2025, VOL. 1

facets

ELIZABETH SKIDMORE
Associate Dean for Research, SHRS
Professor, Department of Occupational Therapy

REIVIAN BERRIOS BARILLAS
Assistant Professor
Department of Physical Therapy

DIPU PATEL
Vice Chair for Innovation and Professor
Department of Physician Assistant Studies

YANSHAN WANG
Vice Chair for Research and Assistant Professor
Department of Health Information Management

AHMAD P. TAFTI
Director of the Pitt HexAI Research
Laboratory and Assistant Professor
Department of Health Information Management

Artificial Intelligence in Health Care.

The Challenges. The Rewards.

University of Pittsburgh®

CONTENTS

2025, VOL. 1

WELCOME TO FACETS.

The University of Pittsburgh School of Health and Rehabilitation Sciences (SHRS) is a leader in the field of health care education, with several of our programs ranked among the best in the country and with alumni representing SHRS around the world. Inside every issue of our alumni magazine, FACETS, you'll discover many sides of the SHRS legacy. You'll hear how our students and faculty continue to step out boldly and confidently in the classroom, in the lab and in the community. You'll learn how our bold moves lead to innovations and collaborations, groundbreaking research and meaningful connections. You'll get a sense of our past. And the vision that drives us to shape the future of health care.

1 From the Dean
Anthony Delitto
David C. Beck

3 Sweet Pamela!:
Pamela E. Toto

4 Creating Best Practices in Artificial Intelligence

11 Enter the Next Generation

12 AI Enhances Student Learning Experiences

14 Equipping Practitioners with the Tools of the Future

17 Honors, Well Deserved
Jamie Kulzer

18 Extending the Reach of the NMRL

22 Message from the Advising Center: Success Is Possible

26 Furnishing Hope

30 It Takes a Village—and a Giant—to Help Children Who Stutter

32 Challenges. Choices. Confidence.
The Journey of a Hybrid DPT Student

35 Leadership Updates
Tara Hankin and Christina Davis

36 Fifth and Halket Building Updates

37 Program Updates
Tim Suchomel and Doctor of Medical Science

Publisher
David C. Beck

Executive Editor
Natalie Baney

Editors
Jill Bodnar
Caitlin Pugh
Lauren Serge
Joshua Hughes

Writing and Design
Red House Communications

Photography
University of Pittsburgh

Pitt SHRS
School of Health and Rehabilitation Sciences

FACETS is published by the Office of the Dean, School of Health and Rehabilitation Sciences. It is produced twice a year for alumni, students, staff, faculty and friends of SHRS. The University of Pittsburgh is an affirmative action, equal opportunity institution.

Reflecting on My Time as Dean.

In my last official "Dean's Message," I'd like to take this moment to let you know that it has been an honor to serve as SHRS dean for the past nine years. We have seen noteworthy growth and accomplishments in all facets of our academic mission. Most of all, I am proud to have led an SHRS team that has oftentimes been described as an exemplar by Pitt senior leadership. Our leadership team of associate deans, chairs, executive directors and others has overachieved in all aspects of their responsibilities, and our faculty, staff and students have benefited greatly from their outstanding service. Any goal or challenge, no matter how formidable, was met with enthusiasm, innovation and a "can-do" attitude, resulting in some of our school's best accomplishments.

In the past five years, SHRS has solidified its reputation as a leader in health and rehabilitation sciences. Our programs consistently rank among the top in the nation, reflecting the dedication of our faculty and staff. We have expanded our research portfolio significantly, securing transformative grants that tackle pressing health challenges and advance clinical care. Notably, the SHRS community has been at the forefront of integrating emerging technology like artificial intelligence (AI) into rehabilitation, with groundbreaking advancements in areas like assistive devices and telehealth solutions.

I am excited about the future of SHRS and the naming of Executive Vice Dean David C. Beck as interim dean. Under his leadership, I fully expect the school to continue a steep, upward trajectory. In closing, I want to express my sincere appreciation for allowing me to lead this esteemed school.

Anthony Delitto
Associate Provost of Digital Education
and Professor

Delitto's last official day as dean was Jan. 31, 2025. Read about his new role leading the University of Pittsburgh Center for Excellence in Digital Education.

Interim Dean David C. Beck

Thank you, Associate Provost Delitto, for your leadership and service to SHRS during your time as our dean. Your love of our school, vision for our growth and work to secure our future has generated excellent momentum that truly leaves our school "better than you found it."

I would also like to thank the University of Pittsburgh's world-renowned leaders, including Chancellor Joan Gabel and Senior Vice Chancellor for the Health Sciences Anantha Shekhar, for their confidence and trust in my ability to serve as our interim dean. SHRS has a well-earned, international reputation for academic, research and clinical excellence, and this has been increasingly evident to me since I joined the faculty in 2009. I am proud to be surrounded by students, staff, faculty, alumni and partners within and outside the University who make the world a better place where everyone participates in life to the fullest and healthiest extent possible.

As we continue into this new era of SHRS, I am honored and excited to continue to advance our school by finding and realizing new opportunities for growth and success while reinforcing the many people and programs that enable us to excel. Some of these opportunities include the following:

- Increasing our integration of state-of-the-art clinical care and engineering into our classrooms, especially the use of artificial intelligence to maximize patient and student outcomes;
- Expanding our research, innovation and commercial translation efforts, especially by unifying our strengths to be awarded grants to establish centers and additional training opportunities; and
- Extending our clinical reach by advancing the care and support we offer our communities through the SHRS Wellness Pavilion and SHRS Adaptive Driving Program, as well as our partnerships with the UPMC Center for Assistive Technology and others across the Commonwealth of Pennsylvania, especially in rural areas.

In addition to this expansion, I will strive to maintain a strong, well-resourced school where the wonders that happen around us every day—from the scientific breakthroughs that occur in our labs, to the "lightbulb moments" of learning in our classroom lessons, to the analytics-driven decision making that improves administrative efficiencies, and many more—are never taken for granted and keep SHRS moving forward!

I am excited to see what we accomplish next as we continue to uncover what's possible at Pitt!

Sincerely,

David C. Beck
Interim Dean and Associate Professor

SWEET PAMELA!

Where it began
I can't begin to know when
But then I know it's growin' strong
Was in the spring
And spring became the summer
Who'd have believe you'd come along?

Written by Neil Diamond. © 2001 Universal Music Domestic Division, a division of Universal Music GmbH.

Try as you might, you won't find a more spirited Pitt fan than Professor Pamela E. Toto (BS '89, MS '96, PhD '10), director of the post-professional Doctor of Clinical Science in Occupational Therapy program and the Pitt Healthy Home Lab.

On Sept. 21, 2024, Toto's love of Pitt was recognized on the field at Acrisure Stadium as she received the Pitt Alumni Association's 2024 ROC Spirit Award during the half-time homecoming ceremonies.

"It was a great honor," says Toto. "But really, any good fan could have won this!"

Maybe Toto is more than just "any good fan."

Her love of all things Pitt began in her undergraduate days. She explains that she had a great experience with the University right from the start. "I came as a first-generation college student so I really didn't know what to expect," she goes on. "Two of my best friends were here, I went into a program that I loved and joined a sorority that gave me a sense of community and purpose. It just continued to get better and better after that."

According to Occupational Therapy Assistant Professor Kelsey Voltz-Poremba, "I thought this award was a great way to honor Pam and her unwavering support of all things Pitt!"

As part of her recommendation for the ROC Spirit Award, Voltz-Poremba created a lively video that paints Toto as the epitome of enthusiasm in a variety of roles—as a teacher, mentor, alumna and Pitt parent. Several of Toto's students chimed in with their support of the nomination.

Top: University of Pittsburgh Chancellor Joan Gabel with ROC Spirit Award winner Pamela Toto.
Bottom: Toto being recognized on the field for her award with her granddaughter during the Pitt football homecoming game.

"The love and pride that Pam shows for Pitt is absolutely infectious! You can't help but want to join in when she's belting out 'Sweet Caroline' or waving her Pitt flag. She has so much loyalty to Pitt and represents the school so well in all she does. She provides such a wonderful example of how to embody 'blue and gold' that I can only hope to match one day," claims Christie Cyktor (OTD '24).

"I'm extremely grateful for all the love and support," adds Toto. "It makes me love this University even more." ■

Watch the video to see why Pamela Toto is the 2024 ROC Spirit Award recipient.

Creating Best Practices in Artificial Intelligence.

When Google Maps or Waze redirects us away from a traffic accident, or Netflix suggests a movie we might like based on our past viewing, we don't think twice about it. This is AI helping us make decisions in our daily lives.

But when the words artificial intelligence are paired with words like "health care" or "patient outcomes," some people see red flags.

At SHRS, faculty and researchers are stepping forward to ensure that AI is used in the most responsible way to improve the efficiency and effectiveness of health care delivery, and most importantly, to improve patient outcomes.

