

## ORS Orthopaedic Implants Section Newsletter



### ***Did you know?***

The [ORS Orthopaedic Implants Research Section](#) launched in August 2016 by the organizers of the Implant RIG and the ORS.

## **Growing the Footprint of the Research Section Community**



Thanks to all who contributed to making the ORS Orthopaedic Implants Research Section: Model Credibility Symposium, ORS Orthopaedic Research Section Scientific Meeting and ORS 2022 Annual Meeting a great success! It was wonderful to have the chance to reconnect with colleagues, including at our section meetings.

In this newsletter issue, we highlight the variety of programming from our Research Section held during the meeting in February. Please share your ideas and topics of interest that could make for a virtual scientific session, a session at ORS 2023 and others.

The Section leadership has finalized goals and initiatives for 2022. These initiatives include virtual sessions culminating in the ORS 2023 Annual Meeting.

We look forward to each of you to help us to continue to grow the footprint of the implants community within ORS!



**Meet your Orthopaedic Implants Research Section leadership!**

Section Chair

**Jeff Bischoff, PhD, Zimmer Biomet Inc**

Section Chair Elect

**Trey Crisco, PhD, Brown University and Rhode Island Hospital**

Section Past Chair

**William Mihalko, MD, PhD, Campbell Clinic Orthopaedics/University of Tennessee Health Science Center**

Section Secretary

**Kenneth Urish, MD, PhD, University of Pittsburgh**

Section Treasurer

**Michael Hast, PhD, University of Pennsylvania**

Section Research & Education Chair

**Jonathan Gustafson, PhD, Rush University Medical Center**

Section Membership Chair

**Alexander Christ, MD, University of Southern California, Department of Orthopaedic Surgery**

Section Members-at-Large

**Emanuele Chisari, MD, Rothman Orthopaedic Institute/University of Groningen**

**Cheryl Liu, PhD, Stryker**

**Joshua Roth, PhD, University of Wisconsin-Madison**

We appreciate the service of those who have completed their volunteer terms and wish the selected officers success in their new roles!

## **Model Credibility Symposium Highlights**

**Computational Modeling to Support Implant Design and Evaluation and Clinical**

## Decision Making – Practical Considerations on Model Credibility

Held Friday, February 4, 2022

Organizers: **Jeff Bischoff, PhD** and **Jonathan Gustafson, PhD**

Culminating from [3 virtual scientific sessions](#) held in 2021, this program included:

- High level review of key points from the virtual scientific sessions.
- Presentation of specific case studies by participants taken to completion (or near completion), with lessons learned
- Abstract-based session on other CM&S applications, focused on content from students, post-graduate trainees and early career attendees
- Panel discussion with academic, industry, and clinical leaders in the CM&S space.

[View the 2021 Virtual Session Recordings](#)



## Research Section 2022 Scientific Meeting Highlights

The [Research Section Scientific Meeting](#) was divided into two parts.

The first part of the meeting was moderated by **Jeff Bischoff, PhD**, Zimmer Biomet, and **Ken Urish, MD, PhD**, University of Pittsburgh. The Section members' only portion focused on support and alignment in total shoulder arthroplasty from a clinician's viewpoint, and how the functional mechanics of the shoulder are best served. This was presented by **Andy Kuntz, MD**, University of Pennsylvania, and **Heath Henninger, PhD**, University of Utah.

There was lively discussion about newer alignment techniques in total knee arthroplasty, with a presentation on the theory behind kinematic alignment and issues with TKA joint modeling with regards to modeling presented by Steve Howell, MD, Adventist Health, and Azhar Ali, PhD, Stryker.

Following the Section members' only portion, the second half of the meeting was open to all meeting attendees with a focus on additive manufacturing (AM), and whether it has made a difference in clinical care. Mathias Bostrom, MD and **Timothy Wright, PhD**, from

the Hospital for Special Surgery, squared off against Brett Levine, MD and **Robin Pourzal, PhD**, both from Rush University Medical Center.

The meeting was well-attended and featured great discussion with the attendees. We appreciate all speakers for contributing to the meeting!

## Congratulations 2022 Podium and Poster Award Recipients

The Orthopaedic Implants Research Section congratulates the 2022 Podium and Poster Award recipients announced during the [ORS 2022 Closing Session](#) held Tuesday, February 8.



**2022**  
ANNUAL MEETING  
ACCELERATING MUSCULOSKELETAL DISCOVERY  
February 4-8, 2022 • Tampa, Florida

Orthopaedic Implants  
Podium Award Recipients



<b>Mark Lemoine, PhD</b> Royal College Of Surgeons In Ireland	<b>Kevin Koch, PhD</b> Medical College of Wisconsin	<b>Christopher Roche</b> Exactech, Inc.
		
<b>Presentation # 32</b> Using Machine Learning To Predict Internal Rotation After Anatomic And Reverse Total Shoulder Arthroplasty	<b>Presentation # 350</b> Mri-based Radiomic Analysis Of Soft Tissue Reactions Near Total Hip Arthroplasty	<b>Presentation # 231</b> Using Machine Learning To Predict Internal Rotation After Anatomic And Reverse Total Shoulder Arthroplasty



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ANNUAL MEETING  
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Orthopaedic Implants  
Poster Award Recipients



<b>Deborah Hall, BS</b> Rush University Medical Center	<b>Casey Myers</b> University Denver	<b>Matthew Teeter</b> Western University
		
<b>Presentation # 1717</b> Fretting And Corrosion Of Dual Mobility Hip Metal Liners: Role Of Design, Microstructure, And Malseating	<b>Presentation # 1643</b> Spinopelvic Mobility In THA And Lumbar Fusion Patients Across A Range Of Common Functional X-ray Positions	<b>Presentation # 1714</b> Quantitative Susceptibility Mapping Of Brain Regions To Assess Metal Deposition Following Total Hip Arthroplasty And Hip Resurfacing Arthroplasty

**ORS 2023: Call for Workshop Applications**



The ORS Annual Meeting Scientific Program Committee is seeking workshop application for the ORS 2023 Annual Meeting in a wide variety of topics which represent basic, translational, and clinical research, as well as innovative technologies. [Learn more and submit your application!](#)

## Upcoming Implant Related Meetings/Events

ISTA 2022

August 31 – September 3, 2022

Maui, Hawaii, USA

ISOLS 2022

September 6-9, 2022

Los Angeles, CA, USA

ICORS 2022

Sept 7-10, 2022

Edinburgh, Scotland

AAHKS 2022

November 3-6, 2022

Dallas, TX, USA



## *Journal of Orthopaedic Research®*

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[Check Out the April Issue.](#)

## ORS Career Center

Check out the latest opportunities available via the [ORS Career Center](#) including:

[Duke Orthopaedic Surgery - Adult Reconstruction](#)

Duke Health

[Research Assistant 2](#)

Oregon Health and Science University

Recruit the most talented  
faculty/employees in the  
field of musculoskeletal research



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## Connect with the Section Officers

### *Share with us!*

If you have suggestions for Section Member Spotlight interviews, featured JOR publications, contributions to our conference reports section, or any other potential contribution to our quarterly e-newsletter, please contact **Alexander Christ, MD, Section Membership Chair** at [alexander.christ@med.usc.edu](mailto:alexander.christ@med.usc.edu).



### **Orthopaedic Research Society**

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