

Agenda

Friday, August 4, 2017

- 7:15 a.m. Registration Opens – **Rooftop Ballroom Foyer**
- 7:15–7:45 a.m. Continental Breakfast – **Visit Exhibitors and ePosters**
Wheatley Terrace
- 7:45–7:55 a.m. Welcome, Disclosures – *Sandra B. Nelson, MD*
- Session I Biofilm Basic Science**
Moderator: Alex C. McLaren, MD
- 8:00–8:06 a.m. Antibiotic Loaded Bone Cement Mediated Killing of *P. Aeruginosa* Biofilms on Implant Materials – *James Moley*
- 8:07–8:13 a.m. Antimicrobial Susceptibility of Tissues-based Bacterial Biofilms
Alex C. McLaren, MD
- 8:14–8:20 a.m. In Vitro Formulation of an Antibiotic Eluting Joint Implant for Peri-Prosthetic Infection Treatment – *Ebru Oral*
- 8:21–8:26 a.m. In Vivo Efficacy of an Antibiotic Eluting UHMWPE Bearing Surface against Biofilm on a Lapine Model – *Ebru Oral*
- 8:27–8:36 a.m. Discussion
- 8:37–8:43 a.m. Staphylococcus aureus Genomic Variation Impacts Clinical Severity of Illness Phenotype of Children with Acute Hematogenous Osteomyelitis
Lawson A. Copley, MD
- 8:44–8:50 a.m. DNase I Inhibits Biofilm-like Aggregates of Clinical and Laboratory Strains of Staphylococcus aureus – *Devendra Dusane, PhD*
- 8:51–8:57 a.m. All Staphylococcus is not the Same: Genotype Diversity in *S. Aureus* Between PJI and Nasal Isolates – *Kenneth Urish, MD, PhD*
- 8:58–9:04 a.m. Large Clinical Variations in Antibiotic Ability to Remove Staphylococcus aureus Biofilm in Periprosthetic Joint Infection
Kenneth Urish, MD, PhD
- 9:05–9:14 a.m. Discussion

Session II

Prosthetic Joint Infection

Moderator: Hany Bedair, MD

- 9:16–9:22 a.m. How to Manage Persistent Draining Wounds after Total Joint Arthroplasty? *Richard Boe, MD*
- 9:23–9:29 a.m. Elevated INR in the Acute Postoperative Period after Total Knee Arthroplasty is Associated with Periprosthetic Joint Infections despite Utilization of a Dedicated Anticoagulation Clinic – *Joshua Bingham, MD*
- 9:30–9:36 a.m. Crystal Positive Synovial Fluid: Do Not Dismiss the Likelihood of Infection – *Carl Deirmengian, MD*
- 9:37–9:43 a.m. Sonication of Antibiotic Spacers does not Predict Recurrence after 2–stage Revision Arthroplasty for Infection – *Adam Olsen, MD*
- 9:44–9:53 a.m. Discussion
- 9:54–10:00 a.m. Vancomycin Povidone–Iodine Protocol Improves Survivorship of Periprosthetic Joint Infection Treated with Irrigation and Debridement *Aldo M. Riesgo, MD*
- 10:01–10:07 a.m. Coating of Cementless Stems with Commercially Pure Antibiotic–Loaded Calcium Sulfate Reduces Infection Rate in Revision THA *Edward J. McPherson, MD*
- 10:08–10:14 a.m. Culturing Periprosthetic Joint Infection: A 15–year Study and Analysis of Samples, Growth Duration, Outcomes, and Organisms *Michael Kheir, MD*
- 10:15–10:21 a.m. No Optimal Antibiotic–free Period Prior to Reimplantation for Periprosthetic Joint Infection – *Timothy Tan, MD*
- 10:22–10:31 a.m. Discussion
- 10:32–10:52 a.m. Refreshment Break – **Visit Exhibitors and ePosters**
Rooftop Ballroom Foyer and Wheatley Terrace

Session III

Prosthetic Joint Infection

Moderator: Antonia F. Chen, MD, MBA

- 10:55–11:01 a.m. Assessment of Musculoskeletal Infection Society (MSIS) Diagnostic Criteria as Predictors of Treatment Success in Hip Arthroplasty Infections Treated with Two–Stage Exchange – *Andy O. Miller, MD*
- 11:02–11:08 a.m. Are All Periprosthetic Infections Equal? Effect of Major Versus Minor Criteria and Patient Outcomes – *Mitchell R. Klement MD*