> "It is important to acknowledge that AI is applied within a collection of tools, and like any other tool, AI can be used well or misapplied," states Elizabeth Skidmore, SHRS associate dean for Research and professor, Department of Occupational Therapy (OT).

"How these tools are applied matters, because misapplication can reinforce biases and contribute to inequities," she continues. "The field is evolving quickly and best practices are still emerging. It is important that the application of AI involves methods that ensure transparency and reproducibility."

In 2023, Yanshan Wang, vice chair for Research and assistant professor, Department of Health Information Management, published an article in the journal npj Digital Medicine that elaborated on the ethical use of AI. His paper, "The GREAT PLEA," proposed a system for the responsible use of generative AI (GenAI) in health care.

GenAI learns patterns from existing data, such as evidence-based medicine, and uses this knowledge to generate new outputs or predictions.

According to Wang, "The GREAT PLEA" sets forth nine principles that scientists, programmers and stakeholders should consider before applying AI in practice. "It is an acronym for the principles of Governability, Reliability, Equity, Accountability, Traceability—and Privacy, Lawfulness, Empathy and Autonomy," says Wang.

He notes that the focus is often put on the performance of AI rather than the ethical considerations. "The use of AI in health care is unique in that health care is a type of public service," says Wang. "Any use of AI by the health care community should adhere to the same ethical principles that otherwise guide our work."

"If you break down each of the principles in 'The GREAT PLEA,' you will see that we are advocating for putting patients at the center of all AI work," he continues.

ELIZABETH SKIDMORE
Associate Dean for Research, SHRS
Professor, Department of Occupational Therapy

YANSHAN WANG
Vice Chair for Research and Assistant Professor
Department of Health Information Management

By adhering to these guidelines, Wang believes clinicians will be better able to gain—and maintain—the trust of their patients as they incorporate AI into their diagnoses, evaluations and treatment plans.

But Wang cautions that assessments must improve in order to ensure that generative AI remains both accurate and ethical.

He calls for experts such as physicians and other scientists to continually review new content in many dimensions, including those of accuracy and misinformation. "There are critical limitations that experts can put on generative AI to maintain the quality of the data," he continues. "If these measures are followed, GenAI can be a powerful tool in achieving better health outcomes."

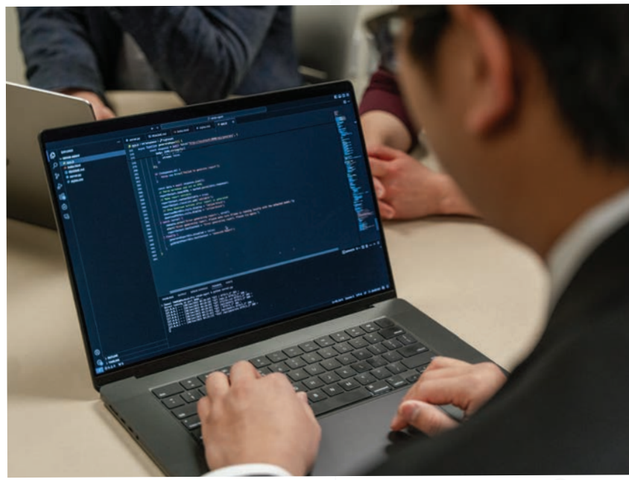
ENSURING FIDELITY.

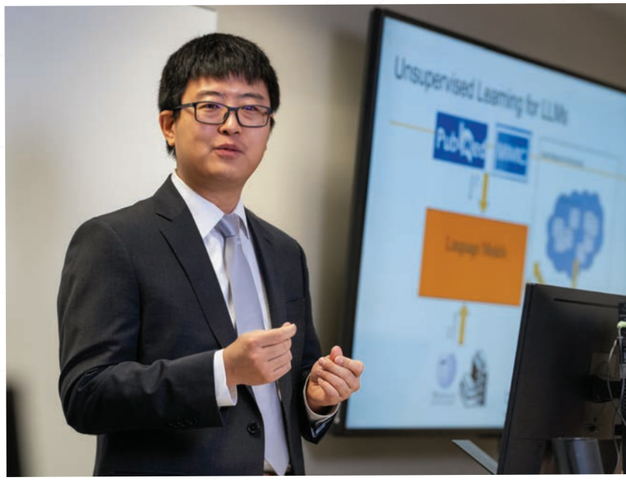
Over the past 15 years, Skidmore and her interprofessional team of clinicians and researchers have been working to develop and implement an intervention that helps people with cognitive impairments actively engage in their rehabilitation. "When they are actively engaged, we find these patients derive more benefit and have significantly less disability six to 12 months later," notes Skidmore. "But we need to be able to assess the fidelity of our intervention and make sure what we intend to deliver in rehabilitation hospitals is actually happening."

In the past, Skidmore hired well-trained, well-paid therapists known as "raters" to watch videos of rehabilitation therapists delivering occupational therapy, physical therapy and speech-language pathology interventions in hospital settings. The raters used a standardized checklist developed by Skidmore and her team to determine whether or not the interventions met the criteria for fidelity.

Because she hoped to scale this intervention out to dozens of rehabilitation hospitals across the country, she needed to find a more cost-effective method. Skidmore tapped into the knowledge of Wang and Health Informatics Associate Professor Leming Zhou.

> "Through our collaborations, we were able to use machine learning to solve a real-world problem," says Skidmore.





Skidmore and Wang collaborate on how to use AI and machine learning to develop assessable models in their research.

The AI tool looked at thousands of hours of videos to determine if selected intervention sessions had good fidelity, using Skidmore's pre-established protocol. Then she and her colleagues began to set up and test models, to determine if the AI model could meet or exceed the gold standards previously achieved by their highly trained raters.

The answer was yes. "We saw that there were patterns in what our raters were seeing that could be identified and reliably reproduced with the machine learning approach," states Skidmore. "But it could be done much more quickly, and in a more cost-effective manner."

Moving forward, she hopes to use this approach in an expanded study, having therapists upload their videos and get a score on the fidelity of their interventions as a way of providing feedback and optimizing the rehabilitation for patients.

"Drs. Wang and Zhou helped us think carefully about how we design our projects and how we design our data collection," she continues. "They also helped us develop assessable models and to understand what we can and cannot conclude from the data."

Top: PhD student Amber Lieto respectfully engages with a patient in a low level of consciousness, letting him know what he might be feeling during the mindBEAGLE assessment.

Bottom: Rupert Ortner, second from right, an engineer from g.tec, the medical engineering company in Austria that developed mindBEAGLE, trains Pitt researchers, from left to right, CSD Clinical Instructor Evelyn Mariperisena-Meinert, CSD alumna Sarah Baker, CSD Professor Katya Hill, CSD graduate student and project volunteer Anna Hamill and PhD student Amber Lieto.

IMPROVING THE STANDARD OF CARE.

In the Augmentative and Alternative Communication (AAC) and Brain Computer Interface (BCI) iNNOVATION Laboratory (iLAB) in the Department of Communication Science and Disorders (CSD), Professor Katya Hill is using AI and machine learning to improve communication and the quality of life for people with severe physical impairments.

With funding from The Beckwith Institute's Clinical Transformation Program, she is in the early stages of a clinical trial exploring new methods for communicating with patients who have varying levels of consciousness. The study utilizes mindBEAGLE, an innovative BCI system, to gain insights into the cognitive and communication capabilities of patients who are unable to respond through conventional means.

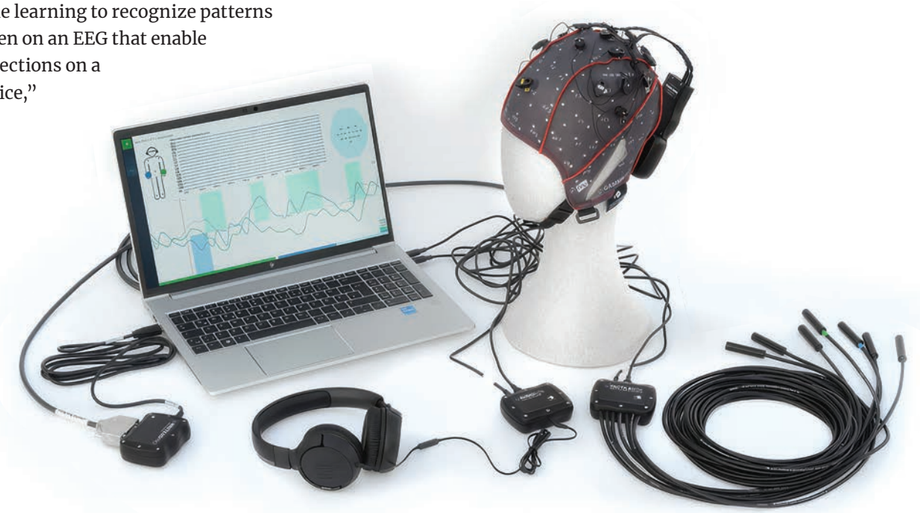
"Evaluating patients in a coma presents significant diagnostic challenges, as traditional communication methods are unavailable due to their inability to provide verbal or physical responses," explains Hill's graduate student researcher Amber Lieto.

