### HEALTH AND HUMAN PHYSIOLOGY **HHP Newsletter** SPRING 2022





A special acknowledgement to **HHP Student Ambassadors** who worked with Professor Erin Litton to pull this content together.

### REBUILDING CONNECTIONS TABLE OF CONTENTS

Opening Statement	3
Student Ambassador Group	4
Professor Highlights	6
Sleep Move Stand Study	8
TR Hawkathlon + Crip Camp	10
UISRM2KC	12
Cultural Competency Outreach	14
Skeletal Muscle Big Adaptions	
Scholarship Winners	
Awards	20
Highlights and Promotions	22
Health Coach Pathway	24

2

#### Warren Darling, Ph.D. DEPARTMENT CHAIR AND PROFESSOR

The future is looking very positive for Health and Human Physiology!

We can expect to move into a new building with more space in 3-4 years and we have been provided with an additional 8,600 sq. ft. of space in the neighboring former College of Pharmacy building for our current use.

A new tenure-track assistant professor, Dr. Jessica Gorzelitz, is starting this August who will initiate novel research on strength training interventions to improve health of people with cancer.

Additional changes are that I will be stepping down as Department Chair on June 30. Looking back on my tenure as chair, we have dealt with many challenges due to growth in enrollment within a very restricted space within the Field House and, over the past two years, a global pandemic requiring increased teaching of online courses, many difficulties in teaching laboratory courses and challenges to conducting research. I have been very impressed as our HHP faculty have met these challenges positively and continued to provide an excellent education to our students as well as increasing opportunities for experiential learning. Furthermore, we have seen growth in our research portfolio with increased external grants and high rates of scientific publications in refereed journals.

I am very optimistic for the future of HHP. I expect we will experience continued growth in HHP majors and look forward to continuing to contribute to HHP's bright future.

Sincerely, Warren Darling, Ph.D. Professor and Chair of Health and Human Physiology



### **HHP** Mission

We advance knowledge of health, human physiology, sport, and recreation through teaching, practice, research, and service to impact the health and well-being of people of the State of Iowa and beyond.

### **HHP** Vision

The HHP programs aspire to be nationally and internationally recognized for advancing knowledge and preparing students to be leaders within their respective fields.

### To GIVE: If you are interested in supporting the development of HHP students, please consider giving HERE.

### **Student Ambassador Group** Rebuilding Connections















Connor Bedell Senior **Exercise Science** 

**Emily Yee** Senior Health Studies

**Raginya Handoo** Sam Lombardi Junior Sophomore Human Physiology Exercise Science

lunior Health Studies

Reagan Comito Katie Kolthoff Makenzie Homan Senior

Sophomore Health Promotion Human Physiology

Demi Oo Senior Health Promotion

The HHP Ambassador group was a pilot program started in the spring of 2022 with the goal of rebuilding the connections between the faculty, staff, and students in the Health and Human Physiology department. The HHP department houses over 2,115 students and 65 faculty and staff, making it the largest department the University of Iowa has to offer, outnumbering many of the colleges on campus such as the College of Business and College of Engineering. While this exponential increase in students and faculty and staff has been a great development, it also proves to have its own challenges with building and creating meaningful connections that will allow students to develop important skills needed to enter the workforce or graduate/professional programs. The ambassador program works to bridge that gap between students and faculty by giving them opportunities to interact and engage outside of a classroom setting and highlight the skills that many students and faculty alike have that allow them to serve the community in the best way possible. This was done through various different programs like the additions of the Reward and Recognition program, new student fairs, highlighting student and faculty accomplishments on our social media, and creating a **mixer event** for students and faculty to networks. This program has tremendous potential and we all can't wait to see what is accomplished in the future!

