

2014  RS Annual Meeting

60 years

Leading innovation through collaboration.



Meeting Announcement

Hyatt Regency New Orleans | **New Orleans**, Louisiana
March 15 –18



Orthopaedic Research Society

Collaborating in the Science of Patient Care

Friday, March 14 and Saturday, March 15
AAOS 2014 Annual Meeting
Morial Convention Center, New Orleans



Make plans to attend the AAOS 2014 Annual Meeting on Friday, March 14 and Specialty Day, Saturday, March 15, when we invite all ORS Annual Meeting registrants to take advantage of the opportunity for orthopaedic surgeons and scientists to *collaborate in the science of patient care*.

Complimentary Programs:

Friday, March 14, 7:00 AM – 6:00 PM

- Symposia
- Paper Presentations
- Posters
- Scientific Exhibits
- Orthopaedic Video Theater

Friday, March 14, 9:00 AM – 4:00 PM

- Technical Exhibits
 - Ask an Expert
 - Electronic Skills Pavilion

Friday, March 14, 4:00 – 6:00 PM

- AAOS/ORS Combined Symposium – Translational Biologics
Moderators: Mathias P.G. Bostrom, MD and Brian J. Cole, MD, MBA

Saturday, March 15, 7:00 AM – 3:00 PM

- Posters
- Scientific Exhibits
- Orthopaedic Video Theater

HOW TO REGISTER:

A sticker is required for access to the AAOS Annual Meeting on Friday, March 14 and Saturday, March 15. A sticker can be obtained at AAOS registration located at the Morial Convention Center, Lobby E, beginning Friday, March 14 at 7:00 AM.

Registration Required

ORS attendees may purchase tickets, with no additional registration fee, for the following AAOS sessions:

Friday Instructional Courses

For details go to www.aaos.org/ameducation

Saturday Specialty Day

For details go to www.aaos.org/amprograms

Programming is provided by:

- American Orthopaedic Foot & Ankle Society
- American Orthopaedic Society for Sports Medicine
- American Shoulder and Elbow Surgeons
- American Society for Surgery of the Hand/American Association for Hand Surgery
- Arthroscopy Association of North America
- Federation of Spine Associations
- The Hip Society/American Association of Hip and Knee Surgeons
- The Knee Society/American Association of Hip and Knee Surgeons
- Limb Lengthening and Reconstruction Society
- Musculoskeletal Tumor Society
- Orthopaedic Trauma Association
- Pediatric Orthopaedic Society of North America

For details about the AAOS 2014 Annual Meeting go to www.aaos.org/annual.

See you in New Orleans!

The first ORS Annual Meeting lasted only one day and consisted of 12 sessions on musculoskeletal research. This year, the ORS will celebrate its 60th Annual Meeting in New Orleans. The Annual Meeting has grown from a humble one-day meeting to a four day event packed with scientific sessions, workshops, poster presentations, networking opportunities and special events.

Long considered the premiere forum for the presentation of new musculoskeletal research, the ORS Annual Meeting strives to bring together researchers from across the globe to collaborate, to educate and to inspire. The 2014 meeting is no exception. We are looking forward to offering many new opportunities for meeting attendees to come together.

Make plans to meet us in New Orleans. The ORS Annual Meeting promises to be a place where surgeons, basic scientists, engineers and industry leaders will continue the tradition of

leading innovation through collaboration.