"mindBEAGLE uses artificial intelligence and supervised machine learning, which means it is trained to recognize patterns in brain waves using a classification system," continues Lieto. "The technology detects unique brain responses when a person focuses on specific 'target' stimuli rather than other non-target stimuli. Based on brain wave patterns, the system can learn to identify if the user is communicating 'yes' or 'no' when answering questions."

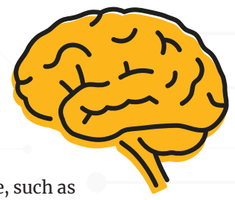
Lieto says mindBEAGLE may allow health care providers to investigate brain function and conduct cognitive assessments that provide more comprehensive information about a patient's ability to follow commands. The implications of this research could potentially transform how medical professionals interact with and care for patients with impaired consciousness.

Graduate student researcher Michael S. O'Leary is also working with Hill to develop a commercialized product that uses BCI to give individuals with severely limited physical abilities extended access to the capabilities of an AAC device, even after they can no longer touch a switch or use eye gaze to access their language software.

"We're using machine learning to recognize patterns in brain waves as seen on an EEG that enable patients to make selections on a communication device," says O'Leary.



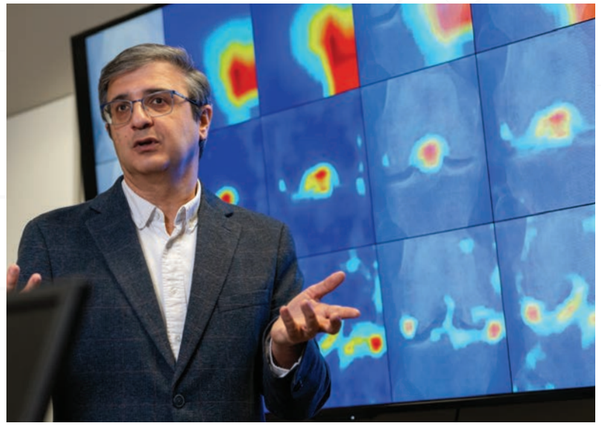
"Even though everyone's brain waves are different, our newest model is trained to recognize what we call the 'aha!' moment—that point in time when the computer knows the patient is paying attention to a certain image, such as a letter, on the screen. This allows the patient to elicit a response whenever they want, without the need to pause the system—something that they would otherwise not be able to do with current systems."



The commercial product consists of a specially designed headset with dry electrodes that plugs into an AAC device.

"These are both very exciting initiatives," notes Hill. "Our BCI research involving AI and machine learning will improve the efficiency of communication and impact the standard of care."

BCI systems such as mindBEAGLE may transform how health care professionals interact with patients with impaired consciousness.



Health Informatics Assistant Professors Ahmad P. Tafti and Yanshan Wang are preeminent leaders in the use of AI in health care. Tafti is director of the Pitt HexAI (health and explainable AI) Research Laboratory, while Wang leads PittNAIL (the Clinical Natural Language Processing and Artificial Intelligence Innovation Laboratory).

LOOKING TO THE FUTURE.

Wang reports that AI models already use electronic health record (EHR) data to predict which patients are at high risk of developing certain diseases, identify optimal treatment plans based on patient characteristics, and monitor patients for adverse events or treatment effectiveness.

In addition, he says that EHRs can be integrated with other health care data sources, such as medical imaging, genomics and wearable devices to provide a more comprehensive view of a patient's health status. "This integrated data can be used to develop more sophisticated AI models that can predict health outcomes with greater accuracy and provide personalized care recommendations based on individual patient characteristics," explains Wang.

But in the future, clinicians must have more sophisticated training in order to fully understand the risks and benefits of this constantly evolving technology.

"Although artificial intelligence has been on our radar for years, it's really only been in the past couple of years that it has been infiltrating more of our conversations in health care," reflects Skidmore.

"I had on-the-job training in the use of AI, thanks to my colleagues, but it's imperative that we as faculty train students in the responsible use of AI," she continues.

"The curricula for our programs, particularly our doctoral programs, contain voluminous amounts of material for students to learn. It will be necessary for us to see how AI training can be incorporated into accreditation standards in the future."

> "Skidmore goes on to say that students are both excited and overwhelmed at the prospect of using AI. "By training them in how to interface with experts who have access to evidence-based approaches and the knowledge to apply AI and machine learning technologies, they will understand the importance of us all working together to achieve a common goal—better outcomes for our patients." ■

Enter the Next Generation.

The growing popularity of AI in everyday life has captured the imagination of young people who may be interested in careers in science or health care. How will it be used? Will it make a difference in what future jobs will be available or how patients will be treated?

For the past two summers, these questions and more have been explored during a week-long AI summer school for high school students in grades 11 and 12.

"This summer school course, AI-Powered Medical Imaging Informatics, provides a unique opportunity for the next generation to dive into the fascinating world of AI and its application in medical imaging informatics. This type of AI summer school helps to develop a workforce in highly demanded AI applications," explains Ahmad P. Tafti, assistant professor of Health Informatics and director of the HexAI Research Laboratory.

High school students gain insight into how AI is used in medical imaging informatics.

AHMAD P. TAFTI
Director of the Pitt HexAI Research Laboratory and Assistant Professor
Department of Health Information Management

Among other things, students develop practical skills using Python programming as they learn how AI and computer vision techniques and algorithms are used for automatic object detection and localization in medical imaging.

Each day is filled with a combination of lectures, keynotes, hands-on practice and collaborative project assignments.

Sophia Gombas, a senior at Shady Side Academy in Pittsburgh, completed the course in June 2024.

> "I've learned so much," says Gombas. "There were a lot of presentations and really educated speakers, so it was really fun for me to explore this part of computer science that I've never interacted with before."

"It's very important for students to have this kind of hands-on experience early on so they can better learn what we mean by safe AI—what we mean by unbiased AI—and what we mean by explainable AI, particularly in health care," adds Tafti. "They learn fundamental algorithms and fundamental concepts that could be applicable for other domains."

He notes that exposure to this kind of knowledge during high school makes students more competitive as they apply to colleges, undergraduate and even graduate programs.

There is no cost for the summer school, but seats are limited to 35 students. Tafti reports that they received more than 45 applications for last summer's session. "One of our students took a 17-hour plane ride from Indonesia!" he continues. "This is evidence that our program and this AI summer school enjoy an international reputation." ■

DPT hybrid students Anne McCormick, Neelanshi Saxena and Joanna Meza review the AI chatbot with Assistant Professor Reivian Berrios Barillas.

AI Enhances Student Learning Experiences.

In the rigorous Doctor of Physical Therapy (DPT) program, few courses contain the volume of information found in the Human Anatomy course.

"Our anatomy course is tough for most students, but it is especially challenging for hybrid students who are learning online content prior to their first in-person immersion," admits Assistant Professor Reivian Berrios Barillas. "Because anatomy is a foundational course, it's critical that students really master the content to ensure their success moving forward."

In the past, Berrios Barillas used a discussion board where students could post questions and she could respond within 24-48 hours. But she thought she could do this better.

Recently, she proposed a novel way to use AI to help students improve their individual outcomes.

Thanks to a Pitt Momentum Funds Teaming Grant, she and a team of experts from the School of Computing and Information (SCI), the Dietrich School of Arts and Sciences, and the School of Education created a course-specific chatbot that has the capacity to answer student questions in real time, provide access to recent study guides and create quizzes based on their individual needs.

> "According to Berrios Barillas, "The chatbot was trained to only use material culled from previous iterations of the course, not information skimmed from the internet. It is based on the needs students have already demonstrated in past semesters and on the instructor-based materials that have been helpful to previous classes."

With the help of programmers from SCI and the Department of Health Information Management (HIM), Berrios Barillas now sees reports showing exactly which students are asking questions and who needs additional help in particular areas.

To address that concern, a feedback app was developed for use after quizzes. It redirects students to specific content areas where they can relearn the information they need to know about bones, muscles, nerves and so on. HIM Assistant Professor Yanshan Wang and PittNAIL Software Developer Mariano De Leon have been instrumental in leading the technological development of the feedback application.

Scott Fraundorf, associate professor in the Department of Psychology and research scientist at Pitt's Learning Research and Development Center, contributed his expertise as a cognitive scientist who studies human learning.

"We wanted to assess student perceptions of how they are learning from the AI chatbot, specifically whether using the chatbot can increase their confidence," says Fraundorf.

Berrios Barillas believes the answer is yes.

"For example, I've noticed the scores on our cadaver quizzes improve when students use the chatbot," she says.

