC Chan's student hardship fund which began during the first year of the Covid-19 pandemic. Faculty and staff are being supported with trainings and workshops to further enact justice, equity, diversity and inclusion into the curricula, classrooms, labs and clinics. Additionally, several post-professional OTD students are completing their pedagogy residencies working alongside faculty members and with peers to develop and deliver these services.

"Our faculty, staff and pedagogy residents are continually working to optimize students' experiences and opportunities," said Associate Dean and Chair **Grace Baranek**. "I want to thank everybody for their insights, hard work and dedication to our core mission areas and efforts to building our Chan community."

Supports include a dedicated mid-day student lounge space, community-building and social activities, philanthropic and service-oriented events, practice exploration events and complimentary lunches for students, faculty and staff to better know one another. "During my tenure with the student support initiative, I came to appreciate its capacity to offer students tailored support, helping them evolve into patient-centered, evidence-based clinicians," said **Primo Bonilla** MA '22, OTD '23, one of the doctoral residents responsible for the initiative's design and implementation. "To quote a student during my time with the initiative, "These efforts are what make me appreciate having chosen USC Chan."

SEXUALITY AND INTIMACY BOOK

Faculty member **Karrie Kingsley** MA '01, OTD '07 is the lead author of "Sexuality, Bias and Impact: Preventing Clinician Harm," a chapter in *Sexuality and Intimacy: An Occupational Therapy Approach* published earlier this year by AOTA Press. Alums **Joseph Christian Ungco** MA '16, OTD '17 and **Dominique Como** MA '16, PhD '21 were also co-authors.

Kingsley is USC's associate chief inclusion and diversity officer for faculty and staff success. In that role, they work to build a more connected and collaborative USC community, and to realize the university's capacity for its collective vision of justice, equity, diversity and inclusion.

Ungco, who is associate director of DEI learning, client services and data analytics at Fred Hutchinson Cancer Center in Seattle, co-edited the book.

"My hope is for occupational therapy practitioners to read this chapter and understand that avoiding sexuality with their clients may actually cause harm, particularly for our most vulnerable clients," Kingsley said. "Folks deserve complete information to support their sexual participation as an important aspect of their lives and identities."

OT IN PRIMARY CARE BOOK

Seven USC Chan faculty members co-authored chapters in "Primary Care Occupational Therapy: A Quick Reference Guide," a new text published by Springer. The book is a definitive resource for all primary care occupational therapy practitioners and others interested in lifestyle-based interventions for conditions typically encountered in primary care settings.

The chapter on administrative and operational considerations was co-authored by Associate Chair of OT Clinical Services and Clinical Professor **Katie Jordan** MA '03, OTD '04 and Associate Clinical Professor **Ashley Halle** MA '11, OTD '12.

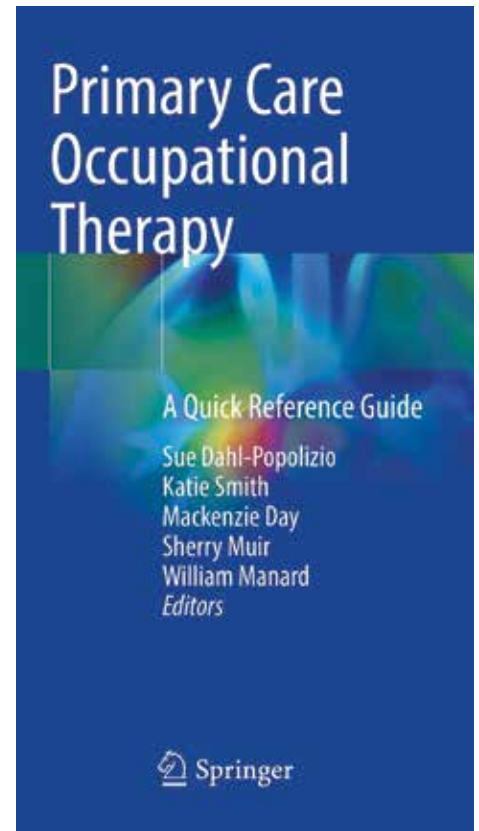
The chapter on anxiety was co-authored by Clinical Professor **Chantelle Rice Collins** '07, MA '08, OTD '09 and Assistant Clinical Professor **Marissa Marchioni** MA '16, OTD '17.

The chapter on depression was co-authored by Rice Collins and alum **Samantha Valasek** MA '15, OTD '16.

Associate Chair of Diversity, Access and Equity and Associate Clinical Professor **Jesús Díaz** MA '08, OTD '09 and Associate Professor **Beth Pyatak** MA '04, PhD '10

co-authored the diabetes chapter with alum **Alyssa Concha-Chavez** MA '14, OTD '15.

Assistant Clinical Professor **Laura Cox** MA '17, OTD '18 co-authored the gastrointestinal disorders chapter with alum **Myka Persson** MA '10, OTD '11.



FACULTY BUILD KMB VISUAL MODEL

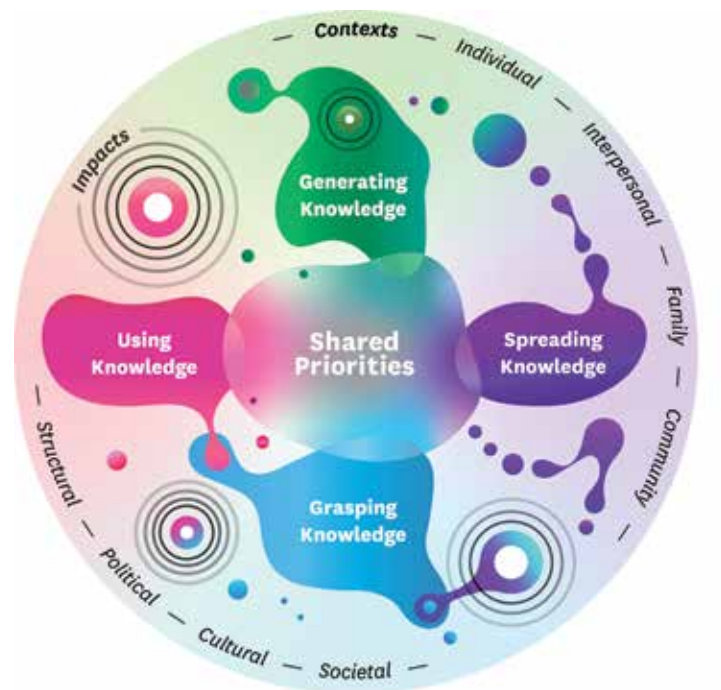
A team of USC Chan faculty have developed a new visual model specific to occupational science and occupational therapy that demonstrates knowledge mobilization (KMB) relationships and interactions.

The model, which has been in development for several years, shows a four-phase process of generating, spreading, grasping and using knowledge centered around shared priorities. These four phases interact in dynamic, fluid and unexpected ways. Sometimes efforts move back-and-forth between the phases, while other times stakeholders need to revisit the shared priority before moving to an adjacent phase. Those efforts are then envisioned to make impacts which "ripple" within contexts, ranging from the individual to the structural.

"Knowledge mobilization has been a pillar of the division's Strategic Plan since 2018, and is a cross-cutting theme in our new five-year Strategic Plan," said Associate Dean and Chair **Grace Baranek**. "I want to commend all the efforts by our faculty and staff during these past five years — including the teamwork that went into building this new visual model — to implement KMB across USC Chan."

KMB is a term used to describe the non-linear, flexible process of knowledge generation, uptake and impact, as an alternative to more traditional concepts of linear, uni-directional "dissemination" of research. KMB consists of more than simply information distribution, exchange and translation; rather, its main goal is to put research into action for the benefit of end users.

End users include consumers, clinicians, educators, policy makers, advocates or other stakeholders who are typically engaged throughout the entire KMB process. Together, they can solve problems beyond the expertise of any single group of participants by co-producing knowledge, moving it into societal use and working together to assess its impacts.



© 2023, USC Chan Division



ARAMEH ANVARIZADEH/PHOTO BY HENRY R JONES II

TRIO TAKE AOTA ELECTIONS

USC Chan faculty members and alums **Arameh Anvarizadeh** '05, MA '06, OTD '07 and **Sarah Bream** MA '96, OTD '09, and alumnus **Bryant Edwards** MA '05, OTD '06, have each won their races for leadership positions in the American Occupational Therapy Association.

They will assume their respective roles beginning July 1.

Anvarizadeh, associate professor of clinical occupational therapy, has been elected AOTA President-Elect. In this role, Anvarizadeh will continue to work alongside current AOTA President Alyson Stover for one year until assuming the three-year term of AOTA president on July 1, 2025.

