

U N I V E R S I T Y O F P I T T S B U R G H
FACETS
S C H O O L O F H E A L T H A N D R E H A B I L I T A T I O N S C I E N C E S

IN SEARCH OF THE SILVER LINING:
**HOW COVID-19 IMPACTS TEACHING,
LEARNING AND PRACTICE**



ALUMNI PROFILE:
COMMUNITY ENGAGEMENT,
PANDEMIC STYLE

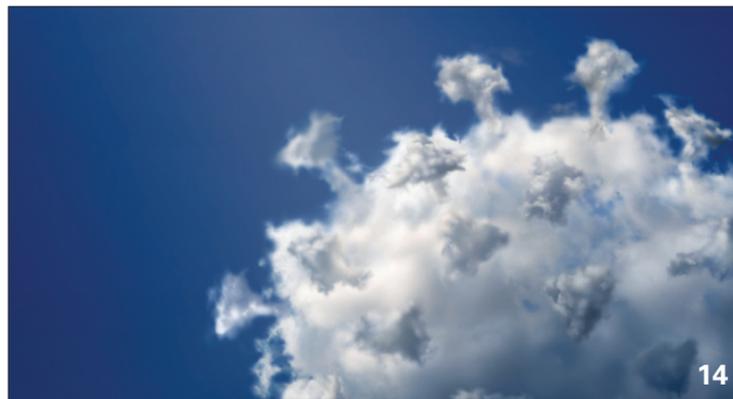
UP CLOSE AND PERSONAL
IN A TIME OF
SOCIAL DISTANCING

**RESILIENCY AND
RESOURCEFULNESS** IN
THE FACE OF PANDEMIC

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FALL/WINTER 2020

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Greetings,

Like virtually everything for the past several months, our FACETS issue is dominated by the COVID-19 pandemic. I will begin by stating that I am extremely pleased with the way our faculty, staff and students have responded to this challenge. We've come a very long way from the time in mid-March when we had two weeks to prepare for remote-learning-only delivery until the present, when we are now planning for students to be here in the fall term, fully utilizing the "Flex@Pitt" model of delivery. (The Flex@Pitt model allows for in-person, remote, synchronous and asynchronous learning options.) I am proud to say that SHRS has responded and met the challenge head on. I especially commend the SHRS leadership team for their foresight, dedication and determination. I can say without hesitation that we are indeed ready and looking forward to the fall term.

Webster's Dictionary defines a paradigm shift as "an important change that happens when the usual way of thinking about or doing something is replaced by a new and different way." I am certain that all have used the term "the new normal" when it comes to thinking about the aftermath of the pandemic. The thought of education and professional practice with COVID-19 restrictions never crossed anyone's mind until recently. Now it looks as though masks and other personal protective equipment are going to be part of our lives well into the future. It is perhaps less scary when we think back to other incidents that have caused paradigm-shifting behavior. Perhaps the easiest and most memorable would be the effect the September 11, 2001 attacks had on the country. And what did we do? We responded by figuring out what was necessary, for example, to make air travel safe again. We followed up with implementing plans and, within a short period of time, the "new normal" of air travel evolved.

No doubt COVID-19 has had a far-reaching, worldwide effect on our lives. We have been through the first response phase by figuring out what we need to have in place to best ensure safety while getting on with our lives in this academic setting. The country's initial response to 9/11 was to ground all air travel. The analogous response academically to the pandemic was to immediately transform to remote-only delivery. Now, we are figuring out the second phase whereby we mitigate risk while reintegrating into classroom and clinical practicum. Our risk mitigation is guided by the best scientific minds among the University of Pittsburgh and UPMC community. We have kept a "safety first" mentality while taking into consideration varying degrees of risk aversion among students, staff and faculty. I am confident that we will be ready when our students return this fall.

What have we learned along the way? First, to no one's surprise, we have a highly resilient group of students, staff and faculty members. All have addressed the challenges of the pandemic with collaborative, solution-oriented approaches to defining our "new normal." Second, our move to remote was not nearly as painful, largely because we have been working in the remote space for the past three years with our distance education initiatives. Third, because of the push to remote and full utilization of educational design and technology, I strongly believe we will be delivering all of our educational products pedagogically better and with greater efficiency. Fourth, there is no substitute for face-to-face instruction in our skill-based professions and we believe the Flex@Pitt model will be consistent with our goal of excellence in education.

I firmly believe we are on the right track and I am looking forward to our new normal.

Anthony Delitto
Professor and Dean

perspective

"Perspective" is written by Patty Kummick, FACETS executive editor and SHRS executive director of Internal and External Relations. This column serves to address topics relating to our students, faculty, staff, the school, and local and global communities.

In 2020, SHRS lost two powerhouses who influenced, instructed and supported us in so many valuable ways. Our heartfelt tributes to Dr. Anne Pascasio, SHRS founding dean and philanthropist; and Bruce R. Baker, adjunct faculty, major donor, advocate and friend, follow.



Anne Pascasio, PhD, PT, FAPTA, physical therapist, professor, leader, mentor, colleague and friend, passed away peacefully on June 22, 2020 in Pittsburgh at the age of 95. Dr. Pascasio is fondly remembered by many as the founding dean of the University of Pittsburgh's School of Health Related Professions (now known as the School of Health and Rehabilitation Sciences). She is

believed to be the first female dean among the 19 allied health schools in the country in the late 1960s and one of the first physical therapists to be named dean of a school.

Dr. Pascasio received undergraduate and graduate degrees from the University of Pittsburgh and a physical therapist certificate from the D.T. Watson School of Physiatrics. Following employment with the UPMC Children's Hospital of Pittsburgh, the University of Pennsylvania Graduate School of Medicine, the Hospital of the University of Pennsylvania and the American Physical Therapy Association (APTA), she returned home to Pittsburgh and joined the faculty at Watson while completing her doctoral degree in higher education at Pitt.

In 1967, Dr. Pascasio returned to Pitt to expand the university's educational offerings. She was instrumental in developing the new School of Health Related Professions by incorporating Watson's PT educational program with Pitt's programs in medical technology and child care/child development. The school opened in 1969 with Dr. Pascasio serving as its inaugural dean. During her 13-year tenure at the helm, she grew the academic offerings and initiated research opportunities for faculty and students.

After leaving the deanship in 1982, Dr. Pascasio remained on faculty at Pitt in the PT Department. Following her 1986 retirement, she focused on travel that also provided teaching and learning opportunities including an adventure on the 1988 Semester at Sea voyage which took her to parts of Europe and Asia.

Professional and civic service was as important to Dr. Pascasio as embracing education. She served as a member of the Physical Therapy Advisory Committee to the Pennsylvania Board of Medical Education and Licensure from 1968-70 and later went on to be the non-physician member of the State Board of Medical Education and Licensure in the Commonwealth of Pennsylvania through an appointment by the governor's office. Dr. Pascasio sat on several national advisory committees related to education and worked locally and at the state level with library services for persons who were blind or who had disabilities. She was the chair of the Governor's Committee on Health Education in the '70s and served on the State Advisory for Comprehensive Health Planning in Pennsylvania, held various posts with the APTA and supported her church, many civic organizations and her residence community.

She received a University of Pittsburgh Medallion in 1986, was the recipient of the first Distinguished Alumnus Award of the School of Health Related Professions in 1987 and was the inaugural recipient of the SHRS Philanthropist Award in 2005. She was named a Fellow of the APTA and was a "lifetimer" with APTA membership spanning some 67 years.

Although soft spoken, Dr. Pascasio was always effective in communicating her points of view. She was highly motivated and driven. Behind her well-mannered ways was a will of steel. She

worked hard, played hard and laughed a lot. She had a wonderful way of engaging people and drawing out the best in them. She was also skilled at recognizing talent and encouraging people not to give up on their dreams. Her generosity extended to SHRS and many of its students where she provided significant funds for the school's Learning Resource Center in memory of her parents and grew a scholarship fund named in her honor upon her retirement.

Dr. Pascasio's light shines bright in the hearts of her extended family, friends, former students, fellow residents and the many others she touched who knew and respected her. Her strong legacy will continue in those she taught, served, influenced and loved.

Gifts in Dr. Pascasio's memory can be made to the Anne Pascasio Scholarship Fund at SHRS, University of Pittsburgh, 128 North Craig Street, Pittsburgh, PA 15260.



Bruce R. Baker, AM, LHD, passed away on May 7, 2020, at the age of 77. A long-time colleague, benefactor, consultant, advocate and dear friend of SHRS, he was the owner of Semantic Compaction Systems, Pittsburgh, and pioneered Minspeak, a system to help those with severe language disabilities communicate.

A graduate of Wabash College, Indiana, and Middlebury College, Vermont, Baker held positions at St. Francis College, Maine; Frostburg State College, Maryland; College of d'Enseignements techniques, Rue St. Charles, Paris; Allegany High School, Maryland; and Westinghouse Electric Corporation before starting his life's work in the field of augmentative communication. Minspeak (meaning "minimum-effort speech") helped hundreds of people with little or no speech experience personal, educational and professional success. Minspeak systems have been developed and used in nine languages.

Among his many awards, Baker received the National Design Award from United Cerebral Palsy associations; Distinguished Service Award from the Rehabilitation Engineering and Assistive Technology Society of North America; Distinguished Service Award from the International Society for Augmentative and Alternative Communication; a position of Honorary Faculty from the University of Sydney, Australia; and Hall of Fame distinction from Logansport High School, Indiana. He often served as a keynote or guest speaker at international conferences in North America, Australia, Europe and Asia and was a founder of SHOUT (Support Helps Others Use Technology), a western Pennsylvania nonprofit. Besides augmentative communication and being of service to others, Baker was passionate about history, philosophy, art and literature.

A true force in the augmentative and alternative communication field, Baker served SHRS in many capacities including adjunct faculty, philanthropist, Board of Visitors member and visionary. Many SHRS students were impacted by Baker's generosity through his Bruce Baker and Semantic Compaction Systems Educational Travel Funds which supported multiple students each year as they ventured to locations far and wide to benefit and expand their education. He will be missed by many but his influence will remain long after his passing.



Millions of lives have been touched more deeply, more severely by COVID-19 than mine. I've not been diagnosed with the coronavirus disease, haven't had a family member or close friend afflicted and haven't experienced the loss of a loved one as a direct result of the pandemic.

But I have experienced the restrictions and limitations of sheltering at home ... the cancellation of important family events ... the passing of holidays without the laughter and love of those I hold dear ... consoling others in times of loss and grief while observing social distancing ... and the adjustment of working from home since mid-March. These are challenging times to say the least.

However, I find that working from home has made me more productive. (Granted, I only have to contend with a 10-year-old dog who's become a pro at getting me to let her in and out of the house with a particular look, while others are sharing time and space with working-from-home spouses, children, parents, roommates.) I do miss the camaraderie that occurs in common workspaces or

knowing that I'd likely get to interact with a colleague in the hallways or elevator. And I miss my mid-day walks around campus and joining coworkers for lunch or happy hours.

In my current state, these adjustments are very significant. My current state is that of pre-retirement. In the midst of the pandemic, Pitt offered a voluntary early retirement package for staff that prompted my decision to leave Pitt and SHRS several years before I had planned. I'm thrilled to enter this new phase of my life, effective September 30, after 40+ years in the workforce (I started really young, of course!). I'm curious about how I'll fill all of my "extra" time in retirement. But mostly I'm saddened that this milestone will happen while my work partners, teammates and esteemed colleagues will be, for the most part, functioning in the confines of their own homes where I won't be able to share with them face-to-face the amazing influence they've had on me over the years.

While I expect to thrive in my new life phase, it makes me think about other, far greater and more pressing transitions facing humankind. Will many of us continue to care about the health and wellbeing of others once a vaccine for COVID-19 is discovered? I believe our faculty, staff, alumni and students will do so as that's how they've been taught and trained in their academic and professional lives. But will human kindness reach the broader level where we no longer label and identify whole groups of people as underrepresented, underserved or marginalized? Will we get to a place in my lifetime where we mutually respect and value each other for our similarities and our differences? Where opportunities are open and available to all regardless of race, religion, gender, ability/disability, sexual orientation? Where people aren't judged by the color of their skin or the texture of their hair or the neighborhoods in which they live?

SHRS has created a framework to help bolster diversity efforts and to work toward being a more representative and inclusive environment—opening the door to greater opportunities for those who may not "look like us." As I write this, we're focused on educating ourselves and building our knowledge base on diversity, equity and inclusion. We're listening and responding to the experts, university leaders, our students and each other to raise a singular voice, a singular vision and a clear path to welcome, embrace, support and celebrate all.