Peter Brusilovsky, SCI professor and director of the Intelligent Systems program, served as the technology lead for the project. He notes that the chatbot is only one of three elements of the instructional design grant. There is also a dashboard that illustrates how students in the past performed in order to identify potential topics that may be difficult for current students, and there are plans to incorporate a machine learning-based component in the near future.

DPT students use the AI chatbot to reinforce their learning while practicing their hands-on skills.

REIVIAN BERRIOS BARILLAS
Assistant Professor
Department of Physical Therapy

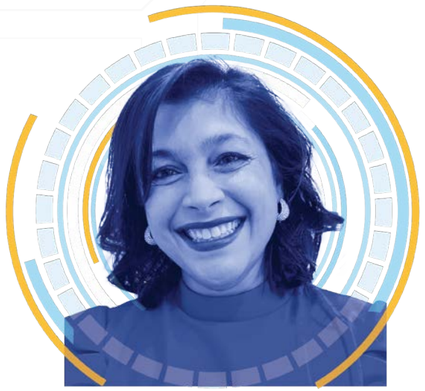
> "Through machine learning, we could use past data and a student's current knowledge to predict how well that student might do in a certain course," adds Berrios Barillas.

"We have done some good work using AI in instructional design in the past, but Reivian's current work shows considerable innovation," notes Brusilovsky. "The rapid advancement of generative AI (GenAI) opens really interesting prospects that we were not able to explore earlier, so we look forward to advancing our joint work in this direction."

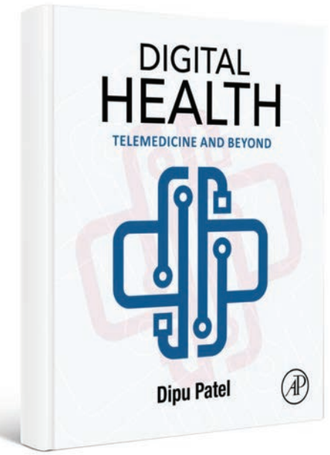
"No one else is doing this work in our department right now," adds Berrios Barillas. "We are excited about expanding these tools to other courses and other departments and schools within the University."

Berrios Barillas presented a portion of their work at the 2025 American Physical Therapy Association's national conference in Houston. It was well received and many of the conference attendees inquired about the impact of the current study on students' academic performances. They were encouraged to hear the outcomes have been positive and were eager to learn about the next steps in the project and when the tools would be widely available. ■

Equipping Practitioners with the Tools of the Future.



DIPU PATEL
Vice Chair for Innovation and Professor
Department of Physician Assistant Studies



Patel's book, "Digital Health: Telemedicine and Beyond."

Dipu Patel is a physician assistant (PA) by training and an educator by choice. But her real passion lies in innovation.

As professor and vice chair for Innovation in the Department of PA Studies, she is passionate about ensuring that future practitioners have the most effective tools at hand to ensure patients receive the best possible care and achieve the best possible outcomes.

In today's health care environment, that includes the constantly evolving digital health tools.

"Over the past decade we have all become familiar with electronic health records, telemedicine, wearable technologies and health apps," notes Patel. "AI, specifically GenAI, falls under the same umbrella and is quickly shifting how we care for patients."

Patel is not a bystander in this digital landscape. She has developed the country's first and only digital health course for students in the school's Doctor of Medical Science (DMSc) program (more on p. 37).

According to Patel, the goal of the Fundamentals of Digital Health course is to help students gain an understanding of the benefits and challenges of various digital health technologies and their impact on patient care and clinical practice. Topic areas include definitions, benefits and challenges, as well as future trends and their potential impact on future practice.

Patel hopes that with this foundation, students will be able to assess and adopt new tools as they evolve in the future.

Left: Patel at the awards ceremony at the annual PAEA Education Forum. Right: Patel (center) with Linda Sekhon (left), immediate past president of PAEA, and Amy Haller (right), vice chair for Professional Development and Continuing Education and associate professor, Physician Assistant Studies.

"I like that this course teaches adaptability to a new skill set," says Patel. "But it also helps the health care provider overcome the fear of AI taking over their job."

"It validates the point that GenAI plus human expertise equals better care," she continues.

Patel gives the example of how GenAI might improve a typical patient visit. Instead of the provider typing away at a computer while the patient talks about symptoms or concerns, AI can document the conversation while the provider gives the patient their full, undivided attention. Patel says this will allow the provider to pick up on certain cues or behaviors that may have gone unnoticed while they were busy typing notes.

Furthermore, the AI-documented information would become part of the patient's electronic health record and could be used in the future to help physicians identify potential genetic or larger population diseases.

"When you look at it this way, you can see AI is not a change in the quality of care, rather an evolution in the practice of it," says Patel.

In October 2024, Patel received an SHRS Innovation in Education Award to help SHRS faculty and students become more comfortable with using AI tools. "This may be the only course on campus that encourages students to use large language models to engage with AI and analyze its use," says Patel. "It's about lowering the threshold to engage with AI tools and taking away the fear."

She recently launched another new initiative, "Discovering Innovative Possibilities of the Use of AI," through weekly digital office hours. Every Wednesday, experts from several schools and colleges meet virtually to dive into AI-related topics, share insights and collaborate on innovative ideas.

Patel says this space has been especially valuable because faculty from business, computer sciences and humanities are joining those from the health care professions in these conversations.

"The most important skills for the future will be adaptability and flexible thinking paired with curiosity," says Patel. "This applies both to the teacher and the learner in all disciplines."

Pitt faculty and staff join Patel to talk about AI in health care and education every Wednesday from 10-11 a.m. To join the conversation, email her at dip59@pitt.edu.

Patel has also published a new book, "Digital Health: Telemedicine and Beyond," that uses case studies and patient outcomes to provide an overview of digital medicine, terms, concepts and applications for the multidisciplinary clinical practitioner.

It addresses the ethical and social challenges that digital health raises, how to engage patients to improve shared decision-making models and how digital health tools can be integrated into clinical practice.

"Keeping the human in the loop is crucial to how we use any form of digital health, especially AI," notes Patel. "It can make us more efficient and better at what we do because it arms us with so much information. But it's important to note that AI is not making medical decisions—health care professionals are making those decisions."

Patel's expertise and leadership has an impact on a national level. In January 2025, she stepped into her new role as board president of the Physician Assistant Education Association (PAEA), where she hopes to broaden the knowledge of the benefits of AI among practicing physician assistants.

"We are nowhere near the peak of where AI can take us," predicts Patel. "But we are at an inflection point of the partnership between humans and AI." ■

THE TAKEAWAY.

ONE STUDENT'S PERSPECTIVE ON PATEL'S FUNDAMENTALS OF DIGITAL HEALTH COURSE.

Jeff Midgley (DMSc '24), PA program director and clinical associate professor, Marist College, says he entered the course "as a geek who loves medicine and technology and left as someone with a vast toolkit to tackle complex challenges."

"Our main task for the course was to design a telehealth service for a hypothetical rural community," explains Midgley. "This was not just simply a process of getting patients access to a computer and clinicians access to a telemedicine system. It was about learning how to create infrastructure which has many applications in industry, health care, administration and academics. It was learning about those things through the use of different AI programs, and how to appraise the work that we did using AI."

In addition to learning foundational concepts, Midgley appreciated the AI feedback reflections that were completed after submitting assignments.

"They provided a lot of thoughtful reflection on how we utilized the tools to build our health care system as well as the limitations and biases that came with using those tools," notes Midgley. "I developed a solid enough foundation that I am now comfortable sharing these tools with others."

He has made several medically related technology presentations and was named co-chair of the academic portion of his college's AI steering committee. In this role, he will be paving the way for the increased use of AI at his own institution.

Midgley says the tools he learned about in class are already informing his work. "We learned in an environment where we were able to explore AI tools and apply them to relevant medical settings to create meaningful projects that will prepare us to care for the patient of the future. I'm passing this information on to my students." ■

noteworthy

Honors, well deserved.

There are many reasons why the Clinical Mental Health Counseling program has been ranked one of the best in the state by the Pennsylvania Counseling Association (PCA).

One just happens to be Jamie Kulzer.

An associate professor in the Department of Counseling and Behavioral Health and recipient of the PCA 2024 Outstanding Professional Teaching Award, Kulzer puts her heart and soul into educating the next generation of counselors.

> "I simply love teaching," explains Kulzer. "When I first stood at the front of a classroom, I worried that I wouldn't have all the answers. Over the years I've learned that teaching involves more than that—it's more about engaging with students."

"I love to create opportunities for questions to arise and then dive into rich discussions and meaningful activities," Kulzer continues.

Michelle Schein, associate professor and Clinical Mental Health Counseling program director, praised Kulzer's excellence and innovation in teaching. "When Jamie began teaching one of her counseling skills courses, she connected with the School of Medicine's standardized patient (SP) program to help students acquire interviewing techniques and cognitive behavior therapy skills," says Schein. "That connection became an invaluable experience for students and has been adopted by other instructors."

