

ISTA Nashville 2024 Program

Day by Day – Room by Room

WEDNESDAY 28 AUGUST, 2024

Governor's B (Expo Hall)

6:30 pm - 8:30 pm
Welcome Reception

Governor's A/E (Podium)

5:00 pm - 6:30 pm
Early Career Investigator Round Table

6:30 pm - 8:30 pm
Welcome Reception

Chamber Room BCD (Poster)

5:00 pm - 8:30 pm
Poster Session 1 Setup

Chamber Room E (Short Talk)

5:00 pm - 7:00 pm
Speaker Ready Room

Wednesday August 28, 2024

THURSDAY 29 AUGUST, 2024

Governor's B (Expo Hall)

6:45 am - 8:00 am

Breakfast

9:30 am - 10:15 am

Morning Break

11:15 am - 12:30 pm

Lunch Served and Poster Viewing

3:30 pm - 4:00 pm

Afternoon Break and Poster Viewing

Governor's A/E (Podium) THURSDAY AUGUST 29

7:15 am - 7:45 am: SHORT TALKS #1 (KIOSK 1): TKA Robotics

Moderators: Fares Haddad, Thomas Hall

7:15 am

Accuracy and Outcomes of a Novel Cut-Block Positioning Robotic-Arm Assisted System for Total Knee Arthroplasty: A Systematic Review and Meta-Analysis

Faseeh Zaidi; Michael Goplen; Scott Bolam; Andrew Paul Monk

7:18 am

Discussion

7:21 am

Are All Robotic Technologies Created Equal? Comparing One of the Latest Image-Free Robotic Technologies Against All Other Robotic Systems for Total Knee Arthroplasty

Anshu Gupta; Philip Huang; Michael Cross; Dhara Intwala; Jill Ruppenkamp; Dan Hoeffel

7:24 am

Discussion

7:27 am

No Difference in Patellar Resurfacing or Fixation Type in Robotic Total Knee Arthroplasty

Alana Prinios; Akram Habibi; Sophia Antonioli; Matthew Hepinstall; Morteza Meftah; Catherine Di Gangi

7:30 am

Discussion

7:33 am

Robotic-Arm-Assisted Conversion of Unicompartmental Knee Arthroplasty to Total Knee Arthroplasty

Matthew Magruder; Tanner McClure; Kevin Marchand; Michael Mont; Robert Marchand

7:36 am

Discussion

7:39 am

The Conversion of Unicompartmental Knee Arthroplasty to Total Knee Arthroplasty With Non-CT Based Robotic Assistance: A Novel Surgical Technique and Case Series

Hamza Raja; Noah Hodson; Phillip McKeeg; Luke Wesemann; Michael Charters; Trevor North

7:42 am

Discussion

Governor's A/E (Short Talk)

7:15 am - 7:45 am: SHORT TALKS #1 (KIOSK 2) Knee Alignment

Moderators: Stephen Howell, Fernando Quevedo Gonzalez

7:15 am

Are Long Leg Radiographs Necessary for Assessing Alignment Prior to Total Knee Arthroplasty?

Anoop Chandrashekar; John Ryan Martin; Gregory Polkowski; Martin Faschingbauer; Courtney Baker; Stephen Engstrom

7:18 am

Discussion

7:21 am

Effect of Patient Specific Alignment Total Knee Arthroplasty on Joint Line Obliquity and Joint Line Restoration

Ittai Shichman; Aiden Hadad; Addy S. Brandstetter; Itay Ashkenazi; Yaniv Warschwaski; Aviram Gold; Nimrod Snir

7:24 am

Discussion

7:27 am

Real-Time Intraoperative Alignment Feedback in Navigated Total Knee Arthroplasty

Allan Maas; Adrian Sauer; Ingrid Dupraz; Raphael Renaudot; Daniel Alberto Vazquez Urena; Radek Hart; Ludger Gerdesmeyer; Djordje Lazovic; Thomas M Grupp

7:30 am

Discussion

7:33 am

Measuring Static and Dynamic Frontal Plane Lower Limb Alignment Using Markerless Motion Capture

Jacob Calderone; Jereme Outerleys; Kevin Deluzio; Elise Laende

7:36 am

Discussion

7:39 am

Analyzing the Effects of Tibial Plate Positioning on Patellofemoral Mechanics in TKA Subjects Using a Forward Mathematical Model of the Knee

Caleb Chesney; Michael LaCour; Bradley Meccia; Richard Komistek

7:42 am

Discussion

7:45 am – 8:45 am: SPOTLIGHT SESSION #1: Improving outcomes in Primary TKA

Moderators: David Markel, Seung-Beom Han

7:45 am

Spotlight Talk Vinod Dasa MD

8:00 am

Discussion

8:05 am

Cocktail of Ropivacaine, Morphine and Diprosan Reduces Pain and Prolongs Analgesic Effects After Total Knee Arthroplasty: A Prospective Randomized Controlled Trial

Zhenyu Luo; Zongke Zhou

8:11 am

Reductions in Anxiety Following Total Joint Arthroplasty Are Most Closely Related to Lessening Pain

Jason Cholewa; Mike Anderson; Roberta Redfern

8:17 am

Discussion

8:21 am

Effects of Intravenous Dexamethasone on Postoperative Clinical Symptoms (Pain, Nausea and Vomiting) After Total Knee Arthroplasty According to Adrenal Function: Prospective, Observational Study

Thursday August 29, 2024

Sung Jun Jang; Hyung Min Lee; Hyunkwon Kim; Seung-Baik Kang; Moon Jong Chang; Tae Woo Kim; Jisu Park;
Min soo Cho

8:27 am

Predictive Modeling for Postoperative Pain Management in Total Knee Arthroplasty: Harnessing Artificial Intelligence for Personalized Care

Julien Lebleu; Andries Pauwels; Eduardo Vannini; Pierre-Antoine Absil; Philippe Anract; Anissa Belbachir;
Philippe Van Overschelde; Jared Weir

8:33 am

TKA Multimodal Swelling Intervention Protocol Shows Significant Reduction in BIA Values Compared to Baseline: A Pilot Study

Louis Battista; Andrew Wickline; Richard Southgate

8:39 am

Discussion

8:45 am - 9:45 am: KNEE TECHNOLOGY SYMPOSIUM: The best bang for your buck

Moderators: William Mihalko, Ruxi Marinescu

8:45 am

Moderator Intro

8:50 am

Robotic Technology: Dr Fabio Catani

8:58 am

Navigation: Dr Alexander Giurea

9:06 am

Automated Ligament Balancing Technology: Dr Chris Plaskos

9:14 am

Wearable Sensors: Dr. Sally LiArno

9:22 am

Implantable Sensors: Dr. Christopher Holland

9:30 am

Discussion

9:40 am

Audience Vote

9:45 am - 10:15 am: Morning Break

10:15 am - 11:15 am: DEBATE #1: The Value of Balancing Technology in TKA

Moderators: Arun Mullaji

10:15 am

Moderators' Introduction

10:17 am

For Dr Martin Roche

10:25 am

Against: Dr Leo Whiteside

10:33 am

Rebuttal For

10:35 am

Rebuttal Against

10:37 am

Q & A

10:42 am

Digital Image Correlation for Ligament Balancing in Total Knee Arthroplasty Using Controlled Grid-Assisted

Thursday August 29, 2024

Pie-Crusting Technique

Kristi Nguyen; Farid Amirouche; Jason Koh; Nicole Tueni; Hristo Piponov; Arash Rezai

10:48 am

Evaluating Ligament Laxity Objectives Across Full Range of Motion in Total Knee Arthroplasty: A Focus on Tibia First Technique

Prudhvi Tej Chinimilli; Laurent Angibaud; Amaury Jung; James Huddleston

10:54 am

Immediate Post-Operative Walking Asymmetry Affected by the Amount of Laxity in the Lateral Compartment in Flexion

Roberta Redfern; Mike Anderson; Jason Cholewa; Joseph Brook; Adam Henderson; Karl Surmacz

11:00 am

Surgeons' Expertise Does Not Prevent Complications in Technology Assisted TKA in Valgus Knees

Shantanu Patil; Ashok Kumar P. S.; Manideep Reddy; Anish Bharadwaj; Vijay C Bose; Pichai Suryanarayan; Kalaivanan Kanniyar

11:06 am

Discussion

11:30 am - 12:30 pm: STRYKER LUNCH SYMPOSIUM:

Personalize each patient's knee position through Mako Total Knee and Functional Knee Positioning(TM)

Faculty: Professor Fares Haddad, M.D. and Martin Roche, M.D.

12:30 pm - 1:30 pm: PRESIDENTIAL GUEST SPEAKER

12:30 pm

Introduction

12:35 pm

Importance of Diversity: Mary O'Connor

1:05 pm

Discussion

1:25 pm

1:30 pm - 2:30 pm: DEBATE #2: Unrestricted Kinematic Alignment is the New Gold Standard in TKA

Moderators: William Mihalko

1:30 pm

Moderators' Introduction

1:33 pm

For: Dr Steve Howell

1:41 pm

Against: Dr Alexander Giurea

1:49 pm

Rebuttal For

1:51 pm

Rebuttal Against

1:53 pm

Questions

1:58 pm

Femoral Resection Precision and Accuracy in Caliper-Verified Manual Kinematic Alignment Total Knee Arthroplasty vs. Robotic Arm Assistance and Patient-Specific Instrumentation

David Scott; Lauren Holbrook

2:04 pm

Risk of Tibial Baseplate Loosening Is Low in Patients Following Unrestricted Kinematic Alignment Total Knee Arthroplasty Using a Cruciate-Retaining Medial Conforming Insert: A Study Using Radiostereom

Maury Hull; Abigail Niesen; Stephen Howell; Pranav Tirumalai

Thursday August 29, 2024

2:10 pm

Perspectives in Navigated Total Knee Arthroplasty - Individual Alignments, Functional Phenotypes & Biomechanical Evidence

Thomas M Grupp; William Taylor; Ricardo Larrainzar-Garijo; Peter E. Mueller; Bjoern Gunnar Ochs; Henning Windhagen; Gavin McHugh; Allan Maas

2:16 pm

The Impact of Coronal Plane Alignment of the Knee (CPAK) Classification on Early Functional Outcomes After Primary Total Knee Arthroplasty

Faseeh Zaidj; Michael Goplen; Scott Bolam; Josh Petterwood; Peter McEwen; Andrew Paul Monk

2:22 pm

Discussion

2:30 pm - 3:30 pm: PODIUM SESSION AE/1: New Materials in Knee Arthroplasty

Moderators: David Schroeder, Aarti Shenoy

2:30 pm

Moderator Intro

2:32 pm

Challenges and Opportunities for Implant Fixation of PEEK Total Knee Arthroplasty: Lessons Learned From a Decade of Biomechanical Research

Dennis Janssen; Lennert de Ruitter; Corine Post; Adam Briscoe; Thom Bitter; Nico Verdonschot

2:38 pm

A PEEK-OPTIMA Femoral Component Articulating Against a Posterior Stabilized UHMWPE Gliding Surface Under Highly Demanding Activities Knee Wear Simulation

Thomas M Grupp; Adam Briscoe; Jens Schwiesau; Ian Revie; Berna Richter; Ludger Gerdesmeyer; William Mihalko; Ana Laura Puente Reyna

2:44 pm

Investigating the Effects of Porous Geometries on the Interfacial Adhesion of UHMWPE-PEEK Structural Composites for Orthopaedic Implant Applications

James Smith; Cemile Basgul; Mark Allen; Steven Kurtz

2:50 pm

Discussion

2:56 pm

Revision Process With a Novel PEEK-OPTIMA Femoral Knee Replacement Prosthesis

Asit Shah; Harry Gaze; Ian Revie; Adam Briscoe

3:02 pm

All-Polymer PEEK Knee Prosthesis: Radiologic Imaging Characteristics and Complication Detection

Cedric Bohyn; Dennis Janssen; Fedra Parnian Zaribaf; Adam Briscoe

3:08 pm

Discussion

3:12 pm

PEKK Promotes Osteogenic Activity in Vitro Compared to PEEK in Solid 3D Printed Specimens

Paul DeSantis; Tabitha Derr; Ryan Bock; Noreen J Hickok; Steven M. Kurtz

3:18 pm

Taguchi Optimization of Additively Manufactured PEKK and Silicon Nitride Loaded PEKK for Medical Device Applications

Tabitha Derr; Cemile Basgul; Paul DeSantis; Ryan Bock; Steven Kurtz

3:24 pm

Discussion

3:30 pm - 4:00 pm: AFTERNOON BREAK AND POSTER VIEWING

Thursday August 29, 2024

4:00 pm - 5:00 pm: SYMPOSIUM: Women in the World of Arthroplasty Research

Moderators: Sophia N. Sangiorgio, Mary I. O'Connor

4:00 pm

Moderator Introduction

4:03 pm

ISTA Women's Initiative: Catherine van Der Straeten

4:08 pm

Design and Manufacturability of Compliant and Anatomically Optimized Spinal Implants Using Laser Powder Bed Fusion Additive Manufacturing

Martine McGregor; Nichaela Vlasea; Stewart McLachlin

4:14 pm

Discussion

4:16 pm

Early Monitoring of Polyethylene Wear Following Total Knee Arthroplasty Through Model Based Wear Measurement on Plain Radiographs

Crystal Kayaro Emonde; Christof Hurschler; Andre Breuer; Max-Enno Eggers; Marcel Wichmann; Max Ettinger; Berend Denkena

4:22 pm

Discussion

4:24 pm

Radiation Sterilized and Crosslinked UHMWPE Loaded With Antibiotics

Nicoletta Inverardi; Orhun Muratoglu; Amita Sekar; Keita Fujino; Anthony Marzouca; Maria Serafim; Marcos Lora; Ebru Oral

4:30 pm

Discussion

4:32 pm

Can High-Tensile Sutures Contribute Significantly to Particle-Induced Tissue Response in Shoulder Arthroplasty?

Deborah Hall; Songyun Liu; John Scanaliato; Gregory Nicholson; Grant Garrigues; Robin Pourzal

4:38 pm

Discussion

4:40 pm

Surgical Alignment Techniques Comparisons for External Peak Knee Adduction Moments During Stair Descent

Alexis Nelson; Nuanqiu Hou; Douglas W. Powell; Marcus Ford; James Guyton; John Crockarell; Christopher Holland; Derek Dixon; Teri Ross; William Mihalko

4:46 pm

Discussion

4:48 pm

Predicted Gait Speed Recovery and Patient-Reported Pain in Patients Requiring Additional Physical Therapy Following Hip and Knee Arthroplasty

Roberta Redfern; Joseph Brook; Karl Surmacz; Mike Anderson; Jason Cholewa; Adam Henderson

4:54 pm

Discussion

Governor's C (Podium) THURSDAY AUGUST 29

7:15 am - 7:45 am: SHORT TALKS #1 (Kiosk 3) Hip Clinical

Moderators: Vipin Asopa, Cynthia Kahlenberg

Thursday August 29, 2024

7:15 am

Femoral Head Offset Effects on Abductor Muscle Function Vary Between THA Patients

J. Bohannon Mason; Duncan Bakke; David Liu; Atul Kamath; Thor Besier; Marco Schneider; [James Germano](#)

7:18 am

Discussion

7:21 am

Intraoperative Recreation of Preoperative Pelvic Tilt: Is It the Key to Reliable Acetabular Component Positioning in Direct Anterior Total Hip Arthroplasty?

Aleksander Mika; Peter Chan; Jacob Wilson; Courtney Baker; Anoop Chandrashekar; [John Ryan Martin](#)

7:24 am

Discussion

7:27 am

Neurovascular Deviations and Factors in Fused Hips: Implications for Hip Arthroplasty

[Chan Young Lee](#); TAEK-RIM YOON; Kyung-Soon Park

7:30 am

Discussion

7:33 am

The Outcomes of Repeat Two-Stage Revision Surgery for Previously Failed Two-Stage Revision Total Hip Arthroplasty

[Mohammed Wazir](#); Babar Kayani; Jenni Tahmassebi; Fares Haddad

7:36 am

Discussion

8:00 am - 9:00 am: PODIUM SESSION C/1: Problems with CoCr

Moderators: Amandine Impergre, Michael Kurtz

8:00 am

Moderator Intro

8:03 am

Risk Factors Associated With Increased Metal Sensitivity: A Retrospective Analysis Among 25,081 Pre- and Post-Operative Orthopedic Adults

Lauryn Samelko; Marco Caicedo; [Nadim Hallab](#)

8:09 am

Influence of Assembly Conditions of the Taper Junction of Modular Revision Hip Stems on Connection Strength

[Julius Böttcher](#); Kay Sellenschloh; Fenja Stiller; Anna Strube; Gerd Huber; Michael Morlock

8:15 am

Discussion

8:19 am

The Effects of Simulated CoCrMo Wear Particles on a Macrophage-Lymphocyte Co-Culture for Evaluating Cellular Corrosion

[Madison Brown](#); Danielle Bryant; Bailey Bond; Richard Smith; William Mihalko

8:25 am

Cobalt and Chromium Ion Levels in the Peri-Prosthetic Tissue of 42 Explanted CoCrMo Femoral Components Is Correlated With Surface Damage Score

[Peter Kurtz](#); Shabnam Aslani; Michael Kurtz; Lilliana Taylor; Daniel MacDonald; Nicolas Piuze; William Mihalko; Steven Kurtz; Jeremy Gilbert

8:31 am

Discussion

8:35 am

The Evolution of Pitting in Total Knee Arthroplasty

[Afton Limberg](#); Kori Jevsevar; Alexander Orem; David Jevsevar; Douglas Van Citters

8:41 am

Load and Scale Effects on Tribocorrosion Mechanisms in Biomedical CoCrMo Alloys

[Edona Hyla](#); Rob Beadling; Gregory deBoer; Richard M. Hall; Michael Bryant

8:47 am

Formation of CoS2 in the Tribological Taper Junction of Hip Implants

Adrian Wittrock; Christian Beckmann; Alfons Fischer; Saurabh Mohan Das; Christian H. Liebscher; Jörg Debus; Markus Wimmer

8:53 am

Discussion

9:00 am - 10:00 am: PODIUM C/2: Artificial Intelligence I

Moderators: Morteza Meftah, Andrew Jensen

9:00 am

Moderator Intro

9:02 am

Technology Versus Technique: Will ChatGPT Replace Orthopedic Triage Nurses?