Joan E Bechtold, PhD
President



Mary B Goldring, PhD
1st Vice President
Annual Meeting Chair



Mathias P Bostrom, MD
2nd Vice President
Annual Meeting Program Chair

Meeting Hours

Saturday, March 15
7:00am-5:45pm

Sunday, March 16
6:00am-6:30pm

Monday, March 17
6:30am-5:45pm

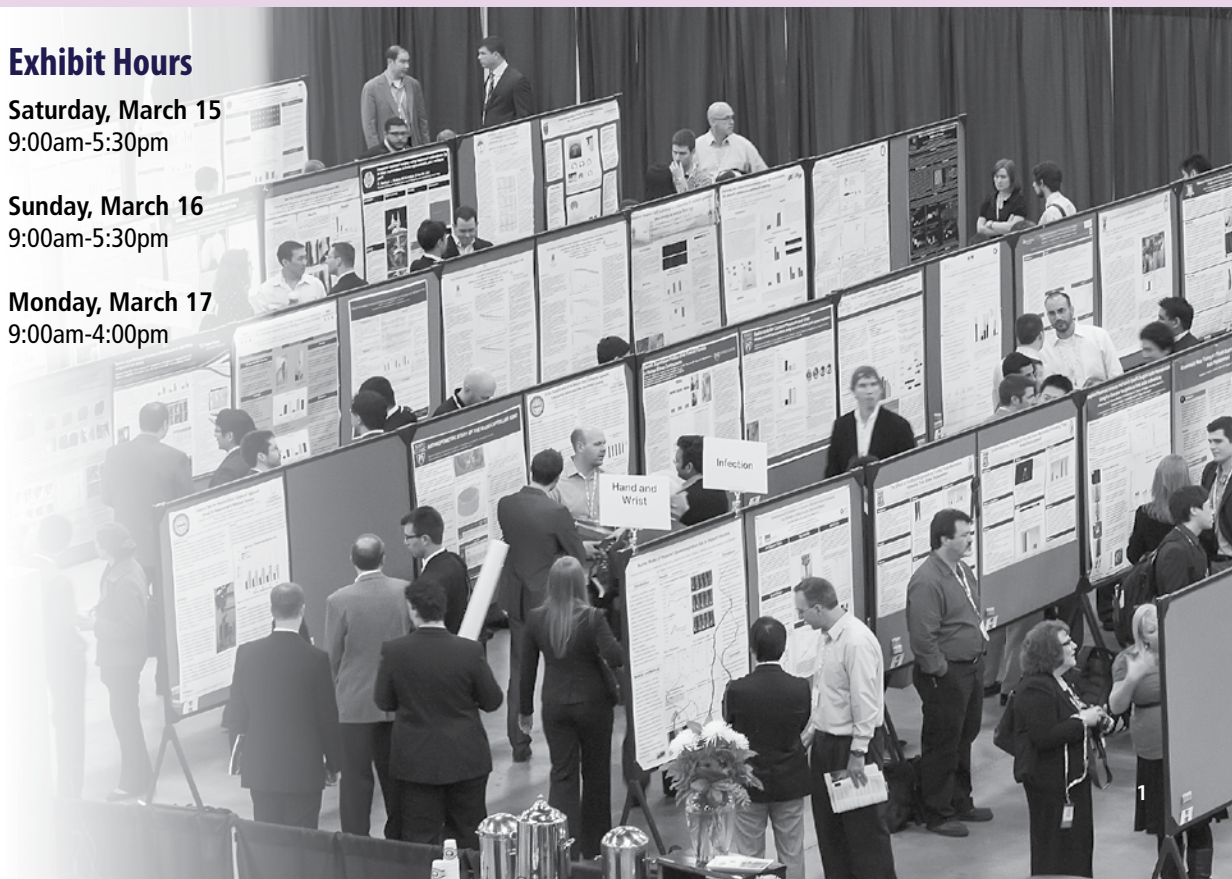
Tuesday, March 18
6:30am-3:00pm

Exhibit Hours

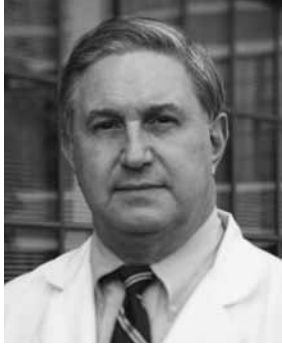
Saturday, March 15
9:00am-5:30pm

Sunday, March 16
9:00am-5:30pm

Monday, March 17
9:00am-4:00pm



SPOTLIGHT SESSIONS



Roy K Aaron, MD
Warren Alpert Medical School
of Brown University
Skeletal Circulation in Osteoarthritis



Frank P Barry, PhD
National University of Ireland
Stem Cells



Roy D Bloebaum, PhD
SLC Health Care System
Osteointegration Coming to America



Lawrence J Bonassar, PhD
Cornell University
*New Approaches in Characterizing
Cartilage Surface Mechanics*



Constance R Chu, MD
Stanford School of Medicine
Post Traumatic Osteoarthritis



Richard H Gelberman, MD
Washington University
*Flexor Tendon Healing: Restoration of a
Biological Gliding Surface*



Marja M Hurley, MD
University of Connecticut Health Center
*Exported 18-kDa Isoform of FGF-2 and
low dose BMP-2 Improved Bone
Regeneration in Critical Size Mice Calvarial
Defects via Wnt Signaling*



Richard L Lieber, PhD
University of California, San Diego
*The Critical Link between Muscle Cells
and the Outside World*



Jeffrey C Lotz, PhD
University of California, San Francisco
*The Intervertebral Disc Endplate: Stuck
Between a Rock and a Soft Place*

ORS/OREF Basic Science Course

Sunday, March 16, 7:00am-4:00pm

Organized by Richard L Lieber, PhD, University of CA, San Diego; Marjolein C van der Meulen, PhD, Cornell University; Theodore Miclau, MD, Orthopaedic Trauma Institute