"The SP experience remains one of the best counseling skills evaluations in the program as students are able to participate in more realistic counseling sessions and receive developmental/behavioral feedback," she continues.

Schein also commended Kulzer for securing two grants related to personal wellness and self-care of graduate students in health sciences professions. This work has resulted in the development and validation of the Pitt Personal Wellness Program, an evidence-based, self-care initiative.

Kulzer credits the University Center for Teaching and Learning for helping her hone her skills in the classroom. "I don't feel I would have received this award without their help and support in lesson planning and curriculum development," says Kulzer. ■

Extending the Reach of the NMRL.

JAPL and NMRL collaborators pose in front of the MRV on the last day of testing in Kansas. From left to right: Bobby Rawls (NMRL), Chelsi Scott (JAPL), Drake Eserhaut (JAPL), Brian Martin (NMRL), Veronica Moceri (NMRL), Livia Wunderlich (NMRL), Kelly Mroz (NMRL) and Andrew Fry (JAPL). Not pictured is Adam Sterczala (NMRL).

The world's first—and only—mobile research vehicle (MRV) of its kind hit the road in October, replete with state-of-the-art scanning and monitoring equipment, unique data collection capabilities and one very excited driver behind the wheel.

Brian Martin, associate director and assistant professor, Neuromuscular Research Laboratory/Warrior Human Performance Research Center (NMRL), spent more than two years planning, designing and customizing the 45-foot-long MRV with funding from the Office of Naval Research.

Now he's bringing the advanced capabilities of the NMRL directly to sites where he and his colleagues are engaged in Department of Defense research.

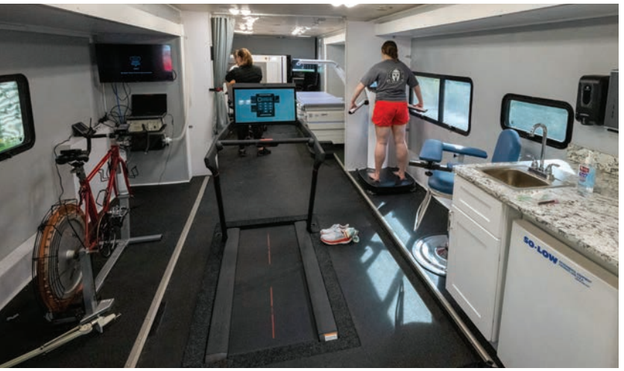
"In the past, when we traveled to military bases and other locations to conduct performance testing, we had to bring our equipment with us, then secure an appropriate location onsite to collect data and perform tests," notes Martin. "In addition, we had the challenge of finding a location on base to store the equipment or bring it back to the lab in Pittsburgh."

> "With the new MRV, we have everything we need right at our fingertips. It is a complete, multi-functional lab on wheels," he continues.

The MRV was ready to roll when a unique opportunity presented itself. The NMRL was looking for a way to expand the number of Reserve Officers' Training Corps (ROTC) recruits in one of its studies.

Martin put Lawrence, Kansas, into the GPS. The MRV's first stop: the University of Kansas' Jayhawk Athletic Performance Laboratory (JAPL).

Martin hits the road in the new MRV.



Top to bottom: NMRL Research Assistants Veronica Moceri (left) and Livia Wunderlich (center) work with University of Kansas PhD student Drake Eserhaut (right) to process and store biospecimens that were collected in the MRV.

Lead-lined curtains divide areas where medical imaging equipment is located. The MRV features bone density scanning equipment along with an XtremeCT—a highly advanced scanner capable of high-resolution peripheral quantitative computed tomography—one of only 30 in the United States and the only one in the world on a mobile unit.

Post-doctoral fellow Bobby Rawls observes PhD student Jenny Forse during a cardio respiratory fitness assessment.

A treadmill is mounted to the floor of the van, along with a bicycle and a metabolic cart for measuring performance during exercise.

COLLABORATION FUELS SUCCESS.

Working together with the JAPL, Martin and his team were able to secure the approvals necessary to add the University of Kansas as a new study site for the NMRL's Bone and Body Composition Adaptations to Training (BoBCAT) study.

This research is designed to help military services better understand the beneficial adaptations that resistance training and exercise can have on bone formation. Specifically, researchers examine the effects of exercise and loading on bones using bone imaging, blood samples and a set of exercises.

"This is the first step in helping to reduce stress fractures," says NMRL Research Assistant Professor Adam Sterczala.

"One of the biggest issues in the military right now is the prevalence of stress fractures," continues Sterczala. "It causes a lot of downtime, so the military is interested in doing everything they can to reduce the number of them. As a result, we are examining the effects of exercise loading on bone in a number of different ways."

Over a period of eight days, the NMRL and JAPL teams tested nearly 40 new U.S. Army, Navy and Air Force ROTC recruits in the MRV. Among other things, they assessed bone mineral density and structure and collected blood samples to examine markers of bone formation and resorption pre- and post-exercise. The collected data will be used to examine changes in hormone levels, bone and body composition and physical performance following approximately six months of physical training.

NMRL Research Program Manager Kelly Mroz served as one of two bone densitometry technologists on the trip and was responsible for keeping the scanners and other sensitive equipment at the appropriate temperature and humidity. "It was an intense schedule, with some pre-5 a.m. start times and exceptionally long days, yet there was a pervasive spirit of professionalism, energy and grace," notes Mroz.

ROAD WORTHY.

Shortly after nearly 1,800 miles and more than 24 hours on the road to and from Kansas, Martin carefully assessed all of the equipment on the MRV. He reported no damage and no issues with functionality.

"We performed many calibrations and repeat testing with the MRV equipment before actually taking it on its first long trip," says Martin. "But it was reassuring to know our planning and customized installation was able to stand up to the rigors of the road."

Martin foresees more trips to the University of Kansas as well as to the U.S. Naval Academy and the Marine Corps Base Quantico in Virginia in the near future.

> "He hopes the MRV will also be used for community outreach and recruitment in addition to NMRL research, as well as with collaborations with other researchers from the University of Pittsburgh and UPMC."

"Brian deserves many kudos for making his vision a reality," adds Professor and NMRL Director Bradley C. Nindl. "He was diligent and industrious in his approach to the planning, design and execution of this unique vehicle. He is a special individual who contributes so much to the success of our lab." ■

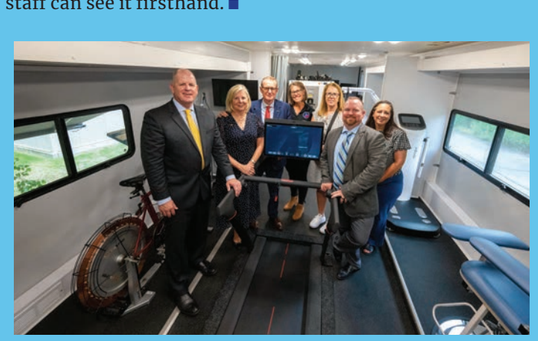
ALUMNI GIFT POWERS EVEN MORE RESEARCH

In fall 2024, SHRS gratefully accepted a $100,000 pledge from Barry D. Rhoads, Esquire (LAW '80), and his wife, Jean Rhoads (PHARM '81), to support the work of the NMRL.

Both Barry D. Rhoads and NMRL Director Bradley C. Nindl have military experience and are passionate about leveraging Pitt's health and performance science and research ecosystem to serve our nation.

Barry D. Rhoads is a retired lieutenant colonel and former federal prosecutor. Nindl is currently serving in the U.S. Army Reserve as a colonel and has more than 33 years of continuous service. He worked in scientific leadership roles in the U.S. Army for more than 20 years before taking on his current role at the NMRL.

The couple's generous gift to support the NMRL is just a part of their ongoing support of human-performance research. Thanks to the efforts of Barry D. Rhoads working with Congress, more than $50 million was appropriated so the University of Pittsburgh could continue doing this type of research for the past 20 years. He would now like to bring the MRV to Washington, D.C., so members of Congress and their staff can see it firsthand. ■



Top, left to right: NMRL Director Bradley C. Nindl, alumna Jean Rhoads, alumnus Barry D. Rhoads, NMRL Program Manager Kelly Mroz, Athletic Training Program Director Amy Aggelou, NMRL Associate Director Brian Martin and Associate Professor Shelly Fetchen DiCesaro.

Bottom: Barry D. Rhoads greets Bradley C. Nindl in the MRV.

Tiwanda Taylor, director of the Center for Academic Advising and Student Success, leads a team of academic advisors and success coaches that has become an important asset for empowering SHRS students.

Message from the Advising Center:

Success Is Possible.

Remember what it was like to start a new academic year? Or to get midway through and feel insecure about your program choice, overwhelmed by what was expected of you?

Brooke Zeller remembers it well.

When she began her online Master of Science in Health Informatics Data Science track, there was a lot going on in her life. She was working full time while she was enrolled in three rigorous classes.

