College of Applied Health Sciences
UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

MOVING FORWARD

AHS YEAR IN REVIEW 2020

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AND ONCE THE STORM IS OVER, YOU WON’T REMEMBER HOW YOU MADE IT THROUGH, HOW YOU MANAGED TO SURVIVE. YOU WON’T EVEN BE SURE, WHETHER THE STORM IS REALLY OVER. BUT ONE THING IS CERTAIN. WHEN YOU COME OUT OF THE STORM, YOU WON’T BE THE SAME PERSON WHO WALKED IN. THAT’S WHAT THIS STORM’S ALL ABOUT.

HARUKI MURAKAMI, KAFKA ON THE SHORE

MESSAGE FROM THE DEAN

Welcome to this issue of *Moving Forward*, my fifth as dean of the College of Applied Health Sciences. I don’t believe I have ever been so challenged by a year—as an educator, an administrator, and a human being. Not only were we struggling to maintain both health and a sense of normalcy in the midst of a worldwide pandemic, but we also were horrified by far too many incidents of racial injustice. We saw the year come to a chaotic end as divisive forces sought to disenfranchise millions of voters and overturn the legitimate results of a free election, and 2021 got off to a chaotic start as those forces attacked the very seat of our democracy.

During this protracted period of high anxiety, I released several messages reaffirming this college’s unwavering commitment to equity, fairness, and inclusion, and I seize this opportunity to emphasize again: the College of Applied Health Sciences will not support intolerance. In our teaching, our research, and our community outreach, we have stood and will continue to stand on the side of social justice, opportunity, and access for all. We must have faith in a brighter future, and dedicate ourselves to making that future possible.

Despite the many obstacles we encountered last year, I am pleased to report that we successfully completed a remote spring semester and a hybrid fall semester because our faculty, staff, and students rose to the challenge and made the best of every difficult situation. Our alumni and donors played an important role in this difficult but successful year as well, and you will read about some of their contributions within these pages. Whether it was providing students with virtual opportunities to complete required internships or providing funds to keep longstanding in-person programs viable in a virtual world, our supporters came out in force to make 2020 an outstanding year.

We moved many of our traditional fall events online, including the Sapora Symposium and the Chez Veterans Center’s annual Veterans Day event. We also initiated a new Fall Lecture Series to give alumni and friends an opportunity to hear about the work of scholars throughout the college. All of our scholars continued their critical research, publishing important papers and receiving significant funding to support their work. We migrated the clinical services provided by our Department of Speech and Hearing Science to the online environment. You will read about all of these developments in this issue of *Moving Forward*.

We also will introduce you to the individuals who joined our faculty in the fall, as well as a student, now alumnus, who came to our attention through his extracurricular activities. Community Health undergraduate Drake Materre has used his skills in activism and organizing to address pressing issues related to social justice and public health in Chicago and Urbana-Champaign.

I am confident that in the months ahead, the light at the end of the tunnel will get brighter and brighter. While we are anxious to put 2020 behind us, let us not forget the lessons we have learned: that we can be resilient and adapt to difficult circumstances, that we should treasure the people who bring meaning and joy to our lives, and that we have much for which to be grateful—our wonderful AHS family, for example. Thank you for your ongoing interest in and support for the college!

Sincerely,

Cheryl Hanley-Maxwell

Dr. Cheryl Hanley-Maxwell
Dean, College of Applied Health Sciences

THE YEAR THAT ALMOST WASN'T

WHEN PEOPLE AROUND THE WORLD RANG IN THE YEAR 2020, FEW HAD ANY IDEA THAT AN OUTBREAK OF THE CORONAVIRUS WOULD SOON TURN INTO A GLOBAL PANDEMIC. MORE THAN 100 COUNTRIES INSTITUTED EITHER FULL OR PARTIAL LOCKDOWNS BY THE END OF MARCH. THIRTY STATES IN THE UNITED STATES WERE UNDER MANDATORY STAY-AT-HOME ORDERS BY THAT TIME, INCLUDING ILLINOIS.

Like many universities, the University of Illinois quickly had to move all instruction to online delivery systems. Students and staff had to adjust to learning and working remotely. Many faculty were navigating the waters of online instruction for the first time.

It was a challenging semester. In addition to moving classes online, faculty and staff in the College of Applied Health Sciences had to find meaningful alternatives for students who suddenly found themselves terminated from internships and other field experiences required for graduation. The first months of the pandemic were characterized by uncertainty, fear, experimentation, and innovation.

Less than one month after the campus shut down, University of Illinois at Urbana-Champaign Chancellor Robert Jones convened the COVID-19 Executive Steering Committee on Return to On-Campus Operations. The steering committee oversaw task forces on academics, university life, community and public engagement, finance and operations, human resources, research and scholarship, and coronavirus testing and tracking, each charged with determining what was needed to reopen the University in the fall. The overall goal was, Chancellor Jones said, "to ensure a safe, careful and deliberate transition back to on-campus operations."

And students did return to campus in August to engage in a hybrid of in-person and online classes, with instruction reverting once again to fully online after the fall Thanksgiving break. Large social gatherings were prohibited. Everyone on campus was required to follow Centers for Disease Control guidelines on masks, social distancing, hand washing, and other protective measures. Students, faculty, and staff seeking access to campus buildings had to take the effective saliva test developed by University researchers twice a week, and show negative results to gain entrance.

Things went well, for the most part. More than 1 million tests were administered, leading to a campus positivity rate of less than half a percent. AHS students were among thousands who successfully concluded what one can only hope will be the most difficult year they'll ever experience. With new, more contagious strains of the virus taking hold globally and nationally, it is anyone's guess as to what a look back on 2021 will entail. For now, however, let's take a look at some of the ways AHS coped with 2020.

ONLINE EDUCATION TAKES ON NEW IMPORTANCE

When Dr. Sara Shrader was hired in January as the Director of Online Learning in the College of Applied Health Sciences, her mission was to coordinate the online offerings of units throughout the College and to develop a strategy for building a portfolio that would include high-quality, fully online degree and certificate programs.

She'd barely gotten started when the coronavirus shut the campus down in March. "Suddenly everything hit the fan and we had to scramble to figure things out and get everyone and everything online," Dr. Shrader said. She has nothing but praise for AHS faculty and instructional staff, who showed a strong commitment to creating a quality online experience for students even when their initial views of online teaching may have been negative. "Face-to-face just feels more organic to some people, more natural," she said. "They see online teaching as a lesser modality and don't think it's as good. Part of my job is showing them that it isn't less; it's just different."

The pandemic gave everyone the opportunity to experience the positives of online teaching. With that experience, and an entire summer to plan and prepare, the fall semester went smoothly. Instructors and students were well-supported in the hybrid model of in-person and remote classes by campus teams, and AHS invested in additional resources to support eLearning by hiring an eLearning specialist and two instructional media specialists. Dr. Shrader and her team even had time for refocusing on the future and a cohesive strategic plan for online learning in a post-pandemic world.

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>
> DR. SARA SHRADER

While she believes students will eagerly embrace being back in the classroom with instructors and peers when they are fully able to return, she anticipates that they will continue to expect much of the flexibility they've become accustomed to while taking courses remotely. "Students come to higher education with vast and deep technology experiences; they navigate the world through technology," she said. "I think instructors should be encouraged to consider ways of leveraging technology to help students critically engage with content."

Along with a potential long-term impact on models of learning for traditional students, Dr. Shrader thinks the pandemic has illuminated the need for professional development and continuing education for non-traditional students. "The pandemic has caused uncertainty for many in the workforce, and I think people will be looking for opportunities to enhance existing skills or learn new ones," she said. This, in turn, presents an opportunity for AHS to address pressing economic and workforce needs for the State of Illinois, in her opinion, contributing to the broader campus mission of lifelong learning.

MEET DR. SHRADER

Dr. Sara Shrader joined the College of Applied Health Sciences from the University of Illinois Center for Innovation in Teaching and Learning, where she was the assistant director of educational research. Prior to that, she was an eLearning specialist with ATLAS (Applied Technologies for Learning in the Arts and Sciences), a unit within the College of Liberal Arts and Sciences. Dr. Shrader completed her PhD in Education Policy, Organization, and Leadership at Illinois. She also has a Master of Education degree with a focus on curriculum and instruction from the University of Missouri-Columbia. Her undergraduate degree in Political Science and History also is from Illinois.

DEPARTMENTS RALLY TO SAVE REQUIRED FIELD EXPERIENCES

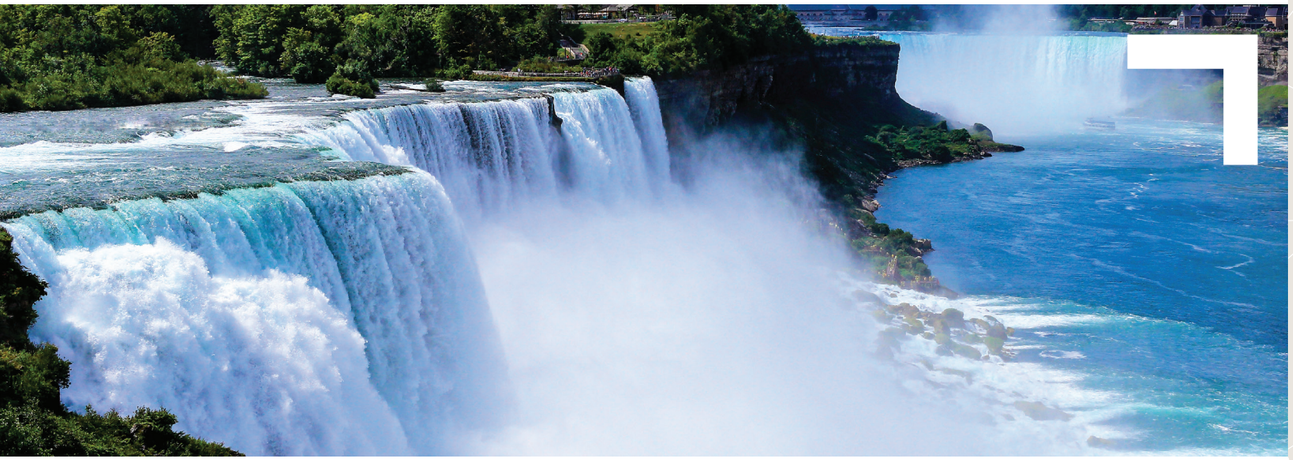
The coronavirus severely impacted our students' ability to complete the field experiences—such as internships, applied practice, and clinical work—that are required by degree programs in all three departments in AHS. Our faculty and staff found creative ways to help students stay on track to graduation while gaining valuable real-world experience.

RST TURNS TO ALUMNI

When the coronavirus shut the state down in March, a number of undergraduates, many in their final semester, suddenly found themselves terminated from internships required to complete their degrees. It quickly became clear that summer internships were in jeopardy as well. Recognizing the need for swift remedial action, Dr. Mike Raycraft, clinical associate professor, and Dr. Carla Santos, head of the department, tapped into RST's extensive network of alumni to round up "clients" who would work with students on real-life problems via Zoom. In about a week, they had support from alumni working with professional sports teams, marketing agencies, tourist destinations, and nonprofit organizations around the country.

"The program was definitely a response to COVID," Dr. Raycraft said, "but in retrospect, our students had a more diverse experience, more access to an amazing RST network, and more of an opportunity to make an immediate impact than they might have had in a traditional internship program."

