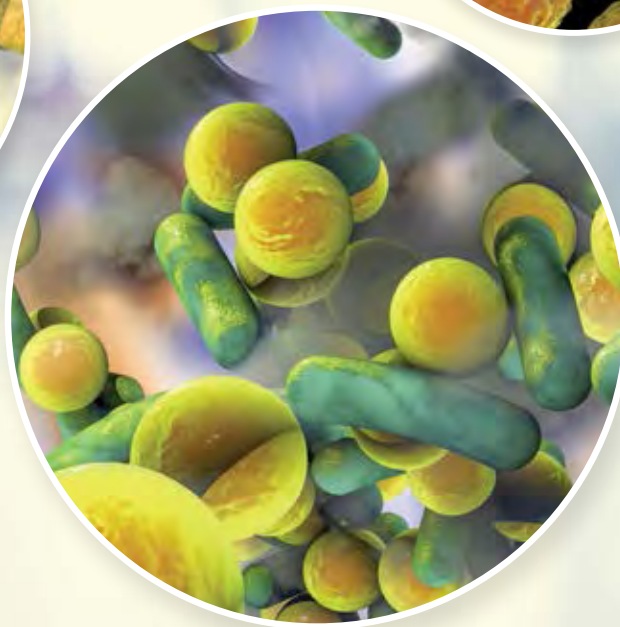
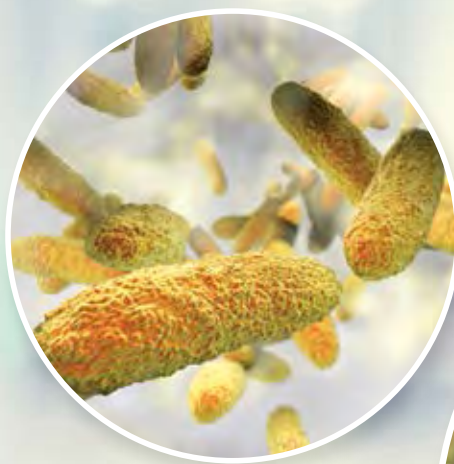


**SHEA**  
The Society for Healthcare  
Epidemiology of America

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## SHEA Spring 2018 Conference SCIENCE GUIDING PREVENTION



FINAL PROGRAM

Download the SHEA 2018 Meeting App or  
Visit the Attendee Portal at  
[www.sheaspring.org/attendeeportal](http://www.sheaspring.org/attendeeportal)  
Wi-Fi: Complimentary in the Hotel Lobby

**April 18-20**  
PORTLAND, OREGON  
Hilton Portland Downtown

Share your thoughts at the Engagement  
Center  
NEW! Visit the Education Booth to Set  
Up your Online LearningCE Profile

# SCIENCE GUIDING PREVENTION

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## Dear Colleagues,

On behalf of the Society for Healthcare Epidemiology of America (SHEA), the Planning Committee, and the Board of Trustees, welcome to the SHEA Spring 2018 Conference: Science Guiding Prevention in Portland, OR. We are all excited to welcome you for the next few days to immerse yourself in education and training related to infection prevention, healthcare epi and antibiotic stewardship in many different healthcare settings. We are very proud of the sessions and speakers taking part in this conference. We feel strongly that all attendees will leave Portland with new ideas and methods to implement at your own institutions to make your infection prevention and antibiotic stewardship practices stronger, improving patient outcomes. SHEA believes education is the basis for fulfilling our vision statement – safe healthcare for all – and is proud to sponsor educational efforts that so closely align with this mission. We understand you have many choices when it comes to meeting your educational needs for the year and are thankful you selected SHEA as one of those meetings.

SHEA Spring 2018 Conference highlights you will not want to miss include:

- Focused scientific abstracts related to healthcare epidemiology, surveillance, implementation science and patient safety, and prevention strategies in poster form during breakfast and lunch breaks and a limited number of oral presentations
- All the educational sessions in the general conference and specialized tracks but especially the plenaries, which are open to ALL attendees
- Expanded networking opportunities during breaks
- Mentorship Networking Breakfast on Wednesday, April 18 (*by invitation only*)
- Welcome Reception with SHEA's 2018 President, Keith Kaye, MD on Wednesday, April 18
- SHEA Epi Project Competition on Thursday, April 19
- SHEA Education & Research Foundation Dinner on Thursday, April 19 (*extra ticket purchase*)
- The Women in Epi Networking Breakfast on Friday, April 20

The next few days are jam-packed with education from leading experts in the field. If you have a spare moment, find us, another member of the planning committee, or Board and let us know how we are doing. We would love to have your feedback in real time. If you are on twitter, use the hashtag #SHEA2018 to help amplify all the great commentary from the meeting. Please do not forget to submit your evaluations after the meeting as well.

Thank you again for joining us. Enjoy the conference!

## Sincerely,

Co-Chairs, Scientific Program



Matthew Linam, MD, MS  
Planning Chair  
University of Arkansas for Medical Sciences and Arkansas Children's Hospital, Little Rock, AR



Judy Guzman-Cottrill, DO, FSHEA  
Planning Vice Chair  
Oregon Health and Science University  
Portland, OR

SHEA's overall goal for SHEA Spring 2018 is for participants to gain valuable knowledge about the latest research and science in healthcare epidemiology, practical skills and strategies to implement this knowledge, and ongoing connections with other professionals in the field of healthcare epidemiology and infection prevention.

At the Conclusion of the course, learners should be able to:

- Review and critique new scientific evidence related to epidemiologic methods and prevention of healthcare-associated infections (HAIs).
- Identify evolving public policy developments and their impact on HAI prevention.
- Compare and contrast differing approaches to controversial aspects of HAI prevention.
- Translate best methods in healthcare epidemiology, antibiotic stewardship, surveillance, prevention, and research into practice.
- Apply and evaluate appropriate antibiotic stewardship practices in acute and non-acute healthcare settings.
- Discuss current best practices in HAI prevention in individual clinical settings including Pediatrics and Long-term Care.
- Apply practical strategies to effectively communicate healthcare epidemiology, HAI prevention and antibiotic stewardship knowledge and practices to patients, healthcare personnel and policy makers.

## **SHEA/CDC TRAINING CERTIFICATE COURSE IN HEALTHCARE EPIDEMIOLOGY**

At the conclusion of this activity, participants should be able to:

- Describe the process of surveillance for healthcare-associated infections and how to apply surveillance techniques and methods.
- Define modes of transmission and approaches to prevention and control of healthcare-associated infections and antimicrobial-resistant pathogens, as well as other emerging infections in the healthcare setting.
- Understand the roles that the environment, cleaning, disinfection, and sterilization play in the cycle of transmission of infections to patients.
- Identify how infection prevention activities align with the disciplines of Healthcare Quality and Safety.
- Apply and define outbreak investigation techniques and evidence-based infection prevention strategies.
- Evaluate the unique approaches to infection prevention among special populations.
- Describe the role of leadership and clinical education in infection prevention efforts.
- Gain a working knowledge of the role of the healthcare epidemiologist in antimicrobial stewardship, occupational health, epidemiology research, the microbiology laboratory, and emergency preparedness.

## **SHEA ANTIBIOTIC STEWARDSHIP TRAINING COURSE**

At the conclusion of this activity, participants should be able to:

- Identify the rationale for antimicrobial stewardship programs in healthcare institutions and communicate this rationale to other healthcare providers.
- Evaluate components of effective antimicrobial stewardship programs and implement interventions in their healthcare setting.
- Apply strategies for and measuring both process and outcomes measures.
- Assess available data, including pharmacy and microbiology data, and the informatics strategies needed to support antimicrobial stewardship in their institution.
- Identify concepts from improvement science and change theory to enhance implementation of antimicrobial stewardship activities.

## **SHEA/CDC/AMDA INFECTION PREVENTION IN POST-ACUTE AND LONG-TERM CARE CERTIFICATE COURSE**

At the conclusion of this activity, participants should be able to:

- Describe surveillance definitions and recognize differences in applying them in the post-acute and long-term care settings.
- Identify opportunities for infection prevention, including those caused by multi-drug resistant organisms, in the post-acute and long-term care settings.
- Discuss recognition and response to common outbreaks in the post-acute and long-term care settings.
- Apply principles of occupational health and safety to healthcare workers and staff in the post-acute and long-term care settings.
- Recognize the need for and opportunities to practice antimicrobial stewardship in the post-acute and long-term care settings.

## **TARGET AUDIENCE**

This conference is designed for physicians, infection preventionists, healthcare epidemiologists, infectious disease specialists, microbiologists, nurses, pharmacists, and other healthcare professionals interested in healthcare epidemiology, infection prevention, surveillance, research methods, patient safety, environmental issues and quality improvement.

