

ORS Southern California Regional Symposium Orthopaedic Research: from Mechanism to Mechanics Ambassadors Friday, October 12, 2018

Symposium Cedars-Sinai Medical Center, Education Conference Center, Los Angeles, California

8:00 AM - 8:20 AM	Registration and Breakfast	
8:20 AM – 8:40 AM	Introduction and Welcome	Dmitriy Sheyn, PhD, ORS Ambassador, Cedars-Sinai Medical Center Mark Vrahas, MD, Chair, Department of Orthopedics, Cedars-Sinai Medical Center Clive Svendsen, PhD, Director of Regenerative Medicine Institute, Cedars- Sinai Medical Center
8:40 AM – 9:05 AM	The hope and knowledge gap: Update on disease modification, facilitation and regeneration for articular cartilage and osteoarthritis	Bert Mandelbaum, MD, CSMC-KJI
9:05 AM - 9:30 AM	Role of Hedgehog signaling in a model of large-scale bone regeneration	Francesca Mariani, PhD, USC
9:30 AM – 9:55 AM	Patterning Cell Fate at the Interface Between Tendon and Bone	Amy Merrill-Brugger, PhD, USC
9:55 AM – 10:05 AM	Networking Break/Coffee	
10:05 AM - 10:35 AM	Regulating Musculoskeletal Cell Systems with CRISPR Gene Activators and Repressors	Robert Bowles, PhD, University of Utah
10:35 AM - 11:00 AM	Bio-Mechanics and Mechano-Biology in Osteoarthritis	Robert Sah, PhD, UCSD
	 Fusion Melodie Metzger, PhD, Cedars-Sinai Orthopaedic Biomechanics Laboratory Non-fibroadipogenic pericytes from human embryonic stem cells attenuate degeneration of the chronically injured mouse rotator cuff muscle	
12:00 PM – 1:00 PM	Networking Lunch	Altik I. I
1:00 PM – 1:25 PM	Micro-engineered systems for regenerative engineering	Ali Kademhuseini, PhD, UCLA
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1:25 PM – 1:50 PM	Drug discovery in the bone field: a recent perspective	Charles McKenna, PhD, USC
1:50 PM – 2:15 PM	Nanomaterials for bone regeneration	Charles McKenna, PhD, USC Min Lee, PhD, UCLA
1:50 PM – 2:15 PM 2:15 PM – 3:00 PM	Nanomaterials for bone regeneration Networking Break	Min Lee, PhD, UCLA
1:50 PM – 2:15 PM	Nanomaterials for bone regeneration Networking Break Taking Craniofacial Patient Discoveries to the International Space Station	Min Lee, PhD, UCLA Jin Hee Kwak, DDS, UCLA
1:50 PM – 2:15 PM 2:15 PM – 3:00 PM	Nanomaterials for bone regeneration Networking Break Taking Craniofacial Patient Discoveries to the International Space Station Creating an Orthopaedic Trauma Registry. The hurdles, pitfalls and the value.	Min Lee, PhD, UCLA
1:50 PM – 2:15 PM 2:15 PM – 3:00 PM 3:00 PM – 3:25 PM	Nanomaterials for bone regeneration Networking Break Taking Craniofacial Patient Discoveries to the International Space Station Creating an Orthopaedic Trauma Registry. The	Min Lee, PhD, UCLA Jin Hee Kwak, DDS, UCLA

1. Alterations to the Osmotic Environment Lead to Changes in the Collagen Ultrastructure of Cartilage and Meniscus Eva Baylon, PhD, University of California San Francisco 2. The Effect of Perioperative Fascia Iliaca Nerve Blocks in Hip Fracture Patients Eytan Debbi, MD, PhD, Cedars-Sinai Medical Center, Dept. of Orthopaedic Surgery 3. A novel 3D matrix in vitro model to study the macrophage activation and fusion Josephine Yen Fang, MS, University of Southern California 4. Infraspinatus Tenotomy Increases Glenoid Exposure with the Modifed Judet Approach to the Scapula John M. Garlich, MD, Cedars-Sinai Medical Center, Dept. of Orthopaedic Surgery 5. Time-to-Block: Early Fascia Iliaca Block Reduces Opioid Use and Length of Stay in Geriatric Hip Fracture Patients Amit Pujari Cedars-Sinai Medical Center, Dept. of Orthopaedic Surgery (presented by John Garlich) 6. Neural Crest-derived MSCs enhance Cranial Allograft Integration Juliane D. Glaeser, PhD, Cedars-Sinai Medical Center 7. Omega 3 Fatty Acid Supplementation attenuates Intervertebral Disc Degeneration Zachary NaPier, MD, Cedars-Sinai Medical Center (presented by Juliane Glaeser) 8. Three-dimensional (3-D) Microenvironment Modulates Inside-out and Outside-in Cell Signaling in Human Articular Chondrocytes Bo Han, PhD, University of Southern California 9. In vivo bone formation post-injury: The Regenerative Ability of the Periosteum Jason Hsieh, BS, University of Southern California, Keck School of Medicine 10. Preoperative Hemoglobin in Hip Fractures: A Predictor of Postoperative Mobilization and Hospital Length of Stay Ali Noorzad, MD, Cedars-Sinai Medical Center 11. Aged Mice Demonstrate Greater Muscle Degeneration After Rotator Cuff Injury Abhinav K. Sharma, BS, University of California Los Angeles, David Geffen School of Medicine 12. Biomechanical Analysis of Thumb Ulnar Collateral Ligament Tear Kinematics Steven S. Shin, MD, Cedars-Sinai Kerlan-Jobe Institute 13. RNA-Sequencing Analysis of Fibroadipogenesis and Transient Myogenesis in a Murine Model of Massive Rotator Cuff Tear Ajith Subhash, BS, University of California Los Angeles, David Geffen School of Medicine 14. Perioperative Transcatheter Aortic Valve Replacement (TAVR) Leads to Higher Rates of Inpatient Complications in Hip Fracture Patients with Severe Aortic Stenosis Dheeraj Yalamanchili, MD, Cedars-Sinai Medical Center 5:30 PM - 5:35 PM **Closing Remarks** Dmitriy Sheyn, PhD, ORS Ambassador, Cedars-Sinai Medical Center 5:35 PM - 5:45 PM Please head over to the Sofitel for networking reception & awards ceremony. 5:45 PM - 7:30 PM **Networking Reception & Awards Ceremony** The Aviary, Sofitel Los Angeles at Beverly Hills 8555 Beverly Blvd., Los Angeles, CA 90048

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