IOWA

FALL 2023 NEWSLETTER

DEPARTMENT OF HEALTH AND HUMAN PHYSIOLOGY

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MASTHEAD

STUDENT EDITOR

Grace McCarty

Grace McCarty is a second year undergraduate at the University of Iowa. She is an English and Creative Writing major, but previously studied Therapeutic Recreation. She enjoys writing short stories and getting coffee with her friends.

STAFF EDITOR

Mikey Waller

Mikey Waller started as the Curriculum Coordintor for the Health and Human Physiology Department in August. With her background in English, creative writing, and publishing, she is thrilled to be the staff editor for the department's newsletter!

STUDENT WRITERS

Elysse Bonds

Elysse Bonds is set to graduate from the University of Iowa in December of 2023 with a Writing Certification and bachelor's degree in English. A passionate wordsmith with a love for storytelling, she hopes to establish a career in digital, technical, or medical communication. Currently, she is putting the finishing touches on her debut novel.

Tiffany Gradeler

Tiffany Gradeler is a third year undergraduate student studying microbiology on the pre-dental track. She enjoys working as a receptionist in her hometown dental office during breaks. While in school, she works in the main library cafe and volunteers at various places.

Dr. Pierce and Drax outside of the Field House
Photo taken by Abby Van Anden

OPENING STATEMENT FROM THE DEO

Welcome to the Fall 2023 Health and Human Physiology Department newsletter!

The 2023-2024 academic year started strong for our department with fall 2023 enrollments of 2234 students across our 6 undergraduate majors and 107 students in our 5 graduate programs. Now in my second year as Chair and Department Executive Officer, I'm honored to lead the department in its progression towards achieving our strategic plan goals.

Here is a summary of updates that will be highlighted in this semester's newsletter:

Four new faculty and four new staff members have joined the department since August. We also welcomed Drax, a certified therapy dog, as part of our Therapeutic Recreation and Child Life programs. Drax also has his own office hours!

We celebrated the Groundbreaking of the new Health Sciences Academic Building on Oct 31 that has a scheduled completion date of March 2026. Faculty and staff continue to work closely with UI Campus Planning and Construction and RDG Architects on the internal design of research laboratories, teaching labs, experiential learning, and office spaces. We have also completed the move of several faculty offices and research labs to the Iowa Bioscience Innovation Facility, and opened the New Pediatric Play Lab (203 FH), Student Success Center (E101 FH), and SRM Podcasting Center (S5101P FH) in the Field House.

Our faculty and students have attended multiple conferences and given invited regional, national, and international presentations this fall, as well as received numerous grants and awards alongside high impact scientific publications among other accomplishments.

Multiple departmental sponsored events, such as the SRM Symposium and our Gisolfi Seminar Series, have brought nationally-renowned expert guests to campus to share expertise, interact with faculty, and network with undergraduate and graduate students.

In summary, the department's continued success this semester is worth celebrating. I'm grateful for our dedicated faculty and staff who help our students thrive, making HHP a destination department for careers in health sciences, research, sport/recreation, and exercise.

Thank you and Go Hawks!

—Gary Pierce, PhD, FAHA, FAPS
Professor and Chair, Health and Human Physiology Department
Russell B. Day and Florence D. Day Endowed Chair in Liberal Arts and Sciences

DEPARTMENTAL UPDATES

IOWA BIOSCIENCE INNOVATION FACILITY (IBIF)

The first floor remodeling of the Iowa Bioscience Innovation Facility (IBIF) completed in May 2023 to temporarily house four HHP Principal Investigator research laboratories, offices, and a conference room. The labs include the Behavior Medicine Laboratory and Community Health Collaborative in 115 IBIF, led by Dr. Lucas Carr, the Physical Acvitity and Cancer Survivorship Lab in 127 and 129 IBIF, led by Dr. Jessica Gorzelitz, the Integrative Labaoratory of Applied Physiology and Lifestyle Medicine in 122 and 129 IBIF, led by Dr. Nathanial Jenkins, and the Microvascular Physiology Laboratory in 118 IBIF, led by Dr. Anna Stanhewicz. The renovation also includes two consultation offices and a shared wet lab in 111 IBIF.

NEW STUDENT SUCCESS CENTER

The new Student Success Center open in August 2023! It is located in E101 FH, right next to the academic entrance. This lounge provides comfort and a quiet study space for students. There are multiple seating options, along with a couch, and a computer within the space. Whether students are catching up with friends, working on a group project, or taking a moment to reset, this lounge is the perfect area on the west side to get things done.

NEW PEDIATRIC PLAY LAB

This semester, the Health and Human Physiology Department opened the new Pediatric Play Lab. The lab will provide students with hands-on learning and onsite experience. A play lab is a specialized facility where students and staff can observe and assess children's play behavior. These labs are commonly used for studying child development and psychology, and designing interventions or therapies for pediatric patients. Dr. Kara Whitaker's NIH-funded 24/7 Pregnancy Study is also currently utilizing the space to monitor how activities during pregnancy affect the health of children. Leading the project is Emily Mozena, the program director of Therapeutic Recreation and Child Life. "We have wanted to have a pediatric play space for teaching and research for years," says Mozena in the CLAS article written by Charlotte Brookins. "We were able to find this space and we hope to use it for courses, demonstrations and discussions, and different group programming and opportunities with therapeutic recreation and child life."

Child Life Grad Student Maya Greer pictured with the mural she created in honor of Dr. Ken Mobily
Photo taken by Jill Tobin

Emily Mozena guides students through hands on learning activities
Photo taken by Jill Tobin

HSAB GROUNDBREAKING

Article written by Grace McCarty

The University of Iowa marked a momentous occasion as it broke ground on the new multimillion-dollar Health Science Academic Building (HSAB) on October 31st. The new HSAB will provide space for the Communication Sciences and Disorders, Physical Therapy Rehabilitation Sciences, and Health and Human Physiology Departments. This facility will give students the opportunity to have new hands-on experiences, labs, and research space. This project is being funded by University Hospitals Building Usage funds, university investment income, and private donations. The groundbreaking ceremony, attended by faculty, students, and dignitaries, symbolizes a significant step towards advancing education and research at the university.

Dr. Pierce gives a speech during the event
Photo by Jesse Wallace

From L to R:
Regent Nancy Dunkel, Regent and HHP Alum Abby Crow, President Barbara Wilson, Dr. Richard Shields, Dr. Gary Pierce, Dr. Eric Hunter, and Provost Kevin Kregel
Photo by Jesse Wallace

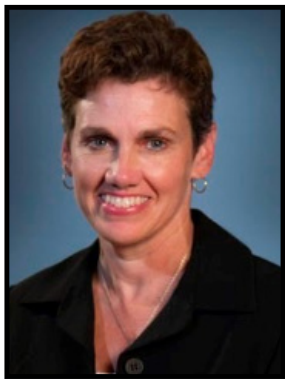
As the construction commences, anticipation and excitement build for the transformative impact this state-of-the-art facility will have on the University of Iowa's academics. Dr. Gary Pierce spoke at the event saying that the building will promote, "teaching, practice, research, and service to impact the health and well-being of the people of the state of Iowa and beyond." It will be monumental in advancing education and the practices of the departments involved. Faculty members await the enhanced capabilities this building will offer, providing them with new resources to advance research and innovation. The new HSAB aims to create an environment that fosters collaboration between departments, encouraging the exchange of ideas across various fields of study. Alumni, donors, and the community recognize the impact the building will have on education, research, and the overall campus experience. Check out the KWWL 7 News and Daily Iowan TV's coverage on the event!

NEW FACULTY ANNOUNCEMENT

Stephanie Borst, MS, RD

Lecturer, Health and Human Physiology

Stephanie Borst is a Registered Dietitian with certifications in pediatric nutrition and nutrition support. She previously taught Nutrition and Health, Pediatric Nutrition, as well as Critical Care and Nutrition Support at The University of Iowa.



