



# KRSS 2023-2024 NEWSLETTER

We are extremely proud of all of our faculty and staff members and their accomplishments. A few of these departmental highlights are featured here. Please take a minute to pause and read about our colleagues' recent research, events, travel, and more.



KINESIOLOGY, RECREATION &  
SPORT STUDIES

# SHAPE AMERICA FOR ENHANCING INCLUSION AND EQUITY IN HEALTH AND PHYSICAL EDUCATION



## ZAN GAO RECEIVES F.B. HENDERSON AWARD FOR HIS COMMITMENT TO INCLUSION

SHAPE America, the Society of Health and Physical Educators, stands as the oldest and largest organization devoted to health and physical education.

The F.B. Henderson Award, granted by SHAPE America, recognizes minoritized members for their dedication to academia, mentorship, and service in promoting the inclusion of underserved communities in their field. Gao was honored with this award at the SHAPE America national conference on March 14th, 2024, in Cleveland, Ohio. To qualify for the E. B. Henderson Award, the recipient must exhibit outstanding engagement in scholarly pursuits. Gao fulfills this criterion by fostering inclusive settings that benefit diverse groups while researching the interplay between modern technology, physical activity, health outcomes, and disease prevention within underserved populations such as children of color, overweight adults, and breast cancer survivors.

# THERAPEUTIC RECREATION INTERNSHIP FAIR & SRTS CONFERENCE

## TR INTERNSHIP FAIR

Last fall, KRSS hosted the 2nd annual, and first ever, Therapeutic Recreation Hybrid Internship Fair. Organizations such as the Shepherd Center, the National Institutes of Health, Challenge Alaska, Higher Ground USA, Lanai Therapies, LLC., Catalyst Sports, Thrive joined via Zoom and in person allowing more than 50 Therapeutic Recreation majors to come and connect with organizations from across Knoxville and the country to discuss potential internship and job opportunities.

The hybrid modality was a huge success. At first, because we had so many organizations in-person, the students didn't seem to see the high-top tables with the laptops and headsets. But once the first couple of computers were being used, the flood gates opened, and all of our virtual representatives had a lot of foot traffic.

Ashley Hamilton, who organized the event, remarked saying, "What was most amazing is that there weren't any slow times. The fair was active from the moment the doors opened until the moment the doors closed. That told me that the students and organizational representatives were having good conversations."



# THERAPEUTIC RECREATION INTERNSHIP FAIR & SRTS CONFERENCE

## SRTS CONFERENCE

Clinical instructor Kelsey Webb, graduate student and instructor Ashley Hamilton, associate professor Angela Wozencroft, and associate department head Steven Waller accompanied graduate students to the Southeast Recreational Therapy Symposium (SRTS) conference. It was the graduate students' first time presenting at a professional conference, and they did a great job!

Hamilton, Wozencroft, and Waller also shared a presentation this year that received an award last year.

According to the latest School Report from the National Council for Therapeutic Recreation Certification (NCTRC), our students achieved a pass rate of 94.4%, significantly passing the national average of 77.8%.

This achievement not only highlights the excellence of our Therapeutic Recreation Undergraduate program, which is the largest in the nation, but also demonstrates that our students are performing exceptionally well compared to their peers nationwide.

Kudos to our faculty members in Therapeutic Recreation for doing such a wonderful job!



Left to right: Clinical Instructor Kelsey Webb, Graduate Students Marcy Ward, Kayley Siller, David Bissada, and Harry Strobel, and Ashley Hamilton.

# DR. SYLVIA TREDAFILOVA VISITS FRANCE

## INTERNATIONAL

Due to her reputation as an expert in the field of environmental sustainability, Dr. Trendafilova was invited to be a Visiting Professor at the Université Gustave Eiffel in France. She was hosted by the Analyse Comparée des Pouvoirs (EA 3350) Research Center and the Department of Sports Sciences.

During her visit, Dr. Trendafilova worked on a research project related to the evaluation of carbon footprint of a kayaking event that took place at the Olympics facility for kayaking. This project was funded by the French Federation of Kayaking and the results will be used for the Olympic Games in Paris (2024). In addition to being involved in research, Dr. Trendafilova participated in events with students such as class visits and a graduation ceremony for the sport management students.