Anvarizadeh is the fifth Trojan to be elected president of the national professional association, following **Wilma West** MA '48 (president from 1961-64), **Florence Cromwell** MA '52 (1967-73), **Mary Foto** '66 (1995-98) and Professor Emeritus **Florence Clark** PhD '82 (2010-13).

"We did it — the people have spoken loud and clear," Anvarizadeh said. "This tells me there is a strong mandate for the changes I have campaigned for, which is incredibly exciting. Thank you all for your unwavering support. I am humbled and honored by the OT community, and ready to continue working with AOTA President Stover for another year as we build the association and move our profession forward."

Bream, associate chair of operations, community partnerships and development and professor of clinical occupational therapy, has been elected to the Board of Directors.



SARAH BREAM/PHOTO BY CHRISTINA GANDOLFO



BRYANT EDWARDS/PHOTO BY OLIVER BAKER



The board is AOTA's voluntary leadership group responsible for determining the association's mission, vision, values and strategic directions, and ensuring AOTA has the resources to successfully enact them. Six elected directors sit on the board, which meets monthly.

"I am grateful to the occupational therapy community for the support they have shown in my capacity to fulfill this role with integrity and effective leadership," Bream said. "I know there is much work to be done, and I look forward to contributing to the positive trajectory of the profession."

Edwards has also been elected to the Board of Directors. He is the executive director of Rehabilitation & Professional Services at Children's Hospital Los Angeles, as well as the current president of the Occupational Therapy Association of California.

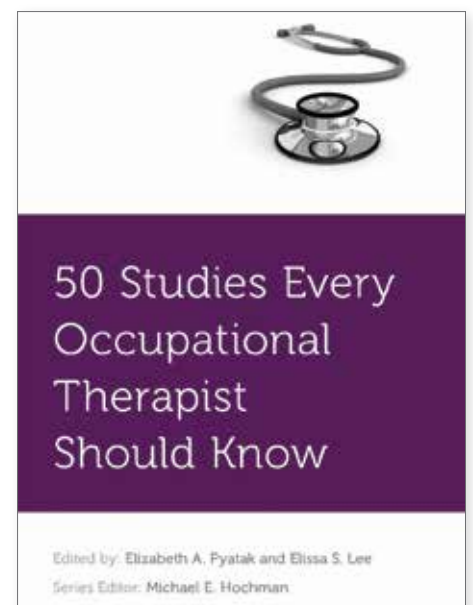
"I'm so honored to be able to step into a leadership role on the AOTA board, and so appreciative of all the support," Edwards said. "I know we have a huge responsibility and a huge opportunity to effect positive change, and I look forward to contributing to the profession!"

TROJANS CO-EDIT NEW "50 STUDIES" BOOK

Associate Professor **Elizabeth Pyatak** MA '04, PhD '10 and alum **Elissa Lee** MA '19, OTD '20 co-edited "50 Studies Every Occupational Therapist Should Know," a new book published by Oxford University Press. The book highlights 50 key studies that inform contemporary occupational therapy practice, and includes a summary of research questions, methods, findings and implications. Each chapter also uses a case study to demonstrate ways of applying research to everyday practice.

Trojan occupational therapists and occupational scientists are well represented throughout the text. Chapter co-authors include 18 current USC Chan faculty and staff members, as well as 16 alumni and students.

"Elissa and I are excited to share this book with occupational therapy students, educators, practitioners and the general public," Pyatak said. "It is a great resource to understand the evidence supporting our practice — without having to read 50 studies! — and an introduction to the diverse methods and approaches used to study occupational therapy practice."



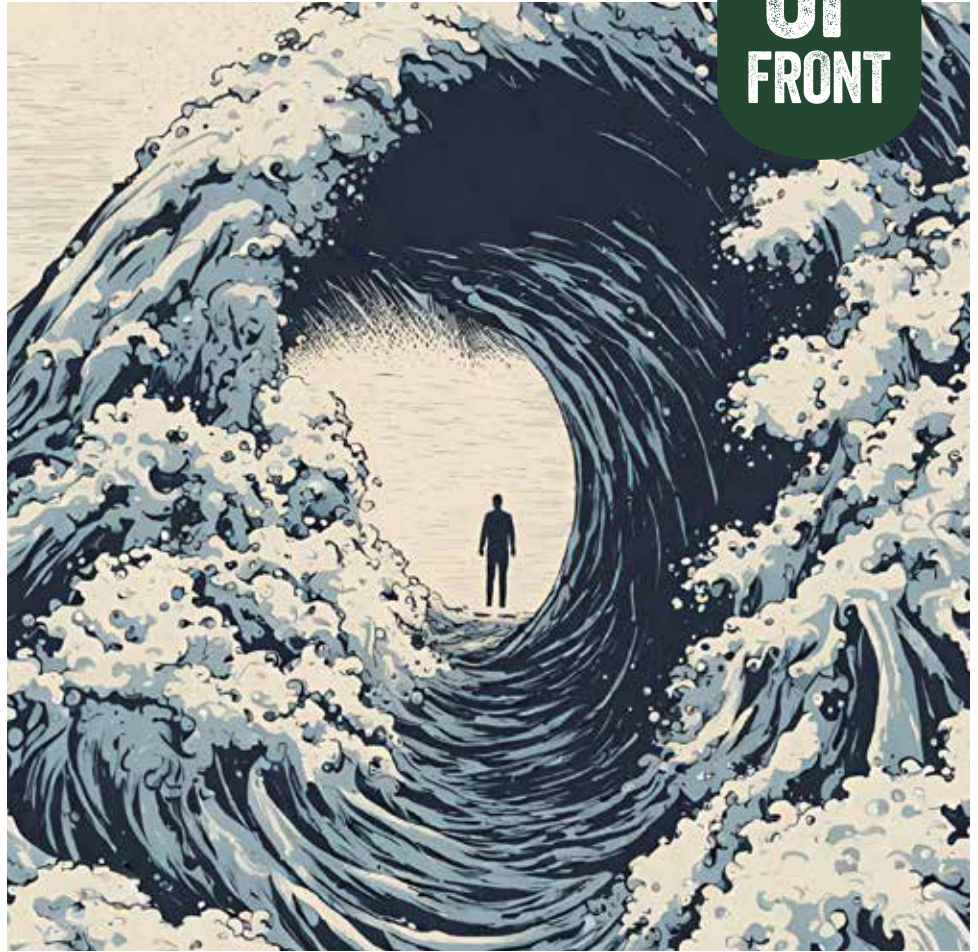
BRACING FOR MENTAL HEALTH “TSUNAMI”

Tracy Jalaba MA '14, OTD '15, associate professor of clinical occupational therapy, co-authored a new op-ed in the *American Journal of Occupational Therapy* concerning the mental health “tsunami” seemingly engulfing many parts of contemporary American society.

“The tsunami metaphor has two pieces that resonate — first is the idea of a huge wave that’s a combination of a lot of different things that have transpired in society in the past few years that together have negatively impacted people’s mental health,” Jalaba said. “And second, a tsunami is a natural disaster, which speaks to the disastrous state that our current mental health care systems are operating in.”

Jalaba is a clinician at the USC Occupational Therapy Faculty Practice working with clients in the mental health, sleep disorders and health coaching programs. She also serves as professional development coordinator for AOTA’s Mental Health Special Interest Section steering committee.

Read “Preparing For and Responding To the Current Mental Health Tsunami: Embracing Mary Reilly’s Call to Action,” in the *American Journal of Occupational Therapy* at research.aota.org/ajot/issue/78/1.



PP-OTD PROGRAM KEY UPDATES

The division’s Post-Professional Doctorate of Occupational Therapy (PP-OTD) program has a few key updates of interest for those who have a master’s degree and are considering next steps to advance their education and career.

First, the former GRE requirement has been permanently waived; admission no longer requires a standardized entry examination. Second, USC’s PP-OTD courses can now be completed entirely remotely, so PP-OTD residents do not have to relocate to the Los Angeles area. Third, the division is offering competitive scholarship awards, particularly for placements in the Pedagogy and Academic Administration pathway. This pathway gives residents the expertise to fulfill roles as clinical teaching faculty members or academic administrators. Pedagogy and Academic Administration residencies may be located within the USC Chan Division for those residents on campus. But PP-OTD residents who are currently faculty members at any other academic institutions can complete the residency at their current institution. Many returning students are able to negotiate and design a residency experience at their current site, and are still eligible to apply for scholarship awards in addition to the compensation earned at their current place of employment.

Learn more about the PP-OTD program by contacting the program’s director, Associate Chair **Sarah Bream** MA '96, OTD '09, at bream@chan.usc.edu.



PP-OTD STUDENT GUY REAVIS AND FACULTY MEMBER ASHLEY HALLE/PHOTO BY FADY HABIB



PHOTO COURTESY OF MIDNIGHT HOUR STUDIOS, INC.