Sarah Hardin, PhD

Lecturer, Sport and Recreation Management

Dr. Sarah Hardin's background includes practical and curricular experience in collegiate, community and nonprofit recreation management with a focus on student professional preparation. As a 2022-23 Visiting Assistant Professor, she assisted in the development of a Recreation Management concentration for the SRM major and enjoyed bringing practical experience to the classroom. Contributions to the recreation field include past board service to Missouri and Illinois Parks and Recreation Associations and leadership as NIRSA National Member Network Chair as well as current service on the Recreational Sports Journal editorial board and national campus recreation certification exam development for the Higher Education Consortium for Student Affairs. Sarah received a Ph.D. in Higher Education from Florida State University and an M.S. in Sport Management from the University of Illinois Urbana-Champaign.

Adam Kempenaar, MA

Professor of Practice, Sport and Recreation Management

Adam Kempenaar is an award-winning digital professional with more than two decades of experience driving audience engagement in sports, film, and media. He returns to the University of Iowa, where he earned an M.A. in Journalism and Mass Communication and a B.A. in Communication Studies, as Professor of Practice following 20 years with the Chicago Blackhawks. Adam most recently served as Vice President of Marketing and Content for the Blackhawks and is a pioneer in sports and film podcasting. Starting in early 2005, he hosted and produced HawkCast, the first podcast for a professional sports team, and co-founded the acclaimed Filmspotting, which the New York Times called the '#1 podcast for the movie buff' in 2019. Adam also holds a B.A. in English from Grinnell College.

Kate Wakenight, MA

Lecturer, Sport and Recreation Management

Kate Wakenight joins the department full-time after teaching two classes in the 2022-2023 academic year as an adjunct. She is an alumna of the program, being awarded her undergraduate degree in 2008 and her masters in 2012. Her career in athletics began in 2017 when she was hired as an Event Management intern in the Iowa Athletic Department. In 2014, Kate became the first Director of Operations for Track and Field and Cross Country at Iowa where she worked for 8 years. She is also an inaugural member of the SRM Advisory Board.

NEW STAFF ANNOUNCEMENT

Lauren Hudachek, BA, BS

Grad Coordinator

Lauren Hudachek graduated from Iowa State University in May 2020 with a B.S. in psychology & anthropology, as well as a B.A. in criminal justice studies. She has long-term goals to pursue a PhD in clinical psychology and study the bi-directional relationship between physical and mental health. While Lauren loves science and research, she also greatly enjoys working hands-on with others and being a source of support for those in need. She determined she was passionate about working with others, particularly in a higher education setting, from her past roles mentoring and tutoring undergraduate and graduate students at ISU and UNI. Now, she is excited to return to her hometown of Iowa City and assist as a Graduate Coordinator in the Dept of Health & Human Physiology.

Edina Schmidt, BS

Instructional Services Specialist

Edina Schmidt joined our department as a temporary Instructional Services Specialist in August and joined the full-time staff in December. She will be coordinating our teaching labs. Edina is a recent graduate of HHP (B.S. in Exercise Science, ‘23) and was a captain on the UI Volleyball team.

Abby Van Anden, MA

Faculty Support Specialist

Abby Van Anden is thrilled to be starting as the new Operations and Faculty Support Specialist. She comes from a career in Higher Education within Student Affairs after earning a MS in College Student Personnel at Western Illinois University. Having worked within Residence Life and Student Conduct, her career has given her a wealth of experience working with students, faculty, and student support offices. As she continues to learn about the team here, Abby is eager to see how she can contribute and support faculty in their roles so they can focus on the core aspects of their work.

Personally, she is also a potter and can often be found making functional pottery in her home studio. She loves the outdoors and spends as much time as she can outside with her husband, Ian, and their two kids, Eleanor (6) and Oliver (4), and their miniature schnauzer Lily.

Mikey Waller, BA

Curriculum Coordinator

Mikey Waller, an Ohioan turned Iowan turned Hawkeye, graduated in May 2023 with a B.A. in English and creative writing on the publishing track. During undergrad, Mikey worked as a front desk administrator for the English Department, got involved in several literary magazines, gained teaching experience as an undergraduate TA, and played on the Iowa Women's Rugby Team. Through developing administrative, collaborative, and organizational skills, Mikey realized her interest in higher education. As the new Curriculum Coordinator for the Health & Human Physiology Department, she's excited to get to know the department and grow into the role!

SRM SUMMER FIELD EXPERIENCE

San Diego Padres

SRM: 4197:0001 taught by Prof. Packy Moran

Among the many experiences students received, the Padres and San Diego Loyal SC hosted students for multiple games and opportunities to experience top level events and spaces. The NWSL's San Diego Wave FC and Belmont Park on Mission Beach presented chances for students to work on sponsorship challenges. The Big West Conference and Loyal SC heard from students on branding and overall marketing challenges. The PGA's Farmers' Insurance Open had a student team investigate volunteer recruitment and retention.

NASCAR Chicago Street Race

SRM: 4197:0002 taught by Prof. Dan Matheson

The first few weeks of the class involved a business challenge from NASCAR execs for the students to perform market research and develop actionable promotional campaigns that could spark attendance and TV viewership of the Chicago Street Race in future years by the Gen Z age group. Students presented their campaigns and research and received feedback and praise for developing strategies that have the potential to be activated next year.

Read more about this incredible experience in this article by Emily Nelson!

Team USA

SRM: 4197:0016 taught by Prof. Jeremy Parrish

During the action-packed week in Colorado Springs – Olympic City USA, students were able to hear directly from and connect with over 20 guest speakers from the US Olympic and Paralympic Committee, US Olympic and Paralympic Foundation, US Olympic and Paralympic Museum, 7 different sport National Governing Bodies, Colorado Springs Sports Corporation, Rocky Mountain Vibes Baseball Organization, plus Olympic and Paralympic athletes. Included among the speakers were UISRM alumnae Morgan (Rabine) Benham with USA Wrestling and Lindsay Welker with the USA Triathlon Foundation.

RESEARCH SPOTLIGHT: DR. ANNA STANHEWICZ

Health Risks Beyond Recovery: The Imprints of GDM

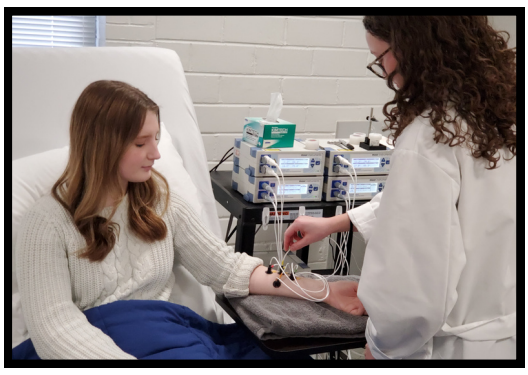
Article written by Elysse Bonds

In the summer of 2023 the National Institutes of Health (NIH) awarded a five-year grant of just over $3 million to support the research of long-term health effects of gestational diabetes. The recipient was Anna Stanhewicz, PhD, assistant professor of Health and Human Physiology at the University of Iowa. In an ongoing study Dr. Stanhewicz has been investigating the role of endothelial dysfunction in the impairment of insulin's action on blood vessels in women with a history of gestational diabetes (GDM). "Women who develop diabetes for the first-time during pregnancy, although they recover after they deliver, are more likely to develop cardiovascular disease and type II diabetes in the following years," Dr. Stanhewicz says. "We believe that dysfunction of the smallest blood vessels in the body contribute to this, and we want to know why." Though her studies have yielded insights that no other labs have yet discovered, this area of science didn't pique her interest until she'd already arrived at the University.

Dr. Stanhewicz grew up in Upstate New York, 45 minutes northwest of Manhattan in the spot where New York, New Jersey, and Pennsylvania meet at a convergence of distinct landscapes and regional influences. She received her bachelor's degree in kinesiology from the University of Rhode Island before attending Penn State where she earned her master's in physiology and her PhD in kinesiology. It was there that Dr. Stanhewicz also met her husband.