Dr. Sylvia Trendafilova standing in front of the university entrance



The kayaking facility for the Paris 2024 Olympic Games

# ISB MATCHING DISSERTATION GRANT

## WALTER MENKE

Walt Menke, a PhD student in Biomechanics, has been awarded the International Society of Biomechanics (ISB) Matching Dissertation Grant for a combined total of \$5,000 in funding from ISB and our department. The proposed dissertation study with Dr. Songning Zhang involves investigating the effects of asymmetric crank arms in stationary cycling in patients pre- and post-total knee replacement. Additionally, musculoskeletal modeling will be conducted using patient specific radiographs to quantify the internal behaviors of the replaced knee during this task. We would like to thank ISB and the KRSS department for their help with this future project!



Walter Menke

From Menke:

“The project is aimed at investigating the biomechanical effects of stationary cycling with asymmetric crank lengths in patients before and after their total knee replacement surgery and will be the basis of Walt’s dissertation. We will be quantifying the joint angle and joint moment changes and their potential relationship with pain and rating of perceived exertion. The idea is that the asymmetric crank arms on the replaced knee side will help to alleviate pain and increase comfort during stationary cycling exercise, especially during such an early period after their surgery.

# ISB MATCHING DISSERTATION GRANT



Exercise adherence often is a common barrier to ideal rehabilitation outcomes in this population, and this methodology may assist this demographic with their exercise habits if pain is alleviated. Not only are we measuring kinematic and kinetic variables to objectively determine the effects of this acute cycling change, but we are also conducting musculoskeletal modeling with this data. By collecting specific metrics from x-ray data from these patients, we will be able to personalize the musculoskeletal model's settings according to actual anatomically derived data. By doing so, we can estimate the internal contact forces within the knee during this activity with greater accuracy than the generic model settings. We hope that the use of traditional and computational biomechanics can help to improve the early rehabilitation progress of patients who recently underwent a total knee arthroplasty!"

-Walter Menke

## KRSS TORCHBEARER



### **ALVIN ROBERTSON**

Alvin Robertson of Memphis is studying therapeutic recreation in the College of Education, Health, and Human Sciences with a minor in public health. Robertson is a member of the 1794 Scholars Program, where he served as the inclusion director for the Honors Student Engagement Council in spring 2023. He is also part of the Dean's Undergraduate Advisory Board for the College of Education, Health, and Human Sciences, visiting high schools and giving tours to prospective students. During his time as a student, he has been an undergraduate teaching assistant for the Department of Anthropology, a resident assistant for University Housing, a VOLbreaks leader, an ambassador for the Jones Center for Leadership and Service, and a campus ambassador with the VolCorps Program. Off campus, Robertson has worked as second vice regional director for the southeastern region for Phi Beta Sigma and served as a volunteer for the Knoxville Center of Autism.



# GRADUATE INTERNSHIPS

## ONE KNOX

The working partnership between the One Knox Collective and The University of Tennessee Sport Psychology & Motor Behavior Graduate Program is designed to help youths around Knoxville grow as athletes and individuals. Focusing on mental skills such as mindfulness, stress management, communication, and goal setting, UT students work with One Knox youth athletes in applied mental performance workshops before, during, and after training sessions. This partnership has been very well-received by One Knox athletes, coaches, and parents, and allows UT students applied and hands-on field training in sport psychology and motor behavior. Both organizations look forward to a positive and growing partnership in the future!



Other Internships include:

- Maryville College
- Carson-Newman University
- University of Tennessee
- University of Tennessee College of Law
- Christian Academy of Knoxville
- Bearden High School
- Knoxville Ice Bears
- BC Baseball Academy



# 2024 CEHHS A&E SUMMIT



## DANIELLE JOHNSON

Tuesday, April 9th, Danielle participated in an A&E Panel titled “Together We Strive: Insights from CEHHS Staff.” The purpose of this panel was to gain unique insights into fostering belonging, building collaborations, and promoting a thriving community within our institution. The event educated staff members and their supervisors in enhancing our shared understanding of organizational dynamics and fostering a supportive work environment.

As a member of the LGBTQ+ community and a vital part of UTK, Danielle provided helpful and meaningful insight regarding her experience in the workplace. We’re proud to have had Danielle represent KRSS in this panel!