"Being part of the first ever Student Ambassador Group has been such a rewarding opportunity. Although it has had its challenges, it has had many more successes. Connection is important wherever you are at in life and having the opportunity to help others in our program make connections with their peers, professors and staff has been such an honor. I am so excited to see what is accomplished by the Student Ambassador Group as it continues to grow!" -Katie Kolthoff

### -SPRING SOCIAL MIXER-



It's been a while since we all got together... we survived the last couple of years during the pandemic and it's time we went back to how things were. We have adapted to new ways of learning as well as delivery of education. We continued to press on with

research, academic engagement, and mentorship but, we have also missed out on opportunities to build connections among the wonderful students and staff members. The event planning committee decided to host our

first social event to invite anyone who is currently in or interested to learn more about the department. The event was held on April 6

at the Field House. Asides from complimentary boxes of pizza for everyone to enjoy, it was pleasant to see everyone creating meaningful conversations between students and professors. On behalf of the HHP ambassadors, we want to thank everyone for taking time out of your day to meet us and for us to meet all of you!



### PROFESSOR KELLI TAEGER

Professor Taeger has been a professor at the University of Iowa for seven years and has inspired many students in her Human Anatomy Lecture, Human Growth and Motor Development Lecture, and Anatomy labs.

#### What is your favorite part of teaching?

Professor Taeger: "My **favorite part about teaching is interacting with students and getting to know them personally.** Unfortunately, because of the large class size I don't get to interact with students as much as I would like to, so I encourage students to attend office hours and ask for help when needed.

#### What do you do for fun?

Professor Taeger: Outside of academics I enjoy being physically active, walking my dogs, watching my kids participate in events outside of school that they are passionate about. I also enjoy volunteering in the community working with Dance Marathon and with local 5k charity races. I am also a baseball fan! **This coming year will have visited all 30 MLB stadiums!** 

#### What are your tips for success?

Professor Teager: My tips for success are don't procrastinate and utilize the resources given to you such as office hours and SI.

### **INSPIRING CONNECTION**



"Professor Taeger is a terrific teacher and really cares about her students. She understands that the class can be a struggle for some students and tries her best to make it better for us." -HHP Student

### EXPLORING HEALTH AND HUMAN PHYSIOLOGY

Professor Clayton Peterson started a new one semester hour class this year called Exploring Health and Human Physiology. This class is meant for freshman students to build relationships with faculty and one another, shape how students approach their college experience, and teach different ways to solve problems that are presented in HHP.

Students will learn about professional development and have a growth mindset to embrace challenges presented to them. Part of this professional development is learning to approach college with embracing failure and not just memorizing material for an exam because that is not how you get the most out of your college experience. While career options are discussed this class focuses more on problem solving.

Currently there are two sections of this class with twenty students each. Professor Peterson's goal for this class is to have it be required for all HHP students and to have 8-10 sections. Professor Peterson believes this class helps his students and himself by appreciating their struggles.

"It is therapeutic in a way where I get to take a break from lecturing and get to know my students on a more personal level." -Professor Peterson



# Which track is right for me?

Learn more at: https://clas.uiowa.edu/hhp/undergraduate



BS



Health Studies

BA



Therapeutic Recreation BS

## Sleep-Move-Stand Study



The Community Health Collaborative (CHC) was established in 2020 with the intent of providing HHP students with real world experiences that also advance the health and well-being of the community. Students complete internships and practicum experiences in areas of health coaching, community health education, health testing, and research. The Sleep Move Stand program is a CHC supported research study that brings many of these experiences and students together for a common purpose.

The overall goal of the study is to determine whether improving physical activity, sedentary behavior, and sleep results in improved cognitive function among middle-aged adults. This is an important area of study as demands of modern society and labor saving technologies have reduced physical activity and sleep during middle-age which is a pivotal life stage for slowing age-related cognitive decline.

The Sleep Move Stand study relies on trained student health coaches, like **Olivia Turner**, who help participants improve their physical activity and sleep behaviors. Health coaches help individuals set health related goals and develop plans for achieving those goals.