Today Dr. Stanhewicz lives with her family, whom she affectionately refers to as the Nittany Lion and the cubs, in the heart of Hawkeye Country. When she first arrived on the UIowa scene in 2019, GDM wasn't on her radar. She'd accepted the position because of its appeal. With access to collaborators and clinical resources, an environment to conduct academic studies, and the opportunity to teach, the opportunity felt like a dream job. Because she studied women with a history of pregnancy complications, GDM kept coming up. "People would always ask me about gestational diabetes," Dr. Stanhewicz says, and when the Diabetes Research Center on UI's campus made a call for proposals, she decided to apply. "I thought, you know, people always ask me this question. I don't have a good answer. There is no good answer in the literature. We don't know, so I'm going to ask."

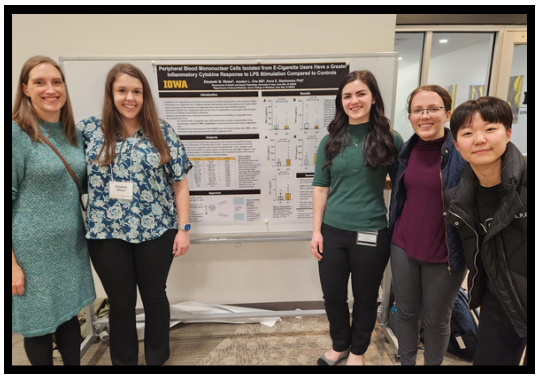
Dr. Stanhewicz knew that individuals with GDM, diabetes, and cardiovascular disease have reduced endothelial function. However, not much was understood about the window of time between recovery from GDM and the development of other conditions. She wanted to know whether women during this period also had a weakened insulin response in their small blood vessels. Specifically, she was examining their ability to properly dilate and facilitate the delivery of nutrients to cells.



Undergraduate student Roman Schlarman (BS' 21) and Research Assistant Kaila Brustkern demonstrate the intradermal microdialysis setup

To find her answer, Dr. Stanhewicz used a technique called intradermal microdialysis, which involves placing an extremely fine, semi-permeable membrane just beneath the surface of a participant's skin on the forearm. These membranes serve as artificial capillaries, pumping in solutions so that Dr. Stanhewicz can examine how blood vessels in that area respond. "It allows us to locally and acutely deliver a pharmacological agent to a very small area of tissue in the skin. When we increase the concentration of that agent in that small area of skin, it acts on the blood vessels. Then we measure the blood flow response." That agent was insulin, and Dr. Stanhewicz hypothesized that the participants with a history of GDM would have a reduced response to the hormone.

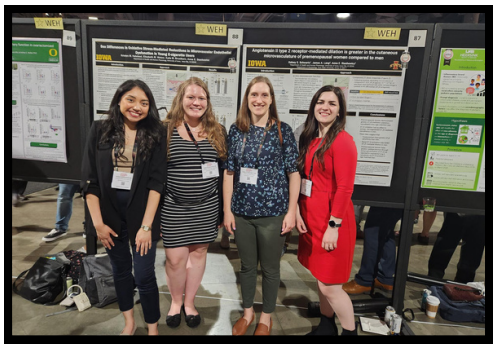
Dr. Stanhewicz had already conducted a similar study back in 2022. The paper, titled, “Oxidative Stress Contributes to Reductions in Microvascular Endothelial-and Nitric Oxide-Dependent Dilation in Women with a History of Gestational Diabetes,” was published in the *Journal of Applied Physiology*. It describes how the team used local heating of the skin surface instead of insulin to measure blood vessel dilation. They then added a drug called L-NAME, which lowers the overall response by blocking nitric oxide production. With this, Dr. Stanhewicz could quantify how much nitric oxide contributed to each response. In the end the team learned that women with a history of GDM did have reduced endothelial function, mediated by a reduction in nitric oxide. Further, that reduction was secondary to increases in oxidative stress. Already associated with GDM, oxidative stress is essentially a biochemical imbalance that leads to damage in cells, proteins, and DNA. Dr. Stanhewicz believes these responses might be some of the earliest mechanisms that lead to the onset of type II diabetes and cardiovascular disease.



Microvascular Physiology Lab group members at the 2023 Fall Undergraduate Research Festival

Microvascular Physiology Lab group members at the 2022 Iowa Physiological Society Annual Meeting

The data from that initial study in 2022 supplemented Dr. Stanhewicz’s proposal to the NIH, and though she is grateful for the monetary cushion that the grant provides, she stresses that the willingness of her human participants is just as important. The team made sure that participants understood the importance of following each rule carefully. Before the study they were prohibited from drinking caffeine for twelve hours and asked to fast for eight.

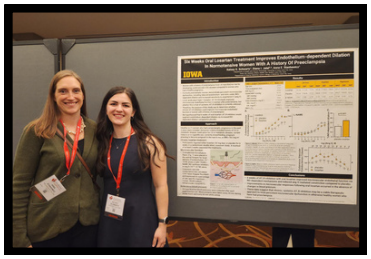


Microvascular Physiology Lab group members at the 2023 American Physiological Society Summit

Dr. Stanhewicz says that there were no problems with the participants. Working with them during the studies, and even recruiting them, went smoothly. One of the reasons why Dr. Stanhewicz was eager to work at the University was because of the ease with which she could conduct research, and she feels that this study is an example of that. “We’re in an environment where a lot of people are familiar with the concept of research and interested in participating,” she says. There was a large pool of eligible participants, and even Dr. Stanhewicz, whose youngest son is two years old, would technically qualify for the control group. Additionally, since women with a history of gestational diabetes would benefit from new information regarding the disease, they are typically interested in participating.

As the results of this research roll in, the team is once again seeing that women who had GDM during their pregnancy having reduced endothelial function, mediated by a reduction of nitric oxide. As a result, the blood vessels are failing to properly dilate in response to insulin, as the team predicted. The paper has yet to be published, and additional trials must be conducted to confirm the data. Moving forward, Dr. Stanhewicz believes that these discoveries are only a small piece of a much larger puzzle.

From the beginning, she never saw the NIH’s contribution as a signal to jump headfirst into answering the big question right away. Right now, the exact reasons why women with a history of gestational diabetes are more likely to develop additional complications remain unclear. Because nobody has tried to understand the mechanisms of this condition, she first must figure out what is happening before she can try to come up with solutions.



Dr. Stanhewicz and Kelsey Schwartz at the 2023 American Heart Association Hypertension Scientific Sessions

“I think there’s probably a lot of factors,” she says. “There’s a number of potential mechanisms that are all coming together, but we know that microvascular function precedes and predicts the development of cardiovascular disease and type II diabetes, so the grant is helping to answer some of those questions.”

SRM SYMPOSIUM

Exploring what is possible.

Women Leaders in Sports panel

Article written by Professor Alex Voss for the SRM Newsletter

Aspiring sport and recreation professionals had to go no further than the Iowa Memorial Union to explore career opportunities, discover how to achieve their dream job, and engage with individuals working in the industry to help them along their path. The Hawkeye Sport Business Association (HSBA) welcomed over forty industry pros to campus for the 8th annual UISRM Symposium on Monday, September 18.

Among the featured speakers was Tara Carsner, Founder of Hometeam LLC. Tara learned of the program and its 'Student focused. Industry centered.' mantra through previous NASCAR practicum students who connected with her via LinkedIn after learning of her work with Lyrical Lemonade. In her mainstage session, Tara highlighted the importance of relationships, hustle, and an unbelievable passion for what one aspires to achieve as a foundation for career success.

HSBA was also honored to deliver a 'super panel' featuring four successful women in sport and recreation. Kyra Kendrick (Women Leaders in Sports), Jenn Fraser (NCAA), Erin Mykleby (Stan Johnson & Associates), and Kayla Smith (NAIA) shared their paths in the industry, but also encouraged everyone in attendance to support and advance the careers of all under-represented individuals looking to succeed in sport and recreation. Furthermore, and to kick off the session, Dan Matheson, Program Director, announced a new partnership between UISRM and Women Leaders in Sports that will provide up to 20 memberships to current undergraduate and graduate students.

