

## Agenda

*All meeting spaces are located directly behind the security desk in Jefferson Alumni Hall, 1<sup>st</sup> Floor. Upon arrival, go to the right of the security desk and look for the MSIS registration table.*

### Friday, July 27, 2018

- |                  |                                                                                                                                                           |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12:00 p.m.       | Registration Opens                                                                                                                                        |
| 1:00 p.m.        | <b>Visit Exhibitors and ePosters</b>                                                                                                                      |
| 1:15–1:55 p.m.   | MSIS Business Meeting – <i>MSIS Members Only</i>                                                                                                          |
| 2:00–2:09 p.m.   | Welcome, Disclosures – <i>Antonia F. Chen, MD, MBA</i>                                                                                                    |
|                  | <b>Carl L. Nelson Lecture</b>                                                                                                                             |
|                  | <b>International Panel Discussion on Periprosthetic Joint Infection</b>                                                                                   |
| 2:10–3:23 p.m.   | Moderator: Antonia F. Chen, MD, MBA                                                                                                                       |
|                  | <b>Chile:</b> Claudio Diaz, MD                                                                                                                            |
|                  | <b>China:</b> Yixin Zhou, MD, PhD                                                                                                                         |
|                  | <b>Mexico:</b> Salvador Rivero–Boschert, MD                                                                                                               |
|                  | <b>New Zealand:</b> Kelly Vince, MD                                                                                                                       |
|                  | <b>Slovenia:</b> Rihard Trebše, MD                                                                                                                        |
|                  | <b>South Africa:</b> Richard Kyte, MD                                                                                                                     |
|                  | <b>Taiwan:</b> Yuhan Chang MD, PhD                                                                                                                        |
|                  | <b>Basic Science:</b> Noreen Hickok, PhD                                                                                                                  |
| 3:24–3:45 p.m.   | Refreshment Break – <b>Visit Exhibitors and ePosters</b>                                                                                                  |
| <b>Session I</b> | <b>Antimicrobials and Total Joint Arthroplasty</b>                                                                                                        |
|                  | Moderators: Brian A. Klatt, MD and Barry D. Brause, MD                                                                                                    |
| 3:46–3:52 p.m.   | Single vs. Multiple Doses of Prophylactic Antibiotics in Orthopaedic Surgery: A Meta–Analysis – <i>Sean Ryan, MD</i>                                      |
| 3:53–3:59 p.m.   | Perioperative Antibiotic Prophylaxis in Total Joint Arthroplasty: A Single Dose is as Effective as Multiple Doses – <i>Timothy L. Tan, MD</i>             |
| 4:00–4:06 p.m.   | Extended Perioperative Antibiotic Prophylaxis Confers no Additional Benefit Following Aseptic Revision Total Hip Arthroplasty<br><i>Feng–Chih Kuo, MD</i> |
| 4:07–4:13 p.m.   | Assessing the Role of Daptomycin as Antibiotic Therapy for Staphylococcal Prosthetic Joint Infection – <i>Michael W. Henry, MD</i>                        |

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|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4:13–4:19 p.m. | Discussion                                                                                                                                                                                      |
| 4:20–4:26 p.m. | Intraoperative Prophylactic Techniques for the Prevention of Periprosthetic Joint Infection in Primary Total Joint Arthroplasty: A Systematic Review and Meta–Analysis – <i>Elie Ghanem, MD</i> |
| 4:27–4:33 p.m. | Effect of Antibiotic–Impregnated Bone Cement on Postoperative Infections in Primary Total Knee Arthroplasty – <i>Hiba Anis, MD</i>                                                              |
| 4:34–4:40 p.m. | Longer Operative Time Results in a Higher Rate of Subsequent Periprosthetic Joint Infection in Patients Undergoing Primary Joint Arthroplasty<br><i>Irene Kalbian, BS</i>                       |
| 4:41–4:47 p.m. | Antibiotic Resistance Increases During Treatment of Prosthetic Joint Infection<br><i>Cierra S. Hong, BA</i>                                                                                     |
| 4:48–4:54 p.m. | Discussion                                                                                                                                                                                      |
| 4:55–5:00 p.m. | Hall of Fame Induction – Jon T. Mader, MD <i>Awarded Posthumously</i>                                                                                                                           |
| 5:00 p.m.      | Adjourn                                                                                                                                                                                         |

## **Saturday, July 28, 2018**

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|-------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 6:30 a.m.         | Registration Opens                                                                                                                       |
| 6:45 a.m.         | Continental Breakfast                                                                                                                    |
| 6:45–7:45 a.m.    | Morning Symposium – Center Atrium                                                                                                        |
| <b>Session II</b> | <b>Basic Science and Antimicrobial Delivery</b><br>Moderators: Thorsten Seyler, MD and Maja Babic, MD                                    |
| 7:50–7:56 a.m.    | PNDJ Hydrogel for Local Antimicrobial Delivery is Not Systemically Toxic<br><i>Alex C. McLaren, MD</i>                                   |
| 7:57–8:03 a.m.    | Injectable Derivatized Chitosan Paste Local Delivery System Elutes Antimicrobials for 7 Days – <i>Logan R. Boles, BS</i>                 |
| 8:04–8:10 a.m.    | Development of a Rabbit Model of Femoral Peri–Implant Osteomyelitis<br><i>Peter Alexander, PhD</i>                                       |
| 8:11–8:17 a.m.    | Toward Translational Treatments for the Infected Implant: A Novel Mouse Model of Revision Arthroplasty for PJI – <i>Chad Ishmael, MD</i> |
| 8:18–8:24 a.m.    | Discussion                                                                                                                               |

