KSM

Fall Newsletter 2022

FEATURED ARTICLES

Team GTA of the KSM department participated in the American Heart Association annual heart walk on October 15th. The group raised $250 in donations towards their fund. Pictured below are team participants. The event was held at Lubbock-Cooper Middle School.

Pictured (bottom left to right): Karla Kitten, Kaitlynn Pacheco, Pratibha Maurya, Kathryn Southall (top left to right): Jan-Joseph Rolloque, Emily Rees, Maryam Nouro, Daniel Scherrer, Ninoshka Pinto, Yeosang Kim, Eloy Guerro, McKenzie Hare

JACOB SMITH

ALUMNI SPOTLIGHT

Hey readers, my name is Jacob Smith and I'm a proud alumni of Texas Tech University! I'm originally from McKinney, Texas, but I've been living in Lubbock for the past 5 years. I graduated from Texas Tech in May of 2020 with a major in kinesiology and a minor in health. I was drawn to kinesiology due to my love of anatomy and physiology as well as my aim to become a physical therapist. This aim began when I tore my rotator cuff playing baseball going into my senior year of high school.

After this event, my sense of direction in life was obscured because I only ever considered playing baseball as my future career. Through my strenuous recovery, I found a passion for physical therapy. The complexities of the human body, the intricacies of the brain and its power on rehabilitation, the interactive and personal nature of the profession, and the ability to serve and help others all drew me towards physical therapy. The same month that I graduated from Texas Tech University, I started the Doctor of Physical Therapy program at Texas Tech University Health Sciences Center.

I'm currently in my final year of the 3-year program, going on my clinical rotations to experience the vast array of settings and experiences that the field of physical therapy has to offer. After graduation, I plan on working as a clinician in either the orthopedic or neurologic setting and eventually transition into research and academics to prepare the next generation of therapists. The kinesiology program at Texas Tech University prepared me well for the rigors of PT school and laid a solid foundation for my future career. I'm forever grateful and proud to be a Red Raider.

KSM Welcomes Four New Faculty

DR. ZACK DAMON

Zack Damon earned his Ph.D. in Sport Management from Texas A&M University. His research broadly examines leadership in sport, with a specific focus on follower leadership development, leader communication, and leader decision-making processes. Currently, his research is undertaking a grounded theory study to forming follower leadership development theory in sport. His research has been published in the *Journal of Sport Management*, *Management Communication Quarterly*, and *Leisure Sciences* among others. Additionally, he has presented national and international conferences spanning the United States, Canada, and Australia.

To support his work, Dr. Damon earned a North American Society of Sport Management (NASSM) Janet B. Parks Research Grant and has won the Global Sport Business Association Junior Faculty Grant competition three times. Through his role as program director at his previous institution, Zack created the online master's in sport management program at the University of Central Arkansas from the ground up. He has experience teaching graduate-level sport management courses across the curriculum as he designed the curriculum. Through this role, he established numerous sport industry connections that helped to expand his research contexts as well as opened doors for his students to pursue internships and careers at organizations such as the National High School Basketball Association, Memphis Grizzlies, Arkansas Travelers, and Special Olympics. Additionally, Dr. Damon is one of the founding members of the Sport Leadership Group; a group being formed to be an international resource for practitioners, scholars, and students for all things related to leadership in sport. Most recently, he was appointed to be the Sport Leadership section editor of Sport Management Digest, a twice-a-year publication in partnership with the World Association of Sport Management (WASM).

WELCOME!

DR. DANIELLE LEVITT

Dr. Levitt joined the Department of Kinesiology and Sport Management as an Assistant Professor in Exercise Physiology. She directs the Metabolic Health & Muscle Physiology (MMP) Laboratory. Her long-term research goal is to understand the mechanisms by which lifestyle factors, particularly alcohol and substance use, contribute to metabolic dysfunction and to identify therapeutic strategies to improve metabolic outcomes in affected individuals. Approximately one-third of adults in the United States report at-risk alcohol use, increasing risk for adverse health outcomes including metabolic diseases such as type 2 diabetes. Skeletal muscle is a primary insulin-responsive glucose utilization site and a major regulator of whole-body metabolism; thus decreased muscle mass and function have strong potential to contribute to alcohol-mediated metabolic pathophysiology. Therefore, the MMP lab uses cellular and molecular techniques alongside clinical studies to achieve several inter-related aims: 1) elucidate mechanisms by which alcohol impairs skeletal muscle bioenergetic function and resulting impacts on muscle regenerative capacity; 2) determine alcohol-mediated changes in inter-organ crosstalk; and 3) evaluate exercise interventions to improve metabolic health, particularly among those with at-risk alcohol use.

Dr. Levitt began her career as a secondary science educator and continued teaching and mentoring throughout her graduate studies at the University of North Texas and postdoctoral fellowship at Louisiana State University Health Sciences Center-New Orleans. She seeks to promote passion for learning and foster critical thinking skills among her students while also learning from them. She looks forward to working with TTU students in the classroom and her laboratory.

WELCOME!