## ACCREDITATION STATEMENT

The Society for Healthcare Epidemiology of America is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

## PHYSICIANS

The Society for Healthcare Epidemiology of America designates this live activity for a maximum of 24 *AMA PRA Category 1 Credit(s)*<sup>TM</sup>, the core conference sessions are designated for 21.75 credit hours and the pre-meeting workshop is an additional 2.25 credit hours. Physicians should claim only the credit commensurate with the extent of their participation in the activity.



## INTERNATIONAL PHYSICIANS

The American Medical Association has determined that physicians not licensed in the United States who participate in this continuing medical education activity are eligible for *AMA PRA Category 1 Credit(s)*<sup>TM</sup>.

## ABIM MOC: NEW THIS YEAR



*All CME accredited sessions are also available for attendees to earn ABIM MOC Points.*

### ABIM MOC Statement

Successful Completion of this CME activity enables the participant to earn up to 24 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) Program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

More MOC points can be earned through pre-meeting workshop for an additional fee.

SHEA Spring 2018 physician participation information will be shared with ABIM through ACCME PARS.

## NURSES

This continuing nursing education activity was approved by the Virginia Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.



Nurses who complete this activity will be awarded a maximum of 21.75 contact hours.

Participants will be awarded continuing education commensurate with their participation in the educational activity with submission of an evaluation. The Pre-Conference Workshop is not eligible for nursing credits.

## SUCCESSFUL COMPLETION STATEMENT

Participants are expected to claim only those hours spent in the educational activities approved for continuing education credit. Certificates of Attendance are provided to registered attendees based upon completion of the online evaluation. To complete the assessment and evaluation, attendees will need to sign into the Attendee Portal/Meeting App. **Please refer to page 4 for additional information on the evaluation.**

## CONTENT VALIDATION STATEMENT

The Society for Healthcare Epidemiology of America accepts the following content validation statements and expects all persons involved in its professional education activities to abide by these statements with regard to any recommendations for clinical care.

- All recommendations involving clinical medicine are based on evidence accepted within the profession of medicine as adequate justification for their indications and contradictions in the care of patients; AND/OR
- All scientific research referred to or reported in support or justification of a patient care recommendation conforms to generally accepted standards of experimental design, data collection, and analysis.

## PHARMACISTS

(Credits only available for the SHEA Antibiotic Stewardship Training Course)



The continuing education activities for pharmacists have been developed through a joint providership of ProCE, Inc. and The Society for Healthcare Epidemiology of America. ProCE is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education (CPE). Participants attending the conference CPE activities may earn a maximum of 17.75 contact hours of CPE credit. Note: some of the CPE sessions are being held concurrently. The sessions offering ACPE credit are designated in the Program brochure with a UAN (Universal Activity Number) and hours of CPE credit. The release date for these CPE activities is April 18 – 20, 2018. Conference registration fees cover the cost of CPE credit. Statements of completion will be issued at **www.ProCE.com** upon successful completion of the online CPE activity learning assessment(s) and activity evaluation(s). All learning assessment(s) and activity evaluation(s) must be completed no later than **May 18, 2018**. No partial credit will be given for any individual session. Conflict of interest disclosures are required of all faculty and shall be provided to all participants at the conference.

## COMMERCIAL SUPPORTERS

The SHEA Spring 2018 Conference: Science Guiding Prevention is supported in part by educational grants from the following companies:

**Merck & Co, Inc.**

**Ethicon, Inc**

**Pfizer**



In accordance with the Accreditation Council for Continuing Medical Education's (ACCME) Standards for Commercial Support for Continuing Medical Education, all faculty and planning partners must disclose any financial relationship(s) or other relationship(s) held within the past 12 months relevant to the content presented. SHEA identifies and manages all conflicts of interest prior to delivering the educational activity to learners.

## PLANNING COMMITTEE & SPEAKERS

**Matthew Linam, MD, MS (Planning Chair)\***

*Disclosed no relevant financial relationships*

**Judith Guzman-Cottrill, DO (Planning Vice-Chair)\***

*Disclosed no relevant financial relationships*

**Belinda Ostrowsky, MD, MPH (Past Chair)\***

*Disclosed no relevant financial relationships*

**Barbara Braun, PhD\***

*Disclosed no relevant financial relationships*

**Gonzalo Bearman, MD, MPH\***

*Disclosed no relevant financial relationships*

**Elizabeth Dodds-Ashley, PharmD, MHS\***

*Disclosed no relevant financial relationships*

**Loretta Litz-Fauberbach, MS, CIC**

*Clinical Advisory Board Member: PDI*

**Sarah Haessler, MD\***

*Disclosed no relevant financial relationships*

**Joan Hebden, RN, MS, CIC**

*Salary: PDI, Inc  
Consulting Fees: ICM Medical - Victus*

**Lauri Hicks, DO\***

*Disclosed no relevant financial relationships*

**Joost Hopman, MD\***

*Disclosed no relevant financial relationships*

**Robin Jump, MD, PhD\***

*Scientific Advisor; Research Funding: Pfizer  
Scientific Advisor: Merck*

**Marion Kainer, MD, MPH\***

*Disclosed no relevant financial relationships*

**Sarah L. Krein, PhD, RN\***

*Disclosed no relevant financial relationships*

**Christopher Pfeiffer, MD\***

*Disclosed no relevant financial relationships*

**Thomas J. Sandora, MD, MPH\***

*Disclosed no relevant financial relationships*

**Marin Schweizer, PhD\***

*Disclosed no relevant financial relationships*

**Kari Simonsen, MD**

*Scientific Advisor: CareFusion  
Consultant Employee Research: Merck, Sharp and Dohme, Astellas, MedImmune, The Medicines Company, Cemptra*

**Nimalie Stone, MD, MS\***

*Disclosed no relevant financial relationships*

**Kavita Trivedi, MD**

*Speaker(s): Clorox, Roche*

## STAFF

**Laure Herzog**

*Disclosed no relevant financial relationships*

**Jessica Johnson**

*Disclosed no relevant financial relationships*

## SPEAKERS

**Hilary Babcock, MD, MPH**

*Disclosed no relevant financial relationships*

**Jamie Bash, MPH**

*Disclosed no relevant financial relationships*

**Lynne Batshon, BS**

*Disclosed no relevant financial relationships*

**Zintars Beldavs, MS**

*Disclosed no relevant financial relationships*

**Michael Bell, MD**

*Disclosed no relevant financial relationships*

**Kristina Bryant, MD**

*Investigator on clinical trials: Pfizer*

**Whitney Buckel, PharmD**

*Disclosed no relevant financial relationships*

**David Calfee, MD, MS**

*Disclosed no relevant financial relationships*

**Philip Carling, MD**

*Consultant Employee and Patent License: Ecolab*

**Esther Choo, MD, MPH**

*Disclosed no relevant financial Relationships*

**Susan Coffin, MD, MPH**

*Disclosed no relevant financial relationships*

**Mirian Dal Ben, MD, Msc, PhD**

*Disclosed no relevant financial relationships*

**Brenna Darazs**

*Disclosed no relevant financial relationships*

**Margaret Dudeck, BS, MPH**

*Disclosed no relevant financial relationships*

**Ghinwa Dumyati, MD**

*Disclosed no relevant financial relationships*

**Mike Edmond, MD, MPH, MPA**

*Disclosed no relevant Financial Relationships*

**Jonathan R Edwards, MStat**

*Disclosed no relevant financial relationships*

**Charlesnika T. Evans, PhD, MPH**

*Disclosed no relevant financial relationships*

**Mohamad G. Fakh, MD, MPH**

*Disclosed no relevant financial relationships*

**Bradford Fitch**

*Disclosed no relevant financial relationships*

**Graeme Forrest, MBBS**

*Vaccine Research Study: Pfizer*

**Jon Furuno, PhD**

*Disclosed no relevant financial relationships*

**Kathleen Gase, MD, MPH**

*Disclosed no relevant financial relationships*

**David Ha, PharmD**

*Disclosed no relevant financial relationships*

**Janet Haas, PhD, RN, CIC**

*Disclosed no relevant financial relationships*

**Molly Hale, MPH, CIC**

*Disclosed no relevant financial relationships*

**Keith Hamilton, MD**

*Disclosed no relevant financial relationships*

**Waleed Javaid, MD**

*Disclosed no relevant financial relationships*

**Julie Ann Justo, PharmD, MS**

*Disclosed no relevant financial relationships*

**Sarah Kabbani, MD, MSc**

*Disclosed no relevant financial relationships*

**Keith Kaye, MD, MPH**

*Disclosed no relevant financial relationships*

**Matthew Kronman, MD, MSCE**

*Disclosed no relevant financial relationships*

**Kristi Kuper, PharmD**

*Disclosed no relevant financial relationships*

**Ebbing Lautenbach, MD, MPH, MSCE**

*Disclosed no relevant financial relationships*

**Grace Lee, MD**

*Disclosed no relevant financial relationships*

**James Lewis, PharmD**

*Scientific Advisor: Accelerate Diagnostics, Merck, Paratek Pharmaceuticals, Achaogen Pharmaceuticals*