Which brings me back to my personal state of facing retirement and defining my role outside of Pitt and SHRS. I want to continue making strides toward equity and inclusion ... and basic human kindness. I plan to advocate for what is equitable, especially with the knowledge and understanding I have gained through my contacts with so many of you.

Thank you for making my life so rich. My 17 years at SHRS, first as its director of Development, and then as its executive director for Internal and External Relations, have been some of the most challenging and fulfilling because of my interactions with SHRS faculty, staff, students, alumni, donors and friends. It's been my pleasure to communicate with each of you in every issue of FACETS since I assumed the role of its editor in 2004. And I enjoyed even more the visits with donors and alumni and attending the many events we hosted to engage and acknowledge you as a part of the SHRS family. I will miss you and wish you the very best in every aspect of your life.

To comment or share your insights on this column, please contact Patty Kummick at pkummick@pitt.edu, 412-383-6548, SHRS, 4054 Forbes Tower, Pittsburgh, PA 15260.

Faculty News

SHRS welcomes the following faculty who have joined our ranks in 2020:

Dr. Mark DeRuiter, professor, Communication Science and Disorders; **Dr. Eric Meyer**, professor and program director, Clinical Rehabilitation and Mental Health Counseling; **Dr. Scott Massey**, associate professor, Physician Assistant Studies; **Dr. Ketki Raina**, associate professor, Occupational Therapy; **Helen Cochran**, assistant professor and program director, Prosthetics and Orthotics; **Dr. Quiana Golphin**, assistant professor, Clinical Rehabilitation and Mental Health Counseling; **Rachel Hibbs**, assistant professor, Rehabilitation Science and Technology; **Susan Graff**, assistant professor, Physician Assistant Studies; **Ashley Firm**, assistant professor, Physician Assistant Studies; **Dr. Aravindakshan Parthasarathy**, assistant professor, Communication Science and Disorders; **Caitlin Trabert**, instructor, Clinical Rehabilitation and Mental Health Counseling; and **Andrew Sprague**, research assistant, Physical Therapy.

We recognize SHRS faculty members who were recently promoted to the following ranks:

Professor:

Dr. Catherine Palmer, Communication Science and Disorders; **Dr. Patrick Sparto**, Physical Therapy; **Dr. Michael Schneider**, Physical Therapy; and **Dr. Lauren Terhorst**, Occupational Therapy

Associate Professor:

Dr. Katelyn Allison, Sports Medicine and Nutrition; and **Dr. David Wert**, Physical Therapy

Assistant Professor:

Ann Marsico, Occupational Therapy; **Dr. Sara Peterson**, Prosthetics and Orthotics; and **Jennifer White**, Occupational Therapy

Clinical Rehabilitation and Mental Health Counseling



Dr. Michael McCue, professor and Counseling program director, retired in July after 41 years of service to Pitt, including 26 years at SHRS. McCue founded the school's Rehabilitation Counseling program in 2000, expanding it to a CACREP-accredited Clinical Rehabilitation and Mental Health Counseling program in 2015.

Communication Science and Disorders



Dr. Bernard Rousseau, professor and chair, completed a six-year term on the National Institutes of Health Motor Function, Speech and Rehabilitation study section. His term ended on June 30, 2020.

Dr. Katya Hill, professor, was invited to serve on the National Institute on Disability, Independent Living, and Rehabilitation Research expert panel on Assistive Technology.



Dr. Bharath Chandrasekaran, professor, was appointed to a four-year term as a charter member of the Language and Communication Study Section, Center for Scientific Review of the National Institutes of Health. He was chosen based on his demonstrated competence and achievements in scientific research, publications in scientific journals, and other significant scientific activities and honors.



Dr. Will Evans, assistant professor, received a Tavistock Trust for Aphasia Distinguished Scholar Award recognizing scholarly excellence in aphasia research, publishing, and student mentoring and training.

Dr. Evans and Speech-Pathology graduate students **Josh Peckman** and **Hakan Seyalioglu** were among the recipients of a First Gear Development Award from the University of Pittsburgh Innovation Institute. This award will support their Aphasia Games for Health Project.



Assistant Professors **Nicole Corbin** (left) and **Mandy Hampton Wray** (right) are collaborating with the DePaul School for Hearing and Speech on a project titled "Neurophysiological correlates of selective attention and speech perception in children with hearing loss."



Dr. Elaine Morner, associate professor, shared an update with The ASHA Leader about how the audiology and speech-language pathology graduate programs have responded to providing clinical continuity for students during the COVID-19 pandemic.

Dr. Leah Helou, assistant professor, is chairing the CSD Department's internal Equity, Justice and Inclusion work group. Dr. Helou has assembled a team of faculty and staff to address key departmental priorities in support of the SHRS strategic plan including celebrating communicative diversity, developing a culture of alliance, and advancing a culture of humility and respect for others.



Dr. Chris Brown, associate professor, received an NIH R21 grant for his project "Modifying spatial maps to improve localization."

Dr. Katya Hill, associate professor, and her team received an SHRS Innovation Challenge award for her Universal Data Logger entry.

The CSD Department wishes fond farewell to faculty who have recently moved on including **Dr. Ellen Cohn**, or retired including **Dr. Janice Vance**, **Dr. Reva Rossman**, **Linda Sustich** and **Dr. Barbara Vento**.

Emergency Medicine



Dr. Walt A. Stoy, professor, was appointed to a National Registry Committee to make recommendations to develop national EMS Evidence-based Guidelines.

Health Information Management



Dr. Valerie Watzlaf, associate professor, has been appointed by the United States Secretary of Health and Human Services to serve on the National Committee on Vital and Health Statistics (NCVHS). The NCVHS is the statutory public advisory body to the Secretary of Health and Human Services on health information policy and provides advice and assistance on key health data issues related to community and population health, standards, privacy and confidentiality, quality, and data access and use.

Dr. Watzlaf collaborated with **Dr. Amal Alzubi** (PhD '16) from Jordan on an article titled "A Simulation Study of Coronavirus as an Epidemic Disease Using Agent-Based Modeling" for the summer 2020 Journal of American Health Information Management Association.



Drs. Dilhari DeAlmeida (left) and **Valerie Watzlaf** (right), associate professors, helped author the ICD-11 whitepaper for the International Federation of Health Information Management Associations (IFHIMA). The whitepaper includes activities in the preparation of ICD-11, characteristics and content, benefits and challenges for countries, workforce development, education and training and real-world case studies.

Faculty News

Nutrition



Caroline Passerello, instructor, was featured in a Healthline article titled “Exercise, Diet, Alcohol: New Guidelines Detail Best Ways to Reduce Cancer Risk.”

Occupational Therapy



Associate Professor **Joanne Baird** was selected to receive the American Occupational Therapy Association Roster of Fellows for “Pioneering Best-Practice Simulation in Occupational Therapy.”



Assistant Professor **Angela Caldwell** was elected to serve on the Board of Directors for the Down Syndrome Association of Pittsburgh.

Dr. Ketki Raina (MS '03, PhD '05) joined the department as associate professor.



Dr. Juleen Rodakowski, assistant professor, was selected to receive the American Occupational Therapy Association Roster of Fellows for “Advancing Occupational Therapy for Aging in Place.” Dr. Rodakowski also received a Service Commendation, American Occupational Therapy Association Advocate, Rehabilitation Research at the National Institutes of Health.



Assistant Professor **Amit Sethi** has been offered the 2020-21 StrokeNet Fellowship. This national network fellowship, typically offered to trained neurology physicians, provides protected time and specialized training in stroke neurology, recovery, and rehabilitation with a focus on neuroimaging training in Sethi’s case.

Dr. Sethi received funding as co-investigator from the Department of Veterans Affairs to support a study titled “Development of Vision-Based Methods for Effective and Efficient Control of Assistive Robotic Manipulators.”



Alyson Stover, assistant professor, was appointed as the American Occupational Therapy Association Board of Directors representative to serve on the AOTA Diversity, Equity, and Inclusion Task Force.



Associate Professor **Pamela Toto** served as distinguished lecturer at the 12th Annual Pi Theta Epsilon Meeting at Creighton University. This honor recognizes Toto’s significant contributions to the profession through education, scholarship and leadership.

Physical Therapy



Dr. Andrea Hergenroeder, associate professor, was promoted to the position of program director of the residential Doctor of Physical Therapy Program.



Professor **Janet Freburger** (left) and Assistant Professor **Joel Stevans** (right) have leading roles in a \$5.5 million study to improve the quality and value of rehabilitation care delivery in real-world settings. They are creating and leading the Learning Health Systems Rehabilitation Research Network (LeaRRn), a national resource network to advance rehabilitation learning health systems (LHS) research. LeaRRn is funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development of the National Institutes of Health.



Dr. Freburger and Associate Professor **Sara Piva** (left) were 2020 recipients of the APTA Catherine Worthingham Fellow Award, the highest honor among APTA’s membership categories. They were recognized for their significant contributions, achievements and leadership in the areas of advocacy, education, practice and research.

Rehabilitation Science and Technology



David Brienza, professor, was selected to serve on the NIH’s Nursing and Related Clinical Sciences Study Section for four years. The panel reviews applications addressing the clinical management of patients.



Dr. Mary Goldberg, associate professor, Human Engineering Research Laboratories, was elected to the Board of Directors for the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA).



Dr. Rory Cooper, FISA/PVA distinguished professor and HERL director, was interviewed for an article in The New York Times about people with disabilities addressing disability innovation. Dr. Cooper was also a guest on a Scientific Sense podcast.

Dr. Cooper is leading a research and development consortium through the creation of a new Tier 1 University Transportation Center (UTC). Pitt is one of four universities in the country to receive funding from the U.S. Department of Transportation to study how autonomous vehicles can be made accessible for those with physical disabilities.

Sports Science



Dr. Matthew Darnell, assistant professor and Sports Science program director, and his team were awarded an SHRS Innovation Challenge award for their Impulse: Measuring Swimming Force entry.



Alumni News

Communication Science and Disorders



Heather Starmer (MA SLP '00), director of the Head and Neck Cancer Speech and Swallowing Rehabilitation Center, Stanford University, received The Head and Neck Cancer Alliance Award.

Health Information Management

Adrianna Rota Melosky

(HIM '16) was featured in the Journal of American Health Information Management Association in an article titled “Finding Her Way: An HIM Professional Shares Her Journey to Amazon.”

Victoria Han (HIM '20) and **Julia Przybos** (HIM '20) have begun careers as business technology analysts with Deloitte Consulting.

Katie McGuire (HIM '20) and **Ryan O'Connor** (HIM '20) have accepted positions with UPMC’s Information Services Division Rotational Program.

Jack Hagarman (HIM '20) accepted a position with Penn State Hershey Rehabilitation Hospital as an HIM/Credentialing manager.

Annie Huang (HIM '20) joined Revint Solutions in Chadds Ford, Pennsylvania, as a validation analyst I.

Noorien Mamoor (HIM '20) accepted a data management technician position with Main Line Health in eastern Pennsylvania.

Lauren Wood (HIM '20) was hired as an associate application analyst with Universal Health Services in Delaware.

Occupational Therapy



Marybeth Moscirella (OTD '20) was accepted for a Johns Hopkins Acute Care Occupational Therapy Fellowship as part of the American Occupational Therapy Association Fellowship programs.

Physical Therapy



Dr. Steven Z. George (PhD '02) was named the Laszlo Ormandy Distinguished Professor of Orthopaedic Surgery at Duke University School of Medicine. He also serves as director of Musculoskeletal Research at Duke Clinical Research Institute and vice chair of Research in Orthopaedic Surgery.

Rehabilitation Science and Technology



Dr. Carmen DiGiovine (PhD '01) was elected president of the Rehabilitation Engineering and Assistive Technology Society of North America.



Student News

Athletic Training



The NATA District Two awarded scholarships to Athletic Training Students **Lauren Betts**, receiving the Tanya Dargusch Leadership in Community Service Scholarship, and **Devon Trieschock**, receiving the Bobby Gunn Award.

Communication Science and Disorders



Sarah Elizabeth Steward (BPhil '20) received the Emma W. Locke Award during Pitt's 2020 Commencement Ceremony. The award is presented to a graduating senior in recognition of high scholarship, character and devotion to the ideals of the University of Pittsburgh.