In order to determine whether the Sleep Move Stand study is effective, our research team administers several health tests including measures of cognitive function, cholesterol, body composition, and physical activity behaviors. This work could not be accomplished without the hard work and dedication of our research assistant practicum students like **Katie McAllister** and **Ryan Snytsheuvel.** 

The Sleep Move Stand study is funded by the University of Iowa Jumpstarting Tomorrow Seed Grant Program. Jumpstarting Tomorrow is a hybrid pilot grant/community-building program that supports innovative and collaborative projects that could become the vanguard for future research investments by the university. The initiative was made possible through a \$2 million investment from the University of Iowa utility public-private partnership (P3).



The research team is led by Dr. Michelle Voss, an Associate Professor in the Department of Psychological and Brain Sciences. Dr. Voss is joined by Professors Lucas Carr (HHP), Kara Whitaker (HHP), Nathaniel Jenkins (HHP), Chooza Moon (Nursing).

#### **Community-Building, Innovation, and Collaboration**

"The Jumpstarting Tomorrow program has provided us an opportunity to explore some really innovative research questions with several faculty across the university who I'm excited to work with. I'm hopeful that this will lay the groundwork for future collaborations with this group. It's also a great opportunity for our students to gain practical and research related experience."

#### -DR. LUCAS CARR

"I plan on working in a cardiac rehab environment, but Sleep Move Stand has been a phenomenal way for me to understand the inner workings of research. Cardiac rehab is an occupation I will need to stay up to date on new and relevant information and having this insight has refined my ability to be critical."

> - RYAN SNYTSHEUVEL M.S. CLINICAL EXERCISE PHYSIOLOGY

"Working as a research assistant has taught me the importance of community outreach and how these programs can significantly improve the health and well-being of individuals in a short period of time. This position has allowed me to develop effective communication skills in a health education environment, skills that will assist me in my goal of continuing to dental school and becoming a health provider."

> -KATIE MCALLISTER B.S. HUMAN PHYSIOLOGY



"The health coaching practicum within the SMS study has given me valuable skills I can utilize in professional and personal relationships. Looking ahead, I hope to continue with health coaching given the positive impact of this experience." (B.A. Human and Human Physiology, Health Promotion, 2022)

> -OLIVIA TURNER B.A. HUMAN AND HUMAN PHYSIOLOGY, HEALTH PROMOTION

### HAWKATHLON-APRIL 24, 2022

One of **Emily Zimmer's** favorite things to do every year as a high school student in Green Bay, Wisconsin, was serving as a peer mentor in the Goody Triathlon. The athletes competing in the triathlon—which includes swimming, biking, and running were students enrolled in high school special education programs from around the Green Bay area.



"Seeing the smiles on the kids' faces as they sprinted to the finish line and received their medals was priceless," Zimmer says. "They are so proud of themselves, and it's great to build their confidence."The University of Iowa health and human physiology major's enthusiasm for the event never waned, and when she realized Iowa City didn't have an event like the Goody Triathlon, she took action. Zimmer created her own event—the Hawkathlon, scheduled for 1 p.m. April 24 at the Campus Recreation and Wellness Center (CRWC)—to help people with disabilities stay active, find new relationships, and build confidence.

For the participants, Zimmer says she hopes the event is less about competing against each other and more about the fun they will have and friends they will make along the way.
"A successful Hawkathlon is one where participants have fun, smile, get active, build relationships with their buddies, meet new friends, and make memories," says Zimmer, "It is not about how fast they can run but about having fun doing it and getting active."





### "CRIP CAMP" DOCUMENTARY FILM

University of Iowa Department of Therapeutic Recreation presented: "Crip Camp" Documentary Film Screening at FilmScene on March 22 Followed by Virtual Q&A with

Judy Heumann



#### "Tells the story of a landmark movement with verve, humor, and fiery righteousness."—Robert Abele, The Wrap

This documentary takes a spirited look at grassroots activism on the heels of Woodstock, as a group of teen campers are inspired to join the fight for disability civil rights. In the early 1970s, teenagers with disabilities faced a future shaped by isolation, discrimination and institutionalization. Camp Jened, a ramshackle camp "for the handicapped" in the Catskills, exploded those confines. Jened was their freewheeling Utopia, a place with summertime sports, smoking and makeout sessions awaiting everyone, and campers who felt fulfilled as human beings. Their bonds endured as they migrated West to Berkeley, California - a promised land for a growing and diverse disability community - where friends from Camp Jened realized that disruption and unity might secure life-changing accessibility for millions.