The ORS Basic Science Course will provide attendees with the tools to explain the functions and limitations of the science behind the decisions, treatments and procedures that are performed in practice every day. The course content has been derived from the *Orthopaedic Basic Science: Foundations of Clinical Practice* textbook developed in partnership with the AAOS and ORS. Covered topics will include principles of orthopaedic surgery basic science, musculoskeletal tissue biology, and musculoskeletal pathophysiology. Course attendees will also receive a copy of the textbook as part of the registration fee. The knowledge of the concepts learned in this course is evaluated through the Orthopaedic In-Training Examination and the American Board of Orthopaedic Surgery Part I and Recertification Examinations. The course will benefit anyone currently in the field or entering the field of orthopaedics including:

- Orthopaedic residents and fellows
- Practicing orthopaedic surgeons
- Musculoskeletal researchers

Registration Fees: All fees include *Orthopaedic Basic Science: Foundations of Clinical Practice* textbook

Residents/Students/Associates: \$145; ORS and/or AAOS registrants: \$195; Non-Members: \$295

Welcome and Introduction	Richard L Lieber, PhD, University of CA, San Diego
Principles of Orthopaedic Surgery Basic Science	
Molecular and Cellular Biology	Tamara Alliston, PhD, University of CA, San Francisco
Musculoskeletal Development and Genetic Diseases	Maurizio Pacifici, PhD, Children's Hospital of Philadelphia
Tissue Engineering in Orthopaedics	Michael J Yaszemski, MD, PhD, Mayo Medical Center
Principles of Biomechanics	Marjolein C van der Meulen, PhD, Cornell University
Orthopaedic Biomaterials	Kenneth A Mann, PhD, SUNY Upstate Medical University
Kinesiology	Samuel R Ward, PhD, University of CA, San Diego
Musculoskeletal Tissue Biology	
Tendon and Ligament	Louis J Soslowsky, PhD, University of Pennsylvania
Skeletal Muscle and Nerve	Richard L Lieber, PhD, University of CA, San Diego
Bone	Karl J Jepsen, PhD, University of Michigan
Cartilage	Suzanne A Maher, PhD, Hospital for Special Surgery
Meniscus and Intervertebral Disc	Dawn M Elliott, PhD, University of Delaware
Musculoskeletal Pathophysiology	
Bone Injury, Regeneration and Repair	Ralph Marcucio, PhD, University of CA, San Francisco
Molecular Basis of Cancer	R Lor Randall, MD, Huntsman Cancer Institute
Orthopaedic Infections	Jay Parvizi, MD, Rothman Institute
Inflammation in the Musculoskeletal System	Regis J O'Keefe, MD, University of Rochester
Osteoporosis/Metabolic Bone	Susan V Bukata, MD, University of CA, Los Angeles
Post-Traumatic Osteoarthritis	William Bugbee, MD, Scripps Clinic
Implant Wear and Inflammatory Response	Darryl D D'Lima, MD, PhD, Scripps Clinic
Thromboembolic Disease and Fat Embolism Syndrome	Tessa Balach, MD, University of Connecticut

ORS Clinical Research Forum

Building, Funding and Joining the Orthopaedic Clinical Research Community

Sunday, March 16, 8:00am-4:30pm

Organized by the ORS Clinical Research Committee: Chair: Kurt Spindler, MD, Vanderbilt Orthopaedic Institute; Theodore Miclau, MD, Orthopaedic Trauma Institute; Saam Morshed, MD, University of California; George Muschler, MD, Cleveland Clinic Foundation; and Kristy Weber, MD, University of Pennsylvania

The ORS Clinical Research Forum will bring together key clinical research leaders to discuss research opportunities in existing networks as well as the advantages and disadvantages of registries, cohorts, and randomized control trials. Attendees will have the opportunity to learn from those who have successfully completed clinical trials.

The Clinical Research Forum is free of charge with ORS Annual Meeting Registration. Pre-Registration is required. AAOS registrants: \$75.

SESSION I: Research Opportunities: Partnering with Existing Networks	Moderator: George Muschler, MD, Cleveland Clinic Foundation
Sports Networks	Rick Wright, MD, Washington University School of Medicine
Trauma Networks	Paul Tornetta, MD, Boston Medical Center
Spine Networks	Jon Lurie, MD, Dartmouth-Hitchcock Medical Center
Summary Perspective	Kurt Spindler, MD, Vanderbilt Orthopaedic Institute
SESSION II: Registries, Cohorts & RCTs: Advantages and Disadvantages	Moderator: Joel Gagnier, PhD University of Michigan
Registries	Lars Engebretsen, MD, Ullevål Hospital
Cohorts	John Kuhn, MD, Vanderbilt Orthopaedic Institute
RCTs	Elena Losina, PhD, Harvard Medical School
Summary Perspective	Jeffrey Katz, MD, Harvard Medical School
KEYNOTE: Clinical Trials and Translation into the Real World	Marc Swiontkowski, MD, University of Minnesota Medical School
SESSION III: Funding Mechanisms for Clinical Research	Moderator: Michael Yaszemski, MD, PhD, Mayo Medical Center
NIH	Joan McGowan, PhD, NIAMS/NIH
Industry	Michael R McBrayer, DJO Global
AO Institute	Beate P Hanson, MD, MPH, AO Research Institute
PCORI	TBD
OREF	James D Heckman, MD, OREF Chair, Research Grants
Arthritis Foundation	John Hardin, MD, Arthritis Foundation
Summary Perspective	Kurt Spindler, MD, Vanderbilt Orthopaedic Institute