LAWLOR'S SLAGLE LECTURE AVAILABLE NOW

Associate Chair of Research and Professor **Mary Lawlor** received the American Occupational Therapy Association's 2023 Eleanor Clarke Slagle Lectureship Award, a recognition of her substantial and lasting scholarly contributions to the profession. Lawlor is the 16th USC-affiliated recipient of the award, the profession's most prestigious academic honor.

For more than 30 years, Lawlor's scholarship has revealed the ways in which seemingly simple activities — the so-called "little things" that occur often in everyday life — are, instead, deceptively complex. A recurring theme in Lawlor's work is the elucidation of how these little things can imbue people's lives with extraordinary meaning, motivation and action, often in partnership with health care practitioners including occupational therapists.

Lawlor formerly led USC Chan's PhD degree in Occupational Science program. The program produced 40 occupational scientists during her time as its director.

The full text of Lawlor's lecture, titled "The Mattering of Little Things," is now available from the *American Journal of Occupational Therapy*.

LA TIMES HIGHLIGHTS OT

The *Los Angeles Times* and KFF Health News recently featured the work of **Julian Prado** MA '19, OTD '20, one of 10 Los Angeles County-employed occupational therapists assigned to homeless and formerly homeless clients, doing all they can to help keep their clients from returning to the streets.

"I always tell my clients that 'I'm going to use my knowledge to support you in this task, but, ultimately, you're in the driver's seat,'" Prado said.

Deborah Pitts PhD '12, professor of clinical occupational therapy and an expert on community-based mental health services, also commented on the interrelationships between occupation, cognition and function.

"L.A. turns to occupational therapists to keep formerly homeless from returning to street" is available at tinyurl.com/la-county-ots.



PHOTO BY MOLLY CASTLE WORK/KFF HEALTH NEWS

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:



AOTF 2023 AWARDEES

Three faculty members received prestigious recognitions at the 2023 awards ceremony of the

American Occupational Therapy Foundation. Professor of Clinical Occupational Therapy **Erna Blanche** MA '88, PhD '98 received the AOTF Virginia Scardina Award of Excellence for outstanding commitment to evidence-based practice through research in brain-behavior relationships and sensory processing. Associate Professor **Sook-Lei Liew** MA '08, PhD '12 was named to the AOTF Academy of Research, which recognizes distinguished and sustained contributions to the science of occupational therapy. Associate Professor **Elizabeth Pyatak** '02, MA '04, PhD '10 received the 2023 AOTF Mid-Career Research Excellence Award to continue supporting her work in advancing occupation-based interventions for chronic conditions.



LR AND SI GRADUATE CERTIFICATES

The division recently launched two new graduate certificate

programs to build practitioners’ clinical excellence in a particular area of interest. The Graduate Certificate in Foundations of Lifestyle Redesign® prepares occupational therapists to effectively design and implement Lifestyle Redesign® interventions with diverse client populations. The program is directed by Associate Professor of Clinical Occupational Therapy **Camille Dieterle** MA '07, OTD '08. The Sensory Processing/Sensory Integration Graduate Certificate advances occupational therapists’ expertise in identifying sensory processing disorders and using sensory integration treatments to address them. The program is directed by Associate Professor of Clinical Occupational Therapy **Janet Gunter** '94, MA '95, OTD '10.



PHD, POSTDOC LEADERSHIP UPDATES

Sook-Lei Liew has been named the director of the PhD in Occupational

Science degree program. Liew has been a PhD program faculty member and research mentor since 2015. In this new leadership role, Liew will recruit PhD students, oversee the program’s administrative requirements, coordinate with the USC Graduate School and provide advising support to PhD students. Professor **Shawn Roll** has been named director of research training and development, and will have new responsibilities to direct post-doctoral research training and help lead the division’s Grant Development Committee. During six years as the previous director of the PhD program, Roll developed and implemented a new curriculum, tripled the program’s application rates and increased the diversity of the PhD student body.



AJOT STUDY ON OT UTILIZATION RATE FACTORS IN AUTISTIC CHILDREN

A study published earlier this year in the *American*

Journal of Occupational Therapy uncovers factors tied to higher occupational therapy service utilization rates among autistic children. By surveying nearly 900 parents of autistic children and correlating scores from three standardized assessments, the researchers found that sensory interests, repetitions and seeking behavior predicted higher occupational therapy service utilization. Other predictors of higher utilization included lower enhanced perception, lower adaptive behavior, younger child age and higher household income. PhD student **Emily Campi** MA '20, PhD '24 is the lead author of the article, which is available at doi.org/10.5014/ajot.2023.050129.



RESPONS 2024 PROJECTS

Four new research projects were selected for funding from the division’s Responding to Society’s

Post-pandemic Occupational Needs (ReSPONs) Initiative. The ReSPONs seed grant mechanism supports early-stage innovative projects that are completed in one year to accelerate innovations across research, education and clinical practice, and to encourage engagement with surrounding communities to address the complex occupational needs of individuals, families and populations. Assistant Professor of Research **Raquel Joiner** leads “Unveiling paths of caregiver connection: Navigating social identities, policies and services for occupational justice,” which aims to uncover the impact of social identities, policies and access to social services on the interpersonal development of caregivers of aging adults. Associate Professor **Beth Pyatak** leads “Visualizing health: User-centered symptom mapping for chronic conditions,” which is developing a symptom mapping platform that integrates ecological momentary assessment with wearable sensor data that together can make personalized, fully automated single-subject studies more feasible. Assistant Professor of Clinical Occupational Therapy **Clarissa Saunders-Newton** PhD '09 leads “Occupational reconstruction practice framework in service of community collaboration,” which is applying occupational therapy practices to a collective action project at SOLA Community Peace Center, located in the University Park neighborhood. Associate Professor of Clinical Occupational Therapy **Ashley Uyeshiro-Simon** MA '10, OTD '11 leads “THRIVE course impact study,” which uses a mixed methods approach to compare the experiences of students who took OT 100: THRIVE — a one-semester course for USC undergraduate students and other campus partners to teach concepts of individual and communal well-being — to those students who do not take THRIVE. Learn more about the ReSPONs Initiative at chan.usc.edu/about-us/respons.

INTERNATIONAL STUDY SHOWS LINK BETWEEN BRAIN AGE AND STROKE OUTCOMES

A USC-led team of researchers find that brain age, a neuroimaging-based assessment of global brain health, may play a role in post-stroke outcomes and could potentially help identify people at risk for poorer outcomes.

BY SIDNEY TAIKO SHEEHAN

A new study led by a team of researchers at the Keck School of Medicine of USC shows that younger “brain age,” a neuroimaging-based assessment of global brain health, is associated with better post-stroke outcomes. The findings could lead to better ways to predict post-stroke outcomes, and offer insight on new potential treatment targets to improve recovery.

Understanding why some stroke survivors show better recovery than others despite similar damage to the brain has been a critical goal in stroke research, since it could help researchers develop better stroke rehabilitation therapies. During a stroke, blood flow to part of the brain is cut off. Without oxygen, brain cells are damaged and eventually die, resulting in brain damage known as a lesion. Studies have shown that people with similar amounts of lesion damage can experience varying amounts of recovery. Much research in the past two decades has focused on the specific location of brain damage and how the lesion affects connected networks in the brain.

This study, published in *Neurology*[®] earlier this year, takes into consideration global brain health, a new way of analyzing the health of the brain based on its cellular, vascular and structural integrity. Although global brain health has been widely examined in aging and neurodegenerative disease such as Alzheimer’s disease, it had not previously been studied in relation to stroke rehabilitation outcomes.

Led by Associate Professor Sook-Lei Liew MA ’08, PhD ’12, the team of researchers focused on a specific measure of global brain health known as brain age. This measure examines the biology of the nervous system through whole brain structural neuroimaging, hypothesizing that the integrity of residual brain tissue, or what is left after the stroke, may be critical for post-stroke outcomes.

Brain age is a biomarker that predicts chronological age based on neuroimaging of structures such as regional thickness, surface area and volumes, and is calculated using advanced machine learning algorithms, which have been widely studied at the Keck School of Medicine’s Mark and Mary Stevens Neuroimaging and Informatics Institute, where Liew holds a joint faculty appointment. A higher brain predicted age difference, calculated as the difference between a person’s predicted brain age and their chronological age, suggests that the brain appears to be older than the person’s chronological age. An older-appearing brain has been associated with Alzheimer’s disease, major depression, traumatic brain injury and more.

“Brain age has not been widely explored in stroke,” Liew said. “A lot of stroke research has focused on how damage to the brain results in negative health outcomes, but there has been less research on how the integrity of the remaining brain tissue supports recovery. We expected that younger-appearing brains would be buffered from the effects of the lesion damage and therefore have less impacts on behavior.”