**Catherine Liu, MD**

*Independent Efficacy Adjudication Committee Member: Theravance*

**Latania Logan, MD**

*Disclosed no relevant financial relationships*

**Emily Lutterloh, MD, MPH**

*Disclosed no relevant financial relationships*

**Kalisvar Marimuthu, MBBS, MRCP**

*Disclosed no relevant financial relationships*

**L. Clifford McDonald, MD**

*Disclosed no relevant financial relationships*

**Jessina McGregor, PhD**

*Disclosed no relevant financial relationships*

**Jonathan Modie, BA**

*Disclosed no relevant Financial Relationships*

**Daniel Morgan, MD, MS**

*Disclosed no relevant financial relationships*

**David Nace, MD, MPH**

*Disclosed no relevant financial relationships*

**Melinda Neuhauser, PharmD, MPH**

*Disclosed no relevant financial relationships*

**Kimberly New, JD, BSN**

*Disclosed no relevant financial relationships*

**Jason Newland, MD, MEd**

*Disclosed no relevant financial relationships*

**Priya Nori, MD**

*Disclosed no relevant financial relationships*

**Deborah Patterson-Burdsall, PhD RN-BC, CIC**

*Disclosed no relevant financial relationships*

**Joe Palca, PhD**

*Disclosed no relevant Financial Relationships*

**Trish Perl, MD, MSc**

*Disclosed no relevant financial relationships*

**Joseph Perz, DrPH, MA**

*Disclosed no relevant financial relationships*

**Theresa Rowe, DO**

*Disclosed no relevant financial relationships*

**William Rutala, PhD, MPH**

*Consultant Employee Research, Scientific Advisor: PDI*

**Dawn Sievert, PhD, MS**

*Disclosed no relevant financial relationships*

**Madeline Sofia, PhD**

*Disclosed no relevant Financial Relationships*

**Arjun Srinivasan, MD**

*Disclosed no relevant financial relationships*

**Edward Stenehjem, MD, MSc**

*Disclosed no relevant financial relationships*

**Thomas Talbot, MD, MPH**

*Spouse:  
Research Support: Sanofi Pasteur, MedImmune, Gilead*

**Pranita Tamma, MD, MHS**

*Disclosed no relevant financial relationships*

**John Towns, MD**

*Disclosed no relevant financial relationships*

**Barbara Trautner, MD, PhD**

*Consultant Employee Research: Zambon Pharmaceuticals, Paratek Pharmaceuticals*

**Maroya J. Walters, PhD, ScM**

*Disclosed no relevant Financial Relationships*

**Nora Wong, MPH**

*Disclosed no relevant financial relationships*

**Deborah Yokoe, MD, MPH**

*Disclosed no relevant financial relationships*

\*Content Reviewers - If a conflict of interest has been reported relevant by a speaker, the Content Reviewers conduct a formal review to ensure the presentation is balanced and free of commercial bias.

## PHYSICIANS AND NURSES

CME, ABIM MOC, CNE, and Attendee Certificates are provided to all registered attendees based upon the completion of the online evaluation. To obtain AMA PRA Category 1 Credit™, ABIM MOC or CEU credits, attendees will need to download the Conference Meeting App or visit the attendee portal at **[www.sheaspring.org/attendeeportal](http://www.sheaspring.org/attendeeportal)**. Attendees will need to sign in with the same email used to register for the conference.

- Once logged in, click on either “Course Agenda” or “Sessions By Day” and follow the steps below. You cannot claim credit until after a session has ended. The deadline for claiming credit is June 23, 2018.
- Select the session you wish to claim credit for. You will need to evaluate each session you attend to receive credit.
- Click the “Evaluate” Button
- Certify that you attended the session by clicking the checkbox at the top of the page. Complete the evaluation form provided, and click the “SUBMIT EVALUATION” button.
- Once you have evaluated all sessions you attended, click on the “Overall Meeting Evaluation” link in the left-hand navigation page.
- When you are finished with the Overall Meeting Evaluation and claiming your credit hours, you can print, view and email your certificates from the “Review Claimed Credit” tab in the left-hand navigation pane.

## TRACK CERTIFICATE

Within the Overall Meeting Evaluation, all attendees will be asked if they participated in **one** of the three Training Courses during the Conference:

- SHEA/CDC Training Certificate Course in Healthcare Epidemiology
- SHEA Antibiotic Stewardship Training Course
- SHEA/CDC/AMDA Infection Prevention in Post-Acute and Long-Term Care Certificate Course

Once selected, your printed Training Course Certificate of completion will be mailed post event.

## PHARMACISTS

### *CE Activity Evaluation and Credit Instructions*

1. To receive CE credit for the activities at this conference, you must complete the post-tests and evaluations online **no later than Friday, May 18, 2018**.
2. Visit **[www.ProCE.com/evaluation](http://www.ProCE.com/evaluation)**.
3. Click on the **Evaluation** button which is listed with the **SHEA Spring 2018 Conference – April 18 – 20, 2018** CE activity.
4. Login to the ProCE CE Center.  
*NOTE: You will need to sign up for a new account if you have not previously used the ProCE CE Center.*
5. Enter the Attendance Codes for all of the CE sessions you attended.  
*NOTE: Each session has a unique attendance code.*
6. Take the post-test, complete the evaluation, and claim CE credit.  
*NOTE: Complete the post-tests, evaluations, and claim CE credit only for the sessions you attended.*
7. If you need assistance or have questions, please contact ProCE at 630-540-2848 or via email at **[info@proce.com](mailto:info@proce.com)**.

## SHARE YOUR THOUGHTS IN THE SHEA SPRING 2018 ENGAGEMENT CENTERS

Share your thoughts with SHEA onsite at our “Engagement Centers”. These are the large signs located near SHEA Registration where you can share any thoughts or feedback on Post-it notes in response to core questions that headline the signs. All your responses will be shared with SHEA Leadership and represent an important way for you to provide valuable feedback for future SHEA plans. Thanks in advance for your thoughtful participation!

## EXCLUSIVE LAUNCH OF THE NEW SHEA ONLINE LEARNING CENTER

Only at SHEA Spring 2018, you can stop by the Education Booth in the Grand Ballroom Foyer and be one of the first to sign onto the new SHEA Online Learning Center.

## ACCESS PRESENTATIONS ONLINE

As a registrant, you will be able to access all presentations within the meeting app.

**Please note:** Presentations will be uploaded by presenters. In some cases, this will be after the conference. Some presenters have also chosen not to have their presentation available to attendees.

## ATTENDEE MEETING APP

Download the SHEA Spring 2018 Meeting App today. The app contains everything you need to know about the meeting, at your fingertips:

- All Session Presentations
- Oral Abstract Presentations
- Poster Abstract Presentations
- Presenter/Speaker Information
- Daily Agenda for you to create your own schedule
- Special Events during the conference
- Floor Plans to locate all sessions and events
- General Conference Information
- Access and complete your Conference and Session Evaluations to download your CME, CNE, ABIM MOC and Attendance Certificates.

You can also view the same information online through the SHEA Spring 2018 Attendee Portal at **[www.sheaspring.org/attendeeportal](http://www.sheaspring.org/attendeeportal)**.

