2024 Tendon Conference Recap

Last month, we brought together thought leaders and community members from across disciplines to discuss needs and guidelines for tendon investigation. There was diverse clinical representation ranging from orthopaedic surgeons to veterinarians to physical therapists, which helped to spark extensive discussion about how tendon disorders and injuries are categorized and treated. The multiomics session highlighted how many in the community were using novel techniques and helped to define some guidelines for the community to move forward in expanding efforts beyond sequencing into all fields of transcriptomics, proteomics, metabolomics, and more. We discussed the future of tendon research with respect to pain measurements and pathways, biomechanics and mechanobiology, extracellular matrix composition and structure, adequate injury and animal models, the biology of development, maturation, and aging, and the etiology of tendon disease. The conference was woven with initiatives targeted towards our early career members, including a well-attended trainee social event and a series of mentoring workshops. Thank you to all that attended, and especially to our organizing committee.

Co-Chairs
Anne Gingery, PhD
Peter Amadio, MD
Chunfeng Zhao, MD

Program Committee
Alayna Loiselle, PhD
Karin Grävare Silbernagel, PT, ATC, PhD
Spencer Lake, PhD
Neal Millar, MBChB, FRCSEd, PhD

Congratulations to our Award Winners Who
Were Honored at the Conference

Poster Awards
Dylan Easley
Tracy Boakye Serebour
Giulia Crosio

Podium Awards
Eric Gracey
Samantha Muscat
Timothy Fleagle

Student Travel Awards
Nikhil Nair
Ashley Potter
Emily Van Zeeland
Alex Stigall
Emily King
Giulia Crosio
Paula Sarmiento
Ryan St. John
Hanna Brancaccio
Sharf Daradkeh
Samantha Muscat
Oscar Vila Dieguez
Nathan Beda
Samantha Price
Gavin Ward
Kenneth Tam
Lily Lin
Kayla Seymore
Hayley Smitheman
Mariah Turner
Timothy Fleagle
Sarah Woelfel
Tracy Boakye Serebour
Clark Bailey
Harisankeerth Mummareddy
Dylan Easley

Trainees Around the Globe

Elameen Adam, MD
Research Fellow
Tendon and Soft Tissue Biology Laboratory
Mayo Clinic

"As a Research Fellow, I have been actively engaged in a research fellowship program, collaborating closely with pioneering orthopedic surgeons and scientists. This role has provided me with an incredible opportunity to contribute to cutting-edge research that aims to improve patient outcomes and enhance the quality of life for individuals in need."

What Does Tendon Section Membership Mean to You?

Members of Tendon Section Leadership are working hard to bring you exciting scientific content and networking opportunities, as well as to increase the visibility of our members and their work. We educate fellow researchers and granting agencies about tendon research through scientific content at the ORS Annual Meeting, and this year through our satellite meeting at the Mayo Clinic. Our goals are to improve knowledge exchange, define best practices for tendon research, foster discussion on new approaches, and facilitate interactions between clinicians, engineers, and researchers. In addition, we plan career development seminars and social events to bring together the community and provide networking opportunities all year long, facilitating collaborations and friendships. Finally, the Section website and newsletter, Tendon Times, updates the community on the latest and greatest in tendon research as well as upcoming events. We strive to make this community diverse, inclusive, friendly, and fun! Please help us to grow by spreading the word on how fantastic Section Membership is.

Send us your thoughts on what Membership means to you.
“Being a member of the Tendon Section has provided me with the means to form positive connections and collaborations that have continuously motivated me during my pursuit of understanding the roles of energy metabolism in tendon homeostasis. Additionally, it has also been a wonderful way to connect with and meet new people from all around the world who share a passion for tendon research!”

LeeAnn Flowers  
PhD Candidate, Molecular and Integrative Physiology  
University of Michigan

Faculty Spotlights

Mark Buckley, PhD
Assistant Professor  
Biomedical Engineering  
University of Rochester

“To tackle our research projects, my lab uses a variety of experimental, theoretical, and computational tools including microscope-interfaced mechanical testing platforms, ultrasound elastography, fundamental theories and principles of mechanics (especially viscoelasticity and poroelasticity), and finite element modeling.”

Nathan R. Schiele, PhD
Associate Professor  
Chemical & Biological Engineering  
University of Idaho

“Our ultimate goal is to advance treatments for tendon injuries. To do this, we aim to understand the mechanisms that regulate tendon formation and healing. We explore impacts of biochemical and mechanical stimuli on cells and tendon as well as on stem cell differentiation.”

