

International Society for Technology in Arthroplasty		
Emerging Technologies in Arthroplasty: <i>Advancing Outcomes</i>		
Saturday, 30 October, 2021		
Session / Presentation Title	Speaker/Moderator	Speaker/Moderator Affiliation
Preoperative Planning Technologies	Melinda Harman, PhD	Clemson University, Clemson, South Carolina, USA
	Scott Banks, PhD	University of Florida, Gainesville, Florida, USA
Pre-operative Planning Technology: The Past, the Now and the Future	Stefan Kreuzer, MD, MS	INOv8 Orthopedics, Houston, Texas, USA
Discussion		
Total Knee Arthroplasty Pre-Planning Tool to Restore Native Kinematics With Standard Cruciate-Retaining Implants	David Leandro Dejtiar, PhD	Materialise, Leuven, Belgium
Can the Use of Preoperative Planning Decrease Costs and Increase Efficiency in the OR?	Alessia Lavin, MD	University of Miami, Weston, Florida, USA
Discussion		
Pelvic Tilt Alters Radiographic Measurement of Pre- to Post-Operative Limb Length Change in Total Hip Arthroplasty	Jeff Muir, MSc	IntelliJoint Surgical, Waterloo, Ontario, Canada
An Autonomous Method for Extracting 3D Knee Replacement Kinematics From Dynamic Single Plane Fluoroscopic Images	Andrew Jensen, PhD Student	University of Florida, Gainesville, Florida, USA
Discussion		
GPS Navigation System Allows the Surgeon to Prepare the Implant Site as Planned on Preoperative Software in Reverse Shoulder Arthroplasty.	Andrea Giorgini, MD	Policlinico di Modena, Modena, Italy
Emergence of Robotic Testing as a Next Generation Approach for Glenohumeral Joint Characterization	Kyle Snethen, PhD	Zimmer Biomet, Warsaw, Indiana, USA
Using Imageless Navigation to Quantify Cutting Error in Total Knee Arthroplasty	Ran Schwarzkopf, MD, MSc	New York University Langone, New York, New York, USA
Discussion		
Clinical Technology Watch List	Peter Walker, PhD	New York University, New York, New York, USA
	Arun Mullaji, FRCSEd, MCh Orth, MS Orth	Mullaji Knee Clinic, Mumbai, Maharashtra, India
Can Cobalt be Eliminated from Articulating Surfaces?	Leo Whiteside, MD	Missouri Bone & Joint Center, St Louis, Missouri, USA
Discussion		
What Can Registries Tell Us in 2021?	David Lewallen, MD	Mayo Clinic, Rochester, Minnesota, USA
Discussion		
The Key to Clinical Adoption of New Technologies: The Hub Concept	Solomon Dadia, MD	Tel Aviv Medical Center, Tel Aviv, Israel
Discussion		
Digital Medicine and Wearable Sensors: Is there Real Value?	Matthias Verstraete, PhD	Stryker, Amsterdam, Netherlands
Discussion		
Hip Resurfacing Rides Again! Why & How?	Catherine Van Der Straeten, MD, PhD	Ghent University, Ghent, Belgium
Discussion		
Computerized Pre-Operative Planning for THA	Nobuhiko Sugano, MD, PhD	Osaka University, Osaka, Japan
Discussion		
Achieving Optimal Outcomes in Joint Arthroplasty	Sophia Sangiorgio, PhD	University of California, Los Angeles, Los Angeles, California, USA
	Morteza Meftah, MD	New York University Langone, New York, New York, USA
Using an Arthroplasty Registry to Drive Quality Changes	David Markel, MD	CORE Institute, Novi, Michigan, USA
Discussion		
Joint Balance Throughout Flexion Has Greater Impact on One Year Pain Outcome Than Component Alignment in TKA	Edgar Wakelin, PhD	Corin, Raynham, Massachusetts, USA
Does Internal Rotation of the Femoral TKA Component Influence Patient Outcomes?	Robert Marchand, MD	South County Orthopedic, South County, Rhode Island, USA
Discussion		