Co-directed by Emmy-winning filmmaker Nicole Newnham and film mixer and former camper Jim LeBrecht, this joyous and exuberant documentary arrives the same year as the 30th anniversary of the Americans with Disabilities Act, at a time when the country's largest minority group still battles daily for the freedom to exist.

### **STUDENT SUCCESS: #UISRM2KC**





**Sport and Recreation** Management Program



In April, the Sport and Recreation Management program led a two-day field trip to Kansas City for 55 students to learn from and network with executives at the Chiefs, **Royals and Sporting KC.** 



Dan Matheson, SRM Program Director and Professor of Instruction, had this to say about the field trip: "SRM alumni Alex Martin, Lakyn Boltz and Brock Baumert and Advisory Board member Jason Kramer and their colleagues were incredibly generous hosts during our trip to Kansas City. They made authentic connections with students, provided behind-thescenes access to stadiums, shared advice on breaking into the industry, and helped students discover new career paths. The connections made are already leading to future internship opportunities for some students on the trip. One of my favorite things to witness during trips like this is Hawkeyes helping Hawkeyes. Alex and Brock were student participants the last time I led a field trip to Kansas City just a few years ago, and now they are among the team executives opening doors of opportunity for the next generation of SRM students."



Contraction of

J. ITP





in the second

-----

0

-0



GEDY

Eh

s City s City royals.com

C



### A PILOT STUDY: THE IMPACT OF A CULTURAL Competency course on undergraduate Students' cultural awareness

Dr. Gayle Walter (Health Studies) and Dr. Jennifer J. Rogers (Athletic Training) presented their research at the SOPHE (Society for Public Health Education) Annual Conference on March 25, 2022. The title of their oral presentation was "A Pilot Study: The Impact of a Cultural Competency Course on Undergraduate Students' Cultural Awareness".

Dr. Gayle Walter was invited by the National Commission for Health Education Credentialing (NCHEC) to assist with the process of updating the Master Certified Health Education Specialist (MCHES®) examination to include the revised Areas of Responsibility, Competencies, and Subcompetencies that resulted from the Health Education Specialist Practice Analysis II 2020 (HESPA II 2020) project. Dr. Walter will be traveling to Pennsylvania in May 2022.

Global experiential learning opportunities have been "put on hold" due to the COVID-19 pandemic, but we are happy to share that Dr. Gayle Walter will be taking a group of students on a faculty-led study abroad experience to the Dominican Republic in January 2023. The purpose of the trip is to compare health services delivery in the Dominican Republic compared to the United States. Some of the activities planned include visiting local hospitals, assisting with mobile clinics, engaging in conversation with the Ministry of Public Health, and learning more about the role of nongovernmental organizations (NGOs) in health services delivery.



Dr. Gayle Walter



**Dr. Jennifer Rogers** 

### **STUDENT SUCCESS: CONFERENCE PRESENTATION**

Cassie Horvath, a senior at the University of Iowa graduating in May with a Bachelor's degree in Health and Human Physiology with a focus in Health studies presents with Dr. Gayle Walter at the Public Health Conference of Iowa.



Register now: bit.ly/PHCI22

PHConferencelowa

\_ \_

#PHCI2022

#### 🗐 Classic Media Player

<u>File View Play Navigate Favorites Help</u>

#### **Recommended Strategies**

- Continued data reports of vaccination rates, active cases, and mortality rates for all states systems.
- Increased education regarding COVID-19 and vaccination for inmates.
- Vaccination mandates for correctional staff.
- Reform of inmate medical care to reduce reluctancy and distrust.
- Continue elimination of medical co-pays in all state systems.

"I am so grateful and excited for the opportunity to present at the Public Health Conference of Iowa this May regarding the disparities of COVID-19 mitigations for incarcerated individuals in the United States. I highly encourage undergraduate students to consider the submission process for their work as this can provide opportunities of further study of their topics and collaboration with other individuals in their field."