- 11:09–11:15 a.m. Development and Evaluation of a Preoperative Treatment Success Calculator for Periprosthetic Joint Infection – *Michael Kheir, MD*
- 11:16–11:22 a.m. Outcomes of Articulating Spacers with Autoclaved Femoral Components in Total Knee Arthroplasty Infection – *Daniel E. Goltz*
- 11:23–11:32 a.m. Discussion
- 11:35 a.m.–12:35 p.m. Symposium: **Musculoskeletal Infections in Persons who Inject Drugs**
Moderator: Sandra B. Nelson, MD
- Eric L. Smith, MD*
Boston Medical Center
- Alysse G. Wurcel, MD*
Tufts Medical Center
- 12:35–1:40 p.m. Luncheon – **Press Room, Mezzanine Level**
- Session IV** **Diagnosis of Periprosthetic Joint Infection**
Moderator: Javad Parvizi, MD
- 1:41–1:47 p.m. Utility of Serological Markers for Detecting Persistent Infection in Two–Stage Revision Arthroplasty in Patients with Inflammatory Arthritis
Jaiben George, MBBS
- 1:48–1:54 p.m. Synovial Fluid Biomarkers for the Diagnosis of Periprosthetic Joint Infection: A Systematic Review and Meta–Analysis
Antonia F. Chen, MD, MBA
- 1:55–2:01 p.m. The Leukocyte Esterase Test Strip is a Poor Rule–out Test for PJI
Carl Deirmengian, MD
- 2:02–2:08 p.m. Can Serum D–Dimer Be the Savior for Diagnosing Periprosthetic Joint Infection in Shoulder Arthroplasties? – *Alisina Shahi*
- 2:09–2:18 p.m. Discussion
- 2:19–2:25 p.m. Diagnosing Periprosthetic Joint Infection: The Promise of Next Generation Sequencing – *Javad Parvizi, MD, FRCS*
- 2:26–2:32 p.m. Next–generation Sequencing is a Valid Tool for Detecting Pathogens in Synovial Fluid – *Javad Parvizi, MD, FRCS*
- 2:33–2:39 p.m. Marker to Guide Reimplantation after Two–stage Exchange Arthroplasty for Periprosthetic Joint Infection: A Meta–analysis
Antonia F. Chen, MD, MBA
- 2:40–2:46 p.m. The Rapid Lateral–Flow Test for Alpha–Defensin Matches the Lab Test
Carl Deirmengian, MD

- 2:47–2:53 p.m. Clinical Evaluation of the Alpha Defensin Test in Diagnosing Prosthetic Joint Infections – *Hernan A. Prieto, MD*
- 2:54–3:04 p.m. Discussion
- 3:05–4:00 p.m. Symposium
Radical Approaches to Antibiotics and Bacterial Persistence
 Moderator: Kenneth Urish, MD, PHD

James J. Collins, PhD
 Termeer Professor of Medical Engineering & Science
 Professor, Department of Biological Engineering
 Massachusetts Institute of Technology
 Broad Institute of MIT and Harvard
 Wyss Institute for Biologically Inspired Engineering, Harvard University
- 4:01–4:20 p.m. Refreshment Break – **Visit Exhibitors and ePosters**
Ballroom Foyer and Wheatley Terrace
- Session V** **Epidemiology, Risk Factors and Prevention**
 Moderator: Angela Hewlett, MD
- 4:22–4:28 p.m. Weighing in on Periprosthetic Joint Infection: The Risk for Infection Rises Steadily with Increased Body Mass Index – *Noam Shohat*
- 4:29–4:35 p.m. Diabetes and Total Joint Arthroplasty: Infection Risk May Not Be Predictable by Markers of Glycemic Control – *Sean P. Ryan*
- 4:36–4:42 p.m. Patients with Psychosis are at Increased Risk of Septic and Aseptic Complications after Total Joint Arthroplasty – *Timothy Tan, MD*
- 4:43–4:49 p.m. Preoperative Doxycycline does not Decolonize *Propionibacterium Acnes* from the Skin of the Shoulder: A Randomized Controlled Trial
Thema Nicholson
- 4:50–4:59 p.m. Discussion
- 5:00–5:06 p.m. A Decade of Practice Developments for SSI Prevention: Betadine Irrigation Prevails – *Karan Goswami, MD*
- 5:07–5:13 p.m. HEPA Filters Do Not Affect Infection Rates following Primary Total Joint Arthroplasty with Forced Air Warmers – *Gannon Curtis, MD*
- 5:14–5:20 p.m. Association between Hospital Volume of Infected Surgeries and Risk of Periprosthetic Joint Infection – *Jaiben George, MBBS*

- 5:21–5:27 p.m. Risk Adjustment is Necessary in Value–Based Outcomes Models for Infected Total Knee Arthroplasty – *P. Maxwell Courtney, MD*
- 5:28–5:37 p.m. Discussion
- 5:40–6:10 p.m. MSIS Business Meeting – *MSIS Members Only*
- 6:30–8:30 p.m. President's Reception
Third Annual Induction – The MSIS Hall of Fame
- UMass Club
1 Beacon Street, 32nd Floor
Walking directions in general information sent via e-mail