# ROB HARDIN AND LYNDSEY HORNBUCKLE



Rob Hardin



Lyndsey Hornbuckle

## 2024 CEHHS AWARDS

KRSS is home to two faculty members that were awarded by the CEHHS. Rob Hardin received the Gary L. and Rebecca S. Blausler Endowed Faculty Support Award in Honor of Dean Bob Rider in recognition for his “excellence in teaching, research, and service efforts withing the College of Education, Health, and Human Sciences.”

Lyndsey Horbuckle received the CEHHS Access and Engagement Award in recognition for her “commitment to inclusive excellence in the College of Education, Health, and Human Science.”

Congratulations to Rob and Lyndsey!

# STEVEN WALLER



## 2024 UTK AWARD

This year, Dr. Waller was awarded the African American Hall of Fame Award! This award recognizes African Americans who have made important contributions to the University of Tennessee. The Commission for Black Communities (CFB) selects an individual and/or group that demonstrate distinguished service, leadership and social advocacy once every five years.

In Dr. Gao's nomination letter as "a fearless advocate and champion of access and engagement within his department, having orchestrated the first diversity climate study, leading to the establishment of the department's Access and Opportunity Committee. He continues to serve as an active member of this committee, advocating for equity and promoting an inclusive climate.

He has left an indelible mark on the University of Tennessee, embodying distinguished service, leadership, and social advocacy throughout his remarkable journey. His enduring commitment to inclusion, mentorship, and academic excellence aligns perfectly with the values and mission of the university."

Congratulations, Dr. Waller!

# WEARABLE TECHNOLOGY AND AI REVOLUTIONIZE PHYSICAL ACTIVITY ASSESSMENT



## SCOTT CROUTER

Through research, Scott Crouter aims to improve how we are able to predict both activity type and energy expenditure at the individual level. Physical activity plays a crucial role in maintaining health and well-being. However, accurately measuring it has always been a challenge. Wearable devices, such as Fitbits and Apple Watches, estimate energy expenditure and activity type based on average values, often failing to capture the complexity and variability of human movement.

His team uses a combination of accelerometer and gyroscope sensors to capture both linear and turning motion. The team also uses machine learning algorithms, a branch of AI, to analyze this sensor data. These algorithms can identify specific activities that people are doing at any given moment, providing a more accurate assessment of physical activity. The ultimate goal of Crouter's project is to develop new models that can predict both energy expenditure and activity type at the individual level with high accuracy and precision. This could pave the way for more personalized interventions for physical activity promotion and disease prevention.

Crouter emphasizes that this project is a team effort involving collaboration with other investigators from different disciplines and institutions, as well as students involved in data collection and analysis. Crouter was also awarded the 2024 UT-Research and Creative Achievement Award for his research!

# PARTNERS IN SPORTS

## GUEST SPEAKER DINNER

Partners in Sports hosted a dinner for guest speaker Marcus Hilliard. Hilliard is the Senior Associate Athletics Director/Chief of Staff. Hilliard oversees Tennessee Athletics' human resources and NIL efforts while working closely with Vice Chancellor/Director of Athletics Danny White on strategic planning and other special projects. He is the sport administrator for the track & field and cross country/distance programs and also serves on the Tennessee Athletics executive leadership team.

Hilliard earned his bachelor's degree in Communication Studies from Tennessee in 2009 while also serving as a student equipment manager for the football program. He completed his master's degree in Sport Management from NC State in 2015 and is currently working to complete a PhD in Higher Education Administration from Tennessee. He currently serves as a board of directors member for both the Boys and Girls Club of the Tennessee Valley and the McLendon Foundation. He is also a member of NACDA, NACMA and NAADD.



Partners in Sports Guest  
Dinner 2024

# GRADUATION CELEBRATION



## GRAD CELEBRATION

This year's graduation celebration was a hit! We had a beautiful background for photos, raffle prizes, and good food! Smokey even made an appearance for photos!

## BALLOONS & CO

Danielle and Lauren successfully transported this balloon arch from the stadium to HPER! We would also like to thank Lauren Childress, owner of Balloons & Co., for offering KRSS this free balloon arch in order to make KRSS events special for our students.