Stephen Chenard; Aleksander Mika; Gregory Polkowski; Stephen Engstrom; Jacob Wilson; John Ryan Martin

9:08 am

AI Segmentation in Clinically Relevant Complex Orthopedic Cases: A Targeted Study on Developmental Dysplasia of the Hip

Lilian Lim; Chris Rapson; Duncan Bakke; Ju Zhang; Thor Besier; Marco Schneider

9:14 am

Discussion

9:18 am

Impact of 3D CT Reconstructed Deltoid Size, Shape, and Volume Measurements on Active Range of Motion Before and After Anatomic and Reverse Total Shoulder Arthroplasty

Christopher Roche; Josie Elwell; Hamidreza Rajabzadeh-Oghaz; Bradley Schoch; Bruno Gobbato; William Aibinder; Anshuman Singh; David Berry; Vikas Kumar

9:24 am

Impact of CT Image Hounsfield Unit Based Measures of Deltoid Muscle Quality on a Patient's Ability to Elevate Their Arm Before and After Anatomic and Reverse Total Shoulder Arthroplasty

Josie Elwell; Hamidreza Rajabzadeh-Oghaz; Bradley Schoch; Bruno Gobbato; William Aibinder; Anshuman Singh; David Berry; Vikas Kumar; Christopher Roche

9:30 am

Discussion

9:34 am

Deep Learning-Based Predictions of Polyethylene Insert Wear in Total Knee Replacements

Mattia Perrone; Steven Mell; Scott Simmons

9:40 am

An Ultrasound-Based Method to Measure Knee Kinematics Enabled by Deep Learning

Joshua Roth; Matthew Blomquist; Christopher Endemann

9:46 am

Phenotype Assessment in Three Dimensions

Gokce Yildirim; Dimitrios Georgopalis; Rachel Alexander

9:52 am

Discussion

10:00 am - 10:30 am: MORNING BREAK/POSTER VIEWING

10:30 am - 11:30 am: PODIUM C/3: Implant Fixation

Moderators: Michael Morlock, Katja Glismann

10:30 am

Moderator Intro

10:32 am

The Effect of Bone Relaxation on the Simulated Pull-Off Force of a Cementless Femoral Knee Implant

Thomas Gersie; Thom Bitter; Robert Freeman; Nico Verdonschot; Dennis Janssen

10:38 am

Migration of Cementless Tibial Baseplates Appears to Be Related to Bone Mineral Density

Fernando Quevedo Gonzalez; Daniel Buchalter; Joseph Lipman; Peter Sculco; Cynthia Kahlenberg; Eytan Debbi; Timothy Wright; Jonathan Vigdorich; David J. Mayman

10:44 am

Osteoporosis May Not Be an Absolute Contraindication for Cementless TKA

Ameer Tabbaa; Gabriel Lama; Matthew Magruder; Ariel Rodriguez; Che Hang Jason Wong

10:50 am

Discussion

10:56 am

Assessing Total Knee Arthroplasty Fixation Strength Using Inducible Displacement Measurements From Weight-Bearing CT-Based Radiostereometric Analysis

Rebecca Hext; Bart Kaptein; James Howard; Brent Lanting; Matthew Teeter

11:02 am

The Stability of Cementless Tibial Trays During Functional Activities Is Explained by Variations in Bone Quality and Surgical Preparation

Philip Noble; Sabir K. Ismaily; Shuyang Han; Hugh Jones; Rikin Patel; Jonathan E. Gold

11:08 am

Discussion

11:12 am

Is the Tibia Mechanical Axis the Correct Landmark to Minimize Risk of Tibia Loosening?

Nathan Lenz; William Fugit

11:18 am

Radiographic Evaluation of Bony Ingrowth of Highly Porous Cups; a Study of 47 Patients Cadaveric Pelvises

Jon Katzman; Benjamin Schaffler; Akram Habibi; Ran Schwarzkopf

11:24 am

Discussion

11:30 am - 12:30 pm: Zimmer Biomet Symposium: Technology Driven Data for Today's Patient

1:30 pm - 2:30 pm: PODIUM C/4: Alternatives to Arthroplasty/Other Joints

Moderators: Nobuhiko Sugano, A. Seth Greenwald

1:30 pm

Moderator Intro

1:32 pm

A Novel Ankle Joint Assessment Tool

Gokce Yildirim; Francois Lintz; Céline Fernando

1:38 pm

Discussion

1:41 pm

Accuracy and Precision Evaluation of Image-Based Computer Assisted Surgical System for Total Ankle Arthroplasty

Matthew Rueff; Zachary Tupper; Prudhvi Tej Chinimilli; Scott Gulbransen; Laureline Prouvost; Edward Haupt; Matthew Hamilton; Laurent Angibaud

1:47 pm

Discussion

1:50 pm

Tensile Forces Acting on the Posteromedial Meniscus Prosthesis Horn During Activities of Daily Living

Branco van Minnen; Tony van Tienen; Nico Verdonschot; Esmée Bosman; Albert van der Veen

Thursday August 29, 2024

1:56 pm

Discussion

1:59 pm

Exploring 3D Joint Space Width and Its Relationship to Cartilage Loss Using MR and CT Images: Data From the OAI and IMI-APPROACH Cohorts

Jared Weir; Michael Bowes; Philip Conaghan; Sebastien Lustig; [Alan Brett](#)

2:05 pm

Discussion

2:08 pm

Differences in Anterior Center-Edge Angle Using Conventional and Automated Planning for Periacetabular Osteotomy

[Nicholas Dunbar](#); Shuyang Han; James Baker; Carey Clark; Alexis Aboulafia; Alfred Mansour III; Philip Noble

2:14 pm

Discussion

2:17 pm

Sex Differences in Range of Motion After Eccentric Rotational Acetabular Osteotomy for Hip Dysplasia

[Hiroto Funahashi](#); Yasuhiko Takegami; Yusuke Osawa; Takamune Asamoto; Keiji Otaka; Hiroshi Asai

2:23 pm

Discussion

2:30 pm - 3:30 pm: SPOTLIGHT SESSION #2: Improving Outcomes with Technology in Reverse TSA

Moderators: Vani Sabesan

2:30 pm

Dr Thomas Throckmorton

2:45 pm

Discussion

2:50 pm

The Effect of Component Lateralization in Reverse Total Shoulder Arthroplasty on Muscle Function and Scapular Strains During Simulated Active Motion: An Ex-Vivo Biomechanical Study

[David Axford](#); Robert Potra; Richard Appleyard; Janos Tomka; Desmond Bokor; Sumit Raniga; Louis Ferreira

2:56 pm

Semi-Inlay Type Reverse Shoulder Arthroplasty May Enhance Scapulohumeral Rhythm Compared to Inlay Type

[Itaru Kawashima](#); Norimasa Takahashi; Keisuke Matsuki; KENJI KITAMURA; Hisato Watanabe; Ryo Haraguchi; Hayato Ryoki; Thomas Wright; Scott Banks

3:02 pm

Discussion

3:08 pm

Enhancing Range of Motion in Reverse Total Shoulder Arthroplasty Through a Novel Dual Mobility Design

[Mercy Ombogo](#)

3:14 pm

Differences in Scapulothoracic and Glenohumeral Coordination of Patients Undergoing Conventional and Lateralized RTSA

[Jonathan Gustafson](#); Talissa Generoso; Joao Bonadiman; Vitor La Banca; Felipe F Gonzalez; Lucas Valerio Pallone; Christopher Knowlton; Gregory Nicholson; Leonardo Metsavaht; Gustavo Leporace; Grant Garrigues

3:20 pm

Discussion

3:30 pm - 4:00 pm: AFTERNOON BREAK POSTER VIEWING

4:00 pm - 5:00 pm: PODIUM C/5: Additive Manufacturing

Moderators: Maria Moravidou, Joseph Lipman

Thursday August 29, 2024

4:00 pm

Moderator Intro

4:02 pm

3D-Printed Custom-Made Implants in Complex Revision Total Knee Arthroplasty

Georg Hettich; Josef-Benedikt Weiß; Thomas M Grupp

4:08 pm

Discussion

4:11 pm

Cementless 3D Printed Implants Match Conventional Cementless Implants in Micromotion Performance

Colin Dudrey-Harvey; Arron Hughes; Maxwell Munford; Jonathan Jeffers; Jennifer Stoddart

4:17 pm

Discussion

4:20 pm

The Impact of SLM and EBM 3D-Printers on Surface Adhered Titanium Particles on Acetabular Implants

Arya Nicum; Harry Hothi; Anna Di Laura; Johann Henckel; Alister Hart; Klaus Schlueter-Brust

4:26 pm

Discussion

4:29 pm

Quantifying Bone Ingrowth in Additively Manufactured Titanium Alloy Baseplates

Michael Kurtz; Hannah Spece; Paul DeSantis; Nicolas Piuze; Steven Kurtz

4:35 pm

Discussion

4:38 pm

A Systematic Benchtop Construction and Deconstruction Study of Spinal Ligaments Using Novel 3D Printable Analogue Spine Models

Siril Teja Dukkupati; Mark Driscoll

4:44 pm

An Unconstrained Force-Control Testing Protocol for Evaluating Endplate Conforming Interbody Cage Designs

Martine McGregor; Richard Barina; Stewart McLachlin

4:50 pm

Discussion

Governor's D (Podium) THURSDAY AUGUST 29

7:15 am - 7:45 am: SHORT TALKS #1 (Kiosk 4) Imaging

Moderators: Markus Wimmer, Nobuhiko Sugano

7:15 am

Radiographic Texture Features as Measures of Implant Fixation

Matthew Teeter; Sasha Hasick; Jennifer Polus; Brent Lanting; Edward Vasarhelyi

7:18 am

Discussion

7:21 am

Revolutionizing 3D Bone Reconstruction: Introducing a Landmark-Less Workflow With Ultrasound Scanning

Manh Ta; Daniel Sebald; Jarrod Nachtrab; Steven MacDonald; Richard Komistek

7:24 am

Discussion

7:27 am

Spine Flexibility in Patients Undergoing Total Hip Arthroplasty

Alexander Heimann; William Murphy; Patrick Lane; Andrew Amundson; Stephen Murphy

7:30 am

Discussion

Thursday August 29, 2024

7:33 am

Validation of 2D to 3D Artificial Intelligence Templating for Total Knee Arthroplasty

Nathan Whitsell; Tarun Bhargava

7:36 am

Discussion

8:00 am - 9:00 am: PODIUM SESSION D/1: Shoulder Arthroplasty: Wear and Outcomes

Moderators: Christopher Roche, Vani Sabesan

8:00 am

Moderator Intro

8:03 am

Extended in Vitro Wear of the Metal Glenosphere and Polyethylene Humeral Bearings of Reverse Total Shoulder Replacements Under Clean and Abrasive Conditions

Hani Haider; Joel Weisenburger; Ryan Siskey; Ruth Heckler; Nichole Plata

8:09 am

Validation of an MRI Technique for Measuring in-Vivo Glenoid Wear; a Tool for Understanding Glenohumeral Pain

Ulrich Hansen; Hazimah Mahmud; Anthony Bull; Sanjeeve Sabharwal; Roger JH Emery; Andra Topan; Peter Reilly

8:15 am

Quantitative Polyethylene Wear Analysis and Scapular Notching Grade in Reverse Total Shoulder Arthroplasty

Gabriel Landi; Douglas Van Citters

8:21 am

Discussion

8:27 am

Can Subscapularis Deficiency Explain Glenoid Wear (Thus Possibly Glenohumeral Pain)

Ulrich Hansen; Hazimah Mahmud; Andra Topan; Anthony Bull; Roger JH Emery; Sanjeeve Sabharwal; Peter Reilly

8:33 am

The Impact of Augmented Reality Technology and Preoperative Planning on Patient Satisfaction and Perceptions After Shoulder Arthroplasty

Garrett Jackson; Vani Sabesan; Aghdas Movassaghi; Julio Vandama; Carlos Fernandez

8:39 am

Discussion

8:43 am

Male Patients Experience Similar Improvement in Clinical and Functional Outcomes Despite Higher Revision Rates Following Reverse Shoulder Arthroplasty Compared to Female Patients: A Systematic Review

Garrett Jackson; Colton Mowers; Devin John; Aghdas Movassaghi; Jacob Calpey; Vani Sabesan

8:49 am

Preclinical Testing of Stemless Shoulder Implant Stability: How Much Complexity Is Necessary?

Kyle Sneathen; Yang Son; Christine Mueri; Marc Bandi

8:55 am

Discussion

9:00 am - 10:00 am: PODIUM D/2 Computational Modeling

Moderators: Dennis Janssen, Fernando Quevedo Gonzalez

9:00 am

Moderator Intro

9:02 am

Effect of Partial and Complete PCL Sectioning in Medial Congruent TKA on Femoral Rollback and Posterior Sag: A Computational Study

Reza Pourmodheji; Cynthia Kahlenberg; Brian Chalmers; William Long; Timothy Wright; Eytan Debbi; Geoffrey H Westrich; David J. Mayman; Carl Imhauser; Peter Sculco

9:08 am

The Location of Periprosthetic Femoral Fracture Corresponds to Areas of High Strain: A Finite Element and Cadaveric Experimental Study

Clarisse Zigan; Ryan Helbock; Haena-Young Lee; Andrew Hughes; Joseph Lipman; Timothy Wright; Peter Sculco; Elizabeth B. Gausden; Sony Manandhar; Jeffrey Bischoff; Fernando Quevedo Gonzalez

9:14 am

Femoral Condylar Geometry Is Related to MCL Force During Knee Flexion in Cruciate Retaining Total Knee Arthroplasty

Reza Pourmodheji; Cynthia Kahlenberg; Brian Chalmers; Eytan Debbi; William Long; Timothy Wright; Geoffrey H Westrich; David J. Mayman; Peter Sculco; Carl Imhauser

9:20 am

Discussion

9:26 am

Computational Modeling of Implant Subsidence Over Heterogeneous Tissue Boundaries

Rémy Benais; Stewart McLachlin

9:32 am

Particle-Based Simulation of Bone to Optimize Implant Fixation Features for Fracture Minimisation

Jennifer Stoddart; Maxwell Munford; Jonathan Jeffers; Sloan Kulper; Erica Ueda; Katie Whiffin

9:38 am

Discussion

9:42 am

Finite Element Model of Patient-Specific Flanged Acetabular Components Highlights Biomechanical Effects of Bone Density and Cortical Shell Thickness

Haena-Young Lee; Friedrich Boettner; Jason Blevins; Jose Rodriguez; Joseph Lipman; Fernando Quevedo Gonzalez; Mathais Bostrum; Timothy Wright; Peter Sculco

9:48 am

How Does THA Impingement Risk During Activities of Daily Living Change With Pelvic Tilt and Spinopelvic Mobility?

Alessandro Navacchia; Edward Davis; Bradford Waddell; Stephen Duncan; Thorsten M. Seyler

9:54 am

Discussion

10:00 am - 10:30 am: MORNING BREAK/POSTER VIEWING

10:30 am - 11:30 am: PODIUM D/3 Gait and Rehabilitation

Moderators: Petra Heesterbeek, Erik Kowalski

10:30 am

Moderator Intro

10:32 am

Targeted Rehabilitation Program Based on a Knee Kinesiography Exam Can Improve Outcomes and Accelerate Achievement of Patient Well-Being After Total Knee Arthroplasty

Pierre Ranger; Alix Cagnin; Bianca Marois; Alex Fuentes

10:38 am

Controlling and Enhancing the Post Operative Care After Knee Arthroplasty: Insights From a Multi-Center Prospective Longitudinal Cohort Study of a Digital Rehabilitation Solution

Julien Lebleu; Andries Pauwels; Stefaan Van Onsem; Philippe Van Overschelde; Jared Weir

10:44 am

Discussion

10:48 am

Is Markerless Motion Analysis a Valid Tool to Study Knee Joint Kinematics?

Markus Wimmer; Ariana Ortigas Vasquez; Christopher Knowlton; Michael Utz; Adrian Sauer; Camilla Antognini

Thursday August 29, 2024

10:54 am

Patient Characteristics and Pre-Operative Gait Speed as Useful Factors to Separate Recovery Curves Generated by a Smart Implant

Roberta Redfern; [Karl Surmacz](#); Joseph Brook; Mike Anderson; Jason Cholewa; Adam Henderson

11:00 am

Variability of in-Clinic and Sensor-Based Free-Living Gait Outcomes in Total Knee Arthroplasty Candidates

[Annemarie Laudanski](#); Michael Dunbar; Glen Richardson; Jennifer Leighton; Janie Wilson

11:06 am

Discussion

11:12 am

Tibial AP Translation During Gait Correlates With Intraoperative Medial Mid-Flexion Laxity in Total Knee Arthroplasty Using a Robotic Ligament Tensioner

[Takayuki Koya](#); Alexander Orsi; Chris Knowlton; Christopher Plaskos; Vasili Karas; Markus Wimmer

11:18 am

Comparing TKA Implant Design for External Peak Knee Adduction Moments, Adduction Impulse and Movement Strategies During Stair Descent

[William Mihalko](#); Alexis Nelson; Nuanqiu Hou; Marcus Ford; James Guyton; John Crockarell; Christopher Holland; Douglas Powell; Teri Ross

11:24 am

Discussion

11:30 am - 12:30 pm: Medacta Symposium: Restoring Native Knee Kinematics Requires Kinematic Alignment and Knee Components That Mimic the Natural Knee. Faculty: Dr. Stephen Howell, Dr. David Scott, Prof. Maury Hull

1:30 pm - 2:30 pm: PODIUM D/4 Wearables and Sensors

Moderators: Sally LiArno, Richard Bolander

1:30 pm

Moderator Intro

1:32 pm

Detecting Femoral Condylar Lift-Off With a Piezoelectric Joint Load Sensing Total Knee Replacement

Brandon Hines; Ryan Willing; [Steven Anton](#)

1:38 pm

How Does Asymmetry Vary in Patients Undergoing Knee and Hip Arthroplasty?

Jason Cholewa; Mike Anderson; [Roberta Redfern](#)

1:44 pm

Discussion

1:48 pm

Combining Wearables and Implantable Sensors: Gait Metrics to Create Recovery Curve Cohorts

Roberta Redfern; [Karl Surmacz](#); Joseph Brook; Mike Anderson; Jason Cholewa; Adam Henderson

1:54 pm

Going Faster Than PROMs: Early Assessment of Post-TKR/THA Recovery Through Physical Activity Markers

[Julien Lebleu](#); Bruno BONNECHERE; Kim Daniels; Andries Pauwels; Hervé Poilvache; Philippe Van Overschelde; Jared Weir

2:00 pm

Discussion

2:04 pm

Unveiling Inaccuracy: A Comprehensive Analysis of Error Induced by Self Applying Wearable Sensors for Total Knee Arthroplasty Monitoring

Jocelynn Bechtel; Jayson Hutchinson; [Ryan Chapman](#)

2:10 pm

Variation in Wearable Sensor Functional Metrics During Early Recovery of Knee Arthroplasty Patients

[Ricardo Antunes](#); Paul Jacob; Robert Marchand; T. Elaine Justice, MSN, RN; Kelly Taylor; Matthias Verstraete

Thursday August 29, 2024

2:16 pm

Discussion

2:20 pm

Panel Discussion: How Can We predict Recovery Trajectories of Individual Patients?