Robert Ritchie, PhD, ScD
Lawrence Berkeley National Laboratory



Ego Seeman, MD
The University of Melbourne

ORS Symposium in Translational Medicine

Atypical Fractures and Long-Term Use of Bisphosphonates

Sunday, March 16, 12:40pm-1:45pm

The ORS Translational Research Symposium will present the problem of difficult fractures in a unique way by providing attendees with cutting edge ideas on multiple aspects of the problem: the clinical/treatment dilemma, the research and clinical solutions and the patient's perspective. The Symposium will provide a comprehensive overview of the most important fundamentals of difficult fractures and the problem of long-term use of Bisphosphonates and will benefit anyone currently in the field or entering the field of orthopaedics or doing research in orthopaedics.

Pre-Registration Required: ORS Members: \$30; Non-Members: \$35.

SPOTLIGHT SESSIONS



Karen M Lyons, PhD
University of California, Los Angeles
BMP Signaling in Chondrogenesis



Robert L Mauck, PhD
University of Pennsylvania
*Engineering Dense Connective
Tissues: Material, Mechanical, and
Mechanobiologic Considerations*



Jay Parvizi, MD
Rothman Institute
*Periprosthetic Joint Infection:
What is on the Horizon?*



Edward Purdue, PhD
Hospital for Special Surgery
*Biological Mechanisms and
Biomarkers in Osteolysis and Adverse
Local Tissue Reactions*



Makarand Risbud, PhD
Thomas Jefferson University
HIF: The Master Regulator of NP Niche



Marjolein C van der Meulen, PhD
Cornell University
*Musculoskeletal Adaptation to
Controlled in vivo Loading*



Beth A Winkelstein, PhD
University of Pennsylvania
Biomechanics of Neurologic Injury

PRESIDENTIAL GUEST SPEAKER



Joshua J Jacobs, MD
ORS Presidential Guest Speaker
Saturday, March 15

Joshua J Jacobs, MD serves as the William A Hark, MD/ Susanne G Swift Professor and Chairman of the Department of Orthopaedic Surgery at Rush University Medical Center. He has also served as the Director of the Orthopaedic Surgery Residency Program for 14 years and as the Associate Dean for Research Development for five years. In addition, Dr. Jacobs is an Adjunct Professor of Materials Science and Engineering at Northwestern University. His major research focus is on the biocompatibility of permanent orthopaedic implants, particularly joint replacement devices. Dr. Jacobs served as the President of the Orthopaedic Research Society in 2006.

Dr. Jacobs is the current President of the American Academy of Orthopaedic Surgeons.

Friday, March 14, 2014

ORS/OREF Grant Writing Workshop

The ORS and OREF are proud to hold the 10th Annual Grant Writing Workshop at the Hyatt Regency New Orleans! This popular course is designed for new investigators who are in the process of writing their first grant proposals. The workshop will include a mock study section so investigators can get a first-hand look at what is involved in an NIH peer review. Breakfast, lunch and a post workshop reception are included in the registration fee.

Pre-Registration Required: \$110 ORS members/\$120 non-members

Saturday, March 15, 2014

Immune Modulation as Therapeutic Strategy in Bone Regeneration

Organizers: Georg N Duda, PhD, Julius Wolff Institute and Stuart B Goodman, MD, PhD, Stanford University Medical Center

Open Source Computational Mechanics Tools for Orthopaedics

Organizer: Gerard A Ateshian, PhD, Columbia University

Nanotechnology and Tissue Engineering: Hope or Hype?

Organizer: Elizabeth Loba, PhD, University of North Carolina, Chapel Hill

Tissue Level Composition and Mechanical Measurements: What Could Possibly Go Wrong?