DR. JULIE MATA

Dr. Mata spent over 25 years in collegiate sport management, coaching and teaching at Tarleton State University. Born in Dallas, she and her family moved to Stephenville, Texas, when she was a child, where she attended high school and college. She earned her Bachelor of Science in Exercise and Sport Studies while playing basketball for Tarleton State and was a 1992 GTE-Academic All-America selection as point guard for the runner-up National Champion team.

After spending three years teaching and coaching on the high school level, she earned her Master of Education degree and returned to her alma mater as the Head Softball Coach and Instructor within the Exercise and Sport Science Department. She attained over 560 wins, coached several All-America selections, and she team won the 2015 Regional Championship. She retired from coaching in 2016 to pursue her doctoral degree in Educational Leadership & Policy Studies. Dr. Mata's primary research focus is equity, diversity, and inclusion policy within sports, and she has attained ATIXA Title IX certification.

She is a member of SHAPE America and Texas Association for Health, Physical Education, Recreation and Dance (TAHPERD), currently serves on TAHPERD's College Committee and has presented at both national and state conferences on Equity and Title IX topics. As an avid disc golfer, she also currently serves on three Professional Disc Golf Association committees. Julie and Jose Mata have one son, Gabe, who is currently completing his Political Science degree at Howard Payne University (and –fingers crossed —will attend Texas Tech upon graduation!).

WELCOME!

DR. JACOB MOTA

Dr. Mota is an Assistant Professor in the Department of Kinesiology and Sport Management. Dr. Mota obtained his Ph.D. from the University of North Carolina at Chapel Hill School of Medicine, while his M.S. and B.S. were awarded from the TTU Department of Kinesiology and Sport Management. His research agenda focuses on the non-invasive assessment of muscle function. Current research projects in his laboratory are investigating the relationship between chronic health conditions and musculoskeletal injury risk in occupational athletes (e.g., firefighters, and law enforcement officers). Additionally, his recent works have aimed to reveal the neuromuscular mechanisms which drive adaptations from resistance exercise.

Studies in his laboratory employ techniques such as electromyography, transdermal twitch interpolation, transcranial magnetic stimulation, B-mode ultrasonography, and various muscle strength testing assessments. Dr. Mota has published over 30 peer-reviewed manuscripts in respected journals such as *Ergonomics*, *Aging Clinical and Experimental Research*, *Clinical Biomechanics*, and *Scientific Reports*. He is an active member of the National Strength and Conditioning Association, where he holds the Certified Strength and Conditioning Specialist certification with Distinction.

He has previously won awards for his mentorship of undergraduate students in research. While he very much enjoys spending time in the laboratory working with students on their research projects, when off campus you will likely find him spending time with his wife, Emily, and their daughter, Olivia, while cheering on Red Raider teams.

CONGRATULATIONS

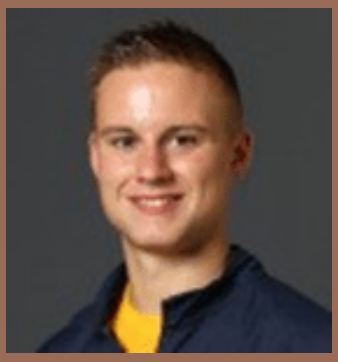
August & December PhD Graduates

Patrick Harty	John Krzyszkowski	Matthew Stratton	Luke Chowning

Patrick Harty

Dr. Harty is an Assistant Professor of Exercise Science in the College of Science, Technology, and Health at Lindenwood University. He holds a Ph.D. in Exercise Physiology from Texas Tech University as well as a bachelor's degree in Exercise Science and a master's degree in Human Performance from Lindenwood University.

While at Texas Tech University, he studied under the mentorship of Dr. Grant Tinsley in the Energy Balance and Body Composition Laboratory. Dr. Harty's recent work examines the applicability of 3D body scanning technologies to serve as performance prediction metrics in soldiers. His research interests also include aspects of sport science, sports nutrition, and body composition. In addition to research, he teaches classes at the undergraduate and graduate levels and enjoys working with students at all stages of their academic journeys.



John Krzyszkowski

John Krzyszkowski was born and raised in Toronto, Canada. He was a track and field athlete while attending Marquette University and graduated with a Bachelor of Science degree in Exercise Science, followed by a Master of Science degree in Clinical Translational and Rehabilitation Health Science with an emphasis in Biomechanics.

John began his Ph.D. at Texas Tech University in the fall semester of 2019 under the mentorship of Dr. John Harry with a research emphasis in Biomechanics. During his time at Texas Tech, John's research has primarily focused on mechanics, strategies, and implications related to the countermovement vertical jump. In addition, John served as the president of the Tech Disc Golf student organization in 2021-2022, which focused on providing Texas Tech students with a social and physical outlet outside of the classroom.

As a Graduate Part-Time Instructor, he taught KIN 3306 Applied Exercise Physiology Labs and KIN 4301 Introduction to Biomechanics. His dissertation focused on exploring the relationship between the countermovement vertical jump and overhead weightlifting derivatives. John has accepted a position of Assistant Professor of Exercise Science at Southern Wesleyan University, which is in Central, South Carolina. He began his new position in August of 2022.