AuD student **Ashley Medefindt** received a James and Susan Jerger Award for Excellence in Student Research from the American Academy of Audiology (AAA) Foundation. The award was for her AAA 2020 conference co-authored research poster, "Auditory Spatial Processing Abilities in Blast-Exposed Veterans with Normal Pure-Tone Thresholds."

Rob Cavanaugh, doctoral student, was accepted into Pitt's Institute for Clinical Research Education's Clinical and Translational Science Fellowship Program, a translational research training program for pre- and post-doctoral students who find innovative ways to advance research from the initial discovery through improved patient outcomes and health policy.

Speech-Language Pathology graduate students **Katie McGovern** and **Jennifer Gates** were the first SHRS students to defend their theses online during the COVID-19 crisis.

Audiology students **Erin Casey** and **Katy Leskowat** were named Schweitzer Fellows for 2020-21. They will work with the HEAR-UP project at the Birmingham Free Clinic and Squirrel Hill Health Center providing hearing evaluations, fitting hearing aids and developing communication strategies to better serve their patients. They will also work on translating documents to Nepali and other additional languages.

PhD student **Cara Donohue** had a first authored research note published in the American Journal of Speech-Language Pathology. Her article, "How Important Is Randomization of Swallows During Kinematic Analyses of Swallow Function?" is co-authored with her mentor, **Dr. James Coyle**, CSD professor. Donohue was also elected chair of the Dysphagia Research Society Student Advisory Board, appointed editorial board member for ASHA's Perspectives of the Special Interest Group 13, and named a recipient of an ASHA Teaching Symposium scholarship.

PhD student **Amanda Mahoney** was appointed to the student advisory committee of the Dysphagia Research Society.

The NSSLHA Chapter at the University of Pittsburgh was awarded 2020 Gold Chapter Honors. This student organization has consistently received this honor of distinction.



PhD student **Leslie Zhen** received the American Academy of Audiology Foundation's Sadanand Singh Memorial Scholarship award for his excellent academic record and clearly articulated research aspirations in auditory perceptual (stimulus) learning.

Occupational Therapy



Tara Klinedinst, postdoctoral associate, was awarded a Postdoctoral Fellowship with the Rehabilitation Research and Training Center on Family Support through the National Institute on Disability, Independent Living, and Rehabilitation Research.

Theresa Tran, OTD student, received the Cleveland Clinic Robert D. Kruse Memorial Scholarship.

Sports Medicine



Emily Mulkey, Sports Medicine student, received the Stanley Prostrednik Health Sciences Grant (Nationality Rooms Summer Study Abroad Scholarship) to learn about and research international approaches to Athletic Training and Sports Medicine.

Allison Ross, Sports Medicine student, received the National Athletic Trainers' Association Research & Education Foundation Gatorade Gail Weldon Memorial Scholarship which recognizes academic achievement and a desire to work with student-athletes or professional athletes.



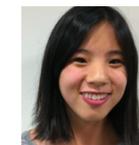
Department News

Human Engineering Research Laboratories

On June 24, 2020, HERL hosted U.S. Department of Veterans Affairs Acting Deputy Secretary **Pamela J. Powers** along with distinguished guests from VA Pittsburgh Healthcare System.

Occupational Therapy

The Doctor of Occupational Therapy (OTD) program was awarded status as a Program of Merit (POM) by the Academy for Gerontology in Higher Education for excellence in integrating gerontology competencies within the OTD curriculum. The OTD program is the first occupational therapy program and the only rehabilitation program in the nation to receive this distinction. This effort was initiated and led by Associate Professor **Pamela Toto**.



The University of Pittsburgh Coalition of Occupational Therapy Advocates for Diversity (COTAD) chapter was established. COTAD chapters are designed to support occupational therapy students to work together to develop and promote diversity and inclusion within occupational therapy education programs and in the profession. This effort was initiated and led by **Theresa Tran**, OTD student, who will also serve as inaugural chair of the chapter.

A number of OT faculty, alumni and students were accepted to present at the 2020 American Occupational Therapy Association annual conference. Acceptees included Professor **Elizabeth Skidmore**; Drs. **Joanne Baird**, **Roxanna Bendixen** and **Pamela Toto**, associate professors; Assistant Professors **Angela Caldwell**, **Juleen Rodakowski**, **Amit Sethi** and **Alyson Stover**; alumni **Megan Driscoll** (MOT '12), **Haley Feller** (OTD '20) and **Chao-Yi Wu** (PhD '19); **Amy Hartman**, PhD candidate; and **Michelle Beck**, **Dani Hall**, **Tori Merritt**, **Emily Pullman** and **Natalie Silverman**, OTD students.

Rehabilitation Science and Technology

RST and HERL researchers received a new patent on June 23, 2020, for a Pathway Measurement Device currently licensed by SHRS startup pathVu. pathVu is a company committed to improving the accessibility and walkability of sidewalks and was founded by RST alumni **Eric Sinagra** (MS '14) and **Dr. Jonathan Duvall** (MS '13, PhD '18) in collaboration with **Dr. Jonathan Pearlman**, RST chair and associate professor.

Forging Ahead in the ADA's 30th Year



On July 26, 2020, the nation celebrated the 30th anniversary of the passing of the Americans with Disabilities Act (ADA). The ADA prohibited discrimination on the basis of disability in employment, state and local government, public accommodations, commercial facilities, transportation and telecommunication. While many changes and improvements have been made since the enactment in 1990 – entrance ramps, curb cuts, chair lifts, power doors, universal design, close captioned videos, greater access to employment and education – much remains to be accomplished. For example, disparities still exist in access to health insurance and health care; and access to information, particularly the Internet, is inconsistent for people who are visually impaired. The goal of economic self-sufficiency appears to have experienced the least success.

Every academic department in the School of Health and Rehabilitation Sciences supports discipline-related programming, research and service specific to people with disabilities. Much of our activity looks to build better ways for people with disabilities to function and thrive. Our Human Engineering Research Laboratories recently received a \$1 million grant from the U.S. Department of Transportation to study how autonomous vehicles can be made accessible for those with physical disabilities. This funding will support efforts to create a new Tier I University Transportation Center through Pitt, one of only four universities in the country to receive the funding.

SHRS has long served as an advocate for and supporter of disabilities rights. As the school's leadership, faculty, staff and students address ways to enhance our overall efforts in diversity, equity and inclusion, we will continue to remain steadfast in our mission "to be a catalyst for a world free of barriers and disparities that allows all people, regardless of health, to have opportunities to participate in life to the fullest ..."

Calendar of Events

Due to concerns over the spread of the COVID-19 virus and the nation's restrictions on large gatherings, SHRS has cancelled most events until further notice.



COMMUNITY ENGAGEMENT, PANDEMIC-STYLE



When Sarah Flenders (BS EM '20) was a young teen, she enjoyed babysitting for family and friends. Word quickly spread and soon she built a cadre of clients. Later in high school, she took on jobs in retail stores and food establishments and her babysitting business dwindled. But during her first year of college, in between shifts as an EMT, she began working as a nanny for a 1-year-old girl.

“It was a lot of fun to babysit again,” notes Flenders.

It seemed only natural to say “yes!” when Nicole D. Macio, clinical education coordinator, Center for Emergency Medicine, approached this recent graduate and her colleague, Rachel Lindsay (BS EM '20), about teaching a babysitting course at the about-to-open SHRS Wellness Pavilion in Pitt's Community Engagement Center (CEC) in Homewood.

“Both Rachel and I teach EMT labs at Pitt,” explains Flenders. “And we both want to be more involved in the community.”

“As paramedics, we understand the importance of public health education,” says Lindsay. “And the babysitting class was a great way to bring emergency medicine knowledge and presence to the Wellness Pavilion.”

But before the first class could take place, Pennsylvanians went on lockdown. Plans for the official opening of the Wellness Pavilion had to be put on hold.

CEC Director Daren Ellerbee approached Dr. Channing L. Moreland, director, SHRS Wellness Pavilion, to discuss the possibility of keeping the babysitting class alive—but doing it virtually. The coordination efforts began.

Ellerbee connected Moreland to the Homewood Children's Village, a local nonprofit organization, who identified youth to participate, then purchased and delivered training manuals to each student.

“Sarah and Rachel were quick to adjust their format to create virtual classes,” adds Macio.

“They spent many hours modifying the delivery method. Despite the change in plans, it went very smoothly.”

Ten students ranging in age from 10 to 15 years participated in the classes, which met via Zoom for two hours every Tuesday for four weeks and culminated in Red Cross certification.

Students learned the fundamentals: the business of babysitting, how to successfully interview for a babysitting job, important aspects of caring for children and basic first aid, including what to do in an emergency.

“We wanted to set the students up for success,” says Lindsay.

They divided the students into groups where they could discuss their past babysitting experiences and ask questions.

Flenders recalls being a little nervous when they were planning out the course. “We knew what we could do if we were teaching an in-person course, but we were not sure if we could keep these young people engaged in an online setting.”

“As it turned out, they were very interested and always asking questions,” says Lindsay.

“The instructors were amazing!” says Moreland. “They created a safe and comfortable space for the youth, provided positive praise and acknowledged them for their participation.”

“Rachel and Sarah were always on the same page and complemented each other well,” Moreland continues. “They were patient and allowed space for the children to share. Their pace was appropriate for the training and they were flexible when necessary. Additionally, they were well versed in the babysitting curriculum.”

“I honestly wish I had a babysitting class like the one that Rachel and I taught,” says Flenders. “When I started babysitting, I really didn't understand how children of different ages needed different activities to keep them occupied and learning. When I was left alone with multiple children at one time, it was really hard for me to figure out activities to do that would keep them all engaged.”

“Our class delivered information that everyone should know,” adds Lindsay. “And I think it served as a good experience for our students. Hopefully they will come back to the Wellness Pavilion, and perhaps encourage their parents and other family members to come, too, for other classes such as CPR and first aid.”

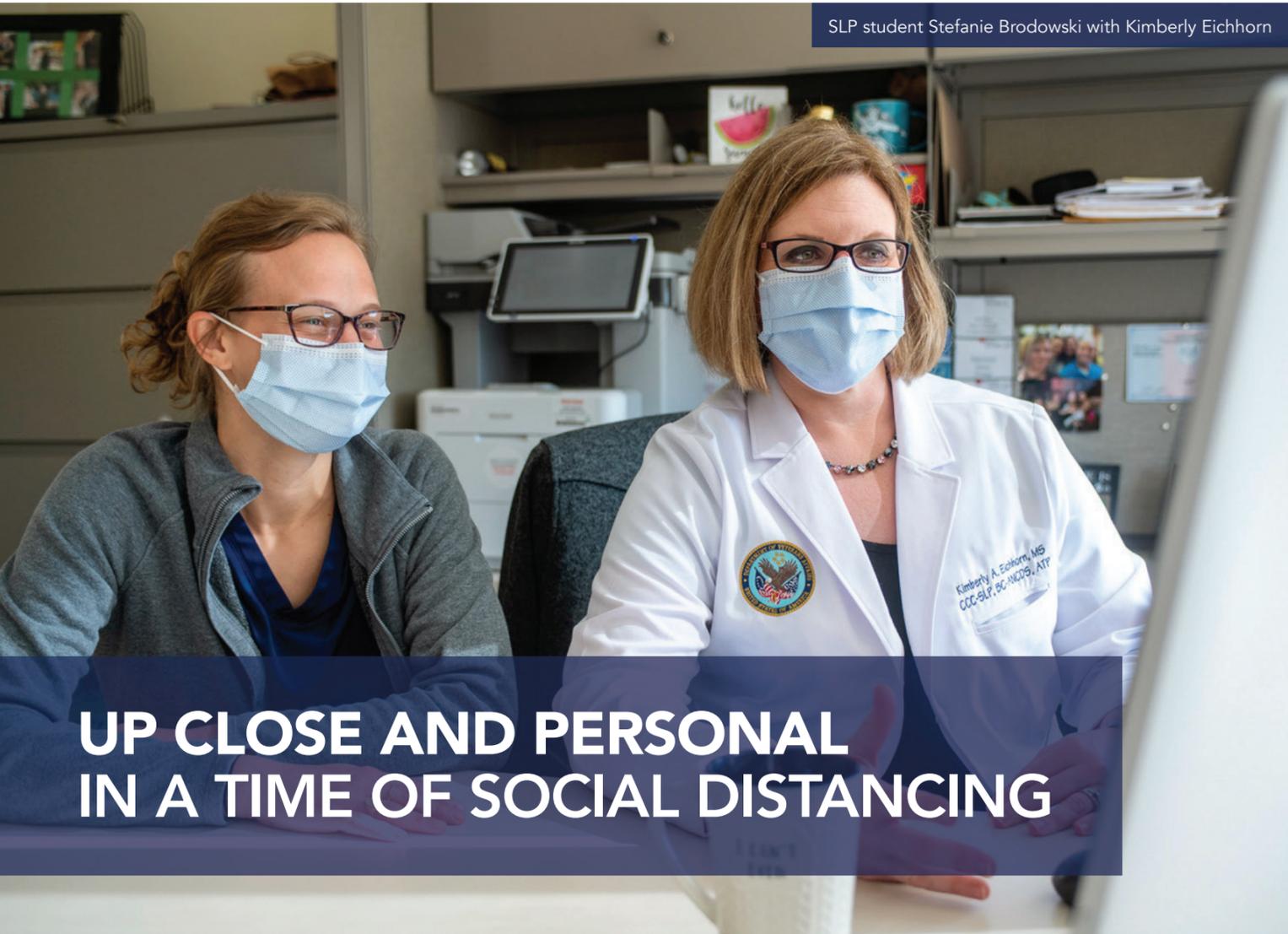
“The instructors were amazing!” says Moreland. “They created a safe and comfortable space for the youth, provided positive praise and acknowledged them for their participation.”
—Dr. Channing L. Moreland

Lindsay says the virtual babysitting course was a valuable experience for her and Sarah as well as for the students. “Even though we had to create this virtual program in a very short period of time, we had a lot of flexibility and a lot of freedom in how we delivered the information.”

