

Annual Meeting Recap

The [2026 Orthopedic Research Society's annual meeting](#) held in Charlotte, North Carolina had great representation of the ORS Skeletal Muscle Section. In our inaugural year, the Skeletal Muscle Section organized two impactful podium sessions titled *Muscle Injury and Regeneration*, *Skeletal Muscle Disease, Growth and Aging* with 11 paper presentations. The 57 posters presented across the ORS poster sessions also ignited several fruitful discussions. We look forward to growing these numbers in 2027!

The creation of the [Skeletal Muscle Section](#) represents a significant step forward in bridging basic science, biomechanics, and clinical practice, addressing a critical gap in orthopaedics.

Overall, the introduction of this new Section is perceived as a key development for the future of orthopaedic research, with strong potential to foster collaboration and improve translational impact in patient care.



Skeletal Muscle Research Interest Group (RIG)

The Skeletal Muscle Section organized the Research Interest Group (RIG) session titled, *Breakthrough Biomaterials for Functional Skeletal Muscle Regeneration Following Trauma*. The all-star line-up of speakers included George Christ, PhD, Kaitlyn Sadtler, PhD, and Warren Grayson, PhD. Dr. Christ presented his lab's work on the development of regenerative biomaterials that encourage functional recovery following volumetric muscle loss (VML). Dr. Grayson focused his talk on strategies that promote neuromuscular regeneration. Dr. Sadtler clarified the complex changes that occur in autoimmunity after VML treatment with a biomaterial.

SPEAKERS



George J. Christ, PhD
University of Virginia

Development of Regenerative Biomaterials for Functional Recovery Following Volumetric Muscle Loss Injury



Warren L. Grayson, PhD
Johns Hopkins University

Neuromuscular Regeneration in Response to Volumetric Muscle Loss



Kaitlyn Sadtler, PhD
National Institutes of Health

Regulation of autoimmunity after volumetric muscle loss injury and biomaterial treatment

ORGANIZERS



Koyal Garg, Ph.D.
Saint Louis University



Michael McClure, Ph.D.,
Virginia Commonwealth University



Karina Nakayama, Ph.D.,
Oregon Health and Science University

ORS 2026 Annual Meeting, March 27- 31, 2026, Charlotte Convention Center, Charlotte, North Carolina

Social Event at Fin & Fino in Charlotte, North Carolina



The inaugural Skeletal Muscle Section social event at Fin & Fino sponsored by Cook MyoSite was a success. The event brought together our esteemed academic leaders, clinicians, industry professionals, and trainees for insightful discussion and networking with food and drink.

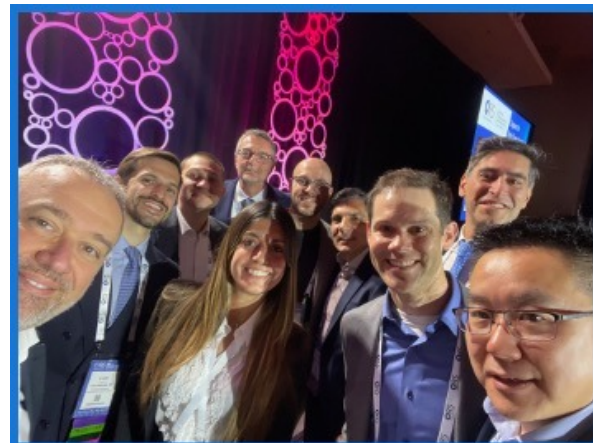
Guest Nation Italy Symposium

The Guest Nation Italy Symposium represented an important occasion for the newly established ORS Skeletal Muscle Section to be highlighted within the international ORS community.

Prof. Francesco Pegreffi, University of Enna “Kore”, Member-at-Large of the ORS Skeletal Muscle Section and member of the Italian Guest Nation delegation, emphasized in his presentation the central role of skeletal muscle in aging, orthopaedic injuries, and clinical outcomes, supporting this message with relevant clinical data.