Matthew Stratton is an Assistant Professor of Exercise Science at the University of South Alabama. He received his Ph.D. in Exercise Physiology from Texas Tech University under Dr. Grant Tinsley. Prior to attending Texas Tech University, he received his M.S. with Honors in Applied Exercise and Health Sciences from Kennesaw State University and his B.S. in Exercise Science from the University of New Mexico, graduating Summa Cum Laude and receiving the outstanding exercise science graduate award. His research centers on examining both the applied and molecular responses to various supplementation and nutritional interventions, with a particular interest in intermittent fasting, with a focus on muscular strength, power, and body composition.

Matthew has presented on the topics of protein, specialty diets, and supplementation at multiple universities as well as regional and national conferences. In addition, he has published on the topics in many peer-reviewed journals in the fields of nutrition, sports performance, and aging. He is a Certified Exercise Physiologist from the American College of Sports Medicine (ACSM-EP), a Certified Sports Nutritionist (CISSN) through the International Society of Sports Nutrition, and a Certified Strength and Conditioning Specialist (CSCS) through the National Strength and Conditioning Association.

Matthew Stratton

Luke Chowning

Luke, a native to northeast Indiana, received his Bachelor of Science degree in Exercise and Sport Science from Lubbock Christian University in 2016. He then joined the Department of Kinesiology and Sport Management at Texas Tech University where he received his Master of Science in Kinesiology in 2019. Since then, he has been working on his doctorate under the mentorship of Dr. John Harry in the Biomechanics Human Performance Lab. Luke's research has focused on biomechanical assessment of sport performance and training interventions for athletic populations. His dissertation is entitled "System and Joint Mechanical Differences Between Countermovement Vertical Jumps and Loaded Jumps."

Luke has published ten research articles and was the lead author on three of them. While at TTU, Luke also earned his Certified Strength & Conditioning Specialist (CSCS) certification through the National Strength & Conditioning Association (NSCA). In addition to his research, Luke enjoyed teaching Introduction to Biomechanics (KIN 4301) and Advanced Strength and Conditioning (KIN 4305) at TTU. Luke has accepted an Assistant Professor position at Dakota State University where he will teach undergraduate exercise science students, beginning in January. He will be charged with designing and establishing a new Biomechanics laboratory, along with developing a potential Biomechanics major for the University.

KSM SPEAKER SERIES

Upcoming
December 2nd - 174 at 1pm

DR. WILL ADAMS

KINESIOLOGY GUEST SPEAKER

Dr. William Adams is currently the Associate Director of Sports Medicine Research with the United States Olympic & Paralympic Committee (USOPC) where he oversees the Sports Medicine Research Program focused on injury and illness prevention in sport. He also is the Director of the US Coalition for the Prevention of Illness and Injury in sport, which is one of twelve International Olympic Committee designated Research Centers that are located around the world. In addition to his current roles, Dr. Adams also holds appointments at the University of North Carolina at Greensboro and the University of Colorado - Colorado Springs.

Dr. Adams is currently overseeing projects related to head injuries in sport, women's health, mental health, and para-athletes with the long-term goal of reducing injury and illness risk and optimizing performance among elite athletes. Prior to joining the USOPC, Dr. Adams was an Assistant Professor in the Department of Kinesiology at the University of North Carolina at Greensboro where he served as the Program Director for the Master of Science in Athletic Training Program and Director of the Hydration, Environment and Thermal Stress Lab. Dr. Adams' research expertise and interests are focused on optimizing human health and performance. Specifically, his interests lie in determining the role of habitual fluid intake on health and wellness, investigating the various facets of exertional heat stroke, and optimizing athletic performance. He has been either a lead or co-author on 95 publications in both peer-reviewed scientific journals and edited textbooks on topics related to exertional heat stroke, maximizing athletic performance in the heat, hydration on human health and performance, and preventing sudden death in sport and physical activity. Dr. Adams has been a licensed Athletic Trainer since 2010 and has worked clinically in collegiate and secondary school settings. He also has clinical experience with mass medical events such as the Boston Marathon, Marine Corps Marathon, Vermont City Marathon, Lake Placid Ironman, Beach to Beacon Road Race and Falmouth Road Race, where he has successfully treated more than 65 cases of exertional heat stroke. Dr. Adams received his bachelor's degree in Athletic Training at the University of Wisconsin-Madison, his master's and doctoral degrees in Exercise Science at the University of Connecticut, and completed his postdoctoral fellowship at the University of Connecticut.

