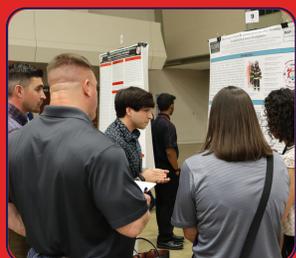
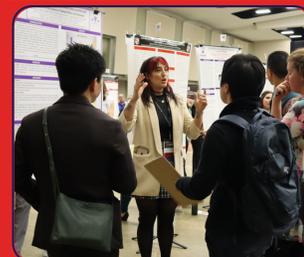
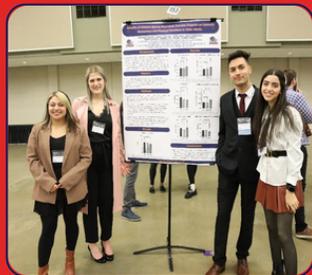


2024 TACSM ANNUAL MEETING PROGRAM



February 22-23, 2024
Waco Convention Center
Waco, Texas



AMERICAN COLLEGE
of SPORTS MEDICINE
LEADING THE WAY

TEXAS ACSM 2024



WELCOME MESSAGE

The 2024 Texas ACSM annual conference will be held Thursday, February 22nd and Friday, February 23rd at the Waco Convention Center. We have assembled another amazing group of speakers and feel that our final program is extremely well-rounded, providing “something for everyone” in attendance. We encourage everyone to seek out and spend time visiting with our vendors during the meeting, as they each make significant contributions to our annual meetings. Parking continues to be free in Heritage Square surrounding the Waco Convention Center.

Thursday afternoon will commence with registration open at 1:00 p.m. and our first round of concurrent sessions at 2:00 p.m. That will be followed by three more rounds of concurrent sessions held in the Brazos Ballroom, then things move into Chisholm Hall for the evening events and networking! Our poster presentation format has changed for 2024 with student poster finalists standing by their posters from 5:30 to 6:30 p.m. as teams of judges make their way through the exhibit hall to determine who will move to the President’s Cup round. This year, the top 3 in each poster category will move on! Following the judging session, the TACSM student research poster session will open from 6:30 to 7:30 p.m. for all poster presenters to showcase their research. The TACSM Social and Sponsor Fair also commence at 5:30 p.m. in Chisholm Hall. For those that are interested, there will be an informal meet and greet at J.S. Barnett’s Pub which is a short walk from the Waco Convention Center.

Friday starts off with a new edition to the meeting agenda. The first ever Women’s Panel Breakfast (RSVP required) opens at 7:15 a.m., and the day will open in Chisholm Hall with a 2nd opportunity for students to stand by their posters during the President’s Cup judging round and a Graduate Student Fair. The meeting will then shift back to a focus on presentations with two rounds of talks that will lead into our Keynote Address, the Raven Lecture at 11:00 a.m. This year’s Raven Lecture will be given by Dr. George Brooks on Muscle and Whole Body Lactate Kinetics. Lunch will be provided and following that, in a brand-new time slot, the always entertaining TACSM Student Bowl XV competition will take place and will be immediately followed by the TACSM Awards Ceremony to close the 2024 Annual Meeting. Please stick around to cheer on the winners!

Steven E. Martin, Ph.D., ACSM-CCEP
2024 TACSM President and Program Chair
Texas A&M University

TEXAS ACSM 2024



GENERAL INFO

CONFERENCE REGISTRATION

To register online, go to the Texas ACSM website (www.tacsm.org).

- Professional member: \$125.00
 - Non-member professional: \$160.00 (plus 1-year chapter membership)
 - Student member: \$45.00
 - Non-member student: \$45.00 (plus 1-year chapter membership)
- Early registration ends February 16th at which time rates will increase.

DIRECTIONS TO THE CONFERENCE

The Waco Convention Center is located in downtown Waco, TX. The physical address for the convention center is 100 Washington Avenue, Waco, TX 76701.

Attendees are asked to park in Heritage Square, a city block of surface parking located at 3rd Street and Austin Avenue, and bounded by 4th Street and Washington Avenue. Buses should be parked on this lot as well. Buses and vehicles taking more than one parking spot are not allowed in the parking lot facing Franklin Avenue.