Instead of working individually with just one organization for an entire semester, students worked in teams of three with three different organizations. December graduate Amelia Wagner was set to work over the summer with the community relations division of the St. Louis Cardinals. Instead, she and her teammates completed projects for the Chicago Bears, Paragon Marketing Group, and the Niagara Region of New York State Office of Parks, Recreation, and Historic Preservation. "The work assigned to our group by each organization was relevant, hands-on, and incredibly useful as we prepare to enter the workforce," she said. "We had the opportunity to highlight our research and analytic skills, as well as our creative and problem-solving skills."



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>
> AMELIA WAGNER, RST STUDENT

Other organizations included the international development office of Princeton University, the Chicago Bulls, the Oklahoma City Thunder, Cunningham Children's Home, and the Chicago White Sox. RST alumnus Thomas Siwek, currently a service executive with the Chicago Bulls, said he wanted to give back to current students because of his own outstanding experience with the program, and he's glad he got involved. "The students were very professional and on top of their game," he said. "They came up with ideas that we're currently pursuing or hope to implement in the near future."

Dr. Raycraft is justifiably proud of the program. "Our students did an amazing job adapting to the current industry environment, and our alumni were incredibly generous with their time and talent," he said. Even when more traditional internships return, he believes this new model can help students who are still defining their career interests by engaging with a cross-section of RST organizations.

BUT COVID-19 HAD OTHER PLANS

OPPORTUNITIES REVISED, BUT NOT LOST

By Vincent Lara-Cinisomo, Media Relations/Editorial Specialist
College of Applied Health Sciences

Students in the Master of Public Health program saw their Applied Practice Experiences (APE) upended over the summer because of the COVID-19 pandemic. But when they delivered their final reports during an August 7 Zoom call with MPH interim director Justine Kaplan, they spoke of perseverance, patience, and making the most of their revamped opportunities.

Stacia Simmons expected to contribute to the Champaign-Urbana Public Health Department's efforts to reduce the risk of HIV infection and prevent opioid overdose. Instead, she worked remotely as a COVID-19 contact tracer, a role she also filled with the Howard Brown Health Center in Chicago. Although she was disappointed not to be working on site, she found positives in her new roles. "My experience was amazing in that the work that I did directly aligns with my career interest, which is infectious disease prevention and treatment," she said. "Being able to gain firsthand public health experience while also doing my part to help stop the spread of COVID-19 was wonderful." Working with two different health agencies targeting two different populations also allowed her to experience different approaches to public health, and she called the dual internship "a blessing."

Shivani Shah worked as a research intern with two studies underway in Northwestern University's Feinberg School of Medicine—the South Asian Heart Lifestyle Intervention (SAHELI) and South Asians Active Together (SAATH) studies. She was expecting to be involved in recruiting participants for the studies and doing educational outreach. She instead was involved in planning COVID-related modifications to recruitment and other aspects of the research. "I learned a lot more about the extensive planning that goes into a robust research study," she said. "I saw a completely new side of organizational management, which is meaningful." Although she was initially hesitant to do her APE in a research setting rather than an organization with more direct community contact, she came to appreciate the important contributions research makes to both the advancement of knowledge and the health of a community. She now looks forward to continuing her involvement with community-based research in her career.

Edson Flores also assisted with research for his APE, conducting and analyzing the results of bilingual interviews meant to validate and strengthen a survey to be used in a study of Mexican immigrants in the Midwest. He felt the experience tapped into the knowledge and skills he gained through the MPH program. As he plans to pursue an academic career, he also felt his APE provided good preparation for a PhD program.

While the APE experiences of many MPH students took unusual turns because of the coronavirus pandemic, Edson doesn't think that's necessarily a bad thing. "One thing this pandemic has taught me is that there are alternative ways to produce the same work," he said. "My advice to future students who may find themselves with disrupted APEs is to be creative."

SHS STUDENTS GAIN TELEPRACTICE EXPERIENCE

Clarion Mendes, clinical assistant professor in the Department of Speech and Hearing Science, recalls the period in March following Governor Pritzker's stay-at-home order as one of dizzying activity. "In less than 10 days, we had to completely upend our service delivery model for speech language pathology and audiology," she said. "We're a training program, so it is our duty and responsibility to provide opportunities for clinical experiences to our students."

The answer was telehealth practice, the use of virtual platforms for clinical sessions. Telepractice is not a new concept. Even in the absence of a pandemic, it is a rapidly growing area of healthcare, and many telehealth training programs have been developed in speech-language pathology—for licensed clinicians. Considered a more advanced clinical skill than in-person evaluations and interventions, it typically is not addressed in speech and hearing science graduate programs. In fact, up to the time of the pandemic, the State of Illinois did not allow students to participate in telepractice models of service delivery. This presented a significant problem, since students are required to have at least 400 hours of clinical experience by the American Speech-Language-Hearing Association (ASHA), the certifying body for clinicians. As a result of an intensive effort by members of the SHS faculty and staff, Illinois passed a variance that allowed for clinical supervisors to be on site but not necessarily in the same room during therapy sessions.

In order to make telepractice work for speech-language pathology clients, clinical staff set students up with software to facilitate online sessions, digital activities to replace the tangible three-dimensional objects typically used in in-person sessions, and high-quality digital assessment tools. Alumni helped as well. "When we were starting this initiative and unsure of where it was going, alumni were our biggest cheerleaders," Ms. Mendes said. "In some cases, they were individuals who could no longer see their clients because of shutdowns, and they sent us a lot of referrals."

It was an enormous undertaking, but one that had significant benefits. The clinic was able to serve a more geographically diverse group of clients, students were able to observe the client in a natural environment rather than a clinical setting, and attendance was better.

Ms. Mendes also worked with SHS professor Keiko Ishikawa to develop an innovative training module on telepractice for a fall semester class on the assessment and management of voice disorders. Their approach combines traditional lectures about telepractice, including the legal, regulatory, and privacy issues involved, with the use of standardized clients—students of voice in the School of Music and students in the Acting Program in the College of Fine and Applied Arts who were formally trained to simulate voice disorders. This approach enabled SLP students to sharpen their telepractice skills before interacting with actual clients.

Clinical assistant professor Amanda Lawrence said audiology students also were given a lot of simulation work while the clinic was shut down. Simulations provided students with the opportunity to focus on more technical and difficult concepts in audiology. They provided Dr. Lawrence with a clearer picture of what students were and were not grasping and how to guide them toward deeper understanding. While audiology does not lend itself as well to telepractice because of the significant amount of sophisticated equipment and precise measurement that is needed to diagnose disorders, she said it did provide a way to stay in contact with and support clients with counseling, and they were able to troubleshoot problems with hearing aids remotely as well. Perhaps unsurprisingly, coronavirus-related safety measures led to an increased demand for audiology services. "If you do not hear well, everyone wearing a mask is problematic because you can't see someone's face while you're talking with them," she said. "Some people thought they were doing okay until everyone started covering their faces."

Despite the challenges posed by telepractice, both Clarion Mendes and Amanda Lawrence were impressed by and proud of their graduate students for their dedication to getting the most out of the new opportunities created by the pandemic. They also see the role for telepractice in graduate education extending far into the future.

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>
> CLARION MENDES

FLEXIBILITY + CREATIVITY = CRISIS SOLVED

More than 150 undergraduates in the Department of Kinesiology and Community Health were engaged in required field experiences when the pandemic hit. While some were able to continue working remotely with their sites, other positions were terminated as the institutions that traditionally mentor students in these programs—hospitals, clinics, and other healthcare facilities—shifted their attention and resources to addressing COVID-19. Advisors were challenged with finding workable alternatives that kept students on track toward graduation while providing meaningful work.

Interdisciplinary Health Sciences academic advisor Beth Frasca and teaching assistant professor Kristin DiFilippo focused on creating real-life alternatives that gave students both insight about the current environment as well as an historical perspective. Spring semester students were charged with comparing health messages and stigma of pandemics past and present, creating podcasts on health topics, or conducting in-depth historical analyses of health policies, processes, or resources.

In the fall, many students were able to secure traditional, albeit virtual, field experiences. Others took advantage of an innovative approach the advisors developed in response to the ongoing crisis. “We started thinking about ways we could form partnerships to do class-based projects rather than having sites mentor our students individually,” Ms. Frasca said. About half of the students worked in teams on the development of a virtual disability awareness event for the Division of Disability Resources and Educational Services and an anti-ageism campaign for the Center on Health, Aging, and Disability. “Our students have been wonderful in being flexible with us and rolling with it,” Ms. Frasca said. “The best part of this is that Kristin and I had to be creative. I think in the long run, it’s going to make our field experience better and give us new opportunities in the future.”

> “WE STARTED THINKING OF WAYS WE COULD FORM PARTNERSHIPS TO DO CLASS-BASED PROJECTS RATHER THAN HAVING SITES MENTOR STUDENTS INDIVIDUALLY.
>
> BETH FRASCA

Community Health internship coordinator and teaching assistant professor Brynn Adamson shared the view that changes implemented to help students during the pandemic could have a long-term, positive impact on the internship requirement. Students whose internships were terminated in the spring were offered a course alternative, which included intensive training modules focused on relevant public health topics such as coronavirus-related contact tracing.

Although restrictions related to the pandemic stretched beyond the spring semester, many of the 40 students pursuing internships in the summer were able to find off-campus organizations willing to work with them remotely. “That really opened up a lot of opportunities,” Dr. Adamson said. “We had students working with organizations in Chicago, Kansas, and California, and the quality of the internships was really good.”

In the fall, she introduced another option that further expanded internship opportunities—working with organizations that cannot offer traditional, full-semester internships but could use help with individual projects. “This task-based approach gave us flexibility,” she said. “Participating organizations received much-needed help, and students gained the practical professional experience they need to prepare for entering the work force themselves.”

Like her colleagues in I-Health, Dr. Adamson thinks the pandemic served as a springboard for innovation. Students appreciated the sense of control the various options gave them in a time of uncertainty, and she’s hoping that some of the changes made in response to the coronavirus will endure when that uncertainty is alleviated.

BETH FRASCA

KRISTIN DIFILIPPO

BRYNN ADAMSON

ZOOM SAVES FALL EVENTS

The ongoing coronavirus pandemic cast an uncertain shadow over traditional AHS fall events such as the Sapora Symposium and the Chez Veterans Center's Veterans Day event. While canceling the events was briefly considered, faculty and staff ultimately decided that Zoom provided a proven platform for holding the events in a virtual space. Even Homecoming occurred online this year, although AHS postponed its annual recognition of outstanding alumni due to health and safety concerns. "We'll return to honoring recipients of the AHS Distinguished Alumni award and the Harold Scharper Award in 2021, when we can give them the celebration they deserve," said AHS Dean Cheryl Hanley-Maxwell.

The fall events that did take place were well received and well attended. We begin with the Sapora Symposium.

SAPORA SYMPOSIUM FOCUSES ON SOCIAL JUSTICE

After Jacob Blake, an African American man, was shot and paralyzed by a white police officer in Kenosha, Wisconsin, the Milwaukee Bucks famously chose not to take the court for a scheduled playoff game in protest. On November 11, Arvind Gopalratnam, vice president of corporate social responsibility for the Bucks, was a featured presenter of the 2020 Sapora Symposium, sponsored by the Department of Recreation, Sport and Tourism.

Joined by representatives of the St. Louis Cardinals to talk about professional sports' role in promoting social justice, Mr. Gopalratnam explained that the Bucks have long been committed to a variety of social responsibility efforts focused on health and wellness, education, civic engagement, community betterment, and mentoring. "But we were asking ourselves, how do we use our microphone to be leaders, to speak out on issues facing our community?" he said. As a minority community member, he said social justice is a personal issue, but it's also an issue for the organization. And it's led the Bucks to participating in conversations that are not traditional conversations in professional sports community relations programs and to going to parts of the community that are often overlooked and underappreciated.