2:30 pm - 3:30 pm: TECHNICAL SYMPOSIUM: The Role of Computational Modeling in Advancing Technology in Arthroplasty

Moderators: Jeffrey Bischoff

2:30 pm

Moderator Introduction

2:38 pm

Computational modelling: Dennis Janssen

2:46 pm

Benchmark validation: Robb Colbrunn

2:54 pm

Population-based applications and validation: Cheryl Liu

3:02 pm

Patient-specific applications and validation: Mark Taylor

3:10 pm

The Role of Computational Modeling in the Regulatory Review of Medical Devices: Brent Craven

3:18 pm

Panel Discussion

3:30 pm - 4:00 pm: AFTERNOON BREAK AND POSTER VIEWING

4:00 pm - 5:00 pm: SPOTLIGHT SESSION #3: Matching Preoperative Kinematics with TKA

Moderators: Hani Haider, Elise Laende

4:00 pm

Dr. Brad Miles

4:15 pm

Discussion

4:20 pm

Defining Phenotypes in Total Knee Arthroplasty Based on Intra-Operative Kinematics: a Multi-Center Cohort of 3915 Patients

Ingrid Dupraz; Raphael Renaudot; Ricardo Larrainzar-Garijo; Bjoern Gunnar Ochs; Gavin McHugh; Thomas M Grupp

4:26 pm

Bridging the Gap in Knee Arthroplasty: Validating Musculoskeletal Models for Functional Kinematics-Informed Surgical Planning

Enrico De Pieri; Sara Sarabadani; Pascal Schuetz; William Taylor; Eik Siggelkow; Joern Seebeck; Marc Bandi

4:32 pm

Discussion

4:36 pm

Kinematic Phenotypes and Their Implications for Total Knee Implant Design

Berna Richter; Brigitte Altermann; Allan Maas; Adrian Sauer; Sven Krueger; Ingrid Dupraz; Alexander Giurea; Masahiro Hasegawa; Yukihide Minoda; Henning Windhagen; William Mihalko; Thomas M Grupp

4:42 pm

Effect of Postoperative Recovery Time on Joint Mechanics and Implant Fixation

Fernando Quevedo Gonzalez; Jonathan Glenday; Joseph Lipman; Peter K. Sculco; Cynthia Kahlenberg; Eytan Debbi; David J. Mayman; Jonathan Vigdorich; Timothy Wright

Thursday August 29, 2024

4:48 pm

Optimization of Kinematics in Robotic Total Knee Arthroplasty: A New Classification for Functional Coronal Alignment

Catherine Di Gangi; [Morteza Meftah](#); Akram Habibi; Sophia Antonioli; Patrick Meere; Matthew Hepinstall

4:54 pm

Discussion

Chamber Room A Kiosk 5 (Other) THURSDAY AUGUST 29

7:15 am - 7:45 am: SHORT TALKS #1 (KIOSK 5) Arthroplasty Outcomes I

Moderators: Petra Heesterbeek, Erik Kowalski

7:15 am

Are We Fulfilling Patient Expectations in Total Joint Arthroplasty? - a Review of a Large National Registry

Tyler Madden; Kent Kern; Karl Roberts; Darby Dean; [Shashank Chitta](#); Tyler Janish

7:18 am

Discussion

7:21 am

Clinical and Patient Reported Outcomes of a Novel Fully Cementless System Following Total Knee Arthroplasty

Casey Cardillo; Ran Schwarzkopf; Joshua Rozell; Muhammad Haider; Jon Katzman; [Akram Habibi](#); Sophia Antonioli; Catherine Di Gangi

7:24 am

Discussion

7:27 am

Clinical and Patient Reported Outcomes of a Kinematically Designed Cruciate Retaining Total Knee Arthroplasty With a Novel Medial Dished Insert Design

Jon Katzman; Casey Cardillo; Muhammad Haider; Mallory Ehlers; Ran Schwarzkopf; Akram Habibi; Catherine Di Gangi; [Sophia Antonioli](#)

7:30 am

Discussion

7:33 am

Leveraging Technology to Improve Patient Reported Outcome Measures (PROMs) Data Collection

[Danielle Edwards](#); Mary Murray-Weir

7:36 am

Discussion

7:39 am

Do Outcomes Following Total Joint Arthroplasty Differ by Objectively Measured Activity Performance?

Atul Kamath; Karl Surmacz; [Roberta Redfern](#); Dave Van Andel

7:42 am

Discussion

Chamber Room BCD (Poster)

7:00 am - 8:00 am: Poster Session 1 Setup

8:00 am - 5:45 pm: Poster Session 1

8:00 am **Bone**

8:00 am

Variations in Bone Mineral Density After Joint Replacement: A Systematic Review Examining Different Anatomical Regions, Fixation Techniques, and Implant Design

Thursday August 29, 2024

Domenico Alesj; Davide Valente; Stefano Zaffagnini; Giulio Maria Marcheggiani Muccioli; Laura Bragonzoni; Raffaele Zinno

8:00 am

Effect of Zoledronic Acid on Femoral Periprosthetic Bone Mineral Density After Total Hip Arthroplasty: A Longitudinal Observational Study

Wataru Ando; Nobuhiko Sugano; Masaki Takao; Hidetoshi Hamada; Keisuke Uemura

8:00 am **THA: Clinical**

8:00 am

Does the French Paradox Cementing Technique Improve or Compromise Femoral Stem Stability? an in Vitro Cadaver Study

Yizhao Li; Stefan St George; Jarrett Masse; Brent Lanting; Ryan Willing

8:00 am

Plus 4 and Neutral Liners in Primary Total Hip Arthroplasty: Review of Survivorship and Clinical Outcomes From a Multi-Center Registry

David Fawley; Kirk Kindsfater; David F Dalury; Robert Gorab; William P Barrett; Timothy Alton; Donald Pomeroy; John F Irving; Michael Swank; Andrew Spitzer; Sean Croker

8:00 am

Evaluation of Two Stem Alignment Techniques Within the Femoral Canal Using a Preoperative Planning Tool: Could a Hybrid Approach Be Best?

Michael LaCour; Thang Nguyen; Jarrod Nachtrab; Richard Komistek

8:00 am

Hip Resurfacing Arthroplasty in Patients Younger Than 35: A Single-Surgeon Series of 184 Cases

Dani Gaillard-Campbell; Thomas P Gross

8:00 am

A Prospective Double-Blinded Randomised Controlled Trial Comparing the Direct Superior Approach Versus Posterior Approach for Total Hip Arthroplasty

Mohammed Wazir; Babar Kayani; Sujith Konan; Jenni Tahmassebi; Dia Eldean Giebal; Fares Haddad

8:00 am

Femoral Stems Implanted Through a Direct Anterior Approach in THA Have Higher Anteversion Than Those Implanted Through a Posterior Approach

Christopher Plaskos; Michael Solomon; Jim Pierrepont

8:00 am: **THA: Pre-operative Planning**

8:00 am

Implications of Functional vs Anatomic Femoral Anteversion on Combined Alignment Theories in THA

Gerard Smith; Christopher Plaskos; Jim Pierrepont; Richard Boyle

8:00 am

How Variable Are Cup Angle Suggestions From Published Hip-Spine Analyses?

Emily McIntosh; Nathanael Heckmann; Jonathan Vigdorshik

8:00 am

Pre- to Postoperative Spinopelvic Variability in Total Hip Arthroplasty Planning

Joshua Twiggs; Max Hardwick-Morris; Brad Miles; Tyson Doneley

8:00 am

Verification of Usefulness of Subluxation Percentage According to the Crowe Classification in Cup Placement for Dysplastic Hip Osteoarthritis

Keiji Otaka; Yusuke Osawa; Yasuhiko Takegami; Hiroki Iida; Yuto Ozawa; Hiroto Funahashi; Hiroaki Ido; Takamune Asamoto; Shinya Tanaka; Shiro Imagama

8:00 am

Changes in Anteversion, Leg Length and Offset With Under- and Oversized Stems Are Patient Specific

David Liu; Duncan Bakke; Lilian Lim; Thor Besier; Marco Schneider; James Germano

8:00 am: **Biomaterials**

8:00 am

Bone Ingrowth Fixation of Gription S Porous Coating

Dustin Albert; Bryan Smith; Michael Frohbergh; Ryan Siskey; Celia Gupta

Thursday August 29, 2024

8:00 am

Are There Relevant Differences in Volumetric Wear Among Highly Crosslinked Polyethylene Brands in Total Hip Arthroplasty?

Robin Pourzal; Michel Schlppi; Deborah Hall; Roman Heuberger; Peter Wahl

8:00 am

Inspection of ISO 17853 for Investigating Wear Particles of THR Trunnions

Charlotte Merrell; Richard M. Hall; Michael Bryant; Rob Beadling; Saurabh Lal; Imran Khan

8:00 am

Variability of the Porous Structure in 3D-Printed Acetabular Implants

Arya Nicum; Anna Di Laura; Harry Hothi; Klaus Schlueter-Brust; Johann Henckel; Alister Hart

8:00 am

2-Octyl-Cyanoacrylate Mesh Dressings for Total Joint Arthroplasty: Dressing Design Influences Risks of Wound Complications

John Cooper; Roshan Shah; Alexander Neuwirth; Carl Herndon; William Levine; Catelyn A. Woelfle

8:00 am

Bone Cement Abrasion Resistance of Titanium Nitride and Oxidized Zr2.5Nb Surfaces

Aline Elquist; Amit Parikh; Bill Hurd

8:00 am

Retrieval Analysis of Fretting-Corrosion at the Stem-Head Interface of Total Hip Arthroplasty Implants Revised Within 5 Years: Preliminary Results

Matheus Henrique Linhares da Silva; Patricia Ortega Cubillos; Eduardo Alberto Fancello; Lourenco Pinto Peixoto;

Marco Bernardo Cury Fernandes; Adrielson Echamendi da Silva; Carlos Rodrigo De Mello Roesler

8:00 am

Survival Analysis of Total Hip Arthroplasty: Contribution of Cross-Linked Polyethylene and Bone Sparing Surgical Technique at a Minimum Follow-Up of Eleven Years.

Masaaki Maruyama; Hiroki Nomura

8:00 am

A Rare Case of Metallosis on Metal on Metal Hip Resurfacing

Lafayette Lage; Gustavo Lage

8:00 am

Effect of Spine Interbody Fusion Implant Surface Architecture on Fixation

Sophia N. Sangiorgio; Edward Ebramzadeh; Nicholas Lamb; John Ehteshami; Matt Zoghi

8:00 am

Surgical Outcomes of Bio-Integrative Fiber-Reinforced Implants (OSSIOfiber)

Thelma Jimenez Mosquea; Taylor Wingo; Hugo Ubillus; Raymond Walls

8:00 am: **THA: Biomechanical Studies**

8:00 am

Relationship Between Stem Taper Machining Line Height, Spacing, and Assembly Load for Total Hip Head-Neck Modular Junctions

Hannah Lundberg; Mitchell Heacock; Jonathan Rathjen; Robin Pourzal; Brett Levine; Jonathan Gustafson

8:00 am

Assessment of Primary Implant Stability With Different Bone Graft Substitutes in an Acetabular Model Defect

Ronja Schierjott; Georg Hettich; Luca Cristofolini; Martin Buttarò; Heiko Graichen; Volkmar Jansson; Maximilian Rudert; Francesco Traina; Thomas M Grupp

8:00 am

Differences in Femoral Stress Distribution With Different Cement Mantle Thicknesses in the Same Type of Cemented Stem - a Thermoelastic Stress Analysis Study

Shota Yasunaga; Tomofumi Nishino; Koshiro Shimasaki; Ryunosuke Watanabe; Sho Totsuka; Tomohiro Yoshizawa; Hajime Mishima; Yoshihisa Harada

8:00 am: **Other Joints**

8:00 am

Promising Results and Removals in the First Year With a Redesigned Anatomically Shaped Meniscus Prosthesis

Petra Heesterbeek; Branco van Minnen; K.C. Defoort; Pieter Emans; Ewoud Van Arkel; Thijmen Struik; Liesbeth Jutten; Saskia Susan; Sebastiaan van de Groes; Nico Verdonschot; Tony van Tienen

Thursday August 29, 2024

8:00 am: **Foot & Ankle**

8:00 am

Clinical Outcomes Following Total Ankle Arthroplasty Over 18 Years at a Single Institution

Kelly Dopke; Michael Aynardi; Luigi Andrew Sabal; [Zachary Koroneos](#)

8:00 am

Efficacy of Transfibular Total Ankle Arthroplasty Using a Tibial Pre-Cutting Technique for Severe Varus Deformity

[Koichiro Yano](#); Katsunori Ikari; Ken Okazaki

8:00 am

Mid to Long-Term Outcomes of Total Ankle Replacement: A Systematic Review

[Thelma Jimenez Mosquea](#); Yasmeen Saeed; Hugo Ubillus; Raymond Walls

8:00 am: **General Topics**

8:00 am

Patient Perception of Artificial Intelligence Digital Medical Assistants for Postoperative Care

[Charles Lawrie](#); Andrew McDaid

8:00 am

ChatGPT Is a Suitable Option for Common Patient Questions Regarding Total Joint Arthroplasty

Hamza Raja; Idris Nagarwala; Hamza Kanchwala; [Noah Hodson](#); Michael Charters; Trevor North

8:00 am

Mitigating Potential Retrieval Study Bias Through Multi-Institutional Study Design and Capture

[Rebecca Thomson](#); Kori Jevsevar; Alexander Orem; Matthew Abdel; Douglas Van Citters

8:00 am

Academic Lineage in Orthopaedics: Its How You Finish.

[Aleksander Mika](#); John Ryan Martin

8:00 am

ePosters Governor's B Exhibit Hall Kiosk #7 (E-Poster)

7:00 am - 5:30 pm: EPOSTER KIOSK: [THURSDAY THROUGH SATURDAY](#)

7:00 am

Rapidly Progressive Spinal Metastasis of Lung Cancer With Leukemic Transformation in Myelodysplastic Syndrome (MDS): A Case Report

[Takaaki Nakai](#); Atsunori Ohnishi; Tsuyoshi Nakai; Keisuke Kuroda

7:00 am

Pinnacle UHMWPE Liner Dissociation: An Investigation on the Movement Kinematics Based on Damaged Surface Evaluation

Renir Reis Damasceno Neto; Patricia Ortega Cubillos; Gean Vitor Salmoria; Lourenco Pinto Peixoto; Osamu de Sandes Kimura; [Carlos Rodrigo De Mello Roesler](#)

7:00 am

A Novel DM Component, Designed for Use in Young and Active Patients

[David Kirwan](#)

7:00 am

Caira Intraoperative AI Planning Solution

Jonathan Greenwald; [Morteza Meftah](#); Gordon Goodchild; Wendell Duncan

7:00 am

Revolutionizing Arthroplasty: Corthotec's Synthetic Bone Graft Solution for Enhanced Surgical Outcomes

[Rami Kallala](#); Rahul Singh

7:00 am

Outcomes Following Treatment of Symptomatic Accessory Navicular With Pes Planus Correction: A Systematic Review

[Thelma Jimenez Mosquea](#); Hugo Ubillus; Raymond Walls

7:00 am

Is Combined Treatment Essential for Symptomatic Accessory Navicular in Flexible Flatfoot: A Study Comparing Kidner Procedure Alone Versus With Subtalar Arthroeresis

Thelma Jimenez Mosquea; Hugo Ubillus; Raymond Walls

7:00 am

Should Orthopedic Surgeons Emulate Spiders or Martians in Their Approach to Total Hip Replacement Surgery

Kambiz Behzadi

7:00 am

Isolated Medial Patellofemoral Ligament Reconstruction Does Not Restore Normal Biomechanics of Patellofemoral Joint in Knees With Increased Femoral Anteversion: A Cadaveric Study

Jisu Park; Sung Jun Jang; Hyunkwon Kim; Hyung Min Lee; Min soo Cho; Tae Woo Kim; Moon Jong Chang; Chong Bum Chang; Seung-Baik Kang

7:00 am

Surgical Draping for Shoulder Arthroscopy: Implications of Simplification

Srinath Kamineni; Anika Yadav

7:00 am

Treatment of Mild and Advanced Cases of Elbow OA With Arthroscopic Debridement and Intra-Articular Hyaluronic Acid Injections

Srinath Kamineni; Anika Yadav

7:00 am

How Does Capsule Disorganization Correlate to the Range of Motion in Contracted Elbows?

Srinath Kamineni; Anika Yadav

7:00 am

Differential Collagen Isoform Expression in Post-Traumatic Stiff Elbow Anterior Capsules

Srinath Kamineni; Anika Yadav

7:00 am

Evaluating CPAK With Imageless Navigation Is Comparable to Computed Tomography

Alexander Orsi; Christopher Plaskos; Brett Fritsch

7:00 am

Addressing Intraoperative Complications: Cementless Modular Revision Stem via Direct Anterior Approach for Iatrogenic via Falsa in Short Stem Arthroplasty

Andrej Nowakowski; Georg-Antonio Bernecker

7:00 am

Natural History of the Sagittal Kinematics of the Hip-Spine

Linden Bromwich; Brett Biedermann; Brandon Gettleman; Gerard Smith; Jim Pierrepont; Stephen McMahon; Christopher Plaskos; Nathanael Heckmann

7:00 am

Multifunctional Mesoporous Polydopamine Near-Infrared Photothermal Controlled Release of Kartogenin for Cartilage Repair

Zhenyu Luo; Zongke Zhou

7:00 am

PCL Resection Increases Intraoperative Lateral and Medial Flexion Laxity During Total Knee Arthroplasty

Nathan Alloun; Alexander Orsi; Christopher Plaskos; Thomas Brosset; Florian Boureau; Sophie Putman

7:00 am

apolloTM - a Novel System for Pre-Resection Robotic Soft Tissue Assessment in Total Knee Arthroplasty - Accuracy and Efficiency of First Clinical Cases

Alexander Orsi; Christopher Plaskos; Andrew Lehman; Jeffrey Lawrence; John Keggi

7:00 am

Variability and Similarity of Joint Balance Across CPAK Phenotypes

Christopher Plaskos; Edgar Wakelin; Gwo-Chin Lee

7:00 am

Detection of Prosthetic Joint Infection With an Implantable Sensor via Plain Radiography

John DesJardins; Rong Wang; Caleb Behrend; Jeffery Anker

7:00 am

Social Determinants of Health Influence Clinical Outcomes of Patients Undergoing Total Ankle Arthroplasty: A Systematic Review

James Butler; Megan Calton; Amit Manjunath; Amanda Mener; Andrew Rosenbaum; Michael Mulligan; Alan Samsonov; John Kennedy; Raymond Walls

7:00 am

No Superiority of Transfibular Approach Compared to Direct Anterior Approach for Total Ankle Arthroplasty: A Systematic Review and Meta-Analysis

James Butler; Ravneet Dhillon; Akram Habibi; Andrew Rosenbaum; Michael Mulligan; Raymond Walls; John Kennedy

7:00 am

Relationship Between Mental Health Disorders and Outcomes Following Total Ankle Arthroplasty: A Systematic Review

James Butler; John Kennedy; Alan Samsonov; Raymond Walls; Davis Hedbany; David Bloom; Andrew Rosenbaum; Michael Mulligan

7:00 am

The Role of Patient Specific Instrumentation for Total Ankle Arthroplasty: A Systematic Review

James Butler; Kishore Konar; John Kennedy

7:00 am

Rate of Improvement Following Reverse Shoulder Arthroplasty: A Comparison of Primary and Revision Reverse Shoulder Arthroplasty

Garrett Jackson; Ali Mohamed; Devin John; Aghdas Movassaghi; Vani Sabesan; Howard Routman; Matthew McKinley

7:00 am

Knee Pivot Motion During Gait After Total Knee Arthroplasty With an Asymmetric Conforming Bearing: Association of Posterior Cruciate Ligament Status With Patient-Reported Outcomes

Alex Fuentes; Rémi Courteille; Evan R Deckard; Alix Cagnin; Nicola Hagemester; Laurence CHEZE; Scott Banks; Michael Meneghini

7:00 am

Rate of Recovery Following Reverse Shoulder Arthroplasty

Garrett Jackson; Howard Routman; Ali Mohamed; Aghdas Movassaghi; Carlos Fernandez; Vani Sabesan; Antonio Da Costa

7:00 am

Does Sleep Comfort Predict Recovery After Primary and Revision Reverse Shoulder Arthroplasty?