Beyond the featured sessions highlighted above, attendees had the opportunity to learn of networking and interviewing best practices from Stephanie Rogers (Vegas Golden Knights) and AJ Gioglio (Arizona Diamondbacks). Attendees aiming to learn about different career paths could select from breakout discussions on topics such as revenue generation; marketing and social media; and event management to inform them of relevant volunteer and field experience worthy work opportunities. If that wasn't enough, attendees had over one hour to interact one-on-one with professionals eager to support the next generation of sport and recreation professionals.

Special thanks to HSBA Event Management Special Interest Group leaders Hannah Frazier (ex. BS 2025) and Hugo Flores (ex. BS 2023) for their role in creating the experience for students. Their efforts provided a home-field advantage for all attendees. Lastly, thank you to the Russell B. Day and Florence D. Day Endowed Chair in CLAS, Graduate Iowa City, UI Health and Human Physiology, and the UISRM University of Iowa Center for Advancement donors for your financial and in-kind support of the UISRM Symposium.

SRM SYMPOSIUM PHOTO ALBUM

SRM Symposium workshop session

Check out SRM's Facebook for more photos!

SRM Symposium Revenue Generation panel

SRM Symposium networking session

SRM Symposium keynote presenter Tara Carsner

Pre-Symposium networking session with SRM Advisory Board members for all grad students and select undergraduates

SRM program celebration of scholarship recipients and Dr. Michael Teague All-Star Award honorees

RESEARCH SPOTLIGHT: DR. ERIN TALBERT

Testosterone Deficiency, One of the Many Halts for Cancer Patients

Article written by Tiffany Gradeler

The past few decades have seen many advancements in helping cancer patients live longer and more fulfilling lives. However, according to Erin Talbert, PhD, there is more that can be done for patients with pancreatic cancer. Pancreatic cancer patients face many detrimental outcomes, and Dr. Talbert is particularly interested in one of them, namely testosterone deficiency in males and the need for providers to screen for the condition. Dr. Talbert is the principal investigator in the Muscle and Molecular Physiology Laboratory at the University of Iowa, which opened in 2020. In her 2023 study, "Retrospective Study of Testosterone Deficiency and Symptom Burden in Patients with Pancreatic Cancer," which was published in the journal of *Translational Andrology and Urology*, Dr. Talbert and her colleagues attempt to show the relationship between testosterone deficiencies and pancreatic ductal adenocarcinoma (PDAC) in male patients. Their research aims to investigate factors that contribute to the poor quality of life of pancreatic cancer patients following treatment.

Dr. Talbert was raised in Russiaville, Indiana, and later received her BS in chemistry and biochemistry from Purdue University. As an undergraduate student at Purdue, Dr. Talbert hoped to become an exercise physiologist. Through her educational journey she became more interested in the scientific components of the health and human physiology field, leading her to pursue her doctorate. She completed her Ph.D. in Health and Human Performance at the University of Florida and was then awarded a Postdoctoral fellowship at Ohio State University and a Postdoctoral Scholarship at the Medical University of South Carolina. Dr. Talbert has attributed her success and development during her educational journey to having been surrounded by great mentors during her undergraduate studies. Her aim is to provide a similar working environment for her colleagues and students today. Dr. Talbert began teaching as an assistant professor at the University of Iowa in courses such as Applied Exercise Physiology, Skeletal Muscle Physiology, and Integrative Physiology of Exercise. "I love the mix of my job and having undergraduate students in the classroom," Dr. Talbert says. "Teaching them makes me a better scientist, it makes me communicate more clearly, and it is also nice to go back to the basics of science."

"I love the mix of my job and having undergraduate students in the classroom," Dr. Talbert says. "**Teaching them makes me a better scientist**, it makes me communicate more clearly, and it is also nice to go back to the basics of science."
-Dr. Erin Talbert

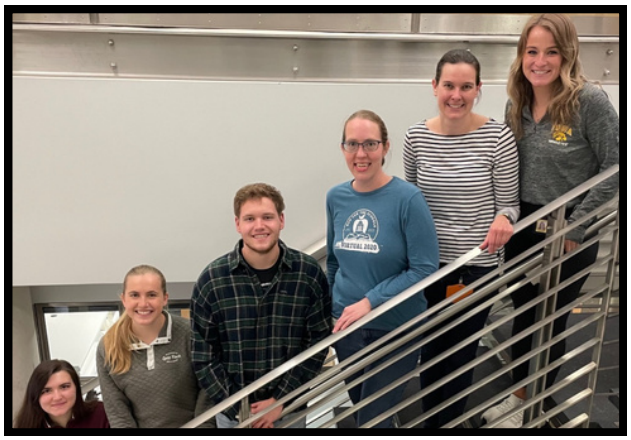
In the Muscle and Molecular Physiology laboratory her team focuses on the constitutional symptoms faced by PDAC patients. These symptoms include fatigue, weakness, weight loss, and cognitive dysfunction. However, her research reflects the fact that although these symptoms are commonly associated with PDAC or treatment, they are also consistent with testosterone deficiency. Testosterone deficiency is defined as a less than 300 ng/dL of testosterone in patients. At the time of the study testosterone was not a procedural laboratory test recommended for PDAC patients. This led Dr. Talbert and her team to investigate the relationship between testosterone deficiency and screenings in PDAC patients at the University of Iowa Hospital and Clinics.

Dr. Talbert and her team explain that androgen deficiency, a precursor to many hormones, including testosterone, has previously been found in advanced cancer patients, which was causing muscle weakness in cancer patients. These symptoms were similar to those of patients with cachexia syndrome —a condition that results in loss of muscle mass that is sometimes found in PDAC patients. Dr. Talbert and her team wondered if increasing testosterone in PDAC patients could improve their physical performance, which would reflect a retention of muscle strength and function. She notes that "higher circulating levels of testosterone have been associated with improved performance on a stair climb test in cancer patients, suggesting that testosterone likely impacts physical performance." Although the study primarily focuses on testosterone deficiency, it has implications for the decrease in physical abilities of PDAC patients as well as those with cachexia syndrome. Dr. Talbert notes that pancreatic cancer patients tend to have higher severities and incidences of cachexia.

"The five-year survival rate for pancreatic cancer is only 12%, which is why I am interested in this population of patients as they are deeply affected by cachexia. We think that preventing muscle wasting in these patients will help them live longer and fuller lives." Dr. Talbert explains that at the University of Iowa, many PDAC patients report symptoms of testosterone deficiency but are rarely screened.

For her experiments Dr. Talbert separated participants into groups A and B. For patients in group A, testosterone testing was analyzed via electronic medical records. For group B, serum samples were taken and assessed using the DIAsource Testosterone ELISA kit. This kit allows for the measurement of the patient sample's testosterone using competitive binding. The results showed that 57% of group A were considered to have low testosterone. In group B, almost 50% of patients had low testosterone, and only approximately 2% of these patients had their testosterone levels measured beforehand. The patients comprising that 2% received no treatment following their screenings for low levels of testosterone. There was no correlation between testosterone and overall survival of PDAC patients. Overall, one in two patients evaluated were found to have laboratory evidence of a testosterone deficiency.

Dr. Talbert and her team focused on patient data to understand the negative effects of pancreatic cancer in people. However, they also used mouse and cell models to further investigate the negative factors contributing to the diminished lifestyles of PDAC patients. In terms of testosterone deficiency, Dr. Talbert and her team believe there is a need for more studies exploring potential solutions for PDAC patients, such as testosterone supplementation. According to the study, large trials have suggested that testosterone therapy can increase activity, sexual desire, and erectile function while reducing symptoms of depression. Dr. Talbert and her team concluded that more studies could further show if testosterone deficiency (and supplementation) plays a role in the well-being of PDAC patients.