For detailed driving directions, please visit the Texas ACSM website (www.tacsm.org).

HOTELS

·See TACSM website for more info, room blocks are limited.

[Hilton Waco](#)

[Courtyard Waco](#)

[Hotel Indigo Waco](#)

[Hampton Inn & Suites Waco-South](#)

[SpringHill Suites Waco](#)

[Comfort Suites Waco](#)

2024 TEXAS ACSM PROGRAM



DAY 1

Thursday, February 22, 2024

1:00 – 7:30 P.M. REGISTRATION OPENS & NAME BADGE PICK-UP.

Room: Upper Lobby

1:00 – 8:30 P.M. VENDOR BOOTHS OPEN

Room: Chisholm Hall

1:00 – 4:00 P.M. POSTER SET-UP OPENS

Room: Chisholm Hall

2:00 – 2:45 P.M. CONCURRENT SESSIONS



ACSM SPONSORED TALK

Gina Cortese Shipley, M.S.

The Ins and Outs of Accreditation:
An Introduction for Faculty Members

Room: Brazos Ballroom North



STUDENT PRESENTATIONS

2024 SRDA Presentation Finalists

Rapid Fire: The Student Research
Grant Proposals Edition

Room: Brazos Ballroom South



2:55 – 3:40 P.M. CONCURRENT SESSIONS

INVITED SCIENTIFIC TALK

John McCarthy, Ph.D.

Satellite Cell Proliferation is Not
Obligatory for Myofiber Fusion during
Muscle Hypertrophy

Room: Brazos Ballroom North



INVITED NUTRITION TALK

Nick Barringer, Ph.D., RD

Good Nutrition In Challenging Places:
Warfighter Nutrition in a Deployed
Environment

Room: Brazos Ballroom South



3:50 – 4:35 P.M. CONCURRENT SESSIONS



INVITED TACTICAL TALK

Andrew Jagim, Ph.D. & Annette Zapp, M.A.

Drinking Science through a Fire Hose:

Navigating the Field of Firefighter
Health and Performance Research

Room: Brazos Ballroom North



INVITED SCIENTIFIC TALK

Monica Hubal, Ph.D.

Drivers of Insulin Sensitivity
Responses to Exercise Training: A
Systems Biology Approach

Room: Brazos Ballroom South



4:45 – 5:30 P.M. CONCURRENT SESSIONS

ROUNDTABLE PANEL DISCUSSION

Panelists: Dr. Jasdeep Kaur, Dr. Abbie Smith-Ryan, Dr. Valerie Stevenson, and Ms. Annette Zapp

Sharing the Mic: TACSM Women's
Panel Discussion

Room: Brazos Ballroom North

GSSI LECTURE

Brandon Shepherd, M.S.

Back to Basics: Physiology of Sweat
and Sweat Testing

Room: Brazos Ballroom South



5:30 – 6:30 P.M. STUDENT POSTER FINALIST JUDGING SESSION

Room: Chisholm Hall

6:30 – 7:30 P.M. STUDENT RESEARCH POSTER SESSION (ALL PRESENTERS)

Room: Chisholm Hall

6:00 – 8:30 P.M. TACSM SOCIAL & SPONSOR FAIR

Room: Chisholm Hall

8:45 – TBD P.M. INFORMAL MEET AND GREET

J.S. Barnett's Pub

2024 TEXAS ACSM PROGRAM



DAY 2

Friday, February 23, 2024

- 7:15 – 11:30 A.M. REGISTRATION OPENS & NAME BADGE PICK-UP.**
Room: Upper Lobby
- 7:15 – 9:00 A.M. COFFEE/CONTINENTAL BREAKFAST**
Room: Chisholm Hall
- 7:15 – 8:15 A.M. WOMEN'S BREAKFAST (RSVP REQUIRED)**
Room: McLennan Hall 209
- 7:45 – 8:00 A.M. TACSM BUSINESS MEETING**
Room: Brazos Ballroom
- 8:00 A.M. – 1:00 P.M. VENDOR BOOTHS OPEN**
Room: Chisholm Hall

