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

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


4:36–4:42 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


9:22–9:28 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  
Zachary Burke, MD

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

Matthew Scarborough, MD  
Oxford University Hospitals NHS FT

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 – Paul T. Ogink


11:00–11:06 a.m. Fungal Spinal Epidural Abscess: Characteristics of FSEA and the Differences between FSEA and BSEA – Gi Hye Im

11:07–11:13 a.m. Antibiotic Impregnated Calcium Phosphate does not Help Prevent Post–Operative Infections when used as Bone Void Filler  
Travis Parkulo

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 – Anil Jagtiani

11:31–11:37 a.m. Septic Olecranon Bursitis Treated with Surgical Debridement, the Mayo Clinic Experience – Anil Jagtiani

11:38–11:44 a.m. Early Diagnosis of Septic Arthritis in Immunocompromised Patients  
Daniel D. Li

11:45–11:51 a.m. Hepatitis C Viral Load and Total Joint Arthroplasty  
Marcus DiLallo

11:52–11:58 a.m. Preoperative Serum Fructosamine: A Simple and Inexpensive Test for Predicting Periprosthetic Joint Infection – Noam Shohat

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