“If we have to teach this again as an online course, we will certainly be ready,” she continues.

Moreland says she is currently planning for the next cohort of students. “We are thrilled that Rachel and Sarah have agreed to volunteer their time again,” says Moreland.

She continues, “They are the first SHRS alumni to be involved in Wellness Pavilion programming, and we couldn't be prouder of their involvement and commitment to the community.” ■



SLP student Stefanie Brodowski with Kimberly Eichhorn

UP CLOSE AND PERSONAL IN A TIME OF SOCIAL DISTANCING

In the pre-pandemic world, Kimberly Eichhorn and Ronda Winans-Mitrik (BA '07, MA SLP '09) were in a rhythm of training Speech-Language Pathology (SLP) students at the VA Pittsburgh Healthcare System.

“Our primary goal is to help students refine and grow in their basic clinical competencies,” says Winans-Mitrik. “They learn to interview patients, review charts, make clinical hypotheses based on data—it is very hands-on training.”

“We want our students to get to know each patient,” adds Eichhorn. “And to appreciate the strong interdisciplinary approach to patient care that we employ at the VA.”

Melissa Peyton (MA SLP '20) and Katherine Bredikin (BA '18, MA SLP '20) spent a semester at the VA Pittsburgh, working under the supervision of Eichhorn. They agree that they grew

as student clinicians in ways they could not have done in the classroom as they began to diagnose and treat individuals with various diagnoses in a variety of settings.

“Kim emphasizes the importance of using evidence-based, individualized treatment, but also the importance of considering the patient’s values and desires,” says Bredikin. “When dealing with her patients and their families, Kim is extremely empathetic.”

“While learning and growing as a clinician is always Kim’s top priority, she emphasizes that it is okay to make mistakes or not know an answer—that’s why we were there!” Peyton continues. “I felt comfortable asking questions or for guidance when I felt it necessary. When I gave an answer to a question posed by Kim, she always asked me how I came to that answer to better understand my thought process.”

In the spring of 2020, on-site training stopped due to COVID-19. But Eichhorn and Winans-Mitrik’s personalized style of clinical education did not.

They both took on new students. This time in a virtual learning environment.

“It was a unique opportunity in light of the current health situation,” notes Eichhorn. “We wanted students to have a full experience and learn how to diagnose and deliver interventions.”

“With the need for enhanced clinical simulations, the team at the VA was my first point of contact,” says Associate Professor Erin Lundblom, coordinator of SLP clinical education.

“I had confidence that the VA team, including Kim and Ronda, were not only well prepared to pivot to a virtual, telehealth-style format to provide clinical instruction, but they would also develop innovative cases to meet student needs,” Lundblom continues.

Winans-Mitrik says they used Zoom to create an open-ended, problem-based learning environment in which students worked individually, then came back as a group to discuss possible clinical solutions.

Adam Fry, who completed the CSD Post-Baccalaureate program in 2019 prior to pursuing his Master of Arts in Speech-Language Pathology, was part of Winans-Mitrik’s virtual cohort of students.

“I was surprised with how many topics we could sink our teeth into over the summer session,” notes Fry. “Through the virtual format, I gained knowledge and simulation hours on topics such as surgical airway, early intervention, motor speech disorders, right hemisphere disorder and dementia.

“With the help of a simulated client, Ronda facilitated discussions around the application of one speaking valve, clinical considerations for a patient with a tracheostomy during a clinical swallow exam and modified barium swallow test, and the steps involved in the decannulation process.”

Even though first-year graduate SLP student Ashlynn Kufleitner never had a clinical experience in a medical setting, she said Winans-Mitrik explained concepts in an easy-to-understand way.

“She provided in-depth feedback on assignments that praised our strengths while also encouraging us to be thorough and rigorous,” notes Kufleitner. “I think Ronda was able to capture materials that we had addressed previously in classes and apply them to real-life scenarios in a way that felt more meaningful.”

“I push students when they’re here,” says Winans-Mitrik. “That did not change because we were in a different delivery mode. I ask them to do a lot of self-reflection on what they thought went well and what they would change.”



SLP student Kaitlin Kohut with Ronda Winans-Mitrik

“It’s good to reflect on your actions,” she adds. “Not just as a speech-language pathologist, but as a person.”

Rasha Y. Yahya Yassin, who also completed the Post-Baccalaureate program in 2019, says that Eichhorn provided her with a rich and valuable experience.

“Kim gave us the opportunity to perform a comprehensive evaluation for a patient with cognitive, speech and language deficits and create an individualized treatment based on our findings, diagnoses and the patients’ goals,” explains Yahya Yassin. “We were able to virtually interview the patient, review the case history, screen and examine the patient and come up with diagnoses and impressions utilizing evidence-based methods.”

“It allowed me to review my academic knowledge and relate it to clinical practice,” she adds.

“I think that in the future there will be more options provided for patients to participate in therapy in a format that works best for them,” says Kufleitner. “For some, that may mean continuing to do online/virtual appointments. I think we have become more knowledgeable about how much we can do virtually, and public interest may help to improve these online options for future use.”

Even though she received her clinical instruction in person, Bredikin agrees. “I have thought about how our mode of service delivery might change to telehealth in some instances. But whether we are practicing in person or virtually, we must ensure we are still providing the highest quality treatment and greatest level of care.”

As these students move forward in their careers, Eichhorn and Winans-Mitrik feel confident that they will be outstanding clinicians.

“It’s important for us to help students develop as patient-centered practitioners,” notes Eichhorn. “It is an honor to be trusted to mentor them.” ■



IN SEARCH OF THE SILVER LINING:
**HOW COVID-19 IMPACTS TEACHING,
LEARNING AND PRACTICE**



Nothing about 2020 is normal. Activities as mundane as grocery shopping are suddenly risky. Sporting events, concerts and lectures have disappeared from the calendar. City streets are abandoned; visits to grandma's house, taboo.

But behind the masks, the social distancing and the makeshift home offices, life goes on. Especially for people with disabilities and other chronic health issues.

How do we at SHRS rise above the challenges and respond to the ever-changing needs of those we serve?

We do what we always do. We innovate. We facilitate. We look for opportunities to improve teaching, learning and clinical practice.



FACULTY WAS ALL-IN

All faculty in all SHRS departments stepped up to the challenges of the pandemic, pivoting from traditional methods of educational delivery to more flexible and often innovative options. Many programs that already used technology in their curriculum developed new or extended applications. Others tapped into their expansive network of resources, including local community members and national professional organizations.

Everyone was on board.

“There’s a silver lining in all of this,” says Department of Physical Therapy (PT) Chair and Professor James Irrgang. “We all learned a lot.”

Irrgang says there was an obvious need to move to online teaching and learning. “But it had to be more than just recording a lecture and hoping students watch and learn,” he explains.

In the PT Department, faculty emulated best practices in online teaching and deployed interactive technologies to increase student engagement during remote instruction. Among other things, they used interactive polling via the Top Hat platform and incorporated videos in their online midterm and final exams.

But Irrgang says an unexpected benefit emerged.

“The skills the students acquired through remote learning will go a long way as they adapt to using technology with patients in the future,” adds Irrgang. “As physical therapists, it will be their job to educate patients, and they may be doing it online.”

“We won’t just let them walk away from the clinic with instructions to do certain exercises,” he says. “We will be checking in on them via telehealth visits to ensure they are performing the exercises correctly and to progress their exercise program to ensure they are making optimal gains.”

“The skills the students acquired through remote learning will go a long way as they adapt to using technology with patients in the future.”

—Professor James Irrgang

Dean Anthony Delitto believes the effort SHRS has put into remote learning over the past three years has paid off.

“Our goal was to offer professional degrees from some of our flagship programs using hybrid delivery,” says Delitto. “That work has benefitted us tremendously in the COVID-19 crisis, when the entire university was forced to immediately transform to a remote learning posture. Suffice it to say that SHRS was way ahead of the game and continues to be well suited to address the challenges inherent in the pandemic.”

“WHY DIDN’T WE DO THIS BEFORE?”

In the Department of Communication Science and Disorders (CSD), Associate Professor Erin Lundblom says often-discussed changes to the Speech-Language Pathology clinical education program were accelerated because of the pandemic. “Thanks to support from alumni and clinical partners at the Pittsburgh VA Medical Center and Children’s Hospital, we’ve implemented virtual simulation that helped students to develop complex critical thinking skills,” reports Lundblom.

Associate Professor Elaine Mormer notes that the Audiology program has been supported by changes in certification and accreditation standards. “We can now use virtual simulations to count as hours for our students,” explains Mormer. “These types of adaptations should definitely stay with us as we move forward.”

“There isn’t a day that goes by that I don’t realize there are good things that came out of the pandemic,” she continues.

CSD Professor and Director of Audiology at UPMC Catherine Palmer reflects on the sudden shift to telehealth back in March.

“At the clinic, we had been thinking about expanding into telehealth over the past year but we had all sorts of reasons why it wouldn’t, couldn’t and shouldn’t work,” says Palmer. “Then one day, it had to work or we wouldn’t be able to take care of our patients.”

“There’s nothing like a crisis to create change in the moment and to make one wonder, ‘Why didn’t we do this before?’” she adds.

Another landmark change ensured providers would be reimbursed.

Palmer, who is also the current president of the American Academy of Audiology, reports the Centers for Medicare and Medicaid Services (CMS) quickly adjusted HIPAA rules to allow the use of remote communication technologies that previously were not considered HIPAA-compliant to ensure that patients could be reached by whatever means were available. CMS also added four cochlear implant codes to the list of codes eligible for reimbursement when provided via telehealth.



In the days and years ahead, the lessons learned from COVID-19 will continue to define us. To inspire us. And drive us to educate the next best generation of health care professionals and improve the lives of people with disabilities.

“This was a landmark change for Audiology,” states Palmer. “They are the first codes we have ever been reimbursed for via telehealth.”

Elizabeth R. Skidmore, SHRS associate dean of Research, professor and chair, Department of Occupational Therapy (OT), points out that telehealth is not a “second-best” solution. Far from it.

“Telehealth opens a new door for occupational therapists—a wide angle for improving clinical practice,” says Skidmore. “It allows us to see people in their homes, which was not always possible prior to the pandemic. This is really helpful as we strive to develop strategies and interventions to help clients live their best life in the world they’re in.”

THE VALUE OF PARTNERSHIPS

The newly appointed director of the Prosthetics and Orthotics (P&O) program, Helen Cochrane, has experienced large-scale challenges that ranged from typhoons to political unrest as she developed training programs in Southeast Asia.

“It’s never comfortable, it’s never easy, but it often allows an opening for change that can be cathartic and highly effective in growing individually and at a program level,” says Cochrane.

“These challenges present an opportunity to look critically at how we achieve competencies, how we work with partners and engage in shared responsibility in new and innovative ways,” she continues.

