



MUSCULOSKELETAL
INFECTION SOCIETY

32nd Annual Open Scientific Meeting
August 5-6, 2022
Pittsburgh, PA

PRELIMINARY AGENDA

Friday, August 5, 2022

- 7:00am Registration Opens
- 7:00-8:00am Breakfast
Visit Exhibitors and e-Posters
- 7:50-7:59am Welcome, Disclosures
Brian Klatt, MD
- Session I** **DIAGNOSTICS**
Moderators:
- 8:00-8:06am Synovial Fluid Microorganism Antigen Testing Demonstrates Good Nationwide Performance
Carl Deirmengian, Brett Levine, Alex McLaren, Alvin Ong, Pearl Paranjape
- 8:07-8:13am Utility of Synovial Biomarkers in the Diagnosis of Acute PJI
Saad Tarabichi, Graham Goh, Colin Baker, Matthew Sherman, Diana Fernández-Rodriguez, Javad Parvizi
- 8:14-8:20am Far from perfect: Synovial fluid next-generation sequencing (NGS) in diagnosing periprosthetic joint infection
Tejbir Pannu, Jesus M Villa, Preston Grieco, Jorge Manrique, Aldo Riesgo, Alison Klika
- 8:21-8:27am The Utility of Next Generation Sequencing in Revision TJA
Colin Baker, Karan Goswami, Saad Tarabichi, Graham Goh, Javad Parvizi
- 8:28-8:36am Discussion
- 8:37-8:43am A New Tool for *C. acnes* Detection: Antigen Immunoassay
Krista Toler, Pearl Paranjape, Alex McLaren, Carl Deirmengian

- 8:44-8:50am The Impact of Specimen Transport Time on Synovial Fluid Culture is Minimal
Krista Toler, Van Thai-Paquette, Alex McLaren, Carl Deirmengian
- 8:51-8:57am Diagnosing prosthetic joint infection in total hip arthroplasty: a comparison of fluoroscopic- and ultrasound-guided hip aspiration
Emily Boes, Michael Archibeck, John Wheelwright, Brenna Blackburn, Masaru Teramoto, Daniel Cushman
- 8:58-9:06am Discussion
- SYMPOSIUM #1** **Critical Role of FDG-PET in the Management of MSK infections**
9:07-9:27am Abass Alavi, MD
Professor, Department of Radiology
Pearlman School of Medicine, University of Pennsylvania
- 9:28-9:38am Discussion
- Session II** **BASIC SCIENCE – 1**
Moderator:
- 9:39-9:45am Arthroplasty Surgery Alters the Local Immune Composition of the Knee Joint
Kyle Cichos, Vidya Sagar Hanumanthu, Chander Raman, Elie S Ghanem
- 9:46-9:52am Characterizing the Local Immune Environment in a Murine Model of Periprosthetic Joint Infection (PJI)
Christopher Hamad, Joseph K Kendal, Zeinab Mamouei, Nicholas Peterson, Alan Li, Jeremiah Taylor, Abdulrahman Almalouhi, Parsa Asachi, Micheal Yeaman, Nicholas Bernthal
- 10:53-9:59am Prospective ex vivo activity of PLG0206, an engineered antibacterial peptide, on chronic periprosthetic joint infection total knee arthroplasty components: the Knee Explant Analysis (KnEA) Study
Dana Parker, Kimberly Brothers, Jonathan Mandell, John Koch, Despina Dobbins, Jonathan Steckbeck, David Huang, Kenneth Urish
- 10:00-10:06am Development of a PJI microJoint Bioreactor for the study of Bacteriophage Activity
Beth Knapick, Dana Parker, Meagan Makarczyk, Kimberly Brothers, Peter Alexander, Hang Lin, Benjamin Chan, James Doub, Kenneth Urish
- 10:07-10:13am An Engineered Antimicrobial Peptide, PLG0206, Reduces Biofilm Mass and Increases Survival in a Rabbit Model of Staphylococcus aureus Periprosthetic Joint Infection
Kimberly Brothers, Jonathan Mandell, Masashi Taguchi, Dana Parker, Peter Alexander, Despina Dobbins, David Huang, Nicholas Pachuda, Kenneth Urish
- 10:14-10:24am Discussion

10:25-10:39am Refreshment Break
Visit Exhibitors and ePosters

SYMPOSIUM #2 **Antibiotics and Diagnostics 201 – taking your knowledge to the next level**
Moderator: Laura Certain, MD

10:40-11:00am Peri-operative Antibiotic Choices
Sandra Nelson, MD
Massachusetts General Hospital

11:01-11:21am Infection Diagnostics
Robin Patel, MD
Mayo Clinic

11:22am-11:42am Oral Antibiotics for Bone and Joint Infections
Nicolas Cortes-Penfield, MD
University of Nebraska Medical Center

11:43-11:53am Discussion

Session III **REIMPLANTATION**
Moderator:

11:54am-12:00pm The 2018 ICM definition of periprosthetic hip and knee infection is of no value in determining the outcome of reimplantation in two-stage revision
Tejbir S Pannu, Jesus M Villa, Nicolas Piuuzzi, Aldo M Riesgo, Carlos Higuera, Alison Klika

12:01-12:07pm Utility of Serum, Synovial, and Tissue Markers Prior to Reimplantation in Patients Undergoing Two-Stage Revision Total Joint Arthroplasty: A Systematic Review and Meta-Analysis
Irfan Khan, Brandon Boyd, Antonia Chen, Nicholas Cortes-Penfield, Thomas Myers, Timothy Brown, Gina Suh, Gerald McGwin, Elie Ghanem, Yale Fillingham

12:08-12:14pm Utility of Synovial Biomarkers in Predicting Failure following Reimplantation
Saad Tarabichi, Graham Goh, Irfan Khan, Colin Baker, Javad Parvizi

12:15-12:21pm Diagnostic Utility and Thresholds for Commonly Obtained Serum and Synovial Markers prior to Reimplantation in Periprosthetic Joint Infection
Abhijit Seetharam, Julian Dilley, R. Michael Meneghini, Michael Kheir Abhijit Seetharam

12:22-12:28pm Is Joint Aspiration Needed before Reimplantation?
Emanuele Chisari, Leanne Ludwick, Taylor D'Amore, Jenna Mandel, Brendan Gleason, Javad Parvizi

12:29-12:39pm	Discussion
12:40-1:14pm	LUNCH
SYMPOSIUM #3	MUSCULOSKELETAL INFECTION
1:15-1:30pm	Literature review of economic impact and advocacy issues Brian Klatt, MD Assistant Professor, Department of Orthopaedic Surgery University of Pittsburgh
Session IV	OUTCOMES AND ECONOMICS OF MUSCULOSKELETAL INFECTION
	Moderator:
1:31-1:37pm	Financial Burden of Septic Total Hip Arthroplasty Revisions Compared to Aseptic Ones - Call for New Procedural Coding? Jesus Villa, Tejbir Pannu, Robert Eysler, Alison Klika, Carlos Higuera
1:38-1:44pm	Financial Burden of Septic Total Knee Arthroplasty Revisions Compared to Aseptic Ones - Call for New Procedural Coding? <i>Jesus Villa, Tejbir S Pannu, Robert Eysler, Alison Klika, Wael Barsoum, Carlos Higuera</i>
1:45-1:51pm	Onodera's prognostic nutritional index a valuable measure in predicting complications after TKA <i>Alisina Shahi, Tae W kim, Jack Shilling, Matthew Brown, Ali Oliashirazi</i>
1:52-1:58pm	An externally validated algorithm for prediction of in-hospital and ninety-day mortality after spinal epidural abscess <i>Akash Shah, Aditya Karhade, Olivier Groot, Thomas Olson, Don Park, Joseph Schwab</i>
1:59-2:05pm	Factors Associated With Periprosthetic Joint Infection in Hip Hemiarthroplasty <i>Jonathan Bourget-Murray, Isabel Horton, Jared Morris, Antoine Bureau, Simon Garceau, Hesham Abdelbary, George Grammatopoulos</i>
2:06-2:16pm	Discussion
2:17-2:23pm	Cutibacterium acnes Native Vertebral Osteomyelitis: A Case Series <i>Matteo Passerini, Julian Maamari, Don Bambino Geno Tai, Zelalem Temesgen, Aaron Tande, Elie F Barbari</i>
2:24-2:30pm	Incidence of Unexpected Positive Sonication Results in Presumed Aseptic Knee and Hip Revision Arthroplasty <i>Alan Wilson, Stuti Patel, Johannes Plate, Michael O'Malley, Brian Klatt</i>

- 2:31-2:37pm Skin microbiome and effect of decolonization
Diana Fernández-Rodriguez, Jeongeun Cho, Emanuele Chisari, Javad Parvizi
- 2:38-2:44pm Streptococcal Periprosthetic Joint Infections: Prognosis and Outcomes
Colleen Wixted, Andy Schwartz, Billy Kim, Isabel Prado, Breanna Polascik, Edward Hendershot, Michael Bolognesi, William Jiranek, Jessica Seidelman, Thorsten Seyler
- 2:45-2:51pm A Multicenter Prospective Investigation on Physical and Mental Health After Girdlestone Resection Arthroplasty
Colleen Wixted, Breanna Polascik, Niall Cochrane, Sean Ryan, Ran Schwarzkopf, Antonia Chen, Thorsten Seyler
- 2:52-3:02pm Discussion
- 3:03-3:19pm Refreshment Break
Visit Exhibitors and e-Posters
- SYMPOSIUM # 4**
- 3:20-4:45pm Coding in Musculoskeletal Infection Care for Ortho and ID doctors**
Moderator:
- 4:46-5:30pm Discussion
- 6:00pm Presidents Reception and Dinner**