11:00 – 11:50 A.M. KEYNOTE ADDRESS



THE RAVEN LECTURE

George Brooks, Ph.D., FACSM

Muscle and Whole Body Lactate Kinetics: Organ–Organ, Cell–Cell, Intracellular, and Postprandial Lactate Shuttles

Room: Brazos Ballroom

11:50 A.M. – 12:50 P.M. LUNCH PROVIDED BY MILLERS SMOKEHOUSE

STUDENT BOWL PARTICIPANTS EAT FIRST TO MOVE TO CHECK IN

Room: Chisholm Hall

8:00 – 9:20 A.M. PLENARY SESSION

PRESIDENTS CUP JUDGING AND GRADUATE STUDENT FAIR (ALL PRESENTERS INVITED TO STAND AT THEIR POSTERS)

Room: Chisholm Hall



12:15 – 12:45 P.M. STUDENT BOWL TEAM, REFEREE, & SCOREKEEPER CHECK-IN

Teams that are not checked in by 12:45 p.m. will be disqualified.

Room: Brazos Ballroom

9:30 – 10:10 A.M. OPENING LECTURE

INVITED SCIENTIFIC TALK

Abbie Smith-Ryan, Ph.D., FACSM

Scientific Skills for Life: A Journey of Collaboration & Creativity

Room: Brazos Ballroom



1:00 – 2:45 P.M. STUDENT BOWL XV COMPETITION

Who will take home the title and win a trip to Boston?

Room: Brazos Ballroom

10:15 – 10:55 A.M. CONCURRENT SESSIONS

INVITED SCIENTIFIC TALK

Susan A. Bloomfield, Ph.D., FACSM

Mission to Mars: Integrative Physiology's Essential Role

Room: Brazos Ballroom



1:00 – 3:30 P.M. POSTER BREAK-DOWN

2:45 – 3:45 P.M. TACSM AWARDS CEREMONY

Election results, recognitions, Honor and Service Awards presentation, student award presentations, and transfer of Presidency.

Room: Brazos Ballroom



INVITED PERFORMANCE TALK

Bryan Mann, Ph.D., CSCS*D, RSCC*D, TSAC-F, FNCSA

For Sport to Any Population- The Force Velocity Profile and You

Room: Bosque Theater

3:45 P.M. ADJOURNMENT

2024 TEXAS ACSM SPONSORED TALKS



Abbie Smith-Ryan, Ph.D., FACSM
Scientific Skills for Life: A Journey of
Collaboration & Creativity

SESSION SPONSORED BY



**MAYBORN COLLEGE OF
HEALTH SCIENCES**
UNIVERSITY OF MARY HARDIN-BAYLOR



THE RAVEN LECTURE
George Brooks, Ph.D., FACSM
Muscle and Whole Body Lactate Kinetics: Organ-Organ, Cell-Cell,
Intracellular, and Postprandial Lactate Shuttles

SESSION SPONSORED BY



Department of Kinesiology
COLLEGE OF NURSING AND HEALTH INNOVATION

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STUDENT BOWL XV COMPETITION
Who will take home the title and win a trip to Boston?



Susan A. Bloomfield, Ph.D., FACSM
Mission to Mars: Integrative Physiology's Essential
Role

SESSION SPONSORED BY



COLLEGE OF EDUCATION
Department of Kinesiology,
Health Promotion & Recreation

SESSION SPONSORED BY



**TEXAS ACSM STUDENT RESEARCH POSTER
SESSION**



Making Metabolic Measurement Easy



Nick Barringer, Ph.D., RD
Good Nutrition In Challenging Places: Warfighter
Nutrition in a Deployed Environment

SESSION SPONSORED BY



The Science of Sure

SESSION SPONSORED BY

SHARING THE MIC: TACSM WOMEN'S PANEL DISCUSSION

**Panelists: Dr. Jasdeep Kaur, Dr. Abbie Smith-Ryan, Dr. Valerie
Stevenson, and Ms. Annette Zapp**



American University
of the Caribbean
School of Medicine



ROSS UNIVERSITY
SCHOOL OF MEDICINE



John McCarthy, Ph.D.
Satellite Cell Proliferation is Not Obligatory for Myofiber Fusion
during Muscle Hypertrophy