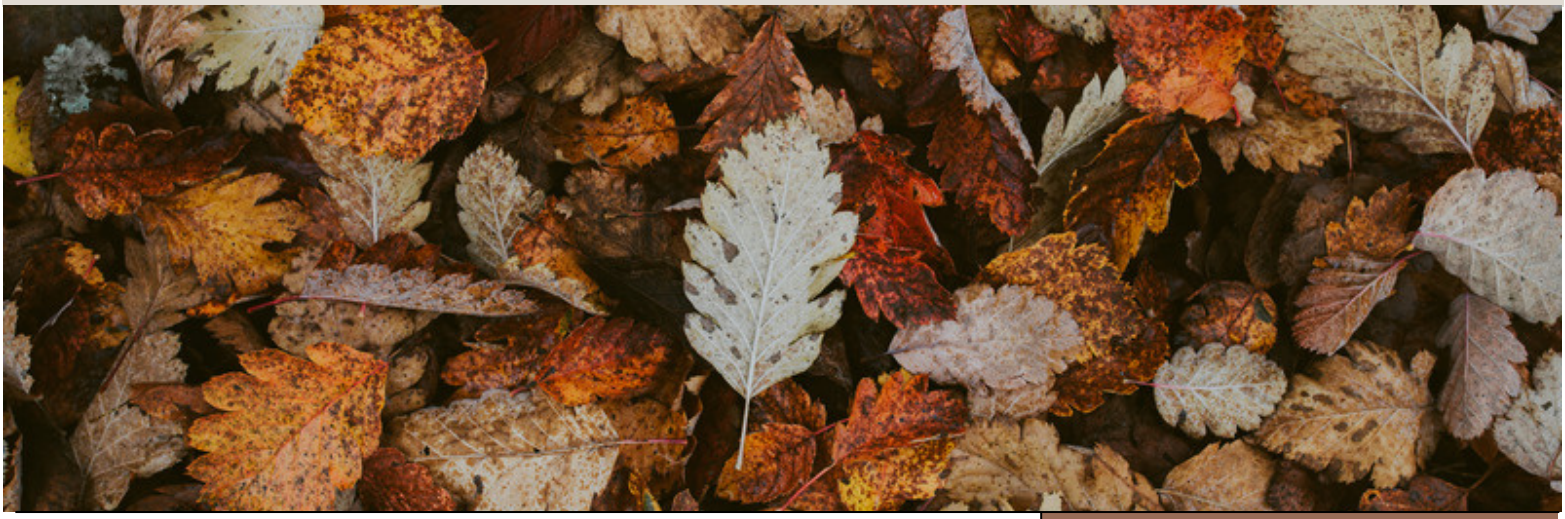
KSM SPEAKER SERIES

DR. ROBERT TURICK

SPORT MANAGEMENT GUEST SPEAKER

On October 4, 2022, Dr. Robert Turick, an Assistant Director of Research at the National Collegiate Athletic Association (NCAA), delivered a guest lecture and shared his extensive experience and knowledge on the business and management of college sports.

Dr. Turick discussed his career journey and current roles at the NCAA, and offered career advice for our sport management students. In the lecture, he said, “You may have a career goal right now, but it might change in the future. You never know which knowledge, skills, or experience will be useful in the future. Instead of narrowing your interests based on your current career plans, you should go to class and participate in campus activities with a flexible and open mind.”



VASCULAR HEALTH LABORATORY DIRECTED BY DR. ARTURO FIGUEROA

The Vascular Health Laboratory (VHL) studies human vascular physiology. The VHL is focused on investigating the impact of aging, menopause, and obesity on endothelial function, arterial stiffness, and aortic hemodynamics and how these vascular alterations negatively affect skeletal muscle health (decreases in muscle mass and strength). Populations of research interest include middle-aged and older adults with hypertension, prediabetes, and type 2 diabetes. The VHL has interest in improving vascular function and skeletal muscle health using resistance training and supplementation with the amino acid L-Citrulline (CIT) and antioxidants. Dr. Figueroa and his students investigate vascular function at rest and during conditions that stimulate sympathetic activity such as exercise, lower-body negative pressure (shown in the picture), and after acute ingestion of glucose.

A few minutes after consuming carbohydrates (sugar), the increase in plasma glucose levels causes a transient decrease in endothelial function that lasts approximately one hour. An ongoing dissertation investigates the effectiveness of CIT supplementation to prevent or reduce the negative effects of acute hyperglycemia on vascular function in women with prediabetes. Two future dissertations will investigate the effects of CIT combined with antioxidant supplementation on vascular function in postmenopausal women with hypertension and with type 2 diabetes. The aim of these investigations is to identify dietary supplementations capable of enhancing vascular function and decreasing cardio-metabolic risk.

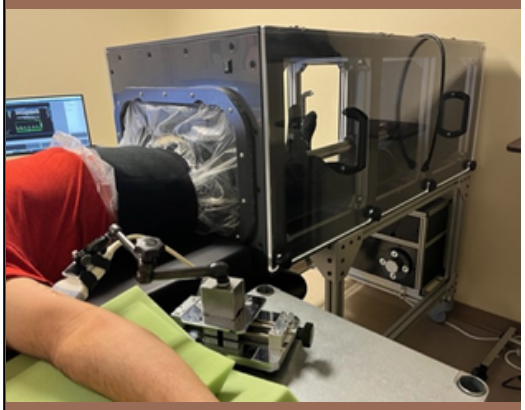


Figure 1 shows how endothelial function of the brachial artery in the arm is examined using ultrasound. The lower-body negative pressure (LBNP) box is used to stimulate sympathetic activity that causes closure of the arteries (vasoconstriction). LBNP is used at rest and during exercise to test vascular function.