MILWAUKEE BUCKS

In focusing on the relationship between sport and social justice, the 18th annual symposium perfectly reflected the overall mission of RST, said department head Carla Santos. "We are committed to exploring and promoting leisure as a means of improving the quality of life across the lifespan and throughout a diverse society," she said. "We pursue our mission through impactful research, research-based educational programs that immerse students in real-world experiences, and outreach activities that make a difference in the lives of individuals, families, and communities."

Designed to connect students to leaders in the leisure industry, the symposium was held via Zoom this year because of the ongoing coronavirus pandemic. Dr. Michael Raycraft, clinical associate professor and director of the event, said the platform actually enhanced this year's symposium. "The virtual learning environment provided an amazing opportunity to connect civic and industry leaders with University of Illinois students from across all disciplines," he said. "Our keynote series featured change makers and heroes from professional and intercollegiate sports, hall of fame athletes, and internationally known inclusivity advocates, many of whom might not otherwise have been able to participate."

In addition to representatives of the Milwaukee Bucks and St. Louis Cardinals, presenters included Paralympic athlete Tatyana McFadden and coach Adam Bleakney, who talked about disability and sport; former University of Illinois women's basketball coach Theresa Grentz, who was the premiere collegiate women's basketball player in the 1970s as a member of the Mighty Macs of Immaculata College; LGBTQ activist Schuyler Bailar, the first openly transgender NCAA Division I swimmer; and Israeli goodwill ambassador and star basketball player Tal Brody, who talked about sport's role in building national pride and identity.

The symposium was dedicated to the winningest coach in Fighting Illini men's basketball, Lou Henson. The opening panel presentation of the symposium included Mark Coomes, whose 33-year coaching career began as an assistant coach to Lou Henson at Illinois; Rob Evans, former head coach at the University of Mississippi and Arizona State University, who played for Henson; longtime NCAA referee Ed Hightower; Jim Phillips, Combe Family Vice President for Athletics and Recreation at Northwestern University; and Mary Henson, who was married to Lou for more than 65 years.

Many people don't know that when Lou Henson accepted his first college coaching position with Hardin Simmons University in 1962, he did so on the condition that he be able to recruit African American athletes. In integrating the basketball team, he integrated the campus. He later added women's basketball and volleyball to the sports program as athletic director, well before Title IX mandated gender equality. Dr. Hightower, a National Association of Sports Officials' Gold Whistle Award recipient, said most people know what a great coach Henson was, but are less familiar with his achievements as a compassionate humanitarian. "He was ahead of his time," he said. "There's so much time being spent in our country today trying to define social justice. If you just go back to the simple philosophy that Coach Henson had, it was all about opening doors of access and opportunity for others."

Added Mary Henson, "My hope is that the takeaway from this tribute will be that just one person doing the right thing can make many positive changes in people's lives."

VETERANS DAY EVENT EXAMINES EMPLOYMENT

Prior to the coronavirus pandemic, military veterans were enjoying relatively low unemployment rates and were largely satisfied with their jobs. However, those lower in military rank at the time of transitioning to the civilian workforce were more likely to be paid on an hourly rather than salaried basis and looking for new positions. Those who had service-connected disabilities felt their disabilities were a barrier to employment. Combat exposure, post-traumatic stress disorder, and homelessness also created barriers to a successful transition into the civilian workforce.

These are some of the key findings from a national survey of veterans conducted by the Military Service Knowledge Collaborative (MSKC) of the Chez Veterans Center in partnership with the School of Labor and Employment Relations' Project for Middle Class Renewal and Jobpath, a nonprofit national service organization for military veterans.

The results of the survey were released during the Center's third annual Veterans Day event, "Veterans in the Labor Market: Readiness, Recruitment, Retention," which also was sponsored by the U.S. Department of Labor's Veterans' Employment and Training Service. The study was made possible by support from GI Go Fund.

This year's event, held via Zoom on November 16, featured representatives of higher education, corporate, nonprofit, and governmental sectors, including Illinois Governor J.B. Pritzker, who expressed his gratitude as the son and grandson of veterans for the work the Chez Veterans Center does to support veterans in the workforce. "Both here in Illinois and across the nation, your findings and your data are essential to furthering the belief we all share that the people who made sacrifices for this nation should have every opportunity to shape a good living for themselves and their families back home," he said, adding that it is his mission to find creative ways across all state agencies to support military-connected citizens.

Linda Chapa LaVia, director of the Illinois Department of Veterans Affairs, said it's impossible for non-veteran civilian employers to truly understand the military experience. "While every veteran's experience is different, there are a series of staple issues that most face upon leaving the military: readjustment to civilian life and structure, transitioning military skills to civilian job skills, adjustment to civilian workforce culture, navigation of benefits and services, the invisible and visible wounds of war, and employer bias," she said.

She went on to explain that even though today's military veterans are not returning to the protests and harassment that Vietnam veterans faced, employers still make assumptions that people with military experience are inflexible, conservative, potentially volatile, and "broken," especially if they have been diagnosed with post-traumatic stress disorder or traumatic brain injury.

Perry Yaw, senior manager for global sales and marketing at Boeing, retired from active duty after 30 years in the Navy and joined Boeing. He stressed the importance of educating employers about the skills veterans bring to their jobs. "The work ethic you demonstrate day in and day out and your dedication to mission is incredibly valuable to the companies and businesses you will find your way to," he said. "Your leadership and initiative, your understanding of what it means to be a team player—you understand that better than most."

In their report on the survey, the researchers offered a number of recommendations for employers, policy makers, organizers of job fairs, and veterans.

To read the full report, visit the Chez Veterans Center website at HTTP://CHEZVETERANSCENTER.AHS.ILLINOIS.EDU. Click on the link to the 2020 Veterans Day event.

DRES MOVES CAMPS ONLINE

Among the casualties of the coronavirus pandemic were the wheelchair sports camps offered each summer by the Division of Disability Resources and Educational Services (DRES). Reluctant to disrupt the 34-year history of the camps, DRES staff decided to move the camps online. With help from the Craig H. Neilsen Foundation Emergency Relief Grant, DRES purchased a Zoom add-on that enabled webinars for up to 500 people, as well as equipment to produce high-quality videos.

"We're all very fortunate to be part of a program in which coaches before us had done an outstanding job of organizing the camps' structure," said men's wheelchair basketball coach Matt Buchi. "I have pages and pages of minute-by-minute directions on every drill we've been running year after year in our camps. We just had to figure out how to transform this into a Zoom call with slide shows, pictures, and game film."

The individual skill development wheelchair basketball camp, which typically enrolls 50 to 60 players between the ages of 11 and 18, attracted 127 online participants from 13 countries. The premiere camp for advanced athletes, which gives more focused attention to about 30 campers per year, enrolled 95 participants from 10 countries. Both camps include education and development sessions for coaches as well, a unique feature of the DRES program. The virtual wheelchair track and field camps, which offered both live workouts and educational sessions, reached more than 250 participants.

Each camp offered live sessions on Facebook, potentially reaching DRES's more than 4500 Facebook followers. "Both the basketball and track camps offered unique opportunities to talk with former student-athletes and Illinois Paralympians, which is always a highlight of the camp experience," said Maureen Gilbert, coordinator of the Campus Life division of DRES. All sessions were videotaped and are available on the YouTube channel Illinois Wheelchair Athletics.

Coach Buchi missed working hands-on with athletes and hopes this year's camps can take place in person. Still, he acknowledges that the accessibility of the virtual camps is a plus. "I think the next step, if we have in-person camps this summer, will be to record the camp sessions and either run them live or upload them after the fact," he said. He believes athletes who can't attend the in-person camps would find it interesting and helpful to watch actual interactions between athletes and coaches. He'd also like to have a live feed of the 20- to 30-minute coaching clinics that take place during meal breaks so that coaches from around the world could join the sessions, which focus on strategy and skill."It's all in the works," he said. "We have no idea what we're doing yet or how we're going to do it, but we're going to figure it out."

TURNING PASSION INTO ACTION

ALUMNUS DRAKE MATERRE FIGHTS SOCIAL INJUSTICE BY BUILDING BRIDGES BETWEEN MARGINALIZED COMMUNITIES AND EDUCATIONAL, CIVIC, AND SOCIAL INSTITUTIONS.

Drake Materre grew up in an Afrocentric household. He attended a church based on Black liberation theology and a school where honors were bestowed in the form of Kente cloths. He learned about who he was and the social and political arenas in which African Americans existed.

Still, he recalls struggling and feeling unsettled before high school, unsure of his direction. His mother gave him the book *Black Men* by Haki Madhubuti. "It completely changed my life," he said. "I thought, okay, I've got to go out there and start doing something."

He has been "out there" since that time, gaining respect as an ardent advocate on issues of health and social justice. His mother, an award-winning pharmaceutical representative, gave him an avenue for action after being laid off from her position. She returned to school to pursue a master's degree in health communication and founded the nonprofit organization Natural Path Nutrition. From the time he was a freshman in high school, Drake assisted with presenting nutrition education programs to children, residents of nursing homes, and participants in health and wellness fairs in African American communities in the Chicago area, where the organization also offered free rapid HIV testing and assessments of blood glucose levels and blood pressure.

Drake continued working with Natural Path Nutrition during summer breaks from his studies in Community Health at the University of Illinois. He brought the organization's philosophy and programs to the Urbana-Champaign community, and emerged as a leading local grass roots organizer. Seeing himself as a builder of bridges between the campus and the surrounding community, he co-founded the student organization Black United Front and the

> **"NEVER, EVER BE AFRAID TO MAKE SOME NOISE AND GET IN GOOD TROUBLE, NECESSARY TROUBLE."**
>
> **JOHN LEWIS, FORMER CONGRESSMAN**

community-based Champaign County Anti-Racist Coalition. In addition to organizing protests against racism after the death of George Floyd, he has lobbied University and civic leaders, including Illinois Governor J.B. Pritzker, to address food insecurity, homelessness, pandemic safety, and criminal justice reform. "The new normal is that people are tired," he said. "People want to rebel against injustice. If we really want to ensure public health and community health, we have to get political; we have to get 'in the streets.'"

Drake is a passionate and articulate spokesperson for the causes in which he believes. This has brought him notice, including from Lemond Peppers, community engagement coordinator for the City of Urbana. Mr. Peppers also is a builder of bridges, between Urbana's African American residents, the police, and the schools. He was impressed by Drake's focus during appearances at City Council and Civilian Police Review Board meetings, and proposed they meet. "To me, Mr. Materre embodies the quote of the late Congressman John Lewis, who said, 'Never, ever be afraid to make some noise and get in good trouble, necessary trouble,'" Mr. Peppers said. He invited Drake to join a group that meets with Urbana Mayor Diane Marlin to talk about how the city might address pressing social justice issues. "Mr. Materre commands attention, not from volume but from substance," Mr. Peppers said. "He is a visionary, and the start of what is needed."

Playing a pivotal role in the civic arena is but one of Drake's successes. He co-authored a resolution passed by Illinois Student Government that advocated for the University to address food insecurity. Last November, University Housing announced an initiative to provide a simple meal to any University of Illinois community member needing it, no pre-registration or ID required. He told Governor Pritzker last August that the homeless shelter in Champaign lacked sufficient supplies of personal protective equipment. Masks and other resources arrived shortly thereafter. Drake rarely gets credit for the outcomes of his activism, but he's okay with that. "Activists have to understand that the powers that be are only going to give from pressure, but are never going to say they gave because of pressure," he said. "We just have to take the changes, big or small, and keep moving forward."