SESSION SPONSORED BY



COLLEGE OF EDUCATION & HUMAN DEVELOPMENT
LAMAR UNIVERSITY
Department of Health & Kinesiology

SESSION SPONSORED BY



2024 SRDA Presentation Finalists
Rapid Fire: The Student Research Grant Proposals Edition



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Health, Human Performance, and Recreation



TEXAS TECH UNIVERSITY

Department of Kinesiology
& Sport Management



TEXAS A&M UNIVERSITY
SAN ANTONIO

HEALTH & KINESIOLOGY



SCHOOL OF HEALTH
PROMOTION & KINESIOLOGY
TEXAS WOMAN'S UNIVERSITY



Barry
University

Sport and Exercise Sciences



DEPARTMENT OF
KINESIOLOGY



Harris College
of Nursing & Health Sciences

Kinesiology



Department of Kinesiology
College of Health Sciences
SAM HOUSTON STATE UNIVERSITY
MEMBER THE TEXAS STATE UNIVERSITY SYSTEM



UNIVERSITY OF
LOUISVILLE

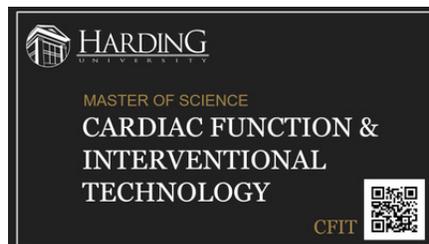


MIDWESTERN
STATE UNIVERSITY

LOGAN UNIVERSITY

COLLEGE OF CHIROPRACTIC | COLLEGE OF HEALTH SCIENCES

TEXAS STATE
HEALTH AND HUMAN
PERFORMANCE



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WE WOULD LIKE TO THANK NATIONAL ACSM AND GSSI FOR THE CONTINUED SUPPORT OF REGIONAL CHAPTERS!



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KEYNOTE SPEAKER

GEORGE A. BROOKS, PH.D., FAPS, FACSM, FECSS

*Distinguished Professor of Integrative Biology
University of California, Berkeley*

*Docteur Honoris Causa
de l'Université Montpellier*

George A. Brooks, Ph.D. is Professor of Integrative Biology at the University of California, Berkeley. Dr. Brooks is a Fellow of the American Physiological Society (APS), American College of Sports Medicine (ACSM), and European College of Sports Science (ECSS). From athletics and exercise and altitude physiology research George A. Brooks developed the Lactate Shuttle concept. Lactate shuttling has three functions; lactate is a fuel energy source, the main gluconeogenic precursor, and a signaling molecule with autocrine, paracrine and endocrine functions. Endurance training develops the capacities to produce, remove and utilize lactate as a fuel energy source. Lactate is favored as a fuel by working red muscle, heart, liver and brain. Moreover, from extant data related to the Hepatic Glycogen Paradox, it was possible to deduce that a Postprandial Lactate Shuttle plays a major role in dietary carbohydrate metabolism. As a result of new understanding lactate is used to provide metabolic support to endurance athletes and as an extracellular fluid replacement (e.g., dehydration, hypovolemia, hemorrhage), metabolic acidosis, heart failure, myocardial infarction, inflammation and Dengue. As well, lactate supplementation being evaluated to treat, traumatic brain injury and sepsis. A notable exception to lactate efficacy is cancer where lactate shuttling needs to be blocked. In his lecture Brooks will inform about Lactate Shuttle theory and encourage others to translate theory into practice.



**THANK YOU DR. BROOKS FOR GIVING THE 2024
RAVEN LECTURE**



DAY 1 SPEAKER BIOS

GINA CORTESE SHIPLEY, M.S.