Garrett Jackson; Ali Mohamed; Jared Kushner; Aghdas Movassaghi; Howard Routman; Vani Sabesan; Matthew McKinley; Jacob Calpey; Elisheva Kopf

7:00 am

Influence of Age and Sex on Meeting MCID Following Reverse Shoulder Arthroplasty

Garrett Jackson; Ali Mohamed; Anna Redden; Aghdas Movassaghi; Vani Sabesan; Howard Routman; Elisheva Kopf

7:00 am

A Look at Postsurgical Complications for Outpatient Shoulder Arthroplasty

Garrett Jackson; Vani Sabesan; Aghdas Movassaghi; Jacob Calpey; Matthew McKinley; Elisheva Kopf

7:00 am

Risk Factors That Predispose Patients to Sub-Optimal After Reverse Shoulder Arthroplasty

Garrett Jackson; Ali Mohamed; Jake Goguen; Anna Redden; Aghdas Movassaghi; Howard Routman; Vani Sabesan

7:00 am

What Factors Impact a Patients Feeling of Recovery After Shoulder Surgery?

Garrett Jackson; Anna Redden; Ali Mohamed; Aghdas Movassaghi; Vani Sabesan; Antonio Da Costa

7:00 am

Artificial Intelligence Language Models Are Useful Tools for Patients Undergoing Total Ankle Replacement

Alan Samsonov; James Butler; John Kennedy; Raymond Walls; Akram Habibi

FRIDAY 30 AUGUST, 2024

Governor's B (Expo Hall)

6:45 am - 8:00 am

Breakfast

9:30 am - 10:15 am

Morning Break

11:15 am - 12:30 pm

Lunch Served and Poster Viewing

3:30 pm - 4:00 pm

Afternoon Break and Poster Viewing

Governor's A/E (Podium) FRIDAY AUGUST 30

7:20 am - 7:45 am: SHORT TALKS #2 (KIOSK 1) TKA Clinical

Moderators: Christopher Thomas Holland, Elise Laende

7:20 am

Mid-Term Recovery of Range of Motion and Function Similar in Revision and Primary Knees

Emily Hampp; Sarah Shi

7:23 am

Discussion

7:26 am

Multi-Center RSA Study of a Novel Cementless Total Knee Replacement

Matthew Teeter; Trevor Gascoyne; Brent Lanting; Eric Bohm; Thomas Turgeon; Douglas

Naudie

7:29 am

Discussion

7:32 am

Preoperative Abnormal Posture Due to Knee Osteoarthritis Could Improve With Total Knee Arthroplasty as Knee-Hip-Spine Syndrome

Yasushi Oshima; Nobuyoshi Watanabe; Toru Takeoka; Yoshiteru Kajikawa; Tadahiko

Yotsumoto; Tokifumi Majima

7:35 am

Discussion

7:38 am

Timing From Admission to Debridement, Antibiotic and Implant Retention (DAIR) Affects Treatment Success in Total Knee Arthroplasty Prosthetic Joint Infection

Simon Garceau; Samuel Morgan; Paul E. Beaulé; Hesham Abdelbary; George

Grammatopoulos; Sophie Henke Tarnow

7:41 am

Discussion

Friday August 30, 2024

7:20 am - 7:45 am: SHORT TALKS #2 (KIOSK 2) Additive Manufacturing

Moderators: Jeremy Gilbert, Maria Moraliou

7:20 am

Custom 3D-Printed Cups for Acetabular Reconstruction: A 3-Year CT Implant Migration Study

Anna Di Laura; Johann Henckel; Alister Hart

7:23 am

Discussion

7:26 am

Fatigue Strength of an Additively Manufactured Ti-6Al-4V Porous Patellar Implant With Comparison to Commercially Available All-Polyethylene and Metal Porous Patellar Implants

Bradley Elliott; Kimberly Mimnaugh

7:29 am

Discussion

7:32 am

3D Printed Prosthesis for Appropriate Reconstruction of Massive Acetabular Bone Defects in Multiple Failed Total Hip Arthroplasty a Functional Outcome Study

Raghav Arora; satya narain; mannu bhatia

7:35 am

Discussion

7:38 am

Optimization of Fused Filament Fabrication (FFF) Process Parameters for PEEK and PEKK Biomaterials for Orthopedic Medical Device Application

Abigail Tetteh; Daniel Porter; Matthew Di Prima; Steven Kurtz

7:41 am

Discussion

7:45 am - 8:45 am: TECHNICAL SYMPOSIUM: Additive Manufacturing

Moderators: Jonathan Jeffers

7:45 am

Basic Science Background: Processes and Applications (Jonathan Jeffers)

8:00 am

Is a hospital-based AM system making a difference? Dr Tim Wright

8:07 am

Additive Manufacturing of polymers is the real opportunity: Steve Kurtz

8:14 am

Is Additive Manufacturing good enough for mainstream implants? Ruxi Marinescu.

8:21 am

Let's not get carried away, retrieval evidence is important: John Skinner

8:28 am

Panel 'Roundtable: Wright, Kurtz, Marinescu, Skinner. Chaired by Jeffers

8:45 am - 9:45 am: DEBATE #4: Dual Mobility Cups

Moderators: Kenneth Urish

8:45 am

Moderator Intro

8:48 am

For Dr Nicholas Piuze

8:56 am

Against: Dr Sugano

9:04 am

For Rebuttal

9:06 am

Against Rebuttal

9:08 am

Questions

9:13 am

Similar Outcomes With Cylindrospheric and Subhemispheric Modular Dual Mobility

Implants in Primary Total Hip Arthroplasty

Alana Prinos; Catherine Di Gangi; Akram Habibi; Sophia Antonioli; Morteza Meftah; Matthew Hepinstall

9:19 am

Influence of Dual Mobility Insert Design on Locking Strength Under Pull-Out and Cam-Out Testing Conditions

Ahmad Faizan; Ananthkrishnan Gopalakrishnan; Venus Vermani; Sahil Khanna; Geoffrey H Westrich

9:25 am

Discussion

9:29 am

Investigating Component Impingement Risk Following Total Hip Arthroplasty in Vivo During Activities of Daily Living

Shahnaz Taleb; Jordan Broberg; James Howard; Brent Lanting; Matthew Teeter

9:35 am

Two-Year Outcomes of a Novel Dual-Mobility System in Revision Total Hip Arthroplasty

Muhammad Haider; Michelle Richardson; Nihar Parikh; Akram Habibi; Benjamin Schaffler; Sophia Antonioli; Chad Krueger; P Maxwell Courtney; Ran Schwarzkopf; Catherine Di Gangi

9:41 am

Discussion

9:45 am - 10:15 am: Morning Break

10:15 am - 11:15 am: SPOTLIGHT SESSION #5: Eradicating PJI with New Technology

Moderators: Kenneth Urish, Leo Whiteside

10:15 am

Mark Ehrensberger

10:30 am

Discussion

10:35 am

Design and Characterization of a Clinical AMF System for Uniform Heating of Prosthetic Knee Implants

Varun Sadaphal; Bibin Prasad; Suri Le; Robert Oakley; Mikel Serralde; Isaiah Baker; Andrei Mitrofan; Jared Smothermon; Kevin McCoy; Jeff Garrett; John Tepper; Rajiv Chopra

10:41 am

Discussion

10:44 am

Preclinical Evaluation of a Chip-Integrated Implantable Biosensor for Infection Detection

Bruno Gil Rosa; Thomas Hall; David Freeman; Damien Ming; Sasza Nabilla; Frederic Cegla; Richard van Arkel

10:50 am

Discussion

10:53 am

Platelet-Rich Plasma Injections Within 6 Months of Total Knee Arthroplasty Increase the Risk of Postoperative Surgical Site Infections

Matthew Magruder; Ameer Tabbaa; Gabriel Lama; Orry Erez

10:59 am

Discussion

11:02 am

Comparison of Wound Irrigation Solutions Using an Ex Vivo Human Bone Organ Culture Model: Insight Into Antibacterial Effectiveness

Hugh Jones; Mark Coggins; Angus Brooks; Catherine Ambrose; Steven Schroder; David Doherty; Kenneth Mathis; Robert Frangie; David Rodriguez

11:08 am

Discussion

11:30 am - 12:30 pm: Lunch Symposium: S+N Lunchtime Symposia: Delivering personalized alignment using the power of handheld robotics

12:30 pm - 1:30 pm: PODIUM AE/2 TKA Gap Balancing and Laxity I

Moderators: Martin Roche, Joshua Roth

12:30 pm

Moderator Intro

12:32 pm

Pioneering Pre-Incision and Pre-Resection Joint Balancing Technologies

Manh Ta; Thang Nguyen; Steven MacDonald; Richard Komistek

12:38 pm

Novel Algorithm for Gap Balancing and Bone Cuts in Robotic Total Knee Replacements Significantly Improves Accuracy and Surgical Duration

Ryan Wai Keong Loke; Matthew Ng Song Peng; Glen Zi Qiang Liao

Friday August 30, 2024

12:44 pm

Total Knee Design to Achieve Anatomic Femoral-Tibial Motion and Laxity

Peter Walker; Peter S Walker

12:50 pm

Anterior-Posterior Constraint of Two Different Knee Inlay Designs in Mid-Flexion

Saskia Anna Brendle; Sven Krueger; Joachim Grifka; Peter E. Mueller; William Mihalko; Berna Richter; Thomas M Grupp

12:56 pm

Discussion

1:04 pm

Accounting for Peripheral Osteophytes During Pre-Resection Balancing of a Total Knee Arthroplasty Helps to Mitigate the Risk of Mid-Flexion Laxity

Joshua Roth; Matthew Blomquist

1:10 pm

Functional Knee Positioning Achieves Consistent Knee Balance in Total Knee Arthroplasty

Azhar Ali; Yogesh Mittal; Paul Jacob; Robert Marchand

1:16 pm

CT-Measured Tibial Slope Will Not Optimize Ligamentous Reconstruction as Determined by NextAR

John Mercuri; Massimiliano Bernardoni; Daniele Ascani; Sanjiv Patel

1:22 pm

Discussion

1:30 pm - 2:30 pm: SPOTLIGHT SESSION #6: The best bearing couple for THA

Moderators: Steven Kurtz, Danielle De Villiers

1:30 pm

Introduction

1:32 pm

Dr. Van Der Straeten

1:47 pm

Discussion

1:51 pm

2- to 17-Year Clinical Outcomes of 5352 Metal-on-Metal Hip Resurfacing Cases

Dani Gaillard-Campbell; Thomas P Gross

1:57 pm

Findings From a Large Cohort of Modular Liner Metal-on-Metal Hip Replacements

Melissa Rupert; Sang-Hyun Park; Sophia N. Sangiorgio; Edward Ebramzadeh

2:03 pm

Discussion

2:07 pm

Correlation of Crosslinking Measured With the Trans-Vinylene Index and Wear as Measured by a Pin-on-Disc Test of Polyethylene Liners From Various Manufacturers Used in Total Hip Arthroplasty

Peter Wahl; Roman Heuberger; Andrea Pascucci; Thomas Imwinkelried; Markus Fuerstner; Niels Icken; Robin Pourzal; Emanuel Gautier; Emanuel Benninger

2:13 pm

Silicon Nitride PEKK Composite Promotes Osteogenic Activity Compared to PEEK in Porous 3D Printed Specimens

Paul DeSantis; Tabitha Derr; Ryan Bock; Noreen J Hickok; Steven M. Kurtz

2:19 pm

Next Generation Implant Design for Acetabular Reconstruction

Sara De Angelis; Anna Di Laura; Angelika Ramesh; Johann Henckel; Alister Hart

2:25 pm

Discussion

2:30 pm - 3:30 pm: TECHNICAL SYMPOSIUM: Data Science

Moderators: Philip Noble

2:30 pm

Introduction. Philip Noble

2:33 pm

Fundamentals of Data Science: Development and Validation of Predictive Models. Dr. Ric

Bollander

2:48 pm

Discussion

2:51 pm

Current Applications: Gait and Demographic Data. Dr. Petra Heesterbeek

2:59 pm

Discussion

3:02 pm

Current Applications: Wearable Sensors. Dr Emily Hampp

3:10 pm

Discussion

3:13 pm

Surgeon Experience: Surgeon experience in clinical application of predictive tools. Dr. Will

Aibinder

3:21 pm

Panel Discussion

3:30 pm - 4:00 pm: AFTERNOON BREAK AND POSTER SESSION 2

4:00 pm - 5:00 pm: ISTA AWARDS SESSION.

Moderator:

4:00 pm

Introductory Remarks

4:03 pm

Best Poster Awards (Poster session 1)

4:05 pm

Best Poster Awards (Poster session 2)

4:07 pm

Have We Come to the End of the PROM? Wearable Sensors Highlight Improved Rate of Recovery and Range of Movement Following Robotic-Assisted TKA That Are Overlooked by

Friday August 30, 2024

Conventional PROMs

Faseeh Zaidi; Michael Goplen; Scott Bolam; Andrew Paul Monk; Thor Besier; Michael M Hanlon; Jacob T Munro; Ted Yeung

4:13 pm

Early Career Award - Faseeh Zaidi - New Zealand

4:16 pm

Shark Tank Award Winner

4:23 pm

The Legacy of HAP Paul

4:26 pm

Investigating the Effects of Porous Topology and Feature Size on the Separation Forces of UHMWPE-PEEK Structural Composites for Orthopedic Implant Applications

James Smith; Cemile Basgul; Mark Allen; Steven Kurtz; Bitan Soltan Mohammadlou

4:32 pm

HAP Paul Award James Smith - USA

4:35 pm

Lifetime Achievement Award - Leo A. Whiteside - USA

5:00 pm - 6:00 pm: SHORT TALKS #3 (KIOSK 1) Implant Testing

Moderators: Hani Haider, Katja Glismann

5:00 pm

Development of Physiologically Relevant Loosening Tests: An Expansion of ASTM F2028-17

Samuel Perry; Rob Beadling; Michael Bryant; Imran Khan; Richard M. Hall; Saurabh Lal

5:03 pm

Discussion

5:06 pm

Novel Robotic Test Method to Compare Knee Stability With Different Prosthesis Designs

Sander Holthof; Angela Brevio; Andrew Amis; David Barrett; Michael Rock

5:09 pm

Discussion

5:12 pm

Cement Adhesion Testing IBED TiN Coating vs. Uncoated Ti6Al4V

Jennifer Diederich; Anna Sullivan; Nabil Rizk; Chris Weaber; Carl Yeip

5:15 pm

Discussion

5:18 pm

Delamination Test of a Temporomandibular Joint Made of UHMWPE Fossa and Ti Alloy Mandibular Condyle

Marcia Maru de Moraes; Rafael Trommer; Ricardo dos Santos; Davis Machado Larrubia

5:21 pm

Discussion

5:24 pm

Validation of an Electromechanical Hip Simulator With a Metal-on-Polyethylene Total Hip Replacement

Raelene Cowie; Louise M. Jennings

5:27 pm

Discussion

5:30 pm

Biomechanical Comparison of Two Extensor Mechanism Reconstruction Techniques

John Moon; Camryn Pletka; Hugh Jones; Shuyang Han; Jonathan E. Gold; Sabir K. Ismaily; David Rodriguez

5:33 pm

Discussion

5:36 pm

Do Cement Pockets Prevent Fluid Contamination of the Undersurface of Tibial Baseplates?

Aleksander Mika; Bryce Biberstein; Jacob Wilson; John Ryan Martin; Hillary Mulvey

5:39 pm

Discussion

5:42 pm

Joint Reaction Forces on the Humerus: What Do We Know?

Niloufar Shekouhi; Christine Mueri; Philippe Favre; Jeffrey Bischoff

5:45 pm

Discussion

5:48 pm

Testing of Directly Applied Coating on Ceramic Substrates for Use in Acetabular Components.

Danielle De Villiers; Simon Collins

5:51 pm

Discussion

5:54 pm

Impact of the Individual Femoral Degree of Freedom on the Restoration of the Trochlea - a Sensitivity Analysis

Prudhvi Tej Chinimilli; Leonard Duporte; Faustine Nogaret; Scott Gulbransen; Gerard Giordano; Louis Dagneaux; Laurent Angibaud

5:57 pm

Discussion

Governor's C (Podium)

7:20 am - 7:45 am: SHORT TALKS #2 (KIOSK 3) Hip Clinical

Moderators: Bernard Stulberg

7:20 am

Effect of Duration of Wound Drainage on Treatment Success After Prosthetic Joint Infection Surgery: How Long Is Too Long?

Simon Garceau; Alberto Telias; Sanjula Costa; George Grammatopoulos; Hesham Abdelbary

7:23 am

Discussion

7:26 am

Long-Term Radiographic and Clinical Outcomes of the Mayo Conservative Hip for Developmental Dysplasia of the Hip in Young Patients: Mean Follow-Up of More Than 10

Years

Masanori Nishi; Takashi Atsumi; Yasushi Yoshikawa; Ryosuke Nakanishi; Minoru Watanabe; Yuki Usui; Yoshifumi Kudo

7:29 am

Discussion

7:32 am

Endoscopic Iliopsoas Fractional Lengthening as a Treatment for Refractory Iliopsoas Impingement After Total Hip Arthroplasty: Functional Outcomes With Minimum 2-Year Follow-Up

Benjamin Domb; Roger Quesada-Jimenez; Andrew Schab; Tyler McCarroll; Itay Perets; Ady Kahana Rojkind

7:35 am

Discussion

8:00 am - 9:00 am: DEBATE #3: Robotics with 3D planning yields better outcomes in THA

Moderators: Leo Whiteside

8:00 am

Moderator Intro

8:03 am

For: Fares Haddad

8:11 am

Against: Phil Noble

8:19 am

Rebuttal For

8:21 am

Rebuttal Against

8:23 am

Questions

8:28 am

Robotic-Assisted Surgery Does Not Decrease Prosthetic Impingement in Total Hip Arthroplasty

Sara Sacher; Jeffrey O'Donnell; Elexis Baral; Eytan Debbi; Douglas E Padgett; Timothy Wright

8:34 am

Long-Term Outcomes of Robotic Assisted Total Hip Arthroplasty With Nested Comparison to Conventional Total Hip Arthroplasty

Benjamin Domb; Ady Kahana Rojkind; Drashti Sikligar; Roger Quesada-Jimenez; Benjamin Kuhns; Mark Schinsky

8:40 am

Discussion

8:43 am

Two-Dimensional Versus Three-Dimensional Pre-Operative Planning in THA: Results From a Randomized Controlled Trial

Adam Yasen; Andreas Fontalis; Babar Kayani; Tianyi David Luo; Ricci Plastow; Fares Haddad

8:49 am

Robot-Assisted Acetabular Reconstruction in Revision Total Hip Arthroplasty: A Clinical

Study With Minimal 2-Year Follow-Up

Hao Tang; Wang Deng; Xiangdong Wu; Hongyi Shao; Zhaolun Wang; Dejin Yang; Yong Huang; Yixin Zhou

8:55 am

Discussion

9:00 am - 10:00 am: PODIUM C/6 Imaging Technology II

Moderators: Matthew Teeter, Nicholas Dunbar

9:00 am

Moderator Intro

9:03 am

Predictive Factors for Making Optimal Surgical Decision in Patients With Knee Osteoarthritis: Analysis of Correlation With Plain Radiographs Findings With Wear Patterns and Anterior Cruciate Ligament

Min soo Cho; Seung-Baik Kang; Moon Jong Chang; Tae Woo Kim; Jisu Park; Sung Jun Jang; Hyunkwon Kim; Hyung Min Lee

9:09 am

Hiding in Plain Sight: MRI Indications for Total Hip Arthroplasty in Patients Without Radiographic Evidence of Severe Arthritis

Benjamin Domb; Benjamin Kuhns; Yasemin Kingham; Tyler McCarroll; Ady Kahana Rojkind; Roger Quesada-Jimenez; Ali P. Parsa; Veer Shah

9:15 am

Discussion

9:19 am

Weight-Bearing CT Assessment Following Cementless Total Knee Arthroplasty

Matthew Teeter; Jane Lin; Mariam Zamani; Edward Vasarhelyi; Brent Lanting

9:25 am

Limb Coronal Alignment Does Not Predict Transepicondylar Axis to Posterior Condylar Axis Variation in Primary Total Knee Arthroplasty

Utkarsh Anil; Catherine Di Gangi; Charles Lin; Matthew Hepinstall; Morteza Meftah; Armin Arshi

9:31 am

3D vs 2D Preoperative Planning: Can More Information Yield Better Outcomes?