Faculty Grants

DR. GRANT TINSLEY

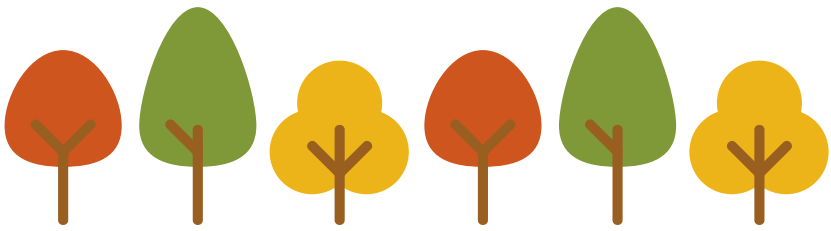
- Pharmacokinetic Analysis of Nutrient Absorption from a Novel Liposomal Multivitamin/mineral Formulation (A21-0282-001). Funded by Nutraceutical International Corporation. $159,341.
- Evaluation of Novel Beverage Formulations for Hydration Enhancement in Humans(A21-0284-001). Funded by 8 POiNT, LLC. $35,000.
- Digital Anthropometry and Body Composition Estimation Using a Generation 2 Prototype 3-Dimensional Optical Scanner (A22-0305-001). Funded by Prism Labs. $32,756.
- Metabolic Effects of a Novel Ready-to-drink Thermogenic Beverage (A22-0092-001). Funded by EHP Labs. $28,401.
- Quantifying the Relationship Between Anthropometry, Body Composition, and Performance on the Army CombatFitness Test (A21-0261-001) [Doctoral Student Research Development Award: Patrick Harty]. Funded by the Texas Chapter of the American College of Sports Medicine. $1,750.

DR. MARC LOCHBAUM

- Received a small grant from the TTU Library to develop open resource materials for KIN 4363 – Principles and Theories in Exercise Psychology. $3,000.
- Received funding for his undergraduate research lab from the Texas Tech University Center for Transformative Undergraduate Experiences (TrUE) Transformers program funded by the Helen Jones Foundation and the TrUE Scholars program. $6,000.

DR. TY PALMER

- Relationship between handgrip strength and postural balance in older adults. Sponsored by the Texas Society for Hand Therapy. $500.



SPORT MANAGEMENT INTERNSHIP PROGRAM

UNDERGRADUATE INTERNSHIP COORDINATOR: ASHLEY HARRY

Sophia Scholz, Spring 2022 Intern, United Supermarkets Arena

Cade Simmons, Spring 2022 Intern, Texas Tech Men's Basketball

The undergraduate Sport Management Internship program is providing many of our students with opportunities to combine the coursework they are completing in class with real-world scenarios at their respective sport internship sites. The spring 2022 semester had one of our largest internship classes of 49 students! Many of these interns worked with Texas Tech Athletics, Lubbock Christian University Athletics, and the Lubbock Matadors.

For the summer 2022 internship class, TTU had representation all around the nation! Some of our Sport Management students completed internships with the Northern Texas PGA, FC Dallas, New Orleans Saints & Pelicans, the Austin Sports Commission, the Bridgestone Arena in Nashville, and the Frisco Roughriders.

Overall, the internship program continues to be an incredibly beneficial component of our Sport Management degree plan as it has opened the door for many students to break into the competitive sport industry. We are excited for the growth of the program and future Texas Tech Sport Management representation all over the map!

Kinesiology & Sport Management Ambassadors

In February, the KSM Ambassadors had a booth at STEM night at the Ramirez Charter School where they were able to interact with and answer questions from students and their families. The booth included a broad jump mat where students could test their jumping ability and learn about what happens to their bodies when they jump and how they produce the power to jump. The Ambassadors also designed and sold new departmental apparel items that were a big hit! In March, the Ambassadors hosted Madison Proctor, director of recruitment and student affairs, from the TTUHSC School of Health Professions to discuss their graduate programs with Kinesiology majors interested in athletic training, occupational therapy, or physical therapy. This discussion is held annually and works to help current students get on track and gain a better understanding of the requirements for acceptance into these programs along with tips and advice from current graduate students in those respective programs. In April, the Ambassadors participated in several events including the Burkhart Walk for Autism and the University Arbor Day festivities where they planted flowers on campus. The Ambassadors also hosted their inaugural volleyball tournament that was sponsored by Cardinal's Sport Center and was won by team Chewblocka! Throughout the semester the Ambassadors also provided tours for faculty interview candidates and numerous prospective high school students interested in Kinesiology or Sport Management.

For the 2022-2023 academic year the KSM Ambassadors welcomed 8 new members. To date, for the fall semester, the Ambassadors have assisted with or will be assisting with several student recruitment and campus events including the Texas Tech Preview, Arts & Sciences Day, and the Majors & Minors Fair. The Ambassadors also participated in Tech or Treat which allowed them the opportunity to work with and interact with children and help them get into the Halloween spirit while being active. The children visited the Ambassadors booth were able to test their jumping skills for a special Halloween prize. The Ambassadors will also participate in the American Heart Association Walk and the Walk to End Alzheimer's to raise money for great causes. The Ambassadors have several volunteer opportunities scheduled throughout the semester and have also created new apparel designs which will be available for purchase in the Spring 2023 semester.