"I had some unexpected circumstances come up in my personal life that made it very difficult to get my schoolwork done," explains Zeller. "I was behind in completing modules and assignments. I did not know how—or if—I could get back on track."

Things changed for the better when Zeller connected with Student Support Coach Jennifer L. Kaplan in the SHRS Center for Academic Advising and Student Success.

"I reached out to Jennifer by email late one afternoon and she met with me by Zoom the following morning," recalls Zeller. "She immediately helped me come up with a feasible plan to get caught up quickly and efficiently."

Tiwanda Taylor, director of the Center for Academic Advising and Student Success, says this is exactly how the Advising Center is supposed to work.

> "Our students are managing so much," Taylor continues. "They often feel alone in their struggles. But when they reach out to academic advisors and support coaches who know their programs—who know them—they can move forward with much more confidence."

Senior Academic Advisor Amy Evans recalls a time when she was the only staff advisor for SHRS students. "All the other advisors were faculty members who were already stretched between their academic responsibilities, research initiatives and other professional duties," recalls Evans.

"In 2020, the concept of a centralized advising center for SHRS was born. By 2022, we were up and running with a full-time advising staff," she continues. "This allowed us to devote all of our time to student support while freeing up faculty to take on more mentoring roles."

The Center for Academic Advising and Student Success provides student support and career guidance.

Academic Advisor Dave Bodnar says his students appreciate having an advisor specifically connected to the field they are pursuing. But it's more than that.

"They look to us as a one-stop resource, not only to clearly define their path to graduation, but to give them direction and support they need to make the best choices for their futures."

> "Success looks different for every student," adds Taylor. "Our job is to listen and to encourage students to find the right path for them."

Undergraduate Communication Science student Rachael Hass has been consulting with Bodnar throughout her academic career. "Dave has been so helpful," says Hass. "I feel like he always listens to me and helps me define my long-term goals. His guidance allows me to make smarter decisions with my scheduling and extracurricular activities that will benefit me in the long run."

Rehabilitation Science student Crystal Alabboud agrees. She says her advisor, Evans, has been an integral part of her academic journey. "We started with a detailed plan, but every time I meet with her, Amy updates the plan to reflect my progress and any new opportunities, ensuring it always aligns with my goals."

According to Taylor, the Advising Center takes a holistic approach to student success, offering programming that empowers both undergraduate and graduate students to become engaged members of their professions and communities.

"We want our Center to be a place where students can interact with each other outside of their academic programs, so we offer workshops and opportunities that focus on career preparation, global experience, health and wellness and more," notes Academic Advisor Jen Gregg.

Student feedback has been positive.

"The SHRS Advising Center is a lot more helpful than any I've ever experienced before," says Bachelor of Science in Health Informatics senior Shayaana Ubhayaratne. "I feel comfortable going there to ask questions or express any concern I might have. They also provide so many extras, like resume reviews and speakers in my field—even snacks!"

To provide continuity and consistency, the Advising Center uses Pathways, a University-wide software platform that simplifies communication between students and staff. It can be used for making appointments, sending out reminders and checking on progress throughout the semester.

"Advisors and coaches use the platform to post summaries of student visits as well as to help students track their goals and next steps," says Taylor. "It is particularly helpful for transfer students, or students transferring from one program to another to have a record of their progress."

The Advising Center welcomes students, both virtually and in person. Advisors meet regularly to discuss strategies for student success.

In addition to finding a welcoming place to meet with their advisors, students also find the Advising Center to be a reliable place to break for snacks.

Although the centralized Advising Center is only a few years old, it is quickly becoming a model for others to follow.

In March 2023, the SHRS advising team presented at Pitt's 2023 Mentoring and Advising Summit and were invited to reprise their presentation in May 2023. In November 2024, they hosted an internal workshop entitled "Best Practices for Graduate Advising" for graduate faculty members.

Taylor says it's exciting to be part of this growing, successful resource for students. She commends her team for their collaborative spirit.

"We have an amazing team who loves to brainstorm new and innovative ways to support our students," explains Kaplan. ■

SHRS advisors attended the National Academic Advising Association (NACADA) Annual Conference in October 2024. From left to right are Dave Bodnar, Hattie McBean, Tiwanda Taylor, Amy Evans and Jen Gregg.

Furnishing Hope.

Mary Murray knows something about hope. For more than 30 years, this Sports Medicine and Nutrition associate professor has been a clinician and educator, providing motivation and encouragement to both her patients and athletic training (AT) students.

But lately, she's found another way to deliver hope. This time to individuals and families who are transitioning out of shelters and into places of their own.

Murray, who was inspired by a Chicago-based nonprofit organization called Humble Design, works with case workers at local shelters including Light of Life Rescue Mission and HEARTH. They connect her to people who are advancing out of their programs and preparing for a fresh start in a new house or apartment.

She collects gently used household goods such as furniture, bedding, decor, cookware, kitchen utensils and other essential items. With the help of her husband, teenage son and daughter, family members and friends, she then goes to work furnishing these new homes.

In many cases, she meets with clients early in the process to get a list of their needs and a sense of what's important to them.

> "These people have come so far," says Murray. "But they're still working on themselves, overcoming their addiction, getting through recovery or over the pain of abuse. Some are on their own, but others are single mothers with children. It means a lot to be able to take away some of the stresses—and burdens—that come with moving forward."

Murray recalls her first client. "When I first walked into her apartment, there was a foam mat on the floor. This is where she slept. Her worldly goods were in black garbage bags."

"We were able to provide her with a bed, dresser, couch, a table and chairs as well as many other things that made her feel comfortable," she continues. "We also gave her a television and a digital antenna that could get 60-plus channels. She was so excited and said that she hadn't had a TV in many years."

Since August 2023, Murray and her helpers have changed the lives of 12 families.

"All of the clients are just so thankful," she continues. "Many are speechless and so overwhelmed that they don't know what to say. One single mom with three young children saw her bedroom and said, 'I love my room so much! It feels so peaceful in here.'"

> Murray accepts their gratitude with humility and grace. "I always had an interest in interior design and decoration," she explains. "This is just a way of channeling my hobby into something a little more meaningful."

She feels fortunate that her family and friends have embraced her mission. Her 90-year-old father, a master carpenter who retired from Pitt after 30 years, helps to repair furniture while her mother sorts and labels bed linens. But Murray also wants her students to understand the value of giving back.

During the Pennsylvania Athletic Trainers' Society week of service this past November, approximately 20 AT students joined her in moving a family into their three-bedroom apartment.

"The students were great," notes Murray. "They unloaded the truck, unpacked boxes and decorated the whole apartment in about three hours! Several asked when they can help again."

Associate Professor Mary Murray amid the items she collects to furnish homes.

Lindsay Blakney, a first-year professional student in the Master of Science in Athletic Training program, heard about Murray's mission during orientation. When the opportunity arose, she jumped at the chance to participate. While she cleaned, organized and set up a play kitchen for the children, she reminisced about her own childhood, playing for hours on end with her siblings in their little play kitchen.

"I kept thinking about the joy that these girls would feel," recalls Blakney. "Knowing that one hour of my day could be spent creating the same kind of happy memories for other little girls made me so grateful to be there."

Murray has always liked to volunteer, but furnishing homes for families is her biggest undertaking to date. It comes with some logistical challenges and personal expenses.

"At first I stored things in our garage," says Murray. "I was picking up items from church flea markets, scrolling through social media for free items and accepting donations from friends who were moving or downsizing. It soon became apparent that we needed a storage unit. Then a bigger one. And of course, we must rent a truck every time we make a delivery."

Murray's initiative continues to grow as family and friends spread the word and other members of the community hop on board.

Her spirit of giving is also taking root in the students who volunteered to help.

"Helping to provide a home for someone who has been in a shelter is a form of health care," explains Blakney. "We are addressing their determinants of health, providing them with safety and warmth and improving their mental health. As providers, I think it is important to be exposed to all of these different determinants of health in order to attempt to understand our patients, their goals and the best treatment for them." ■

AT students decorate children's rooms during the Pennsylvania Athletic Trainers' Society week of service.

Associate Professor Mandy Hampton Wray, former NBA basketball player Michael Kidd-Gilchrist and Seth Tichenor (SLP '13).

It Takes a Village—and a Giant—to Help Children Who Stutter.

Former NBA basketball star Michael Kidd-Gilchrist stands tall as an advocate for children who stutter.

As a person who has stuttered since a very young age, Kidd-Gilchrist was instrumental in securing passage of a new Pennsylvania law, House Bill 2268, sponsored by State Representative Brandon Markosek. Passed on Oct. 16, 2024, the new bill guarantees private insurance coverage of unlimited stuttering therapy for children from 2 to 6 years of age.

There is no limit to the amount of therapy a child can receive, and there is no need for a specific medical diagnosis.

Associate Professor Mandy Hampton Wray, Department of Communication Science and Disorders (CSD), says this legislation is long overdue.