Drake completed his undergraduate degree in December. He is currently working with kinesiology and community health professor Chelsea Singleton on research that he hopes will support the creation of a diversion program that makes professionals like social workers rather than police the first responders in calls involving homeless individuals. It is but one of many paths he hopes to pursue in the future, believing not in end points, he says, but in the journey. Regardless of where his journey takes him, you can be sure he will be on the front lines of the fight for a better future.

> WE JUST HAVE TO TAKE THE CHANGES, BIG OR SMALL, AND KEEP MOVING FORWARD.
>
> DRAKE MATERRE

Photo: Quentin Shaw, *Daily Illini*

NO NEED FOR A CRYSTAL BALL

AHS EMBEDDED COUNSELOR KIM PETERS SAYS STUDENTS MOSTLY ARE COPING WELL WITH THE PANDEMIC.

The college experience provides young adults with an array of opportunities for personal and professional development. Over the course of their studies, they gain independence, hone their identities, clarify their values, and choose a career path. Part of this work is solitary, but part is facilitated by the relationships students form with each other and with professors, advisors, and other mentors. This remarkable period of growth can be overwhelming, giving rise to anxiety, confusion, depression, and loneliness.

NOW THROW A PANDEMIC INTO THE MIX

"You didn't need a crystal ball to foresee that there was going to be a mental health challenge to this," said Kim Peters, a licensed clinical professional counselor who has joined the College of Applied Health Sciences as an embedded counselor. "It was hard for some students—they were homesick, they couldn't eat in the dining halls, they were isolated and scared. It's stressful."

The embedded counselor program existed long before the coronavirus took hold of campus. The University of Illinois Counseling Center developed the program in order to connect students to its services more effectively. "The initial counselors were placed in units that generated the most referrals to the Counseling Center or demonstrated need in another way," said AHS dean Cheryl Hanley-Maxwell. "AHS lobbied to participate in the program. That we were able to secure a counselor as the pandemic hit was entirely coincidental."

But what a fortunate coincidence it was. Ms. Peters joined AHS in August as students returned to campus for the first time since March. Her primary goal is to meet with students and assess their mental health needs, and refer them to the counseling center resources for brief individual counseling, group counseling, workshops, or drop-in services. If students need a higher level of care or longer treatment, they are referred to community resources. A certified telehealth counselor, she has worked with students located from Cook County to Urbana-Champaign to rural southern Illinois.

IT WAS HARD FOR SOME STUDENTS. THEY WERE HOMESICK, THEY COULDN'T EAT IN THE DINING HALLS, THEY WERE ISOLATED AND SCARED. IT'S STRESSFUL.

KIM PETERS

The main issues she encountered in her telehealth meetings with students were problems with motivation, focus, concentration, and fatigue. The pandemic, she said, loaded another layer of demand on an already demanding and rigorous experience. Overall, students managed very well. "I do think people are hopeful," she said. "They have bad days, where the minutia gets under their skin and the dumbest thing can trigger a meltdown. But I think for the most part, these students are really resilient."

Overall, the system worked well. Students connected with her through advisors and instructors, and she gave presentations that encouraged them to contact her directly. Still, she's looking forward to the day when students can knock on her door in Huff Hall and get the help they need to make the most of their college experience face-to-face.

MEET KIM PETERS

A native of Decatur, IL, Ms. Peters has almost 30 years of experience as a licensed clinical professional counselor and has a private practice in Forsyth, IL. Her bachelor's degree and master's degree in development counseling are from the University of Illinois at Springfield. She is trained in Eye Movement Desensitization Reprocessing therapy for trauma, cognitive-behavioral therapy, medically assisted addictions treatment, dialectical behavioral therapy, mind-body connection, walk and talk therapy, and critical incident stress management for first responders.

AVOCADO POWER

DAILY AVOCADO CONSUMPTION IMPROVES ATTENTION IN OVERWEIGHT OR OBESE ADULTS

Liz Ahlberg Touchstone, Biomedical Sciences Editor
University of Illinois News Bureau

A DIET INCLUDING DAILY AVOCADO CONSUMPTION IMPROVES THE ABILITY TO FOCUS ATTENTION IN ADULTS WHOSE MEASUREMENTS OF HEIGHT AND WEIGHT ARE CATEGORIZED AS OVERWEIGHT OR OBESE, A NEW RANDOMIZED CONTROL TRIAL FOUND.

Researchers at the University of Illinois at Urbana-Champaign conducted the 12-week study, published in the *International Journal of Psychophysiology*. "Previous work has shown that individuals with overweight and obesity are at higher risk for cognitive decline and dementia in older age," said kinesiology and community health professor Naiman Khan, who led the study. "We are interested in whether dietary approaches may have benefits for cognitive health, especially in midlife."

The Hass Avocado Board and the U.S. Department of Agriculture's National Institute of Food and Agriculture supported this work.

Avocados are high in lutein, a dietary component associated with cognitive benefits. Though avocado consumption's benefits have been studied in older adults and children, no randomized controlled trials had

studied its cognitive effects on adults with overweight or obesity, despite 70% of the American adult population falling into that category, said graduate student Caitlyn Edwards, the first author of the study.

In the new study, the researchers provided 12 weeks of daily meals to 84 adults with overweight or obesity. The meals were identical in calories and macronutrients, but one group's meals included a fresh avocado every day, while the control group had no avocado in their meals.

At the beginning and end of the study, the participants completed three cognitive tests to measure attention and inhibition. In addition, the researchers measured lutein levels in the participants' serum and in their retinas, which is associated with the lutein concentration in the brain.

They found that the participants whose diets included avocados improved their performance on one of the cognitive tests, called the Flanker task, which measures attentional inhibition—the ability to maintain focus on the task at hand even in the face of distraction. However, there was no difference in the other two cognitive tests.

"It could be that nutrients in avocados have a specific action in the brain that supports the ability to do this task in particular, or they could be more beneficial for certain cognitive abilities over others," Khan said. "It's also possible that with a longer study or different tests, we could see other effects. Other studies have found broader effects in other populations, so it is interesting to see a more specific benefit for this population."

Another unexpected finding was that, while the participants who ate avocados had higher levels of lutein at the end of the study, the changes in lutein levels were not correlated with their cognitive changes. "Avocados also are high in fiber and monounsaturated fats. It is possible that these other nutrients may have played a role in the cognitive effects we saw, but we focused on the lutein in our analyses," Edwards said. "Future analyses may focus on other nutrients found in avocados, or avocado consumption's impact on other measures such as weight status, inflammation and potential changes in the microbiome."

Although this study focused on avocados, other dietary sources of lutein, fiber and unsaturated fats—such as green leafy vegetables or eggs—also have potential cognitive and health benefits. The researchers say their study shows that small dietary changes, such as eating avocados, can have measurable impacts on cognitive performance, even when other health behaviors remain the same. "Our mission is to give people options. There are multiple ways people can eat to optimize brain health," Khan said. "What we're learning is that avocados may be one of those fruits that may be neuroprotective in certain ways. This work provides some evidence behind one option people have from a plethora of healthful foods that we can consume."

Graduate student Caitlyn Edwards and professor Naiman Khan performed the first randomized control trial looking at the cognitive benefits of avocado consumption for overweight or obese adults.

Photo by Brian Stauffer

PURSUING THE FOUNTAIN OF YOUTH

KINESIOLOGY AND COMMUNITY HEALTH PROFESSOR MARNI BOPPART ADDRESSED NOVEL WAYS OF REJUVENATING AGED SKELETAL MUSCLE DURING BECKMAN INSTITUTE'S DIRECTOR'S SEMINAR IN NOVEMBER.

By the year 2030, almost 20 percent of the U.S. population will be over the age of 65. More than 70 million of us will be experiencing age-related declines in the mass and function of skeletal muscle, which makes up almost half of a healthy individual's body weight and is vital to movement, respiration, and metabolism.

We lose one to two percent of muscle mass every year after the age of 50, a progression that can be lessened with healthy choices about diet and exercise but never fully mitigated. The most effective therapy for recovering muscle loss is resistance exercise, but studies have shown that such recovery may be nonexistent in older adults. Dr. Marni Boppart's research seeks to determine why this is by studying cellular molecular mechanisms that drive skeletal muscle adaptation in response to exercise and determining if deficits exist in these mechanisms with age, with the ultimate goal of developing novel therapies and biological products that can rejuvenate muscle and promote healthy aging.

Dr. Boppart is a professor in the Department of Kinesiology and Community Health, head of the Molecular Muscle Physiology Laboratory in the Beckman Institute for Advanced Science and Technology, and an affiliate member in the Department of Cell and Developmental Biology and the Carl R. Woese Institute for Genomic Biology. She also serves on the faculty of the Carle Illinois College of Medicine.

DR. MARNI BOPPART

Aging, she explained, begins when DNA damage caused by exposure to internal and external stressors leads mitochondria in cells to produce reactive oxygen species, or ROS, eventually resulting in cellular senescence. Senescence occurs throughout the lifespan and plays a critical role in development. Over time, however, the accumulation of ROS causes destruction to cellular structure. Cells begin to produce pro-inflammatory substances, leading to the last stage of aging, that is, chronic tissue inflammation that has been linked to such conditions as osteoarthritis and kidney dysfunction. "There isn't a tissue in the body that is spared by the aging process," Dr. Boppart said. "However, some tissues, including skeletal muscle, are more sensitive than others."

Much of her research has focused on the $\alpha 7\beta 71$ integrin complex, which works within muscle to attach the extracellular matrix, which provides structural and biochemical support to surrounding cells, to the actin cytoskeleton within cells. The actin cytoskeleton is responsible for essential cellular processes. She has found that overexpressing the integrin in muscle allows for the promotion of muscle and vessel growth and believes there is an important role for the integrin in addressing skeletal muscle atrophy with age.

She then sought to identify muscle cells that are responsive to integrin overexpression and to determine whether that cell type promoted muscle growth in response to exercise. This led her to pericytes, which turned out to be highly responsive to exercise but which appear in significantly decreased quantity in aged muscle. "After immobilization and resumption of activity in aged muscle, there were still significant deficits in terms of fiber size within the muscle and very little improvement in the muscle atrophy condition, even after two weeks of recovery," she said. Age and immobilization decreased the function of pericytes to the point of senescence. But could transplanting healthy pericytes contribute to recovery? Again, the news was good for younger muscle: full recovery of muscle fibers and capillary density, as well as enhancement of capillary content in the muscle. These effects were not seen in aged muscle.

Dr. Boppart's most recent line of research focuses on extracellular vesicles (EVs), which play significant roles in stem cell therapies and in the body's responses to stress. In 2017, she co-founded the Extracellular Vesicle Imaging and Therapy Working Group at Beckman. "EVs reduce reactive oxygen species and inflammation, two of the hallmarks of aging," she said. "We have found that EVs collected after acute exercise restored and enhanced growth in muscle that had been immobilized. This has really captured our attention because it holds promise as a therapy for aged muscle."

Her experiments in this area are ongoing. Those of us who are fast losing our muscle mass will keep our fingers crossed.

> EVS REDUCE REACTIVE OXYGEN SPECIES AND INFLAMMATION, TWO OF THE HALLMARKS OF AGING. WE HAVE FOUND THAT EVS COLLECTED AFTER ACUTE EXERCISE RESTORED AND ENHANCED GROWTH IN MUSCLE THAT HAD BEEN IMMOBILIZED.

PAYING ATTENTION TO BALANCE

DR. MANUEL HERNANDEZ STUDIES NEURAL AND MUSCULOSKELETAL FACTORS RELATED TO INCREASED RISK OF FALLS IN OLDER ADULTS.