PLEASE FOLLOW US! **@KSM_AMBASSADORS**

STUDENT SPOTLIGHT

Katie Bayouth

Katie Bayouth is a senior in kinesiology who hopes to become a physical therapist. Outside of her work experience at Physical Therapy Associates and prerequisite coursework, she has also been working in the Perception, Cognition, and Action lab (KSM 101) with Dr. Jarrod Blinch. Katie's time in the lab has given her valuable research experience that has also counted as a major elective; specifically, KIN 4000 Independent Study. Her research this semester uses motion capture technology and reaction time distribution analysis to investigate how information processing changes when the difficulty of the task increases. Katie plans to continue her research next spring and to present her findings at Texas Tech's Undergraduate Research Conference.

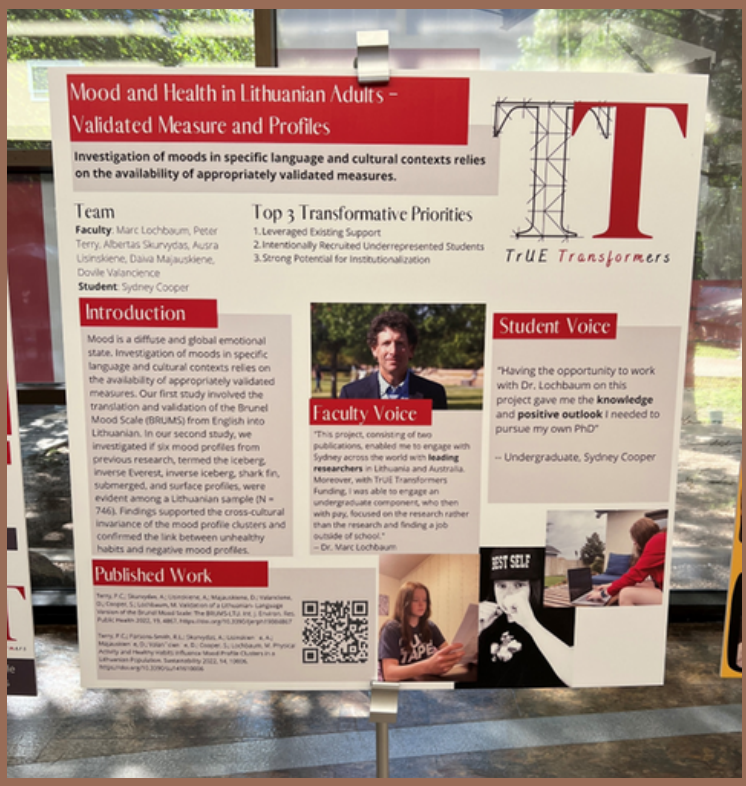
Katie is a Lubbock native who is the third member of the Bayouth dynasty to study kinesiology at Texas Tech. Her brothers graduated in 2020 and 2022 and her sister might be a kinesiology first-year student next year. One final unique thing about Katie is that her minor is Spanish. She hopes that knowing Spanish will help her to interact with physical therapy patients that are also among the 41 million Americans that speak Spanish at home.

Dr. Marc Lochbaum Provides Community Outreach to

Snyder Independent School District

Contributing to TTU's and KSM's strategic priority of community outreach to Snyder Independent School District, Dr. Marc Lochbaum provides life and sport mental techniques (e.g., positive self-affirmations, stress management) to the Lady Tiger soccer team. Jessica Lima (bottom row on left) graduated with her M.S. in Kinesiology in the Motor Behavior/Sport Psychology concentration. On the far right is Cassandra Sisneros, who graduated from TTU in the spring). Cassandra worked in Dr. Lochbaum's undergraduate research lab https://www.depts.ttu.edu/true/spark/lochbaum/ and assists Dr. Lochbaum in providing community outreach.

Dr. Lochbaum and Sydney Cooper presented this fall to culminate their TrUE Transformer projects. They researched mood and health in Lithuanian adults. From their work, the following two publications resulted with colleagues from Australia, Lithuania, and the UK.



Terry, P.C.; Parsons-Smith, R.L.; Skurvydas, A.; Lisinskienė, A.; Majauskienė, D.; Valančienė, D.; Cooper, S.; Lochbaum, M. Physical Activity and Healthy Habits Influence Mood Profile Clusters in a Lithuanian Population. Sustainability 2022, 14, 10006. https://doi.org/10.3390/su141610006