Like other programs, the support of clinical partners and alumni has been invaluable for the P&O program. Recently, the faculty bolstered its partnerships with key P&O service providers in multiple states to ensure the quality of clinical and practical experiences through competency-based internships for students during the pandemic. “The willingness of clinical sites to support our program—and our students—while facing their own COVID barriers is a testament to the importance of safeguarding professional competence especially during challenging times,” says Cochrane.

MOVING FORWARD

If COVID-19 has impacted the way we teach and learn, it has also redefined the roles of many health care professionals moving forward.

Take athletic trainers, for example. According to Kevin Conley, associate dean for Undergraduate Studies, chair and associate professor, Department of Sports Medicine and Nutrition, “COVID-19 has reinforced the role of athletic trainers as valuable front-line health care providers in their respective settings, and the need for them to focus on general medicine and infectious disease surveillance.”

“We can leverage their considerable skills to test, treat and aid in the recovery of infected patients,” Conley continues.

Valerie Watzlaf, vice chair of Education and associate professor, Department of Health Information Management (HIM), sees contact tracing as an expanding profession for HIM graduates in the near future.

“Our alumni understand medical terminology, how to read and interpret data and are great communicators,” says Watzlaf. “They also keep up to date with the latest applications and regulations regarding patient privacy. This makes them well qualified to become the ‘disease detectives’ that the world will need to stop the spread of whatever infectious disease comes next.”

In the days and years ahead, the lessons learned from COVID-19 will continue to define us. To inspire us. And drive us to educate the next best generation of health care professionals and improve the lives of people with disabilities.

“It’s been a remarkable experience to have the support of such dedicated and compassionate leadership who have encouraged evolution and are driving evidence-based solutions to incredibly complex problems,” observes newcomer Cochrane.

This is no surprise to those who have longer ties with SHRS.

Says Skidmore, “There’s something in the DNA of SHRS. We are action oriented, team oriented and ready for whatever comes next.” ■



CHALLENGES ON THE FRONT LINES

Students in the Emergency Medicine (EM) program acquire a unique skillset that allows them to quickly assess and evaluate patients on the spot, and immediately treat them with a limited amount of resources.

Never has that skillset been more valuable than during the COVID-19 pandemic.

EM program alumnus Dr. Mohamed Hagahmed (BS '09) currently practices as an emergency physician at the University of Texas Health Science Center (UT Health) at San Antonio, Texas. He says his training as a paramedic provided him with the best possible foundation for treating COVID patients.

“These patients are very unpredictable because coronavirus is such a unique organism,” notes Hagahmed. “Individuals may come to the emergency room with minor symptoms and can be sitting up, talking about how they feel. But within a few hours, their condition can deteriorate to the point where they can’t breathe and need to be in the ICU.”



Dr. Mohamed Hagahmed

Hagahmed says the San Antonio area did not see the same wave of virus as cities on the East Coast. “In March and April, when we saw the numbers surge in New York City, then in other cities and states, we went on high alert here,” explains Hagahmed.

UT Health put a disaster system in place. They made sure they had additional personal protective equipment (PPE) on hand and backup personnel to handle a high volume of patients.

In April and May, there was actually a drop in the number of patients admitted to UT Health. By late June, however, the number of hospitalizations due to COVID-19 increased tenfold.

“During the first months of the virus spread, we saw milder cases and patients were able to be treated and go home to quarantine,” says Hagahmed. “When the surge hit later in the summer, patients were in more serious condition and most needed to be hospitalized.”

“At that point, we assumed that every patient we saw was COVID-positive,” states Hagahmed.

He says UT Health dedicated two floors to COVID-patient care. One was for patients with relatively mild symptoms; the other was an ICU floor for the more serious cases.

Safety was always the top priority. All staff members, including physicians and nurses, wore face masks during their entire shifts. When they entered the room of a patient with signs and symptoms of COVID-19, they donned full PPE. This included masks, gowns, eye coverings and head coverings.

Doctors, nurses and respiratory therapists spent long periods—sometimes up to two hours at a time—at the bedsides of their most critical patients. “We were continually managing their airways and medications, but also evaluating new symptoms and side effects. By concentrating a great deal of time on each individual patient, we were able to provide the best possible care while minimizing exposure.”

UT Health built extra flexibility into staffing. Doctors worked nine or 10 hours a day, while nurses put in 12-hour shifts.

“COVID-19 is the most time-consuming and resource-consuming disease I’ve ever seen,” he continues. “It was very fortunate that we were prepared.”

Ted Fessides (BS '13), chief and executive director, Cranberry Township (Pennsylvania) EMS, agrees that preparedness is key.

“For years, epidemiologists have been telling us that pandemics will occur,” says Fessides. “It’s not a matter of *if* but rather *when* they will happen and how ready we will be.”

According to Fessides, the Cranberry EMS took a very proactive stance when the Ebola crisis threatened public health back in 2016. They stock-piled an appropriate amount of PPE and began to train EMS providers in additional safety protocols, such as how to minimize the spread of the disease when donning and doffing PPE and handling infected patients.

When the coronavirus surge hit Western Pennsylvania, they were ready.

In the heat of the outbreak, Cranberry EMS staff members wore masks on every call, assuming all patients were COVID-positive. They participated in daily temperature checks and self-reported their own health status. They also used a new ultraviolet box to disinfect masks and other equipment.

“The COVID-19 pandemic has resulted in new best practices for EMS,” adds Fessides. “It has also made us acutely aware that there are things that we must always do, whether or not we are experiencing a health crisis.”

Many of the procedures that Cranberry EMS put in place because of COVID-19 will be equally effective during the normal flu season. “We know what we’re doing is working right now,” Fessides continues. “But there’s a concern about what will happen when the next wave, or next virus, hits. Everyone must continue to do their part.”

“As a society, we must make it a priority to care for those who are older or more vulnerable than we are,” Hagahmed adds. “It demands a lot of effort from each individual, but we must share the responsibility of keeping each other safe.”

“It is truly humbling to learn how valuable the undergraduate education was for an experienced emergency physician like Dr. Hagahmed,” notes EM Program Director Thomas Platt.

He continues, “In addition, having agencies like Cranberry Township EMS precepting our students provides an excellent opportunity for students to learn first-hand how to care for patients, not to mention how to acquire supplies and maintain operational readiness.” ■



Ted Fessides teaching Hands-only CPR during an ambulance open house to the public



A FULL PLATE DURING COVID-19

In the past, “food insecurity” was a term we associated with the marginalized members of society. With the onset of COVID-19, it became painfully evident that all factions of Americans suddenly did not have access to healthy foods, some because of unemployment, others due to the inability to get to stores during the pandemic.

Faculty and graduate students in the nutrition programs within the Department of Sports Medicine and Nutrition stepped up their efforts to combat this food emergency.

“In the spring, we were all looking forward to the opening of the new SHRS Wellness Pavilion in Pitt’s Community Engagement Center (CEC) in Homewood,” says Nutrition Instructor Caroline Passerello. “SHRS has a wonderful new demonstration kitchen there where we planned to involve the community through hands-on nutrition education and food sampling.”

The first food sampling was scheduled to include different varieties of whole grain provided through a partnership with the Whole Grains Council.

A week before the scheduled food sampling, everything came to a grinding halt.

“The shutdown of the CEC didn’t stop Caroline,” says SMN Assistant Professor and Vice Chair Deborah Hutcheson. “She immediately asked permission from her vendors to repurpose the food as donations.”

Wellness Pavilion Director Channing L. Moreland connected Passerello to Brother Rashad at the Community Empowerment Association, which was planning an emergency food drive for April 11.

After getting an okay to go back into the then-closed Forbes Tower, Passerello personally divided approximately 350 pounds of whole grain pasta, brown rice and oatmeal into 66 bags for the food drive.

She included handouts that described the benefits of whole grains along with recipe ideas in each bag as well as a few fun activities such as word searches to keep people entertained while they were home-bound.

“Although plans changed and we were not able to conduct our demonstration and sampling in person, we were still able to educate the community about whole grains and provide them with ideas for recipes,” adds Passerello.

“The presence of our nutrition programs at the Wellness Pavilion is very exciting to us,” adds Hutcheson. “We want to be an even stronger community partner, not just providing cooking classes and training, but to impact government policy around the issue of food insecurity.”

Assistant Professor Judith Dodd has been actively involved in community outreach for more than 40 years. She says the recent health crisis has increased the number of people who come to her for nutrition information.

At a recent “Staying in Touch” event sponsored by UPMC Health Plan, nearly 1,400 people went on Zoom to hear Dodd discuss the benefits of hydration. And in her ongoing classes for



Students in the Dietitian Nutritionist Program year 1, Principles of Nutrition Education class

Pitt’s Osher Lifelong Learning Institute, she sees a tremendous rise in attendance.

“We would typically have 15 or 16 participants in our food lab for each Osher class,” notes Dodd. “Now we have 50 or 60 each week on Zoom or joining us by phone!”

Dodd says graduate students Jessica Rea (BS ’19) and Zheng Zeng (BS ’20) have been indispensable in making these classes meaningful to the participants. They poll participants prior to the class to find out what topics interest them, help to develop course materials, teach the lessons and answer direct questions that arise.

“Our participants are greatly interested in seeking advice on supplement use, food safety and specific dietary concerns including diabetes, heart-healthy diets and weight management,” explains Zeng. “They also want suggestions on how to cook for just one or two people. Part of my role is to locate recipes and evidence-based resources that meet individual participants’ needs.”

Rea adds that nutrition information can be easy to misinterpret. “Through community outreach programs like Osher, we can bust nutrition-related myths, illuminate evidence-based research, and teach the participants how to eat for health and pleasure.”

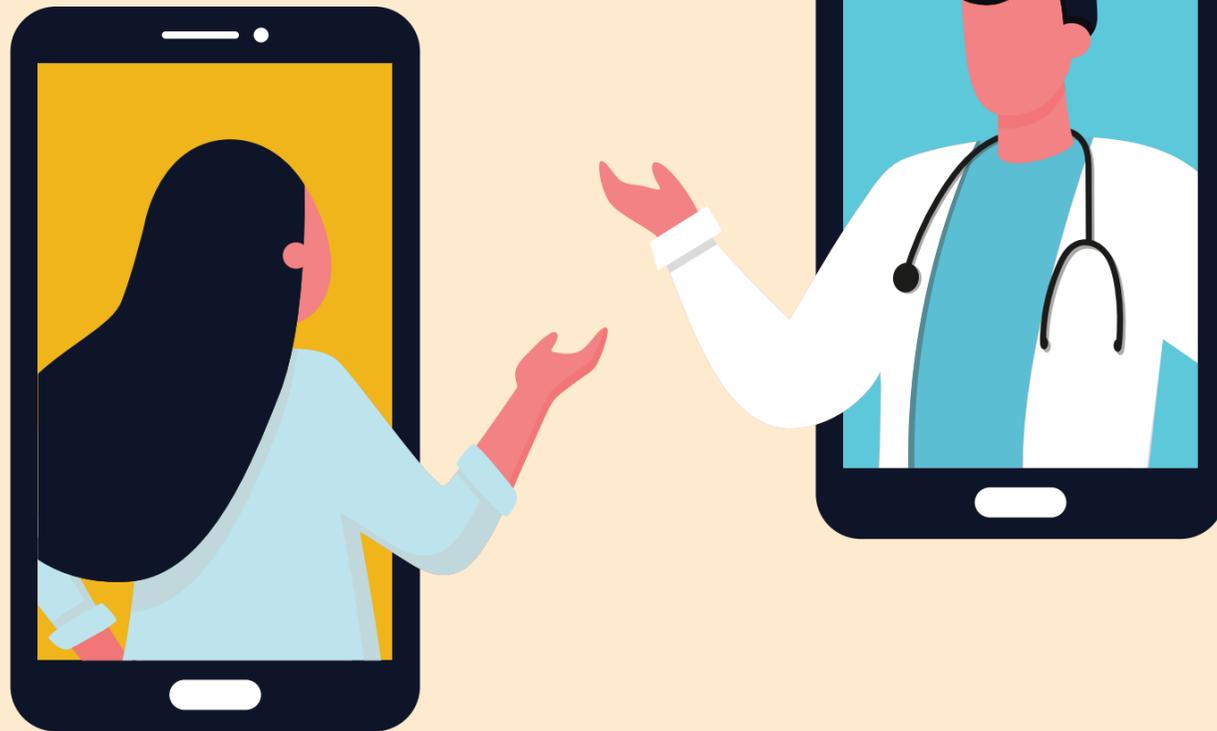
“In the past, we would feed everyone in the labs,” notes Dodd. “Since we can’t feed them, we now need to provide them with even more facts, and to tailor our discussions around things that concern them in this moment.”