Committee on Accreditation for the Exercise Sciences (CoAES)

Gina Cortese Shipley, M.S. is the Executive Director for the Committee on Accreditation for the Exercise Sciences, leading operations in alignment with the Commission on Accreditation of Allied Health Programs (CAAHEP). Gina has a deep passion for health and wellness which extends from improving the lives of consumers, to creating support for exercise professionals, to strengthening the industry at large. In as much, she has served as an advisor and subject matter expert; a speaker for many educational series, conferences, and certification courses nationally and internationally; authored several articles and books; and developed web and mobile applications. Prior to her current role, Gina served at The Cooper Institute where she was a member of both the CoAES and the Coalition for the Registration of Exercise Professionals.



JOHN J. MCCARTY, PH.D.

Center for Muscle Biology, Department of Physiology, College of Medicine, University of Kentucky

Dr. McCarthy received a B.S. in Biology from the University of California at Irvine, a M.S. in Physical Education for California State University at Fullerton and a PhD in Exercise Physiology from the University of Oregon. He completed post-doctoral training at the University of Illinois at Urbana-Champaign and the University of Missouri at Columbia. He is a Professor in the Department of Physiology at the University of Kentucky. The primary focus of his lab is to better understand the molecular and cellular mechanisms regulating skeletal muscle mass in response to exercise and with aging. Ongoing projects are investigating the role of the muscle-specific microRNA miR-1, satellite cells and the gut microbiome in the regulation of muscle metabolism and hypertrophy. His research is supported by funding from NIH.



NICK BARRINGER, PH.D., RD

Army-Baylor Master's Program in Nutrition

Nick Barringer is an expert on nutrition and performance for the tactical athlete. Nick currently serves as the Army-Baylor Master's Program in Nutrition program director. He also served as an assistant professor at the United States Military Academy at West Point. Previously while working at the United States Army Research Institute of Environmental Medicine, Nick researched Warfighter nutritional requirements in differing environments, including deployed Special Operators. Before that, he taught performance nutrition at the Army-Baylor Graduate Program in Nutrition. Nick served in the 75th Ranger Regiment as a member of the Ranger Athlete Warrior (RAW) program, where he oversaw the nutrition and aspects of the physical training of Rangers. Nick received his undergraduate degree in dietetics from the University of Georgia, and his doctorate in kinesiology from Texas A&M. Nick is married to Kathrin Barringer, and they have one daughter Sawyer and two sons Wolfe and Axel.



DAY 1 SPEAKER BIOS

ANDREW JAGIM, PH.D., CSCS*D, CISSN

*Director of Sports Medicine Research
Mayo Clinic Health System*

Andrew Jagim, Ph.D., CSCS*D, CISSN, is currently the Director of Sports Medicine Research for the Mayo Clinic Health System in La Crosse, Wisconsin. Dr. Jagim completed his Ph.D. in Exercise Physiology at Texas A&M University. His primary research area focuses on how various nutrition and exercise-related strategies influence the performance and health of athletes. Dr. Jagim's research also focuses on the physiological demands of various sports and tactical professions and how they pertain to injury, recovery status, and performance. Andrew is also a certified strength & conditioning specialist through the National Strength & Conditioning Association and a certified sports nutritionist through the International Society of Sports Nutrition and has worked as a consultant for various clients and athletes.



ANNETTE ZAPP, M.A., CSCS*D, CISSN

*City of Chicago Firefighter;
Owner, Fire Rescue Wellness*

Annette Zapp, MA, CSCS*D, CISSN, is a recovering biochemist who wandered into the fire service 20 years ago and never left. She found what broke her heart and thereby discovered her purpose. The fact that firefighters pledge their lives in the service to the public, and yet no one is taking care of them while they die of complications of cardiovascular disease, cancer, and suicide, is unacceptable. AZ finds the research and resources and brings them to the fire service in a way that provides them with the "So what, now what?" AZ owns and operates Fire Rescue Wellness and hosts the FRW podcast, which drops weekly on Tuesdays.



MONICA J. HUBAL, PH.D., FACSM

Indiana University – Indianapolis

Monica Hubal currently works at Indiana University–Indianapolis. She is an Associate Professor of Kinesiology and is affiliated with the Indiana Center for Musculoskeletal Health. Dr. Hubal's main research interests are elucidating what factors make some people more prone to obesity, type 2 diabetes, and cardiometabolic disease (especially earlier in life) and identifying ideal intervention strategies to regain health. She is dual-trained in exercise physiology and genetic medicine, making her a key inter-disciplinary expert in molecular exercise science and cardiometabolic research.