▶ **88 ⊡ 144 44 104 10 10** 

### Skeletal Muscle's Big Adaptions to a High Fat Diet

by Claire Burelbach and Makayla Kruse



Skeletal muscle is made of two types of fiber, each of which responds to a high fat diet in a different way. In a research article published in September of 2021 titled Skeletal Muscle Type-Specific Mitochondrial Adaption to High-Fat Diet Relies on Differential Autophagy (Morales et al., FASEB J 2021), Dr. Vitor Lira, PhD, addressed how different muscle fibers respond to a diet rich in fat. which is a commonly used model in mice to mimic health problems associated with obesity and diabetes in humans. The study took place in Chile and at the University of Iowa with mice fed either a control diet with low fat content or an experimental diet with high fat content. The goal of the study was to determine how important the cellular degradation of unnecessary or dysfunctional proteins and mitochondria, known as autophagy, is in the adaptations of muscle fibers to a high fat diet.

Dr. Lira is originally from Brazil but came to the United States to complete his PhD in Exercise Physiology at the University of Florida and pursued his post-doctoral fellowship at the University of Virginia. The availability of resources used to study basic mechanisms of skeletal muscle physiology, which were difficult to access in Brazil, drew Dr. Lira to the United States for completion of his doctorate degree. Finding ways to preserve skeletal muscle capacity to efficiently contract and use carbohydrate and fat as sources of energy in obesity, diabetes and aging is the focus of much of Dr. Lira's research.

Following the completion of his fellowship, Dr. Lira began to look for a faculty position that had both teaching and research components. The University of lowa and its community appealed to him and his family for a number of reasons including kind and collaborative faculty, outstanding resources for research, and quality schools for his three children.

Once working at the University of Iowa, a lab in Chile contacted Dr. Lira's lab seeking their collaboration on a study regarding muscle physiology. Dr. Lira's lab had an animal model, a nonhuman species used to mimic aspects of a disease found in humans to obtain a potential treatment, that the Chile lab needed to obtain vital results for their research. The animal model of interest was a mouse with an impaired autophagy gene, Agt7. The lab in Chile was interested in studying this mouse to answer questions regarding how important autophagy is to the adaptation of different types of muscles when exposed to a diet with 60% kcal from fat. "This high fat diet model is very commonly used to cause mice to become obese and to study problems associated with obesity," said Dr. Lira. Now, the animal model would be used to determine whether autophagy was necessary for muscle fibers adapting to a high fat diet.

There are two main muscle fiber types, oxidative and glycolytic, in both mice and humans. These fibers differ in how they primarily generate ATP, which is the main cellular energy carrier of all organisms. A chemical process that obtains energy from carbohydrates and fatty acids while utilizing oxygen, known as aerobic respiration, occurs in mitochondria of all fiber types.

However, this is the main process used by oxidative muscle fibers to generate ATP and is able to fuel muscle contractions for a long duration.

> Highlighting written work by HHP Students in "Writing for Health and Human Physiology" with Professor Andres Carlstein Edited by HHP Student Sam Lombardi

16

Glycolysis, which is another process that also breaks down carbohydrates to produce energy, is the main process used by glycolytic muscle fibers to generate ATP and is able to quickly produce large amounts of energy for a short duration. Most muscles consist of both fiber types, but muscles involved in maintaining posture such as the muscles of the lower leg and back consist of mainly oxidative muscle fibers.

With this in mind, the soleus muscle, containing mostly oxidative fibers, and the gastrocnemius muscle, containing mostly glycolytic fibers, were chosen by Dr. Lira's team to compare how different muscle types adapt to a high fat diet.