Jarrold Nachtrab; Thang Nguyen; Michael LaCour; Richard Komistek

9:37 am

Discussion

9:43 am

Avoiding Arthroplasty - the Impact of Acetabular Orientation on Femoral Head Coverage and Hip Range of Motion

Philip Noble; Shuyang Han; Nicholas Dunbar; James Baker; Maddison Brenner; Chuheng Xing; Angus Brooks; Alexis Aboulafia; Alfred Mansour III

9:49 am

Mixed Reality-Guided Performance of Bernese Periacetabular Osteotomy: Proof of Concept

Alexander Heimann; Jens Kowal; Stephen Murphy; Patrick Lane; Andrew Amundson; Moritz Tannast

9:55 am

Discussion

10:00 am - 10:30 am: MORNING BREAK

10:30 am - 11:30 am: PODIUM C/7 Joint Kinematics

Moderators: Nico Verdonschot,

10:30 am

Moderator Intro

10:32 am

A Workflow-Efficient Approach to Pre- and Post-Operative Assessment of Weightbearing 3D Knee Kinematics

Scott Banks; Gokce Yildirim; George Jachode; John Cox; Andrew Jensen; Oren Anderson; J. Dean Cole; Oliver Kessler

10:38 am

Articulation and Axial Rotations of Normal and CR TKA Knees During Flexion

Guoan Li

10:44 am

Reliable Predictions of Knee Kinematics Through Validated Knee Computer Models Are Important to Help Improve Clinical Outcomes After TKA

Eik Siggelkow; Marc Bandi; Kyle Snethen

10:50 am

Investigating the Influence of Implant Geometry on Autonomous Kinematics Measurements

Andrew Jensen; Scott Banks; Kerry Costello

10:56 am

Discussion

11:04 am

Bilateral Frontal Plane Lower Limb Alignment From Markerless Motion Capture During Gait Is Correlated Across Severity of Knee OA but Not Post-TKA

Elise Laende; Jereme Outerleys; Kevin Deluzio

11:10 am

Knee Contact Forces in OA Patients During Gait

Mario Lamontagne; Alexandre Pelegrinelli; Danilo S. Catelli; Erik Kowalski; Felipe A. Moura

11:16 am

In Vivo Assessment of Robotically Performed Total Knee Arthroplasty for Posterior-Cruciate and Bi-Cruciate Retaining and Substituting Implants

Michael Tim Yun Ong; Patrick Shu-Hang Yung; Garrett Dessinger; Richard Komistek; Michael LaCour

11:22 am

Discussion

12:30 pm - 1:30 pm: SYMPOSIUM: Hip Technology: Best Bang for your Buck

Moderators: Christina Esposito, Philip Noble

Friday August 30, 2024

12:30 pm

Introduction Moderator

12:35 pm

Peri-operative Infection Prevention. David Markel

12:43 pm

Best Bearing choice Steve Kurtz

12:51 pm

Robotics and Computer Navigation Nobuhiko Sugano

12:59 pm

3D pre-operative Planning. Brad Miles

1:07 pm

Mixed Reality Intraoperative Guidance. Alexander Heimann

1:15 pm

Panel Discussion and Q & A

1:25 pm

Audience Vote

1:30 pm - 2:30 pm: SHARK TANK FINALS.

Organizer: Dr Mort Meftah

1:30 pm

Organizer: Dr Mort Meftah

1:35 pm

Finalists to give their presentations

2:05 pm

Audience Vote

2:30 pm - 3:30 pm: PODIUM C/8 Trunnions, Corrosion and Retrievals

Moderators: Jeremy Gilbert, Robin Pourzal

2:30 pm

Moderator Intro

2:32 pm

Reduction of Metal Ion Release in Cemented Hip Stems by a Zirconium Nitride Multilayer Coating Simulating a Severe Stem Debonding Condition

Thomas M Grupp; Andreas M. Pfaff; Mevluet Sungu; Bernd Fink; William Mihalko; Ana Laura Puente Reyna

2:38 pm

Concerning Crevice Corrosion in Metaphyseal Sleeves of Revision Total Knee Components

Shabnam Aslani; Michael Kurtz; Christopher Pelt; Joshua Rainey; Michael James Archibeck; Jeremy Gililland; James Smith; Jeremy Gilbert; Steven M. Kurtz

2:44 pm

Discussion

2:48 pm

Titanium-Titanium Junctions in the Knee Corrode, Generating Damage Modes Identified in the Hip

Michael Kurtz; Shabnam Aslani; James Smith; Hannah Spece; Greg Klein; Steven Kurtz

Friday August 30, 2024

2:54 pm

Corrosion in CoCrMo Modular Taper Junctions in Femoral Knee Component: A Retrieval Study

Hwaran Lee; Michael Kurtz; Greg Klein; Steven M. Kurtz; Jeremy Gilbert

3:00 pm

Discussion

3:04 pm

Does TKA Alter Synovial Fluid Properties? a Comparison of Necropsy TKA and Contralateral Knee Specimens

Bailey Bond; Michael Kurtz; Shabnam Aslani; Madison Brown; Steven Kurtz; Jeremy Gilbert; William Mihalko

3:10 pm

Is Wear Still a Concern in TKA With Contemporary Conventional and Highly Crosslinked Polyethylene Tibial Liners in the Long-Term?

Devin Asher; Jennifer Wright; Deborah Hall; Hannah Lundberg; Douglas Van Citters; Joshua Jacobs; Brett Levine; Robin Pourzal

3:16 pm

Migration of Retrieved Ball-and-Socket Cervical Disc Replacements

Jenna Wahbeh; Sang-Hyun Park; Bryan Cornwall; Edward Ebramzadeh; Sophia N. Sangiorgio

3:22 pm

Discussion

3:30 pm - 4:00 pm: AFTERNOON BREAK - POSTER SESSION 2

5:00 pm - 6:00 pm: SHORT TALKS #3 (KIOSK 3) Patient Outcomes

Moderators: Sally LiArno, Matthew Magruder

5:00 pm

Correlating Patient Reported Outcomes to External Peak Knee Adduction Moments and Surgical Techniques During Stair Descent

Alexis Nelson; Nuanqiu Hou; Douglas Powell; Marcus Ford; James Guyton; John Crockarell; Derek Dixon; Teri Ross; William Mihalko; Christopher Holland

5:03 pm

Discussion

5:06 pm

Multi-Center Health Cloud Database: A Comprehensive Real-World Multi-Level Data Source for Outcomes Research in Orthopaedic Surgery

Ignacio Pasqualini; Laura Yanoso-Scholl; Anusha Guntupalli; Andrea Coppolecchia; Nicolas Piuze

5:09 pm

Discussion

5:12 pm

Functional Positioning Planning Attributes With Robotic Assisted TKA: Predictors of Outcomes

Emily Hampp; Azhar Ali; Michael Rodenbaugh; Akira Hada; Sidney Migliori; Robert Marchand

5:15 pm

Discussion

Friday August 30, 2024

5:18 pm

The Impact of Personality Traits on the Outcome of Total Knee Arthroplasty

Alexander Giurea; Georg Fraberger; Paul Kolbitsch; Richard Lass; Reinhard Windhager

5:21 pm

Discussion

5:27 pm

Development and Process of Psychometric Evaluation of a New Patient-Reported Outcome Measure for Patients Who Have Undergone Primary TKR Surgery

Samantha Birts; Sheryl O'Farrell; Louise Strickland; Crispin Jenkinson; Hemant Pandit

5:30 pm

Discussion

5:33 pm

Reverse Shoulder Arthroplasty Provides Durable Outcomes Regardless of Diagnosis and Pathology

Garrett Jackson; Aghdas Movassaghi; Hans Lapica; Howard Routman; Vani Sabesan; Antonio Da Costa

5:36 pm

Discussion

5:39 pm

Early Clinical and Economic Outcomes of VELYS Robotic-Assisted Solution (VRAS) Compared to Manual Total Knee Arthroplasty

Anshu Gupta; Philip Huang; Michael Cross; Dhara Intwala; Jill Ruppenkamp; Dan Hoeffel

5:42 pm

Discussion

Governor's D (Podium)

7:20 am - 7:45 am: SHORT TALKS #2 (KIOSK 4) Shoulder Clinical

Moderators: William Aibinder, Vani Sabesan

7:20 am

The Distance Between Scapular Neck and Polyethylene Insert During Active External Rotation in Shoulders With Semi-Inlay Reverse Shoulder Arthroplasty

Itaru Kawashima; Norimasa Takahashi; Keisuke Matsuki; KENJI KITAMURA; Hisato Watanabe; Ryo Haraguchi; Hayato Ryoki; Thomas Wright; Scott Banks

7:23 am

Discussion

7:26 am

Better Outcomes? Rotator Cuff Repair Versus Reverse Shoulder Arthroplasty for Massive Rotator Cuff Tears in Elderly Population

Garrett Jackson; Anna Redden; Aghdas Movassaghi; Vani Sabesan

7:29 am

Discussion

7:32 am

Auto-Planning in Anatomic Total Shoulder Arthroplasty Improved Placement and Precision in Preoperative Surgical Planning

Friday August 30, 2024

Sarah Lammers; Arthur De Gast; Emile Ducrocq; Claudia Beimel; Gilles Walch; Mike Coronel; David Fitch

7:35 am

Discussion

7:38 am

8:00 am - 9:00 am: PODIUM D/5 Imaging Technology I

Moderators: Markus Wimmer, Thomas Hall

8:00 am

Moderator Intro

8:02 am

Inducible Displacement of the Femoral Stem Measured Using Computed Tomography-Based Radiostereometric Analysis (CT-RSA)

Matthew Teeter; Jennifer Polus; Bart Kaptein; Edward Vasarhelyi; Brent Lanting

8:08 am

Accuracy of 3D/2D Registration for Determining Cup Position and Leg Length in Fluoroscopy Guided THA

Christopher Plaskos; Jim Pierrepont; Junfen Shi; Gerard Smith; Linden Bromwich; Jevan Arulampalam; Arjun Saxena; Eric M Slotkin; Moritz Ehlke

8:14 am

A Novel Radiographic Methodology to Measure Knee Adduction Moment

Fernando Quevedo Gonzalez; Drake Lebrun; Theofilos Karasavvidis; Cale Pagan; Edward Grabov; Joseph Lipman; Peter K. Sculco; Cynthia Kahlenberg; Eytan Debbi; Timothy Wright; David J. Mayman; Jonathan Vigdorchik

8:20 am

Introduction of Orthosonic™ Scanning for Creating Three-Dimensional Bones in Minutes for Component Sizing and Pre-Operative Planning

Russell McKissick; Manh Ta; Steven MacDonald; Richard Komistek

8:26 am

Discussion

8:34 am

A Novel Method of Determining Bone Mineral Density From Pre-Surgical CT Scans to Aid in Surgical Planning

Jared Weir; Sebastien Lustig; Alan Brett; Niall Maguire

8:40 am

Analysis of Discrepancy Between Kellgren-Lawrence(K-L) Grade and Intraoperative Cartilage Status in Patients Undergoing Total Knee Arthroplasty (TKA)

Min soo Cho; Seung-Baik Kang; Moon Jong Chang; Tae Woo Kim; Jisu Park; Sung Jun Jang; Hyunkwon Kim; Hyung Min Lee

8:46 am

Advanced Candidate Identification for Medial Partial Knee Arthroplasty: a Machine Learning Approach Using CT Data

Michael Bell; Sietske Witvoet; Alison Long; Michael Bowes; Sebastien Lustig; Jared Weir

8:52 am

Discussion

Friday August 30, 2024

9:00 am - 10:00 am: DEBATE #5: Technology versus Technique in Reverse TSA

Moderators: Thomas Throckmorton

9:00 am

Moderators' Introduction

9:04 am

For: Dr Eric Wagner

9:12 am

Against: Dr Vani Sabesan

9:20 am

Rebuttal For

9:22 am

Rebuttal Against

9:24 am

Questions

9:29 am

Determining the Minimal Clinically Important Difference and Substantial Clinical Benefit

Following Revision Reverse Shoulder Arthroplasty

Garrett Jackson; Ali Mohamed; Anna Redden; Jared Kushner; Aghdas Movassaghi; Howard Routman; Diego L Lima; Vani Sabesan; Jacob Calpey

9:35 am

Discussion

9:38 am

Is Implant Wear and Corrosion in Anatomic and Reverse Total Shoulder Arthroplasty Associated With Radiographic Evidence of Aseptic Loosening?

Colton Mowers; Deborah Hall; Jennifer Wright; Tyler Williams; Gregory Nicholson; Grant Garrigues; Robin Pourzal

9:44 am

Discussion

9:47 am

The Effect of Humeral Distalization in Reverse Total Shoulder Arthroplasty on Muscle Function, Scapular Strain, and Joint Load During Simulated Active Motion: An Ex-Vivo Biomechanical Study

David Axford; Robert Potra; Richard Appleyard; Janos Tomka; Desmond Bokor; Sumit Raniga; Louis Ferreira

9:53 am

Discussion

10:00 am - 10:30 am: MORNING BREAK

10:30 am - 11:30 am: PODIUM D/6 Hip Resurfacing: Clinical Results and Biomaterials Challenges

Moderators: Catherine Van Der Straeten, John A. Skinner

10:30 am

Moderator Intro

10:32 am

Improvement in Gait Five Years After Ceramic-on-Ceramic Hip Resurfacing Arthroplasty

Amy Maslivec; Brogan Guest; Justin Cobb

10:38 am

Accelerated and Real-Time Aging of Cemented Ceramic Resurfacing Heads

Danielle De Villiers; Simon Collins

10:44 am

Discussion

10:48 am

15 Year Minimum Follow-Up of Hip Resurfacing Male Patients: A Review of Outcomes

Anand Saluja; Zachary Wong; Jonathan Spaan; Louis Andrew Jordan ; Edwin Su

10:54 am

Insights Into Long-Term Performance and MRI Profiles in M2a-Magnum Cup Metal-on-Metal Total Hip Arthroplasty

Ryo Orito; Wataru Ando; Shoya Abe; Ema Nakahara; Takeshi Ogawa; Tsuyoshi Koyama; Takayuki Tsuda; Kenji Ohzono

11:00 am

Discussion

11:04 am

Is Femoral Component Malposition Acceptable in Metal on Metal Hip Resurfacing ?

Lafayette Lage; Gustavo Lage

11:10 am

The Effect of Surgical Approach on Gait Following Hip Resurfacing Arthroplasty

Rima Nasser; Amy Maslivec; Justin Cobb

11:16 am

Discussion

12:30 pm - 1:30 pm: PODIUM D/7 Arthroplasty Outcomes

Moderators: Fares Haddad, Hemant Pandit

12:30 pm

Moderator Intro

12:32 pm

Predicting Post-Surgery Functional Outcomes Following Total Knee Arthroplasty

Bradley Lambert; Thomas Sullivan; Terry Clyburn; Kwan Park; Stephen Incavo

12:38 pm

Discussion

12:41 pm

Promising Short-Term Outcomes for Robotic-Assisted Revision Total Knee Arthroplasty

Kevin Chang; Jonathan R. Danoff; Aleksandra Qillieri; Alexandra Echevarria

12:47 pm

Discussion

12:50 pm

Revision TKA Using Robotic Assisted Surgery: Technical Challenges and Short Term Outcomes

Arthur Malkani; John Whitaker; Erik Van Eperen; Madhusudhan Yakkanti; Andrew Swiergosz

12:56 pm

Discussion

1:02 pm

Clinical and Patient Reported Outcomes of a Novel Reverse Hybrid System in Total Knee Arthroplasty

Muhammad Haider; Jon Katzman; Casey Cardillo; Joshua Rozell; Ran Schwarzkopf; Akram Habibi; Benjamin Schaffler; Catherine Di Gangi; Sophia Antonioli

1:08 pm

Discussion

1:11 pm

Patients Identified as Neutral Satisfied Patients Are, in Fact, Neutral, Questioning the Use of Dichotomizing to Satisfied or Dissatisfied.