Many of us no doubt have had moments where, in a split second of distraction, we make a misstep and stumble or fall. As we age and lose muscle and agility, our risk of falling can increase. Given that falls are the leading cause of injury and injury-related death in people aged 65 and above, it is important to understand the factors that contribute to fall risk and how to mitigate them.

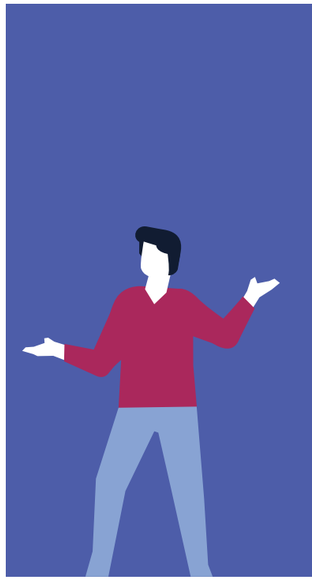
Dr. Manuel Hernandez, assistant professor in the Department of Kinesiology and Community Health and director of the Mobility and Fall Prevention Research Lab, uses tools from the intersection of neuroscience and biomechanics to investigate fall risk in older adults. His recent work has focused on individuals with neurological conditions such as multiple sclerosis (MS) and musculoskeletal conditions such as osteoarthritis. Osteoarthritis is a prevalent condition, diagnosed in 25 percent of adults aged 18 and older, increasing to 50 percent in people aged 65 and above.

He is particularly interested in the role of attention in balance. In his research, he monitors blood flow in the prefrontal cortex to assess the attentional resources individuals are using while performing such tasks as walking, stepping, and reaching. This region of the brain is associated with higher level cognitive processes, such as decision making, attention, and planning.

In his research with people with MS, he has demonstrated that using a lot of attentional resources to maintain balance may lead to other risk factors down the line. People with MS rely heavily on attentional resources to do things that people without MS take for granted, such as walking comfortably on a level surface. “This might explain different manifestations down the line like fatigue,” he said. “If you’re expending a lot of cognitive effort to maintain balance and to control something like walking, it could explain why you feel worn out by the end of the day.” Fatigue compromises an individual’s ability to sustain the attention that might be required to perform a task such as walking.

“STUDENTS FROM KINESIOLOGY, SPEECH AND HEARING SCIENCE, ENGINEERING, PSYCHOLOGY COME TOGETHER TO RESOLVE SOME OF THESE ISSUES, WHICH DRAW UPON ASPECTS OF SCIENCE FROM MANY DIFFERENT DISCIPLINES.”

DR. MANUEL HERNANDEZ



Pain is another factor that can place demands on attentional resources. As Dr. Hernandez explained it, “Someone who has osteoarthritis and pain in the knee is constantly going to monitor that pain and try to limit or be in tune with its movement. It’s good to be mindful of it, but challenges might arise in situations where you need attentional reserves to handle unexpected situations.”

In more demanding environments, then, it can be problematic to have to dedicate your attention to just one aspect of movement. But even with routine tasks, people are always doing more than one thing. At the grocery store, we’re navigating the aisles, looking at lists, scanning shelves, maybe engaging in conversation. “So we’re doing a lot of cognitive tasks as we’re moving about in the environment,” Dr. Hernandez said. “If we don’t have enough resources of attention to dedicate to maintaining balance and avoiding obstacles and other dangers, we could increase risk factors and the likelihood of injury.”

In his research, he is studying gait while asking people to engage in cognitive tasks such as subtracting by sevens from a three-digit number or reciting every other letter of the alphabet. Not only does he hope to identify differences between healthy individuals and those with cognitive impairments, differences that may be diagnostic, but he’s also gathering additional evidence to support that you can improve performance by training the body to do two things at once.

“Older adults come into the lab and report that in their concern about falls, they’re focusing on doing one thing at a time,” he said. “While this is pragmatic, the downside is that you’re not giving yourself the opportunity to be challenged and maintain or grow your attentional reserves.”

One of the things Dr. Hernandez is most excited about the work in his lab is its interdisciplinary nature. “Students from kinesiology, speech and hearing science, engineering, psychology come together to resolve some of these issues, which draw upon aspects of science from many different disciplines,” he said. As for next steps, he and his team will investigate whether the increased attentional resources that are needed for balance are also needed for other motor tasks. He also hopes to explore the benefits of different interventions.

MANUEL HERNANDEZ

POSITIVE SEXUALITY IN LATER LIFE

DR. LIZA BERDYCHEVSKY'S RESEARCH EXAMINES THE PHYSICAL AND PSYCHOLOGICAL BENEFITS OF INTIMACY AMONG OLDER ADULTS.

In 2018, AARP and Michigan Medicine, the medical center of the University of Michigan, reported that 40 percent of respondents to their survey of individuals aged 65 to 80 were sexually active. Of the 72 percent of respondents who reported having a romantic partner, more than half said they were sexually active.

Despite the many psychological and physiological benefits of sex—things such as fostering a sense of vitality and emotional intimacy, lowering blood pressure and the risk of heart attack, and improving sleep—age-related stereotypes about the prevalence and appropriateness of sexual behavior among older adults have made studies of that population scarce.

It also is largely ignored in health education efforts as well. This concerns Dr. Liza Berdychevsky, associate professor in the Department of Recreation, Sport and Tourism, who has long been studying sexual health and well-being in tourism and leisure contexts. "Attending to the sexual needs of older adults is essential because there are multiple gaps in their knowledge about later-life sexuality, and healthcare providers often shy away from discussing sex with older adults," she said. "Our sexual needs change continuously as we age and affect our quality of life."

Her research in this area is informed by the key principles of positive sexuality, which views sexuality as a natural and healthy aspect of human life and sexual health and well-being as essential across the life span. Knowledge of human sexuality is essential for making responsible choices, emphasizing the importance of sexual health education at all stages of life. The questions Dr. Berdychevsky and her colleagues were interested in exploring were how should sexual health education for older adults be conducted, and would a view of sex as leisure and positive sexuality serve to facilitate educational efforts?

She collaborated with Dr. Galit Nimrod of Ben-Gurion University of the Negev on two studies, "Let's Talk about Sex" and "Sexual Until We Drop," to examine sex-related discussions in online communities for older adults as well as the concept of sex as leisure in later life. The scholars followed a full year of communication—about 700,000 messages—in 14 online communities. In the first study, they found that discussions of sex online served as a sphere for consultation and intellectual dialogue, as well as providing posters with educational entertainment and opportunities for self-expression. The online sex-related discussions impacted offline behavior, including encouraging better communication about sexual needs with partners, friends, and healthcare professionals. The communities provided older adults with forums for shedding embarrassment and inhibitions while gaining confidence and a greater understanding of the sexual self.

Employing the same "netnography" methods used to examine online sex-related discussions in the first study, the second study examined whether older adults viewed sex as leisure. They found that sex was often discussed as an enjoyable, gratifying, and stress-relieving leisure activity. Posters felt constrained by a societal lack of acceptance of sexuality in later life, as well as their own negative body images. But they associated sex with living life to the fullest, enjoying life for what it is, loving and being loved, and losing inhibitions. Some were more successful than others in negotiating constraints to maintain an active sex life.

The most recent evolution of Dr. Berdychevsky's research focuses on the issue of sexual health education in later life. Working again with Dr. Nimrod as well as Ph.D. student Iulia Fratila and kinesiology and community health professor Wendy Rogers, she conducted in-depth interviews not only with older adults but also with sex educators, coaches, therapists, and other sex experts who work with them. The scholars found that most sex experts and many older adults agreed that framing sex as leisure could be a useful and educational perspective.

> THIS PERSPECTIVE CONNECTS SEX TO QUALITY OF LIFE. USING SEX FOR ITS HEALTH BENEFITS AS PART OF SELF-CARE HELPS TO FRAME SEX AS A FORM OF ADULT PLAY AND EXPAND PEOPLE'S MINDSETS ABOUT SEX.
>
> DR. LIZA BERDYCHEVSKY

"This perspective connects sex to quality of life," Dr. Berdychevsky said. "Using sex for its health benefits as part of self-care helps to frame sex as a form of adult play and expand people's mindsets about sex."

She and her research team are now working on developing individualized sexual health communications for older adults that can be delivered via the internet. They are identifying older adults' sexual health needs, developing the sexual health messages, and investigating the willingness of older adults to use technology to receive innovative sexual health education tailored to their needs.

Preliminary results indicate that older adults want to learn more about their aging bodies and the physiological, psychological, and interpersonal benefits of sex. They see both advantages and disadvantages in receiving tailored sexual health messages via the internet, but are especially concerned about responding to online self-assessment questionnaires about their sex-related needs. But based on her research findings that older adults discuss sex online, that viewing sex as leisure is a useful perspective for fighting age-related stereotypes and constraints, and that older adults lack knowledge that is crucial to making fully-informed decisions about sex, Dr. Berdychevsky is determined to develop effective sexual health education programs for this population.

WHEN SILENCE ISN'T GOLDEN

A LACK OF SPEECH EXPOSURE MAY HAVE LONG-TERM CONSEQUENCES FOR PRETERM INFANTS, SAYS DR. BRIAN MONSON.

Scientists have long known that babies start learning about the world while they are still in the womb. At birth, they recognize their mother's voice and respond to familiar stories read to them while in utero.

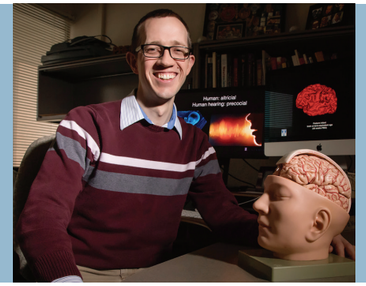
Dr. Brian Monson, assistant professor in the Department of Speech and Hearing Science and director of the Auditory Neuro Experience Lab, is interested in how exposure to language in the womb affects auditory neurodevelopment and perception. Of particular interest are these phenomena in babies who are born prematurely.

Premature birth is associated with auditory and cognitive disorders, including delays in speech and language development, hearing loss, auditory processing disorders, and attention deficit hyperactivity disorder (ADHD). There was limited understanding, however, of how the auditory brain developed in infants born early in the third trimester of pregnancy, and whether there was a relationship between this process and later difficulties. In one study, Dr. Monson used diffusion neuroimaging to study the development of the auditory cortex in infants' brains, comparing MRI scans of preterm and full-term babies. Measuring the diffusion of water in brain tissue reveals how and at what rate tissue is developing.

By looking at the primary auditory cortex, the first cortical region to receive auditory signals from the ears, and the nonprimary auditory cortex, which helps to process those signals, Dr. Monson and his team found that both regions were less developed at 40 weeks in the preterm infants than in the full-term infants. They also found evidence that suggested that the disruption of the nonprimary auditory cortex's development contributed to speech and language problems as the child aged.

In his continuing effort to understand auditory neural development in infants, Dr. Monson is examining differences in language exposures for preterm infants in neonatal intensive care units (NICUs) and full-term infants in the womb. With funding from the National Institute on Deafness and Other Communication Disorders, he is investigating the impact of these differences on auditory neurodevelopment.

BRIAN MONSON



"Infants gain a lot of information in the womb in the last trimester of pregnancy," he said. "What happens if you take this rapidly developing brain, prematurely remove it from this environment, and put it in a box in a hospital? Premature infants can spend several months in a neonatal intensive care unit, exposed to a very different sound profile than what they might get in the womb."

While a baby in the womb hears conversations and music and, constantly, its mother's heartbeat, a baby in a NICU is often surrounded by silence, mixed with periods of very loud noises and alarms. What role does this auditory experience play in the sensorineural hearing loss, language and speech development delays, auditory processing disorders, and other deficits associated with premature birth?