- 8:25–8:31 a.m. Investigating the Efficiency of Using Bacteriophage as a Potential Therapeutic Adjunct to Antibiotics for Peri–Prosthetic Joint Infection  
*Mariam Taha, PhD*
- 8:32–8:38 a.m. The Osteocyte as a Target Cell and Disease Nidus in Periprosthetic Joint Infection – *Professor Gerald J. Atkins*
- 8:39–8:45 a.m. Zoledronic Acid Increases Bacterial Burden and Infection Rate in a Validated Mouse Model of Implant Infection – *Peter Hsiue, MD*
- 8:46–8:52 a.m. Polymyxin and Bacitracin in the Irrigation Solution: There is No Role for This Practice – *Karan Goswami, MD*
- 8:53–8:59 a.m. Acinetobacter Inhibits Osseointegration by Inducing Inflammatory Osteolysis: Role of Quorum Sensing – *Edward M. Greenfield, PhD*
- 9:00–9:06 a.m. Discussion
- 9:07–9:30 a.m. Refreshment Break – **Visit Exhibitors and ePosters**
- 9:31–10:35 a.m. **Symposium: Single-stage Treatment of Infected Fractures and Osteomyelitis**  
Moderator: Barry D. Brause, MD  
  
*Dr. Martin McNally*  
Lead Surgeon  
Oxford Bone Infection Unit  
Nuffield Orthopaedic Centre  
Oxford University Hospitals  
Honorary Senior Lecturer  
Oxford University  
President, European Bone and Joint Infection Society  
  
*Dr. Matthew Scarborough*  
Consultant in Clinical Infection  
Oxford University Hospitals NHS FT
- Session III** **Periprosthetic Joint Infection**  
Moderators: Carlos Higuera–Rueda, MD and Sandra B. Nelson, MD
- 10:36–10:42 a.m. Periprosthetic Joint Infection in Patients with Multiple Arthroplasties: Investigate Other Joints? – *George A. Komnos, MD*
- 10:43–10:49 a.m. Total Joint Arthroplasty in Patients with History of Treated Same–Joint Septic Arthritis: A Multi–Center Investigation of Incidence and Risk Factors for Periprosthetic Joint Infection – *Assem Sultan, MD*

- 10:50–10:56 a.m. Total Hip Arthroplasty after Prior Acetabular Fracture: Infection is a Real Concern – *Matthew Kheir, MD*
- 10:57–11:03 a.m. Outcomes of Knee Periprosthetic Joint Infection Reconstruction Treated with Hinged Prosthesis – *Michael Chen, MD*
- 11:04–11:10 a.m. Total Knee Arthroplasty Megaprosthesis in Non–tumor Patients–Are Septic Indications Worth the Effort? – *Carlos Higuera–Rueda, MD*
- 11:11–11:21 a.m. Discussion
- 11:22–11:28 a.m. Articulating Spacers as a Modified One–Stage Revision TKA: A Preliminary Analysis – *Ahmed Siddiqi, DO*
- 11:29–11:35 a.m. The Infected Spacer: The Impact of Spacer Exchanges and Debridement on Two–Stage Exchange Arthroplasty Outcomes  
*Andy O. Miller, MD*
- 11:36–11:42 a.m. Negative Cement Spacer Sonication is Associated with Successful Reimplantation in Multi–Stage Revision for PJI – *Jason P. Zlotnicki, MD*
- 11:43–11:49 a.m. Defining Treatment Success after Two Stage Exchange Arthroplasty for Periprosthetic Joint Infection – *Alexander J. Rondon, MD*
- 11:50–11:59 a.m. Discussion
- 12:00–12:59 p.m. Luncheon Symposium – Center Atrium
- Session IV** **Diagnostics and Cultures**  
Moderators: Aaron J. Tande, MD and Antonia F. Chen, MD, MBA
- 1:00–1:06 p.m. The Journey of a Culture: From Operating Room to Final Report  
*Matthew Kheir, MD*
- 1:07–1:13 p.m. An Enhanced Understanding of Culture–negative Periprosthetic Joint Infection with Next Generation Sequencing – *Karan Goswami, MD*
- 1:14–1:20 p.m. Organism Profile Causing Periprosthetic Joint Infection: is this Different in Total Hip Versus Total Knee Arthroplasty? – *Hannah Groff, BA*
- 1:21–1:27 p.m. Propionibacterium acnes is Less Commonly Identified by Next Generation Sequencing than Culture in Primary Shoulder Surgery  
*Surena Namdari, MD, MSc*
- 1:28–1:34 p.m. Discussion