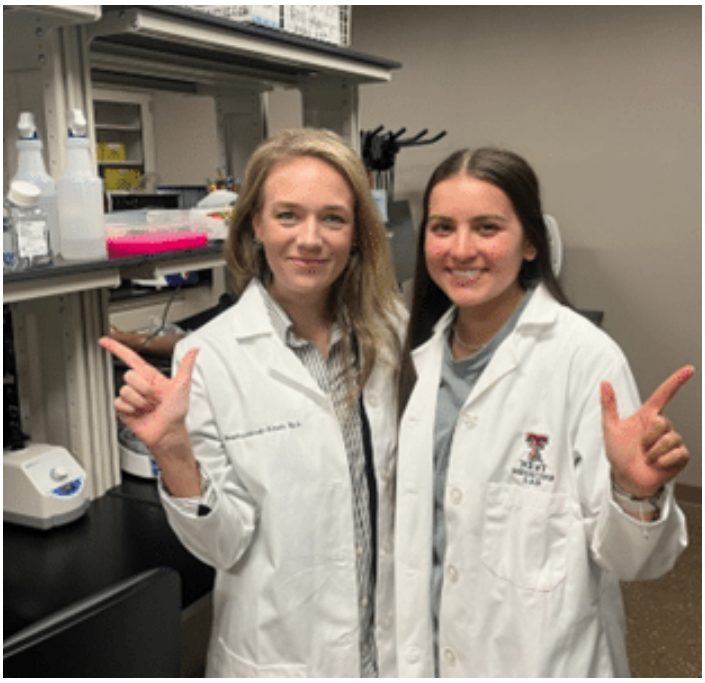
Terry, P.C.; Skurvydas, A.; Lisinskiene, A.; Majauskiene, D.; Valanciene, D.; Cooper, S.; Lochbaum, M. (2022). Validation of a Lithuanian-Language Version of the Brunel Mood Scale: The BRUMS-LTU. International Journal of Environmental Research and Public Health, 19, 4867. https://doi.org/10.3390/ijerph19084867

In addition to these publications, Dr. Lochbaum, his undergraduate TrUE students (S. Cooper and C. Sisneros), graduate students (M. Sherburn and S. Limp), and colleagues, published the following meta-analyses.

Self-confidence and sport performance: Lochbaum, M., Sherburn, M., Sisneros, C., Cooper, S., Lane, A. M., & Terry, P. C. (2022). Revisiting the self-confidence and sport performance relationship: A systematic review with meta-analysis. International Journal of Environmental Research and Public Health, 19(11), 6381. https://doi.org/10.3390/ijerph19116381

Athletic identity in sport: Lochbaum M, Cooper S, Limp S. The Athletic Identity Measurement Scale: A Systematic Review with Meta-Analysis from 1993 to 2021. European Journal of Investigation in Health, Psychology and Education. 2022; 12(9):1391-1414. https://doi.org/10.3390/ejihpe12090097

Mentoring
Undergraduate Students



Dr. Kembra Albracht-Schulte & Kiara Garza

Dr. Danielle Levitt & Rylea Helmberger

Texas Tech University Center for Transformative Undergraduate Experiences (TrUE) works to ensure that every undergraduate student has the opportunity to engage in high-impact educational practices while earning their degree.

Dr. Kembra Albracht-Schulte and undergraduate research scholar, Kiara Garza, have received $2,000 from the College of Arts and Sciences Undergraduate Research Experience Program with support from the Center for Transformative Undergraduate Experiences (TrUE). This funding is to support hands-on research experience for undergraduate students. Their proposal “Exercise and the Microbiome” involves investigating the relationship between exercise and the gastrointestinal microbiome in humans and animals. As part of a USDA funded clinical trial focused on understanding the combined effects of fish oil and high-intensity interval training (HIIT), Kiara will specifically investigate the effects of HIIT on the microbiome. Additionally, Kiara is assisting on an animal study determining the effects of aerobic training on the gastrointestinal microbiome in an aging model of mice. For this project, she is learning how to isolate DNA from fecal samples and will work with collaborators at the TTU Center for Biotechnology & Genomics as well as collaborator, Dr. Heather Vellers at The University of Oklahoma to understand changes in microbiota in response to aerobic training. Kiara is a senior Kinesiology major and has been a member of the Nutrition, Exercise, and Translational (NExT) Medicine Laboratory for nearly 2 years. She plans to attend physical therapy school and has already had several interviews!

Dr. Danielle Levitt and undergraduate research scholar Rylea Helmberger were awarded $2,000 for the project titled “Alcohol-mediated decreased myoblast proliferation: Cell death or slowed cell division?” as part of the College of Arts and Sciences Undergraduate Research Experience Program. This project falls under a larger goal of the Metabolic Health and Muscle Physiology (MMP) Laboratory to understand how alcohol impacts skeletal muscle regenerative capacity. Through her work in the MMP laboratory, Rylea will learn a variety of hands-on techniques such as cell culture; cell staining, imaging, and analysis; and cell death assays. Results will aid in informing the development of interventions to improve skeletal muscle health in people with at-risk alcohol use. Rylea plans to present her results at the Gordon Research Seminar on Alcohol-Induced End Organ Diseases, a trainee-focused event.

Six Doctoral Students Begin Studies

Navin Balagopal

Navin is a molecular and cell biologist with a special interest in aging. He finished his undergraduate degree in Biotechnology in India at Bharatiyar University and subsequently pursued a Master of Science in Medical Molecular genetics at the University of Aberdeen, Scotland and a Master of Research in Ageing and Health. In between the interim periods of his studies, he also pursued numerous job opportunities, such as a lab assistant at Loughborough University, England, as a Research fellow at Vellore Institute of Technology, and Research Assistant at Tulane Centre for Ageing and Tulane National Primate Research Center in Louisiana.

