

**FRIDAY | February 10**

10:00 AM	3:00 PM	RIG: MSK Infection
3:00 PM	5:45 PM	ORS ISFR Section Meeting
3:00 PM	8:00 PM	<b>Spine Section Scientific Symposium</b>

**SATURDAY | February 11**

8:00 AM	9:00 AM	<b>Biomaterials 4: Bone and Soft Tissue Regeneration</b>
8:00 AM	9:00 AM	Bone - Mechanobiology
8:00 AM	9:00 AM	Knee Arthroplasty
8:00 AM	9:00 AM	Cartilage and Synovium: Omics-based Insights into Synovial Joint Biology
8:00 AM	9:00 AM	Clinical Research Methods I
8:00 AM	9:00 AM	Knee - Growth, Development and ACL Injury
9:15 AM	10:15 AM	<b>ORS 2023 Opening Session - Keynote Speaker, Letitia Bradford, MD</b>
11:15 AM	12:15 PM	<b>Spotlight Speaker: Infection featuring Edward, Schwarz, PhD</b>
11:15 AM	12:15 PM	Bone - Biology
11:15 AM	12:15 PM	Intervertebral Disc: Development, Injury, Disease and Treatment
11:15 AM	12:15 PM	Hip Arthroplasty
11:15 AM	12:15 PM	Modulators of Inflammation in Knee PTOA
11:15 AM	12:15 PM	Meniscus - Development and Repair throughout Lifespan
12:30 PM	3:15 PM	Orthopaedic Implants Section Meeting
12:30 PM	3:15 PM	Strategies in Clinical Research Section Meeting
1:45 PM	3:15 PM	<b>Guest Nation Workshop: Skeletal Mechanobiology: From Fundamentals to Therapeutic Opportunities</b>
1:45 PM	3:15 PM	Current Trends in the Treatment of Tendinopathies
1:45 PM	3:15 PM	Sex Dimorphism and Cartilage
1:45 PM	3:15 PM	The Need for Standardized Assessment of Skeletal Muscle Quality, Functional Deficit, and Fatiguability
3:30 PM	4:30 PM	<b>Spotlight - Corrosion, Toxicity, and Inflammation in Arthroplasty featuring William Mihalko, MD, PhD</b>
3:30 PM	4:30 PM	Spine - Pathophysiology and Mechanisms
3:30 PM	4:30 PM	NIRA - Mechanisms, Treatment and Therapies
3:30 PM	4:30 PM	Pre-Operative and Operative Considerations in Shoulder
3:30 PM	4:30 PM	Knee Mechanics and Computational Modeling
3:30 PM	4:30 PM	Biomaterials - Cartilage and Regeneration
4:45 PM	5:45 PM	<b>Tendon and Ligament - ACL Injury and Reconstruction</b>
4:45 PM	5:45 PM	Spotlight - Mechanical and Biological Evaluation of Spine Function featuring Grace O'Connell, PhD
4:45 PM	5:45 PM	A Focus on Translational Research
4:45 PM	5:45 PM	Biomechanics and Outcomes of Shoulder Arthroplasty
4:45 PM	5:45 PM	Cartilage and Synovium - Joint Tissue Morphogenesis
4:45 PM	5:45 PM	Foot and Ankle - Kinematics and Imaging

**SUNDAY | February 12**

8:00 AM	9:00 AM	<b>Cartilage and Synovium - Advances in Osteoarthritis Treatment</b>
8:00 AM	9:00 AM	Bone - Injury and Healing
8:00 AM	9:00 AM	NIRA - Bone and Microbiome
8:00 AM	9:00 AM	Spotlight - Tendon/Ligament Injury and Therapeutics featuring Karin Silbernagel, PT, ATC, PhD
8:00 AM	9:00 AM	Clinical Research - Clinical Outcomes and Use
8:00 AM	9:00 AM	Muscle Response to an Injury and Repair
9:15 AM	10:15 AM	<b>Career and Scientific Achievement Awards and Presidential Address</b>
11:15 AM	12:45 PM	<b>Guest Clinical Society, AOSSM: Unmet Clinical Needs in Sports Medicine: Brainstorming Ideas to Address Clinical Shortcomings</b>
12:45 PM	3:30 PM	Preclinical Models Section Meeting
12:45 PM	3:30 PM	Tendon Section Meeting
12:45 PM	3:30 PM	Meniscus Section Meeting
2:00 PM	3:30 PM	<b>Temporal Implants in Orthopaedics: Current Concepts, Limitations, and Future Directions</b>
2:00 PM	3:30 PM	New Biomaterials and Technologies in Spine Surgery
3:45 PM	4:45 PM	<b>Spotlight - Multi-Tissue Crosstalk featuring Rachel Miller, PhD</b>
3:45 PM	4:45 PM	Spotlight - Bone Cell Heterogeneity featuring Ling Qin, PhD
3:45 PM	4:45 PM	NIRA - Clinical Outcomes and Muscle