# CREDIT TRACKER

## Pre-Conference Workshop

Please note: Pre-Conference Workshop **is not eligible** for CNE Credits

Time	Title	CME, ABIM MOC	Credits Earned
<b>Tuesday, April 18</b>			
2:00 - 2:50 p.m.	<i>Communicating Science to the Public</i>	0.75	
2:50 - 3:40 p.m.	<i>Blogs and Social Media</i>	0.75	
4:00 - 4:50 p.m.	<i>Crisis Communication with the Media and Public</i>	0.75	
5:00 - 6:00 p.m.	<i>Work Group Breakout: Become Part of NPR's Science Communication Team</i>	1	
	<i>Work Group Breakout: Tips on Becoming a Blogger or Setting up your Twitter Account</i>		
	<i>Work Group Breakout: Crash Course in Media Training</i>		

## SHEA/CDC/AMDA Infection Prevention in Post-Acute & Long-Term Care Certificate Course

Time	Title	CME, ABIM MOC, CNE	Credits Earned
<b>Wednesday, April 18</b>			
10:15 - 11:15 a.m.	<i>Joint Session: Healthcare Epidemiology: Introduction to an Emerging Field</i>	1	
11:15 - 12:00 p.m.	<i>Joint Session: Transmission of Infectious Agents In Healthcare Settings</i>	0.75	
1:30 - 2:30 p.m.	<i>Introduction of the Post-Acute in Long-Term Care Setting</i>	1	
2:45 - 3:15 p.m.	<i>Managing Outbreaks</i>	0.5	
3:15 - 4:00 p.m.	<i>Occupational Health and Safety</i>	0.75	
4:15 - 5:30 p.m.	<i>Strengthening IP/Stewardship at Care Transitions</i>	1.25	
<b>Thursday, April 19</b>			
8:00 - 9:30 a.m.	<i>Strategies to Prevent Infections &amp; MDROS</i>	1.5	
10:00 - 11:15 a.m.	<i>Changing Approaches in Surveillance</i>	1.25	
11:15 - 12:00 p.m.	<i>CDI Management</i>	0.75	
2:45 - 3:45 p.m.	<i>Joint Session: Post-Acute Care and Long-Term Care: Changing The National Landscape and Infection Prevention</i>	1	
3:45 - 4:45 p.m.	<i>Joint Session: Antibiotic Stewardship in Skilled Nursing Facilities and Long-Term Care</i>	1	
5:00 - 5:45 p.m.	<i>Challenging Situations</i>	0.75	

## Full Conference Sessions

Time	Title	CME, ABIM MOC, CNE	Credits Earned
<b>Wednesday, April 18</b>			
8:00 - 9:30 a.m.	<i>Opening Plenary: Crossing the Communication Chasm</i>	1.5	
10:00 - 12:00 p.m.	<i>Challenging Cases in Infection Prevention</i>	2	
	<i>Preparing for the Next Emergency: Improving Readiness in Hospitals, Labs and Communities</i>		
1:30 - 2:30 p.m.	<i>The Needle and the Damage Done: The Infection Control Implications of Opiate Diversion by Healthcare Workers</i>	1	
2:45 - 4:00 p.m.	<i>Hands On Vs. Hands Off Surveillance</i>	1.25	
	<i>Pro/Con: Carrot or Stick</i>		
4:15 - 5:45 p.m.	<i>Joint Session: Stewardship of the Future</i>	1.5	
<b>Thursday, April 19</b>			
8:00 - 9:30 a.m.	<i>HAI Prevention in Pediatrics 2018</i>	1.5	
10:00 - 12:00 a.m.	<i>HAI Prevention in 2018: Best Practices</i>	2	
	<i>Infection Prevention: Building Global Capacity and View</i>		
1:30 - 2:30 p.m.	<i>Plenary: It's Not What You Say, It's How You Say It</i>	1	
2:45 - 4:00 p.m.	<i>R2D2 vs Elbow Grease: Environmental</i>	1.25	
	<i>Looking Beyond Our Patients: OneHealth Perspective</i>		
4:15 - 5:45 p.m.	<i>It's Not an Isolated Issue</i>	1.5	
<b>Friday, April 20</b>			
8:00 - 9:30 a.m.	<i>I'm Here to See the Baby</i>	1.5	
	<i>LTC: Should I Stay or Should I Go</i>		
	<i>Is Stewardship or Infection Prevention the Key to Reduction?</i>		
10:00 - 12:00 p.m.	<i>Beauty and the Beasts: Tales from the Front Lines of Response to Emerging Threats</i>	2	
	<i>How to Publish What We Do</i>		
1:30 - 2:30 p.m.	<i>Interrupting the Slippery Slope of Over-Testing to Over-Treating the Urine</i>	1	
	<i>Leveraging the Synergy of Antimicrobial Stewardship and Infection Prevention and Control Programs</i>		
	<i>Healthcare Associated Viruses</i>		
2:45 - 4:00 p.m.	<i>Joint Session: Ask the Antibiotic Stewardship Experts</i>	1.25	
	<i>How Much is Truly Preventable and How Hard Should We Try</i>		
4:15 - 5:45 p.m.	<i>Closing Plenary: Changing the World Through Better Communication</i>	1.5	

## SHEA/CDC Training Course in Healthcare Epidemiology

Time	Title	CME, ABIM MOC, CNE	Credits Earned
<b>Wednesday, April 18</b>			
10:15 - 11:15 a.m.	<i>Joint Session: Healthcare Epidemiology: Introduction To An Emerging Field</i>	1	
11:15 - 12:00 p.m.	<i>Joint Session: Transmission Of Infectious Agents In Healthcare Settings</i>	0.75	
1:30 - 2:30 p.m.	<i>The Compendium Strategies For Preventing HAIs</i>	1	
2:45 - 3:15 p.m.	<i>Practical Strategies for Surveillance</i>	0.5	
3:15 - 4:00 p.m.	<i>Environment and Cleaning</i>	0.75	
4:15 - 4:45 p.m.	<i>Sterilization &amp; Disinfection</i>	0.5	
4:45 - 5:45 p.m.	<i>The Science of Safety</i>	1	
<b>Thursday, April 19</b>			
8:00 - 9:30 a.m.	<i>NHSN Measures: Learning Risk Adjustment and Assessing Prevention Impact</i>	1.5	
10:00 - 10:45 a.m.	<i>Approach to Epidemic/Outbreak Investigation</i>	0.75	
10:45 - 11:15 a.m.	<i>Problem Session: Outbreak in the OR</i>	0.5	
11:15 - 12:00 p.m.	<i>Unique Aspects of Pediatric Infection Control</i>	0.75	
2:45 - 3:45 p.m.	<i>Joint Session: Post-Acute Care and Long-Term Care: Changing The National Landscape and Infection Prevention</i>	1	
3:45 - 4:45 p.m.	<i>Overview of Antibiotic Stewardship</i>	1	
5:00 - 5:45 p.m.	<i>Special Populations: Immunocompromised, Dialysis &amp; Burn Patients</i>	0.75	
<b>Friday, April 20</b>			
8:00 - 8:45 a.m.	<i>Leadership and Communication Skills</i>	0.75	
8:45 - 9:30 a.m.	<i>The Hospital Epidemiologist as A Clinical Educator</i>	0.75	
10:00 - 11:00 a.m.	<i>Occupational Infection Prevention</i>	1	
11:00 - 12:00 p.m.	<i>The Role of The Laboratory In Healthcare Epidemiology</i>	1	
1:30 - 2:00 p.m.	<i>How to Read a Study &amp; Perform Research</i>	0.5	
2:00 - 2:30 p.m.	<i>Business of Infection Prevention</i>	0.5	
2:45 - 3:15 p.m.	<i>Regulatory &amp; Emergency Preparedness</i>	0.5	
3:15 - 4:00 p.m.	<i>Putting It All Together</i>	0.75	