Zeng believes her experience with the Osher classes helped to strengthen her communication skills and ability to foster more trusting relationships in a virtual environment. “In the future, registered dietitians will have to be open to the idea of telemedicine and virtual education and consultation.”

The bottom line for Rea is to make a difference in participants’ lives. “This is what I find to be most rewarding and what I aspire to do every single day as a registered dietitian nutritionist.” ■



ELIMINATING BARRIERS TO CARE



By definition, occupational therapists remove barriers. It's their job to continually create new and different ways for clients to overcome physical, social or psychological difficulties, become more independent and live productive, satisfying lives.

During the COVID-19 pandemic, Department of Occupational Therapy (OT) Assistant Professor Alyson Stover made it her mission not only to remove barriers for clients, but also to remove barriers that prevented OTs from practicing at the highest level of their license.

Working through the Pennsylvania Occupational Therapy Association (POTA), Stover led the charge, petitioning Pennsylvania Governor Tom Wolf's administration and the state legislature to pass a bill that permitted occupational therapists, physical therapists (PTs) and speech-language pathologists (SLPs) to deliver their services via telehealth.

"There have been several telehealth bills proposed in Pennsylvania in the past," explains Stover. "But insurance companies lobby against them and the bills are defeated."

This time, because of the unusual circumstances, Governor Wolf issued an executive order that permitted the use of early intervention telehealth visits to cover OT, PT and SLP services for children from birth to 3 years old.

Although this was good news, the order neglected to allow telehealth services for older individuals.

Working with POTA and the Pennsylvania state associations for PT and SLP, Stover drafted a letter that encouraged Governor Wolf to expand his executive order. On March 18, 2020, the governor released a new executive order allowing OT, PT and SLP services to be delivered via telehealth to all individuals in Pennsylvania, across the lifespan.

"This was a huge win," says Stover. "Now we have this golden opportunity to collect data that shows our clients are receiving the same continuity of care that they did when they received in-person services, and that they are still meeting their goals and making progress."

"We hope we can prove the value of telehealth as a viable delivery option, even after the pandemic is over," she adds.

Stover, who also serves as director of Clinical Services at Capable Kids Pediatric Therapy Clinic in rural Mercer County, Pennsylvania, was prepared for what needed to come next. Thanks to an investment in a HIPAA-compliant, encrypted telehealth platform, the OTs, PTs and SLPs at Capable Kids were immediately able to conduct virtual visits with clients who could no longer receive services in person.

The clinic kept its entire staff employed, most delivering telehealth services from their own homes. To support their efforts, in early April, Stover enlisted the help of OT students who were ready to begin their Level II field work.

"Many clinical placements had to be suspended because of COVID-19," explains Ann M. Marsico, OT instructor and academic fieldwork coordinator. "When the opportunity arose for our students to stay safely at home and help to provide telehealth services under the supervision of the OTs from Capable Kids, we were extremely open and interested."

Marsico says that prior to the pandemic, telehealth was taught in the OT curriculum even though it was not a viable option in practice because it was not covered by payors. "Thanks to the expanded executive order from Governor Wolf, our students were able to get first-hand experience with current technology and also help to collect the data to support Dr. Stover's case."

In all, 45 students participated in 491 telehealth sessions during their clinical placements with Capable Kids. OT students Tori Merritt (BS '18) and Dani Hall (BS '18) were among them.

Merritt says that at first, she was unsure how her in-person training could be translated to a virtual format. But her confidence grew as she saw clients improve.

"I saw telehealth increase the carryover of skills that the child was working on in school or the clinic to the home as the caregivers were learning along with their children during the sessions," notes Merritt.

Hall says she also noticed major improvements in her clients during her three weeks at the clinic.

"In my eyes, the biggest advantage to providing our services via telehealth is that it allows us to see how our clients are functioning in their natural environments rather than a clinic," says Hall. "This way, we can see exactly where adaptations and modifications can be made so that they can participate effectively despite any disability, illness or injury."

Both students agree the experience challenged their ability to think creatively and be more flexible. According to Marsico, that is exactly the goal of any OT clinical rotation.

"As occupational therapists, we must always expect the unexpected, and be ready to think outside the box to help our clients, whether we're doing it on-site or online," notes Marsico. "The telehealth rotation with Capable Kids was a wonderful lesson for all of us." ■



RESILIENCY AND RESOURCEFULNESS IN THE FACE OF PANDEMIC

“Progress never comes from standing still.” That was the message Bernard Rousseau, professor and chair, Department of Communication Science and Disorders (CSD), conveyed to the class of 2020 during their virtual commencement celebration.

“Despite the uncertainties, we forge ahead, because that is what we do at the University of Pittsburgh,” Rousseau continues. “As Jim Collins explains in ‘Good to Great,’ like Admiral James Stockdale, we are not confusing faith that we will prevail in the end with the discipline to confront the facts of our current reality.”

In spite of dramatic and sudden changes to teaching and learning during the spring semester, CSD faculty rose to the challenge of confronting the facts of the current reality.

“I was incredibly impressed with how our faculty and staff responded to the COVID-19 global pandemic,” notes Rousseau. “They quickly and creatively shifted to remote instruction and virtual clinical simulations in every one of our five programs, allowing students to complete or advance their coursework with little or no interruption.”

CSD Vice Chair for Clinical Education and Associate Professor Elaine Mormer says that in the past, Audiology (Aud) and Speech-Language Pathology (SLP) students used commercially packaged case simulation programs in the classroom to observe, assess, diagnose and treat virtual patients. But during the recent health crisis, these and other new learning platforms expanded the scope of instruction.

“We developed a templated format for audiology and speech-language pathology clinicians to present patient data a bit at a time,” explains Mormer. “This prompted dynamic student interactions. They were able to complete case history

questions; role-play interviews; plan evaluation methods; interpret and discuss results with patients, caregivers and families; plan treatments; evaluate outcomes; complete documentation and so on,” she continues.

Clinical instructors created virtual patients based on actual, de-identified patients from UPMC audiology clinics, SLP and audiology clinics at Children’s Hospital and the VA Pittsburgh Healthcare System. Mormer adds, “With the creation of the cases, each faculty was able to develop a bank of simulation cases that can be shared across clinicians as they work with assigned students.”

As available, UPMC Audiology and VA Pittsburgh Healthcare clinicians continued clinical instruction remotely through the simulation activities. Students and clinicians met virtually each week to review components of the case simulations, and students received scaffolded instruction and feedback to develop clinical decision-making skills.

According to Rousseau, a silver lining emerged in the midst of the pandemic.

“The health crisis not only forced us to pivot and manage our existing curriculum, but to speed up the process of adopting new teaching and learning activities that will further enhance our programs,” says Rousseau.

During the spring semester, students in Aud and SLP completed their comprehensive exams virtually. Faculty leveraged these remote learning opportunities to provide

continuing education units to clinical supervisors and professionals in the community.

Two SLP master’s students and two PhD students successfully defended their theses online using the Zoom platform. They were the first virtual thesis defenses conducted completely online in the history of SHRS. And in the undergraduate program in Communication Science, there were two successful BPhil defenses online.

“One of the highlights of pursuing a BPhil is the opportunity to defend it in front of a panel of professionals that you admire and an audience of your biggest supporters,” says Sarah E. Steward (BPhil ’20). “Luckily, with the available technology and a phenomenal support system, my defense was still as fulfilling and enriching as I hoped it would be.”

Faculty advisors in all programs held virtual advising appointments to check in with students and discuss next steps in their academic programs.

Michael Walsh Dickey, associate professor and director of the CSD PhD program, scheduled virtual drop-in hours with PhD students to maintain regular contact in case they had questions regarding program milestones. He also held virtual townhalls as part of CSD’s Research Round Table series, to enable PhD students and faculty to share experiences, challenges and success stories.

“It’s been truly inspiring to see how the CSD community has come together to support one another,” says Dickey.

In order to ensure that all activities were aligned with certification standards, CSD faculty worked with the Council for Clinical Certification in Audiology & Speech-Language Pathology, the credentialing body of the American Speech-Language-Hearing Association.

“It’s been truly inspiring to see how the CSD community has come together to support one another.” —Michael Walsh Dickey

“At the University of Pittsburgh, we are fueled by leaders, educators, thinkers and healers,” notes Rousseau. “Since 1787, Pitt has never stopped pushing the edge of what’s possible. In the face of recent events, our faculty and staff proved that we are ready—not only to tackle whatever challenges come our way—but to elevate the way we deliver education to our students.” ■



Top: Jana Iverson (from Pitt’s Psychology Dept., thesis advisor/committee chair), Dawna Duff (CSD committee member) and Lisa Goffman (UT Dallas, external committee member); bottom: Erin Lundblom (CSD committee member) and Sarah Elizabeth Stewart



TAKING PANDEMIC IN STRIDE

The practice of physical therapy revolves around movement and mobility, so in the time of a global health crisis, it's not surprising that the faculty of the Department of Physical Therapy (PT) got moving quickly. In fact, they took the need to provide more flexible teaching options right in stride.

"Teaching is what we do," says PT Associate Professor Andrea Hergenroeder with a smile.

Not only did faculty pivot immediately to virtual classes, they did it in a way that engaged students and established new best practices along the way.

Over-achievers? Perhaps. But would you expect anything else from the PT program ranked number one in the country?

"Our department developed faculty learning communities so the faculty could share strategies on how best to teach remotely," explains Hergenroeder. "In these communities, we discuss what's working, what isn't and what we can change to improve our instruction."

Associate Professor Kathleen Kelly had some experience using Canvas, a rich online learning management platform that allows flexibility and creativity for both instructor and students. In her spring and summer term Growth and Development class, Kelly used Canvas to pre-record lectures, then lead Zoom meetings to discuss the material and provide clinical applications.

"At that time, Canvas was a completely new interface for most faculty, but many were quick to jump on board," notes Kelly. "Through Canvas we were able to create small breakout groups for students, create discussion boards, and

use interactive polling to get student feedback. Now, Canvas is a part of our teaching toolkit."

Kelly says the transition to remote learning was a team effort, with all hands on deck. For example, in courses where there was a clinical lab component, teaching assistants worked behind the scenes, monitoring the chats and managing students in the breakout rooms on Zoom.

"The goal was to make this experience as seamless as possible for students," adds Kelly.

Of course, there were challenges.

"You cannot deliver content online in the exact same way that you would in a traditional classroom," Hergenroeder continues. "But our faculty was very open to new ideas to enhance remote instruction! They came up with innovative strategies to make learning engaging for the students—which in the end helps to make us better educators."

Associate Professor Deb Josbeno conjured up innovative ways to engage students in her virtual Neuromuscular PT 1 course. Josbeno recorded her own lectures, gave students selective readings and assignments they could complete on their own time, then met synchronously on Zoom to break out into small groups and conduct the "lab" portion of the class.

"Dr. Josbeno's flipped classroom model was very effective," says second-year DPT student Brian Lovasik (BS '19). "She enlisted a team of neurological physical therapists to serve as our mentors and lab instructors. They were incredibly knowledgeable, helpful and always available to answer our questions."

In many cases, Josbeno required students to record their own skills using an activity that would have typically been completed in the classroom. "I assigned an activity, such as a gait speed assessment, that they could do at home," says Josbeno. "Students then came to the scheduled synchronous session ready to discuss what they practiced and relate the activity to a clinical scenario."

Another second-year DPT student, Nikki Ray (BS '19), feared the online classes would not be as effective when it came to hands-on learning. The class exceeded her expectations.

"I learned how to perform different parts of a neurological examination even though we were not in person," explains Ray. "It prepared me well for my first inpatient clinical rotation at UPMC Mercy."

Emily Zaplatosch (BS '19) had a similar reaction. "Even though I couldn't practice my hands-on lab skills with my classmates, all of the lecture material was presented in an organized manner via live Zoom sessions and the small breakout groups definitely reinforced learning," says Zaplatosch. "I feel as comfortable with the content as I would have if I took the class in person."

While hands-on learning is not required for Theresa Wubben's Leadership and Professional Development class, that didn't keep the PT adjunct instructor from engaging students. She developed what she calls "low-tech" techniques to make a very specific point.

"In physical therapy, we engage with clients all the time. It's all about relationship building," says Wubben. "In virtual classes, we need to build relationships with students just as much as we need to encourage students to build relationships with each other—and their future clients. It's not always easy, but I used ice-breakers to demonstrate the process."