L to R: Emily Kalmanek, Natalia Weinzierl, Connor Flynn, Katie Spliter, Dr. Talbert, and Ashley Freeman

Dr. Talbert plans to continue to call Iowa City home. Despite her busy schedule, she finds time to run and bike around the city. "On an average day, I teach a lecture or host office hours and get to interact with undergraduate students. On Mondays I meet with my lab to sit down and look at our data. There are a lot of academic services, where I spend time reading the paper of someone who's not published yet, and peer review them," she says. Dr. Talbert wants to continue to pursue academia as well as her cancer and cachexia research. In the last year she traveled to Stockholm, Edinburgh, and Florida to inform peers about her work. In 2020, Dr. Talbert was selected as a Next Generation Cancer Cachexia Researcher for their virtual conference. At this conference Dr. Talbert was able to connect with other scientists in her field, allowing her to learn from their methods. While traveling can be fun for Dr. Talbert, she feels it also helps advance her research. "I look at my data through all my lived experiences, but other people have a different experience when considering my data. I find it's helpful for them to ask questions, and ultimately it sends me home to try new experiments."

DRAX MAKES CAMPUS DEBUT

Article written by Grace McCarty

Have you had the chance to meet our new furry friend on staff? Adrienne Johnson, a professor in the Therapeutic Recreation Program and Drax's handler, gives the inside scoop about everyone's new favorite pup. Drax is a two-year-old Bernese Mountain Dog. His day with Prof. Johnson usually begins with a trip to the dog park for a morning walk or run. On Mondays and Wednesdays, Drax goes to work with her. Together, they attend classes, meetings, and office hours. After classes, students are welcome to spend time with him during his office hours on Wednesday from 9:30 to 11:30 until week sixteen of the semester. After work they head home and have more play time together. He is groomed every night before bed so he is looking his best for the next day.

While being a therapy dog seems natural for Drax, Prof. Johnson worked hard to get him certified. Before he was born, she researched the most appropriate breeds for therapy dogs. "There's not a perfect type of breed. Any dog can become a therapy animal," she explains. The most common breeds are Labs, Retrievers, and Bernese Mountain dogs. Bernese Mountain dogs, like Drax, often have the ideal temperament needed for the work of a therapy dog.

Prof. Johnson reached out to a reputable breeder in Iowa and asked about the next expected litter. The moment Drax was born, the breeder performed temperament testing, evaluating how he socialized with other dogs and people, as well as his reaction to things like pulling on his tail and ears. Out of the litter, five were picked for Prof. Johnson's selection. She chose the biggest one, Drax. He stayed at the breeders for a couple extra weeks to immediately begin training. At ten weeks old, he was taken home and began puppy training for a year. After completing puppy training, which can involve household manners, house training, and social experiences, he set out to do adult obedience training and Canine Good Citizen. Canine Good Citizen is a ten-skill test that teaches good manners to dogs and responsible dog ownership to their owners. Along with Drax's training, Prof. Johnson had to take an animal handler course before his certification could be completed. Finally, after two years of training, they took the Pet Partners Aptitude test. After passing, they were certified as a team!

Professor Adrienne Johnson and Drax

In his first semester, Drax is receiving an abundance of positive feedback from students and is considered to have a big impact on their teaching environment. “I think I saw the biggest impact in terms of teaching in my first-year seminar, which is designed for first year students. My participation, engagement, and attendance in that class was way higher than any of my other classes,” Prof. Johnson explains. Only a couple students miss during the whole eight weeks of her seminar. She saw that when Drax was present for her class, the students opened up more quickly, had more engagement, and stayed open for the remainder of that class. When she brought guest speakers with animals, students were interested in the subject and highlighted in feedback that it was really engaging for them. “They found that they didn’t want to miss class because they didn’t want to miss spending time with Drax.” She even had more students come to office hours just to sit with Drax and relax.

Prof. Johnson has many future goals and events with Drax planned. They don’t yet have anything scheduled, but goals are set. In the past, they’ve had field trips to dog parks with the Therapeutic Recreation and Child Life programs, which she is hoping to do again. Prof. Johnson is also planning to utilize Drax in service capacities, such as visiting the psychiatric residents at UIHC once a month for the rest of the year. She is currently working with the Office of Student Life and their therapy animal to collaborate at events.

Overall, the positive impact of Drax is overwhelming. “I will say Drax really likes being here as much as I have enjoyed bringing him. The students and faculty have enjoyed having him here. He even waits by the car in the morning and gets very excited to get his vest on to go to work. He’s very excited to come and be part of what we do here at the University of Iowa.”

“They found that they didn’t want to miss class because they didn’t want to miss spending time with Drax.”

FIND MORE DRAX CONTENT BELOW!

DITV: The University of Iowa Adds Second Therapy Dog

CLAS welcomes new therapy dog into the therapeutic recreation program

Health and Human Physiology: Meet Drax

FALL 2023 GISOLFI SEMINAR SERIES

Diana Jalal, MD: Associate Professor of Internal Medicine-Nephrology, University of Iowa, Carver School of Medicine

Topic: *The Alternative Pathway of Complement and Vascular Disease in CKD: A Potential Link*

Dr. Diana Jalal is an Associate Professor of Internal Medicine with a focus on Nephrology at the University of Iowa. Since 2017, she's served as the Deputy Chief of Subspecialty Medicine at the Iowa City Veterans Affair Medical Center (VAMC). Driven by the profound desire to assist those affected by chronic kidney Disease, Dr. Jalal's career has been dedicated to patient care, teaching the new generation, and conducting research to find solutions and improve lives.

W. Larry Kenney, PhD: Marie Underhill Noll Chair in Human Performance, Professor of Physiology, Kinesiology, Pennsylvania State University

Topic: *Aging in a Hotter World*

Dr. W. Larry Kenney is a Professor at Penn State University, where he teaches Physiology and Kinesiology. He specializes in human skin blood flow, thermoregulation during exercise in extreme environments, and the heat exchange between humans and their surroundings. Noteworthy for his significant contributions, he secured funding from the NIH from 1986 to 2015. Dr. Kenney makes it a point to share his knowledge beyond the classroom, evident by his authorship of two books and nearly 300 journal articles.

Laura Q. Rogers, MD, MPH: Professor in the Division of Preventive Medicine, Department of Internal Medicine, University of Alabama at Birmingham

Topic: *Exercise After a Cancer Diagnosis: From Research to Practice*

Since 2012, Dr. Laura Q. Rogers has served on the faculty at the University of Alabama at Birmingham, where she's currently a Professor of Preventive Medicine. Her specialization is outpatient general internal medicine and weight management. Wanting to facilitate healthy lifestyle behavior changes in people affected by chronic disease, she's spent nearly 3 decades developing and testing research initiatives. Dr. Rogers is a senior scientist at several UAB research centers and has authored more than 100 research publications.

Marni Boppart, ScD: Professor of Kinesiology and Community Health, University of Illinois

Topic: *Extracellular Vesicle Approaches to Recovery of Skeletal Muscle After Disuse*

Dr. Marni Boppart works as a Professor of Kinesiology and Community Health at the University of Illinois Urbana-Champaign. There, she conducts research on the molecular and cellular mechanisms that underlie muscular repair and growth following exercise. With a mission to prevent muscle injuries, maintain tissue health, protect against age-related disabilities, and develop beneficial adaptation strategies in exercise, Dr. Boppart also holds key roles as a Professor of Biomedical and Translational Sciences at Carle Illinois College of Medicine and as a Professor at the Beckman Institute for Advanced Science and Technology.

UNDERGRADUATE NEWS

Health Studies Major Sharon Goodman Earns Academic All-Big Ten Honors, Named a Big Ten Distinguished Scholar

In the article "Competitive on the court and in the classroom," Sara Epstein Moniger highlights women's basketball player, and HHP student, Sharon Goodman for her dedication to academics that earned her the Elite 90 Award from the NCAA. Goodman expresses gratitude for her coaches, teammates, and supporters, as well as HHP Professor Kelli Taeger. "She worked with me on my basketball conflicts and was also excited to watch our games. She is one of my favorite professors on campus." The department congratulates Goodman and her incredible accomplishments!