Organizer: Michael D Morris, PhD, University of Michigan

Sunday, March 16, 2014

Orthopaedic Combat-Casualty Care: Research Progress and Persistent Gaps after More than a Decade of Conflict



Collaboration of the ORS and the Society of Military Orthopaedic Surgeons (SOMOS)

Organizer: Benjamin Kyle Potter, MD, Walter Reed National Military Medical Center

Osteosarcoma: Future Directions in the Targeting of Micrometastases



Collaboration of the ORS and the Musculoskeletal Tumor Society (MSTS)

Organizers: Kristy L Weber, MD, University of Pennsylvania and Richard M Terek, MD, Brown University

Understanding Early Onset Scoliosis - From Bench Top to Bedside - The Evolution from Genetics to Animal Models to Clinical Trials



POSNA

Collaboration of the ORS, the Scoliosis Research Society (SRS), and the Pediatric Orthopaedic Society of North America (POSNA)

Organizers: Brian Snyder, MD, PhD, Boston Children's Hospital and Benjamin A Alman, MD, Duke University

Monday, March 17, 2014

Fibrochondrocytes in Meniscus, IVD and Beyond: Biology, Pathology, and Regeneration

With generous support from the  ARTHRITIS FOUNDATION

Organizers: Darryl D D'Lima, MD, PhD, Scripps Clinic and Scott Rodeo, MD, Hospital for Special Surgery

Patient-Reported Outcomes in Orthopaedic Research

Organizer: Patricia D Franklin, MD, University of Massachusetts Medical School

Tissue Engineered Medical Products

Organized by the ORS Corporate Affairs Committee (CAC)

Organizer: Harold M Aberman, DVM, Synthes

Bio-Tribocorrosion: Fundamentals and Advances in Orthopaedics

Organizers: Mathew T Mathew, PhD, Rush University Medical Center and Jean Geringer, PhD, ENSM-SE/CIS/STBio

Tuesday, March 18, 2014

Investigating Polytrauma and Orthopaedic Injuries with Animal Models



Collaboration of the ORS and the Orthopaedic Trauma Association (OTA)

Organizer: Todd McKinley, MD, Indianapolis University Methodist

Molecular Genetic Technologies: Strategies for Applications within Orthopaedic Research

Organized by the ORS Women's Leadership Forum (WLF)

Organizers: Nancy A Hadley Miller, MD, University of Colorado and Cathleen L Raggio, MD, Hospital for Special Surgery

Multi-Scale Adaptive Remodeling Simulations in Musculoskeletal Regenerative Medicine

Organizers: Barbara Boyan, PhD, Virginia Commonwealth University and Douglas Robertson, MD, PhD, Emory University

Cell and Tissue Engineering for Annulus Fibrosus Repair: AO Foundation Collaborative Research Project

Organizers: Sibylle Grad, PhD, AO Research Institute Davos and James C Iatridis, PhD, Mount Sinai School of Medicine

Continuing Medical Education (CME) Credit

This activity has been planned and implemented in accordance with the Essentials and Standards of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the American Academy of Orthopaedic Surgeons and the Orthopaedic Research Society. The American Academy of Orthopaedic Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

The American Academy of Orthopaedic Surgeons designates this educational activity for a maximum of 30 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Attendees will be able to claim CME from the ORS 2014 Annual Meeting by completing the CME form on the ORS website following the meeting in New Orleans.

Early Riser Sessions

Get a head start to the day! Join fellow meeting attendees for a breakfast buffet and small group discussions focused on the following topics:

Choosing the Right Mentors for a Successful Academic Career

Saturday, March 15, 7:00am-8:00am

Speakers: Nelly Andawaris-Puri, PhD, Devina Purmessur, PhD, Evan Flatow, MD, Mauro Alini, PhD, Helen Lu, PhD

Mentors are essential for your career development and successful path in academics. A good mentor can play a significant role in shaping and guiding your career path, help you surpass your limits of innovation and discovery, and help you stay focused. How do you identify the right mentors and go about establishing a fruitful relationship? What should a mentor expect to offer a mentee? From picking the right mentor to benchmarks for a successful relationship, this early-riser session will provide guidance and advice based on ORS mentors' own experiences from clinical, basic science and international perspectives.

Pre-Registration Required: \$20 ORS members/ \$25 non-members

An Inside Look at Research Funding in America with the National Institutes of Health

Sunday, March 16, 7:00am-8:00am

Budget cuts have always been a threat to individual researchers and research programs. It is no secret that sequestration, the across the board government spending cuts, have had a particularly dramatic effect on medical research funding. This early riser session will provide attendees with an opportunity to better understand NIH funding policy through focused interaction with NIH staff. Seating is limited!

Pre-Registration Required: \$20 ORS members/ \$25 non-members

The Road to Becoming a Successful Young Investigator: From Job Applications to Management of a New Lab

Monday, March 17, 7:00am-8:00am

Speakers: Nelly Andawaris-Puri, PhD, Devina Purmessur, PhD, Dawn Elliott, PhD, Makarand Risbud, PhD, Jo A Hannafin, MD PhD

Transitioning into an independent academic career can be challenging through every step along the way, from getting hired through the early years as a new investigator. At a stage that is laced with numerous high impact decisions and limited guidance, it is easy to lose your strategic approach. From job searches and applications to managing your own laboratory and establishing best laboratory practices, learn ways to set yourself up for academic success from internationally renowned ORS mentors.