To measure the auditory experience, Dr. Monson is using LENA devices—small, 24-hour recorders—to capture the auditory environments of babies in the womb and NICU babies, and has amassed more than 15,000 hours of data for each environment.

Preliminary findings indicate that babies in the womb get about 50 percent more language exposure than babies in a NICU. To assess the impact of this difference, Dr. Monson is working with Dr. Sadie Braun in the University of Illinois Audiology and Speech-Language Pathology Clinic to assess neural responses to auditory stimuli when both groups of babies are three months old. "The time that it takes for the responses to come after the sounds, the latency, gives us information about how mature the system is and how well it's developing," Dr. Monson said. "For our fetal group, we have seen a relationship between increased daily speech exposure and lower latencies, or faster responses, which we presume to be beneficial."

He hopes to assess language development and auditory function in these same children at the ages of two and five to determine long-term impacts of differences in auditory exposures. One of his goals in identifying the average amount of auditory exposures full-term babies receive in utero is to develop effective, evidence-based interventions for premature infants who spend all or part of the critical third trimester in what has typically been a language-poor environment. Will playing a mother's voice to an infant in an incubator promote brain development and prevent auditory and cognitive disorders down the line? Dr. Monson hopes time, and his research, will tell.

ABOUT THE FALL LECTURE SERIES

Dr. Berdychevsky and Dr. Monson shared their research as part of the 2020 Fall Lecture Series, a newly-conceived online series of five presentations that gave alumni insight into some of the research and services of the College of Applied Health Sciences. The AHS Fall Lecture Series was the brainchild of the college's Office of Advancement, and featured such topics as auditory exposure and brain development in pre- and full-term infants and sexuality in later life.

"The AHS Lecture Series was a terrific opportunity to highlight a few examples of the remarkable research, teaching, and services in the College of Applied Health Sciences," said Jean Driscoll, assistant dean for advancement. "The work of our faculty, staff, and students is relevant, important, and very interesting."

In addition to presentations on research in the Department of Recreation, Sport and Tourism and the Department of Speech and Hearing Science, the series featured presentations on services offered by the Division of Disability Resources and Educational Services, the Chez Veterans Center Veteran's Day event on veterans and employment, and research on aging and technology by Dr. Wendy Rogers, Shahid and Ann Carlson Khan Professor in the Department of Kinesiology and Community Health.

MARY FLAHERTY

Assistant Professor | **DEPT** | Speech and Hearing Science

RESEARCH BRIEF | *Journal of the Acoustical Society of America* | DEC 2020

The role of extended high frequencies in children's speech-in-speech recognition

MARY FLAHERTY

WHAT WAS THE PURPOSE OF YOUR STUDY?

While the audible frequency range for human hearing spans approximately 20 Hz to 20 kHz, children are more sensitive than adults to extended high frequencies (frequencies above 8 kHz; EHFs). The traditional view has been that EHFs have little utility for speech perception. However, recent evidence from studies in adults has demonstrated that EHFs do contribute to speech perception in a variety of ways, including recognition in noise. However, we know little about how EHFs might impact the developing child's communication, as studies of EHF hearing in children generally focused on sensitivity to pure tones, rather than on speech perception.

The goal of the present study was to examine the impact that children's increased hearing sensitivity to EHFs may have on their ability to recognize speech in the presence of competing talkers. Children's enhanced EHF sensitivity raised the possibility that they would be impacted by EHFs to a greater extent than adults, possibly explaining some discrepancies observed between child and adult speech recognition abilities.

WHAT DID YOU FIND?

The results demonstrated that EHF energy in the speech signal above 8 kHz is beneficial to children. While children could recognize speech in the absence of EHFs, the presence of EHF in the speech signal improved overall performance. A small change in head orientation of the competing talkers likewise improved speech recognition. Children as young as 5 years were impacted to a similar degree as older children and adults. Despite children's increased hearing sensitivity to EHFs relative to adults, they did not benefit to a greater degree than adults from these cues.

WHAT ARE THE IMPLICATIONS OF YOUR RESULTS?

The findings are the first to demonstrate the utility of EHFs for children's speech-in-speech recognition and provide support for the mounting evidence in favor of EHFs playing a more important role in speech perception than historically considered. These findings have important implications for children with hearing loss. Although children generally have better EHF hearing than adults, EHF hearing is highly susceptible to premature damage from middle ear disease and ototoxicity. Therefore, these results are the first to demonstrate how EHF hearing loss in children could affect their speech recognition in complex auditory scenes.

YIH-KUEN JAN

Associate Professor | **DEPT** | Kinesiology and Community Health

RESEARCH BRIEF | *Journal of Physical Medicine & Rehab* | OCT 2020

Using elastographic ultrasound to assess the effect of cupping size of cupping therapy on stiffness of triceps muscle.

YIH-KUEN JAN

WHAT WAS THE PURPOSE OF YOUR STUDY?

Cupping therapy describes a technique that uses local negative pressure to suck the skin into a cup to treat various conditions, including low back pain and muscle stiffness. Although cupping therapy is widely practiced in some countries, the effectiveness of cupping therapy remains inconclusive. To examine whether cupping therapy could reduce muscle stiffness and whether the cup size of cupping therapy may affect the stiffness change, we used strain elastography to compare the change of muscle stiffness after cupping therapy with various sizes of cups.

WHAT DID YOU FIND?

This is the first study examining the effect of cupping therapy on muscle stiffness using elastographic ultrasound. In this study, three sizes of cupping cups (ie. 45, 40, and 35 mm in inner diameter) were used to apply cupping therapy (-300 mmHg for 5 minutes) on the triceps muscle. The results showed that the 45-mm and 40-mm cups significantly reduced triceps stiffness after cupping, but the 35-mm cup does not. The decreased stiffness of triceps after cupping therapy is mainly from the deep layer rather than the superficial layer.

WHAT ARE THE IMPLICATIONS OF YOUR RESULTS?

Cupping therapy is a promising intervention in musculoskeletal rehabilitation because of its easy application, low cost, and noninvasive (in our case, dry cupping) nature. Cupping therapy could be particularly useful in home rehabilitation programs. With a careful evaluation, clinicians could prescribe home cupping therapy to improve musculoskeletal issues if the dose-response relationship is well established. It may have other uses in musculoskeletal rehabilitation as well including athletic recovery and pain management. Future studies may use our method to study the effect of various sizes of cupping therapy on improving various musculoskeletal impairments.

CHELSEA SINGLETON

Assistant Professor | **DEPT** | Kinesiology and Community Health

RESEARCH BRIEF | *Ethnicity and Disease* | JAN 2020

Racial/ethnic differences in the shopping behaviors and fruit and vegetable consumption of farmers' market incentive program users in Illinois

WHAT WAS THE PURPOSE OF YOUR STUDY?

Farmers' market incentive programs, such as Link Match, provide monetary incentives to Supplemental Nutrition Assistance Program (SNAP) participants to promote their use of local farmers' markets. Information on racial and ethnic differences in the shopping behaviors and fruit and vegetable (FV) consumption of farmers' market incentive program users is scarce. This research aimed to address this need by examining users of the Link Match incentive program in Illinois. We surveyed 328 Link Match users, collecting information on each participant's demographics, farmers' market shopping behaviors, and monthly frequency of FV consumption, and looked for differences by race and ethnicity.

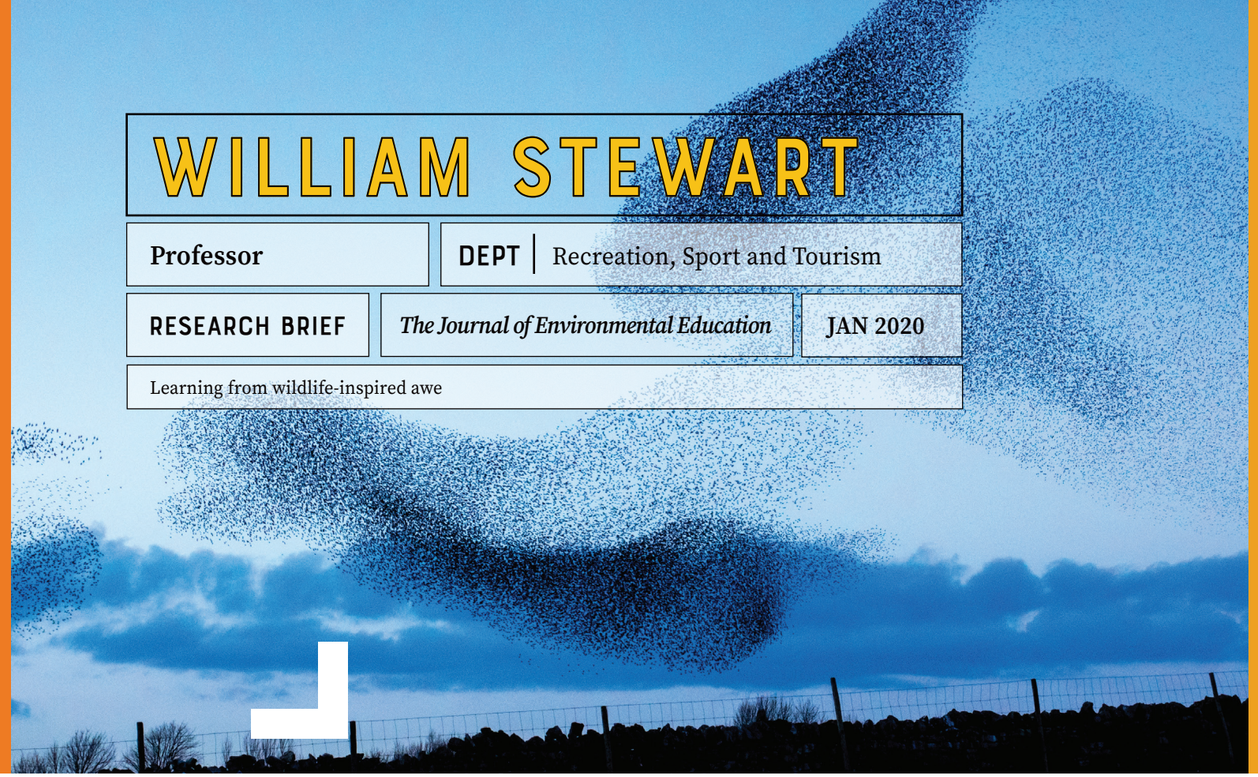
CHELSEA SINGLETON

WHAT DID YOU FIND?

A significantly higher percentage of non-Hispanic Black participants reported being an infrequent farmers' market user, shopping once a month or less, compared with non-Hispanic White and other survey participants. Non-Hispanic Black participants had lower odds of consuming fruit daily compared with non-Hispanic White participants. Other participants had lower odds of consuming both fruit and vegetables compared with non-Hispanic White participants.

WHAT ARE THE IMPLICATIONS OF YOUR RESULTS?

Differences in shopping behaviors and fruit and vegetable consumption were observed by race and ethnicity among Link Match users. These findings may inform the development of new educational or outreach programs focused on increasing utilization of farmers' market incentive programs among low-income minority populations. Additional research is needed to provide more context to the health and nutritional implications of race and ethnicity in farmers' market incentive program usage among diverse low-income populations. Future studies could consider evaluating the differential impact of using farmers' market incentive programs on the food shopping behaviors and dietary intake of several racial and ethnic groups over time.



WILLIAM STEWART

Professor | **DEPT** | Recreation, Sport and Tourism

RESEARCH BRIEF | *The Journal of Environmental Education* | JAN 2020

Learning from wildlife-inspired awe

WHAT WAS THE PURPOSE OF YOUR STUDY?