PHOTO BY PHIL CHANNING

The research team conducted an observational study using a multi-site data set of 3D brain structural MRIs and clinical measures from ENIGMA Stroke Recovery, a collaborative working group of more than 100 experts worldwide who pool together post-stroke MRI data to create well-powered, diverse samples. The primary mission of the group is to create a worldwide network of stroke neuroimaging centers focused on understanding the mechanisms of stroke recovery.

The new study showed that younger brain age is associated with superior post-stroke outcomes. The researchers note that inclusion of imaging-based assessments of brain age and brain resilience may improve the prediction of post-stroke outcomes and open new possibilities for potential therapeutic targets.

“The health of your overall brain can protect you from the functional consequences of stroke,” Liew said. “That is, the healthier your brain is, first, the less likely you are to have a stroke, and second, the less likely you are to have poor outcomes if you do have a stroke. There’s so much research on the aging brain right now, and therapeutics being developed to slow brain aging. This study ties brain aging to stroke outcomes, so any therapeutics developed to slow brain aging might also be helpful to improve outcomes after stroke.”

For this study, the team of experts used high-resolution MRI data from research studies. They plan to progress their brain age assessment work by applying it to routine clinical MRI data to determine if it can be an easily implemented biomarker for stroke rehabilitation outcomes.

Researchers at the Stevens INI collaborate on a variety of stroke research, including the Stroke Pre-Clinical Assessment Network (SPAN), which was established to address a significant need in the scientific investigation of stroke treatment. Additionally, Liew and other USC collaborators recently released an expanded, open-source data set of brain scans from stroke patients in hopes of accelerating large-scale stroke recovery research.

Read the open-access article at [neurology.org/content/100/20/e2103](https://www.neurology.org/content/100/20/e2103).

GenNext

Meet the Trojans pushing occupational science and occupational therapy forward.

INTERVIEW BY MIKE MCNULTY '06,
MA '09, OTD '10

ADITYA JAYASHANKAR
PHD '24

Age: 31

Hometown: Dubai, United Arab Emirates

Previous studies: B.Tech Biotechnology, VIT University (Vellore, India); M.Sc Cognitive and Computational Neuroscience, University of Sheffield (UK)

Meaningful occupations: Gaming, movies, cooking, food tourism and reading comics.

Describe occupational science in one sentence: The study of meaningful occupations (light or dark) and the influence they have on individual/group behavior, physiology and/or social outcomes.

Given your educational background in neuroscience, how did you first hear about occupational science, and how has OS informed your approach to science?

In 2017, I worked as a research assistant in an MRI lab in Bangalore. We had a volunteer research assistant who wanted to learn fMRI, and I was her mentor. She had just completed her undergraduate OT studies, and she taught me quite a bit about OT and OS. She also suggested I apply to USC for my PhD. I believe studying and researching neuroscience through occupational science provides me with a unique perspective, and the research questions that I am asking are more attuned to a humanistic philosophy instead of a traditional biological approach.

What sparked your interest in cognitive neuroscience?

I've always loved video games, and I became a pretty avid gamer after high school. As an undergraduate student, I found it hard to cope with my lectures and studies, more so than at any time in my previous education, and that frustrated me. I wanted to know why I was the



PHOTO BY FADY HABIB

way I was, so I tried analyzing my behavior. It would turn out that I had lived my entire life with symptoms of ADHD and OCD. While trying to “boost” my cognition naturally, I stumbled upon a paper titled “The Cognitive Neuroscience of Gaming” (Green & Bavelier, 2004). Their idea that my gaming hobby could actually improve certain aspects of my cognition, like spatial awareness and reaction time, was mind-blowing. After reading that paper, I felt that cognitive neuroscience would help me meet my goals, and it was where I was meant to be. Eventually, my dream of learning about cognition and emotion to help myself, actually became a mission to help others like me, and then just trying to help people in general.

What is your favorite part of working with Dr. Lisa Aziz-Zadeh and in her lab?

I have truly loved working at the Center for the Neuroscience of Embodied Cognition with colleagues past and present in such a nurturing and educational environment. This lab and my experiences here are what I was hoping for when I dreamed of pursuing a PhD all those years ago! That said, my favorite

part has been interacting with our research participants. From high-fiving energetic eight-year-olds, to helping them play Pokemon Go during their breaks, to being part of “The Squad,” I have learned something new in every moment. Personally, time spent with my PhD cohort after our OS seminar meetings was also a weekly highlight. I am really thankful for how these gatherings provided a safe place for everyone to share their thoughts and feelings, and to offer support for one another as peers going through very similar experiences in the program.

As you look to finish your PhD studies soon, what do your future career aspirations and goals include?

I plan to work as a postdoctoral researcher and continue research in embodied cognition in children and adolescents. Eventually, I hope to run my own lab and study how video games can influence embodied cognition, and explore the therapeutic benefits of gaming and its modalities, like virtual reality and augmented reality. I would also use the OS perspective to explore gaming as a meaningful occupation for children and adolescents.

ASSOCIATE PROFESSOR OF
CLINICAL OCCUPATIONAL
THERAPY CAMILLE
DIETERLE IN THE USC
PEACE GARDEN'S "PLANT
ADOPTION CENTER,"
WHICH OFFERS BEGINNER-
FRIENDLY SPECIES
AVAILABLE TO ALL, NO
GREEN THUMB REQUIRED.



GROWING BY DESIGN

When designing the USC Peace Garden, landscape architect Daniela Velazco prioritized people and planting.

BY MIKE MCNULTY MA '09, OTD '10

PHOTOS BY HANNAH BENET

“A garden is a physical manifestation of people coming together, doing the work and enjoying themselves along the way,” says Daniela Velazco MLA+U/MHC '23.

Velazco spent the better part of last summer designing the USC Peace Garden, a collaborative community project to rejuvenate what had been a long-neglected university-owned lot located one block north of the Shrine Auditorium.

As a student in the USC School of Architecture's Master of Heritage Conservation/Master of Landscape Architecture + Urbanism three-year dual degree program, Velazco has engaged with a number of design projects ranging in scale from the hyper-local, like the USC Peace Garden, to the multi-layered regional. Her MHC thesis, for example, involves a historical documentation assessment of Santa Cruz Island.

In the past year working on the project, she has seen firsthand the garden realize its potential for bringing people together.

“A huge pile of mulch was delivered to the garden and I thought, ‘Oh my God, that’s going to take forever to spread around,’” Velazco laughs. “But six huge water polo players came over and did it in like 30 minutes!”

While the garden's physical property is relatively contained, its community impact is sprawling. Equal parts laboratory, classroom,

events space and wellness center, the Peace Garden is bringing together groups from across campus and the community to engage and grow together.

Accordingly, Velazco says her design approach had a responsibility first to understand what people wanted from the garden, and why.

“For a long time, landscape architecture had this attitude of, ‘We’re the experts, we’re in charge and you’re gonna love whatever we decide to build,’” Velazco says. “But now the profession is putting power back into people’s hands. So rather than the mindset of, ‘If we build it, they will come,’ the first agenda item is making yourself available to community groups, asking them what they want and going from there.”

A place to grow, a place to go

Restoration of the USC Peace Garden has been underway since early 2022, thanks to funding support from the USC Chan Division of Occupational Science and Occupational Therapy's Responding to Society's Post-pandemic Occupational Needs initiative. Camille Dieterle, associate clinical professor at the USC Chan Division, is coordinating the project.

“At the outset, I wanted the garden to highlight California native plants and urban agriculture because of their innate ties to sustainability and food justice, topics which I've been teaching in my Occupational



Science minor classes for years,” Dieterle says. “As an occupational therapist, I also wanted a space that would be inclusive and accessible for as many people as possible — children to older adults, people with physical disabilities and psychiatric diagnoses.”

To bring her vision to fruition, Dieterle knew the garden needed to undergo a structured landscape design process. USC’s Landscape Architecture program was the obvious place to go.

“I really want this project to be multidisciplinary — anybody and everybody at USC can get involved — so I turned to the people on campus in Landscape Architecture who think about this type of work all day long,” Dieterle says.

Last summer, Velazco and Dieterle walked the garden grounds together. They met with undergraduates on site. They gathered input from partners already on board, including the USC Office of Sustainability, the USC Garden Club and SoLa Community Peace Center.

“Stakeholders wanted a place where you can put your hands in the soil, a place to grow something and harvest it,” Velazco says. “Many also talked about wanting a contemplative space to calm down and experience the site in a more private way.”

That relationship between green spaces, occupations and health is one Dieterle especially appreciates. She is certified by the American Board of Lifestyle Medicine, a yoga instructor and, in her spare time at home, a highly enthusiastic hobby gardener herself.