Saturday, August 5, 2017

- 7:00 a.m. Registration Opens – Rooftop Ballroom Foyer
- 7:00 to 8:15 a.m. Continental Breakfast – Press Room, Mezzanine Level
- Visit Exhibitors and ePosters – Ballroom Foyer and Wheatley Terrace

Session VI

Basic Science

Moderator: Barry D. Brause, MD

- 8:30–8:36 a.m. Coating Orthopaedic Wires with Monolaurin to Eliminate Staphylococcal Pin Site Infections – *Dmitry Gil*
- 8:37–8:43 a.m. Efficacy and Dose Response of Vancomycin Powder within a Mouse Model of Spinal Implant Infection – *Gideon Blumstein MD, MS*
- 8:44–8:50 a.m. Fluorescence Image–guided Surgery with Staphylococcus aureus Specific Probes within an In–vivo Mouse Model of Spine Implant Infection
Gideon Blumstein MD, MS
- 8:51–8:57 a.m. Novel In Vivo Mouse Model of Shoulder Implant Infection and Osteomyelitis – *Zachary D. Burke, MD*
- 8:58–9:07 a.m. Discussion
- 9:08–9:14 a.m. Novel Immuno–based Microbial ID Assays for Organism Detection in Synovial Fluid – *Carl Deirmengian, MD*
- 9:15–9:21 a.m. Tri–phasic Bone Void Filler Releases Antibiotics from Degradable Matrix – *Hamza Ahmed*
- 9:22–9:28 a.m. PNDJ Hydrogel Provides High, Sustained Antimicrobial Levels by Local Delivery – *Alex C. McLaren, MD*
- 9:29–9:35 a.m. A Novel Mouse Model of Bulk Allograft Infection Demonstrates a Biphasic Peak in Infection Intensity – *Zachary D. Burke, MD*

9:36–9:42 a.m.	Bulk Allograft is More Susceptible to Infection than is Stainless Steel or Cancellous Allograft using a Novel Mouse Model of Infection <i>Zachary Burke, MD</i>
9:43–9:53 a.m.	Discussion
9:55–10:25 a.m.	Symposium: Oral versus Intravenous Antibiotics for Bone and Joint Infection Moderator: Douglas R. Osmon, MD <i>Matthew Scarborough, MD</i> <i>Oxford University Hospitals NHS FT</i>
10:26–10:45 a.m.	Refreshment Break – Visit Exhibitors and ePosters Ballroom Foyer and Wheatley Terrace
Session VII	Musculoskeletal Infections Clinical Science Moderator: Aaron J. Tande, MD
10:46–10:52 a.m.	Development of a Predictive Algorithm for 90–day Mortality in Patients with Spinal Epidural Abscess – <i>Paul T. Ogink</i>
10:53–10:59 a.m.	Non–operative Management of Spinal Epidural Abscess: Development of a Predictive Algorithm for Failure – <i>Paul T. Ogink</i>
11:00–11:06 a.m.	Fungal Spinal Epidural Abscess: Characteristics of FSEA and the Differences between FSEA and BSEA – <i>Gi Hye Im</i>
11:07–11:13 a.m.	Antibiotic Impregnated Calcium Phosphate does not Help Prevent Post–Operative Infections when used as Bone Void Filler <i>Travis Parkulo</i>
11:14–11:23 a.m.	Discussion
11:24–11:30 a.m.	Septic Olecranon Bursitis caused by Non–tuberculous Mycobacteria, the Mayo Clinic Experience – <i>Anil Jagtiani</i>
11:31–11:37 a.m.	Septic Olecranon Bursitis Treated with Surgical Debridement, the Mayo Clinic Experience – <i>Anil Jagtiani</i>
11:38–11:44 a.m.	Early Diagnosis of Septic Arthritis in Immunocompromised Patients <i>Daniel D. Li</i>
11:45–11:51 a.m.	Hepatitis C Viral Load and Total Joint Arthroplasty <i>Marcus DiLallo</i>
11:52–11:58 a.m.	Preoperative Serum Fructosamine: A Simple and Inexpensive Test for Predicting Periprosthetic Joint Infection – <i>Noam Shohat</i>
11:59 a.m.–12:09 p.m.	Discussion

- 12:15–12:35 p.m. Introduction of Incoming President: Antonia F. Chen, MD, MBA
Sandra B. Nelson, MD
- Presentation of Jon T. Mader Award
 Presentation of Jeanette Wilkins Award
 Presentation of George Cierny, III Memorial Award
 Sandra B. Nelson, MD and Douglas R. Osmon, MD
- 12:36–12:50 p.m. Closing Remarks, Adjourn