The aim of the study was to understand the long-term impacts of wildlife encounters on human experience, particularly experiences characterized by a sense of awe and wonder. Research indicates that pro-environmental learning—that is, learning that guides a sustainable lifestyle such as cultivating native plants in your garden or reducing energy use in everyday life—is enhanced through positive responses to wildlife encounters. We focused on wildlife-inspired awe to understand how people made sense of and learned from their encounters with wildlife.

WILLIAM STEWART

WHAT DID YOU FIND?

Co-author Jonathan Hicks and I found there were several responses to wildlife encounters that aligned with awe. Our study participants responded to seemingly ordinary encounters, such as a wren alighting on one's hand while in the backyard or watching a caterpillar spin a cocoon outside one's window, in terms of wonder, amazement, fear or magic. Awe is a powerful response—part emotion, part cognition—characterized by complete and full immersion of attention. The experience becomes stored as an emotional memory that evolves across time and holds potential to affect one's lifestyle and career choices. Many of our participants shared stories of wildlife encounters and connected them to their current day careers and environmental advocacy in their home and with their children.

WHAT ARE THE IMPLICATIONS OF YOUR RESULTS?

In the past decade, the global biodiversity crisis has become harder to ignore. As an example, North America has lost 30% or 3 billion birds since 1970 which includes losing 50% or 700 million grassland birds. With Illinois being the Prairie State, we need to ensure our natural heritage becomes a valued legacy for people today and in the future. The implications of this study fit within a broader context to promote nearby nature as a place to learn from our awe-inspiring encounters with wildlife and guide us to appreciate our collective natural inheritance.

NEW FACES IN AHS

EIGHT TENURE-TRACK FACULTY MEMBERS AND THREE CLINICAL INSTRUCTORS JOINED THE COLLEGE OF APPLIED HEALTH SCIENCES IN 2020.

JACOB ALLEN
ASSISTANT PROFESSOR
DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

Dr. Allen joined AHS from the Nationwide Children's Hospital's Center for Microbial Pathogenesis, where he was a postdoctoral scientist. He earned his PhD in exercise immunology and microbial ecology in the Department of Kinesiology and Community Health at Illinois. His bachelor's and master's degrees in exercise physiology are from the University of North Carolina at Chapel Hill.

Dr. Allen's research focuses on gut microbiota, a malleable and bioactive ecosystem of 100 trillion bacteria and other microorganisms that continuously and robustly impact human physiology. "It is imperative to understand how environmental interventions and conditions, such as exercise, psychological stress, and diet, influence gut microbial communities and metabolite production during both homeostatic and pathological disease states," he said. "Ultimately, my aim is to provide a new perspective on how environmental conditions interact to modify the gut microbiota, and leveraging that knowledge to improve human health."

Dr. Allen currently is the principal investigator on a study of stress and gut tryptophan metabolism under a Ruth L. Kirschstein National Research Service Award from the National Institute of Dental and Craniofacial Research. He received the JB Russell Young Scientist Award for Best Oral Presentation at the 2019 Congress on Gastrointestinal Function.

Dr. Allen believes the University of Illinois is an ideal institution for pursuing his research as there is an equal emphasis on basic studies and applied health. "For microbiome research, the next frontier is integrating these two components into a cohesive framework for understanding how gut microbiota interacts with humans," he said. "I'm excited to work with the brilliant and diverse group of scientists at the U of I."

XIAOTIAN GAO
ASSISTANT PROFESSOR
DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

Dr. Gao completed his PhD in biostatistics at the University of Pittsburgh, where he was a graduate research assistant in the Department of Medicine's Division of Gastroenterology, Hepatology and Nutrition. He also served research assistantships in the Patient-Centered Outcome Research Institute and the Thomas E. Starzl Transplantation Institute. Dr. Gao completed his MS in biostatistics at the University of Pittsburgh. His undergraduate degree in biotechnology is from Dalian Medical University in China, where he also conducted research on immunotherapies at the People's Hospital of Liaoning Province.

Dr. Gao's research interests include Bayesian hierarchical modeling, regression and classification trees, statistical methods in biomarker evaluation, transplantation studies, and comparative effectiveness research. In his current research, Dr. Gao is engaged in robust nonparametric regression and joint models of longitudinal and survival data, with the goal of developing useful statistical tools to analyze complex longitudinal and survival data and identifying key biomarkers or genes related to human health. He was the inaugural recipient of the Lingzi Lu Memorial Award, given by the American Statistical Association in partnership with the International Chinese Statistical Association, and received the 2015 Outstanding Graduate Student Award from the University of Pittsburgh Graduate School of Public Health.

"Besides the academic reputation of the department, I was attracted to the position because of the unique interdisciplinary and collaborative environment fostered within the College of Applied Health Sciences and the University of Illinois," Dr. Gao said. "I also value the opportunity to contribute my expertise to our established and emerging programs in public health."

SARAH GEIGER
ASSISTANT PROFESSOR
DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

Dr. Geiger's PhD in public health sciences with a focus on epidemiology and biostatistics is from West Virginia University. She joined KCH from Northern Illinois University's School of Health Studies, where she was an associate professor of public health. She also has been an adjunct assistant professor in the Department of Comparative Biosciences at the University of Illinois at Urbana-Champaign since 2017. She completed her master's degree in community health at Illinois and her bachelor's degree at Northern Illinois University.

As an environmental and chronic disease epidemiologist, Dr. Geiger investigates environmental pollutants and chronic disease risk factors, including sleep problems, asthma, obesity, and other cardiovascular disease risk factors among children. She also conducts research on the impact of environmental pollutant exposure from private domestic well water on children's health. "My long-term goal is to positively affect children's health in the United States by discovering truth through research," she said.

Dr. Geiger currently is the principal investigator on an evaluation of asthma control programs funded by the Illinois Department of Public Health and a study of smartphone reporting tools for chemical biomonitoring funded by the National Institutes of Health ECHO Opportunities and Infrastructure Fund. She is a current member of the Illinois Public Health Association Executive Council and a Fellow of the American Heart Association Council on Epidemiology and Prevention.

She said her first semester at Illinois reinforced her first impressions of the university. "Faculty, staff, and students were kind, accommodating, and helpful," she said. "Even in this time of great struggle for so many, the university community seems to be finding its strength and resilience through banding together."

SHEENA MARTENIES
ASSISTANT PROFESSOR
DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

Dr. Martenies joined KCH after completing a postdoctoral fellowship in environmental epidemiology at Colorado State University. She completed her PhD in environmental health sciences in the University of Michigan's School of Public Health. Her Master of Public Health degree in environmental health science and policy is from George Washington University's School of Public Health and Health Services, where she was a research associate in the Perry Lab, and her undergraduate degree in chemistry is from San Diego State University.

Through her research, Dr. Martenies seeks to identify the environmental determinants of childhood health outcomes such as asthma and obesity. "There are a lot of steps we could take at the neighborhood, city, state, or even national level to address childhood health and ensure that all kids grow up in healthy environments," she said. She is particularly interested in studying how prenatal and early-life exposures to traffic emissions, features of the built environment, and social determinants such as poverty influence birth weight and other indicators of long-term health risk. Her ultimate goal is to answer research questions that lead to successful public health interventions to improve children's health.

In transitioning to a tenure-track position, Dr. Martenies looked for a department that was collaborative and multidisciplinary and had a strong focus on students. "I found all of that here in KCH," she said. "I'm excited to be able to contribute to the research and teaching missions of the department."

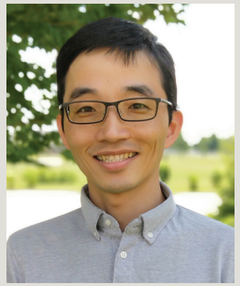
MINAKSHI RAJ
ASSISTANT PROFESSOR
DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

Dr. Raj completed her PhD in health management and policy and her Master of Public Health degree in the University of Michigan's School of Public Health. As a fellow in the Department of Learning Health Sciences, she conducted research on healthcare quality, addressing issues such as trust, informed consent, health information technology, and patient decision making. Her bachelor's degree in psychology is from Syracuse University.

Dr. Raj's research focuses on using patient and clinician perspectives to improve the quality of healthcare. Her goal is to inform practice and policies that encourage family-centered care by integrating family caregivers of older adults and patients with cancer into health care teams through the use of technology. "I also seek to better understand how patients and their family caregivers experience and sustain trust in the health care system and the impact of health information technology on trust," she said. She currently is a co-investigator on a study funded by the National Institute on Aging's Inter-NIA Center Pilot Proposal on Behavioral Change to Benefit Older Adults. In 2019, she received a Scientist-in-Training Award from the American Geriatrics Society.

"I was drawn to the multidisciplinary research in the Department of Kinesiology and Community Health," said Dr. Raj, "the supportive culture of the KCH community, and the collaborative and innovative spirit across campus."

MIKIHIRO SATO
ASSISTANT PROFESSOR
DEPARTMENT OF RECREATION, SPORT AND TOURISM



Prior to joining AHS, Dr. Sato was an assistant professor in the Hart School of Hospitality, Sport and Recreation Management at James Madison University. He completed his PhD in business administration at Temple University. He earned an MBA degree and an MSA in sports administration at Ohio University. His bachelor's degree in physical electronics is from the Tokyo Institute of Technology.

The goal of Dr. Sato's research is to explain how and why sport participation promotes well-being. He examines environments such as sporting events, fitness clubs, parks, and recreational facilities and how they influence the levels and patterns of individuals' physical activity and long-term well-being. "My colleagues and I also are working on research projects to understand how COVID-19 has affected people's lives in terms of their sport participation, health, and well-being," he said.

His long-term goal is to closely examine the roles of sport participation in promoting community well-being. "This line of work will provide a better understanding of the macro-level benefits of sport participation, which I hope will help sport management, recreation management, and public health officials further their efforts to support, administer, and develop effective programs that promote well-being in their communities," he said.

Dr. Sato said the RST curriculum's integration of recreation, sport, and tourism management intersects directly with his research and teaching. "I am impressed with the quality of students in the department and look forward to working with them in research and in the classroom," he said. "While we weren't able to have much face-to-face interaction in the fall semester, I am grateful for the research and teaching support that AHS and RST have given me."

JOELLE SOULARD
ASSISTANT PROFESSOR
DEPARTMENT OF RECREATION, SPORT AND TOURISM

Dr. Soulard completed her PhD in the Howard Feiertag Department of Hospitality and Tourism Management at Virginia Tech. Her master's and bachelor's degrees in recreation, park and tourism sciences are from Texas A&M University.

Her research focuses on the development of sustainable solutions to community-based tourism development, transformative and experiential travel, community health, and the social aspect of tourism. She explores empowering travel experiences that encourage meaningful interactions between travelers and destination residents and inspire civic engagement. "My long-term goal is to collaborate in projects that offer creative, relevant, and inclusive solutions to challenges faced by communities in which tourism development is occurring," she said. Certified in Hotel Industry Analytics, Dr. Soulard received an Olsen Graduate Memorial Fellowship at Virginia Tech.

Dr. Soulard said she found RST's value for community-centered approaches to research, teaching, and outreach appealing. "RST's focus on producing meaningful and impactful research that benefits local communities in a sustainable and inclusive manner resonated deeply with me, and I am excited to be part of this dynamic and creative faculty," she said.

DAN FOGERTY
ASSOCIATE PROFESSOR
DEPARTMENT OF SPEECH AND HEARING SCIENCE

Dr. Fogerty joined AHS from the University of South Carolina, where he was an associate professor in the Department of Communication Sciences and Disorders. He completed a dual PhD, in speech and hearing science and cognitive science, at Indiana University and was a postdoctoral research fellow in the Audiology Research Laboratory there. His master's degree in speech-language pathology is from Michigan State University and he earned bachelor's degrees in communication sciences and disorders and psychology at Augustana College.