Balloon Arch with Danielle for Scale

# KRSS GOES TO CAMP



## CAMP KOINONIA

Camp Koinonia is an outdoor education program that serves campers with multiple disabilities. The campers at Camp Koinonia come for a variety of special education programs and schools across the state of Tennessee. Campers can first attend at the age of 7 and are eligible to attend until they graduate from high school. The program is primarily geared toward those who do not typically have the opportunity to attend these types of programs. Disabilities include Down Syndrome, Autism Spectrum Disorder, Cerebral Palsy, Intellectual and/or Developmental Disability, and others.

Our TREE (Therapeutic Recreation Experimental Education) Team students help ensure that each camper has a positive and enriching time at camp. Different activities include sand art, Mad Scientists experiments, Singo, and canoeing. This year at camp, mini horses were brought in so campers could interact with and learn about horses!



# MAJOR JOSHUA SPRINGER AND JARED PORTER

## ARMY ROTC STUDY

Stemming from a unique partnership with Army ROTC, Major Joshua Springer and Professor Jared Porter have designed a virtual reality military marksmanship environment to study the demands of military performance. Warfare is a multifaceted human endeavor that requires the synchronization of technical, tactical, physical, and mental proficiencies in some of the most demanding environments. In an effort to enhance Soldier performance, learning, and real-world application, MAJ Springer and Porter have begun to study and develop training solutions capable of delivering results on the battlefield.



**MAJOR JOSHUA SPRINGER**

This state-of-the-art military virtual reality system provides realistic training through safe, simulated environments while producing robust data sets required for advanced research implementation and the development of training to enhance Soldier performance and safety. The University of Tennessee is the first and only academic institution to acquire and develop training using this military based advanced marksmanship simulator.

# MAJOR JOSHUA SPRINGER AND JARED PORTER

## ARMY ROTC STUDY

MAJ Springer and Porter are currently exploring the effects of combined fatigue states on Soldier marksmanship performance, judgment, and reaction time. Results from this line of work will directly impact researchers, leaders, policymakers, and Soldiers alike. As MAJ Springer stated, “It is my mission to develop relevant, impactful, and actionable research worthy of the men and women who have come before us. Through this line of work under the direction of Porter, I intend to continue that mission forward for many years to come.”

Josh Springer is a second-year PhD student and an active-duty Army Major currently assigned to the 187th Medical Battalion, 32nd Medical Brigade, out of Joint Base San Antonio.

Disclosure: “The views and information presented are those of the authors and do not represent the official position of the U.S. Army Medical Center of Excellence, the U.S. Army Training and Doctrine Command, or the Departments of Army, Department of Defense, or U.S. Government.”



**MAJOR JOSHUA SPRINGER**

# WELCOME NEW STAFF

## LAUREN BRYANT

Lauren is our new KRSS Administrative Associate. As the Administrative Assistant she helps with class scheduling, social media/news stories and more for the department. Before coming to the department, she worked in the Student Counseling Center. Lauren enjoys crocheting, reading, spending time with her family and pets.



## LINDSEY DAVIS

Lindsey has been with the University of Tennessee since July 2023. As an Advisor I she provides academic advising support for KRSS students. She has a background in sports and is coming to the department from the Thorton Athletics Student Life Center.

Outside of the office you will find Lindsey spending time with her dog - Cooper, watching or attending athletic events, binge-watching reality tv, and expressing her artistic side doing paint-by-numbers & paint-by diamonds.



## HOLLY THOMAS

As Advisor II, Holly provides academic advising support for KRSS students. She has 10 years of work experience as an academic advisor and prior to moving to Knoxville, she worked as a Senior Academic Advisor with the University of Oklahoma.

Away from her desk you can find Holly watching or playing sports, enjoying a good book, playing with her dogs Chip and Emmy, hanging out with friends and family, or doing something creative!



# MERCH/GIVE TO KRSS

## GIVE TO KRSS

The Department of Kinesiology, Recreation, and Sport Studies is grateful for the continued generosity of its many supporters. This generosity plays a large part in the department's ability to provide financial support for our students and faculty. Interested parties may contribute to the department's general enrichment fund or to more specialized funds. To give, go to [krss.utk.edu/support-krss/](https://krss.utk.edu/support-krss/)



## KRSS MERCH

KRSS Department merch is now available online! From clothing to office supplies, there's something for everyone. Visit the link below to shop.

<https://tiny.utk.edu/KRSSBRAND>