"In this era of Zoom—I call it the 'absence of presence'—we must be able to present ourselves and communicate in ways that are both personal and professional."

—Theresa Wubben

Wubben started off her first few classes by randomly calling on students to share a fun fact about themselves. As Wubben learned more about her students, the students learned more about each other, and began to build skills that will help them in their professional lives.

"In this era of Zoom—I call it the 'absence of presence'—we must be able to present ourselves and communicate in ways that are both personal and professional," continues Wubben.

As components of online teaching and learning evolve, the PT faculty continually assesses and makes course corrections to ensure a better learning experience for their students.

"While we are learning to be better teachers, our students are learning to be more resilient," notes Kelly. "This is one skill that will serve us all well moving forward, whether we are in a pandemic or not." ■



RISING ABOVE THE CHALLENGES OF COVID-19

The dog is barking. Toddlers are demanding attention. Your client is completely distracted. Or worse, an abusive spouse or partner is in the next room.

According to Anthony Calvario, adjunct instructor in the Clinical Rehabilitation and Mental Health Counseling program, these are just a few of the challenges that came with the pandemic, when therapists suddenly needed to engage in online counseling.

There are also the issues of security, HIPAA compliance and stability of the internet connection.

“This is the reality of how we deliver services today,” says Calvario, who also works in a private counseling practice. “That’s why it’s important to address issues like these when training future counselors.”

In his Crisis Counseling, Risk Management and Disaster Preparedness course, Calvario typically teaches students how to work with clients who are affected by a natural disaster. “As soon as we switched to online learning in the spring, we also modified our curriculum to make it all about COVID-19. Instead of hypothetical situations, we used specifics of what was happening in the real world. It was much more tangible—more meaningful.”

During the summer, his students were not able to practice their skills with clients online but they did participate in rich discussions that prepared them for future online encounters.

“There are definitely challenges for online counseling,” adds Counseling Assistant Professor Michelle Schein. “It’s a shift to be able to establish rapport with clients when you only see them on a screen.”

Caitlin Trabert is clinical faculty and coordinator of the Cognitive Skills Enhancement Program at the Hiram G. Andrews Center in Johnstown, Pennsylvania. She provides cognitive rehabilitation counseling services to young adults with disorders such as autism, ADHD and learning disabilities.

“Our goal is to help our clients—these young adults—understand their strengths and weaknesses as they transition into the workforce,” says Trabert.

When coronavirus sent her clients back to their homes and onto their computers for therapy sessions, Trabert faced all the challenges of delivering online counseling. And more.

“With this population, we need to work on social cues all the time,” notes Trabert. “But online, it’s difficult for them to recognize nonverbal cues, and even more difficult for them to ‘practice’ these skills.”

Pre-pandemic, Trabert met clients in person and facilitated conversations with other students at the center in the hopes of building friendships. She now uses role play in her video chats but says it’s not the same.

“This is a difficult time for everyone. It’s easy to become frustrated by our current situation,” explains Trabert. “But for individuals who struggle with emotional regulation, this becomes an even bigger issue.”

She shared coping skills such as mindfulness with her clients. And in an effort to keep them socially engaged, Trabert conducted research to find safe online “hangouts,” along with games and apps to help them improve their social skills.

Schein notes that in clinical education, as well as clinical practice, change is constant. Some internships

were delayed due to the pandemic; others were conducted remotely. She says these changes have made Counseling students more marketable.

“Students are learning to be more creative as they explore new and different strategies that translate well to online counseling,” Schein explains.

Lauren Kennedy (BA ’15, MS-CRMHC ’20) began her internship at the Services for Teens at Risk (STAR) Center on site, but transitioned to telehealth where she conducted phone screens, individual therapy with assigned clients and clinical assessments, as well as co-leading Intensive Outpatient groups.

Like Trabert, she quickly learned that nonverbal communications can get lost in translation via telemedicine. “I had to adjust my communication style to account for this,” explains Kennedy. “Rather than communicating empathy and understanding through a mixture of nonverbal and verbal methods, I shifted to primarily verbal messages.”

“We had to get creative to keep our group sessions fun and effective—and keep teens engaged for several hours at a time,” recalls Kennedy. “We reworked some of our material to be more interactive and included midway and ending activities such as trivia and riddles.”

“In spite of the challenges, the pandemic illustrated how valuable telemedicine is to the counseling profession,” adds Kennedy. “It allows us to provide care for our clients throughout this unprecedented time.”

Schein agrees. She embraces the opportunities that virtual counseling provides for the future and envisions adding a module on the ethics of technology to her curriculum. ■





WHEN DUTY CALLS ...



About this time last year, students in the Physician Assistant Studies (PAS) program were completing their final semester. They had a clear vision of their future. The crisp white coats. The inspiring commencement address. The licensure exams that lead to the careers of their dreams.

It was exciting. It was also normal.

Fast forward to early 2020. The coronavirus was decimating residents of Italy and Spain. Soon it was spreading throughout Europe. By March, a new epicenter arose. This time it was New York City and nothing seemed normal anymore.

Emily Bower (MS PAS '19) and Gina M. Nerone (MS PAS '19) felt compelled to help.

“When I heard New York’s Governor Andrew Cuomo plead for retired health care professionals to come out of retirement, I knew I had to do something,” recalls Bower. “Gina felt the same way. When she heard about the opportunity to help in New York, she called me, and we talked it over. We were young, healthy and had the skill set that was needed. We had to go.”

Because there was a state of emergency declared in New York, Pennsylvania-licensed and nationally certified PAs were permitted to cross state lines to practice medicine.

After applying to an agency that handled emergency medical staffing, the two new PAs took off for New York for what they thought was a 21-day stay.

“When we arrived on April 1, it was eerie,” recalls Bower. “Times Square was empty.”

The women checked into the hotel that would become their home-away-from-home for the next two months and prepared for an experience that would forever change their lives.

Bower was assigned to an ICU floor in North Central Bronx Hospital (NCBH). “It was really overwhelming at first,” she says. “Every patient had COVID-19, but with different symptoms and different complicating side effects. They were all on ventilators. No one knew how to best treat the virus.”

According to Bower, a large percentage of the regular hospital staff was either sick themselves, quarantined or too exhausted to work. “Fortunately, doctors, mid-level providers, nurses and respiratory therapists, some from the National Guard and others from around the country, arrived to help. They were all amazing.”

“Our team became a fierce advocate for our patients,” Bower continues. “There were some tough losses. To keep morale up,

we wore badges that said ‘COVID Ass-Kickers.’ Every time we came back to work and saw our patients still there fighting, it was the best feeling in the world.”

Nerone had a similar experience at the Jacobi Medical Center in the Bronx, where she cared for COVID patients who were transitioning to home. Although they were not on ventilators, these patients were all still extremely ill and needed personalized care.

Health care professionals from the Air Force Reserve, including two attending physicians, became part of Nerone’s team.

“No one knew anything about COVID-19, so we were all learning new things every day,” notes Nerone. “Treatments that worked for one patient didn’t work for others, so we kept trying different things.”

Two drug trials were being conducted at Jacobi while Nerone was there. “We saw some success with remdesivir, which was originally created to combat Ebola,” Nerone says. “After seeing so many other failed drug trials, it was encouraging to feel like we had something that worked.”

Bower and Nerone worked 12-hour shifts with very few days off until they returned home at the end of May.

Reflecting on their experience, they agree that they were prepared to jump right in and deliver the best care they could, even in changing situations. “Despite the fact

that no one knew how to treat COVID, as PAs we were able to fall back on our training and focus on the patients and the complications we could manage,” says Nerone.

“I’m so appreciative of the training I received at Pitt,” adds Bower. “It was the foundation that I built on every day.”

Assistant Professor David Beck, chair of the PAS department, is proud of these two recent graduates. “Their actions and dedication to patient care demonstrate their strong personal character, and their expertise and preparedness speak to their academic efforts and the caliber of our program.”

“Physician assistants must always be flexible, and both Emily and Gina proved that under the most dire conditions,” he continues.

“It was inspiring to be surrounded by a community of people from all over the country responding with skill and compassion to the needs of New Yorkers,” says Nerone.

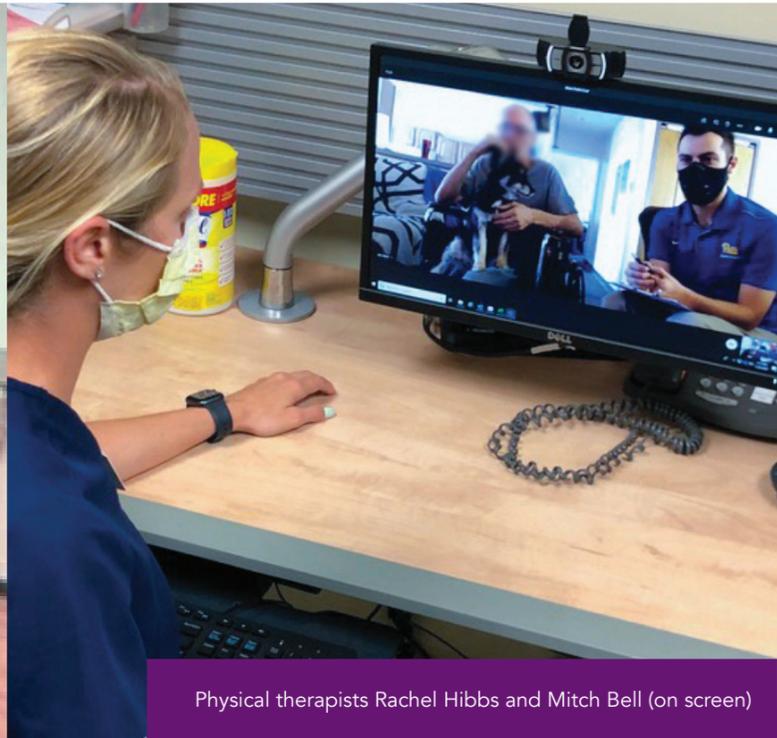
“And to be cheered on and supported by the people of New York City every night at 7 p.m. will be something I’ll always remember,” adds Bower.



Emily Bower (MS PAS '19) and Gina M. Nerone (MS PAS '19)



PIONEERS, THEN AND NOW



Physical therapists Rachel Hibbs and Mitch Bell (on screen)

Mark Schmeler remembers telerehabilitation before there was widespread access to the internet.

“In the late 1990s, we recognized it was not only possible, but necessary to find alternative ways to provide services to many of our clients who use wheelchairs, especially veterans,” recalls Schmeler, associate professor and Master of Rehabilitation Technology (MRT) program director, Department of Rehabilitation Science and Technology (RST).

“At that time, we developed a system that was crude to say the least,” Schmeler explains. “We used a camcorder and some basic software and had phone lines and cables running across the floor.”

According to Schmeler, either a generalist occupational or physical therapist, or in some cases, a graduate student, would visit a client’s home with several types of wheelchairs, while an expert in assistive technology would consult with them—either by phone, or in later years, through videoconferencing.

Thanks to funding from the VA Pittsburgh Healthcare System, Schmeler continued to improve telehealth delivery services. By the early 2000s, he and his team were supporting people with disabilities in five rural Pennsylvania clinics with telehealth wheelchair assessments and providing video conferencing with local community hospitals.

By 2008, Schmeler’s published research validated the effectiveness of providing wheelchair mobility and seating assessments from a remote location using the Functioning Everyday with a Wheelchair (FEW) outcome measurement tool. And in 2010, wheelchair users confirmed they were highly satisfied with this method of assessment.

Mitch Bell (BS ’16, MS ’19) currently works as an assistive technology professional (ATP) with National Seating & Mobility in Pittsburgh. As a graduate student, he traveled to veterans’ homes with a van full of wheelchairs and conducted the in-home portion of the assessments while being connected to physical therapists at the VA Pittsburgh Healthcare System who were providing guidance.

“We were the ones who were hands-on with the client, helping them try out devices and taking measurements,” notes Bell. “Being there in person allowed us to evaluate their homes to make sure the device would work in their particular environments and transmit critical information to the hospital-based clinicians.”

Since the onset of coronavirus, Bell has expanded his own telerehabilitation service. “Clinics are no longer open but, because of my experience at Pitt, the transition to telehealth was easy. Once again, I travel to my clients’ homes and connect with a therapist to conduct the assessment.”

“We always believed that telehealth and online education was the future for wheelchair assessments,” notes Schmeler. “But once the pandemic hit, we knew the time had come for this move from research to practice.”