## SHEA Antibiotic Stewardship Training Course CE

Time	Title	CPE, CME, ABIM MOC, CNE	ACPE UAN	Attendance Code (Only required for CPE)	Credits Earned
<b>Wednesday, April 18</b>					
10:00 – 12:00 p.m.	<i>Breakout Session: Using Data to Drive Decisions</i>	2	0221-9999-18-093-L04-P		
	<i>Breakout Session: Stewardship Intervention: From Bundles to Timeouts</i>		0221-9999-18-094-L04-P		
1:30 – 2:00 p.m.	<i>What Every Steward Should Know About Pharmacokinetics - Pharmacodynamics</i>	0.5	0221-9999-18-095-L01-P		
2:00 – 2:30 p.m.	<i>Allergies, Interactions and Adverse Events, Oh My!</i>	0.5	0221-9999-18-096-L01-P		
2:45 – 3:15 p.m.	<i>An Update on Duration of Therapy and Therapeutic Monitoring: Our Role as Stewards</i>	0.5	0221-9999-18-097-L01-P		
3:15 – 4:00 p.m.	<i>Tackling Liability Issues in Antibiotic Stewardship</i>	0.75	0221-9999-18-098-L03-P		
4:15 – 5:45 p.m.	<i>Joint Session: Stewardship of the Future</i>	1.5	0221-9999-18-099-L01-P		
<b>Thursday, April 19</b>					
8:00 – 8:45 a.m.	<i>Diagnostic Stewardship: Beginning Concepts</i>	0.75	0221-9999-18-100-L01-P		
8:45 – 9:30 a.m.	<i>Case Study #1: Management of Resistant Gram Negative Infections</i>	0.75	0221-9999-18-101-L01-P		
10:00 – 10:45 a.m.	<i>Case Study #2: Management of Resistant Gram Positive Infections</i>	0.75	0221-9999-18-102-L01-P		
10:45 – 11:30 a.m.	<i>Rapid Diagnostic Tests and How to Implement Their Use: Mini-Lecture &amp; Case Study #3</i>	0.75	0221-9999-18-103-L04-P		
11:30 - 12:00 p.m.	<i>How to Find Resources at Your Institution of Health System</i>	0.5	0221-9999-18-104-L04-P		
2:45 - 3:15 p.m.	<i>The Never Events: Managing Provider and Patient Expectations</i>	0.5	0221-9999-18-105-L01-P		
3:15 - 3:45 p.m.	<i>Managing Outlier Physicians: The Reluctant Steward</i>	0.5	0221-9999-18-106-L04-P		
3:45 – 4:45 p.m.	<i>Joint Session: Antibiotic Stewardship in Skilled Nursing Facilities and Long-Term Care</i>	1	0221-9999-18-107-L04-P		
5:00 - 5:45 p.m.	<i>Telemedicine: Opportunities in Stewardship</i>	0.75	0221-9999-18-108-L04-P		
<b>Friday, April 20</b>					
8:00 – 9:00 a.m.	<i>Case Study #4: Stewardship and C. Difficile Infection</i>	1	0221-9999-18-109-L01-P		
9:00 - 9:30 a.m.	<i>Case Study #5: Pediatric Case – Intervention to Improve Antibiotic Use in Pediatrics and the NICU</i>	0.5	0221-9999-18-110-L01-P		
10:00 - 10:45 a.m.	<i>Case Study #6: Adult Case – Intervention to Improve Management of Community Acquired Pneumonia</i>	0.75	0221-9999-18-111-L01-P		
10:45 - 11:15 a.m.	<i>Stewardship at the Bedside: Engaging Front-Line Providers</i>	0.5	0221-9999-18-112-L04-P		
11:15 - 12:00 p.m.	<i>Stewardship and Informatics</i>	0.75	0221-9999-18-113-L04-P		
1:30 - 2:00 p.m.	<i>Developing an Antibiotic Stewardship Program in Ambulatory Care</i>	0.5	0221-9999-18-114-L04-P		
2:00 - 2:30 p.m.	<i>Case Study #7: Adult Case – Intervention to Improve Antibiotic Use in the Immunocompromised</i>	0.5	0221-9999-18-115-L01-P		
2:45 - 4:00 p.m.	<i>Joint Session: Ask the Antibiotic Stewardship Experts</i>	1.25	0221-9999-18-116-L04-P		

## SHEA EPI COMPETITION BREAKFAST

Thursday, April 19, 6:30 – 7:50 a.m., *Grand Ballroom I*

Join us on Thursday morning for the annual SHEA Epi Project Competition. Funded by the SHEA Research and Education Foundation, this competition will award up to \$20,000 in grants to early investigators in the field of healthcare epidemiology research. Winning proposals will be carefully chosen among a pool of finalists competitively selected prior to the competition. These finalists will deliver oral presentations based on their proposals. An anonymous panel of judges will evaluate and score the finalists' presentations based on how the proposed research project will shape our understanding of transmission of healthcare-associated infections, and identify the best prevention methods and implementation science. The judges will deliberate and the winner will be announced at the April 19 afternoon plenary session.

## POSTER LUNCH PRESENTATIONS

Selected abstract posters will be presented, during lunch, each day of the conference from noon to 1:30 p.m. in the Exhibit/Poster Hal. There will be time during these lunch sessions to explore the posters and meet with the authors. The top **twenty-seven** abstracts selected by the review committee are identified with a "SHEA Abstract Award" ribbons.



## POSTER TOPICS

### Wednesday, April 18

- CAUTI
- CLABSI
- Disinfection/Sterilization
- Environmental Cleaning
- SSI
- Long-Term Acute Care
- Pediatrics
- Respiratory Virus
- VAE

### Thursday, April 19

- Antibiotic Stewardship
- *C. diff*
- Implantation Science
- Diagnostic/Microbiology

### Friday, April 20

- Hand Hygiene
- MDR-GNR
- MRSA/VRE
- Outbreaks
- Occupational Health
- Surveillance/Public Health

## SHEA MENTORSHIP BREAKFAST

Wednesday, April 18, 7:00 – 7:50 a.m., *Pavilion Ballroom*

SHEA Mentors and Mentees will gather as the kickoff to the SHEA Mentorship Program. This Program is designed to create a strong networking community; providing, and enhancing the SHEA membership experience at all levels (e.g. student, fellow, junior faculty and practitioners). The goal is to form relationships that can be carried forward beyond SHEA Spring 2018. The mentoring program seeks to cultivate supportive and mutually rewarding relationships between the mentee and the mentor. As the mentee seeks advice and support with career development and goal achievement, the mentor will provide guidance and help the mentee set and attain goals, as well as offer encouragement. Mentors have the satisfaction of sharing their experience and wisdom. As in any teaching relationship, the teacher often benefits from new insights and rejuvenated enthusiasm. This breakfast is open only to registered SHEA Mentors, SHEA Mentees, and SHEA Leaders.

### Mentors

Mayar Al Mohajer  
Maria Almedida  
David Banach, MD  
Michael Ben-Aderet, MD  
Mike Brown, RN, CIC  
Whitney Buckel, PharmD  
Michael Calderwood, MD MPH  
Dave Calfee  
Susan Coffin, MD, MPH  
Marci Drees, MD, MS  
Jehan El Kholy, MD  
Scott Fridkin, MD  
JJ Furuno, PhD  
Shruti Gohil, MD, MPH  
Joost Hopman, MD  
Vincent Hsu, MD MPH  
Jesse Jacob  
Robin Jump, MD, PhD  
Marion Kainer, MD MPH  
Dieudonne Magloire  
Kamga  
Neil Ku, M.D.  
Kristi Kuper, PharmD, BCPS  
Grace Lee, MD, MPH  
Surbhi Leekha, MBBS, MPH  
Matt Linam, MD, MS  
Eric Lofgren, PhD  
Anu Malani, MD  
Larissa May, MD  
Jessina C. McGregor, PhD  
Michael Oji  
Michelle Ordoveza, MD  
Trish Perl, MD, MSc  
Chris Pfeiffer, MD, MHS  
Michael Phillips, MD  
Michael Rubin, MD, PhD  
Ed Septimus, MD  
Mamta Sharma, MD  
Pranavi Sreeramoju, MD, MPH  
Eddie Stenehjem, MD, MSc  
Mike Stevens, MD, MPH

Scott Stienecker, MD  
Michael L Tapper, MD  
Zemedu Mehamed, MPH  
Kavita Trivedi, MD  
David J. Weber, MD, MPH  
**Mentees**  
Sonali Advani MD, MPH  
Ibukun Akinboyo, MD  
Meg Aldrich, MD  
Antonie Auguste, MD  
Sarah Baron, MD  
Kelsey Baubie, MS, MPH  
Heather Benson, BScN RN CIC  
Jena Blumenthal, MD  
Harry Boamah, MD  
Michael Bozzella, DO  
Chloe Bryson-Cahn, MD  
Patrick Burke  
Kelly Cawcutt, MD, MS  
Jessica Chen, Pharm.D.  
Khami Chokani, MD  
Angela Chow, MBBS, MPH, PhD  
Caroline Ciofi-Silva  
Carmen T. Cortes Ramos, MT (ASCP) SM CIC  
Mirian Dal Ben  
Patricia Dandache, MD  
Rupak Datta, MD PhD  
Shandra Day, MD  
Analia De Cristofano  
Joseph Devlin  
Tara Leigh Donovan, MSc  
Saumil Doshi  
Lauren Dutcher, MD  
Andrew Dysangco, MD  
Misti Ellsworth, DO  
Kimberly Erukunakpor, MPH  
Carolee D. Estelle, MD  
Nicole Fitzpatrick, MPH, RN  
Susan Fletcher-Gutowski, MS, BSM, CIC  
Nikkiah Forbes  
Xiaodong Gao, BS

Katherine Goodman, JD  
Swathi Gowtham, MD  
Hana Hakim, MD  
Carrie Hanley, PhD, MPH  
Emily Heenan, MSN, RN, CIC  
Haley Holmer  
Heather Hsu, MD MPH  
Paul Jacob, MD MPH  
Nkwan Jacob Gobte  
Kathleen Jharie, IPC (RN)  
Rashonda Kennedy, RN, BS, MBA, JD  
Hong Bin Kim, MD, FIDSA  
Jo-anne Salangsang Klein, MD, MS  
John Kopsidas  
Seetha Lakshmi, MD  
Lee Yew Fong  
Hannah Leeman  
James Lewis  
Beth Lewis, MBA, BSN, CPHQ  
Gregory Madden, MD  
Jasmine Marcelin, MD  
Poppy Markwell, MD, MPH  
Lucia Martinez  
M. Nael Mhaissen, MD  
Shyam Kumar  
Ryo Miyakawa, MD  
Rima Moghnieh  
Muhanad Mohamed  
SaraLee Molinari, PharmD  
Melissa Morgan  
Martha Muller, MD  
Neha Nanda, MD  
Bhagy Navalkale, MD  
Peggy Newman, MD  
Rany Octaria  
Stella Okoye, MD  
Sean O'Malley  
April Palmer, MD  
Deborah Passey, PhD  
Deb Burdsall  
Jeff Pearson, PharmD