Saturday, August 6, 2022

- 6:30-8:00am. Breakfast
Visit Exhibitors and e-Posters
- 7:00-7:45am . MSIS Business Meeting (MSIS Members only)
- Session VI BASIC SCIENCE - 2**
Moderator: Drs. Kenneth Urish and Antonia Chen
- 8:00-8:06am Non-Eluting Zimmer Bactiguard Implant Coating Provides Early Protection Against Infection in a Murine Model of Periprosthetic Joint Infection (PJI)
Zeinab Mamouei, Christopher Hamad, Nicholas Peterson, Joseph Kendal, Alan Li, Jeremiah Taylor, Abdulrahman Almalouhi, Aaron Kavanaugh, Fabrizio Billi, Nicholas M Bernthal
- 8:07-8:13am Irrigation and Brush Sonication remove mature staphylococcal biofilm on clinical orthopedic implants: An in-vitro evaluation
Zachary Coles, Christina A Chao, Tyler Khilnani, Mathias Bostrom, Alberto Carli

- 8:14-8:20am Combined DAIR and PhotothermAA Gel Decreases Implant Biofilm Burden and Soft Tissue Infection in a Rabbit Model of PJI, A Pilot Study
Anabelle Visperas, Nathalie Milbrandt, Yu Hsin Tsai, Zhifei Ye, Dehau Jiang, Nicolas Piuzzi, Alison Klika, Anna Cristina Samia, Carlos Higuera, Pedro J Rullan
- 8:21-8:27am Do antiseptic irrigation solutions have different efficacies on different orthopedic surfaces against staphylococcal biofilm? An in-vitro evaluation
Tyler Khilnani, Zachary Coles, Christina Chao, Mathias Bostrom, Alberto Carli
- 8:28-8:34am Periprosthetic Joint Infection and the Trojan Horse Theory: Examining the Role of Gut Dysbiosis and Epithelial Integrity
Emanuele Chisari, Jeongeun Cho, Marjan Wouthuyzen-Bakker, Javad Parvizi
- 8:35-8:45am Discussion
- SYMPOSIUM # 5**
- 8:46-9:40am A Survey of the annual meeting of the MSIS**
- 9:41-9:59am Refreshment Break
Visit Exhibitors and e-Posters
- Session VII** **CLINICAL MANAGEMENT OF MUSCULOSKELETAL INFECTIONS**
Moderator:
- 10:00-10:06am An externally validated algorithm predicts failure of non-operative management for spinal epidural abscess
Akash Shah, Aditya Karhade, Olivier Groot, Thomas Olson, Don Park, Joseph Schwab
- 10:07-10:13am Closed Incision Negative Pressure Therapy Reduces Incidence of Re-Operation for Surgical Site Infection in Spine Surgery
Anthony Oyekan
- 10:14-10:20am Subspecialty Training Improves Treatment Success Following Debridement, Antibiotics, and Implant Retention in Total Knee Arthroplasty
Nicholas Tubin,, Jonathan Bourget-Murray, Isabel Horton, Antoine Bureau, Hesham Abdelbary, George Grammatopoulos, Simon Garceau, Jared Morris
- 10:21-10:27am Childs-Pugh Class B/C Increases Risk of Early Mortality in HCV Patients Undergoing Elective TJA Regardless of Treatment Status
Kyle Cichos, Antonia F Chen, Erik N Hansen, Eric Jordan, Kian Niknam, Gerald McGwin Jr, Elie Ghanem
- 10:28-10:38am Discussion

- 10:39-10:45am Impact of Bacterial Phenotypic Variation with Bacteriophage therapy: A Pilot Study with Prosthetic Joint Infection Isolates
James Doub, Ken Urish, Martin Lee, Joseph Fackler
- 10:46-10:52am Low Friction Spacers for Two-Stage Exchange Show Decreased Bacterial Colonization Compared to Cement Molds and Static Spacers
Brandon Couch, Alan Wilson, Frank Plate, Brian Klatt, Michael O'Malley
- 10:53-10:59am Incidence of PJI Following Extensor Mechanism Reconstruction in TKA Patients
Colin Baker, Peter Gold, Qudratullah Qadiri, Andrew Hughes, Paul Courtney
- 11:00-11:06am What is the relevance of the presence or absence of effusion around a total knee replacement scheduled for aspiration? When should we perform a lavage?
Bashiar Thejeel, Joseph Nguyen, Alberto Carli, Theodore Miller
- 11:07-11:17am Discussion
- 11:18-11:40am **Introduction of Incoming President: Laura Certain, MD**
Brian Klatt, M.D.
Presentation of Awards
Jon T. Mader Award; Jeanette Wilkins Award; e-Poster Award
Closing Remarks; Brian Klatt, MD
- Adjourn