Jason Cholewa; Mike Anderson; Roberta Redfern

1:17 pm

Discussion

1:20 pm

Factors Associated With Increased Opioid Consumption Following Total Hip Arthroplasty

Mads Koefoed Hansen; Andreas Fontalis; Fares Haddad; Ricci Plastow; Adam Yasen; Babar Kayani

1:26 pm

Discussion

1:30 pm - 2:30 pm: SPOTLIGHT #7: improving TSA outcomes with AI

Moderators: Ryan Chapman, William Aibinder

1:30 pm

Christopher Roche

1:45 pm

Discussion

1:50 pm

Computational Model to Predict Primary Stability of a Patient Matched Glenoid Vault Reconstruction System

Maged Awadalla; Bradley Elliott; Robbin Monceaux; Ravikumar Varadarajan

1:56 pm

Discussion

1:59 pm

Unsupervised Machine Learning Clustering of 3D CT Reconstructed Deltoids to Classify Deltoids Relevant to Shoulder Arthroplasty Clinical Outcomes

Hamidreza Rajabzadeh-Oghaz; Josie Elwell; Bradley Schoch; Anshuman Singh; Bruno Gobbato; William Aibinder; David Berry; Vikas Kumar; Christopher Roche

2:05 pm

Discussion

2:08 pm

Offset Between Proximal Humeral Canal Axis and Resection Center: An Automatic Morphological Analysis for Short Stem Implants Design and Positioning

Axel Pavan; Cristiano Pizzamiglio; Andrea Fattori; Michele Pressacco

2:14 pm

Discussion

2:17 pm

A Rapid Topographic U-Net for Detecting the Anatomic Neck in Arthritic Humeri: Enabling Automatic Shoulder Arthroplasty Planning

Gregory Spangenberg; Fares Uddin; Ahmed Habis; Kenneth J. Faber; G. Daniel G. Langohr

2:23 pm

Discussion

2:30 pm - 3:30 pm PODIUM D/8 Artificial Intelligence II

Moderators: Vipin Asopa, Scott Banks

2:30 pm

Moderator Intro

2:32 pm

Artificial Intelligence Language Models Are Useful Tools for Patients Undergoing Total Ankle Replacement

Alan Samsonov; James Butler; John Kennedy; Raymond Walls; Akram Habibi

2:38 pm

Comparison of ChatGPT Plus (Version 4.0) and Pretrained AI Model on Orthopaedic in-Training Exam

Matthew Magruder; Michael Miskiewicz; Ariel Rodriguez; Mitchell Ng; Amr Abdelgawad

2:44 pm

Discussion

2:48 pm

Patient Specific Alignment and Laxity in TKA: A Neural Network Analysis

Alexander Orsi; Christopher Plaskos; Edgar Wakelin; John Keggi

2:54 pm

Automated SSM Landmarking With Region-Refinement Improves Landmarking Accuracy

Marco Schneider; Duncan Bakke; Lilian Lim; Ju Zhang; Alex Carleton; Thor Besier

3:00 pm

Discussion

3:04 pm

Novel Dilation-Erosion Labeling Technique Allows for Rapid, Accurate and Adjustable Alignment Measurements in Primary TKA

Aleksander Mika; Yehyun Suh; Robert Elrod; Martin Faschingbauer; Daniel Moyer; John Ryan Martin

3:10 pm

Predictive Modeling of Unplanned Hospital Inpatient Utilization in Osteoarthritis Patients

Lulla Kiwinda; Chuan Hong; Mikhail Bethell; Peiyu Li; Christian Pean

3:16 pm

Discussion

3:20 pm

Activity Recognition Using Artificial Intelligence Techniques in a Cadaveric Knee Replacement Model Based on Dual Integrated IMU Devices

Emma Donnelly; Ryan Willing; Lipalo Mokete; Alex Conway

3:26 pm

Discussion

Friday August 30, 2024

3:30 pm - 4:00 pm: AFTERNOON BREAK AND POSTER SESSION 2 VIEWING

5:00 pm - 6:00 pm: SHORT TALKS #3 (KIOSK 4) Technology in Hip Surgery

Moderators: Robb Colbrunn, Russell Bodner

5:00 pm

The Influence of Hyaluronic Acid on a Cartilage Wear Model for Hemiarthroplasty

Markus Wimmer; Francesca De Vecchi; Amandine Impergre

5:03 pm

Discussion

5:06 pm

Effects of Acetabular Cup Medialization on Muscle Function Vary Between THA Patients

Atul Kamath; J. Bohannon Mason; Duncan Bakke; David Liu; James Germano; Thor Besier; Marco Schneider

5:09 pm

Discussion

5:12 pm

Clinical Results on Cup Placement Using the Mako Robotic System

Makoto Iwasa; Hidenobu Miki

5:15 pm

Discussion

5:18 pm

Neck Height Should Not Increase With Implant Size. Optimal Design of a New Collared, Metaphyseal-Filling, Triple-Taper Stem Using the CorinRegistry Statistical Shape Model

Elizabeth Cartwright; Hanna Cacace; Christopher Plaskos; Jonathan Bare; Andrew Shimmin; Travis Small; Michael P. Bradley; Jim Pierrepont

5:21 pm

Discussion

5:24 pm

Decoupled Impaction Increases Primary Cup Fixation in Cementless THA

Adam Reynolds; Monil Karia; Jonathan Jeffers; Sarah Muirhead-Allwood; Hadi Alagha; Luyang Xu

5:27 pm

Discussion

5:30 pm

Statistical Shape Modelling Shows the High Variability of the Proximal Femoral Canal: Future Guide to Achieve Target Stem Anteversion

Angelika Ramesh; Johann Henckel; Sara De Angelis; Anna Di Laura; Alister Hart

5:33 pm

Discussion

5:36 pm

Is Vibratory Implantation an Alternative for Conventional Impaction of Acetabular Cups?

Yasaman Niki; Gerd Huber; Kambiz Behzadi; Michael Morlock

5:39 pm

Discussion

5:42 pm

Mallets Are Good for Implantation - Shakers for the Determination of Dynamic Properties

Peter J Schlieker; Michael Morlock; Gerd Huber

5:45 pm

Discussion

5:00 pm - 6:00 pm: SHORT TALKS #3 (KIOSK 2) Knee Balancing and Laxity

Moderators: Charles Lawrie, Joshua Roth

5:00 pm

Lack of Standardization in TKA Kinematics Studies Hinders Big Data Analysis: A Call for Unified Protocols

Andrew Jensen; Scott Banks

5:03 pm

Discussion

5:06 pm

Lateral and Medial Laxity, but Not Gap Balance, Is Associated With Objectively Measured Post-Operative Gait Quantity and Quality

Roberta Redfern; Joseph Brook; Mike Anderson; Adam Henderson; Karl Surmacz; Jason Cholewa

5:09 pm

Discussion

5:12 pm

Robotic Tensioning Provides a More Reproducible Assessment of Soft Tissue Laxity and Balance Compared to Manual Methods

Alexander Orsi; Christopher Plaskos; John Keggi; Paramjeet Gill; Simon Coffey

5:15 pm

Discussion

5:18 pm

Does Patient Phenotype Predict Knee Laxity in Total Knee Arthroplasty?

Azhar Ali; Yogesh Mittal; Paul Jacob; Robert Marchand

5:21 pm

Discussion

5:24 pm

Effect of Simulated PCL Fiber Release on Compartmental Contact Forces in Cruciate Retaining Total Knee Arthroplasty: A Computational Study

Reza Pourmodheji; Cynthia Kahlenberg; Brian Chalmers; Eytan Debbi; William Long; Timothy Wright; Geoffrey H Westrich; David J. Mayman; Peter Sculco; Carl Imhauser

5:27 pm

Discussion

5:30 pm

The Impact of Surgical Workflow on Bone Cut Parameters Evolution in Total Knee Arthroplasty - Transitioning From Measured Resection to Gap Balancing Surgical Workflow

Laurent Angibaud; Prudhvi Tej Chinimilli; Amaury Jung; François Boux de Casson

5:33 pm

Discussion

5:36 pm

Role of Femoral Condylar Geometry in Loading of the MCL and PCL in Cruciate Retaining Total Knee Arthroplasty: A Computational Approach

Reza Pourmodheji; Cynthia Kahlenberg; Brian Chalmers; Eytan Debbi; William Long; Timothy Wright; Geoffrey H Westrich; David J. Mayman; Peter Sculco; Carl Imhauser

5:39 pm

Discussion

5:42 pm

Coronal Knee Laxity in Total Knee Arthroplasty and Patient Reported Outcomes: Awake Versus Anaesthetised

Ishaan Jagota; David Liu; Willy Theodore; Joshua Twiggs; Brad Miles

5:45 pm

Discussion

5:48 pm

Long-Term Results of Synovectomy in Total Knee Arthroplasty: A Prospective, Randomized Controlled Trial

Wei-Nan ZENG

5:51 pm

Discussion

Main Hallway Kiosk #6 (Short Talk)

7:20 am - 7:45 am: SHORT TALKS #2 (KIOSK 6) Arthroplasty Outcomes II

Moderators: Christopher Plaskos, Jan Albert Koenig

7:20 am

PROMs Are Becoming SoC. a Novel Approach to Mitigate Their Limitation

Julien Lebleu; Andries Pauwels; Philippe Van Overschelde; Jared Weir; Charles-Eric Winandy

7:23 am

Discussion

7:26 am

Total Knee Arthroplasty Recovery in Patients Above Patient Acceptable Symptom State Preoperatively

Roberta Redfern; Mike Anderson; Dave Van Andel; Jason Cholewa

7:29 am

Discussion

7:32 am

Can Patient Reported Outcome Measures Predict Length of Stay and Discharge Disposition Following Total Hip Arthroplasty?

Jon Katzman; Casey Cardillo; Muhammad Haider; Catherine Di Gangi; Akram Habibi; Sophia Antonioli; Ran Schwarzkopf; Joshua Rozell

7:35 am

Discussion

7:38 am

Serial Changes in Patient-Reported Outcome Measure at Long-Term Follow-Up After Total

Knee Arthroplasty: A Systematic Review and Meta-Analysis

Jisu Park; Sung Jun Jang; Hyunkwon Kim; Hyung Min Lee; Min soo Cho; Tae Woo Kim; Moon Jong Chang; Chong Bum Chang; Seung-Baik Kang

7:41 am

Discussion

5:00 pm - 6:00 pm: SHORT TALKS #3 (KIOSK 6) Clinical Practice & Economics

Moderators: S. David Stulberg, Sarah Bolander

5:00 pm

Patients Having Primary Total Joint Arthroplasty at ASC's Have Lower Readmissions and ER Visits Than Those at HOPDs or Hospitals.

Simarjeet Puri; Harjot Uppal; Martin Weaver; Giresse Melone; Richard Hughes; Elizabeth Dailey; David Markel

5:03 pm

Discussion

5:06 pm

Rapid and Safe Transition to a Stand-Alone Ambulatory Surgical Center at a Major Academic Medical Center

Aleksander Mika; Jacquelyn Pennings; Jacob Wilson; Stephen Engstrom; Gregory Polkowski; John Ryan Martin

5:09 pm

Discussion

5:12 pm

Revolutionizing Total Knee Arthroplasty Inventory Management: Seamless Integration of Ultrasound-Based Bone Reconstruction Into Robotic-Assisted Surgery

Manh Ta; Riddhit Mitra; Russell McKissick; Steven MacDonald; Richard Komistek

5:15 pm

Discussion

5:18 pm

Why Do Total Hip Arthroplasties Get Canceled on the Day of Surgery?

Jon Katzman; Sophia Antonioli; Akram Habibi; Carlos Sandoval; Eric Grossman; Armin Arshi; Ran Schwarzkopf; Catherine Di Gangi

5:21 pm

Discussion

5:24 pm

Incidence of Surgical Indications From Orthopedic Source

Ira Kirschenbaum; Katelyn DCosta; Alec Ralph; Jonathan Metellus; Millie Rouffiac; Chelyn Park; Emelia Ohnmacht; Francesca Vecchio; Isaiah Dolphin; Jaiden Stokes; Anthony Kang; Erik Kim

5:27 pm

Discussion

5:30 pm

Making Sense of Data: Creating Actionable Information From Remote Monitoring Technology

Richard Bolander; Victor Hernandez; S. David Stulberg; Michele D'Apuzzo

5:33 pm

Discussion

5:36 pm

Relationship Between Area Deprivation Index and Patient Reported Outcomes Following Total Knee Arthroplasty

Gregory Laborde; Gregory Benes

5:39 pm

Discussion

Chamber Room BCD (Poster)

7:00 am - 9:00 am

Poster Session 1 Removal

9:00 am - 11:00 am

Poster Session 2 Setup

11:00 am - 6:30 pm: POSTER SESSION 2

11:00 am: Knee Kinematics

11:00 am

Influence of a Post-Cam Mechanism on Femoral Rollback of Human Cadaveric Knees

Saskia Anna Brendle; Sven Krueger; Joachim Grifka; Peter E. Mueller; William Mihalko; Berna Richter; Thomas M Grupp

11:00 am

Comparison of Kinematics Between Bi-Cruciate Stabilized and Medial Stabilized Total Knee Arthroplasty Cohorts

Garett Dessinger; Peter Thadani; Andrew Gaetano; Richard Komistek; Michael LaCour

11:00 am: Robotic Assistance

11:00 am

Does Robotic Assistance Improve Success of Component Fixation in Cementless Total Knee Arthroplasty?

John Cooper; Jeffrey Geller; Alexander Neuwirth; Nana Sarpong; Roshan Shah; Catelyn A. Woelfle

11:00 am

Image Free Robotic-Assisted System for Total Knee Arthroplasty Associated With Reduced and More Consistent Surgical Times Versus Manual Instrumentation: A Retrospective Controlled Single Surgeon Study

James Lesko; Ian Leslie; Timothy Alton

11:00 am

Clinical and Patient Reported Outcomes of a Novel Robotic System in Total Knee Arthroplasty

Muhammad Haider; Michelle Zabat; Casey Cardillo; Akram Habibi; Sophia Antonioli; Ivan Madrid; Morteza Meftah; Joshua Rozell; Ran Schwarzkopf; Catherine Di Gangi

11:00 am

Introduction of ROSA Robotic-Arm System for Total Knee Arthroplasty Is Associated With a Minimal Learning Curve for Operative Time

Faseeh Zaidi; Scott Bolam; Mei-Lin Tay; Michael M Hanlon; Jacob T Munro; Andrew Paul Monk

11:00 am

Examining the Associations Between Morphologic Knee Features With Demographics and Walking Gait Kinematics in Patients Awaiting Robotic-Assisted Knee Arthroplasty.

Nadim Ammourey; Stephanie Civiero; Michael Dunbar; Glen Richardson; Jennifer Leighton; David Wilson; Janie Wilson

11:00 am

Consistency in Robotic-Assisted Total Knee Arthroplasty Case Time Between Different Patient Preoperative Deformities

Laura Yanoso-Scholl; Rambatla Radhakrishnan; Todd Gutowski

11:00 am: TKA: Biomechanics

11:00 am

Effect of Tibial Slope on Knee Mechanics for PCL Deficient Cruciate-Retaining Total Knee Arthroplasty

Kyle Snethen; Marc Bandi; Eik Siggelkow; Craig Silverton; Nicholas Frisch

11:00 am

TKA Joint Line Obliquity Post-Op Comparisons for External Knee Adduction Moments During Stair Ascent

William Mihalko; Nuanqiu Hou; Alexis Nelson; Douglas Powell; Marcus Ford; James Guyton; John Crockarell; Christopher Holland; Teri Ross; Derek Dixon

11:00 am

Impacts of Medial-Lateral Implant Placement in TKA

Nathan Lenz

11:00 am

Interfacial Motion Comparison Between 1-Peg and 3-Peg Cementless Patellar Implants During Simulated Patellofemoral Kinematics and Kinetics

Bradley Elliott; Kimberly Mimnaugh

11:00 am

The Pendulum Knee Drop Test as a Means to Distinguish Balance in a Total Knee Arthroplasty Model

Kevin Abbruzzese; Scott Logan; Michael Dunbar; Jared Weir; Michael Mont; Sally LiArno

11:00 am

Impact of Asymmetric Tibial Inserts on Multi-Planar Kinematics During Pendulum Knee Drop Test

Kevin Abbruzzese; Michael Dunbar; Jared Weir; Michael Mont; Sally LiArno

11:00 am

Press-Fit Tibial Tray Micromotion Is Similar During Loading in High Flexion Between Manual and Robotic-Assisted Total Knee Arthroplasty

Ana Figueroa; Ayobami Ogunsola; Michael Marinier; Marc Brouillette; Jessica Goetz; Jacob Elkins

11:00 am: Outcomes

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11:00 am

Cementless vs Cemented Robotic-Assisted Total Knee Arthroplasty Outcomes: A Single Center MARCQI-Based Study

Alexander Ziedas; Simarjeet Puri; William Kesto; David Knesek; Jefferey Michaelson; Todd Frush; David Markel

11:00 am

Walking Aid Use Has Significant Impact on Gait Parameters During TKA Recovery

Ricardo Antunes; Andrew Meyer; Paul Jacob; Robert Marchand; T. Elaine Justice, MSN, RN; Kelly Taylor; Matthias Verstraete

11:00 am

What Factors Affect Patients Perception of Changes in Mobility Following Knee Arthroplasty Procedures?

Roberta Redfern; Mike Anderson; Jason Cholewa

11:00 am: TKA: Clinical

11:00 am

Survivorship and Clinical Outcomes for a New and Legacy All Polyethylene Tibia Used in Primary Total Knee Arthroplasty: A Multi-Center Registry Review

David Fawley; David F Dalury; Kirk Kindsfater; Robert Gorab; William P Barrett; Donald Pomeroy; John F Irving; Sean Croker

11:00 am

A Failed Trial of Selective Patellar Resurfacing During Primary Total Knee Arthroplasty

John Cooper; Catelyn A. Woelfle

11:00 am

Preoperative Flexion Contracture Influences Magnitude of Planned Resections in RA-TKA

Catherine Di Gangi; Alana Prinos; Patrick Meere; Sophia Antonioli; Morteza Meftah; Matthew Hepinstall; Akram Habibi

11:00 am

Infection Prevention Strategies for Extensor Reconstruction Synthetic Meshes

Alisina Shahi; Samantha Gardner; Annabelle Lin; Hugh Jones; David Rodriguez

11:00 am

Achieving High Weight-Bearing Flexion With an ACL Retaining TKA: Is Inclusion Criteria a Difference Maker?

Lauren Smith; Michael LaCour; Richard Komistek; Michael Ries; Jan Victor

11:00 am

Cost-Effectiveness of a Patient Centered Digital Platform After Elective Orthopaedic Surgery- Experiences at a District Hospital

Gagandeep Mahi; Faizal Rayan; Srinivasan Shyamsundar; Myrto Vlazaki; Hamidreza Khairandish

11:00 am: UKA

11:00 am

Lateral UKA in Patients With Greater Than 14 Degrees Valgus Deformity

Martin Redish, MD; Robert Eberle

11:00 am

The Impact of Surgeon Volume on UKA Survivorship: A MARCQI Database Analysis

Muhammad Abbas; David Markel; Brian Hallstrom; Huiyong T Zheng; Michael Charters

11:00 am: Technology in Arthroplasty

11:00 am

Safety, Efficacy and Validation of AMF Heating on a Primary Prosthetic Knee Implant and Surrounding Tissues Using Human Cadaver and Digital Knee Models

Bibin Prasad; Varun Sadaphal; Luke Gritter; Joshua Thomas; Jose F Guzman; John Tepper; Haley Alegria; Rajiv Chopra

11:00 am

Integrating Virtual Reality in ACL Rehabilitation: A Novel Approach for Enhanced Neuromuscular Connectivity Following Arthroscopic Reconstruction

Cadence Lee; Farid Amirouche

11:00 am

From Theory to Practice: Integrating Wearable Technology Into Clinical Environments

Richard Bolander; Sarah Bolander; Victor Hernandez; Michele D'Apuzzo

11:00 am

Remote Therapeutic Monitoring: What to Consider for Meaningful Clinical Integration and Reimbursement Potential

Richard Bolander; Sarah Bolander

11:00 am: Other Joints

11:00 am

Survivorship and Clinical Outcomes for a Short Stem Used in Shoulder Arthroplasty: A Multi-Center Registry Review

David Fawley; Amon Ferry; Rudolf Hoellrich; Jacob Stueve; Sean Croker

ePosters Governor's B Exhibit Hall Kiosk #7 (E-Poster)

7:00 am - 5:30 pm

ePosters

SATURDAY 31 AUGUST, 2024

Governor's B (Expo Hall)

7:00 am - 8:00 am: **BREAKFAST**

Governor's A/E (Podium)

8:00 am - 9:00 am: **SHORT TALK #4 (KIOSK 1) Knee Alignment**

Moderators: Scott Banks, Ryan Chapman

8:00 am

Assessment of Knee Ligaments Behavior in Cadaveric Study: Comparing Mechanical

Friday August 30, 2024

Saturday August 31, 2024

Alignment (MA) and Kinematic Alignment (KA) Using Augmented Reality Guidance NextAR in Total Knee Arthroplasty

Daniele Ascani; Massimiliano Bernardoni

8:03 am

Discussion

8:06 am

Surgical Alignment Techniques and Implant Designs After Total Knee Arthroplasty Has Little Effects on Muscle Strength

Nuanqiu Hou; Alexis Nelson; Douglas W. Powell; Marcus Ford; James Guyton; John Crockarell; Christopher Thomas Holland; Derek Dixon; Teri Ross; William Mihalko

8:09 am

Discussion

8:12 am

Strong Associations Between Robotic Functional Intraoperative Planning and Dynamic Alignment Behavior After Total Knee Arthroplasty

Sebastien Lustig; Clement Favroul; Alix Cagnin; Laurence CHEZE; NICOLA HAGEMMEISTER; Alex Fuentes; Cecile Batailler

8:15 am

Discussion

8:18 am

Comparing TKA Surgical Alignment Techniques for External Peak Knee Adduction Moments, Adduction Impulse and Movement Strategies During Stair Ascent

Alexis Nelson; Nuanqiu Hou; Douglas W. Powell; Marcus Ford; James Guyton; John Crockarell; Christopher Thomas Holland; Derek Dixon; Teri Ross; William Mihalko

8:21 am

Discussion

8:24 am

Variability of Alignment and Bone Resections in Robotically Balanced Total Knee Arthroplasty

Catherine Di Gangi; Matthew Hepinstall; Christian Oakley; Michael Sybert; Sophia Antonioli; Akram Habibi; Morteza Meftah; Patrick Meere

8:27 am

Discussion

8:30 am

Prediction of Coronal Alignment in Robotic-Assisted Total Knee Arthroplasty With Artificial Intelligence

Catherine Di Gangi; Joseph A. Bosco IV; Morteza Meftah; Daniel Waren; Cody Watson; Sophia Antonioli; Akram Habibi

8:33 am

Discussion

8:36 am

Comparison of Mechanical Versus Kinematic Alignment in Kinematic Outcomes in TKA Subjects Using a Forward Mathematical Model of the Knee

Caleb Chesney; Michael LaCour; Richard Komistek; Bradley Meccia

8:39 am

Discussion

Saturday August 31, 2024

8:42 am

Inverse Kinematic Alignment Decreases Joint Line Obliquity Compared to Kinematic Alignment

Joseph Maratt; Lucian Warth; Chris Curless; Rachel Brennan

8:45 am

Discussion

8:48 am

Portable Navigation Enables Accurate Coronal and Sagittal Alignment in Total Knee Arthroplasty Performed by Less Experienced Surgeons.