> "While there is no cure for stuttering, providing young children with stuttering therapy is a proven way to help them learn how to manage their stuttering and help them to become confident communicators," explains Hampton Wray.

"Children who stutter may feel isolated," she continues. "They may be bullied or teased and that can result in anxiety and a reluctance to speak sometimes. Through stuttering therapy, we work to give them the tools they need so they won't have to hide their stuttering. They can be themselves."

ADVOCACY AND EDUCATION: A WINNING COMBINATION.

In 2021, Kidd-Gilchrist created Change & Impact, a stuttering initiative with a mission to improve access to health care and expand services and resources for those who stutter. In addition to lobbying for legislation, he frequently visits universities, including the University of Pittsburgh, to promote the need for more advanced education about how to address stuttering in children.

On Nov. 15, 2024, he visited Pitt as a special guest during a professional development day for school-based speech-language pathologists (SLPs). He spoke about the new bill and the importance of providing stuttering therapy to young children.

Among those in attendance were SLPs from Pittsburgh Public Schools, the Allegheny Intermediate Unit and other local school districts. They received a full day of training on best practices in stuttering from Hampton Wray and alumnus Seth Tichenor (SLP '13), assistant professor at Duquesne University's Department of Speech-Language Pathology.

According to Hampton Wray, many SLPs do not feel adequately prepared to work with people who stutter. The professional development day expanded their knowledge of stuttering therapy and showed them how to integrate it into their caseloads.

"There used to be a focus on 'fixing' children who stutter," says Hampton Wray. "In our professional development day, we helped the SLPs understand that it's okay for a child to stutter."

CHANGING THE MINDSET.

Hampton Wray says this is a big shift in mindset. "We went from 'fixing' the problem to supporting the stuttering child. We do not want children to develop speaking habits where they avoid words, speaking situations or do not say what they want to say for fear of stuttering. Instead, we're working with children and adults to help them develop the confidence to say what they want to say when they want to say it, even if they stutter when they say it. Their words and their voice are important. They can still be heard."

Tichenor leads a discussion about stuttering with school-based SLPs.

"Effective therapy for stuttering is all about empowerment," says Tichenor. "It helps the child learn they are not alone and they aren't different. It teaches them that they don't have to internalize the negative thoughts and feelings they're experiencing—and helps them understand what they can actually control versus what they cannot control."

"When we teach kids to advocate for themselves, stuttering has less impact on their daily lives," adds Hampton Wray.

By working with individuals like Kidd-Gilchrist and his Change & Impact initiative, and by continuing to educate current and future SLPs, Hampton Wray hopes to expand access to excellent stuttering therapy for everyone who needs it.

"Although society often values fluent speech, we are working to help society understand stuttering," Hampton Wray continues. "Stuttering is simply the way some people talk, and not a reflection of any other personality traits. The world is filled with phenomenal people who stutter, and stuttering doesn't have to be a barrier for any goals or interests a person may have. Working with Michael Kidd-Gilchrist helps people see that stutterers can do great things, including win championships and play in the NBA." ■

Fast Facts

Nearly
70 million people
in the world stutter.

Approximately
3 million Americans stutter.

Most children start stuttering between
2 and 5 years of age.

Stuttering is genetically based.

Nearly 2 out of 3 people who stutter have a family member who stutters.

Watch the video of Michael Kidd-Gilchrist at Pitt speaking to local school-based SLPs.

Challenges. Choices. Confidence.

The Journey of a Hybrid DPT Student.

The sign on the French door of her office read, "Please be quiet. Mommy is taking a final exam." Yet kids giggled, the dog scratched at the window and Elena Luna-Vazquez's husband blew her kisses from the other side of the glass.

This is the life of a determined hybrid Doctor of Physical Therapy (DPT) student.

"Sometimes it was a bit crazy," admits Luna-Vazquez, a Fort Worth, Texas, resident who graduated from the program in December 2024. "My husband is retired from the military and we have a blended family of four children and two dogs. Everyone's on their own schedule but they were all supportive of me earning this degree."

"Whether I had to study, take a quiz, practice some new skills or travel to Pittsburgh for an immersion, they all pulled together to help me do what I needed to do and keep our household running," she continues.

A career in physical therapy (PT) has always been her goal. In fact, Luna-Vazquez received an undergraduate PT degree in Mexico more than 10 years ago but only practiced as a physical therapist for two years because her family moved to South Korea. When she knew they were coming to the United States, she once again started thinking about her career.

> "I applied to nearly 20 PT schools but the program at Pitt was my first choice," she recalls. "Its reputation was excellent and I had a feeling it would challenge me to be my best."

In Mexico, Luna-Vazquez learned many PT skills but was not trained in all the evaluation skills or evidence-based practices that are at the core of the Pitt DPT program.

"At Pitt I knew I would be well prepared in every aspect of physical therapy," she continues. "We would not only learn how the body works and how to evaluate patients, but also how to use evidence-based research to advance patient care. My hope is to pursue further education to help our profession with reimbursement and insurance issues that affect our ability to provide excellent patient care."

"When I was accepted into the hybrid DPT program, I had so many questions!" Luna-Vazquez continues. "I wasn't sure how it would work not being on campus all the time. It didn't take long to realize it was the best thing I could have ever done!"

> "She says her cohort connected in a way that she never thought possible. "When we came together for our first immersion, it was like a big family reunion!"

Luna-Vazquez enjoyed the way everyone recognized each other from their online sessions, and how the faculty welcomed them with fun activities, including an ice breaker that took groups of students in search of places all over Pittsburgh.

Elena Luna-Vazquez (DPT '24) with Professor and DPT Hybrid Program Director Kim Nixon-Cave.

Left: Homework time for Luna-Vazquez and her daughters. Center: Luna-Vazquez practices making a hand splint on her husband, Ozzie, as her dog looks on. Right: Luna-Vazquez celebrates her hard work during graduation.

Professor and DPT Hybrid Program Director Kim Nixon-Cave describes her as an excellent student. "Elena was very supportive of her classmates who were struggling with course material," explains Nixon-Cave. "She was always willing to step in and assist wherever she was needed."

Of course there were challenges along the way for Luna-Vazquez. Nixon-Cave elaborates: "Even prior to applying to the program, Elena had to complete some prerequisites. The challenge for her was that she didn't speak English. So, in true Elena style she taught herself English and began taking classes to be able to apply to a DPT program."

"From that day on, she excelled," Nixon-Cave adds.

Clinical placements close to her home helped Luna-Vazquez gain real-world experience without leaving her family for extended periods of time.

This busy mom was inspired by her final 15-week clinical rotation at a private PT facility where she worked with patients with neurological conditions, such as stroke and traumatic brain injuries, as well as many geriatric issues such as Parkinson's disease.

"I truly enjoyed working with that population," states Luna-Vazquez. "It made me start thinking about my long-term plans and perhaps becoming board certified in both orthopedic and neurological PT."

Luna-Vazquez credits Nixon-Cave and her Leadership and Professional Development course with giving her the foresight to create long-term goals.

"Dr. Nixon-Cave had such a huge impact on me," admits Luna-Vazquez. "When she asked us to create a five- and 10-year career plan, it seemed daunting. But along the way, I wondered if I had the potential to take on a leadership role in our profession."

Luna-Vazquez advocated for herself and was invited to join the American Physical Therapy Association (APTA) Leadership Scholars program.

Now, as a student delegate from Texas, she is connecting with practicing PTs who are working toward advancing the profession and is creating a project that will be presented at the 2025 APTA Leadership Congress in Washington, D.C. She hopes to continue on as a professional delegate once she obtains her PT license.

"Part of what makes this program outstanding is the way it pairs scholars with mentors who are both sensei and sounding boards for the participants," offers Nixon-Cave. "Scholars often point to these relationships as among the highlights of their training, but mentors are also quick to point out that the benefits flow both ways."

Nixon-Cave notes that this is the first year that new graduates had the opportunity to apply and participate in the program. "I see Elena as a future leader in the PT profession and the APTA. She has the potential to hold leadership positions that will shape the profession. Elena's story is a remarkable story and should be an example that if you set goals and focus as well as work hard you can achieve anything." ■

noteworthy

TARA HANKIN TAPPED AS FIRST ASSOCIATE DEAN FOR CLINICAL PARTNERSHIPS

SHRS prides itself on providing students with excellent classroom education, backed by state-of-the-science research and clinical practice preparation.

But as the number of online and hybrid programs grow, so do the challenges of finding high-caliber clinical partners.

Enter Tara Hankin in her new role as associate dean for Clinical Partnerships.

Since July 1, 2024, Hankin has been dedicated to expanding the SHRS network of clinical providers, designing and implementing an infrastructure to support this growth and assuring the quality of clinical sites, both in Pittsburgh and around the country.

Her academic background in physical therapy and her work in clinical environments, including serving several years with the UPMC Centers for Rehabilitation Services (now UPMC Rehabilitation Institute), prepared her to step confidently into the role.