Young adult mice were fed either the control diet or the experimental diet for a duration of four, twelve, twenty-two, or forty weeks. After the previously specified time, the mice were euthanized followed by immediate removal of the gastrocnemius and soleus muscles, which were either used for analysis of mitochondrial respiration or frozen in liquid nitrogen. SDS-PAGE, a method to separate proteins by molecular mass, and immunoblot, a method to identify proteins, were used to determine the amount of protein in each muscle comparatively. Succinate dehydrogenase (SDH) and cytochrome oxidase (COX) stains were used to determine the amount of mitochondria in fibers of each muscle. After application of each stain, oxidative muscle fibers appeared darker and glycolytic fibers appeared lighter.

Results from the study indicated that a high fat diet's effect on autophagy is dependent on muscle fiber composition and how long the obesogenic condition is administered. Mitochondrial respiration became deficient in the oxidative soleus muscle early during the diet, but that was not the wase in the glycolytic gastrocnemius. The exposure to a high fat diet in the soleus muscle caused an increase in mitochondria after only four weeks as well as after forty weeks and autophagy activity was not maintained. In other words, there was more mitochondria in the oxidative muscle fibers as a result of the high fat diet, but their autophagy activity became less efficient. In the gastrocnemius muscle the number of mitochondria did not increase, autophagy activity remained high, and the mitochondria remained efficient. Dr. Lira stated that a "major mechanism by which the glycolytic fibers appeared to maintain mitochondria function in the beginning of obesity was by maintaining and preserving autophagy." The ability of the gastrocnemius muscle to remove unnecessary or dysfunctional mitochondria, despite experiencing a high fat diet, seemed to allow it to sustain metabolic efficiency.

To study if the maintenance of autophagy was the cause of mitochondrial differences in muscles experiencing a high fat diet, the American mice lacking the Atg7 gene, a protein coding gene associated with effective autophagy, were studied. It was found that Atg7 plays a crucial role in autophagy that is required for the gastrocnemius muscle to process fatty acids from a high fat diet. The Atg7 allows efficient energy to be derived from the high fat diet, without allowing an increase in the number of mitochondria. Instead, it keeps around the healthiest mitochondria for maximum efficiency. The way that Dr. Lira explained the differences in muscle fiber mitochondria levels and autophagy is that "different muscle fibers adapt differently to an obesogenic condition. Some fibers, glycolytic fibers, preserve the recycling of mitochondria while in others, oxidative fibers, the process is impaired."

Dr. Lira's research on muscle fiber response to a high fat diet in mice has clinical applications for obese humans. If the research discussed can lay the groundwork for a way in which autophagy in all muscle fibers could be conserved Dr. Lira thinks "muscle integrity could be maintained and insulin sensitivity could be better preserved in obese individuals," decreasing the risk of diabetes.

**Claire Burelbach** is a fourth-year graduating May 2022 with a degree in Human Physiology and a minor in Psychology. She plans to continue work at the University of Iowa Hospital then apply to PA school.



Makayla Kruse is a third-year student studying Human Physiology and is on the pre-PA track. She plans to apply to PA schools this spring with the hopes of becoming a PA.

### HHP SCHOLARSHIP WINNERS

Courtney Fietsam	Emily Rogers	Claire Enyart
Hailey Thomas	Olivia Ruby	Hardik Kalra
Anna Griffin	Ashley Freeman	Scott Tibbetts
Makenzie Anderson	Jackie Dziewior	Kaitlyn Dage
Emily Tilander	Allison Winter	Nile Banks
Abigayle Leibach	Morgan Leach	Jacob Gallagher
Elizabeth Dix	Emily Zimmer	Natalia Weinzierl

### FELLOWSHIP WINNERS

Mark Flores (incoming Ph.D. student): Graduate College LuLu Merle Johnson Fellowship for Fall/spring 2022-23 + Summer 2023

Alexandra Fietsam (Ph.D. student): 2022 Graduate College Summer Fellowship

Tahsin Khataei (Ph.D. student): 2022 Ballard and Seashore Fellowship-Fall 2022

Nile Banks (Ph.D. student): 2022 Post-Comprehensive Research Fellowship- Fall 2022

Jacob Gallagher (Ph.D. student): Graduate College Post-Comprehensive Research Fellowship - Spring 2022

Jacob Gallagher (Ph.D. student): CLAS Dissertation Writing Fellowship for Summer and Fall 2022

Virginia Nuckols (Ph.D. student): Graduate College Summer Fellowship

Emily Rogers (Ph.D. student): 2022 Graduate College Summer Fellowship



Kristen Turner, Human Physiology PhD program graduate. Matthew Harris, Human Physiology PhD program graduate.