With Dieterle’s perspectives, Velazco drafted a design distinguishing spaces in the garden that reflect their respective uses.

“For example, in the meadow area I was thinking about different topographic elements that would benefit people’s balance and kinesthetic skills as they move through it, or how flexible spaces could meet various needs that foster participation depending on who’s using it at any given time,” Velazco says.





DANIELA VELAZCO, USC PEACE
GARDEN DESIGNER AND
HERITAGE CONSERVATION/
LANDSCAPE ARCHITECTURE +
URBANISM STUDENT

Resilience of California native plant species

In less than one year, the garden has literally grown into its own. Much of that is because of the plants specified by the design.

“I really wanted to evoke California landscapes with our plant selections, which are based on heat and water needs,” Velazco says. “Plants like fragrant sages also have colorful blooms so the garden becomes this multisensory experience that truly transports you out of the surrounding city.”

The Peace Garden is part of Assignment: Earth, the university-wide sustainability framework championed by President Folt for a greener campus and planet. While the plant materials in the garden are a win for sustainability, Velazco is instead thinking about their impact in even bigger ways.

“When using native plants, I actually don’t say, ‘they’re sustainable;’ I say, ‘they’re resilient,’” Velazco says. “That’s because native plant choices not only save water in the long run, they also recreate an ecology that we’re otherwise running out of across L.A.”

That philosophy that also aligns with shifting attitudes across Southern California toward more water-wise, drought-tolerant landscaping choices. For example, groundskeepers on USC’s Facilities Management Services team are learning about and integrating more California native species across campus.

The project also recycles and reuses materials wherever and whenever possible. For example, when Velazco wanted to design a hardscape feature suggestive of a dry creek bed, Dieterle proposed creating the effect by reusing concrete blocks that were already on site.

Those types of intentional, daily choices made by people in the garden, whether at work, rest or play, will ensure the USC Peace Garden continues to evolve in the seasons and years ahead.

“You can have an idea in your head of how things are going to turn out,” Velazco says. “But when people engage with the garden, things change in ways that you wouldn’t have imagined — sometimes, even better than you imagined.”





The USC Peace Garden draws inspiration from Southern California ecosystems, and its planting design revolves around the use of California native species and other drought-tolerant ornamental plants. According to the California Native Plant Society, gardening advantages offered by native plants — defined as those species which grew in California prior to European contact — include lower water, fertilizer and pesticide requirements, lower maintenance needs and better support for insect pollinators such as hummingbirds, butterflies, moths and bees.

California native plant species grown in the USC Peace Garden include:

- California buckwheat (*Eriogonum var.*)
- California bush sunflower (*Encelia californica*)
- California fuchsia (*Epilobium canum*)
- California goldenrod (*Solidago californica*)
- California sagebrush (*Artemisia californica*)
- Deerglass (*Muhlenbergia rigens*)
- Golden currant (*Ribes aureum*)
- Lemonade berry (*Rhus integrifolia*)
- Sages: black sage (*Salvia mellifera*), Cleveland sage (*Salvia clevelandii*), hummingbird sage (*Salvia spathacea*), white sage (*Salvia apiana*)
- Showy milkweed (*Asclepias speciosa*)
- Sugar bush (*Rhus ovata*)
- Toyon (*Heteromeles arbutifolia*)



MITIGATING ON-THE-JOB STRESS

Shawn Roll leading interdisciplinary team on \$1.1M National Science Foundation grant for managing and mitigating on-the-job stress using artificial intelligence.

BY MIKE MCNULTY '06, MA '09, OTD '10

The World Health Organization has called stress the “health epidemic of the 21st century” — and that was before the Covid-19 pandemic.

While a highly personalized phenomenon, job-related stress is consistently cited as the primary source of stress in adults’ lives. According to Gallup’s State of the Global Workplace: 2023 Report, 52 percent of workers in the United States and Canada reported experiencing “a lot” of stress during their previous workday.

For many, work-related stress is painfully obvious. Musculoskeletal tension, headaches and gastrointestinal symptoms are common physical symptoms of stress, while irritability, distractibility, fatigue and decreased motivation are frequent mental health symptoms. According to the American Institute of Stress, an estimated one million workers are absent from work every day due to stress, and its estimated annual costs total more than \$300 billion in lost time, decreased productivity and accidents.

But because so few employees have actionable insights into the ways that on-the-job activities and the physical and social environments contribute to stress and other health outcomes, workplace stress experiences can form vicious cycles that are difficult to break.

Professor Shawn Roll looks to disrupt, if not break them, with his new four-year, \$1.1 million grant from the National Science Foundation.

By gathering a variety of data from workers, the workplace and the environment, Roll and colleagues will develop multi-factor models that illustrate how stress manifests in the workplace and in workers’ lives. Those models will then help build personalized solutions for enabling workers to improve their self-awareness, better manage workplace stressors and, ultimately, improve their own work-related health and well-being.

“My career to this point has focused on addressing worker health and well-being using a broad lens to identify applications across the general workforce,” Roll says. “But for this project, we’ll be using technologies to help individual workers understand their own stress on their own terms. It’s analogous to precision

medicine — identifying what works best for each individual.”

Better worker health through data

The project will capture different types of data from the person, the built environment and the socioemotional environment at work. Interviews, focus groups, real-time assessments, mobile devices, wearable technologies and embedded sensors in the environment will all help researchers understand the ebb and flow of stress experiences as workers engage in different tasks across different workspaces and sites. Those include not only formal work environments, per se, but everywhere else that modern-day work is conducted, from the kitchen table to the corner coffee shop.

Although the term “stress” typically carries negative connotations, the researchers recognize that there is such a thing as positive stress, also known as eustress, which can feel energizing and be essential to productivity. Differentiating between types of stress experiences will be a key component of the study.

“We know eustress can lead to the experience of flow states when you’re challenged, in the moment and you view things as opportunities,” Roll says. “But in a lot of environments, workers don’t always have full control. So our goal isn’t necessarily to achieve a stress-free environment, but to understand what is causing stress and how to balance bad and good stress, the negative stress-inducing pressures with positive opportunities and challenges.”

Once data are integrated, the researchers hope to identify patterns to inform personalized solutions for better self-awareness and management of work-related health and well-being.

“Who are you, how do you perform, and when you engage in an activity or step into a space, how are you engaging in that activity and space?” Roll asks. “What’s causing, for example, your neck pain? We want to help you stop, step back and figure out what you can do to better manage it.”

Interdisciplinary experts teaming up again

To do that, Roll will look to his co-principal investigators: Gale Lucas, Shrikanth Narayanan and Burcin Becerik-Gerber, scientists at the USC Institute for Creative Technologies and the USC Viterbi School of Engineering. Their expertise in human-technology interfaces, remote sensing and machine learning discovery systems will help identify the most valuable combinations of data for personalized, automated and/or technology-supported intervention approaches for stress management.

“Not only can we map people’s physiological and personal responses to let them know how they’re doing at work, but my colleagues are looking at automating the process of stress mapping with artificial intelligence to meaningfully account for a wide range of variables that include additional data from the physical and social environments,” Roll says.

It’s not the first time Roll has joined Viterbi faculty members on studies funded by the NSF, which is the independent federal governmental agency for science and engineering research, akin to the National Institutes of Health. Roll, Lucas and Becerik-Gerber previously worked together on a \$667,000 NSF grant to design a workstation that uses artificial intelligence to learn about and adjust to worker preferences and patterns, with the goal of improving overall well-being.

The new study, he says, is a natural follow-up to their intelligent workstation project.

“Most of my previous research has identified what’s good en masse,” Roll says. “But we are all very different individuals, and whenever a principle is applied en masse there are still people who fall through the cracks. So this new project is trying to understand individual stress factors, use technologies for ongoing monitoring and then make recommendations that are far more customized and useful to individuals.”

The grant is administered by the Smart and Connected Health initiative, a NSF-NIH interagency program exploring how next-generation computer and information science and engineering approaches can transform health and medicine.

Roll and Lucas are also co-principal investigators on a recently funded \$1.8 million NSF grant led by Becerik-Gerber to develop and test a sensory-enhanced workstation for remotely operating demolition machines in the construction industry. While this so-called teleoperation can increase workplace safety (because you can’t get crushed by a wrecking ball if you’re not actually standing on the jobsite), there is limited understanding at the moment on how to conduct remote operation effectively and safely within dynamic construction sites.

Roll acknowledges that working on two large-scale grants totaling nearly \$3 million is a rare achievement, in NSF terms. In 2022, for comparison, USC was awarded only 10 NSF grants that received individual funding greater than \$1 million.

“I am so grateful for the continued support of the USC Chan Division in my research efforts, and I cannot be happier with the collaborative efforts of our transdisciplinary team.”