Keisuke Matsukura; Satomi Abe; Hiroshi Ito

8:51 am

Discussion

8:54 am

What Is the Best Way to Identify Femoral and Tibial Anatomic Landmarks for Component Alignment? a Cadaver-Based Study

Melanie Caba; Azhar Ali; Antonia Chen; Michael Mont; James Crutcher; Ormonde Mahoney; Laura Yanoso-Scholl; Emily Hampp; Sarah Shi

8:57 am

Discussion

9:00 am - 10:00 am: PODIUM AE/3 Computer Assisted Arthroplasty

Moderators: Charles Lawrie

9:00 am

Moderator Intro

9:02 am

Navigated Instrumentation Improves Reproducibility of Laxity Acquisition During a Total Knee Arthroplasty

François Boux de Casson; Laurent Angibaud; Florian Kerveillant; Leonard Duporte; Gerard Giordano; Louis Dagneaux

9:08 am

Accuracy of Robotic Assistance in Unicompartmental Knee Arthroplasty: A Cadaveric Study Comparing VELYS Robotic Assisted Solution to Conventional Instrumentation

Gary Doan; Ian Leslie; Patrick Curtis; Daniel Hoeffel; Richard Southgate; David F Dalury

9:14 am

How Accurately Can a Miniaturized Navigation Device Assess the Intra-Operative Sagittal Position of the Pelvis?

Tristan Jones; Stefan Kreuzer; Stephen Raterman; Danielle DeMoes; Miroslava Rangel

9:20 am

Navigation Accuracy of a Novel Mixed Reality Platform for Orthopedic Surgery

John Cooper; Winona Nice

9:26 am

Discussion

9:34 am

Boney Compaction Surrounding Cementless TKA Implants and the Effect of Robotic Surgery
Emma Donnelly; Jaques Milner; David Holdsworth; Ryan Willing; Brent Lanting

Saturday August 31, 2024

9:40 am

Discussion

9:42 am

Evaluation of the Learning Curve Associated With Advanced Intra-Operative Planning for Total Knee Arthroplasty

François Boux de Casson; James Huddleston; Wen Fan; Amaury Jung; Laurent Angibaud; Prudhvi Tej Chinimilli

9:48 am

Learning Curve for a New Novel, Miniaturized, Imageless Navigation Technology for TKA.
Abigail Priestley-Collins; George Branovacki

9:54 am

Discussion

10:00 am - 11:00 am: PODIUM AE/4 Arthroplasty Outcomes

Moderators: Cheryl Liu, Matthew Magruder

10:00 am

Moderator Intro

10:02 am

Patient-Reported Outcome Measures Provide Little Value for Long-Term Clinical Surveillance in Joint Arthroplasty: A Systematic Review and Meta-Analysis

Hannah Spece; Michael Kurtz; Nicolas Piuze; Steven Kurtz

10:08 am

Outcomes in Patients Undergoing Primary Total Hip Arthroplasty With History of Prior Hip Arthroscopy

Hayley Raymond; Brian A. Perez; Muhammad Haider; Sophia Antonioli; Akram Habibi; Ran Schwarzkopf; Diren Arsoy; Catherine Di Gangi

10:14 am

Patients Having Primary Total Joint Arthroplasty at ASCs Receive Higher Opioid Prescriptions at Discharge Than Those at HOPDs or Hospitals

Simarjeet Puri; Harjot Uppal; Martin Weaver; Giresse Melone; Richard Hughes; Elizabeth Dailey; David Markel

10:20 am

Discussion

10:26 am

Is Robotic Assisted Unicompartmental Knee Arthroplasty Effective in Elderly Patients? Early Outcomes of a Single Centre Prospective Study

Shantanu Patil; Ashok Kumar P. S.; Vikas Rai; Kalaivanan Kannian; Pichai Suryanarayan; Vijay C Bose

10:32 am

Does the Use of a Tourniquet Influence Five-Year Outcomes Following Total Knee Arthroplasty? Results of a Randomized Controlled Trial

Jon Katzman; Alana Prinos; Hayley Raymond; Casey Cardillo; Morteza Meftah; Akram Habibi; Ran Schwarzkopf; Catherine Di Gangi; Sophia Antonioli

10:38 am

Discussion

10:42 am

Increased Risk of Flexion Impingement and Posterior Instability Following Total Hip Arthroplasty

Linden Bromwich; Christopher Plaskos; Nathanael Heckmann; Stephen McMahon; Andrew Shimmin; Jonathan Bare; Jim Pierrepont

10:48 am

Targeted Prehabilitation Approach Guided by a Knee Kinesiography Exam Can Improve Function and Realign Expectations in Total Knee Arthroplasty Candidates

Pierre Ranger; Alix Cagnin; Bianca Marois; Jean-Philippe Lajoie; Alex Fuentes

10:54 am

Discussion

11:00 am - 12:00 pm: SHORT TALKS #5 (KIOSK 1) Clinical Biomechanics

Moderators: Jeffrey Bischoff, Danielle De Villiers

11:00 am

Is Change in Walking Asymmetry Correlated With Changes in Quality of Life in Patients Undergoing Total Joint Arthroplasty?

Jason Cholewa; Mike Anderson; Roberta Redfern

11:03 am

Discussion

11:06 am

The Efficacy of Cement-Augmented Pedicle Screw for Osteoporotic Vertebral Fracture

Atsunori Ohnishi; Toru Minami; Takaaki Nakai; Junzou Hayashi; Tsuyoshi Nakai

11:09 am

Discussion

11:12 am

Design of a Tibial Component for Triboelectric Force Sensing in Total Knee Arthroplasty

Yizhao Li; Adam Garry Redgrift; Shahrzad Towfighian; Ryan Willing

11:15 am

Discussion

11:18 am

How to Understand the Biomechanics of New Hip Stem Designs

Richie Gill; Elise Pegg; Jennie McNab; Mouhsin El-Chafei; Edward Davis

11:21 am

Discussion

11:24 am

Increasing Use of Cemented Stems Is Associated With Reduced Early Fracture After Total Hip Arthroplasty: A Single Statewide Arthroplasty Registry Perspective

Kevin Adik; Nathanael Adams; Ajay Srivastava; Richard Hughes; Huiyong T Zheng; Brian Hallstrom; David Markel

11:27 am

Discussion

11:30 am

How Do Collared Double Taper Wedge Stems Reduce the Periprosthetic Fracture Risk?

Katja Glismann; Golzar Dakhili; Michael Morlock; Gerd Huber

11:33 am

Discussion

11:36 am

Statistical Shape Modelling of the Pelvis Helps Minimise Leg Length Discrepancy in Primary THA

Sara De Angelis; Johann Henckel; Angelika Ramesh; Alister Hart; Anna Di Laura

11:39 am

Discussion

11:42 am

Using 3D Preoperative Planning to Predict Stem Alignment, Sliding, and Edge Loading for Compaction Broach and Press Fit Stems

Thang Nguyen; Jarrod Nachtrab; Richard Komistek; Michael LaCour

11:45 am

Discussion

Governor's C (Podium)

8:00 am - 9:00 am: SHORT TALK #4 (KIOSK 3). Wear and Materials

Moderators: Ebru Oral, Louise M. Jennings

8:00 am

Oxidation and Crosslink Density of Retrieved Highly Crosslinked Polyethylene Total Hip and Total Knee Inserts After Long-Term Implantation

Aarti Shenoy; Nathaniel T. Ondeck; Louise O Connor; Elexis Baral; William Querido; Nancy Pleshko; Timothy Wright

8:03 am

Discussion

8:06 am

Oxidation Assessment on the Surface and Subsurface of Total Knee Arthroplasty Tibial Inserts Revised Within Less Than 5 Years

Enrico Fava; Amanda Fullgraf Petry; Carlos Rodrigo De Mello Roesler; Gean Vitor Salmoria; Alan De Paula Mozella; Patricia Ortega Cubillos

8:09 am

Discussion

8:12 am

Comparative Analysis of Polyethylene Wear Particle Shape Generated Under Standard and Edge Loading Conditions in a Metal-on-Polyethylene Total Hip Replacement

Amisha Desai; Raelene Cowie; Samantha Paterson; Louise M. Jennings

8:15 am

Discussion

8:18 am

Wear in Reverse Shoulder Arthroplasty: An in Vitro Comparative Study in Clean Conditions on Highly Cross-Linked Vitamin E UHMWPE Components in Standard and Inverted Configuration

Andrea Fattori; Gabriele Vidoni; Thomas Ferro; Michele Pressacco

8:21 am

Discussion

8:24 am

Influence of EDTA on Friction and Its Effectiveness to Reduce Solid Precipitation on Lubricants Used in Arthroplasty Wear Testing

Alexander Eischeid; Mercedes Renken; Joel Weisenburger; Hani Haider

8:27 am

Discussion

8:30 am

Delamination and Oxidation in Exactech Patellar Components: To Revise or Not to Revise

Aarti Shenoy; Peter Hsiue; Elexis Baral; Geoffrey H Westrich; Thomas Sculco; Douglas E Padgett; Timothy Wright

8:33 am

Discussion

8:36 am

Electrosurgery Induced Subsurface Damage and Hardness Changes of Ti-6Al-4V Implant Alloy

Mohsen Karshenas; Jeremy Gilbert; Peter Kurtz

8:39 am

Discussion

8:42 am

Effects of Adverse Loading on Metal on Polymer Total Hip Replacements

Ben Clegg; Nazanin Emami; Samuel Perry; Richard Hall; Michael Bryant; Rob Beadling

8:45 am

Discussion

8:48 am

Morphological and Mechanical Properties of a Dual Layered Porous Plasma Spray Coating

Aline Elquist; Patrick Steiger; Marc Taylor

8:51 am

Discussion

9:00 am - 10:00 am: PODIUM C/9 (Biomechanics and Intra-op Tech)

Moderators: Douglas Van Citters, Jennifer Stoddart

9:00 am

Moderator Intro

9:02 am

Resurfacing Unicompartmental Knee Arthroplasty Should Be the Gold Standard for Patients Over 70 Years Old With Single-Compartment Degeneration of the Knee.

Robert Eberle; Martin Redish, MD

9:08 am

Constraint of Modern Posterior Stabilized Total Knee Replacements

Joel Weisenburger; Kevin Garvin; Carlos Rodrigo De Mello Roesler; Maria Eduarda Quissini; Hani Haider

9:14 am

Using Stressed HKA for Alignment in Varus Knees Show Signs of Early Recovery.

Adam Henderson; Eyal Kazin; Karl Surmacz; Mike Anderson; Simon Plasman

9:20 am

TKA Joint Line Obliquity Post-Op Comparisons for External Knee Adduction Moments During Stair Descent

Alexis Nelson; Nuanqiu Hou; Douglas W. Powell; Marcus Ford; James Guyton; John Crockarell; Christopher Thomas Holland; Derek Dixon; Teri Ross; William Mihalko

9:28 am

Discussion

9:34 am

Preclinical Development of Endoprosthetic Implants for Replacement of Lost Limbs

Dustin Crouch; David Anderson; Stacy M. Stephenson

9:40 am

Differences in Cementless Total Elbow Arthroplasty Stem Design Depending on Degree of Bone Loss

Yupin Shi; Joseph Lipman; Fernando Quevedo Gonzalez; Timothy Wright; Robert Hotchkiss

9:46 am

Development of an Implantable Trapezium Replacement for Measuring in Vivo Loads at the Base of the Thumb

J.J. Trey Crisco; Julia Henke; Daniel McDermott; Amy Morton; Josephine Kalshoven; Douglas Moore; Rohit Badida

9:52 am

Discussion

10:00 am - 11:00 am: PODIUM C/10 Avoiding Complications in Arthroplasty

Moderators: Christopher Thomas Holland, Nicolas Piuze

10:00 am

Moderator Intro

10:03 am

Inertial Measurement Units Reveal Functional Differences Between Anterior and Posterior Approach in Hip Arthroplasty Patients

Kate Moyle; Thor Besier; George Grammatopoulos; Isabel Horton

10:09 am

Discussion

10:12 am

Synovial Barium and Zirconium Ions Are Promising Markers for Aseptic Loosening

Aleksander Mika; Hillary Mulvey; Jacob Wilson; Stephen Engstrom; Gregory Polkowski; John Ryan Martin

10:18 am

Discussion

10:21 am

Impact of Proximal Stem Fill on Humeral Loosening and Stress Shielding

Maged Awadalla; Christine Mueri; Adam Henderson; Lukas Connolly; Ghislain Maquer; Jeffrey Bischoff; Philippe Favre

10:27 am

Discussion

10:30 am

Is a Lateral Facetectomy the Solution for Unresurfaced Patellae?

Nathan Lenz; William Fugit

10:36 am

Discussion

10:39 am

Matching Trochlear Congruity to the PCA in Total Knee Replacement

James Crutcher

10:45 am

Discussion

10:48 am

Does Melatonin Improve Sleep Following Primary Total Hip Arthroplasty: A Randomized, Double-Blind, Placebo-Controlled Trial

Muhammad Haider; Kyle Lawrence; Thomas Christensen; Akram Habibi; Benjamin Schaffler; Ran Schwarzkopf; William Macaulay; Joshua Rozell; Sophia Antonioli; Catherine Di Gangi

10:54 am

Discussion

11:00 am - 12:00 pm: SHORT TALKS #5 (KIOSK 3) Revision Arthroplasty

Moderators: Leo Whiteside, Lafayette Lage

11:00 am

Re-Revision Risk of Modular and Monobloc Revision Stems After Revision Total Hip Arthroplasty

Michael Morlock; Alexander Grimberg; Klaus-Peter Günther; Marc Michel; Carsten Perka; Yinan Wu

11:03 am

Discussion

11:06 am

Flexible Metaphyseal Cones in Total Knee Arthroplasty Revision: Evaluation of Clinical-Radiographic Results and Short-Term Survival in a Sample of 11 Patients

Giulio Maria Marcheggiani Muccioli; Domenico Alesi; Alberto Fogacci; Mirco Lo Presti; Stefano Zaffagnini; Maria Pia Neri

11:09 am

Discussion

11:12 am

Evolving Techniques in Revision Knee Arthroplasty: Comparative Analysis of Novel and Legacy Hinge Knee Implants Demonstrating Reduced Bone Removal

Emily Hampp; Oliver Jenner; Julia Halligan; Nicolas Piuze

11:15 am

Discussion

11:18 am

Association Between Postoperative Zonal Fixation of Hybrid Fixated Tibial Components in Revision Total Knee Arthroplasty and Subsequent Aseptic Loosening: Appropriate Metaphyseal Fixation Is Key

Petra Heesterbeek; Simon Van Laarhoven; Gijs Van Hellemond; Wim Schreurs; Sjoerd Nota; Ate Wymenga

11:21 am

Discussion

11:24 am

Comparison of Patients Profile Between Femoral Stem Fixation Methods in Primary Hip Revisions in Brazilian Patients Between the Years 2020 to 2024.

Julia de Lira Kaszubowski; Patricia Ortega Cubillos; Amanda Dos Santos Cavalcanti; Ari Digiacomo Ocampo More; Joao Antonio Matheus Guimaraes; Lourenco Pinto Peixoto; Carlos Rodrigo De Mello Roesler

11:27 am

Discussion

11:30 am

A Statistical Shape Model of Revision Tibia

Bryan Kirking; Joshua Twiggs; William Calov; Nathan Pyle

11:33 am

Discussion

11:36 am

Unicompartmental Knee Arthroplasty Revised to Total Knee Arthroplasty Versus Primary Total Knee Arthroplasty: A Meta-Analysis of Matched Studies

Mitchell Ng; Kenneth Levy; Matthew Magruder; Afshin Razi; Nikhil Vasireddi; Paul Mastrokostas; Hrishik Epuru; Ruhani Sujlana; Nitish Polishetty

11:39 am

Discussion

Governor's D (Podium)

8:00 am - 9:00 am: SHORT TALKS #4 (KIOSK 4) Robotic Assisted Surgery

Moderators:

8:00 am

The Iatrogenic Bone Trauma and Soft Tissue Injury (BOSTI) Classification System: A Prospective Cohort Study Comparing Robotic-Arm Assisted Versus Conventional Total Hip Arthroplasty

Mohammed Wazir; Fabio Mancino; Fares Haddad; Babar Kayani

8:03 am

Discussion

8:06 am

Size-Up, Size-Down: Accuracy of Component Sizing With Computerized Tomography & Robotic-Assisted Total Knee Arthroplasty

James Henry; Brienne Paradis; Aleksandra Qilleri; Nadia Baichoo; Keith R. Reinhardt; James slover; Jonathan R. Danoff; James Germano

8:09 am

Discussion

8:12 am

High in-Vivo Accuracy of a Novel Robotic-Arm-Assisted System for Total Knee Arthroplasty:

A Retrospective Cohort Study

Faseeh Zaidi; Michael Goplen; Connor Fitz-Gerald; Scott Bolam; Michael M Hanlon; Jacob T Munro; Andrew Paul Monk

8:15 am

Discussion

8:18 am

Comparison of Accuracy and Short-Term Results Between MAKO and Manual Technique

Chan Young Lee; Kyung-Soon Park; TAEK-RIM YOON

8:21 am

Discussion

8:24 am

Validation of Coronal Alignment in a Robotic Total Knee Arthroplasty System

Anoop Chandrashekar; John Ryan Martin; Logan Locascio; Peter Chan; Gregory Polkowski; Martin Faschingbauer

8:27 am

Discussion

8:30 am

Robotic vs. Conventional Shoulder Arthroplasty: Impact of Surgical Variability on Preoperative Bone Density Estimates

Ghislain Maquer; Ingmar Fleps; Mirella Lopez Picazo; Thomas Duquin; Taku Hatta; John Sperling; Jean-Guillaume Abiven; Chloe Landry; Ludovic Humbert; Jeffrey Bischoff; Philippe Favre

8:33 am

Discussion

8:36 am

Access to Robotic Spine Surgery in the Continental United States: A Geospatial Analysis