Mariangela  
Pena-Gonzalez  
Pavel Prusakov, PharmD  
Mireia Puig-Asensio  
S. Sonia Qasba, MD, MPH  
Rosa Ravariere-Seaman  
Ashley Richter, MPH, CIC  
Sara Eloisa Rivera Molina  
Tashina Robinson  
Priscilla Rupali  
Jorge L Salinas, MD  
Maile Salter  
Smita Sarma  
Michael Schweikert, MPH, M(ASCP)<sup>CM</sup>, CIC  
Saranya Seetharaman, MBBS, MPH  
Emily Shing, MPH  
Matt Simon, MD  
Miranda Smith, MPH  
Pavithra Srinivas, PharmD  
Stephanie Sterling, MD, MPH  
Naresh Sunkara, PhD  
Roza Tammer  
Patricia Tellez Watson, MD  
Dat Tran  
Scott Troppy  
Ana Vaughan, MD, MPH  
Valerie Vaughn, MD, MSc  
Mitch Vaughn, PharmD  
Ravi K Vemuri, MD  
Neethi Venkatappa, MD  
Roberto Viau Colindres  
Elizabeth Walters  
Matthew Washam, MD MPH  
Zach Willis, MD, MPH  
Jennifer Yim, BSN, RN, CIC  
Mariam Younas, MD  
Hui Zhang



**Palca**



**Cardo**



**Crozier**

## 4<sup>TH</sup> ANNUAL SHEA EDUCATION AND RESEARCH FOUNDATION DINNER

(ticketed event)

Thursday, April 19, 6:00 – 9:30 p.m., *World Forestry Center*

*The SHEA Education & Research Foundation is hosting the annual Foundation Dinner during SHEA Spring 2018. We invite you to come and participate in this “fireside chat” with a candid discussion moderated by **NPR’s Joe Palca, PhD**, featuring **Denise Cardo, MD**, Director of the Division of Healthcare Quality Promotion (DHQP), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) at the Centers for Disease Control and Prevention (CDC), and **Ian Crozier, MD**, Infectious Disease Specialist and Ebola Survivor. We hope you will consider joining us for this memorable event! This is a ticketed event. If you did not purchase a ticket in advance, a limited number of tickets are available for purchase at Registration until 5:00 p.m. Wednesday, April 18.*

**Please note:** Transportation will be provided for this event. Please meet outside the Hilton Portland Downtown Lobby starting at 5:30.



## CONSIDER A DONATION TO SHEA’S EDUCATION & RESEARCH FOUNDATION

SHEA is committed to providing members what they need to be leaders in their facilities — now and into the future. Membership dues cover only a small percentage of what SHEA needs to provide these valuable tools and opportunities. We need the help and commitment from all members to continue to recruit and transform SHEA members into SHEA leaders, and to help train the next generation of healthcare epidemiologists. Please visit [www.shea-online.org/Foundation/Donate.aspx](http://www.shea-online.org/Foundation/Donate.aspx) to find out how to make an online tax-deductible donation or email [lbrady@shea-online.org](mailto:lbrady@shea-online.org) to make your donation.



## SHEA WOMEN IN EPI BREAKFAST

Friday, April 20, 6:30 – 7:50 a.m.  
*Atrium Ballroom*

Women in the field of healthcare epidemiology are encouraged to attend this women’s only leadership breakfast. Women are increasingly entering the field of healthcare epidemiology, but have had few opportunities to meet and discuss the challenges. This event is designed to facilitate networking and mentoring among women with extensive careers in healthcare epidemiology and those still in training or starting out in the field..

## GINA PUGLIESE SCHOLARSHIP AWARDEES

The Gina Pugliese Scholarship was established by SHEA to promote the training of a non-physician infection preventionist (IP) who has shown outstanding interest and leadership in the field or works in a resource limited setting. SHEA established this scholarship in honor of Gina Pugliese, RN, MS, a prominent IP and leader in the field of healthcare epidemiology. Ms. Pugliese was a founding faculty member of the SHEA/CDC Training Certificate Course in Healthcare Epidemiology and co-chair for fifteen years.



Caroline Silva



Melissa Morgan

## BILL RUTALA SCHOLARSHIP AWARDEES

The Bill Rutala Scholarship was established by SHEA to promote the training of a non-physician interested in the research of healthcare-associated infections. SHEA established this scholarship in honor of William Rutala, MS, MPH, PhD a prominent SHEA leader the field of healthcare epidemiology research. Dr. Rutala was the SHEA Lectureship awardee in 2012 and has worked tirelessly researching areas such as disinfection, sterilization, cross-infection, healthcare-associated infections, outbreaks, antibiotic-resistant pathogens.



Elizabeth Walters



Haley Homer

## JOHNATHAN FREEMAN SCHOLARSHIP AWARDEES

The Jonathan Freeman Scholarship was established by SHEA to promote the training of outstanding infectious disease fellows who demonstrate interest in the field of healthcare epidemiology. The society established the scholarship in the memory of Jonathan Freeman, MD, MPH, a teacher and researcher in field of healthcare epidemiology dedicated to improving the delivery of healthcare through the prevention of nosocomial infections. Dr. Freeman was a founding faculty member who for a decade taught the epidemiology and statistics track of the course.



Ibukunoluwa  
Akinboyo



Rupak Datta



Mireia Puig-  
Asensio



Teppei Shimasaki



Anna Sick-  
Samuels

## SPEAKER READY ROOM

### Council Suite

*Tuesday, April 17, 2:30 – 5:30 p.m.*

*Wednesday April 18, 6:30 a.m. – 5:30 p.m.*

*Thursday, April 19, 6:30 a.m. – 5:30 p.m.*

*Friday, April 20, 6:30 a.m. – 4:15 p.m.*

The Council Suite serves as the speaker ready room for presenters to review presentations as well as check for any last-minute issues. Professional audiovisual staff will be available in the speaker ready room to provide assistance. Speakers are required to arrive at the room they

are presenting in 15 minutes before their session starts to meet with the moderator of the session.

**Please note:** Any changes made to your presentation needs to be uploaded one day before your session in the Speaker Ready Room. We recommend any changes made day of to be mentioned verbally during your presentation.

## INTERNET CONNECTION

Wireless internet connection will not be provided in the meeting rooms. Complimentary WiFi connection will be available in the hotel lobby and guest sleeping rooms.

## SESSION CHANGES

SHEA will display a message board in the registration area (Grand Ballroom Foyer), which will display daily session changes.



## SHEA PUBLIC HEALTH SCHOLARSHIPS AWARDEES

In 2018, the SHEA Education & Research Foundation (SHEA/ERF) established SHEA/ERF Public Health Scholarships to promote the training and advancement of public health professionals who work in various capacities related to infection prevention and antibiotic stewardship within public health systems. The creation of these scholarships demonstrates a commitment by SHEA/ERF to strengthen relationships between SHEA members who serve as leaders healthcare infection prevention/antibiotic stewardship teams and public health professionals. Additionally, SHEA/ERF is committed to improving awareness and expertise on infection prevention, HAIs, and antibiotic stewardship of professionals who serve at the public health level. The scholarships are a part of a larger investment the SHEA/ERF is making in 2018 to focus on Public Health and the role they play in both infection and antibiotic stewardship.



**Rany Octaria, MD,  
MPH**  
*Tennessee*



**Tashina Robinson**  
*Washington*



**Marla Sievers**  
*New Mexico*



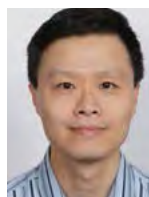
**Roza Tammer**  
*Oregon*



**Brian Hartl**  
*Michigan*



**Tiina Peritz, RN,  
BSN, MS**  
*Pennsylvania*



**Dat Tran, MD, MS**  
*Oregon*



**Scott Troppy**  
*Massachusetts*

### Not Pictured:

Ahmed Hassaballa, *Illinois*  
Maureen Cassidy, *Oregon*  
Sean O'Malley, *California*  
Hannah Leeman, BA, *New Hampshire*

## REGISTRATION

*Grand Ballroom Foyer*

*Tuesday, April 17, 1:00 – 6:15 p.m.*  
*Wednesday April 18, 6:00 a.m. – 6:00 p.m.*  
*Thursday, April 19, 6:30 a.m. – 5:30 p.m.*  
*Friday, April 20, 6:30 a.m. – 4:15 p.m.*

## EDUCATION AND MEMBERSHIP BOOTHS

*Grand Ballroom Foyer*

*Wednesday, April 18, 6:00 a.m. - 6:00 p.m.*  
*Thursday, April 19, 6:30 a.m. - 5:30 p.m.*  
*Friday, April 20, 6:30 a.m.- 4:15 p.m.*

## POSTER VIEWING HOURS

Posters are available for viewing in the Exhibit/Poster Hall. Viewing hours are listed below.