Photos by Brian Ray

A Total of 54 HHP Students Invited to Join Phi Beta Kappa Society

Across the Exercise Science, Health Studies, Health Promotion, Human Physiology, Sport and Recreation Management, and Therapeutic Recreation Programs, 54 undergraduate students have been invited to join Phi Beta Kappa Society for their academic excellence and integrity. Out of the 10% of U.S. colleges and universities that have Phi Beta Kappa chapters, only 10% of their arts and sciences graduates are invited to join. Congratulations to our dedicated students who achieved this honor!

The PHI BETA KAPPA Society

Undergraduate Learning Assistants: High Impact, High Reward

The Department of Health and Human Physiology recently partnered with Academic Support & Retention to develop opportunities for current undergraduate students to serve as peer Learning Assistants (LAs) in human anatomy and physiology labs. Undergraduate Learning Assistants work closely with HHP faculty mentors and complete pedagogy coursework, building their facilitation skills to empower student learning during class or lab sessions. HHP is one of three departments on campus that offer LA opportunities, and the only one to embed LAs into lab courses. Read more on the LA website here.

"Getting to work with students on physiology content has improved my confidence and passion for the subject while helping to facilitate a deeper understanding of the concepts studied in lab."- Cade, Fall 2023 Learning Assistant

Spring 2023: The amazing inaugural cohort of LAs in Human Physiology with Lab: Lavena, Margaret, Laney, Oscar, Dr. Jen Rogers, and Piper

LA Omar with his Fall 2023 human physiology lab section

GRADUATE NEWS

Child Life Field Trip to Des Moines

During the Child Life Des Moines Field Trip, students were able to visit four child life programs (seeing UI alumni) and learned about a variety of services a child life specialist can provide.

They started the day at ChildServe, an inpatient rehabilitation unit serving children 0-22 years old with various abilities and conditions. They have a Child Life Specialist and a facility dog at this program. They then went to Children's Cancer Connection, serving children and their families effected by pediatric cancer, and met with one of the program's UI alumni and toured the facility, discussing various roles for a child life specialist in a community non-profit setting.

They had lunch and then went to Blank Children's Hospital and met their child life staff, where they ran into more UI alumni during a tour. Their final stop was MercyOne Children's Hospital where they met with two UI alumni that had just graduated in May 2023 and were given a tour and learned about their experiences.

HHP PhD Candidate Kelsey Schwartz Awarded a Graduate College Post-Comprehensive Research Fellowship

Kelsey Schwartz is a PhD candidate in the Health and Human Physiology department. Her research focuses on the chronic disease burden of preeclampsia, a cardiovascular condition affecting 8-10% of pregnancies. After pregnancy, women who had preeclampsia are at a greater risk to develop cardiovascular disease. However, the mechanisms underlying this increased risk are unclear, and there are no approved therapies to reduce disease progression. Kelsey's dissertation revolves around two major aims: 1) determining the extent that dysregulation of the angiotensin system damages blood vessels during preeclampsia and persists postpartum, and 2) if restoring balance to this system can mitigate or reverse blood vessel dysfunction that remains following delivery. Kelsey's research may provide valuable information to stop cardiovascular disease progression in these otherwise healthy, high-risk women.

Read more about the fellowship here. Congrats Kelsey!

Congratulations to our Fall '23 graduates!

Lauren Steinke, MS

Andrea Babcock, MS

Brian Brookhart, MS

Libby Brosius, MS

Cade Aspelmeier, MA

Derek Ravlin, MA

MEET THE REUTERS

A Q&A with the family of three HHP students

From L to R: Kody, Taylor, Cheri, Hallie, Ken, and Kasey

Q: What is a memorable experience from your time HHP?

Kasey: My Writing in Health and Human Physiology class with Andres Carlstein was a challenging and memorable HHP class. I was able to develop my personal statement, a resume, and a general outline for my graduate school application essays. This allowed me to send in my information within the first 2 weeks of the application period. While I was working through what I wanted to write about, Professor Carlstein gave myself and my classmates thought-provoking prompts that gave me discernment of who I am on a deeper level. I grew close with my classmates during this class because it brought all of us out of our comfort zone. I highly recommend his class— it's a one-of-a-kind experience.

Hallie: One particularly noteworthy aspect of my time in HHP was the shift to online classes necessitated by the pandemic. All my HHP professors went above and beyond to adapt to the change and were accommodating to students. Despite the challenges posed by the sudden shift to virtual learning, they quickly transitioned their courses to an online format, provided additional support, and maintained their commitment to delivering quality education. This experience highlighted the resilience and dedication of both the faculty and my classmates, creating a strong sense of unity within the HHP community during a challenging time. It was a testament to the department's commitment to its students' success, and I will always remember how everyone came together to navigate the unprecedented times.

Taylor: A memorable experience I had in HHP was performing tests in lab. This was memorable because it allowed me to feel like a clinician. Doing these tests opened my eyes to what life would look like in my career. It was exciting to practice my skills and to get to experience what I am working towards.

Q: What are you doing now/aiming for in a future career? How did HHP help prepare you?

Kasey: I am an outpatient orthopedic and pelvic floor physical therapist at The Iowa Clinic in Ankeny. HHP helped me develop the skills to be a critical thinker in the clinical setting. Iowa's HHP program gave me the tools to communicate well and develop strong interpersonal relationships with my patients. Making connections and helping people achieve their goals to improve their quality of life is what I love the most about my job— it is so rewarding!

Hallie: I am in my second year of graduate school at the University of Iowa pursuing a Master of Health Administration. Upon graduation in May, I will be joining HealthPartners in the Twin Cities as an Administrative Fellow. When I was an undergraduate student, I never considered the career path that I am on now. I started college with the intention to pursue a clinical career path but found that I loved the business aspect of healthcare. The Health and Human Physiology Department played an integral role in shaping my career interests. Despite the seemingly different fields, my degree in human physiology equips me with the knowledge of the human body's functions, anatomy, and the bases for various medical conditions. This understanding is valuable in healthcare management and allows me to better communicate with clinical teams. The HHP department also prepared me with critical analytical and problem-solving skills that are necessary to solve complex issues in healthcare settings.

I think I speak for both of my sisters when I say this, but I would like to add that none of us could have got here without our parents. **We owe everything to them.**
-Taylor Reuter

Taylor: I am aiming to be a chiropractor post-graduation with an exercise science degree from Iowa. HHP has helped expand my thinking process so that I know I can think about clients in all areas of their life. Classes taught me that there are different areas to focus on based on the person and that health is multi-dimensional.

Q: What most surprised you about your time at Iowa?

Kasey: As someone who transferred to Iowa after 3 semesters, I was surprised by how challenging the courses at Iowa were compared to my prior university. It definitely prepared me for the challenges that I encountered in graduate school, and I'm incredibly grateful for being well-prepared so grad school was an easy transition.

Hallie: What most surprised me about my time at the University of Iowa was the support that you find. I grew up in a small town and graduated high school with a class of 53 people, so I was nervous to go to a large university. I quickly found that there are professors, academic advisors, student organizations, and classmates that are in your corner, cheering you on.

Taylor: What surprised me the most about my time at Iowa is how close I got to all my peers. Freshman me had no idea that people I met on my first day of math discussion would still be in my classes and that we would refer to each other as friends. The HHP program is unique in the way that when you start classes a lot of the people you will be with for the rest of the time at the university. I expected the university to feel very large in comparison to my high school yet being in the HHP department allowed me to make the university feel small.

From L to R:
Kasey, BA in Health Studies, Fall '18, DPT Fall '21
Hallie, BS in Human Physiology, Spring '22, MHA candidate
Taylor, BS in Exercise Science, Fall '23

Q: What makes you proud of your sisters?