Until he came across the work of Dr. Kembra Albracht-Schulte at TTU whose work on obesity and inflammation fascinated him. He felt that if he was going to pursue his Ph.D. and work on a topic for the next few years, this would be it. Further, as he came across the opportunities in the department, he was convinced that it would be the right choice for him. As a doctoral student in Exercise Physiology along with his research, he teaches Exercise Testing and Prescription labs.

Ryan Dunn

Ryan is a graduate part-time instructor and Ph.D. student in Exercise Physiology under the supervision of Dr. Yasuki Sekiguchi. He is originally from the United Kingdom, where he completed an Honours degree in Applied Sport and Exercise Science at Robert Gordon University in Scotland, prior to completing his master's degree in Exercise Physiology at Loughborough University in England. He is interested in researching novel heat adaptation methods and heat mitigation strategies to optimize athlete and occupational performance in hot environmental conditions, in addition to exploring areas of hydration, athlete monitoring, screening and recovery.

He was previously employed as an Academic Demonstrator at Robert Gordon University where he assisted with leading various practical classes such as Exercise Testing and Prescription, Strength and Conditioning and Applied Exercise Physiology. During his spare time he enjoys watching soccer (mainly the English and Scottish Premier Leagues) and has previously worked as a performance analyst for a professional women's soccer team in the North of Scotland.

Six Doctoral Students Begin Studies (cont'd)

Marcos Keefe

Marcos was born in Chicago, Illinois, and raised right across the border in Hammond, Indiana. He received his undergraduate degree from Indiana University-Purdue University Indianapolis (IUPUI) in Exercise Science and received his master's degree from Loyola University Chicago in Exercise Science with a Human Performance concentration. He is a certified strength and conditioning specialist (CSCS) through the National Strength and Conditioning Association (NSCA). At Texas Tech, he is working as a graduate part-time instructor teaching KIN 3306 Applied Exercise Physiology labs and working in the Sports Performance Laboratory under Dr. Yasuki Sekiguchi.

His main research interest lies in improving sport performance through environmental physiology and thermoregulatory mechanisms, specifically heat acclimation. However, Dr. Sekiguchi's laboratory focuses on other aspects of human performance, including hydration, training load monitoring, and wearable technology. Outside of academia, he enjoys working out, hanging out with friends, and discovering new food spots. He looks forward to becoming part of the Texas Tech KSM family for the next few years!

Katie Kennedy

Katie Kennedy is from Alliance, Ohio. She is pursuing her Ph.D. in Exercise Physiology working alongside Dr. Jacob Mota. Katie earned her M.S. in Exercise Science from the University of South Alabama and her B.A. in Exercise and Sport Science from the University of North Carolina-Chapel Hill (UNC). She began working in a Neuromuscular Research Laboratory as an undergraduate at UNC and has since continued her research in neuromuscular performance and outcomes of resistance training.

Her master's thesis focused on understanding the sex differences in neuromuscular control of the quadriceps during fatiguing exercise. Katie's primary research interests involve investigating female-specific training adaptations and interventions, as well as understanding the neuromuscular demands of special occupational populations, such as those in the fire service. Upon completing her Ph.D., Katie's long-term goal is to become a tenured professor at a university where she can continue pursuing these research interests.

Six Doctoral Students Begin Studies (cont'd)

Matthew Nino

Matthew is passionate about learning and helping others in the field of kinesiology. He obtained his B.S. in Kinesiology at Texas A&M University. His ambition for learning drew him to Texas Tech University where he obtained his M.S. in Kinesiology. He had the opportunity to gain a tremendous amount of lab experience working under Dr. Michael Massett in his lab. Additionally, with his mentorship and other faculty at Texas Tech University he has been able to expand his knowledge in basic physiology and exercise physiology.

Throughout his academic career Matthew has loved learning about anatomy and physiology, chemistry, biology, exercise science, and many other related topics to kinesiology. He is in his first semester as a Ph.D. student in Exercise Physiology and already he feels like he has learned so many new concepts he had not thought about before regarding physiology. He looks forward to improving his lab techniques, learning new lab techniques, and absorbing as much knowledge as possible to better prepare for the future. He is confident he can succeed in doing this at Texas Tech University.

Kealey Wohlgemuth

Kealey is from Topsail Island, North Carolina. She earned her B.A. in Exercise and Sport Science from the University of North Carolina at Chapel Hill. She also earned her M.A. in Exercise and Sport Science with a concentration in Exercise Physiology from the University of North Carolina at Chapel Hill. During her undergraduate career, she worked as a research assistant and a strength and conditioning coach. She is a Certified Strength and Conditioning Specialist through the National Strength and Conditioning Association and a Certified Sports Nutritionist from the International Society of Sports Nutrition. During her master's program, she worked in a Neuromuscular Assessment Laboratory and became intrigued by human performance.

At TTU, Kealey is working under the mentorship of Dr. Jacob Mota. Her research interests include neuromuscular performance and adaptations to resistance training in special populations (i.e., firefighters, law enforcement officers, military). In the future, she hopes to continue in academia and work in a laboratory where she can research neuromuscular adaptations to resistance training.