*Wednesday April 18, 11:30 a.m. – 7:15 p.m.*  
*Thursday, April 19, 7:00 a.m. – 6:00 p.m.*  
*Friday, April 20, 7:00 a.m. – 1:30 p.m.*

Posters will only have presentations during lunch Wednesday - Friday from 12:00 – 1:30 p.m.

## INTERNATIONAL LOUNGE

*Park Room*

New this year, on the Plaza Level in the Park Room, there is a lounge for International attendees to mingle and get acquainted with one another. Lounge hours are below.

*Wednesday April 18, 9:00 a.m. – 4:00 p.m.*  
*Thursday, April 19, 9:00 a.m. – 4:00 p.m.*  
*Friday, April 20, 9:00 a.m. – 4:00 p.m.*

## INTERNATIONAL AMBASSADORS PROGRAM WINNERS

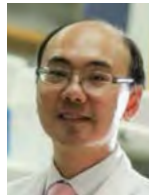
In its tenth year, the International Ambassadors Program (IAP) builds collaborative relationships between U.S. and international healthcare professionals with expertise in healthcare epidemiology and infection prevention. The International Ambassadors Program seeks candidates with 5 to 20 years of experience in order to allow for those more advanced in their career to attend as well. Since 2009, SHEA has partnered with 3M to benefit the international community of healthcare professionals dedicated to infection prevention through our International Ambassadors Program.



Rupali Priscilla  
India



Forbes Nikkiah  
Bahamas



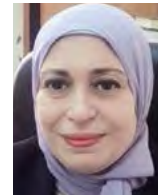
Cheng Chi Chung  
Vincent  
Hong Kong



Kopsidas Ioannis  
Greece



Lee Yew Fong  
Malaysia



El Kholy Jehan  
Ali Egypt



Chow Angela  
Singapore



Sarma Smita  
India



Ravariere-Seaman  
Rosa British  
Virgin Islands



Gobte Nkwan  
Jacob  
Cameroon



Jharie - Kuisch  
Katheen Deborah  
Manolita  
Suriname



Zhang Hui  
China



Kanamori Hajime  
Japan



Mishra Baishnab  
Shyam Kumar  
Nepal



Gao Xiaodong  
China



De Cristofano  
Analia  
Argentina



Rivera Sara  
Honduras



Moghnieh Rima  
Lebanon

# SCHEDULE AT A GLANCE

## TUESDAY, APRIL 17

1:30 – 1:50 p.m.	Registration Open	Grand Ballroom Foyer
2:00 – 6:00 p.m.	Pre-Conference Workshop: Spreading Information Not Infection: Making Infection Prevention and Hospital Epidemiology Digestible for the Public	Pavilion Ballroom
2:30 – 5:30 p.m.	Speaker Ready Room	Council Suite

## WEDNESDAY, APRIL 18

6:00 a.m. – 6:00 p.m.	Registration Open	Grand Foyer Ballroom
6:30 a.m. – 5:30 p.m.	Speaker Ready Room	Council Suite
9:00 am. – 4:00 p.m.	International Lounge	Park Room
7:00 – 7:50 a.m.	<b>Mentorship Breakfast</b> (by invitation only)	Pavilion Ballroom
8:00 – 9:30 a.m.	Opening Plenary: Crossing the Communication Chasm	Grand Ballroom I
9:30 – 10:00 a.m.	<b>Networking Break</b>	Grand Ballroom Foyer
10:00 – 10:15 a.m.	Joint Session: Course Overview	Pavilion Ballroom
10:00 – 12:00 p.m.	Challenging Cases in Infection Prevention	Grand Ballroom I
10:00 – 12:00 p.m.	Preparing for the Next Emergency: Improving Readiness in Hospitals, Labs and Communities	Grand Ballroom II
10:15 – 11:15 a.m.	Joint Session: Healthcare Epidemiology: Introduction To An Emerging Field	Pavilion Ballroom
11:15 – 12:00 p.m.	Joint Session: Transmission Of Infectious Agents In Healthcare Settings	Pavilion Ballroom
10:00 – 12:00 p.m.	Ready, Set Go: Antimicrobial Stewardship in Action – Using Data to Drive Decisions	Broadway Room
10:00 – 12:00 p.m.	Ready, Set Go: Antimicrobial Stewardship in Action – Stewardship Interventions: From Bundles to Time Outs	Galleria
12:00 – 1:30 p.m.	<b>Networking Lunch with Poster Presentations</b>	Exhibit/Poster Hall
1:30 – 2:30 p.m.	The Needle and the Damage Done: The Infection Control Implications of Opiate Diversion by Healthcare Workers	Grand Ballroom I
1:30 – 2:30 p.m.	Oral Abstracts: MRSA: New Prevention for an Old Problem	Grand Ballroom II
1:30 – 2:30 p.m.	The Compendium Strategies For Preventing HAIs	Pavilion Ballroom
1:30 – 2:30 p.m.	Introduction to the Post-Acute and Long-Term Care Setting	Broadway Room
1:30 – 2:00 p.m.	What Every Steward Should Know About Pharmacokinetics - Pharmacodynamics	Galleria
2:00 – 2:30 p.m.	Allergies, Interactions and Adverse Events, Oh My!	Galleria
2:30 – 2:45 p.m.	<b>Networking Break</b>	Grand Ballroom Foyer
2:45 – 3:15 p.m.	Practical Strategies for Surveillance	Pavilion Ballroom
2:45 – 4:00 p.m.	Hands On Vs. Hands Off Surveillance	Grand Ballroom II
2:45 – 4:00 p.m.	Pro/Con: Carrot or Stick	Grand Ballroom I
2:45 – 3:15 p.m.	Managing Outbreaks	Broadway Room
2:45 – 3:15 p.m.	An Update on Duration of Therapy: Our Role as Stewards	Galleria
3:15 – 4:00 p.m.	Environment and Cleaning	Pavilion Ballroom
3:15 – 4:00 p.m.	Occupational Health and Safety	Broadway Room
3:15 – 4:00 p.m.	Tackling Liability Issues in Antibiotic Stewardship	Galleria
4:15 – 5:45 p.m.	Oral Abstracts: A Fresh Look at the Fundamentals	Grand Ballroom II
4:15 – 5:45 p.m.	Joint Session: Stewardship of the Future	Grand Ballroom I
4:15 – 4:45 p.m.	Sterilization & Disinfection	Pavilion Ballroom
4:15 – 5:30 p.m.	Strengthening IP/Stewardship at Care Transitions	Broadway Room
4:45 – 5:45 p.m.	The Science of Safety	Pavilion Ballroom
6:00 – 8:00 p.m.	<b>Welcome Reception</b> #SHEAMembershipMatters	Exhibit/Poster Hall

● Plenaries	● Oral Abstract Sessions	● Full Conference Sessions
● SHEA/CDC Training Certificate Course in Healthcare Epidemiology	● Meals/Networking Breaks	● Other
● SHEA Antibiotic Stewardship Training Course		