Kasey: As Hallie and Taylor's older sister, I'm immensely proud of the women they have grown to be. They are intelligent, driven, and willing to fearlessly pursue their passions. Our parents aren't in health care, so I think it's funny that we all decided upon the same major. All three of us girls (and our older brother) will be in health care in some capacity, and I think it's because our parents raised us to be compassionate people.

Hallie: Growing up, Kasey was my biggest role model, and I always wanted to follow directly in her footsteps. Kase accomplishes whatever she sets her mind to with grace and humility, and I am most proud of her for always facing adversity head on. While I no longer follow her step by step, the fact that she is my biggest role model will never change. Taylor is witty, personable, and brings laughter to whatever room she walks into. Growing up as the youngest sibling of four, I knew that she always felt pressure to follow in our footsteps. I am most proud of her for finding her own passions and paving her own path. While all three Reuter girls decided to pursue a degree with HHP, each of our journeys was unique.

Taylor: Being the youngest sibling and having three older siblings to look up to I was very worried I was not going to live up to their greatness. I always disliked this expectation but looking back on everything this is what grew me into the person I am now. So, selfishly, I am proud of how my sisters helped push me, teach me that it is okay to ask for help, and show me that hard work always pays off. I could not be prouder of them for always staying true to who they are and reaching the goals they set for themselves while also being the people I look up to, whether they knew that or not.

Q: What advice do you have for current HHP students?

Kasey: Do NOT be afraid to reach out to your advisor or professors for help. I tried to "tough it out" at times, and reaching out to my advisor, Joe Cilek, and my professor, Jen Rogers, to ask for their advice and encouragement was some of the best time I ever spent on campus. You have ample resources at your fingertips, so don't be afraid to use them! The HHP team wants to see you succeed, but you need to take the initiative to build connections.

Hallie: My advice for current HHP students is to step outside of your comfort zone because it is in that place that you will grow.

Taylor: The advice I can give current HHP students is that everyone else is going through the ups and downs that you are. There are always peers that will understand where you are coming from and that professors are great people to look to when you do not understand certain topics. Making personal connections with both classmates and professors will help everyone feel comfortable in the pursuit of an HHP degree.

For the past 8 years, at least one of the Reuter sisters has attended the University of Iowa. **Iowa City has become a home away from home for our family, and we will always cherish the memories that have been made here.** It has been an absolute joy getting the family together for the many Iowa Hawkeye Football games that we've attended throughout the years!
-Hallie Vonk

From L to R:
Taylor, Ken, Hallie, Cheri, and Kasey

Q: Were there clues that they would all end up with similar interests in college?

Cheri and Ken: The first clue was that from age 3 Hallie tagged along with her big sister every chance she had. All three girls have high academic standards for themselves. So, they were willing to meet head-on the educational rigors of the HHP program at the University of Iowa. And all three girls have big hearts and care and compassion for the well-being of others. So, it was not a surprise that they pursued education in Health and Human Physiology.

Q: How did they get along growing up?

Cheri and Ken: The girls were friends growing up. Of course, they had their 'moments' but given that 3 years of age separate Kasey and Hallie, and 3 years of age separate Hallie and Taylor, there was never really a sibling rivalry among them. They supported each other, particularly by being at each other's sporting events as much as possible.

Q: What are some unique ways each daughter was shaped at Iowa?

Cheri and Ken: Kasey had to learn time management skills because of being a full-time student and playing for the University of Iowa Volleyball team as well as being a full-time student.
Hallie worked part time at an eye clinic in Iowa City and was able to gain first-hand experience which helped her decide she wanted to pursue a career in Health Administration.
Taylor has been fortunate to have 3 siblings who are older than her. She has been able to learn many of the dos and don'ts of life in college and what it takes to be a successful college student. All three of the girls have strong work ethics. When they put their minds to something, you can bet they will reach their goals.

Q: How has it collectively shaped your family?

Cheri and Ken: We've always been Hawkeyes at heart and now we also have 3 girls that are Hawkeyes by degree. It was great having our girls relatively close to home. We've had many, many weekends in Iowa City getting the family together, watching Kasey play volleyball, tailgating for football and supporting the Hawkeyes. Go Hawks!

CONFERENCES AND PRESENTATIONS

Midwestern American College of Sports Medicine Conference

On October 12-13, faculty and graduate students attended the Midwest American College of Sports Medicine Conference. In total, our department brought 11 students (7 from Kara Whitaker's lab, 3 from Lucas Carr's lab, and 1 from Nate Jenkins lab) – and 9 of the 11 had oral or poster presentations.

Kara Whitaker's Lab (6 presentations):

- Mackenzie Unke (HHP - MS with thesis student): Poster Presentation
- Raegan Krumboltz (HHP – BS student, Honors in the Major): Poster Presentation
- Tess Filip (Clinical Psychology PhD Student): Poster Presentation
- Lisa VanWiel (HHP – PhD Student): Poster Presentation
- Jacob Gallagher (HHP – Postdoc): Oral Presentation
- Jackie Dziewior (HHP – PhD Student): Oral Presentation

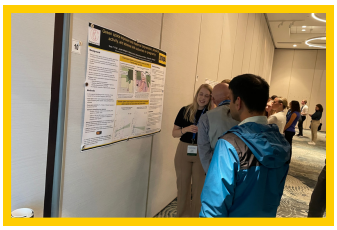
Lucas Carr's Lab (2 presentations):

- Nick Farkas (HHP – MS with thesis student): Oral Presentation
- Lauren Steinke (HHP – MS with thesis student): Poster Presentation

Nate Jenkin's Lab (1 presentation):

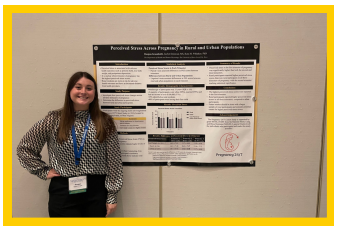
- Kylee West (HHP – PhD Student): Oral Presentation

Jackie Dziewior



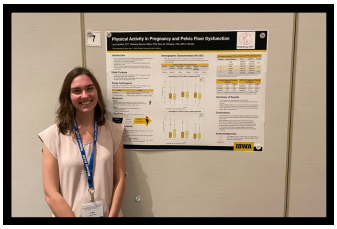
Tess Filip

Jacob Gallagher



Raegan Krumboltz

Mackenzie Unke

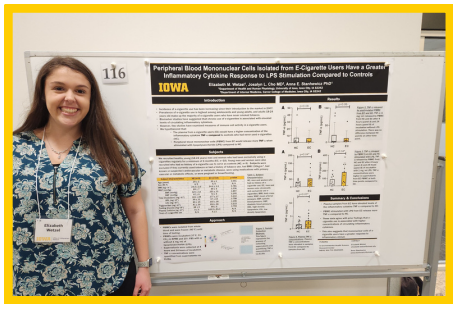


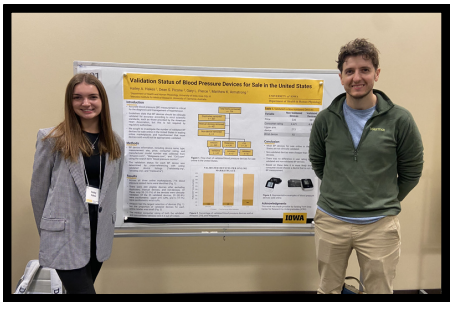
Lisa VanWiel

Kylee West

Fall Undergraduate Research Festival

On November 8th, undergraduate students Hailey Hakes (R, pictured with mentor Matt Armstrong) and Elizabeth Wetzel (L) presented at the Fall Undergraduate Research Festival.





FACULTY ACCOMPLISHMENTS

Grants, awards, publications, etc.

Cody Schlitter, Assistant in Instruction, coordinated for coordinating the IC Weightlifting Summit Sponsored by UI HHP, hosted by Big Grove Brewery, held August 6th of 2023. The event is a Non-Traditional Weightlifting Meet where local lifters can sign up for free to challenge themselves in performing a clean, squat and press. This also serves as a way to celebrate strength and health in the local community! Lifters are encouraged to cheer and support each other as they demonstrate their abilities for one another. Check out the Instagram page of the event for photos!