5

THINGS TO KNOW ABOUT: CANDACE CHATMAN OTD, OTR/L

BY MIKE MCNULTY '06, MA '09, OTD '10

Assistant Professor of Clinical Occupational Therapy
Candace Chatman OTD '20 is the division's academic fieldwork coordinator for pediatrics, part of the five-person team dedicated to making student fieldwork education and capstone experiences the best they can be. Here are five things to know about Chatman:

1 She found occupational therapy while exploring a career switch to nursing.

Chatman worked as a special education teacher for seven years before she thought nursing school was in her future. But everything changed with one guest lecture. "So I'm taking this lifespan psychology class as a nursing school prereq, and in walks Bonnie Nakasuji of Therapy West fame. She talked all about occupational therapy and her work in Ghana [at Mephibosheth Training Center]. And I was like, 'That's it; that's exactly what I want to do.' As a SPED teacher I focused on discrete skill-building, but occupational therapy is about helping a person holistically with their entire life. I was hooked."

2 She says one of her most valued job responsibilities is helping students when things don't go exactly as planned.

"In the remediation process, I get to work one-on-one with students and fieldwork sites, looking at what happened (and what didn't) throughout their learning experience. It's really similar to using the OT process. And when students do eventually succeed, they say things like, 'Oh! This is possible; I really do have the skills for being an occupational therapist!' I love seeing students gain confidence when they have structured, caring and supportive learning environments."

3 She says it's teamwork that makes the fieldwork dream work.

"What I love about our fieldwork faculty and staff team is that we're always trying to figure out how to improve. No one is complacent, or says, 'It's always been done this way so there's no need to change.' We are always asking how to be better. How can we make fieldwork education and experiences more transparent? How can we increase accessibility? That's taking a truly student-centric approach to fieldwork."

4 One of her big projects has been securing international fieldwork and capstone sites as part of USC Chan's new Entry-Level OTD program.

One of the signature elements of USC's Entry-Level OTD program is the Level II Fieldwork-to-Doctoral Capstone Experience, in which students develop knowledge and skills by spending a total of 12 months at a single site, domestic or

international. It's a new model that had not been tried before. "I have to admit, in the beginning, I didn't know how we would do it. But it's such a great feeling every time a site says 'yes' to having USC students there for 12 months. Today, I'm coordinating nearly 10 international fieldwork sites, and I think these partnerships really strengthen our sense of a global Trojan community. It's been fun making calls to England at 7:00 a.m. and to Australia at 7:00 p.m."

5 She's a dog person at heart.

The first item on her weekend agenda? Spending quality time with her standard dachshund named Mark. "I adopted Mark when he was two, and now he's four years old. We didn't name him, but it's a name that really fits. We go on walks and hit the park a lot. It's been cool watching Mark develop and mature into being comfortable with his surrounding world."



PHOTO BY FADY HABIB

Research Buzz

BEYOND THE SPECTRUM

Rethinking autism research from the perspective of an autistic researcher.

BY ELLIE TAYLOR PHD '25

Before coming to study at USC Chan, I worked as a counselor and research assistant at a program for young adults experiencing psychosis. Traditionally, care providers determine the objectives of psychosis care and research, and then enforce compliance from youth and their families. However, this approach has often backfired because it incites distrust between providers with institutional knowledge and community members who have lived experiences.

The program where I worked uniquely employs collaborative interventions and Community-Based Participatory Research (CPBR) informed by the Disability Rights Movement. I learned that honoring lived expertise humanizes and empowers those who have been endemically silenced. I witnessed, too, how including communities in the process of priorities-setting can foster engagement and achieve outcomes that changed the trajectories of young lives.

These experiences resonated with me as I embarked upon my PhD journey in 2020. Ultimately, they led me to autism research. Autistic people are increasingly advocating for greater inclusion in the studies and practices related to them. As a member of the autistic community myself, I am passionate about promoting inclusion and equity, particularly among traditionally underserved populations (including adult women).

My occupational science dissertation will explore autistic experiences of intersectional stigma and performativity using a mixed methods participatory-social justice design. I draw from an intersectionality lens, queer and critical disability theories and an occupational justice framework. I aim to establish a career focused on community perspective elicitation, transformative and participatory approaches and neurodiversity-affirming care.

In pursuing these goals, I am privileged to be mentored by Assistant Professor Amber Angell and to collaborate with fellow members of the Disparity Reduction and Equity in Autism Services (DREAMS) Lab. I continuously learn from Dr. Angell's skilled, supportive mentoring and from the partnerships that our lab has built with community members.

I currently assist with DREAMS research related to autism clinical interventions and health disparities. One example includes a study titled "Occupational therapy for children with autism during the COVID-19 pandemic: What factors influence delivery of telehealth services?" This project explored the narratives of occupational therapists and parents of autistic children regarding their transition to telehealth occupational therapy during the COVID-19 pandemic. I conducted a secondary analysis of this data to examine accounts of the autistic children's experiences. I am also project lead for the survey study "How do LGTBQIA+ and heterosexual autistic adults experience health care?" which assesses autistic participants' ratings of health care services.



PHOTO BY AMY JOHNSON

Drawing from narratives of autistic self-advocates, I authored the theoretical paper "Beyond 'bad' behaviors: A call for occupational scientists to rethink autism" (2022). In the paper, I call for increased autistic representation in research and for broader recognition of the complex subjectivity and occupational salience underlying autistic behaviors. In addition to autism research, I partnered with an amazing team of young adults with social media savvy and diabetes expertise. Together we developed a virtual recruitment campaign for the Resilient, Active, Living, Empowered-Telehealth (REAL-T) Diabetes Study led by Principal Investigator Beth Pyatak.

Beyond my scholarly activities, I contribute to neurodiversity advocacy and education. For instance, I organized and co-facilitated a neurodiversity panel at the USC Chan Division. I received the Lisa A. Test Scholarship for my research and advocacy efforts. I also teach and guest lecture on neurodiversity-related topics. Last semester, I co-instructed a course on autism development across the lifespan with Associate Clinical Professor Linsey Grunes. Finally, I serve as a member of the Autistic Researchers Committee at the International Society for Autism Research (INSAR). I received a INSAR Autistic Researcher Award to present a poster on autistic children's experiences of telehealth occupational therapy at the INSAR 2023 Annual Meeting.

I am fortunate to have had these rich opportunities, and I look forward to continuing my growth at USC Chan.

In Print

AI COULD HELP IN THE EARLY DIAGNOSIS OF AUTISM, USC STUDY FINDS

Results indicate an “easy and novel” way to detect autism spectrum disorders, paving the way for tailored therapeutic approaches.

BY LEIGH HOPPER

Artificial intelligence, coupled with data from an iPad coloring game, could assist in early diagnosis of autism, a new USC study shows.

“These results indicate potential for an easy and novel method for early detection of autism and development coordination disorder,” said Professor Lisa Aziz-Zadeh, the study’s senior author. “This is especially important as motor signatures appear early in autism — usually before social symptoms. And this methodology does not involve potential biasing by the assessor.”

The results appear in the *Journal of Autism and Developmental Disorders*.

Previous studies have shown it is possible to use technology to categorize autism from typically developing individuals, but it can be difficult to distinguish autism from other similar developmental disorders. For example, developmental coordination disorder — primarily a motor skills disorder — has features that overlap with autism. Children with autism spectrum disorder often have both motor and sensory deficits in addition to the social deficits that are the hallmark of the disorder.

“Early identification allows for tailored therapeutic approaches, which result in better long-term developmental outcomes,” said first author Christiana Dodd Butera PhD ’21, a postdoctoral fellow at the USC Division of Biokinesiology and Physical Therapy. “Having the appropriate therapy for the appropriate child at the most impactful time in development would be the long-term goal of this detection work.”

AI and autism: Using machine learning analytics

For the study, 54 children between the ages of 8 and 17 took part in a five-minute coloring game on iPads. Eighteen had autism, 16 had developmental coordination disorder and 20 were developing typically. The iPads collected touchscreen kinematic data — for example, how hard kids are pressing, and the jerkiness or velocity of movements. The researchers used machine learning analytics, a form of artificial intelligence, to process the information.

“We were able to correctly distinguish between a typically developing child and one with autism spectrum disorder with 76 percent accuracy,” Aziz-Zadeh said.

Researchers also were able to correctly distinguish between typical development and developmental coordination disorder with 78 percent accuracy, and autism and developmental coordination disorder with 71 percent accuracy.

The study was conducted in high functioning children and adolescents with autism, and needs to be replicated in larger, younger and more diverse groups, researchers said.



“We would want to see this signature as early as possible,” said Butera.

The study is just one example of how researchers are using artificial intelligence to detect, teach and assist children with autism. Social robots, which are made to interact with humans, can help teach social and educational skills to students of all abilities. A tabletop robot developed by researchers at Yale University models appropriate “social gaze” behavior and improves communication.