DAY 1 SPEAKER BIOS

BRANDON SHEPHERD M.S., CSCS

*Gatorade Sports Science Institute-
Life Sciences R&D, PepsiCo Inc.*

Brandon is an exercise scientist working at the Gatorade Sports Science Institute (GSSI), in Bradenton, FL. Before joining GSSI, Brandon received a master's degree in exercise physiology at Mississippi State University (MSU). Brandon's research background includes nutrition, technology, and training modification for performance. In his current role, Brandon is a member of the GSSI Insights and Innovation Team where he supports new product formulations and athlete insights. In his spare time, Brandon enjoys spending time with family and friends, traveling, and cooking.



WOMEN'S PANEL MEMBERS



Jasdeep Kaur, Ph.D.

The University of Texas
at Austin



**Abbie Smith-Ryan, Ph.D.,
FACSM, FNSCA, FISSN**

University of North Carolina at
Chapel Hill



**Valerie Stevenson,
DAT, ATC, LAT, CSCS**

University of North
Texas



**Annette Zapp, M.A.,
CSCS*D, CISSN**

City of Chicago: Fire Rescue
Wellness

DAY 2 SPEAKER BIOS

ABBIE E. SMITH-RYAN, PH.D., CSCS*D, FNCSA, FACSM, FISSN

Professor and Associate Chair for Research, Department of Exercise & Sport Science, University of North Carolina, Chapel Hill

Abbie E. Smith-Ryan, Ph.D., CSCS*D, FNCSA, FACSM, FISSN is a Professor in the Department of Exercise and Sport Science, where she serves as the Associate Chair for Research, and Director of the Applied Physiology Lab. She is an active researcher in the field of body composition, metabolism, sport nutrition and exercise performance, with a special interest in female health. Dr. Smith-Ryan contributes to the current body of scientific literature with over 185 peer-reviewed manuscripts, a number of scholastic books and book chapters, and international/national presentations. She is a leader in the field and has been recognized by the National Strength and Conditioning Association as the Outstanding Sports Scientist of the Year (2022), Young Investigator of the Year (2015), and the Nutrition Researcher of the Year (2013). Dr. Smith-Ryan has a passion for improving the health and quality of life of others through evidence-based research.



SUSAN A. BLOOMFIELD, PH.D., FACSM, FASBMR, FNAK

*Research Professor, Kinesiology & Sport Management
Texas A&M University*

Susan A. Bloomfield, PhD, is Research Professor of Kinesiology at Texas A&M University. The long-standing objective of her integrative physiology laboratory was to understand the skeletal response to microgravity, including interactive effects of nutritional intake and radiation exposure. This work was funded by NASA and related agencies (~\$5.5 million in awards as PI). While at TAMU, she also served as Asst. Provost in the Graduate School and Associate Research Dean for her college. Dr. Bloomfield is a Fellow of the American College of Sports Medicine, the American Society of Bone & Mineral Research, and the National Academy of Kinesiology. She has served on three National Academy of Sciences, Engineering and Medicine committees advisory to NASA, including co-chairing last year's NASA Decadal Survey Biological Sciences Panel.



BRYAN MANN, PH.D., CSCS*D, RSCC*D, TSAC-F, FNCSA

*Clinical Associate Professor
Texas A&M University*

Dr. Bryan Mann joins Texas A&M University after serving as an Associate Professor, Director of Sports Science for Olympic Sports and Exercise Physiology program director at the University of Miami. He has also served as a coach, researcher and educator at various institutions, including Southwest Missouri State University, Arizona State University, the University of Tulsa and the University of Missouri. Mann's commitment to strength and conditioning has contributed to popularizing auto-regulation training methods, including velocity-based training and progressive resistance exercise protocols, which help athletes improve their strength and power. He has also consulted for professional sports organizations and worked with student-athletes who went on to compete in the Olympics.



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