The participation of the Section leadership in the symposium further strengthened the visibility of the Section and underscored the strong Italian support for this new ORS initiative.

The Italian Guest Nation recognized the value of establishing a dedicated, interdisciplinary, and transversal platform focused on skeletal muscle research. In this context, the presence and contribution of the Section leadership: Michael J. McClure, PhD, Hongshuai Li, PhD, Koyal Garg, PhD, Karina Nakayama, PhD, Sarah Greising, PhD, and Woojin Han, PhD were warmly welcomed and highly appreciated, further strengthening the connection between the Italian Guest Nation and the ORS Skeletal Muscle Section.



Spotlight Faculty: Dr. Richard Lieber, PhD

Professor and Chief Scientific Officer
Shirley Ryan Ability Lab
Departments of Physical Medicine & Rehabilitation and Biomedical Engineering
Northwestern University
Senior Research Career Scientist
Hines VA Medical Center



“What inspired you to study muscle, and what has been your greatest research success?”

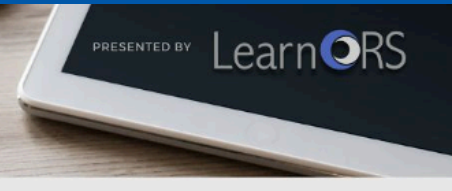
"I was 'born and raised' as a frog single fiber mechanics guy at UC Davis. When I joined UCSD Orthopaedics in 1985, I was blown away by how interesting simple muscle physiology is to surgeons. Fast forward 25 years and it has been fabulous to see the advances in surgical reconstruction by my surgical colleagues partly due to our intraoperative laser diffraction and muscle anatomy studies!"

[Read More](#)

Webinar Recap

Tissue Teamwork: Skeletal Muscle's Crosstalk with Bone, Fat, Tendon, and Nerve

Tissue Teamwork: Skeletal Muscle's Crosstalk with Bone, Fat, Tendon, and Nerve



SPEAKERS



Keith Baar, PhD



Michael McClure, PhD



Hongshuai Li, PhD



Gretchen Meyer, PhD

ORGANIZERS



Avantika Jain



Amelia Ridolfo



Koyal Garg, PhD



Rebecca Sheetz



**Wednesday
May 6, 2026**



**12 - 1 PM
Central**

Skeletal Muscle Section

On November 5, 2025, Skeletal Muscle, in collaboration with the Preclinical Models Section, hosted the *"Beyond the Bench: Translating Skeletal Muscle Research with Large Animal Models."* This session was organized by **Koyal Garg, PhD**, alongside her colleagues **Alex Reiter, PhD**, and **Annette McCoy, DVM, MS, PhD, DACVS**.

A distinguished panel of experts - including **Sarah Greising, PhD**, **Christopher Fry, PhD**, **Dongsheng Duan, PhD**, and **Annette McCoy, DVM, MS, PhD, DACVS** - highlighted the best practices for leveraging porcine, canine, and equine models in skeletal muscle research. Discussions spanned key translational challenges, from volumetric muscle loss and ACL injury recovery to Duchenne muscular dystrophy and the biomechanics of growth and exercise. The session was a resounding success, earning high post-event survey ratings and enthusiastic feedback from attendees.

[View Recap Here](#)

Skeletal Muscle Section Job Postings

[Dr. Giambini's laboratory](#) in collaboration with [Dr. Gonzalez Porras's laboratory](#) is hiring a postdoctoral researcher to help investigate muscle regeneration and adipocyte biology using novel nano-therapeutics in the setting of rotator cuff tears and repairs. We are looking for candidates with expertise in muscle biology, animal models, and who are excited about working at the interface of nanotechnology, orthopedics, and muscle physiology. This is an NIH-funded position. This is an

excellent opportunity for someone who wants to work on translational projects improving rotator cuff tear pathology.

Interested candidates should reach out to Dr. Giambini directly at hugo.giambini@utsa.edu for further information.

Read More About This Project



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