3:45 PM	4:45 PM	Challenges in Musculoskeletal Research and Education
3:45 PM	4:45 PM	Biomaterials - Soft Tissue Regeneration
3:45 PM	4:45 PM	Resident and Fellow Research
5:00 PM	6:00 PM	<b>AAOS Kappa Delta and OREF Award Paper Presentations</b>
<b>MONDAY   February 13</b>		
8:00 AM	9:00 AM	<b>Bone - Treatment and Therapeutics</b>
8:00 AM	9:00 AM	Hip Modeling and Imaging Analysis
8:00 AM	9:00 AM	NIRA - Biomechanics
8:00 AM	9:00 AM	Cartilage and Synovium - Chondrocyte Metabolism and Osteoarthritis
8:00 AM	9:00 AM	Spotlight - Disc Cell Metabolism and Homeostasis featuring Lisbet Haglund, PhD
8:00 AM	9:00 AM	Biomaterials - Osseointegration and Bone Healing
9:15 AM	10:15 AM	<b>ORS Collaborations Session</b>
11:15 AM	12:15 PM	<b>Clinical Research - Omics/Biomarkers</b>
11:15 AM	12:15 PM	Spotlight = Bone Mechanoregulation featuring David Hoey, PhD
11:15 AM	12:15 PM	NIRA - Biomaterials
11:15 AM	12:15 PM	Basic Science Imaging
11:15 AM	12:15 PM	Hip - Injury and Functional Analysis
11:15 AM	12:15 PM	Foot and Ankle - Surgical and Non-Surgical Interventions
1:30 PM	3:00 PM	<b>Cell, Tissue, and Systemic Crosstalk in Joint Disease</b>
1:30 PM	3:00 PM	The Role of The Immune System in Tendon Disease
1:30 PM	3:00 PM	The Utility of Quantitative MRI in ACL Surgery Postoperative Management
1:30 PM	3:00 PM	Advanced Techniques to Image Musculoskeletal Tissue and its Microenvironment via Multiphoton Microscopy
1:30 PM	3:00 PM	Implementing the 3R Principles in Fracture Healing Research: in vitro, in silico and Refined in vivo Models
1:30 PM	3:00 PM	Leveraging Multidisciplinary Expertise to Identify Patients at Risk for OA after Meniscal Surgery
3:15 PM	4:15 PM	<b>Spotlight - Tendon Development, Differentiation and Healing featuring Alice Huang, PhD</b>
3:15 PM	4:15 PM	Spotlight - Drug Delivery to Joints featuring Ambika Bajpayee, PhD
3:15 PM	4:15 PM	Clinical Outcomes in Hip and Knee Arthroplasty
3:15 PM	4:15 PM	Hand and Wrist - Biomechanics
3:15 PM	4:15 PM	Translational and Clinical Imaging
3:15 PM	4:15 PM	Orthopaedic Infection and Management
4:30 PM	6:00 PM	Ankle Osteoarthritis - Toward New Understanding and Opportunities for Intervention
<b>TUESDAY   February 14</b>		
8:00 AM	9:00 AM	<b>Cartilage and Synovium - Mechanotransduction</b>
8:00 AM	9:00 AM	Clinical Research Methods II
8:00 AM	9:00 AM	Spotlight - Tendon and Ligament Mechanobiology featuring Michael Kjaer, PhD
8:00 AM	9:00 AM	Tumors - Genetics, Primary and Metastatic
8:00 AM	9:00 AM	Computational Modeling in Arthroplasty
8:00 AM	9:00 AM	Spine - Therapies and Diagnostics
10:30 AM	12:00 PM	<b>ORS Incoming Presidential Address &amp; Debate: Orthopaedic Research Needs More Discovery v Hypothesis Driven Science</b>
12:15 PM	1:15 PM	<b>Biomaterials - Disc and Osteoarthritis</b>
12:15 PM	1:15 PM	Knee - Imaging, Traumatic Joint Injury and OA Assessment
12:15 PM	1:15 PM	Late Breaking Session
12:15 PM	1:15 PM	Bone - Diseases and Disorders
12:15 PM	1:15 PM	Biology of Shoulder Injury and Regeneration
12:15 PM	1:15 PM	Robotics and Technology in Arthroplasty
1:30 PM	2:15 PM	<b>ORS Closing Session (NIRA and Section Awards)</b>