Pre-Registration Required: \$20 ORS members/ \$25 non-members

Social Events

President's Welcome Reception

Saturday, March 15, 6:00pm-8:00pm

All meeting attendees are invited to this kickoff celebration! See familiar faces and meet new friends over hors d'oeuvres and drinks. As they say in New Orleans: LAISSEZ LE BON TEMPS ROULER (LET THE GOOD TIMES ROLL)

All registered meeting attendees will receive two drink tickets for this event.

ORS Awards Gala

Sunday, March 16, 7:00pm-10:00pm

Join us for an elegant evening honoring these outstanding leaders in the Orthopaedic Research Community: The recipients of the William Harris Award, Marshall Urist Award, Alfred Shands Award, Kappa Delta Research Awards, CORR® ORS Richard A Brand Award, OREF Clinical Research Award, ORS/OREF Distinguished Investigator Award, Video Outreach Competition Award, the ORS Women's Leadership Award, the ORS New Investigator Recognition Awards (NIRA), Collaborative Exchange Awards, and the ORS/OREF Travel Awards in Orthopaedic Research Translation.

*Pre-Registration Required: \$115 ORS members/\$125 non-members
Tables of 10: \$1,000*

Women's Leadership Forum Reception

Monday, March 17, 7:30pm-10:00pm

Our annual reception celebrating women in science! This is an excellent opportunity to discuss issues facing female scientists. The winner of the Women's Leadership Forum (WLF) Award will be honored for her role as an outstanding mentor to women in the field of orthopaedics.

Pre-Registration Required: \$60 ORS members/\$65 non-members

Mentoring

Mentor Connect

Saturday, March 15, 12:15pm-1:15pm

This is an informal and interactive session between mentors and mentees. Mentees will be able to choose their mentor from a select group of ORS members who have demonstrated success in their career. Over lunch, the mentors and mentees will have the opportunity to discuss career establishment and how to balance competing demands in the academic and corporate environments. The discussions may also cover topics such as the importance of identifying mentors and describing the roles and functions of a mentor. This is an excellent opportunity to network with senior ORS members and ask questions of the mentors in an informal, small group environment. The Women's Leadership Forum will host two tables for interaction and mentorship with female ORS leaders. Lunch is included in the registration fee.

Pre-Registration Required: \$25 ORS members/\$30 non-members

Industry Connect

Monday, March 17, 12:15pm-1:15pm

This luncheon provides an excellent opportunity for meeting attendees affiliated with or interested in learning how industry collaborations with medical schools, hospitals and biomedical research institutions are critical to furthering research efforts and accelerating innovative patient care. The purpose of this interactive discussion with the ORS Corporate Affairs Committee is to network, discuss and develop career mentoring programs and advance the development of collaborative programs in orthopaedic research. Lunch is included in the registration fee.

Pre-Registration Required: \$25 ORS members/\$30 non-members



Professional Advancement Series

Career Development: Elements of a Great Post-Doctoral Fellowship

Saturday, March 15, 10:30am-12:00pm

Organized by the ORS New Investigators Mentoring Committee

Speakers: James Iatridis, PhD, Tammy Haut Donahue, PhD, Karl J Jepsen, PhD, Daniel J Kelly, PhD, Anthony Ratcliffe, PhD

Learn ways to set yourself up for a post-doctoral experience that can jump start your career from ORS mentors who have trained post-doctoral scientists who have gone on to successful careers in academia, industry, and government. Whether you are planning your post-doc, in your post-doc, or mentoring a post-doc, this session will share common struggles that most post-doctoral scientists face, and best practices for overcoming them such as:

Establishing best research practices, developing an identifiable new skill, managing larger projects, the ying and yang of post-doctoral mentor and mentee experiences, establishing independence, and much more.

Publishing Your Idea

Sunday, March 16, 2:00pm-3:30pm

Organized by the ORS Corporate Affairs Committee

Speakers: David W Schroeder, MBA, Barbara Boyan, PhD, Tim McTighe, Dr HS, Timothy Wright, PhD, Seth Leopold, MD

The results from your research are done and you're ready to tell the entire world about your discovery – but are you really prepared to publish your idea? Whether you want to publish your research because it is groundbreaking, it will benefit society or patients, it will support the use of a product, or it will help advance your career, there are many factors to consider: Do you have the right or authority to publish your work? What if there is a patentable idea? In this program, speakers will discuss aspects of publishing your idea or research and factors that you should consider as you decide how, when, and where to publish.

Work-Life Balance as a Woman in Orthopaedic Research

Monday, March 17, 1:30pm-3:00pm

Organized by the ORS Women's Leadership Forum

Speakers: Robin Queen, PhD, Nancy Pleshko, PhD, Cathleen Raggio, MD, Michelle Ghert, MD, FRCSC

Many female ORS members are faced with the challenge of balancing the demands of their profession with the demands of their personal lives including spouses, children and outside interests. Learn from successful female ORS members as they share practical tips and stories of building a career while maintaining a sense of 'self' outside of their profession. In addition to learning skills for work-life balance, participants will have the chance to discuss various options regarding family and personal life.

Ancillary Events

In today's tech savvy world we are offered endless opportunities to virtually connect with others but there is still no substitute for face-to-face interaction. The ORS recognizes that our Annual Meeting attendees seek to maximize these face-to-face opportunities and fulfill their professional responsibilities while at a location with so many of their colleagues. This year, the ORS has made available time and space at the Hyatt Regency New Orleans for Ancillary Events. An Ancillary Event is a non-ORS sponsored Special Event held in conjunction with the ORS Annual Meeting. Examples include: alumni events, colleague gatherings, reunions, receptions, dinners, etc. For detailed ORS Ancillary Event Guidelines and to complete an event proposal please visit www.ors.org/2014ancillaryevents

PLEASE NOTE: The ORS does not allow groups to host educational or continuing medical education events during the ORS Annual Meeting.

Research Interest Groups (RIGS)

ORS Research Interest Groups offer the opportunity to engage in lively discussions with colleagues in your area of musculoskeletal research. RIGs foster the thoughtful exchange of ideas and forge collaborative partnerships. This year's confirmed RIGs include:

Friday, March 14, 2:00pm – 5:00pm

The Orthopaedic Evidence and Outcomes Education Organizations

Growth Factors and Musculoskeletal Repair

Friday, March 14, 6:00pm – 8:00pm

Bone Regeneration

Bone Tissue: Hierarchical Simulations for Clinical Applications

Flexor Tendon Healing: Restoration of a Biological Gliding Surface

Spine Research

Interested in organizing and leading a RIG? RIGs can be held throughout the ORS Annual Meeting.

Please visit www.ors.org/2014-research-interest-groups/ or contact Matt Zuleg at zuleg@ors.org for more information.

REGISTER TODAY!

Advance registration is NOW OPEN and will close January 13, 2014. www.ors.org/2014registration/ Late online only: Jan 14-Feb 24, 2014

MEETING REGISTRATION	ADVANCE REGISTRATION OCT 9, 2013-JAN 13, 2014	ONLINE ONLY JAN 14-FEB 24, 2014	ON-SITE MARCH 14-MARCH 18, 2014
ORS Active/Affiliate (member)	\$335	\$410	\$485
ORS Associate (member)	\$185	\$260	\$335
Resident/Fellow (non-member)	\$235	\$310	\$385
PhD Candidate/Student (non-member)	\$235	\$310	\$385
Non-member	\$635	\$710	\$785

Become an ORS member and save on your meeting registration! ORS is accepting applications for membership through November 1, 2013. Join the ORS community of experts and be eligible for other ORS member benefits throughout the year. For more information, visit www.ors.org/membership-application/
Membership dues start at only \$50.00 annually!

ORS HEADQUARTERS

Immerse yourself in the ORS 2014 Annual Meeting experience: Meeting space and accommodations under one roof at the Hyatt Regency New Orleans.

ORS has negotiated great guest room rates at the Hyatt Regency New Orleans for ORS meeting attendees. Rates start at only \$219 per night (excluding taxes).

Attending the AAOS and ORS Annual Meetings? For the convenience of our attendees attending both the AAOS and ORS Annual Meetings, our rate will be honored prior to the official start of the ORS Annual Meeting (based on availability).

* In order to book within the ORS block, guests must book rooms on Saturday, March 15 and Sunday, March 16. Rooms reserved on these dates cannot be cancelled, otherwise you entire reservation will be subject to cancellation.

Book your room today at www.ors.org/2014housing or call 847-823-5770

Experience the Crescent City like never before at the revitalized Hyatt Regency New Orleans. As an integral part of the city's downtown area for over 30 years, the hotel was one of the most visual representations of Hurricane Katrina's aftermath. For more than six years, locals and visitors eagerly awaited the re-opening of one of the Big Easy's most important hotels.

Adjacent to the Mercedes-Benz Superdome and New Orleans Arena, the Hyatt Regency New Orleans is conveniently located just blocks from the French Quarter, Morial Convention Center, and the Mississippi Riverfront. Sit back and relax while sightseeing on the new Loyola Avenue Streetcar Line, or enjoy live local jazz and a decadent dessert bar with Anaïs St John as she transports you to the golden age of jazz and cabaret.



For more information on the ORS 2014 Annual Meeting visit www.ors.org/2014AnnualMeeting

ADVANCE REGISTRATION FORM

SATURDAY, MARCH 15 – TUESDAY, MARCH 18, 2014 • NEW ORLEANS, LOUISIANA • HYATT REGENCY NEW ORLEANS

2014 ANNUAL MEETING OF THE
ORTHOPAEDIC RESEARCH SOCIETY

Registrations MUST BE RECEIVED ON OR BEFORE JANUARY 13, 2014 to receive the advance registration rate.

Please type or print or attach a business card: Your ORS ID# (_____)

Degree (Choose only one) ☐ MD ☐ PhD ☐ DVM ☐ MS ☐ BS ☐ Other I am a ☐ Male ☐ Female

First Name _____ Last Name _____

Institute/Company _____ Department _____

Address _____

City _____ State/Province _____ Zip/Postal Code _____

Country _____ E-mail Address _____

Phone _____ Fax _____

I am a (please check one) ☐ Biologist ☐ Bioengineer ☐ Clinician ☐ Other _____

Primary Affiliation (please check one) ☐ Academic ☐ Industry ☐ Government

Secondary Specialization (please check one) ☐ Applied Science ☐ Basic Science ☐ Clinical ☐ General and Administrative

Select appropriate category	ACTIVE	AFFILIATE	ASSOCIATE	RESIDENT*	FELLOW*	STUDENT*	PHD CANDIDATE*	NON-MEMBER
Meeting Registration	☐ \$335	☐ \$335	☐ \$185	☐ \$235	☐ \$235	☐ \$235	☐ \$235	☐ \$635

Programs and Events	ORS MEMBER	NON-MEMBER
Friday, March 14		
ORS/OREF Grant Writing Workshop (8:30am-6:00pm)	☐ \$110	☐ \$120
Saturday, March 15		
Early Riser: Choosing the Right Mentors for a Successful Academic Career (7:00am-8:00am)	☐ \$20	☐ \$25
Mentor Connect (12:15pm-1:15pm)	☐ \$25	☐ \$30
Sunday, March 16		
Early Riser: An Inside Look at Research Funding in America with the National Institutes of Health (7:00am-8:00am)	☐ \$20	☐ \$25
ORS/OREF Basic Science Course (8:00am-4:30pm)	☐ \$145 Assoc/Res/Student	☐ \$195 PHD Active Member
ORS Clinical Research Forum: Building, Funding and Joining the Orthopaedic Clinical Research Community (8:00am-4:30pm)	☐ \$0	☐ \$0
ORS Symposium in Translational Medicine: Atypical Fractures and Long Term Use of Bisphosphonates (12:30pm-1:45pm)	☐ \$30	☐ \$35
ORS Awards Gala (7:00pm-10:00pm)	☐ \$115	☐ \$125
Monday, March 17		
Early Riser: The Road to Becoming a Successful Young Investigator: From Job Applications to Management of a New Lab (7:00am-8:00am)	☐ \$20	☐ \$25
Industry Connect (12:15pm-1:15pm)	☐ \$25	☐ \$30
Women's Leadership Forum Reception (7:30pm-10:00pm)	☐ \$60	☐ \$65

***Note:** Resident/Fellow/PhD Candidate/Student: You must have a signature of your Chief of Staff or Department Head below to qualify for the reduced registration fee. If this form is not signed you will be charged the non-member registration fee.

(Signature of Chief or Staff/Department Head)

Meeting Registration Fee \$ _____
Program and Event Fee \$ _____
GRAND TOTAL \$ _____

REGISTRATIONS AFTER JANUARY 13, 2014 CAN BE DONE ONLINE ONLY AT WWW.ORS.ORG.

Method of payment must be enclosed or form will be returned.

☐ AMEX ☐ MasterCard ☐ Visa ☐ Check (Payable to ORS in U.S. Funds only, drawn on a U.S. Bank. **Registrant is responsible for all bank charges**)

(Card #) _____ (Expiration Date) _____ (Signature) _____

Three options for registration: (Please include your business card with faxed or mailed registrations, if possible)

Online at www.ors.org	Fax form to: 847.823.5772	Mail form to 6640 Eagle Way, Chicago, IL 60678 If possible, please include your business card with faxed or mailed registrations.
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Cancellation Policy: Refunds will be issued if received in writing by February 24, 2014. Program and Event fees are non-refundable. All refunds will be issued after the Annual Meeting less a \$75 cancellation fee.

 ☐ Check if ADA (Americans with Disabilities Act) is desired. Please specify:



Orthopaedic Research Society

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Rosemont, IL 60018

Tel: (847) 823-5770 • Fax: (847) 823-5772

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2014 Annual Meeting



Register now at www.ors.org

Meeting Announcement

Hyatt Regency New Orleans | **New Orleans**, Louisiana
March 15 – 18