“Because of our past experience, we were able to immediately help the Center for Assistive Technology (CAT) switch to a telerehab service model,” Schmeler continues.

“All of our clients depend on their assistive technology,” notes CAT Director Rosemarie Cooper. “If a power wheelchair needs to be repaired or adjusted, it can’t wait just because of the pandemic. This really opened our eyes to the importance of telerehab.”

“The pandemic has created a clinical environment shift,” states RST Chair and Associate Professor Jonathan Pearlman. “Everyone’s role has changed. Although the wheelchair prescriptions are still written by rehabilitation physicians and the assessments are performed by the rehabilitation technology team, during the pandemic it’s the suppliers—the ATPs—who are now going into the clients’ homes.”

“We at CAT are very fortunate to have a wonderful team of suppliers who understand what we expect and are willing to provide the same high level of service to our clients as we do in the clinic,” continues Cooper.

Cooper says now that CAT has seen success with teleconferencing, they may continue to use it in the future if clients are unable to come into the clinic. “Telerehab has given us a window into our clients’ homes and allows us to see how their assistive technology impacts their quality of life,” she explains.

Other organizations have also realized the benefits of telerehabilitation, and the leadership of Pitt’s RST faculty.

“In early 2020, we had requests from colleagues from around the country to tap into our knowledge,” says Schmeler. “We had the scientific evidence they needed to get their telerehabilitation programs up to speed.”

Over the past few months, Schmeler and his team have been formalizing protocols to guide other practitioners. They also created a new MRT degree program at SHRS.

“We always believed that telehealth and online education was the future for wheelchair assessments. But once the pandemic hit, we knew the time had come for this move from research to practice.”

—Dr. Mark Schmeler

Schmeler says this shorter and extremely practical program will put more ATPs in the pipeline quickly. “It’s our attempt to combat the overwhelming shortage of ATPs in this country,” explains Schmeler.

In addition, the Department is creating programs for mini certificates in Rehabilitation Technology. With “stackable” education certificates in areas such as Telehealth in Assistive Technology, Aging in Place, and Certified Repair Technician, future practitioners can specialize in areas of interest while they pursue ATP certification from the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA).

“I’m excited to see the future of telehealth, as it can benefit everyone involved in seating and mobility,” notes Bell. “We know it works for clients. But it also works for practitioners. In one two-hour telehealth visit, I can conduct the evaluation with a therapist, do a trial of the device in the home, and finish the client’s paperwork. It allows me to be more efficient, seeing more clients in one day.”

“When situations like the pandemic arise, you’ve got to view them as opportunities to make transformational change,” adds Pearlman. “That’s what we continually do in our RST department.” ■



In late February, when Kelly Kravec (BS '11) left her office at the Ambulatory eRecord Department of UPMC Information Services Division for a long-overdue family vacation, there were no known coronavirus cases in Allegheny County. When she returned one week later, her building on the South Side of Pittsburgh had been transformed into a COVID-19 testing center.

(DATA) DRIVEN TO STOP THE SPREAD



Kravec and her team were under work-from-home orders and the entire scope of their work had shifted.

As the lead application analyst collaborating with 11 other health information professionals, Kravec designs new ways to deliver meaningful IT solutions to UPMC clinical providers.

Working with electronic medical records (EMRs), the team solves problems through system design and integration. "This allows us to reduce human error, deliver meaningful patient data to clinicians, develop and resource proper decision support tools, and provide continuity of care by integrating with outside IT systems," says Kravec.

Among her team's responsibilities is support for telemedicine visits.

"During the first week of March there were approximately 160 UPMC telemedicine visits," notes Kravec. "But by the end of July, telemedicine visits were up to 20,000 per week—with as many video visits in one day as they previously conducted in a six-month time frame."

Supporting that task alone was daunting. But another challenge arose.

Kravec's team spent many sleepless nights developing solutions to flag UPMC patients as positive, negative or under investigation for SARS-CoV-2 virus. They were charged with deploying isolation precautions and contact tracing within all UPMC facilities and services.

Kravec explains that UPMC ambulatory facilities use one EMR system, while the hospitals and cancer centers each use their own.

"In addition to our own system, my project team integrated development with four other EMRs in the UPMC organization," Kravec continues.

Under normal circumstances, development and implementation of such magnitude would have taken nine months or longer to design, develop and deploy.

Kravec's team did it in eight days.

Now, if a patient sees his primary care physician for a sore throat or cough, for example, the system flags him as a person under investigation for the virus. If the same person presents at the emergency department with worsening symptoms, his EMR flag immediately alerts the health care team to test for coronavirus.

By establishing protocols and leveraging technology, Kravec says all health care professionals at every UPMC location have the tools they need to keep patients and staff as safe as possible.

"It is truly amazing what a high-performing team can do if they come together for a common cause," notes Kravec.

"During the COVID-19 pandemic, we started to see health information professionals almost as disease detectives,"



says Valerie Watzlaf, vice chair of Education and associate professor, Department of Health Information Management (HIM). "Kelly's work is an example of how medical data can be captured and used within a large health care system to track and potentially stop the spread of a virus."

"HIM is certainly at the forefront of this kind of disease," she continues. "It allows us to expand the tools that are used across EMRs and find information that is specific to COVID-19."

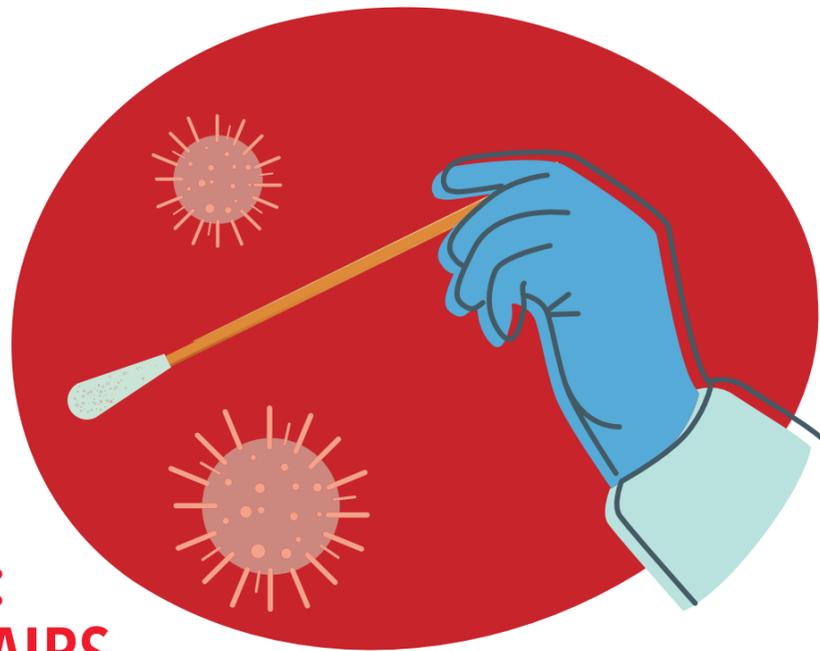
"We are seeing great interest in core areas of health informatics during this pandemic," adds HIM Department Chair and Professor Bambang Parmanto. "Those areas are digital health and data analytics. The pandemic forces us to deliver health care digitally using telehealth and mobile health, and it also turns the focus into the importance of data analytics for testing, treatment and decision making."

Kravec agrees. "Health informatics is the number one partner to the researchers working on testing, treatment and vaccines to knock out the threat," she says. "I think of informatics as the enabler to the health care heroes and leaders of the world. I am proud to say that my team played a small role in helping to find a path out of the crisis."

Kravec is currently enrolled in the SHRS online Master of Science in Health Informatics (MSHI) program, combining the Data Science and Health Care Supervision and Management tracks.

"Health Informatics offers so many possibilities for the future," says Kravec. "I know the field beyond my narrow scope of software is rapidly growing. Things like artificial intelligence, quantum computing, pharmacogenomics and IoT device integration are health informatics areas that really interest me."

She continues, "Having the opportunity to learn more in depth about the field of Health Informatics and emerging technologies will allow me to grow into the valuable leader I want to be and allow me to keep pace with a constantly growing and changing industry." ■



SHIFTING GEARS: FROM WHEELCHAIRS TO NASAL SWABS

Activity at the Human Engineering Research Laboratories (HERL) rarely comes to a halt. Since it opened more than 25 years ago, this 30,000 square-foot state-of-the-art facility has been abuzz with students, faculty and staff working on the latest rehabilitation and assistive technology research projects.

But when the pandemic hit and lockdown ensued, the lab shifted gears.

According to Garrett Grindle, HERL's assistant director for Engineering, the labs went into COVID-mode.

"In early April, leadership at the VA Pittsburgh Healthcare System asked if HERL had the ability to make face shields," says Grindle. Because of the lab's ongoing partnership with the University of Pittsburgh and U.S. Department of Veterans Affairs, Grindle was quick to respond with a loud "Yes!"



Like many health care facilities, personal protective equipment was in short supply at the VA.

Grindle says the team at HERL worked nonstop for two weeks, hunting down the appropriate materials, collaborating with clinicians on design and eventually fabricating the face shields. "Things were happening very quickly," Grindle recalls. "By the time we were gearing up to make large quantities, the public sector kicked in, manufacturing the necessary face shields for the VA and other hospitals."

But that was just the beginning. The Pittsburgh VA once again called on HERL. This time to fabricate nasopharyngeal swabs to test both patients and staff for COVID-19.

"There was—and still is—a tremendous need for nasal swabs," says Grindle. "There are only a few manufacturers of these swabs in the world and at the height of the pandemic, their production was at capacity. At HERL, we

are fortunate to have an industrial 3-D printer and the ability to come up with an effective design to print high-quality nasal swabs."

Grindle and his staff went right to work. They found the appropriate material and enlisted the help of the printer manufacturer to overcome some technical difficulties.

"The team at HERL was pleased to support the VA's effort to fight COVID-19," says Rory Cooper, director of HERL, associate dean for Inclusion at SHRS and FISA/Paralyzed Veterans of America distinguished professor. "Over the years, our partnership has been mutually beneficial to both organizations, but more so to veterans and people with disabilities. This recent project is a prime example."

"It was very much a team effort," adds Grindle.

HERL worked with the Sterile Processing department at the VA to provide ultrasonic and steam cleaning of the swabs, and with one of the VA labs to ensure the materials we were using would not contaminate the patient's results in any way.

Grindle says they also did extensive testing to compare commercial swabs with those produced at HERL.

"On the first try, our swabs came back as 'non-inferior' to the commercial swabs," he reports. "This was exactly what we wanted to hear—our swabs were as good as the commercial swabs!"

Using machines that typically test wheelchair cushions, the HERL scientists conducted mechanical tests on the nasal

swabs to see how far they bend, how they hold up under use, and how likely—or unlikely—they were to break in a patient's nostril.

Throughout the process, Grindle says the lab followed the same good manufacturing practices (GMP) they would use for manufacturing other medical devices. They documented the design, noted any changes, established a system of labeling and assigned lot numbers to every batch. They also created an email address to accept feedback on their product.

"We encourage continuous feedback from health care workers in the field," says Grindle. "We also continue to do mechanical testing to ensure continued safety."

"We're very proud of the amazing talents and teamwork of the faculty, staff and students at HERL," says Cooper. "They made it possible to change direction from creating and investigating technologies for veterans and people with disabilities to creating and supplying personal protective equipment."

"Most importantly, we are proud of their efforts to design and fabricate more than 25,000 nasopharyngeal swabs that have been validated and placed into VA inventory and are in use across several states throughout the Northeast," Cooper adds.

Grindle says by the end of July, HERL was turning out approximately 7,000 swabs each week. His goal is to increase production to 10,000 per week. According to Grindle, "The need is still there." ■



"We're very proud of the amazing talents and teamwork of the faculty, staff and students at HERL. They made it possible to change direction from creating and investigating technologies for veterans and people with disabilities to creating and supplying personal protective equipment."

—Dr. Rory Cooper

Garrett Grindle (right) was recognized by the U.S. Deputy Secretary of the VA for his contributions to meeting the needs of COVID-19.

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SHRS Standings

in 2021 U.S. News & World Report Survey
of Best Graduate Schools

#1 **PHYSICAL THERAPY**

#3 **OCCUPATIONAL THERAPY**

#3 **SPEECH-LANGUAGE PATHOLOGY**

#7 **AUDIOLOGY**



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School of Health and
Rehabilitation Sciences