Aziz-Zadeh and Butera are also affiliated with the Brain and Creativity Institute at the USC Dornsife College of Letters, Arts and Sciences.

Additional USC-affiliated co-authors include Laura Harrison Postdoc ’20, Emily Kilroy PhD ’18, Postdoc ’21 and Aditya Jayashankar PhD ’24. The research was supported with funding from the Hawthorne Fellowship in Autism Innovation and the NIH Eunice Kennedy Shriver National Institute of Child Health and Human Development under award number R01HD079432-01A1.

Joy Agner was lead author of “Can Photovoice foster the development of social support?,” published in the *American Journal of Community Psychology*.

Joy Agner was lead author of “Health literacy, social networks, and health outcomes among mental health Clubhouse members in Hawai’i,” published in the *International Journal of Environmental Research and Public Health*.

Amber Angell PhD ’16 and **Catherine Crowley** OTD ’07 were co-authors of “Challenges and facilitators to telehealth occupational therapy for autistic children during COVID-19,” published in *OTJR: Occupational Therapy Journal of Research*; PhD students **Marsha Franklin** OTD ’21, PhD ’26 and **Ellie Taylor** PhD ’25 were co-authors, along with alumni **Elaine Carreon** MA ’21, OTD ’22; **Joana Akrofi** MA ’21, OTD ’22 and **Shona Maher** MA ’20, OTD ’21.

Amber Angell and **Leah Stein Duker** were co-authors of “Pediatricians’ role in healthcare for Latino autistic children: Shared decision-making versus ‘You’ve got to do everything on your own,’” published in *Autism*; alum **Lucia Floríndez** PhD ’19 was a co-author.

Alison Cogan MA ’12, OTD ’17 was lead author of “Therapeutic relationship in mTBI rehabilitation: The disparity between the illness experience and clinical definitions,” published in *Military Medicine*.

Alison Cogan was lead author of “Provider discussion of health goals and psychosocial needs: Comparing older to younger veteran experience,” published in *Health Services Research*.

Alison Cogan was co-author of “Interventions facilitating recovery of consciousness following traumatic brain injury: A systematic review,” published in *OTJR: Occupational Therapy Journal of Research*; alum **Jennifer Weaver** MA ’11 was lead author.

Joshua Kotler was lead author of “Effectiveness of occupational therapy interventions to improve performance and participation in Instrumental Activities of Daily Living (IADL) among adult stroke survivors (2009–2019),” published in the *American Journal of Occupational Therapy*.

Sook-Lei Liew MA ’08, PhD ’12 was a co-author of “Acceptability of a telerehabilitation biofeedback system among stroke survivors: A qualitative analysis,” published in *OTJR: Occupational Therapy Journal of Research*; PhD student **Miranda Donnelly** PhD ’24 was lead author, and students **Jessica Jeong** MA ’22, OTD ’23; **Barrisford Bladon** MA ’23; **Kira Wong** MA ’21, OTD ’22 and **Aisha Abdullah** MA ’23 were co-authors.

Allison Phillips OTD ’19 and **Grace Baranek** were co-authors of “Assessment fidelity of parents implementing a standardized telehealth infant autism screener,” published in *OTJR: Occupational Therapy Journal of Research*; PhD student **Emily Campi** MA ’20, PhD ’24 was a co-author.

Bobbi Pineda was lead author of “NICUs in the US: Levels of acuity, number of beds, and relationships to population factors,” published in the *Journal of Perinatology*.

Bobbi Pineda was lead author of “NICU sensory experiences associated with positive outcomes: An integrative review of evidence from 2015–2020,” published in the *Journal of Perinatology*; staff member **Polly Kellner** was a co-author.

Bobbi Pineda was lead author of “Health care professionals’ perceptions about a telehealth model of therapy after NICU discharge,” published in *OTJR: Occupational Therapy Journal of Research*; PhD students **Marinthea Richter** OTD ’20, PhD ’25 and **Bethany Gruskin** PhD ’26 were co-authors.

Beth Pyatak was a co-author of “Greater telehealth use results in increased visit frequency and lower physician related-distress in adolescents and young adults with Type 1 diabetes,” published in the *Journal of Diabetes Science and Technology*.

Beth Pyatak was lead author of “Impact of overnight glucose on next-day functioning in adults with type 1 diabetes: An exploratory intensive longitudinal study,” published in *Diabetes Care*; PhD students **Raymond Hernandez** PhD ’21 and **Loree Pham** PhD ’25 were co-authors. Pyatak, Hernandez and Pham were also co-authors of “Movement matters: Short-term impacts of physical activity on mood and well-being,” published in the *Journal of Behavioral Medicine*.

Shawn Roll was a co-author of “AIUM practice principles for work-related musculoskeletal disorder,” published in the *Journal of Ultrasound in Medicine*.

Shawn Roll was a co-author of “Ten questions concerning the impact of environmental stress on office workers,” published in *Building and Environment*.

Shawn Roll was lead author of “Cross-disciplinary prevalence and associated factors for work-related discomfort in users of ultrasonography: Implications for sonography professionals and health care administrators,” published in the *Journal of Diagnostic Medical Sonography*; PhD student **Yoko “Ellie” Fukumura** MA ’19, PhD ’24 was a co-author.

Shawn Roll was lead author of “Sonographic reference values for median nerve cross-sectional area: A meta-analysis of data from healthy individuals,” published in *Journal of Diagnostic Medical Sonography*; PhD students **Sandy Takata** MA ’15, OTD ’16, PhD ’23 and **Buwen Yao** PhD ’22 were co-authors.

John Sideris and **Grace Baranek** were co-authors of “Toddlers at elevated likelihood for autism: Exploring sensory and language treatment predictors,” published in the *Journal of Early Intervention*.

John Sideris, **Gabby Granados** ’17, MA ’18, OTD ’19, **Jesús Díaz** MA ’08, OTD ’09 and **Beth Pyatak** were co-authors of “Telehealth Lifestyle Redesign occupational therapy for diabetes: Preliminary effectiveness, satisfaction, and engagement,” published in *OTJR: Occupational Therapy Journal of Research*; staff member **Jeanine Blanchard** MA ’99, PhD ’10 was a co-author; alum **Seth Mitchell** ’20, MA ’22 was lead author.

John Sideris, **Leah Stein Duker**, **Grace Baranek** and **Sharon Cermak** were co-authors of “Comparing sensory processing in children with Down syndrome to a mental age matched sample of children with autism, other developmental disabilities, and typically developing children,” published in *Research in Developmental Disabilities*; PhD student **Elizabeth Isralowitz** PhD ’24 was lead author.

Leah Stein Duker was a co-author of “Telehealth utilization among occupational therapists in oncology: Results from a national survey,” published in *OTJR: Occupational Therapy Journal of Research*; alum **Alix Sleight** MA ’12, OTD ’13, PhD ’17 was lead author.

A DEEPER MEANING

The division's longest-serving faculty member identifies the three keys to a fulfilling and successful career.

ERNA IMPERATORE BLANCHE MA '88, PHD '98

As soon as I start talking, my accent makes it obvious that I am originally from Chile. But I have actually been at USC since 1987, either as a student or a faculty member, which is longer than anybody else here today. That may be why I was asked to speak to the graduating class at the Division's 2023 Commencement ceremony. I shared with them these three key ingredients that made my career successful, and which I also believe will guide anybody to their own successful, satisfying career.

The first ingredient is passion. If it sounds simple, that's because it is. Passion is the fuel to get anywhere worth going. When you do what you love, you will forge a path that is authentic to who you are, and who you might become. With passion as your guide, you can achieve more than you ever thought possible.

The second ingredient is preparation. As a student at USC in the '80s and '90s, I learned from the best educators, theorists and scientists, and I was prepared to enter a community of practice. That preparation also empowered me to adapt whenever plans changed in unexpected ways. Opportunities come at unexpected moments and from unexpected people, but it's preparation that positions you to seize them.

Here's a story to help illustrate my point: Many years ago, when Dr. Jean Ayres '45 was in her last year of practice and teaching at USC, somebody in the division — I still don't know who — nominated me to study with her. As a student, I didn't think that I could even apply to such prestigious training with the world-famous Jean Ayres.

I was accepted, and I could not believe it! But I didn't think I was ready; I didn't feel like I belonged; I had that nagging 'impostor' feeling. But I also knew that studying with Dr. Ayres was a once-in-a-lifetime offer that would not come again. Its timing was less than ideal. But I had to take the opportunity, and it turned out that studying with Dr. Ayres was one of the great highlights of my professional life.