Kristen and Matt graduated in December of 2021. Prof. Vitor Lira was their mentor.



Kristen's dissertation was entitled "Combined inorganic nitrate/nitrite supplementation improves oxygen consumption capacity in type 2 diabetic patients: potential roles of circulating nitrite and adaptations in skeletal muscles".

#### Kristen is now pursuing postdoctoral training at the Department of Molecular and Integrative Physiology at the University of Michigan.

"My overall experience in the HHP program at the University of Iowa was very positive. My PhD mentor, Dr. Vitor Lira was brilliant and open-minded. Under his mentorship, I led research in skeletal muscle from patients with type 2 diabetes and contributed to discovery-based questions about protein homeostasis in animal models of skeletal muscle dysfunction. I think all the experiences described contributed early on, and shaped my path towards excellence. Externally, I was 1 of 25 selected for a career development program sponsored by the NIH for trainees conducting endocrine research."



Matt's dissertation was entitled "ULK1 and ULK2: Molecular Modulators of Autophagy and Function in Cardiac and Skeletal Muscles". Matt is now pursuing postdoctoral training at the Department of Internal Medicine at the University of Iowa.

"I started in the Human Physiology PhD program in August 2017 in Dr. Vitor Lira's lab and graduated in December 2021. My experience and training I received in the HHP graduate program were overwhelmingly positive. I received a hands-on mentorship from Dr. Lira that gave me the tools and fostered my development as a scientist. Working in the Lira Lab I also had the opportunity to collaborate and learn new techniques from labs outside the department, such as Internal Medicine, Anatomy and Cell Biology, and Biochemistry. I am currently a Postdoctoral Research Fellow in the lab of Dr. Leonid Zingman in the Department of Internal Medicine at the University of Iowa."

**Genette Campbell** Joe Cilek **Kimberly Pereboom** Anna lensen **Dr. Clayton Peterson Dr. Gary Pierce Ryan Snytsheuvel Bri Swope Dr.Katherine Mellen Erin Litton Chase Thurman Dr. Jen Rogers Alex Voss Brooke Bartels** Joan Seye **Kaila Brustkern Packy Moran Danielle Considine Olivia Turner Dr. Gayle Walter** Anna Zucker Alexa Colella **Drew Dabney Hannah Demory** Jenna Kohoutek **Emily Miller** Adrianna Naumoski Sean Toriyama **Jenny Torres** Anna Gomolski **Riley O'Donnell Avy Truax Genette Campbell Aaron Schneider Dr. Nathanial Jenkins Tamara Ninkovic Averie Robertson Katie McAllister Jackie Dziewior** Dr. Kelli Taeger **Kristen Halstead** Demi Oo **Makenzie Homan** Sam Lombardi **Katie Kolthoff Reagan Comito Emilv Yee Connor Bedell** Jeremy Huizenga **Dr. Vitor Lita Dr. Erin Talbert Genevieve DeMauro Kimberly Pereboom** 

# RECOGNITION



As a part of the Student Ambassador Program through the Department of Human Physiology, students created the Reward and Recognition Program to to recognize and encourage the great "W.I.N.S." students, staff, and faculty are contributing to the Hawkeye community.