Andrea Short, Assistant in Instruction and HPAS Director, received the Rockway Scholarship in her PhD. program in Science Education, worked with the *Exercise is Medicine* student organization to create a series of events for Exercise is Medicine Month, including a pushup challenge between Iowa, Penn State, Iowa State, and Michigan State, and was asked to present and serve on the conference presentation committee to review presentation submissions for the National Association for Kinesiology in Higher Education annual conference.

Kathy Mellen, Professor of Instruction, presented a poster at the Academy of Nutrition and Dietetics annual meeting. The poster title was: "Development of an Undergraduate Pre-Dietetics Program of Study as an Advising and Recruitment Tool." She also presented with colleagues at the Iowa Academy of Nutrition and Dietetics annual meeting in Ames. The presentation titled "Pathways to Becoming a Registered Dietitian Nutritionist" was co-authored by Laurie Kruzich (MS, RDN, LD), Mridul Datta (PhD, RD, LD, FAND), and Laurie Kroymann (MBA, RDN, LD). Students in her First Year Seminar: *If We Are What We Eat, What Should We Eat?* participated in the Research-Focused FYS poster session.

Ben Hunnicutt, Professor, was recently interviewed several times this semester as a content expert in the 4-day work week, including this article by Aditi Shirkant and this article by Ece Yildirim.

Anna Stanhewicz, Assistant Professor, and her graduate students **Kristen Halstead** and **Kelsey Schwartz**, recently published two high impact papers in the *Journal of Applied Physiology and Hypertension*. The articles were titled Sex Differences in Oxidative Stress-Mediated Reductions in Microvascular Endothelial Function in Young Adult e-Cigarette Users. Halstead KM, Wetzel EM, Cho JL, Stanhewicz AE. Hypertension. 2023 Dec;80(12):2641-2649 and Angiotensin II type 2 receptor-mediated dilation is greater in the cutaneous microvasculature of premenopausal women compared with men. Schwartz KS, Lang JA, Stanhewicz AE. J Appl Physiol (1985). 2023 Dec 1;135(6):1236-1242.

Nate Jenkins, Assistant Professor, and his recent PhD students **Emily Rogers** and **Nile Banks**, recently published two high impact papers in the *Amer Journal of Physiology*. The articles were titled Resistance exercise lowers blood pressure and improves vascular endothelial function in individuals with elevated blood pressure or stage I hypertension.Banks NF, Rogers EM, Stanhewicz AE, Whitaker KM, Jenkins NDM. Am J Physiol Heart Circ Physiol. 2023 Nov 17 and Progressive Isoinertial Resistance Exercise Promotes More Favorable Cardiovascular Adaptations than Traditional Resistance Exercise in Young Adults. Banks NF, Rogers EM, Berry AC, Jenkins NDM. Am J Physiol Heart Circ Physiol. 2023 Oct 27. Online ahead of print.

Dr. Jenkins also received a **$3.7 million grant from the NIH to fund his research the connection between early life psychosocial stress andcardiovascualr health**. Read the CLAS article here!

Kara Whitaker, Associate Professor, had a recent publication in the American Journal of Epidemiology: Study Design and Protocol of the Multisite Pregnancy 24/7 Cohort Study.Whitaker KM, Jones MA, Smith K, Catov J, Feghali M, Kline CE, Santillan M, Santillan D, Zimmerman B, Gibbs BB. Am J Epidemiol 2023 Nov 3:kwad208. Online ahead of print.

Vitor Lira, Associate Professor, contributed to an article published in the *National Library of Medicine*: GADD45A is a mediator of mitochondrial loss, atrophy, and weakness in skeletal muscle.

Warren Darling, Professor, contributed to an article published in the *Sage Journal*: Diet-induced changes in functional disability are mediated by fatigue in relapsing-remitting multiple sclerosis: A secondary analysis of the WAVES randomized parallel-arm trial. He also presented a poster at the Society of Neuroscience meeting in Washington, DC: W.G. Darling, L. Mikhail, J. Adhikari (2023) Control of bimanual lifting of symmetric and asymmetrically loaded objects. Society for Neuroscience abstracts.

Jess Gorzelitz, Assistant Professor, traveled to Boston in November to present at the ASCO Quality Care Symposium, which is sited in the Clinical Oncology Journal.

PROGRAM ACCOMPLISHMENTS

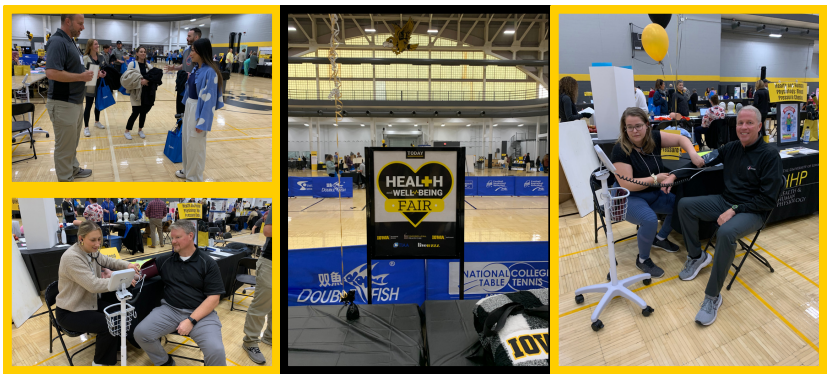
The **EIM-OC (Exercise is Medicine- On Campus) committee**—Andrea Short, Luc Carr, and Amy Fletcher— received gold status from ACSM for their activities and events for EIM Month in 2022.

The **Sports and Recreation Management Program** received a mention in the *Journal of NCAA Compliance* for hosting the College Athletics Infractions Hearing Competition.

The program also supported the membership fee for 27 SRM students in the **Women Leaders in Sports** organization. The membership opens up a year of professional and personal development opportunities for students. SRM is extremely thankful to donors who helped make this opportunity possible!

On Friday, December 1st, the **Fall 2023 Semester Experiential Learning and Research Poster Day** was held in IBIF. The following students shared their incredible accomplishments this semester: Olivia Johnson, Jenna Mainfeld, Hudson Barnum, Dean Omar, Isabelle Mehlberger, Omar Mustafa, Rylee Johnson, Katelyn Benter, Ethan Stallman, Kaylee Sanger, Cade Block, Samantha Miller, and Tyler Stallman.

The **Fall 2023 Health and Well-Being Fair** was held on the main deck in the Field House on Wednesday, November 1st. The event was well-attended and the department's booth offered blood pressure readings and exercising testing activities. Thank you to our faculty and student volunteers!



On Wednesday, October 4th, Bri Swope, Associate Professor of Instruction, and the Therapeutic Recreation/Child Life Program, led the department to participate in the **Iowa Healthiest State Walk**. The annual walk is an opportunity to join thousands of other Iowans statewide in walking for 30 minutes. Workplaces, schools, organizations and cities are all encouraged to register a walk!

FALL '23 GRADUATION

107

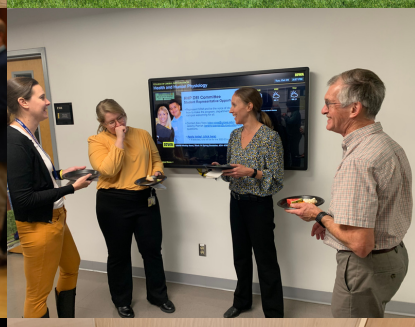
NEW HHP ALUMNI

The department congratulates each undergraduate student who graduated with a degree in one of the following areas: Health Promotion, Health Studies, Exercise Science, Human Physiology, Therapeutic Recreation, and Sport and Recreation Management.
We can't wait to see what you do next!










CONNECT WITH US!

New HHP Department Website

New SRM Program Website

IOWA | Department of Health and Human Physiology