- 1:35–1:41 p.m. Fibrinogen and Alpha 2 Macroglobulin are Promising Serum Biomarkers to Diagnose and Monitor Periprosthetic Joint Infection  
*Sreeram Peena, MD*
- 1:42–1:48 p.m. Diagnostic Accuracy of Alpha–Defensin Test at Reimplantation of a Two–Stage Revision for Periprosthetic Joint Infection  
*Linsen T. Samuel, MD, MBA*
- 1:49–1:55 p.m. The Diagnostic Accuracy of the Alpha Defensin Lateral Flow Test Kit in Asians – *Benjamin Ding, MBBS, MRCS (Edin)*
- 1:56–2:02 p.m. Diagnostic Accuracy of the Alpha–defensin for Periprosthetic Joint Infection in Patients with Inflammatory Diseases – *Alison Klika, MS*
- 2:03–2:09 p.m. ESR and CRP Have A High Discordant Rate in PJIs – *Joshua Bingham, MD*
- 2:10–2:16 p.m. Discussion

## Session V

### **Biofilms and Acute and Chronic PJI Management**

Moderators: Alex C. McLaren, MD and Andy O. Miller, MD

- 2:17–2:23 p.m. Staphylococcus Aureus Carriage Rates are Higher in Rheumatoid Arthritis Patients on Biologics – *Andy O. Miller, MD*
- 2:24–2:30 p.m. Is it Time to Rethink the IWGDF/IDSA Classification System for Diabetic Foot Infections? – *Easton Ryan*
- 2:31–2:37 p.m. Greater Knee Soft Tissue Thickness Predisposes Patients to Subsequent Periprosthetic Joint Infection after Total Knee Arthroplasty  
*Antonia F. Chen, MD, MBA*
- 2:38–2:44 p.m. Risk Adjustment is Necessary in Value–Based Outcomes Models for Infected Total Hip Arthroplasty – *Anthony J. Boniello, MD*
- 2:45–2:51 p.m. Discussion  
*Refreshments available in Right Wing of Atrium – please help yourself quietly*
- 2:52–2:58 p.m. MagDAA with Magnetic Hyperthermia Successfully Disrupts Bacterial Biofilm–A Potential Treatment for PJI – *Carlos Higuera–Rueda, MD*
- 2:59–3:05 p.m. Control of Pseudomonas aeruginosa and Staphylococcus aureus Biofilms Grown on Implant Materials Using Antibiotic Loaded Absorbable Beads  
*Paul Stoodley, PhD*
- 3:06–3:12 p.m. In Vivo Bioluminescence Imaging in a Rabbit Model of Orthopedic Implant–Associated Infection to Monitor Efficacy of an Antibiotic–Releasing Coating  
*John M. Thompson, MD*

- 3:13–3:19 p.m. Non–Invasive Detection of Gram Positive and Gram Negative Bacteria with Single Fluorescent–Linked Probe in Mouse Model of Spine Implant Infection  
*Chad Ishmael, MD*
- 3:20–3:33 p.m. Discussion
- 3:34–3:40 p.m. Increased Failure after Irrigation and Debridement for Acute Hematogenous PJI – *Noam Shohat, MD*
- 3:41–3:57 p.m. Implant Survivorship in Prosthetic Joint Infection with Retained Prostheses – *Michael W. Henry, MD*
- 3:58–4:04 p.m. Positive Blood Cultures are Associated with Decreased Treatment Success in Acute Hematogenous Periprosthetic Joint Infection – *Feng–Chih Kuo, MD*
- 4:05–4:11 p.m. Changing Trends, Risk Factors, and Treatment Challenges in Staphylococcus aureus Septic Arthritis – *Kenneth L. Urish, MD, PhD*
- 4:12–4:18 p.m. Reevaluating Success in Treating Chronic Periprosthetic Joint Infections in Total Hip Arthroplasty? – *Karan Srivastava, MD, MBA*
- 4:19–4:25 p.m. Do All Patients Undergo Reimplantation after Resection Arthroplasty of an Infected Knee and Hip? – *Qiaojie Wang, MD*
- 4:26–4:32 p.m. Reconsidering the Strategies to Manage Chronic Periprosthetic Total Knee Infections: Using Analytics to Find the Optimal Strategy between One–Stage and Two–Stage Total Knee Revision – *Karan Srivastava, MD, MBA*
- 4:33–4:39 p.m. The Presence of Sinus Tract Adversely Affects the Outcome of Treatment of Periprosthetic Joint Infections – *Chi Xu, MD*
- 4:40–4:50 p.m. Discussion
- 4:51–5:10 p.m. Poster Session
- 5:11–5:20 p.m. Introduction of Incoming President: Barry D. Brause, MD  
*Antonia F. Chen, MD, MBA*
- 5:21–5:26 p.m. Awards  
*The Jon T. Mader Award*  
*The Jeanette Wilkins Award*  
*The Poster Award*
- 5:27–5:30 p.m. Closing Remarks, Adjourn