#### What do we consider W.I.N.S.?

- Working in the Community
- Inspiring & Appreciating Others
- Networking & Collaboration
- Success in the Classroom





#### ANNA STANHEWICZ, PHD Grants

•American Heart Association Career Development Award Grant: Mechanisms of Aspirin Therapy in the Prevention and Treatment of Maternal Vascular Dysfunction Following Preeclampsia. (Total amount \$210,000)

#### Awards

 2022 Honors Mentoring Award, University of Iowa Honors Program
 2022 Dale J. Benos Early Career Professional Service Award, American Physiological Society
 CANTROL Environmental Systems New Investigator Research Award, EEP Section, American Physiological Society



### GARY PIERCE, PHD

#### **Book Chapter:**

Pierce GL, Heffernan KS, Davy KP (2022). Effect of Exercise Training and Weight Loss on Arterial Stiffness and Pulsatile Hemodynamics. Elsevier, Inc. (1st ed). In: Arterial Stiffness and Pulsatile Hemodynamics in Health and Disease. Julio A. Chirinos (editor).

#### Honors:

Appointed to Editorial board, Journal of Applied Physiology

### **MELISSA BATES, PHD**

#### Grants:

"Sleep Disordered Breathing as a Targetable Risk Factor in Multiple Myeloma" funded by the National Cancer Institute (Total amount: \$2.9 Million)

#### Awards:

Dr. Bates was selected to participate in the JPEC Startup Incubator Program in the Spring cohort. The incubator provides an environment and resources for Ulowa entrepreneurs to launch a commercial ideal into a sustainable venture.





# HIGHLIGHTS

### Exe&cise is Medicine Gold Campus

The University of Iowa is recognized as a GOLD level campus for our efforts to create a culture of wellness on campus! The Exercise is Medicine on Campus group includes faculty, staff, and students from the Department of Health and Human Physiology, Student Wellness, Family Medicine, and Orthopedics.

EIM-OC calls upon universities and colleges to promote physical activity as a vital sign of health and encourages faculty, staff and students to work together to improve the health and well-being of the campus community. Campus activities include establishing exercise as a vital sign at UIHC and outreach via the Exercise Is Medicine On Campus student organization.

### Kyle Gustofson Shadows at College of Dentistry

**Kyle Gustofson,** a junior at the University of Iowa is studying Exercise Science on the Pre-Dental Track. Kyle shares his experience connecting with Dr. Nair.

"Professor Walter introduced me to an opportunity to shadow within the dental school, and I can't say enough positive things about the experience. She connected me with Professor/Dentist Dr. Nair who teaches the Dentistry of Geriatrics and Dentistry of Disabilities at the dental school here at Iowa. In my 4 hours spent with Dr. Nair, I learned much more about dentistry compared to the multiple private practice dentists I had shadowed in the past. The major difference between Dr. Nair and the other dentists I had shadowed is the in-depth descriptions of the procedures he was performing. He would walk me through the various techniques he was utilizing, explain why he was using a certain tool, and made sure I could see everything he was doing. I could tell he was a professor based on the way he explained everything in such detail, yet with simplicity."



22

# PROMOTIONS

Bri Swope honored with the CLAS Distinguished Associate Professor of Instruction



"Surround yourself with those who inspire you. The people who bring out the absolute best in you. The kind of people who force you to level up in everything you do.' I am incredibly thankful to be surrounded by the absolute best team and students who continue to inspire me and am humbled to have been chosen for this award."

This professional development award recognizes candidates for advancement to Associate Professor of Instruction who excel in teaching, institutional and professional service, and their record of publications at time of advancement. The two-year award carries a one-time grant, which may be used for research and teaching initiatives.

### Congratulations Dan Matheson, Adrienne Johnson, Bri Swope, Alison Reichter, and Gayle Walter.

Dan Matheson has been recommended by the Provost to be promoted to Professor of Instruction.

Adrienne Johnson, Bri Swope, Alison Reichter and Gayle Walter have all been recommended by the Provost to be promoted to Associate Professor of Instruction.



# **HEALTH COACH PATHWAY**

National Board of Health and Wellness Coaches approves the Health Coach Pathway to sit for National Certification Exam!



#### The Health Coach Pathway is the only training in the state of Iowa approved for NBHWC!

Students who want to complete the Health Coach Training must complete: HHP:3030 Lifestyle Medicine \* HHP:4020 Health Coaching and Communication Learn more:

clas.uiowa.edu/hhp/undergraduate/health-coach-pathway



### 



Health and Human Physiology