Did I ever think that I — an occupational therapist trained in Chile — would study with Jean Ayres? That I would become a faculty member? That I would become a faculty member at USC, the top-ranked occupational therapy program in the world?! Never. But somebody believed in me, and joining the USC Trojan Family opened doors for me and prepared me to walk through them.

The third and final ingredient to career success is perseverance. Today's environment is filled with challenges and obstacles. Clients may not recover as expected. Papers are not published as quickly as possible. Grant proposals are often not funded on their first, second or even third submissions. That's when you have to trust that you have the tools, confidence and supportive community to



PHOTO BY PHIL CHANNING

succeed. Approach each setback not as a failure but as a learning opportunity. It may seem counterintuitive, but I believe we gain more from our setbacks than our successes.

I have seen so many changes throughout my 35 years at USC. I was the first Spanish-speaking faculty at USC Chan. Today, we have more than a dozen faculty and staff members who speak fluent Spanish.

That may seem like a foregone conclusion, considering more than 3.3 million people in Los Angeles County speak Spanish. But let me tell you, back then it didn't always feel that way. I often felt like I was seeing the world from a completely different point of view. But over the years, I have learned that when we are part of a community, these types of differences are actually strengths.

In the next 35 years and beyond, let's continue to derive strengths from differences. Let's continue building a worldwide community of practitioners, working together to build our profession from Los Angeles, to Chile and points across the globe. Together, we can drive progress and innovation. And with passion, preparation and perseverance, I hope your own career, like mine, fulfills your wildest dreams.

Obituaries

ANNE HENDERSON, 98

Alumna and longtime Boston University faculty member was the recipient of the American Occupational Therapy Association's 1988 Eleanor Clarke Slagle Lectureship Award. Obituary courtesy of the Henderson family and Eaton Funeral Homes.

Anne Henderson '46 passed away in April 2023, at North Hill independent living community in Needham, Massachusetts, with her loving nieces at her side.

Anne was born in Taegu, Korea, in 1924, where her parents were serving as missionaries. She and her six brothers and sisters lived in Korea until 1940, at which time the family returned to the US and settled in Berkeley, California.

Anne attended the University of California, Berkeley and then USC, where she received her Bachelor of Arts in Occupational Therapy degree in 1946. After working in several occupational therapy positions, including at a hospital in Mexico with post-polio patients, Anne returned to school at the University of Pennsylvania where she earned her master's degree in 1963, and continued there as an instructor in OT. In 1971, she earned her doctoral degree at UPenn, and then went on to the University of New Hampshire where she served as chair of the UNH Occupational Therapy Department. Later, at Boston University, she was the founder of one of the first post-professional master of science and doctoral programs in occupational therapy in the world.

She co-authored a book titled "Hand Function in the Child: Foundations for Remediation." She was a cherished professor and mentor to many students. After retiring in 1989, she remained in touch with a number of her students, who became close friends for the remainder of her life.

Anne resided at North Hill for 25 years. Anne loved doing jigsaw puzzles and also became a prolific painter, a passion she also nurtured in several of her nieces. She owned a small cabin in Maine near her sister's family, where she spent many happy summers planning treasure hunts



(complete with poetic clues) for adoring nieces and nephews, showing them how to make origami birds on rainy days and teaching the fine art of rock tumbling. She was the one who took nieces and nephews to the bookstore for a birthday treat or out to special birthday dinners. Her amazing toy cupboard had the most unique items and was a museum unto itself. She loved a good mystery novel, as well as science fiction novels and the Dr. Who television series. She and her niece, Joanne Weaver, spent countless hours researching the family genealogy back to the 1700s. A pioneering professional woman and a loving, fun aunt who we knew as "Auntie Anne" — she will be so missed.

She is survived by her half-sister, Deborah Berryere, of Vernon, Vermont, and her half-brother, David Henderson, of Swoope, Virginia, and numerous loving nieces and nephews, and many close friends who were like family to her.

In lieu of flowers, the family asks that donations in her name can be made to the American Occupational Therapy Foundation (aotf.org/support).

ABBEY MARTERELLA, 50

Occupational Science alumna, former USC Chan and Eastern Michigan University faculty member, is remembered for her professional contributions and personal impact.

Abbey Marterella PhD '10, alumna and former USC Chan faculty member, passed away in September.

Marterella earned her PhD in Occupational Science at USC in 2010, then joined USC Chan's faculty as a research assistant professor before returning to her native Michigan to join Eastern Michigan University's occupational therapy faculty. At EMU, she was promoted to the rank of associate professor with tenure in 2016.

Marterella's research interests included intervention studies, qualitative inquiry, usability studies and theoretical developments in occupational therapy and occupational science. She co-authored articles published in the *Canadian Journal of Occupational Therapy* and the *American Journal of Occupational Therapy*, among others. She also received a Service Commendation from the American Occupational Therapy Association.

In 2017, Marterella became research and development director at the Center for Innovative OT Solutions, a Colorado-based company that owns and licenses several standardized assessments for clinical practice including the "Assessment of Motor and Process Skills." She co-authored the textbook "Powerful Practice: A Model for Authentic Occupational Therapy" with CIOTS founder Anne Fisher. Marterella was president and CEO of CIOTS at the time of her death.

MARY FOTO, 82

Alumna, longtime USC Chan Board of Councilors member and former president of the American Occupational Therapy Association was an occupational therapy reimbursement policy expert and advocate. Obituary courtesy of the American Occupational Therapy Association.

Mary Foto '66, president of the American Occupational Therapy Association from 1995 to 1998, died in September at her home in Colorado.

Few people had such a significant impact on the practice and profession of occupational therapy. For half a century, she worked to ensure occupational therapy was considered a key health profession, both nationally and throughout the third-party payor industry. Her work led to the inclusion of occupational therapy as an essential service with Medicare and Medicaid, and her tireless advocacy led to the inclusion of occupational therapy reimbursement codes in the Current Procedural Terminology® Manual, an essential inclusion for payment of health care services.

Foto was an exceptional leader in occupational therapy and devoted leader to AOTA. For nearly 30 years, before and after her AOTA presidency, she became the face of the profession in the American Medical Association's committees on defining and valuing the codes of the CPT® system. She worked on the first delegation of non-physician providers to the AMA process in the early 1990s. She argued for, and gained establishment of, critical codes such as the Activities of Daily Living (ADL) code and the Therapeutic Activities code, which established the unique use of the process of occupational therapy.

Foto's work and dedication established the principle that occupational therapy was not only achieving a goal around ADLs, but that ADLs were also the treatment. This key principle was highlighted in the revision to create three new occupational therapy evaluation codes in 2017. She was the chief architect of that groundbreaking description of the occupational therapy process; she thoughtfully and powerfully increased the recognition and comprehension of occupational therapy among the physicians in the AMA commu-



nity, as well as payers of health care services nationwide.

Her service to AOTA included many positions on work groups and committees, becoming an AOTA Fellow and supporting many staff members in their work over the decades to ensure a solid place for occupational therapy in federal and state policy. During her AOTA presidency, she wrote many articles and speeches that reflected the health system challenges of the 1990s, examining emerging issues such as entrepreneurship, specialization, outcome studies, managed care and technology.

Foto earned her Bachelor of Science degree in occupational therapy at USC in 1966, and was a longtime member of USC Chan's Board of Councilors. Two of her heroes were Wilma West MA '48 and Professor Emeritus Elizabeth Yerxa '52, MA '53, for their emphases on the human spirit, the primacy of the patient and effectiveness.

In her private practice work she was a pioneer of using actual therapists to review

insurance claims for therapy. She established The Foto Group in 1968, the first therapist-owned company in the nation to offer peer review of rehabilitation therapies, assistive technology, durable medical equipment and prosthetics and orthotics. The Foto Group contracted with Blue Cross of California for more than 40 years, and with other insurers and payers across the country. Foto was also ahead of her time in developing ways to collect and analyze data, developing a data dictionary for service claims for Medicare in the 1980s.

Not only has she left a legacy around professional recognition and payment, but she guided and mentored a new generation of occupational therapy practitioners who are committed to advancing the profession and practice. Mary Foto was a visionary who changed the landscape of a profession.

In lieu of flowers, the family suggests a GoFundMe donation to Turner Fautsko (gofundme.com/f/turner-fautsko).

USC Chan Division
of Occupational Science
and Occupational Therapy

1540 Alcazar Street, CHP 133, Los Angeles, CA 90089-9003

Non-Profit Org.
U.S. Postage
PAID
University of
Southern
California



chan.usc.edu



facebook.com/uschchanosot



chan.usc.edu/linkedin



twitter.com/uschchanosot



youtube.com/@uschchanosot



instagram.com/uschchanosot

USC
Chan

We are
HIRING.

See current opportunities to join
the USC Trojan Family at
chan.usc.edu/about-us/careers.