Mitchell Ng; Paul Mastrokostas; Leonidas Mastrokostas; Ahmed Emara; Ian Wellington; Ahmed Saleh; Jad Monsef

8:39 am

Discussion

8:42 am

Manual vs Robotic Patellofemoral Arthroplasty Outcomes: A Single Center MARCQI-Based Study

Alexander Ziedas; Adam Miller; Elliot Biddle; Michael Laker; Jefferey Michaelson; Todd Frush; David Markel

9:00 am - 10:00 am: SPOTLIGHT #8: Standards for Spinal Implants

Moderators: Sophia N. Sangiorgio,

9:00 am

Introduction

9:02 am

Dr. Sophia Sangiorgio

9:14 am

Questions and Discussion

9:19 am

Formal Risk-Informed Validation of a Finite Element Model for Lumbar Spine Total Joint

Replacement Under Normal and Impingement Conditions

Steven Rundell; Ron Yarbrough; Steven Kurtz

9:25 am

Safety and Tribology of a Design Optimized Ceramic Bearing for a Cervical Total Disc

Replacement

Lucia Kolle; Gregory Pryce; Rob Beadling; Michael Bryant; Ben Helgason; S J Ferguson;

Richard M. Hall

9:31 am

Hyperspectral Chemical Imaging Reveals Spatially Varied Degradation of Artificial Nucleus From M6-C Cervical Disc

Songyun Liu; Donna Ohnmeiss; Dino Samartzis; Deborah Hall; Guyer Richard; Alexander Satin; Scott Blumenthal; Robin Pourzal

9:37 am

Discussion

9:43 am

Composite Lumbar Spine Surrogate Biomechanical Variability During Multi-Laboratory Collaborative Testing

Jenna Wahbeh; Emma Coltoff; Jeremy G Loss; Siril Teja Dukkupati; Kalle Chastain; Matthew Pelletier; Tian Wang; Philip J. Brown; Mark Driscoll; Sophia N. Sangiorgio; Edward Ebramzadeh; Kate Meyers; William Walsh; Bryan Cornwall; Brian Kelly; Robb Colbrunn

9:49 am

Temporal Variation in Artificial Composite Spinal Surrogates Through Inter-Laboratory Spine Biomechanics Testing

Jenna Wahbeh; Emma Coltoff; Jeremy G Loss; Siril Teja Dukkupati; Kalle Chastain; Matthew Pelletier; Tian Wang; Philip J. Brown; Mark Driscoll; Sophia N. Sangiorgio; Edward Ebramzadeh; Kate Meyers; William Walsh; Bryan Cornwall; Brian Kelly; Robb Colbrunn

9:55 am

Discussion

10:00 am - 11:00 am: PODIUM D/9 Imaging and Planning Technology

Moderators: Peter Walker, Nobuhiko Sugano

10:00 am

Moderator Intro

10:02 am

Evaluating the Precision of Joint Centre Reconstruction in Total Hip Arthroplasty and Its Effect on Post-Operative Axial Rotation of the Femur

Gerard Smith; Christopher Plaskos; Douglas Dennis; Jim Pierrepont

10:08 am

Computational Anatomical Reconstruction of Abnormal Patellar Geometries Based on Statistical Shape Modelling (SSM)

Maria Moralidou; Rima Nasser; Justin Cobb; Richard van Arkel

10:14 am

Discussion

10:18 am

Clinical Accuracy of Patient-Specific Humeral and Glenoid Guides in Total Shoulder

Arthroplasty

Estelle Wigmore; Joshua Twiggs; Brad Miles; Benjamin Kenny

10:24 am

Accuracy of a Mixed Reality Surgical Platform for Total Knee Arthroplasty

John Cooper; Aaron Young; Jacob B. Brenza; Mike E. King; Winona Nice

10:30 am

Mixed Reality-Guidance for Accurate Cup Positioning During Total Hip Arthroplasty

Alexander Heimann; Stephen Murphy; Dan Sun; William Murphy

10:36 am

Discussion

10:42 am

Utilizing Machine Learning and Morphing Algorithms for 3D Reconstruction of Implanted Knee Models

Viet Dung Nguyen; Richard Komistek; Michael LaCour

10:48 am

Dynamic Analysis of Spinal-Pelvic Malalignments: Adverse Pelvic Mobility, Flatback Deformity and Stiff Spinopelvic Mobility

Satoshi Hamai; Tetsunari Harada; Hirokazu Saiwai; Toshiki Konishi; Yasuharu Nakashima

10:54 am

Discussion

11:00 am - 12:00 pm: SHORT TALKS #5 (KIOSK 4) Optimizing Hip Surgery

Moderators: Edward Ebramzadeh, Christopher Thomas Holland

11:00 am

Long-Term Outcome of Cementless Total Hip Arthroplasty After Rotational Acetabular Osteotomy

Hiroshi Asai; Yusuke Osawa; Yasuhiko Takegami; Hiroki Iida; Yuto Ozawa; Hiroto Funahashi;

Hiroaki Ido; Takamune Asamoto; Shiro Imagama

11:03 am

Discussion

11:06 am

Relaxed vs Flexed Seated: Bridging the Gap Between Spinopelvic Mobility Assessment Methods in THA

Linden Bromwich; Christopher Plaskos; Jonathan Bare; Stephen McMahon; Andrew Shimmin; Jim Pierrepont

11:09 am

Discussion

11:12 am

Improving Hip Resurfacing Outcomes in Women: A Retrospective Analysis of 1285 Cases

Dani Gaillard-Campbell; Thomas P Gross

11:15 am

Discussion

11:18 am

Early Performance of a Triple-Taper Metaphyseal Filling Collared Femoral Stem in a Multicenter Trial

Ahmad Faizan; Filescha Haniff; Hannah Pacheco; Han Wang; Dennis Nam

11:21 am

Discussion

11:24 am

Femoral Stem Distal Fit Assessment With Novel Three-Dimensional Planning Software

David Rister; Gokce Yildirim; Rachel Alexander

11:27 am

Discussion

Governor's A/E (Short Talk)

8:00 am - 9:00 am: SHORT TALKS #4 (KIOSK 2) Anatomic Considerations

Moderators: Nicholas Dunbar, Michael Morlock

8:00 am

Combinations of Minor Acetabular Rotations Have a Major Impact on Femoral Head Coverage and Hip Range of Motion After Hip Preserving Osteotomies

Philip Noble; Nicholas Dunbar; Shuyang Han; Carey Clark; Roshan Mara; Maddison Brenner; Chuheng Xing; Angus Brooks; Alexis Aboulaflia; Alfred Mansour III

8:03 am

Discussion

8:06 am

Assessment of the Position of Anterior Inferior Iliac Spine Position in the Pelvis of Developmental Dysplasia of the Hip

Hiroto Funahashi; Yasuhiko Takegami; Yusuke Osawa; Takamune Asamoto; Keiji Otaka; Hiroshi Asai

8:09 am

Discussion

8:12 am

Novel CT-Based 3D Assessment of Proximal Femoral Bone

Ahmad Faizan; Ilissa Hamilton; Kyle Alpaugh

8:15 am

Discussion

8:18 am

Unused 3D Femoral Morphology: Can They Lead to Better THAs?

Jarrold Nachtrab; Thang Nguyen; Michael LaCour; Richard Komistek

8:21 am

Discussion

8:24 am

3D Distal Femur Phenotype Classification

James Crutcher; Ronald Connors-Ehlert

8:27 am

Discussion

8:30 am

Automatic Muscle Attachment Estimation Compared to MR-Derived Manual Selection

Nancy Kim; Marco Schneider; Duncan Bakke; Thor Besier; Madison Wissman; Michael Harris

Saturday August 31, 2024

8:33 am

Discussion

8:36 am

Numerical Methods for Estimating Muscle Activities With Co-Contractions

Taiga Ishii; Masaru Higa

8:39 am

Discussion

8:42 am

Quadriceps Muscle Action Assessment

Gokce Yildirim; Simon Talbot

8:45 am

Discussion

8:48 am

The Quadriceps Vector Has the Same Direction in Knees of People From India as in Caucasian and Japanese People Despite Different Bone Morphology

Chi Fangzhou; Shigeru Takagi; Tomoharu Mochizuki; Osamu Tanifuji; Shin Kai; Rajesh Malhotra; John Blaha

8:51 am

Discussion

11:00 am - 12:00 pm: SHORT TALKS #5 (KIOSK 2) Knee - Alignment and Biomechanics

Moderators: Peter Walker, Sally LiArno

11:00 am

Distribution of Coronal Plane Alignment of the Knee in German Patients With Knee Arthritis

Anoop Chandrashekar; Courtney Baker; Stephen Engstrom; Gregory Polkowski; Martin Faschingbauer; John Ryan Martin

11:03 am

Discussion

11:06 am

Tibial Components Placed in Constitutional Varus Following TKA: A Minimum 5-Year Survivorship Analysis

Arthur Malkani; John Whitaker; Gavin Clark; Serene Lee; Dermot Collopy; Langan Smith; Rohat Bhimani

11:09 am

Discussion

11:12 am

Does Increased v-v Moment Affect the Tibial Micromotion of a v-v Constrained Insert?

Chase Maag; Ryan Knowles; Amit Mane

11:15 am

Discussion

11:18 am

Intact and Total Knee Arthroplasty Joint Kinematics During Activities of Daily Living

Emma Donnelly; Ryan Willing; Brent Lanting

11:21 am

Discussion

11:24 am

Anatomical Phenotyping of the Knee for TKA Planning: Beyond the Coronal Plane

Ishaan Jagota; Jonathan Bare; Andrew Shimmin; Joshua Twiggs; Brad Miles

11:27 am

Discussion

11:30 am

Blinded Assessment of Soft-Tissue Balance Using an Advanced Knee Simulator Model

Kevin Abbruzzese; Vincent Alipit; Andre Freligh; Michael Dunbar; Jared Weir; Michael Mont; Sally LiArno

11:33 am

Discussion

11:36 am

Correlational Analysis of CPAK-Based Coronal Alignment and Patellofemoral Joint Status: Enhancing Surgical Planning and Management in Total Knee Arthroplasty

Amir Pourmoghaddam; Danielle DeMoes; Stefan Kreuzer

11:39 am

Discussion

Chamber Room A Kiosk 5 (Other)

8:00 am - 9:00 am: SHORT TALKS #4 (KIOSK 5). Infection and Other Clinical Issues

Moderators: Fares Haddad, Christopher Thomas Holland

8:00 am

Unexpected Positive Cultures in Aseptic Revision Hip and Knee Arthroplasty: Prevalence and Outcomes at Mid-Term Follow-Up

Mohammed Wazir; Fabio Mancino; JOANNA BAAWA-AMEYAW; Fares Haddad; Babar Kayani

8:03 am

Discussion

8:06 am

Efficacy of a Vancomycin/tobramycin-Doped Dicalcium Phosphate Dehydrate (P-DPCD) Composite in a Mouse Pouch Infection Model Implanted With 3D-Printed Porous Titanium Cylinders

Adam Miller; Michael Kaminski; Therese Bou-Akl; Paula Dietz; David Markel

8:09 am

Discussion

8:12 am

Effects of Intravenous Dexamethasone on Glycemic Control in Patients With Type 2 Diabetes Mellitus After Total Knee Arthroplasty: Prospective, Randomized Controlled Study

Sung Jun Jang; Hyunkwon Kim; Hyung Min Lee; Min soo Cho; Jisu Park; Tae Woo Kim; Moon Jong Chang; Seung-Baik Kang

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8:15 am

Discussion

8:18 am

Appropriate Sequence and Timing of Ipsilateral Hip and Knee Arthroplasty

Ameer Tabbaa; Matthew Magruder; Gabriel Lama; Ariel Rodriguez

8:21 am

Discussion

8:24 am

Measuring the Quality of Periprosthetic Joint Infection Diagnosis: An Administrative Database Study

Daniel Buchalter; Andy Miller; Shinhye Kim; Edward Grabov; Diana Chee; Amy Chin; Alexander Mclawhorn; Catherine MacLean

8:27 am

Discussion

8:30 am

Short-Term Outcomes of Robotic-Assisted 1.5-Stage Exchange Total Knee Arthroplasty for the Management of Periprosthetic Joint Infection

Aleksandra Qillari; Kevin Chang; Alexandra Echevarria; Jonathan R. Danoff

8:33 am

Discussion

8:36 am

A Novel, Cordless, Non-Powered, Continuous Negative Pressure Wound Dressing: Optimizing Total Hip Arthroplasty

Robert Eberle; Asit Shah; Saira Shah

8:39 am

Discussion

11:00 am - 12:00 pm: SHORT TALKS #5 (KIOSK 5). AI and Digital Technology

Moderators: Andrew Jensen, Michael Kurtz

11:00 am

Comparative Analysis of Aidify's Knee Care Aids and General ChatGPT in Providing Knee Replacement Information: A Blinded Study

Evan Bloom; timur seckin; Jan Albert Koenig; James D Capozzi; Gregory H Sirounian; Omid Barzideh

11:03 am

Discussion

11:06 am

GPT-4 as a Source of Patient Information for Cervical Disc Arthroplasty: A Comparative Analysis Against Google Web Search

Mitchell Ng; Paul Mastrokostas; Leonidas Mastrokostas; Ahmed Emara; John Houten; Ahmed Saleh; Afshin Razi; Hrishik Epuru; Ruhani Sujlana; Nitish Polishetty

11:09 am

Discussion

11:12 am

CODEX AI: Clinical Orthopaedic Data Extraction - Using Large Language Models for

Improved Clinical Data Capture and Coding in Clinical Notes

Joshua Rozell; Kush Attal; Lefko Charalambous

11:15 am

Discussion

11:18 am

GPT-4 as a Source of Patient Information for Anterior Cervical Discectomy and Fusion: A Comparative Analysis Against Google Web Search

Mitchell Ng; Paul Mastrokostas; Leonidas Mastrokostas; Matthew Magruder; Ahmed Emara; Ian Wellington; Ahmed Saleh; Jad Monsef; Afshin Razi

11:21 am

Discussion

11:24 am

Patient Experiences With a Smartphone Application (Post Op) in Elective Arthroplasty

Gagandeep Mahi; Faizal Rayan; Myrto Vlazaki; Srinivasan Shyamsundar; Hamidreza Khairandish

11:27 am

Discussion

11:30 am

The Utilization of the Pixee Knee+ Augmented Reality-Assisted Navigation System in Total Knee Arthroplasty

Safa Kassab; Jacob Waitzman

11:33 am

Discussion

11:36 am

Development of a Deep Learning Model for Determining Post-Operative Coronal Plane Alignment of the Knee (CPAK) Classification

Anoop Chandrashekar; Courtney Baker; Stephen Engstrom; Gregory Polkowski; Martin Faschingbauer; John Ryan Martin

11:39 am

Discussion

Main Hallway Kiosk #6 (Short Talk)

8:00 am - 9:00 am: SHORT TALK #4 (KIOSK 6) Shoulder and Upper Extremity

Moderators: Eric Wagner, Ulrich Hansen

8:00 am

Understanding the Effect of Interscalene Blocks on Pulmonary Function: Can We Prevent Complications?

Garrett Jackson; Vani Sabesan; Devin John; Aghdas Movassaghi; Howard Routman; Jacob Calpey

8:03 am

Discussion

8:06 am

Survivorship and Clinical Outcomes for a Platform Epiphysis Component Used in Reverse Shoulder Arthroplasty: A Multi-Center Registry Review

Maarten de Vos; Jacob Stueve; Sean Croker; David Fawley

8:09 am

Discussion

8:12 am

How Much Do We Actually Use Our Wrists? Harnessing Wearable Motion Sensors to Determine Baseline Wrist Motion Values in Real-World Settings for Use in Preclinical Testing of Wrist Arthroplasty Devices

Ryan Chapman; J.J. Trey Crisco

8:15 am

Discussion

8:18 am

Survivorship and Clinical Outcomes for a Modular Lateralized Shoulder Epiphysis Used in Reverse Shoulder Arthroplasty: A Multi-Center Registry Review

David Fawley; Amon Ferry; Rudolf Hoellrich; Sean Croker

8:21 am

Discussion

8:24 am

Porcine Carpal Biomechanics: Feasibility as a Preclinical Animal Model for the Human Wrist Joint

J.J. Trey Crisco; Rohit Badida; Quianna Vaughan; Edward Akelman; Madison Altieri

8:27 am

Discussion

8:30 am

Analyzing Prosthetic Radial Head 3D Topography

Srinath Kamineni; Anika Yadav

8:33 am

Discussion

11:00 am - 12:00 pm: SHORT TALKS #5 (KIOSK #6) Applied Biomechanics in TKA

Moderators: Christina Esposito, Yasushi Oshima

11:00 am

Evaluation of a Self-Powered Knee Implant Under Simulated Gait Loading

Adam Garry Redgrift; Yizhao Li; Shahrzad Towfighian; Ryan Willing

11:03 am

Discussion

11:06 am

Load to Shear Failure of Cemented Patellar Components in Well-Functioning Postmortem Total Knee Arthroplasties

Sara Sacher; Drake Lebrun; Elexis Baral; Breana Siljander; Robert Hopper; Ryan Breighner; Hollis Potter; C. Anderson Engh; Douglas E Padgett; Timothy Wright

11:09 am

Discussion

11:12 am

Muscle and Knee Contact Forces During Sit-to-Stand in Patients One Year After Unilateral Total Knee Arthroplasty

Erik Kowalski; Alexandre Pelegrinelli; Danilo Catelli; Geoffrey F Dervin; Mario Lamontagne

11:15 am

Discussion

11:18 am

Experimental Estimates of the Forces and Moments Which Could Compromise

Reregistration of Reference Frames in Navigated or Robotic Arthroplasty

Alexander Eischeid; Joel Weisenburger; Hani Haider

11:21 am

Discussion

11:24 am

How Does Subchondral Bone Remodeling Affect the Trajectory of the Bone Saw in the AP Trajectory? a Bone Foam Model Evaluation

Devin Asher; Craig Silverton; Erickson Andrews; Tahsin Rahman; Robin Pourzal; Jonathan Shaw

11:27 am

Discussion

11:30 am

Analyzing the Effects of Tibial Plate Positioning on TKA Femorotibial Mechanics Using a Dynamic Mathematical Model of the Knee

Caleb Chesney; Michael LaCour; Richard Komistek; Bradley Meccia

11:33 am

Discussion

11:36 am

Investigation of a Spatial Computing Device for Knee Stiffness Modulation in Total Knee Arthroplasty

Kevin Abbruzzese; Mark Cass; Akshansh Chaudhry; Sally LiArno

11:39 am

Discussion

11:42 am

Preoperative Patient Gait Kinematics May Impact Total Knee Arthroplasty Outcomes: Insight Into Bearing Design

Alex Fuentes; Rémi Courteille; Evan R Deckard; Alix Cagnin; Nicola Hagemeister; Laurence CHEZE; Scott Banks; Michael Meneghini

11:45 am

Discussion

11:48 am

Does Cruciate Ligament Substitution and Implant Asymmetry Make a Difference for Total Knee Arthroplasty Kinematics?

Lauren Smith; Richard Komistek; Michael LaCour

11:51 am

Discussion

Chamber Room BCD (Poster)

7:00 am - 11:00 am

Poster Session 2

Saturday August 31, 2024

11:00 am - 12:30 pm
Poster Session 2 Tear Down

ePosters Governor's B Exhibit Hall Kiosk #7 (E-Poster)

7:00 am - 11:30 am
ePosters