"For many years, our residential program model allowed us to train students through our partnership with UPMC and other local health care providers," explains Hankin. "Now we are committed to supporting workforce development in under-resourced communities—in places where our online and hybrid students live."

"We need to be strategic in how and where we find clinical partners," she continues. "Our goal is to develop well-trained health care providers who can eventually practice in their hometown areas."

Hankin says it's important to consider the clinical needs of all programs, including the accreditation requirements, and to improve efficiencies within SHRS. She credits Shelbey Rojik, director of Clinical Placement Operations, and Joy Tomasic, contracts administrator, with helping to expand clinical education efforts.

"I am excited to take on this new role," says Hankin. "My vision is to cultivate robust, impactful relationships with health systems and clinical organizations, drive innovation and foster a supportive environment where our students can thrive." ■

Scan the code if you're interested in helping to shape future health care providers by becoming a clinical instructor.

CHRISTINA M. DAVIS STEPS UP AS CHAIR, DEPARTMENT OF PHYSICIAN ASSISTANT STUDIES

Assistant Professor Christina M. Davis is excited to assume her new role as chair of the Department of Physician Assistant (PA) Studies. As interim chair for 17 months, she understands the importance of providing students with excellence and innovation in education.

SHRS leadership made the announcement in October 2024. Former SHRS Dean Anthony Delitto said, "Davis has performed brilliantly as interim chair, navigating the successful accreditation of both the Master of Science in PA Studies hybrid and on-campus programs."

"My goal is to continue to foster an inclusive, innovative learning environment while prioritizing collaboration, faculty and staff development, and the expansion of research," says Davis.

Expanding research is one of Davis' top priorities.

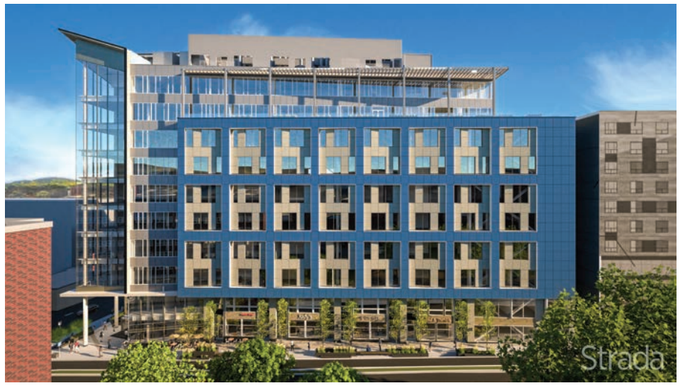
"It is important for our department to engage in and coordinate research that focuses on the PA profession and the science, delivery and administration of health care, all of which align with our department's mission and vision," explains Davis.

In addition, she is committed to strengthening and growing external partnerships, enriching clinical training opportunities and increasing educational offerings within the department.

Prior to her role as the department's interim chair, Davis was vice chair for Administration and director of Curriculum for the PA Studies Hybrid program. With more than 20 years of clinical experience working in a variety of health care settings, Davis still practices in urgent care.

"I am eager to work alongside the great leaders and teams at the University, school and department levels to create an environment that will empower our department to have a meaningful impact on PA education and health care delivery." ■

Fifth and Halket Building Update



This time next year, the future of SHRS will become reality in the new Fifth and Halket building. Students, staff and faculty from most of SHRS' 30+ programs will relocate to six brand new floors with state-of-the-art clinical training facilities, classrooms, offices and meeting spaces. For the first time, SHRS will be housed in a building that has been specifically and strategically designed to meet our immediate and future needs.

The building is still on track to be completed in December 2025. Programs and offices that are currently spread across three SHRS buildings in Oakland will come together to create an unprecedented interprofessional learning and working environment. All SHRS students will find a new home to thrive in with increased collaboration and educational opportunities. Students in programs at other SHRS locations such as Bridgeside Point, Bakery Square, the NMRL and Southside Works Box Office will also be able to attend interprofessional classes, lectures and special events.

"With each day and every update on the progress of the building, our excitement builds," says Interim Dean David C. Beck. "As we continue to emerge as the preeminent allied health sciences school of tomorrow, this space will advance all members of the SHRS community as we increasingly collaborate and learn together. Most importantly, the design team and SHRS leaders have been committed to making this the best space possible for our students. I am most excited to see how it enhances their experiences—from the classrooms to their lounge spaces, and everywhere in between." ■

Top: Interim Dean David C. Beck, Associate Dean of Business and Finance Christine Jackson, Executive Administrator Amy Morgan, Marketing Director Caitlin Pugh, Director of Space Management and Planning Gregory Smith, and Project Manager Tony Caicco review plans for the floorspace during a tour in January 2025.

Bottom: Student spaces maximize daylight, offer a diversity of seating options and provide meeting and huddle rooms.

VISIT THE SHRS WEBSITE TO:

- Stay up to date on the latest building progress
- Learn more about the detailed floor plans and where programs, labs, classrooms and offices will be located
- View artistic renderings of the classrooms and common spaces and a photo gallery of the construction progress
- Make a long-lasting impact with your gift contribution

Images courtesy of Perkins & Will & Strada are not final and are subject to change.

noteworthy

WELCOME, TIM SUCHOMEL. HELLO, NEW OPPORTUNITIES FOR SPORTS SCIENCE STUDENTS.

When Tim Suchomel arrived in Pittsburgh in August 2024, he brought a competitive spirit and a passion for improving the performance of athletes. As associate professor and director of the Master of Science in Sports Science program, Department of Sports Medicine and Nutrition, he is poised for success.

"As an undergraduate, I was interested in becoming a strength and conditioning coach," says Suchomel. "But during an internship, I fell in love with strength and conditioning research. That experience opened my eyes to graduate school."

"It became apparent that the blending of science and application was something I wanted to do, so I pursued my PhD," he continues.

Now, as program director, Suchomel welcomes the opportunity to grow his own professional interests while expanding opportunities for his students.

"The combination of the people we have here, the incredible resources of the University of Pittsburgh, and the number of professional and college sports teams in the area make this program unique," adds Suchomel.

In the near future he wants to home in on what's going well in the Sports Science program—such as data analytics—while adding new courses and opportunities for students to shape their own experiences with more internships and research projects.

Down the road, he sees great things happening. "I can imagine a day when the program is expanded to include multiple tracks, perhaps one for data analytics and another for strength and conditioning."

He adds, "I believe that we can make Pitt the mecca for sports science education." ■

Suchomel works on strength and conditioning with Chloe Minas (MS '24), who is now a professional soccer player in Sweden.

INTRODUCING THE DOCTOR OF MEDICAL SCIENCE DEGREE: NEW NAME. SAME DEGREE OF EXCELLENCE.

In the past, when practicing physician assistants (PAs) wanted to advance their careers, they frequently turned to the Doctor of Physician Assistant Studies (DPAS) degree at SHRS. Now, that same innovative program is known as the Doctor of Medical Science (DMSc)—a name that more accurately reflects the extensive academic and clinical knowledge associated with this advanced degree as well as the graduate's potential to transform health care.

The name change came after wide-ranging conversations with other professionals and PA leaders around the country. According to Christina M. Davis, chair and assistant professor, Department of Physician Assistant Studies, nearly all existing programs and those planned for the future award the DMSc degree. "The name change of the Pitt program will provide our graduates with a more recognizable degree that aligns with the direction of our profession."

She adds that this change affects the name and credential only, and the program will continue to deliver the same excellent curriculum.

Like the former DPAS, the DMSc program is an affordable online program that can be completed in as little as one year, allowing a desirable work-life balance that accommodates increasingly busy schedules. It provides advanced training in health care leadership and best practices. The highlight of the program is a quality improvement project that implements real-world changes that positively impact patient care.

For more information about the DMSc program, reach out to the SHRS enrollment specialist at PittDMSc@shrs.pitt.edu. ■

University of Pittsburgh
School of Health and Rehabilitation Sciences
4033 Forbes Tower
Pittsburgh, PA 15260

Change Service Requested

Nonprofit Org.
U.S. Postage
PAID
Pittsburgh, PA
Permit No. 511

DAY OF GIVING
2.25.25
UNIVERSITY OF PITTSBURGH

Thank you for participating in this year's Pitt Day of Giving! Check out our numbers:

12% over our donor goal

#6 "Level Up" Leaderboard

#5 "Raise the Bar" Challenge

25% increase in donors from 2024

367 donors

$41,000 raised

These rankings entitle our school to receive additional challenge funds from the University!

Your gift provides extra resources to programs, research and projects that might not otherwise be possible. At SHRS, gifts help to bridge financial gaps and support initiatives that benefit our school community through scholarships, student group activities, community outreach events and more. The opportunities to make a difference are boundless.

If you missed this year's Day of Giving, you can still make an impact! Learn about ways to give here: