



Experience Excellence

February 4 - 7

Moscone West Convention Center San Francisco, California







MEETING ANNOUNCEMENT

REMEMBER

Advance registration opens Monday, September 26, 2011 for both ORS members and non-members.



IMPORTANT MEETING INFORMATION AND SCHEDULES



MEETING LOCATION

The ORS 2012 Annual Meeting will be held at the Moscone West Convention Center, in San Francisco, California, starting on Saturday, February 4, through Tuesday, February 7, 2012.

POSTER PRESENTATIONS AND EXHIBITS

Posters and exhibits will be on display in Moscone West, Level 3 Saturday – Tuesday, February 4-7.

NEW!! ORS will have two Poster Sessions at the 2012 Annual Meeting in San Francisco.

Posters in Session I will be displayed Saturday and Sunday, February 4th and 5th. Posters in Session II will be on display Monday and Tuesday, February 6th and 7th. The 40 NIRA finalist posters will be available during the entire meeting from Saturday through Tuesday, February 4-7.

EDUCATIONAL PROGRAMS

Saturday, February 4	Sunday, February 5	Monday, February 6	Tuesday, February 7
8:00 am – 6:00 pm	8:00 am – 4:30 pm	8:00 am – 6:00 pm	8:00 am – 5:30 pm

FOR YOUR CONVENIENCE AT THE 2012 ANNUAL MEETING

The ORS Career Center Kiosks

The ORS Career Center Kiosks will be available during the regular hours of the ORS Annual Meeting. The ORS Career Center provides employers and recruiters with a highly qualified talent pool with relevant work experience to fulfill even the most challenging staffing needs. It is the premier recruitment resource for the orthopaedic industry.

Whether you are an orthopaedic researcher looking for a new position or are ready to take the next step in your career, the ORS Career Center will help you find that ideal opportunity.

Job seekers:

Whether you're looking for a new job or ready to take the next step in your career, we'll help you find the opportunity that is right for you.

Employers:

Target your recruiting and reach qualified candidates quickly and easily. Simply complete the online registration form and start posting jobs today www.careers.ors.org.

JOIN US ON FACEBOOK!...

The ORS is now on Facebook! Become a fan to receive important messages and updates from the ORS. To become a fan, you must be signed up for a free account on Facebook. Go to facebook.com and type in "Orthopaedic Research Society."

ATTENTION! If your company is interested in exhibiting or providing financial support at the meeting, contact the ORS office via e-mail lewsza@ors.org or via phone at (+1) 847.430.5022. An exhibit prospectus is available upon request and on the ORS website at www.ors.org/2012_exhibitsinfo.html.

BACK BY POPULAR DEMAND!!

ORS Research Interest Groups

Research Interest Groups (RIGs) are unique forums for orthopaedic researchers with common interests to exchange information and to collaborate. Due to the enormous success of these groups at the 2011 ORS Annual Meeting in Long Beach, California, the ORS is organizing RIGs for participants attending the 2012 Annual Meeting in San Francisco. The RIGs will be held on Saturday, Sunday and Tuesday, in the morning from 6:30 am to 7:30 am.

ORS members are invited to organize RIGs and develop a key research topic for discussion for their group. If you are interested in organizing a RIG, please contact Mary Jo Harrold at **Harrold@ors.org** or (+1) 847.430.5024 with the following information—name/contact information of organizers, topic/focus and objectives of group.

DAILY MEETING HIGHLIGHTS

FRIDAY February 3, 2012

8:00 am - 5:00 pm

ORS/OREF GRANT WRITING WORKSHOP

(\$95 for ORS members and \$120 for nonmembers; includes continental breakfast, lunch, and syllabus materials)

Grant Writing Workshop Assists New Investigators

Are you writing your first grant proposal? Do you need assistance understanding the National Institutes of Health (NIH) peer review and study section process? The Grant Writing Workshop, presented by the ORS New Investigators Mentoring Committee, is the ideal course for new investigators preparing their first grant proposal.

The Grant Writing Workshop will include talks from NIAMS representatives including discussions of the various components of an R01 proposal. Both basic science and clinical research viewpoints will be considered. A mock study section will take place with faculty providing reviews. There will also be discussions of score sheet interpretation, as well as the steps to take after a grant has been approved.

Workshop participants are encouraged to submit a grant to the ORS office. Two grants—the initial draft and revised version—will be chosen for review during the mock study section. All faculty members have participated in an NIH study section.

Registration is on a first-come, first-served basis so early registration is strongly encouraged.

SATURDAY February 4, 2012

8:00 am - 9:30 am

WORKSHOPS

Biomaterial Based Approaches Towards Minimally Invasive Treatment of IVD Degeneration

Organizers: Wouter J Dhert, PhD and Laura Creemers, PhD

The application of regenerative approaches, in particular the use of autologous cells in the treatment of intervertebral disc degeneration has gained attention over the past decades. However, these approaches entail several disadvantages, such as leakage of the injected materials and the infliction of damage to the annulus fibrosis. The purpose of this workshop is to give an overview on currently developed biomaterial-based strategies to overcome these setbacks and to discuss their applicability and requirements.

Personalized Fracture Risk Assessment and Treatment in Osteoporosis: From Population-Based to Patient-Specific Medicine

Organizers: Keita Ito, MD and Ralph Müller, PhD

Almost 33 to 50% of all women and 15 to 30% of all men will face an osteoporotic fracture in their lifetime. Currently, once such a fracture is sustained, many will die of related complications within 12 months and others will remain impaired. Hence, it is imperative to identify those not only suffering from osteoporosis but specifically those at risk of fracture and to plan a preventive treatment which will lower their risk for such fractures. Although useful for the diagnosis of osteoporosis, the assessment of bone mineral density (BMD) and the T-score (deviation from average youthful BMD) does not differentiate well patients who are at risk for fracture. The hurdles to development of an accurate and useful clinical tool are many. Currently, diagnosis focuses on bone strength, but only indirect measures of this guality are conducted and not at the sites of most importance, i.e. axial skeleton. The risk of fracture though is not only dependent on bone strength but also on many other factors associated with loading events, which are not often assessed. Although clinical assessment is patient-specific, the diagnostic work-up is not. Regardless of the actual risk profile of the patient, screening, diagnostic, and prognostic methods are largely based on the

same technology. Furthermore, there is also little patient-specific tailoring of treatments. Even when the pharmacological treatment appears insufficient, we simply wait for the fracture and try our best to deal with it. Clearly, available technology is insufficient. This workshop will explore many of these issues and introduce new bioengineering technologies, which will improve clinical diagnosis and treatment planning of osteoporotic fractures of the axial skeleton in a patient-specific manner.

Current Insights on the Regenerative Potential of the Periosteum: Molecular, Cellular & Endogenous Engineering Approaches

Presented by the ORS Women's Leadership Forum Organizer: Melissa L Knothe Tate, PhD

Elucidation of the periosteum and its regenerative potential has become a hot topic in orthopaedics, e.g. more than half of the 1600+ articles indexed in PubMed and appearing under the keywords "periosteum and regeneration" were written in the past 10-12 years! The proposed workshop aims to bring biomedical researchers up-to-date on the state of the art in the science of periosteum and its regenerative potential. Molecular, cellular and tissue scale approaches to elucidating the mechanisms underlying the periosteum's regenerative potential will be reviewed and discussed in light of translational therapies and engineering solutions inspired by the periosteum's remarkable regenerative capacity. An interactive panel discussion at the end of the workshop will highlight current hurdles to advancement and clinical translation of these insights as well as current controversies in the field.

SATURDAY February 4, 2012 8:00

8:00 am – 9:30 am

PROFESSIONAL ADVANCEMENT SERIES I: Deciding what Journal to Publish in?

Invited speakers: James D Heckman, MD; Farshid Guilak, PhD; Joseph Buckwalter, MD; and Joseph Lane, MD

Prominent editors of leading Journals representing various disciplines will share their perspectives on the decision making process of which journal to publish in. Do's and don'ts of the submission process will be discussed. Also, a lecture will be dedicated to the topic of paper authorship.

Registration is required.

SATURDAY	February 4, 2012	9:00 am – 6:00 pm
POSTER AND EX	(HIBIT HOURS	
SATURDAY	February 4, 2012	12:00 pm – 1:30 pm

NEW! POSTER WALKING TOURS

Join experienced investigators who enjoy communicating about great science as they conduct walking tours of the 2012 Annual Meeting posters. Tours will be offered for biologists, engineers and clinicians on a broad range of poster topics. Topics will be determined after the October Program Committee meeting and placed on the ORS website.

View our profile on Linked in

Interested in orthopaedic research discussions? Want to add your ORS affiliation to your Linkedin profile. Join the ORS members-only Linkedin group.

DAILY MEETING HIGHLIGHTS CONT.

SATURDAY February 4, 2012

1:30 pm – 3:00 pm

SPOTLIGHT SESSIONS

The ORS has invited experts in various research fields to give 25-minute talks about their latest work. Four related 10-minute talks drawn from the accepted abstract pool will complete the session. Spotlight talks will be presented on Saturday and Sunday. Confirmed speakers include:

A Clinician-Scientist's View on Translation of Tendon and Ligament Research to Clinical Care Scott A Rodeo, MD

Biomechanics and Mechanobiology of Intervertebral Disc Injury and Repair *James C latridis, PhD*

Current Trends and Projected Utilization of Total Joint Replacements Steve M Kurtz, PhD

Understanding Wear, Wear Products and Local Tissue Reactions around Total Hip Prostheses Patricia A Campbell, PhD

ACL Outcomes: an Evidence Based Medicine Approach Kurt P Spindler, MD

Osteoporosis Treatments: So many choices -A Medical Success Story David B Burr. PhD

Stem Cells and Tissue Engineering to Treat Osteoarthritis Farshid Guilak, PhD

Serum Non-Coding RNAs as Biomarkers for Osteoarthritis *Gary Gibson, PhD*

MicroRNAs Control the Skeletal Landscape Jane B Lian, PhD

Bone and Muscle Interactions Independent of Loading Lynda F Bonewald, PhD

Presentation day will be assigned in early October and posted on the website.

SATURDAY February 4, 2012

3:15 pm – 4:15 pm

NEW! NIRA PRESENTATIONS

For the first time, the New Investigator Recognition Award (NIRA) finalists will present their papers, followed by question and answer sessions. The forty NIRA presentations will be given in groups of eight presenters, with five-minute talks followed by ten-minute discussions. Participants are invited to attend the poster and exhibit reception immediately following the NIRA presentations to speak with the authors.

SATURDAY February 4, 2012

DEDICATED POSTER AND EXHIBIT SESSION

Scientific posters and exhibits will be highlighted during this event. Authors will be available at their posters to answer questions.

SUNDAY February 5, 2012

8:00 am - 4:30 pm

4:15 pm - 6:00 pm

POSTER AND EXHIBIT HOURS

SUNDAY February 5, 2012

8:00 am – 9:30 am

WORKSHOPS

Translational Animal Models in Orthopaedic Research

Organizers: Laurie R Goodrich, DVM and Kurt D Hankenson, DVM, PhD

Translational research, the transfer of basic science discoveries to human clinical problems, relies heavily on comparative animal models of injury and dysfunction. However, in choosing an animal model, significant consideration must be given to species, model-type (surgical, mechanical, or pharmacological vs. naturally occurring), and how closely those models mimic human disorders. Thus, a nuanced understanding of species differences in anatomy, physiology, pathology, and treatment is required. With these considerations, veterinarians, who are trained with a highly comparative educational pedagogy, contribute significantly to the advancement of orthopaedic research through the development of animal models of musculoskeletal dysfunction. This workshop will highlight the contribution that veterinarians make to orthopaedic research through animal model development, selection, and analysis. Issues pertaining to model selection criteria and analysis will be described. The development of non-rodent models of bone, cartilage, ligament and meniscus will be discussed. Postoperative monitoring and associated animal care and use issues will be considered. Eachspeaker will bring a unique perspective - the models will be viewed through the eyes of a large animal surgeon, a small animal surgeon, and a veterinary pathologist.

Bone Infection: An Unresolved Problem

Organizer: Geoff Richards, PhD

Musculoskeletal Infection continues to be a challenge in orthopaedic and trauma surgery with immense socioeconomic impact. Despite significant advances in research and development and best medical and surgical practices, bone and bone associated infections are still difficult to diagnose, impossible to prevent in all cases and definitive treatment requires surgical removal of the implant. The most pressing issues in this field involve the requirement for sensitive and specific infection diagnostics and improved antimicrobial intervention strategies. It is the purpose of this workshop to present the latest advances in the diagnosis and treatment of musculoskeletal infections and describe the state of the art in animal models required for the development of these urgently required solutions.

CT and MRI Metal Artifact Reduction Update: Relevance to Orthopaedic Research

Organizers: Douglas D Robertson, MD, PhD and Gulshan B Sharma, PhD

Obtaining structural information of bone and soft tissue adjacent to orthopaedic hardware is critical not only for research but for diagnosing orthopaedic derangement, preoperatively planning, and assessing outcomes. To date, radiography is the principal method for obtaining this information. While CT and MRI have revolutionized orthopaedic research and diagnosis, metal artifact has limited their full potential. The reduction of metal artifact will permit morphological and densitometric assessments adjacent to hardware assisting researchers throughout the field of orthopaedics. New methods are available which significantly improve CT and MR imaging adjacent to orthopaedic hardware. SUNDAY February 5, 2012

8:00 am - 9:30 am

WORKSHOPS

New Insights into the Effects of Spaceflight in Musculoskeletal Tissues

Organizers: Jamie Fitzgerald, PhD and Stavros Thomopoulos, PhD

The response of skeletal tissues to microgravity is poorly understood. While it is recognized that bone mineral density decreases and muscles atrophy in spaceflight, very little is known about the molecular underpinnings of these effects. In addition, virtually nothing is known about the effects of microgravity on other musculoskeletal tissues such as cartilage and tendon. The speakers in this workshop all participated in a NASA mouse tissue Biospecimen Sharing Program on two Space Shuttle flights in 2010 and 2011. The purpose of this workshop is to educate the audience about the latest insights into the effects of spaceflight on bone and muscle and two previously under-investigated tissues: cartilage and tendon. The application of new cellular and molecular techniques to the analysis of these tissues provide new insights into the effects of microgravity on musculoskeletal tissues.

PROFESSIONAL ADVANCEMENT SERIES II: Optimizing Skills Needed for A Successful Research Career

Invited speakers: Annie C Hayashi, MA; James C latridis, PhD, Mohit Bhandari, MD

This interactive session will provide you with practical ideas to effectively communicate key messages about your research to non-academic audiences including the media; assist you in finding ways to seek research funding when the initial request may not be granted. Finally, recent recalls in the orthopaedic industry have called into question how new innovations should be introduced into clinical practice.

Registration is required.

SUNDAY February 5, 2012

12:00 pm - 1:30 pm

MEET THE MENTORS LUNCHEON

Sponsored by the ORS New Investigators Mentoring Committee (\$30 member; \$35 non-member, includes lunch)

The "Meet the Mentors" luncheon is designed to provide advice to new investigators and researchers on how to consider issues related to establishing an independent research career and balancing competing demands in the academic and corporate environments. The discussions will also focus on the importance of identifying mentors and describing the roles and function of a mentor. Three participants will be assigned to one mentor. Attendees will be assigned to tables based on their areas of interest and will be able to pick the mentors they would like to meet. The sessions are intended to be informal, interactive, and designed for all to actively participate in the discussions. Mentors are from North America.

Potential topics may include:

- Selecting mentors
- What mentors do to assist junior faculty and team members
- Writing your first grant
- Departmental status for clinician scientists
- Research versus management track options in industry
- Relationships within the department
- Expectations of the job
- Creating an impact
- Measures of success
- Registration is on a first-come, first-served basis.

SUNDAY February 5, 2012 **12:00 pm – 1:30 pm**

DEDICATED POSTER AND EXHIBIT SESSION

Scientific posters and exhibits will be highlighted during this event. Authors will be available at their posters to answer questions.

SUNDAY February 5, 2012 1:30 pm – 3:00 pm

SPOTLIGHT SESSIONS

The ORS has invited experts in various research fields to give 25-minute talks about their latest work. Four related 10-minute talks drawn from the accepted abstract pool will complete the session. Spotlight talks will be presented on Saturday and Sunday.

SUNDAY February 5, 2012 3

3:00 pm - 4:30 pm

7:00 am – 8:00 am

POSTER WALKING TOURS

Join experienced investigators who enjoy communicating about great science as they conduct walking tours of the 2012 Annual Meeting posters. Tours will be offered for biologists, engineers and clinicians on a broad range of poster topics. Topics will be determined after the October Program Committee meeting and placed on the ORS website.

SUNDAY February 5, 2012 **3:00 pm – 4:30 pm**

DEDICATED POSTER AND EXHIBIT SESSION

Scientific posters and exhibits will be highlighted during this time.

SUNDAY February 5, 2012 7:30 pm – 9:00 pm

ORS WOMEN'S LEADERSHIP FORUM AWARD AND NETWORKING RECEPTION: E&O TRADING COMPANY

(\$65 for ORS members and \$80 for ORS non-members—includes reception, cash bar will be available)

E&O Trading Company is a Modern Asian oasis in the heart of San Francisco's vibrant Union Square featuring contemporary Asian-inspired cuisine. The restaurant features high ceilings adorned by dramatic chandeliers and stunning decor.

Organized to prepare women for leadership in the ORS and to mentor and foster young women in orthopaedic research, the ORS Women's Leadership Forum (WLF) seeks to:

- Encourage and inspire women early in their careers;
- Increase the number of women receiving training in orthopaedic research, specifically in the fields of engineering, biology and orthopaedic surgery.

Join this fast-growing, dynamic group for an opportunity to meet and network with many prominent ORS leaders.

Registration is required.

MONDAY February 6, 2012

ORS BUSINESS MEETING

All members of the ORS are encouraged to attend the Business Meeting.

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DAILY MEETING HIGHLIGHTS CONT.

MONDAY February 6, 2012

8:00 am - 4:30 pm

ORS CLINICAL RESEARCH FORUM: THE INNOVATION CYCLE: HOW CAN WE AVOID WRONG TURNS?

Co-Chairs: Theodore Miclau, MD and Mohit Bhandari, MD

Organizing Committee: Saam Morshed, MD; George F Muschler, MD; Kristy L Weber, MD; James G Wright, MD

8:00 am - 9:45 am	SESSION I: A Framework for Taking Innovation into Clinical Practice	
8:00 am	Introduction	
8:10 am	Cycle of Innovation: Is there an IDEAL Approach?	
8:25 am	Taking Early Innovation into the Clinical Arena: Industry's Perspective	
8:40 am	Taking Promising Innovation into Clinical Practice: What are the Studies We Should Be Doing?	
8:55 am	Critical Observations: How Hard is it to Turn Back?	
9:10 am	Warning Signs: Monitoring Safety and Adverse Events	
9:25 am	Panel Discussion	
9:45 am	Break	
10:00 am – 11:35 am	SESSION II: The Story of Atypical Proximal Femur Fractures: What about Rare Events that Arise After Widespread Implementation?	
10:00 am	Looking Back: Did Experimental Evidence Tell Us of the Problems with Long Term Bisphosphonate?	
10:15am	Did the Large Body of Clinical Data Provide any Hint of Complications to Come?	
10:30 am	The First Cluster of Events: When Did We First Characterize the Atypical Fracture?	
10:45 am	Lessons Learned: Is this Really a Clinical Problem?	
11:00am	Lessons Learned: Could This Have Been Avoided?	
11:15am Panel Discussion		
11:35 am – 12:30 pm Lunch Break (lunch is on your own)		
12:30 pm – 2:05 pm	SESSION III: Metal-on-Metal: Were the Studies Strong Enough Before Implementation?	
12:30 pm	How Experimental Evidence Drove Innovation	
12:45 pm	How Clinical Case Series Supported Widespread Adoption	
1:00 pm	Warning Signs: Events that Lead to Safety Concerns	
1:15 pm	Lessons Learned from the Metal-Metal Arthroplasty Innovation Cycle	
1:30 pm	Panel Discussion	
1:50 pm	Break	
2:05 pm – 3:50pm	SESSION IV: BMPs: How do We Detect Adverse Events that We weren't Even Thinking About?	
2:05 pm	The Innovation and Experimental Evidence Supporting FDA Approval in 2002 and Subsequent Clinical Use	
2:20 pm	Clinical Adoption - On-Label and Off-Label Use - A Business Perspective	
2:35 pm	Are there Unaddressed Problems Amid Clinical Success? Warning Flags in Published Data and Clinical Experience	
2:50 pm	Global Experience: Use and Perspective	
3:05 pm Lessons Learned: Where are We? Assessment of Indications, Current Risk, Educational Requirements, Professional and Regula Responsibility, Research Implications		
3:20 pm Panel Discussion: Risk Assessment, Need for Education, Post-Market Surveillance, Clinical Practice Guidelines, Regulato		
	SESSION V: Closing the Loop: Changing Surgeons' Minds When Confronted with New Information	
3:50 pm – 4:30 pm	SESSION V. closing the coop. changing surgeons minus when controlled with New information	
· · ·	GUEST PRESENTATION – TBD	
3:50 pm – 4:30 pm 3:50 pm – 4:10 pm 4:10 pm		

(Note: Presentations subject to change. Please check the ORS website for list of presentations and speakers.)

Registration is required.

MONDAY February 6, 2012

8:00 am - 9:30 am

WORKSHOPS

Heterotopic Ossification in Orthopaedic Trauma

Presented by the ORS and Orthopaedic Trauma Assocation Organizer: Emil H Schemitsch, MD

Heterotopic ossification, the formation of bone in soft tissues, represents a clinically important condition in orthopaedic surgery, with particular relevance to orthopaedic trauma. This workshop reviews the pathophysiology, prophylaxis, and treatment of heterotopic ossification, with a focus on this condition in orthopaedic trauma patients and blast injury patients. In addition, the close relationship between central nervous system injury and and heterotopic ossification will be reviewed. This joint workshop with the Orthopaedic Trauma Association will review the latest concepts in heterotopic ossification and orthopaedic trauma.

Focus Areas for Future Research in Total Knee and Total Hip Replacements

Presented by the ORS and Hip Society and Knee Society Organizers: Juan J Rodrigo, MD and Harry E Rubash, MD

The significance of this workshop is to have ORS members made aware of the important areas of research that need to be done in total hip and total knee arthroplasty. The main areas to be addressed are knee alignment and kinematics, hip component positions, bearings, registries, complications, and patient satisfaction. Problem areas that have surfaced will be discussed by experts in the field, and ideas for future research will be discussed.

Building a Successful Research Program:

Decisions, Victories and Pitfalls *Presented by the ORS Advocacy Committee*

Organizers: Stuart B Goodman, MD, PhD, Cathleen L Raggio, MD

Building and sustaining a successful multidisciplinary research program is a daunting task, especially for the new investigator. The purpose of this workshop is to provide both the younger and seasoned investigator further insight into the challenges, obstacles, successes and (occasionally) disappointments while establishing a world-class, federally funded research program. Four highly successful researchers will recount their research careers illustrating their stories with specific research questions, problems encountered and how they were solved. Significance: This workshop will facilitate critical assessment by attendees of their own research careers by highlighting how successful musculoskeletal researchers meet the challenges associated with beginning and maintaining a federally funded research program.

MONDAY February 6, 2012

8:00 am – 9:30 am

PROFESSIONAL ADVANCEMENT SERIES III: Career Pathways in the Orthopaedic Industry

Organized by the ORS Corporate Affairs Committee

The usual orthopedic technical training and research training programs (for example BS, MS, PhD, post-doc and MD) rarely give insight into entrepreneurship in the fields related to orthopaedics. While much of the orthopedic device industry is well established, mature and highly profitable, continued innovation will be required to address the changing needs and increasing expectations of patients in the near and distant future. Academic research is often touted as the birthplace of these needed innovations. However, in order for these innovations to reach fruition, these ideas and innovations must be successfully transplanted from academia into industry and grown into successful products. In this program, speakers will discuss their own experiences with entrepreneurship and the challenges associated with translating academic research into products. Agenda: Anthony Ratcliffe, PhD (Synthasome, Inc, President and CEO "*The Transition from Academia*")

to Industry", Michele Marcolongo, PhD (Associate Dean for Intellectual Property, Drexel University, Co-founder, GeliFex) "The Role of the University in Translating Research", and Charlie Archer, PhD (Professor of Biosciences, Cardiff University, CSO, Progenteq) "Articular Cartilage Stem Cells for Joint Repair: A Case Study in Orthopedic Entrepreneurship in the UK."

Registration is required.

MONDAY February 6, 2012	9:00 am – 6:00 pm
POSTER AND EXHIBIT HOURS	

MONDAY February 6, 2012

ORS AWARDS CEREMONY/LECTURES

The prestigious ORS Awards will be given to individuals with significant contributions to the advancement of orthopaedic research and furthering understanding of the musculoskeletal system and musculoskeletal diseases and injuries. Cutting-edge, distinguished researchers, leaders and mentors will be honored. Some awardees will also give presentations.

The following award recipients will be recognized:

- ORS Alfred R Shands Jr., MD Award & Lecture
- ORS Marshall R Urist, MD Award & Lecture
- ORS William H Harris, MD Award
- ORS Women's Leadership Forum Award
- ORS/OREF Travel Awards in Orthopaedic Research Translation
- ORS/OREF Distinguished Investigator Award
- ORS New Investigator Collaborative Recognition Awards (NIRAs)
- ORS Collaborative Exchange Awards

12:15 pm – 1:30 pm

9:45 am – 11:00 am

NEW! POSTER WALKING TOURS

MONDAY February 6, 2012

Join experienced investigators who enjoy communicating about great science as they conduct walking tours of the 2012 Annual Meeting posters. Tours will be offered for biologists, engineers and clinicians on a broad range of poster topics. Topics will be determined after the October Program Committee meeting and placed on the ORS website.

MONDAY February 6, 2012 12:15 pm – 1:30 pm

MEET THE INDUSTRY MEMBERS LUNCHEON

Organized by the ORS Corporate Affairs Committee (\$30 for ORS member, \$35 for non-members; includes lunch)

The ORS Corporate Affairs Committee invites you to attend the Meet the Industry Members Luncheon. This luncheon and networking session is open for ORS attendees affiliated with industry or interested in working in/ with industry. The purpose is to have interactive discussions with industry colleagues and to meet with Corporate Affairs Committee members to learn how the Society can support industry members and provide additional services and benefits.

Registration is required.

MONDAY February 6, 2012

4:00 pm – 6:00 pm

DEDICATED POSTER AND EXHIBIT SESSION

Scientific posters and exhibits will be highlighted during this event. Authors will be available at their posters to answer questions.

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DAILY MEETING HIGHLIGHTS CONT.

TUESDAY February 7, 2012

7:00 am – 11:45 am

8:00 am - 6:00 pm

POSTER AND EXHIBIT HOURS

TUESDAY February 7, 2012

ORS/AAOS CO-PROGRAMMING

ORS/AAOS Co-Programming will take place Tuesday, February 7, 2012 and will include the following:

- ORS Workshops
- ORS Podium Presentations
- ORS/AAOS Combined Symposia
- AAOS Symposia
- AAOS Podium Presentations
- AAOS Review Courses
- AAOS Instructional Course Lectures
- Kappa Delta Award Paper Presentations/OREF Research Award

Seven AAOS posters will be highlighted at the ORS meeting (Saturday – Tuesday.) The AAOS will choose one poster from each of the common classifications: Adult Hip, Adult Knee, Foot and Ankle, Hand and Wrist, Shoulder and Elbow, Tumors, and Spine. ORS will have seven posters highlighted at the AAOS meeting (Tuesday – Saturday) from the same categories. ORS will also present the ten New Investigator Recognition Award winning posters at the AAOS meeting.

HOW TO GET AN AAOS BADGE?

ORS registrants will be able to attend the AAOS meeting on Tuesday and Wednesday, which includes access to the AAOS exhibit hall on Wednesday. ORS registrants interested in attending the AAOS meeting must visit the ORS registration desk before 5:00 pm Tuesday to receive a complimentary AAOS badge. AAOS ticketed courses or sessions will require an additional fee.

AAOS Program Schedule

8:00 am - 10:00 am	. Papers, Symposia
8:00 am - 11:00 am	. Review courses
1:30 pm – 3:30 pm	. Papers, Symposia, Instructional Course Lectures
1:30 pm – 5:00 pm	. Instructional Course Lectures
4:00 pm - 6:00pm	. Papers, Symposia, Instructional Course Lectures

TUESDAY February 7, 2012

8:00 am – 9:30 am

WORKSHOPS

Design, Implementation, Statistical Analysis and Reporting of Clinical Trials in Orthopaedics: A How To for Clinical Trialists

Organizer: Joel J Gagnier, PhD

This workshop will provide attendees with a comprehensive overview of how to design, implement, analyze and report a clinical trial in orthopaedic surgery. This workshop will be 70% didactic and 30% practical. Attendees will work through several exercises in order to develop a clinical trial protocol of interest to them. On completion of this workshop, attendees will have an excellent understanding of clinical trials and will have developed a concrete idea of how to procede with their plans for clinical trials. We expect significant interaction amongst the speakers and attendees.

Recent Changes at the US Food and Drug Administration with Respect to Orthopaedic Devices

Presented by the ORS Corporate Affairs Committee Organizers: James J Mason, PhD and Katy Georgiadis, PhD

As the US Food and Drug Administration seek to toughen regulation of medical devices under the Obama administration, the future of product innovation in orthopaedics has become clouded. It is clear that policies should be consistent and predictable to help small and large companies innovate but at the same time they need to ensure product safety. In this workshop, three speakers from the FDA, a small company and a large company, will discuss new FDA policies and their impact on orthopaedic device development in the US now and in the future.

Metal-Metal Bearings: Facts, Fictions and Futures

Organizers: A Seth Greenwald, DPhil(Oxon), Lynne C Jones, PhD, Warren O Haggard, PhD

One step forward, two steps back is a concerning assessment of the currency of contemporary metal-metal total and surface replacement hip systems employed as a remedy in the treatment of degenerative arthritis. Recently they have received excessive press coverage, most of it of a decidedly negative slant, attributed to adverse local tissue reactions (ALTR). There are peerreviewed reports in the clinical literature which describe these phenomena resulting in an increased rate of revision. More advanced research tools allow improved understandings of the material, tissue, and biological interactions and effects including hypersensitivity, metallosis and the development of pseudotumors. These are contributory to implant loosening leading to revision with reported decreased patient outcome. The purpose of this workshop is to summarize the current facts, fictions and specificity of future employment of metal-metal bearings.

Clinical Assessment of Acute Joint Injury and Early Joint Degeneration

Presented by the ORS and Osteoarthritis Research Society International Organizers: Constance R Chu, MD and Linda J Sandell, PhD

Early diagnosis and treatment of human joint degeneration is considered an important new strategy to delay the onset of disabling osteoarthritis. To evaluate this strategy, sensitive and quantitative clinical assessments of early joint degeneration are needed. This symposium presents expert discussion of human clinical use of novel joint assessment techniques to include highfield MRI of bone, cartilage, synovium and meniscus; optical coherence tomography, new MRI mapping techniques, quantification of inflammation and cytokine profiles; and integration of imaging and biochemical biomarkers.

TUESDAY February 7, 2012 9:45

9:45 am - 10:45 am

- Keynote Speaker Zena Werb, PhD, Professor and Vice Chair, Department of Anatomy, University of California, San Francisco
- ORS Presidential Address Brian Johnstone, PhD
- Incoming Presidential Address Theodore Miclau, MD

TUESDAY February 7, 2012

10:45 am - 11:45 am

Scientific posters and exhibits will be highlighted during this event. Authors will be available at their posters to answer questions.

DAILY MEETING HIGHLIGHTS CONT.

TUESDAY February 7, 2012

1:00 pm – 2:30 pm

ORS/AAOS COMBINED SYMPOSIUM I: Adverse Reactions to Byproducts of Joint Replacement

Moderators: Juan J Rodrigo. MD and Stuart B Goodman. MD. PhD

This symposium describes antigen-specific (allergic) inflammatory responses to byproducts of joint replacements including histological findings, lymphocyte proliferative responses, radiological and clinical presentations, and methods of antigen testing.

TUESDAY February 7, 2012

2:45 pm - 4:15 pm

ORS/AAOS COMBINED SYMPOSIUM II: Basic and Clinical Science Advances in Understanding Femoroacetabular Impingement (FAI)

Moderator: John C Clohisy, MD

This combined AAOS and ORS symposium will address the current, contemporary understanding of FAI and will propose areas in need of future investigation. Specifically, the current evidence supporting the concept of FAI will be reviewed. The scientific information regarding hip pathomechanics, disease epidemiology, and prevalence of FAI will be presented. Contemporary strategies for disease staging including radiography, imaging and biomarkers will be discussed. The current evidence regarding surgical treatment will be analyzed and presented with an emphasis on identifying areas in need of investigation. Overall, this symposium will present the current basic and clinical science evidence regarding FAI, contemporary strategies of diagnosis, disease staging and treatment. An emphasis will also be placed on future areas of basic and clinical science investigation.

TUESDAY February 7, 2012

4:30 pm – 5:30 pm

THE KAPPA DELTA AND OREF AWARD PAPER PRESENTATIONS

Kappa Delta Sorority has contributed to the advancement of orthopaedics since 1950. The highly coveted orthopaedic research awards through the American Academy of Orthopaedic Surgeons (AAOS) have been the starting point for many prominent researchers and physicians in the field. Beginning with one \$1,000 research award in 1950, Kappa Delta now supports three \$20,000 grants—the Ann Doner Vaughan Award, the Elizabeth Winston Lanier Award, and the Young Investigator Award. The sorority is dedicated to the future of musculoskeletal health.

The Kappa Delta Awards Research Awards call attention to important studies and garner esteemed recognition in the field. A past Kappa Delta Young Investigator Award Recipient put it best: "It's like the Nobel Prize of Orthopaedics. This serves to inspire young investigators and more experienced investigators to produce larger bodies of cohesive work, which is necessary for successful research programs and advancing the field to enable better treatment options for our patients."

GENERAL INFORMATION

MEETING OBJECTIVES

- To present the best available research from all disciplines of musculoskeletal research.
- To promote the exchange of ideas and encourage collaborations in orthopaedic research.
- To encourage promising and emerging areas in musculoskeletal research, including basic science, education, and research strategies by use of forums, workshops, special sessions and special interest meetings.

CONTINUING MEDICAL EDUCATION (CME) CREDIT

The Orthopaedic Research Society and the American Academy of Orthopaedic Surgeons jointly sponsor the scientific presentations at the 2012 Annual Meeting. This activity has been planned and implemented in accordance with the Essential Areas and policies 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.

Attendees claiming CME from the ORS 2012 Annual Meeting will be required to complete the ORS CME Request Form following the meeting in San Francisco. Attendees will need to submit the Form by the due date in order to have the ORS CME added to their AAOS Transcript. Requests for CME submitted after the deadline, will not be included on the AAOS Transcript and will receive a CME Certificate from the ORS.

FDA

All drugs and medical devices used in the United States are administered in accordance with Food and Drug Administration (FDA) regulations. These regulations vary depending on the risks associated with the drug or medical device, the similarity of the drug or medical device to products already on the market, and the quality and scope of clinical data available. Some drugs or medical devices demonstrated at this 2012 Annual Meeting of the Orthopaedic Research Society may have not been cleared by the FDA or have been cleared by the FDA for specific purposes only. The FDA stated that it is the responsibility of the physician to determine the FDA clearance status of each drug or medical device he or she wishes to use in clinical practice. Orthopaedic Research Society policy provides that "off label" uses of a drug or medical device may be described in the Orthopaedic Research Society's CME activities so long as the "off label" use of the drug or medical device is also specifically disclosed (i.e., it must be disclosed that the FDA has not cleared the drug or device for the described purpose). Any drug or medical device is being used "off label" if the described use is not set forth on the product's approved label.

DISCLAIMER

The materials presented at the 2012 Annual Meeting of the Orthopaedic Research Society have been made available by the Orthopaedic Research Society for educational purposes only. The material is not intended to represent the only, nor necessarily best, method or procedure appropriate for the medical situations discussed, but rather is intended to present an approach, view, statement or opinion of the faculty, which may be helpful to others who face similar situations. The Orthopaedic Research Society disclaims any and all liability for injury or other damages resulting to any individual attending the meeting and for all claims, which may arise out of the use of the techniques demonstrated therein by such individuals, whether these claims shall be asserted by physician or any other person. No reproduction of any kind, including audiotapes and videotape, may be used in any portion of the ORS Annual Meeting. The ORS reserves all of its rights to such material, and commercial reproduction is specifically prohibited.

REGISTRATION

ADVANCE REGISTRATION

DECISTRATION EEE

Advance registration opens on September 26, 2011. (See schedule on opposite page). Payment in full must accompany your registration; otherwise your registration will not be processed. Advance registration may be submitted by mail, fax or online at www.ors.org. If you are paying with a check, please complete the registration form on page 19 and mail it to the address listed on the form. The ORS will accept checks made payable to ORS in U.S. funds only, and drawn on a U.S. bank (registrant is responsible for all bank charges). Accepted credit cards are Amex, MasterCard and Visa only.

The advance registration deadline date for fax and mail is December 16, 2011. Mailed or faxed registrations received in the ORS office after December 16, 2011 will be returned unprocessed.

ON-SITE REGISTRATION

On-site registration will be located in the lobby of Level 3, Moscone West Convention Center. The official hours of on-site registration are:

Friday,	Saturday,	Sunday,	Monday,	Tuesday,
February 3	February 4	February 5	February 6	February 7
2:00 pm –	7:00 am –	7:00 am –	7:00 am –	7:00 am –
5:00 pm	6:00 pm	6:00 pm	6:00 pm	5:00 pm

REFUNDS

Written cancellation of registration must be received in the ORS office by January 6, 2012, a \$50 processing fee will be charged.

NO REFUNDS WILL BE ISSUED AFTER FRIDAY, JANUARY 6, 2012.

REGISTRATION FEE					
Membership Status	Advance Registration Fee September 26 – December 16 (ORS Members & Non-Members)	Late Online Registration December 17 – January 6 (Online Only)	On-Site Registration		
Active Member	\$320.00	\$370.00	\$395.00		
Affiliate Member	\$320.00	\$370.00	\$395.00		
Associate Member	\$120.00	\$170.00	\$195.00		
Emeritus Member	No charge	No charge	No charge		
Non-Member	\$620.00	\$670.00	\$695.00		
Orthopaedic Resident Fellow	\$210.00	\$260.00	\$285.00		
PhD Candidate/Student	\$210.00	\$260.00	\$285.00		

BECOME A MEMBER OF THE ORTHOPAEDIC RESEARCH SOCIETY AND SAVE ON YOUR ANNUAL MEETING REGISTRATION!

ACTIVE MEMBERSHIP

Active membership is open to all orthopaedic surgeons, physical and biological scientists, engineers, or other investigators on the basis of previous scientific contributions and activity and continued participation in the field of research.

AFFILIATE MEMBERSHIP

Affiliate membership is available to lab technicians, lab and private practice administrators/managers, and industry representatives, who have made significant scientific or nonscientific contributions to orthopaedic research and the ORS, but have not published peer-reviewed journal papers.

ASSOCIATE (STUDENT) MEMBERSHIP

Associate (Student) membership is available to trainees in the area of orthopaedic research, including individuals who are pursuing advanced degrees (e.g., MD, DMD, DDS, DO, MS, MPh, PhD, DSc, DVM) or in post doctoral clinical and research training programs (Residency and Fellowship). Associate (Student) Members must verify their training status in the field of orthopaedic research in order to be elected to the Society.

BENEFITS OF MEMBERSHIP ARE:

- Prestige of membership and professional recognition
- Reduced registration fees at the ORS Annual Meeting
- Year-round access to the Transactions of the Annual Meeting
- Subscription to the Journal of the Orthopaedic Research
 - (12 issues annually—Active and Affiliate members only)
- Subscription to the ORS eUpdates
- 24-hour access to the online membership directory, and member community (2011)
- Discounted rate for the ORS Career Center—reduced fees for member career postings
- Eligibility for ORS awards and grants
- Eligibility to serve on ORS committees, as a reviewer and moderator
- Global networking opportunities

If you are interested in becoming a member of the ORS, please visit our website at www.ors.org and click on "Join ORS" tab to download an application, apply online, or contact the ORS at 847-823-5770 for more information. Membership applications must be received in the ORS office by December 15, 2011 to obtain the reduced registration rate for the 2012 Annual Meeting. **BECOME A MEMBER OF THE ORTHOPAEDIC RESEARCH SOCIETY AND SAVE ON YOUR ANNUAL MEETING REGISTRATION!**

The ORS Membership Committee members will be available to discuss membership and benefits, as well as endorse applications, during breaks and poster sessions in the ORS "connection" area located in the exhibit area in the convention center.

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TRAVEL AND HOUSING INFORMATION

SAN FRANCISCO

San Francisco is often called "Everybody's Favorite City," a title earned by its scenic beauty, cultural attractions, diverse communities, and world-class cuisine. Measuring 49 square miles, this very walk-able city is dotted with landmarks like the Golden Gate Bridge, cable cars, Alcatraz and the largest Chinatown in the United States. A stroll of the City's streets can lead from Union Square to North Beach to Fisherman's Wharf, with intriguing neighborhoods to explore at every turn. Views of the Pacific Ocean and San Francisco Bay are often laced with fog, creating a romantic mood in this most European of American cities. Visit **www. sanfrancisco.travel** for information on tours, dining and other San Francisco activities and venues.

ADA NEEDS

ADA accommodations are available at all hotels. Please specify what your needs are when making your reservations so that the hotel can insure your comfort.

AIRPORT

The San Francisco International Airport (SFO) is located approximately 15 miles south of San Francisco, near the junction of Highways 101 and 380 and services over 51 airlines.

AIRLINES

Special meeting discounts can be obtained by calling United Airlines at (800) 521-4041 or go online to www.united.com and refer to United Airlines Discount Code: 589HM. Or by calling Corporate Traveler at 1-877-384-1246 or 1-312-384-1246. Travel agent service fee: \$32.00 USD.

AIRPORT SHUTTLE

GO Lorrie's Shuttle will provide door-to-door transportation service between SFO and downtown hotels or Moscone Convention Center in shared ride vans that make multiple stops.

To make a reservation Book Online

http://gosfovan.hudsonltd.netres?USERIDENTRY=ORS&LOGON=GO and receive a \$3.00 one-way/ \$6.00 round trip discount.

- Fee: \$14.00 (One-Way)
- Fee: \$26.00 (Round-Trip)

BANKS

Exchanging foreign currency or cashing traveler's checks (foreign or domestic) can be done at several locations throughout the city. Please check with your hotel concierge for the location closest to your hotel.

PARKING

The Moscone Center is located at 800 Howard Street, San Francisco, CA 94103. As a City-owned facility, The Moscone Center provides information according to the City's traffic management philosophy which encourages the use of transit first. Off-site parking is available at several nearby locations including: Fifth & Mission Parking Garage (adjacent to Moscone West); 833 Mission Street (between Fourth & Fifth streets); Hearst Parking Center, 45 Third Street (entrance on Stevenson, 2 blocks from Moscone South/North); and Moscone Center Garage, 255 Third Street (Folsom & Howard, across the street from Moscone South's Esplanade Ballroom). The cost is \$3.50 per hour (0-7 hours), \$28 (7-12 hours), \$32 (12-24 hours).

PUBLIC TRANSPORTATION

The Bay Area is full of places to go and buses, trains and trolleys make travel accessible and economical for visitors. BART operates rail service from SFO airport to San Francisco and the East Bay directly from SFO. The SFO BART station is located on the Departures Level (Level 3) of the International Terminal, on the Boarding Area 'G' side of the terminal. You can also take the AirTrain terminal transport's red line or blue line to the BART station. There is no charge to board AirTrain. The fare to take BART to downtown San Francisco is about \$8.10 one-way. For more information about service and destinations, go to the BART home page (www.bart.gov).

RENTAL CARS

ORS has negotiated special rates for rental cars during the meeting. Car reservations can be made via the ORS registration website, your travel agent, or direct with the rental car companies. Call the numbers below and mention the discount code listed.

Car Company	Discount Code	Phone	Internet
Hertz	CV#: 022Q5156	(800) 654-2240	www.hertz.com
Avis	AWD#: D256916	(800) 331-1600	www.avis.com

TAXI SERVICE

Taxi fare from San Francisco International Airport (SFO) to downtown San Francisco is approximately \$47 one-way. A \$2.00 exit surcharge is included in all San Francisco taxicab meter fares for rides originating from San Francisco International Airport. <u>By sharing a ride, up to 5</u> <u>people can ride for the price of 1 person.</u>

Distance: 21.69 km Duration: 20-30 minutes	Dollars	Euros	Pounds
Total	\$47.00	33.00 €	29.00 £

Taxis depart from designated taxi zones located at the roadway center islands, on the Arrivals/Baggage Claim Level of all terminals at San Francisco International Airport (SFO). Ramp accessible taxis are available. Please contact the taxi coordinator to request a ramp accessible taxi, or phone *1191 from any airport courtesy phone.

SMOKING

Smoking is not permitted in public areas such as restaurants, hotels, the Moscone Convention Center or the San Francisco International Airport.

WEATHER

San Francisco enjoys mild weather year-round. Average daily February temperature is 61°, average nighttime temperature is 49°. A comfortable, light jacket or coat is advisable during the day; an all-weather coat is recommended for the evening.

HOTEL RESERVATIONS

A hotel room reservation may be obtained through the ORS website (**www.ors.org**) or by contacting the official AAOS housing company, Wyndham.Jade via phone or fax as shown on the housing form. A very limited number of rooms are available through the AAOS housing company when the ORS Annual Meeting is co-located with the AAOS. When the ORS meeting is separate from the AAOS, it is important to book your room through the ORS housing company.

MAKE YOUR HOTEL RESERVATIONS ONLINE

Housing is available on the ORS website at www.ors.org. Reservation confirmations will be sent within 24 hours.



- 1 Hotel Adagio
- 2 Best Western Americania Hotel
- **3** Chancellor Hotel on Union Square
- 4 Galleria Park Hotel
- 5 InterContinental San Francisco

- 6 King George Hotel
- 7 Parc 55 Wyndham Hotel
- 8 Pickwick Hotel
- 9 Powell Hotel
- **10** San Francisco Marriott Marquis

HOTEL DESCRIPTIONS

HOTEL ADAGIO 550 Geary Street, San Francisco, CA 94102 .8 Miles to Convention Center

Located amidst the bustling streets of San Francisco, Hotel Adagio is less than two blocks from the Curran Theatre and the American Conservatory Theater. The hotel is within six blocks from the Moscone Convention Center, Nob Hill eateries and shops, and the historic Grace Cathedral. The

sophisticated Hotel Adagio showcases sleek 1950s furnishings in the welcoming lobby. Contrasting in look and feel is the planetarium-lit Cortez Restaurant and Bar, offering a wide selection of imported wines and bold Mediterranean cuisine. Coffee and tea services are available throughout the mornings and evenings. Wireless internet access is complimentary throughout the hotel's public spaces. Hotel amenities include a fitness center with cardiovascular equipment and fitness training through a registered personal trainer on the property. The Hotel Adagio's 171 guest rooms feature modern décor, with platform beds, cluster lamps, accented walls and panoramic views of downtown San Francisco. Flat-screen televisions offer web services. High-speed wired and wireless internet access is complimentary in each room. Bars and refrigerators are also included and the bathrooms feature Aveda products. The hotel Adagio is an all non smoking hotel.

ROOM RATES:	SINGLE/DOUBLE	DOUBLE/DOUBLE	TRIPLE	QUAD
	\$214.00	\$214.00	\$234.00	\$254.00

2 AMERICANIA HOTEL-A BEST WESTERN PLUS HOTEL 121 7th Street, San Francisco, California 94103

.7 Miles to Convention Center

The Best Western Americana is a newly renovated fun, hip hotel that captures the spirit of the mid-twentieth century. The Best Western Americana is a 143-room San Francisco boutique hotel with amusing and fun amenities. Each questroom features playful, retro-style furnishings and



board games along with complimentary high-speed internet, flat screen tv, and iPod docking stations. Each renovated room features a simple, retro fitting for a stylish, yet family-friendly, atmosphere. After a long day relax in the outdoor heated swimming pool and sun deck. The Americana also offers the Custom Burger and Lounge where you can create the all-American meal of your dreams. Choose from an abundance of fresh, local ingredients, from patties and toppings, to sauces and buns. Understated references to classic American pastimes and pop-culture create a San Francisco hotel experience well suited for all travelers.

ROOM RATES:	SINGLE/DOUBLE	DOUBLE/DOUBLE	TRIPLE	QUAD
	\$149.00	\$159.00	\$169.00	\$179.00

3 CHANCELLOR HOTEL ON UNION SQUARE

33 Powell Street, San Francisco, CA 94102 .7 Miles to Convention Center

The Chancellor is a charming hotel located in the heart of San Francisco. Since 1914, the Chancellor has seen many improvements but one thing hasn't changed; it is still a classic boutique hotel serving guests who want to be surrounded by world class shopping, restaurants, and theatre



at a good value. The business traveler will also find great value in our hotel because of its short walk to the Moscone Convention Center, free local calls, two line phones with data ports and the Chancellor Hotel's Clipper Ship Meeting Room. Every room is decorated in a classic European motif and contains the amenities that our guests have come to expect. Wired or wireless, the hotel has what you need. All public areas and guest rooms have a free WiFi signal and free high-speed internet access plug-ins are in the lobby bar as well. The Chancellor Hotel is an all non smoking hotel.

ROOM RATES:	SINGLE/DOUBLE
	\$165.00

4 GALLERIA PARK HOTEL

191 Sutter Street, San Francisco, CA 94104 .5 Miles to Convention Center

The Galleria Park Hotel is adjacent to Crocker Galleria shopping and two blocks east of Union Square. Chinatown and the Moscone Convention Center are within four blocks. The hotel hosts complimentary wine receptions every evening



in the lobby. The on-site business center offers complimentary high-speed wired and wireless internet access. Recreational amenities include a fitness center with cardiovascular equipment and a landscaped rooftop garden overlooking the skyline from a winding path. Town car service is complimentary within three miles of the hotel during weekdays. With vaulted ceilings and leather furnishings, the Galleria Park Hotel's 177 guest rooms elaborate the hotel's Euro-influenced theme. Premium bedding includes pillow top mattresses and Italian Frette linens. High-speed wired and wireless internet access is complimentary. Flat-screen televisions stand beside CD players, mp3 docking stations and video game consoles. Additional amenities include coffeemakers and minibars. The Galleria Park is an all non smoking hotel.

ROOM RATES:	SINGLE/DOUBLE			
-	\$206.00			

5 INTERCONTINENTAL SAN FRANCISCO (MARKET STREET) 888 Howard Street, San Francisco, CA, 94103

.2 Miles to Convention Center

The InterContinental San Francisco, a graceful tower of translucent cool-blue, soars 32 stories above the vibrant South of Market (SoMa) neighborhood, and is quickly taking its place among the city's most admired landmarks. Directly adjacent to the Moscone West Convention Center, the InterContinental San Francisco occupies a strategic location for both business and leisure in America's most dynamic and beloved city. While its convenience for businesspersons is unrivaled, San Francisco's newest luxury hotel is also within easy walking distance of premium shopping areas, a diverse collection of trendy and upscale restaurants and bars, and a number of major tourist attractions.



ROOM RATES:	SINGLE/DOUBLE	DOUBLE/DOUBLE	TRIPLE	QUAD	
	\$320.00	\$320.00	\$350.00	\$380.00	

6 KING GEORGE HOTEL

334 Mason Street, San Francisco, CA 94102 .6 Miles to Convention Center

The King George Hotel offers the perfect location. The hotel shares sidewalks with fine dining, world class shopping, theatre, the Moscone Convention Center, and the city's famous cable car line to Fisherman's Wharf. A



tradition of charm and personal service has been the hotel's hallmark since first opening its doors in 1912. The hotel's amenities are distinctly up-to-date, including complimentary in-room high speed internet access, cable television, ironing equipment, and direct dial telephone with voicemail. The hotel also offers 24-hour room service.

Located in a great location, the King George Hotel shares sidewalks with fine dining, world class shopping, theatre, the Moscone Convention Center and the city's famous cable car line. The hotel's amenities include complimentary in room high speed internet.

ROOM RATES:	SINGLE/DOUBLE
	\$145.00

HOTEL DESCRIPTIONS CONT.

PARC 55 HOTEL 55 Cyril Magnin Street, San Francisco, CA 94102

.5 Miles to Convention Center

Located in downtown San Francisco, Parc 55 Hotel is the perfect setting for the business or leisure traveler. Situated in the financial district and next to the renowned Union Square shopping area and theatre districts, the sites of the city are

easily accessible from our Union Square San Francisco hotel accommodations. Take a stroll to the San Francisco Museum of Modern Art and the Yerba Buena Gardens. Attend a function at the Moscone Convention Center. Enjoy a ride on the cable car system - just a half-block away. Quick access to BART and the East Bay and area airports is available from our comfortable hotel in downtown San Francisco, CA.

ROOM RATES:	SINGLE/DOUBLE	DOUBLE/DOUBLE	TRIPLE	QUAD	
	\$269.00	\$269.00	\$299.00	\$309.00	

8 PICKWICK HOTEL 85 Fifth Street, San Francisco, CA 94103 .4 Miles to Convention Center

The Pickwick is an outstanding example of Neo-Gothic Architecture coupled with luxury boutique style. Enter into its grand lobby, with marble floor and sitting area, and you feel like you've entered the Golden Age of Art Deco. With

its film-noir-style, seven-story corner sign, the Pickwick hearkens back to the 30s with its focus firmly on the future. Built in 1926, the 189-room hotel is a favorite of leisure and business travelers, who appreciate its proximity to Union Square, San Francisco Shopping Centre and Moscone Convention Center. Located in the heart of cosmopolitan San Francisco.

ROOM RATES:	SINGLE/DOUBLE	DOUBLE/DOUBLE	TRIPLE	QUAD	
	\$209.00	\$209.00	\$229.00	\$249.00	

9 POWELL HOTEL

28 Cyril Magnin Street, San Francisco, CA 94102 .5 Miles to Convention Center

Built in 1908, the beautiful Powell Hotel has been a favorite choice for visitors for almost a century. Our ideal location, friendly and welcoming service and corporate-class accommodations are the best reasons to make The Powell



Hotel your "home away from home." All of the guest rooms have high ceilings, private bathrooms, key-card door locks, windows that open, writing desk, and more. Once you've experienced the comfort and convenience of The Powell Hotel, you are sure to be back. The Powell Hotel is an all non smoking hotel.

ROOM RATES:	SINGLE/DOUBLE	DOUBLE/DOUBLE	TRIPLE	QUAD	
	\$180.00	\$180.00	\$195.00	\$210.00	

SAN FRANCISCO MARRIOTT MARQUIS 55 4th Street, San Francisco, CA, 94103 .6 Miles to Convention Center

The Marriott San Francisco sits just south of Market Street. The Moscone Convention Center and the Museum of Modern Art are one block from this hotel and the Financial District and Union Square are within four blocks. Four dining options are prevalent, including a restaurant terrace, a sports bar and deli, and a



Starbucks Coffee shop. The staffed business center offers print, fax and photocopy services. Wireless internet access is available throughout the hotel's expansive lobby area. The complimentary on-site health club offers a fitness center overlooking an outdoor rooftop garden, indoor pool and spa tub, saunas and steam rooms. Spa services, including massages and facials, are also available for a fee. The hotel's guest rooms are furnished with Marriott's signature Revive Bedding, with pillow top mattresses, 300-thread count sheets, down comforters and pillows. Each room features views of the San Francisco skyline from 39 floors. Additional amenities include high-speed wired and wireless internet access, complimentary weekday newspapers, and a 32-inch television with premium cable channels. The San Francisco Marriott is an all non smoking hotel.

ROOM RATES:	SINGLE/DOUBLE	DOUBLE/DOUBLE	TRIPLE	QUAD	
	\$309.00	\$309.00	\$339.00	\$359.00	





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BOARD OF DIRECTORS 2011 - 2012

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Editorial Advisory Board Chair



HOUSING FORM

Saturday, February 4, 2012 – Tuesday, February 7, 2012 Housing Deadline: January 11, 2012

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Chancellor Hotel on Union Square

Galleria Park Hotel

InterContinental SF

King George Hotel

Pickwick Hotel

SF Marriott Marquis

Powell Hotel

Park 55 Wyndham Hotel

2012 ANNUAL MEETING OF THE ORTHOPAEDIC RESEARCH SOCIETY

San Francisco, California

Meeting Location: Moscone West Convention Center

ORS ID Number	Number Number is printed on mailer; housing cannot be assigned without ID number.) number.		
Name										
	(L	.ast)		(First)				(Middle Initial)		
Hospital/Institution										
Street Address										
City				State/Pro	ovince		Zip	Code		
Country: 🗆 USA		🗆 Canada	□ Oth	er						
Daytime phone numbe	r									
E-mail address					Fax num	nber				
(C	onfirmation v	vill be sent to e-mail address if provide	ed)			(Country code	e and city code requ	ired outside US and Canada)		
Reservation Informat	ion:									
1st choice		2nd choice	3rd choice				_ 4th choice			
Arrival date:/	/2012	2 Departure date:	/	_/2012	/2012 Check if attending ORS/AAOS			\Box Check if attending ORS only		
Accommodations: Single, one person/one bed Double, two people/one bed Double/double, two people/two beds			Special Requests: □ Smoking Room □ ADA Room └							
	Map #	Hotel		Single	Double	Double/Double	Triple			
	1	Hotel Adagio		\$214	\$214	\$214	\$234			
	2	BW Americania		\$149	\$149	\$159	\$169			

Reservations Can Be Made:

\$165

\$206

\$320

\$145

\$269

\$209

\$180

\$309

\$165

\$206

\$320

\$145

\$269

\$209

\$180

\$309

\$320

\$269

\$209

\$180

\$309

\$350

\$299

\$229

\$195

\$339

Online 24 hours; 7 days a week	www.ors.org	Immediate reservation confirmation
By telephone	1.972.349.5876 International	8 AM – 6:30 PM Central Time Mon-Fri
	866.207.3615 Domestic	8 AM – 6:30 PM Central Time Mon-Fri
By fax 24 hours; 7 days a week	972.349.7715 US and Canada	Cover sheet not required

Deposit:		
Card Number	Expiration Date:	
Name as printed on card:	□ MasterCard	□Visa
Signature:	□ American Express	Discover

Reservation Policies:

• Deposit of first night's room fee and tax is due at time of reservation.

• All rates are in U.S. funds.

•	Confirmation	of	reservation	will	be	sent to	you within	(3)) working	days of	receipt.
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• Your credit card will be charged immediately. Changes or cancellations to reservations must be made to Wyndham Jade by January 11, 2012.

• Policies on reservation cancellation and arrival/departure changes vary by hotel. Check your confirmation for specific details.



ADVANCE REGISTRATION FORM

2012 ANNUAL MEETING OF THE ORTHOPAEDIC RESEARCH SOCIETY

Saturday, February 4 – Tuesday, February 7, 2012 • San Francisco, California

Registrations MUST BE RECEIVED ON OR BEFORE DECEMBER 16, 2011 to receive the advance registration rate.

Please type or print or attach a business card: Your ORS ID# ()									
Degree (Choose only one) Degree (Choose only one) Degree (Choose only one)		(Orthopaedic Surgeon)	🗆 PhD	DVM	□MS	BS	□ Other		
First Name	Last Name								
Institute/Company		Department							
Address									
City		State/Province	_ Zip/Post	al Code					
Country		E-mail Address							
Phone		Fax							
I am a (please check one) Biologist Primary Affiliation (please check one) Secondary Specialization (please check one)	 Bioengineer Academic Applied Science 	□ Clinician □ Industry e □ Basic Sc			□ Other □ Governmer □ Clinical	nt	al and Administrative		

Select approriate category	ACTIVE	AFFLIATE	ASSOCIATE	EMERITUS	RESIDENT/ Fellow*	PHD CANDIDATE/ Student*	NON-MEMBER	
Meeting Registraion	□ \$320	\$320	□ \$120	NO FEE	□\$210	□\$210	\$620	
Events (Registraion is required to attend the events below, if appropriate)								
Grant Writing Workshop Friday, February 3 (8:00 am - 5:00 pm)	□\$95	□\$95	□\$95	-	□\$95	□\$95	□\$120	
Professional Advancement Series I Saturday, February 4 (8:00 am - 9:30 am)	🗆 No Fee	🗆 No Fee	🗆 No Fee	-	🗆 No Fee	🗆 No Fee	🗆 No Fee	
Professional Advancement Series II Sunday, February 5 (8:00 am - 9:30 am)	🗆 No Fee	🗆 No Fee	🗆 No Fee	-	🗆 No Fee	🗆 No Fee	🗆 No Fee	
Meet the Mentors Luncheon Sunday, February 5 (12:00 pm - 1:30 pm)	□ \$30	□\$30	□\$30	-	□ \$30	□\$30	□\$35	
Women's Leadership Forum Dinner Sunday, February 5 (7:30 pm - 9:00 pm)	□\$65	□\$65	□\$65	-	□ \$65	□\$65	□ \$80	
Clinical Research Forum Monday, February 6 (8:00 am - 4:30 pm)	🗆 No Fee	🗆 No Fee	🗆 No Fee	-	🗆 No Fee	🗆 No Fee	🗆 No Fee	
Professional Advancement Series III Monday, February 6 (8:00 am - 9:30 am)	🗆 No Fee	🗆 No Fee	🗆 No Fee	-	🗆 No Fee	🗆 No Fee	🗆 No Fee	
Meet the Industry Members Luncheon Monday, February 6 (12:15 pm - 1:30 pm)	□ \$30	□\$30	□\$30	_	□ \$30	□\$30	□\$35	

*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.

Meeting Registration Fee	\$
Event Fee	\$
Total Fee	\$

(Signature of Chief or Staff/Department Head)

REGISTRATIONS AFTER DECEMBER 16, 2011 CAN BE DONE ONLINE ONLY AT WWW.ORS.ORG.

(Signature)

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

(Card #)

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

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

Register online at www.ors.org	Fax Form to: 847.823.5772	Mail to: Orthopaedic Research Society 35138 Eagle Way, Chicago, IL 60678-1351		
		Check if ADA (Americans with Disabilities Act) is desired. Please specify:		

(Expiration Date)



6300 North River Road, Suite 602 Rosemont, Illinois 60018

ADVANCE REGISTRATION DEADLINE: DECEMBER 16, 2011

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February 4 - 7

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> 2012 ANNUAL MEETING