Meet the Membership Committee

The Tendon Section Membership Sub-Committee is working hard behind the scenes to bring you all of the latest tendon news, highlights from conferences, and hot-off-the-press research. In addition to the newsletter, we also run the section social media page (@ors_tendon), and you may recognize us from working the door at social events! Get to know us a little better below.
I am an Assistant Professor of Biomedical and Mechanical Engineering at Boston University. My lab studies mechanisms of extracellular matrix remodeling, and specifically how changes associated with aging and sex affect the ability to repair and rebuild tissue structure and function. I have been working on the Membership Committee for the last 8 years, first as a trainee member and now as Chair. I joined section leadership because of my passion for giving back to the community and mentoring the next generation of trainees in the Tendon Section. Fun Fact: "I am a proud graduate from the all-women undergraduate engineering program at Smith College."

I am currently an Assistant Professor of Mechanical and Biomedical Engineering at Boise State University in beautiful Boise, Idaho. My research interests include understanding how tendons and muscles develop in response to micro- and nano-environmental mechanics, so we can build mechanically active biomaterials that deliver the right signals to regenerate musculoskeletal tissues from stem cells. I joined the Tendon Section and membership committee because I love connecting with other researchers and clinicians who share the goal of keeping people moving and enjoying life pain-free. Fun Fact: "Many years ago, I qualified for the 2008 Olympics as part of the Greek National Judo Team but got injured and could not compete."

I am an associate professor in the Department of Biomedical Engineering and Mechanics at Virginia Tech and direct the Industry Partners Program in my department. My lab's primary research areas are (1) muscle loading and focused ultrasound-based rehabilitation of tendinopathy using murine models and (2) radiomic analysis of clinical ultrasound images. Fun Fact: "During graduate school, I (slowly) completed the NYC marathon for four consecutive years, with no tendon injuries along the way!"

I am an IRTA Postdoctoral Fellow working in Dr. Katherine Rogers’s lab at the National Institutes of Health in Bethesda, MD. I work with optogenetic tools to interrogate and control stem cell fate decisions with the goal of informing regenerative approaches to tendon injury. Being a Tendon Section member has provided me so much value through opportunities for mentorship, networking, and collaboration. So, I joined the membership committee to give back to one of my favorite professional communities! Fun Fact: "I am an ex-college softball player who has now taken up Olympic weightlifting and pickleball in my retirement."

I am currently in my fourth year of doctoral studies at the University of Florida, under the supervision of Dr. Taylor in the Taylor Lab. My research focuses on investigating the mechanistic implications of extracellular vesicles in tendon healing and tendinopathy. I have actively engaged in the Tendon Section Committee Membership to expand my professional network among fellow tendon researchers and deepen my involvement in the academic community.
Recent Tendon Publications

As a section member, you may access a compiled list of published articles and preprints relevant to the orthopaedic field. Check out this key benefit to stay well-informed and engaged with current research and developments. The Membership Committee has chosen a few of our favorites to highlight in this quarterly newsletter. In addition, please stay tuned for our upcoming webinars featuring new Hot-Off-The-Press preprints from members of our tendon community!

Publications List

New Mentor Matching Program

Are you hoping to increase your visibility and improve connections with colleagues outside your home institution? Are you in search of guidance in different aspects of your career? Whether you are a trainee or an established investigator, the ORS Tendon Section is launching a new mentor matching program to help support and grow our community at all levels! This program aims to offer both peer (similar stage) or aspirant (relative senior stage) mentor/mentee matching to our members. We aim to match mentors and mentees based on the individual needs of the mentee, such as (but not limited to): professional development, personnel management, departmental/institutional politics, parenting, self-care, grant writing, scientific communication, and more! As a mentor or a mentee, you will be asked to commit at least one year of paired or small group mentoring, based on your needs, with dedicated time set aside at various conferences throughout the year.

To those who attended the Mayo Clinic meeting, thank you for your insightful feedback and enthusiasm throughout our planned mentorship activities! We had a wonderful time brainstorming new initiatives for the Section and learning how to best approach tough mentoring situations. We will be disseminating information from this session to you in the coming weeks, as well as working on new ideas for future events. For those of you who expressed interest in the mentor match program, and for those unable to attend the satellite meeting, there is still plenty of time to get involved!

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