Dr. Fogerty has a strong interest in healthy aging, and the impact of age-related hearing loss on daily life. His research focuses on identifying the factors necessary for precisely targeting limitations that an individual may have in understanding speech. "I'm currently working to define acoustic interactions between speech and noise that predict speech understanding in complex environments," he said. "Another research focus is detailing the individual auditory and cognitive abilities that predict individual performance under noisy listening conditions." He is the principal investigator on a study funded by the National Institute on Deafness and Other Communication Disorders. In 2012, he received the Advancing Academic-Research Careers Award from the American Speech-Language-Hearing Association.

Dr. Fogerty sees his research as relating to and intersecting with the interests of many SHS faculty. "The Department of Speech and Hearing Science is a vibrant, collegial environment with a growing research presence and excellent instructional programs," he said. "I am excited to be a part of this scholarly environment."

SADIE BRAUN
VISITING CLINICAL ASSISTANT PROFESSOR
DEPARTMENT OF SPEECH AND HEARING SCIENCE

Dr. Braun is a licensed and clinically certified audiologist. She completed her undergraduate degree in speech and hearing science at the University of Illinois at Urbana-Champaign and her Doctor of Audiology degree at Purdue University.

Dr. Braun has more than 10 years of experience providing audiology services to clients across the lifespan. Her experience includes assessment of auditory brainstem responses, vestibular system, hearing aid and cochlear implant fitting, and marketing to increase clinic utilization. In her previous position, she was responsible for following up on newborn hearing tests, central auditory processing disorder (CAPD) screening, and videonystagmography and otoacoustic emissions testing.

A native of Urbana-Champaign, Dr. Braun said she welcomed the opportunity to pass on her clinical knowledge to the next generation of audiologists. "I was particularly impressed during the fall semester by the dedication of the students and how seriously they took their role in keeping clinic clients healthy and safe in the midst of a pandemic," she said.

WINDI KROK
VISITING ASSISTANT PROFESSOR
DEPARTMENT OF SPEECH AND HEARING SCIENCE

Prior to completing her PhD at Purdue University, Dr. Krok worked as a speech-language pathologist in public schools and private practice in Arizona and Indiana for more than 11 years. She has been an assistant professor at George Washington University for the last three years. Her master's degree is from Arizona State University.

Dr, Krok's areas of expertise are in childhood language disorders and grammatical learning in children with typical and delayed language. In addition to teaching courses in early childhood language disorders, Dr. Krok will collaborate on ongoing projects and coordinate grant activities in the Applied Psycholinguistics Lab.

"I'm thrilled to join a team of researchers with a focus on clinically relevant research that will improve the lives of children with language disorders and their families," she said.

AMY STROHMAN
VISITING CLINICAL ASSISTANT PROFESSOR
DEPARTMENT OF SPEECH AND HEARING SCIENCE

Ms. Strohman completed both her bachelor's and master's degrees in the Department of Speech and Hearing Science at the University of Illinois at Urbana-Champaign.

She has gained clinical experience in a variety of settings, with a focus on speech, language, and feeding in pediatric populations in Illinois and the United Kingdom. Her experience includes promoting and teaching Augmentative and Alternative Communication to students and school staff. She previously served as a clinical instructor in SHS and supported student training in telepractice over the summer. In 2019, she received an Award for Continuing Education from the American Speech-Language-Hearing Association.

Ms. Strohman said her pride in SHS led her to maintain a relationship with the department, which involved mentoring the clinical externships of graduate students. "This sparked my love of working with young clinicians as they sharpen their clinical skills," she said. "I am excited to be back at my alma mater, fostering the same love of the field of speech-language pathology in our graduate students."

AWARDS + HONORS

NATIONAL RECOGNITION

DR. WILLIAM STEWART

PROFESSOR

DEPARTMENT OF RECREATION, SPORT AND TOURISM

Dr. William Stewart, professor in the Department of Recreation, Sport and Tourism, has been elected to a three-year term as executive director of the International Association of Society and Natural Resources, a global collection of researchers, policy makers, and other professionals who study connections between people and the environment in ways that lead to a more sustainable and healthier society.

DR. JEFF WOODS

PROFESSOR

DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

Dr. Jeff Woods is first author of the publication chosen as the 2020 SMHS Best Paper, based on downloads on ScienceDirect and citations. "The COVID-19 pandemic and physical activity" appeared in the June 2020 issue of *Sports Medicine and Health Science*. Dr. Woods is a professor in the Department of Kinesiology and Community Health, director of the Center on Health, Aging, and Disability, and associate dean for research in the College of Applied Health Sciences.

DR. WEIMO ZHU

PROFESSOR

DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

Dr. Weimo Zhu, professor in the Department of Kinesiology and Community Health, received the 2020 M&E Lifetime Achievement Award, the highest award in the field of measurement and evaluation in kinesiology, from the Society of Health and Physical Educators, or SHAPE America. Dr. Zhu is a Fellow of the Research Consortium of SHAPE, the American College of Sports, and the American Academy of Kinesiology. He served as editor-in-chief of the journal *Research Quarterly for Exercise and Sport* from 2013 to 2018 and currently serves on the editorial boards of 11 international journals. His contributions have been especially prominent in the areas of child fitness, workplace activity, and aging.

DR. CARLA SANTOS

DEPARTMENT HEAD, PROFESSOR

DEPARTMENT OF RECREATION, SPORT AND TOURISM

Recreation, Sport and Tourism department head Carla A. Santos was named a fellow of The Academy of Leisure Sciences, or TALS. Her research focuses on the examination of communicative practices (from mass mediated narratives to the face-to-face dyad) as a means of addressing the socio-political and cultural impact of tourism on the world's people and cultures. Dr. Santos earned her PhD from Penn State University and came to the University of Illinois as an assistant professor in 2002.

NATIONAL RECOGNITION

DR. ROBYN GOBIN
ASSISTANT PROFESSOR
DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

Dr. Robyn Gobin of the Department of Kinesiology and Community Health received the Carolyn Payton Early Career Award from the American Psychological Association's Society for the Psychology of Black Women. A licensed clinical psychologist, Dr. Gobin's research investigates how individual, cultural, and societal factors lead to unique outcomes in the aftermath of interpersonal trauma. The ultimate goal of her research is to promote healing in culturally diverse communities, reduce mental health stigma, and increase treatment engagement among individuals with PTSD.

ROBYN DETERDING
ADJUNCT INSTRUCTOR
DEPARTMENT OF RECREATION, SPORT AND TOURISM

Robyn Deterding of the Department of Recreation, Sport and Tourism received the NIRSA Annual Service Award from the National Intramural-Recreational Sports Association. The award recognizes the considerable volunteer efforts various NIRSA professional and student members have made to further NIRSA and the collegiate recreation field.

CAMPUS RECOGNITION

DR. MARNI BOPPART
DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

Dr. Marni Boppart is the 2020 recipient of the Beckman Institute Vision and Spirit Award. Dr. Boppart is a professor in the Department of Kinesiology and Community Health and also has appointments in the Carle Illinois College of Medicine and the Carle R. Woese Institute for Genomic Biology. Recipients of the award, which recognizes institute scholars who have fostered collaboration in their research and exemplify founder Arnold Beckman's vision, are awarded $150,000 to further their research.

DR. WENDY BARTLO
DR. JEFF WOODS
CENTER ON HEALTH, AGING, AND DISABILITY

Age-Friendly Champaign, led by Dr. Wendy Bartlo and Dr. Jeff Woods of the Center on Health, Aging, and Disability, received the 2020 Team Award for Excellence in Public Engagement from the University of Illinois at Urbana-Champaign.

DR. KIM SHINEW
DEPARTMENT OF RECREATION, SPORT AND TOURISM

Dr. Kim Shinew of the Department of Recreation, Sport and Tourism received the 2020 Larine Y. Cowan Make a Difference Award for Leadership in Diversity. The award recognizes exceptional dedication to and success in promoting diversity and inclusion via research, hiring practices, courses, programs, and events.

ANN FREDERICKSON
DIVISION OF DISABILITY RESOURCES AND EDUCATIONAL SERVICES

Ann Frederickson, coordinator of Accessible Media Services and disability specialist in the Division of Disability Resources and Educational Services, received the 2020 Larine Y. Cowan Make a Difference Award for Excellence in Access and Accommodations. The award recognizes individuals or campus units for their efforts to expand and improve the utilization of programs and structures by persons with disabilities.

DR. SANDRALUZ LARA-CINISOMO
DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

Dr. Sandraluz Lara-Cinisomo, assistant professor in the Department of Kinesiology and Community Health, received the Campus Award for Excellence in Graduate and Professional Teaching. The award recognizes sustained excellence and innovation in graduate or professional teaching and contributions to graduate or professional learning beyond classroom instruction.

COLLEGE RECOGNITION

STAFF EXCELLENCE AWARD

TERRI DANIELS
INTERNSHIP AND ENGAGEMENT COORDINATOR
DEPARTMENT OF RECREATION, SPORT AND TOURISM

ACADEMIC EXCELLENCE AWARD

JEANNETTE ELLIOTT
PHYSICAL THERAPIST
DIVISION OF DISABILITY RESOURCES AND EDUCATIONAL SERVICES

EXCELLENCE IN GUIDING UNDERGRADUATE RESEARCH AWARD

DR. NAIMAN KHAN
ASSISTANT PROFESSOR
DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

EXCELLENCE IN GRADUATE STUDENT MENTORING AWARD

DR. JACOB SOSNOFF
PROFESSOR
DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

EXCELLENCE IN GRADUATE AND PROFESSIONAL TEACHING AWARD

DR. SANDRALUZ LARA-CINISOMO
ASSISTANT PROFESSOR
DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

EXCELLENCE IN UNDERGRADUATE TEACHING AWARD: TEACHING ASSISTANT

LISELLE MILAZZO
PH.D. STUDENT
DEPARTMENT OF RECREATION, SPORT AND TOURISM

EXCELLENCE IN UNDERGRADUATE TEACHING AWARD: INSTRUCTIONAL STAFF

JUSTINE KAPLAN
CLINICAL ASSISTANT PROFESSOR
DEPARTMENT OF KINESIOLOGY AND COMMUNITY HEALTH

EXCELLENCE IN UNDERGRADUATE TEACHING AWARD: FACULTY

DR. JUSTIN ARONOFF
ASSOCIATE PROFESSOR
DEPARTMENT OF SPEECH AND HEARING SCIENCE

AHS_BY THE NUMBERS

30

PERCENTAGE OF AHS STUDENTS FROM UNDER-REPRESENTED GROUPS

FALL 2020 ENROLLMENT — 2381 // **TOTAL STUDENTS**

UNDERGRADUATE

	358 // FRESHMAN
	397 // SOPHOMORE
	562 // JUNIOR
	681 // SENIOR
	25 // NON-DEGREE
	2023 // TOTAL

GRADUATE

	217 // MASTER'S
	141 // PHD
	358 // TOTAL

65.5

PERCENTAGE OF AHS STUDENTS THAT ARE WOMEN

1560 WOMEN
821 MEN

PERCENTAGE OF AHS STUDENTS THAT ARE FROM ILLINOIS

86

Illinois

> IN THREE WORDS I CAN SUM UP EVERYTHING I'VE LEARNED ABOUT LIFE: **IT GOES ON.**
>
> – ROBERT FROST

COLLEGE OF APPLIED HEALTH SCIENCES

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