Residual Varus Alignment Can Reduce Joint Awareness, Restore Joint Parallelism, and Preserve the Soft Tissue Envelope During Total Knee Arthroplasty for Varus Osteoarthritis	Dae Keun Suh, MD	Korea University School of Medicine, Seoul, South Korea
Assessing Correlations Between Patient-Reported Outcomes and Knee Kinematics Following TKA Procedure	Michael LaCour, PhD	University of Tennessee, Knoxville, Knoxville, Tennessee, USA
Discussion		
Revision Total Knee Arthroplasty With the Use of Restricted Kinematic Alignment Protocol: Surgical Technique and Initial Results	Lazaros Kostretzis, MD	University of Montreal, Montreal, Quebec, Canada
Monoblock Press-Fit Cups With Large-Diameter Bearings Are Safe for THA in Patients With Atypical Acetabula. a Case Series of 125 Hips With Nine Years Average Follow-Up	Presenter: Paul-Andre Synnott, MD Discusser: Maged Shaheen, MD	University of Montreal, Montreal, Quebec, Canada
Obese Patients With BMI 35 and Above Undergoing Cementless Total Knee Arthroplasty Have Similar Clinical Outcomes and Survivorship	Graham Goh, MRCS	Rothman Institute, Philadelphia, Pennsylvania, USA
Discussion		
Emerging Technologies	Philip Noble, PhD	University of Texas at Houston, Houston, Texas, USA
	Matthew Hepinstall, MD	New York University Langone, New York, New York, USA

AI & Machine Learning	Valentina Padoia, PhD	University of California San Francisco, San Francisco, California, USA
Discussion		
Enhanced Reality for Orthopaedic Training	Kartik Logishetty, PhD	Imperial College London, London, United Kingdom
Discussion		
Translational Research is Great, but how do we Fund it?	Douglas Van Citters, PhD	Dartmouth, Hanover, New Hampshire, USA
Discussion		
Applications of 3D Printing in Arthroplasty	Solomon Dadia, MD	Tel Aviv Medical Center, Tel Aviv, Israel
Discussion		
Clinical Realization of Augmented Reality Guidance in THA	Stephen Murphy, MD	New England Baptist Hospital, Boston, Massachusetts, USA
Discussion		
Computerized TKA Balancing	John Keggi, MD	Orthopaedics New England, Waterbury, Connecticut, USA
Discussion		
TKA: Biomechanics <i>Are "Normal Knee Kinematics" of Critical Importance after TKA?</i>	Bill Taylor, PhD	ETH Zurich, Zurich, Switzerland
	Jim Pritchett, MD	University of Washington, Seattle, Washington, USA
TKA: Clinical Results <i>Has New Technology Improved the Outcome of TKA?</i>	Scott Banks, PhD	University of Florida, Gainesville, Florida, USA
	Morteza Meftah, MD	New York University Langone, New York, New York, USA
THA: Biomechanics <i>When are Dual Mobility Cups Really Necessary?</i>	Ken Mathis, MD	University of Texas at Houston, Houston, Texas, USA
	Jonathan Jeffers, PhD	Imperial College London, London, United Kingdom
Robotic Assistance in TJA <i>When do Robotics Add Value to TJA? Are Changes Needed?</i>	Bernard Stulberg, MD	St Vincent Charity Medical Center, Cleveland, Ohio, USA
	Mark Pagnano, MD	Mayo Clinic, Rochester, Minnesota, USA
Computational Modeling <i>Is Experimental Validation Keeping up with the Sophistication of Computational Modeling?</i>	Carl Imhauser, PhD	Hospital for Special Surgery, New York, New York, USA
	Jeff Bischoff, PhD	Zimmer Biomet, Warsaw, Indiana, USA
Shoulder Arthroplasty <i>Technological Advances in Total Shoulder Arthroplasty: Fixation and Component Positioning</i>	Joseph Iannotti, MD, PhD	Cleveland Clinic, Weston, Florida, USA
	Vani Sabesan, MD	Atlantis Orthopedics, Boca Raton, Florida, USA