# SCHEDULE AT A GLANCE

## THURSDAY, APRIL 19

	6:30 a.m. – 6:00 p.m.	Registration Open	Grand Foyer Ballroom
	6:30 a.m. – 5:30 p.m.	Speaker Ready Room	Council Suite
	9:00 am. – 4:00 p.m.	International Lounge	Park Room
●	6:30 – 7:50 a.m.	SHEA Epi Competition Breakfast	Grand Ballroom I
●	8:00 – 9:30 a.m.	HAI Prevention in Pediatrics 2018	Grand Ballroom II
●	8:00 – 9:30 a.m.	Oral Abstracts: The Daily Report	Grand Ballroom I
●	8:00 – 9:30 a.m.	NHSN Measures: Learning Risk Adjustment and Assessing Prevention Impact	Pavilion Ballroom
●	8:00 – 9:30 a.m.	Strategies to Prevent Infections & MDRO	Broadway Room
●	8:00 – 8:45 a.m.	Diagnostic Stewardship: Beginning Concepts	Galleria
●	8:45 – 9:30 a.m.	Case Study #1: Management of Resistant Gram Negative Infections	Galleria
●	9:30 – 10:00 a.m.	<b>Networking Break</b>	Grand Ballroom Foyer
●	10:00 – 12:00 p.m.	HAI Prevention in 2018: Best Practices	Grand Ballroom I
●	10:00 – 12:00 p.m.	Infection Prevention: Building Global Capacity and View	Grand Ballroom II
●	10:00 – 10:45 a.m.	Approach to Epidemic/Outbreak Investigation	Pavilion Ballroom
●	10:00 – 11:15 a.m.	Changing Approaches in Surveillance	Broadway Room
●	10:00 – 10:45 a.m.	Case Study #2: Management of Resistant Gram Positive Infections	Galleria
●	10:45 – 11:15 a.m.	Problem Session: Outbreak in the OR	Pavilion Ballroom
●	10:45 – 11:30 a.m.	Rapid Diagnostic Tests and How to Implement Their Use: Mini-Lecture & Case Study #3	Galleria
●	11:15 – 12:00 p.m.	Unique Aspects of Pediatric Infection Control	Pavilion Ballroom
●	11:15 – 12:00 p.m.	CDI Management	Broadway Room
●	11:30 – 12:00 p.m.	How to Find Resources at Your Institution of Health System	Galleria
●	12:00 – 1:30 p.m.	<b>Networking Lunch with Poster Presentations</b>	Exhibit/Poster Hall
●	1:30 – 2:30 p.m.	Plenary: It's Not What You Say, It's How You Say It	Grand Ballroom I
●	2:30 – 2:45 p.m.	<b>Networking Break</b>	Grand Ballroom Foyer
●	2:45 – 4:00 p.m.	R2D2 vs. Elbow Grease: Environmental	Grand Ballroom I
●	2:45 – 4:00 p.m.	Looking Beyond Our Patients: OneHealth Perspective	Grand Ballroom II
●	2:45 – 3:45 p.m.	Joint Session: Post-Acute Care and Long-Term Care: Changing The National Landscape and Infection Prevention	Pavilion Ballroom
●	2:45 – 3:15 p.m.	The Never Events: Managing Provider and Patient Expectations	Galleria
●	3:15 – 3:45 p.m.	Managing Outlier Physicians: The Reluctant Steward	Galleria
●	3:45 – 4:45 p.m.	Overview of Antibiotic Stewardship	Pavilion Ballroom
●	3:45 – 4:45 p.m.	Joint Session: Antibiotic Stewardship in Skilled Nursing Facilities and Long-Term Care	Galleria
●	4:15 – 5:45 p.m.	It's Not an Isolated Issue	Grand Ballroom I
●	4:15 – 5:45 p.m.	Oral Abstracts: Microbes on the Move	Grand Ballroom II
●	5:00 – 5:45 p.m.	Special Populations: Immunocompromised, Dialysis & Burn Patients	Pavilion Ballroom
●	5:00 – 5:45 p.m.	Challenging Situations	Broadway Room
●	5:00 – 5:45 p.m.	Telemedicine: Opportunities in Stewardship	Galleria
●	6:00 – 9:30 p.m.	<b>Foundation Dinner</b> (advanced purchase required)	World Forestry Museum

● Plenaries	● Oral Abstract Sessions	● Full Conference Sessions
● SHEA/CDC Training Certificate Course in Healthcare Epidemiology	● Meals/Networking Breaks	● Other
● SHEA Antibiotic Stewardship Training Course		



# SCHEDULE AT A GLANCE

## FRIDAY, APRIL 20

6:00 a.m. – 4:15 p.m.	Registration Open	Grand Foyer Ballroom
6:30 a.m. – 4:15 p.m.	Speaker Ready Room	Council Suite
9:00 a.m. – 4:00 p.m.	International Lounge	Park Room
6:30 – 7:50 a.m.	<b>Women in Epi Breakfast</b>	Atrium Ballroom
7:00 – 7:50 a.m.	<b>Breakfast with Poster Viewing</b>	Exhibit/Poster Hall
8:00 – 9:30 a.m.	I'm Here to See the Baby	Grand Ballroom II
8:00 – 9:30 a.m.	LTC: Should I Stay or Should I Go	Broadway Room
8:00 – 9:30 a.m.	Pro/Con: Switching It up: <i>Clostridium difficile</i> Infection Prevention. Is Stewardship or Infection Prevention the Key to Reduction?	Grand Ballroom I
8:00 – 8:45 a.m.	Leadership and Communication Skills	Pavilion Ballroom
8:00 – 9:00 a.m.	Case Study #4: Stewardship and <i>C. Difficile</i> Infection	Galleria
8:45 – 9:30 a.m.	The Hospital Epidemiologist as a Clinical Educator	Pavilion Ballroom
9:00 – 9:30 a.m.	Case Study #5: Pediatric Case – Intervention to Improve Antibiotic Use in Pediatrics and the NICU	Galleria
9:30 – 10:00 a.m.	<b>Networking Break</b>	Grand Ballroom Foyer
10:00 – 11:00 a.m.	Occupational Infection Prevention	Pavilion Ballroom
10:00 – 12:00 p.m.	Beauty and the Beasts: Tales from the Front Lines of Response to Emerging Threats	Grand Ballroom I
10:00 – 12:00 p.m.	How to Publish What We Do	Grand Ballroom II
10:00 – 12:00 p.m.	Oral Abstracts: At the Intersection of Antibiotics and Resistance	Broadway Room
10:00 – 10:45 a.m.	Case Study #6: Adult Case – Intervention to Improve Management of Community Acquired Pneumonia	Galleria
10:45 – 11:15 a.m.	Stewardship at the Bedside: Engaging Front-Line Providers	Galleria
11:00 – 12:00 p.m.	The Role of the Laboratory in Healthcare Epidemiology	Pavilion Ballroom
11:15 – 12:00 p.m.	Stewardship and Informatics	Galleria
12:00 – 1:30 p.m.	<b>Networking Lunch With Poster Presentations</b>	Exhibit/Poster Hall
1:30 – 2:30 p.m.	Interrupting the Slippery Slope of Over-Testing to Over-Treating the Urine	Grand Ballroom II
1:30 – 2:30 p.m.	Joint APIC Session: Leveraging the Synergy of Antimicrobial Stewardship and Infection Prevention and Control Programs	Grand Ballroom I
1:30 – 2:30 p.m.	Pro/Con: Healthcare Associated Viruses	Broadway Room
1:30 – 2:00 p.m.	How to Read a Study & Perform Research	Pavilion Ballroom
1:30 – 2:00 p.m.	Developing and Antibiotic Stewardship Program in Ambulatory Care	Galleria
2:00 – 2:30 p.m.	Business of Infection Prevention: Promoting Growth of a Program	Pavilion Ballroom
2:00 – 2:30 p.m.	Case Study #7: Adult Case – Intervention to Improve Antibiotic Use in the Immunocompromised	Galleria
2:30 – 2:45 p.m.	<b>Networking Break</b>	Grand Ballroom Foyer
2:45 – 4:00 p.m.	Joint Session: Ask the Antibiotic Stewardship Experts	Galleria
2:45 – 4:00 p.m.	Best Oral Abstract Session	Grand Ballroom II
2:45 – 4:00 p.m.	How Much is Truly Preventable and How Hard Should We Try?	Grand Ballroom I
2:45 – 3:15 p.m.	Regulatory & Emergency Preparedness	Pavilion Ballroom
3:15 – 4:00 p.m.	Putting It All Together	Pavilion Ballroom
4:15 – 5:45 p.m.	Closing Plenary: Changing the World Through Better Communication	Grand Ballroom I

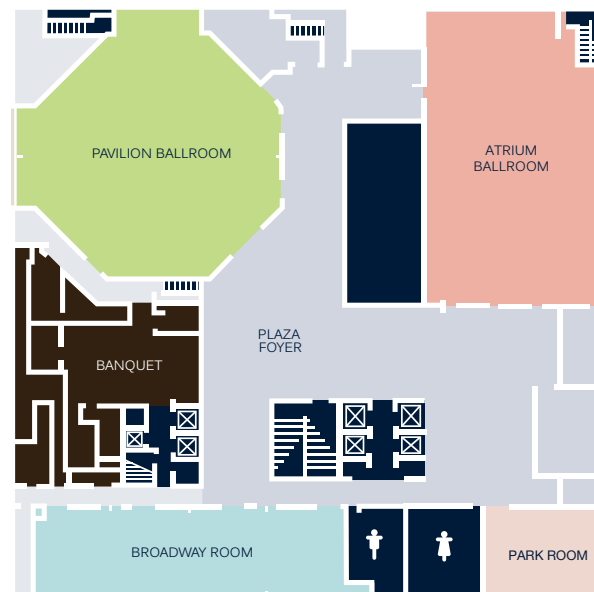
- Plenaries
- SHEA/CDC Training Certificate Course in Healthcare Epidemiology
- SHEA Antibiotic Stewardship Training Course
- Oral Abstract Sessions
- Meals/Networking Breaks
- Full Conference Sessions
- Other

## Ballroom Level



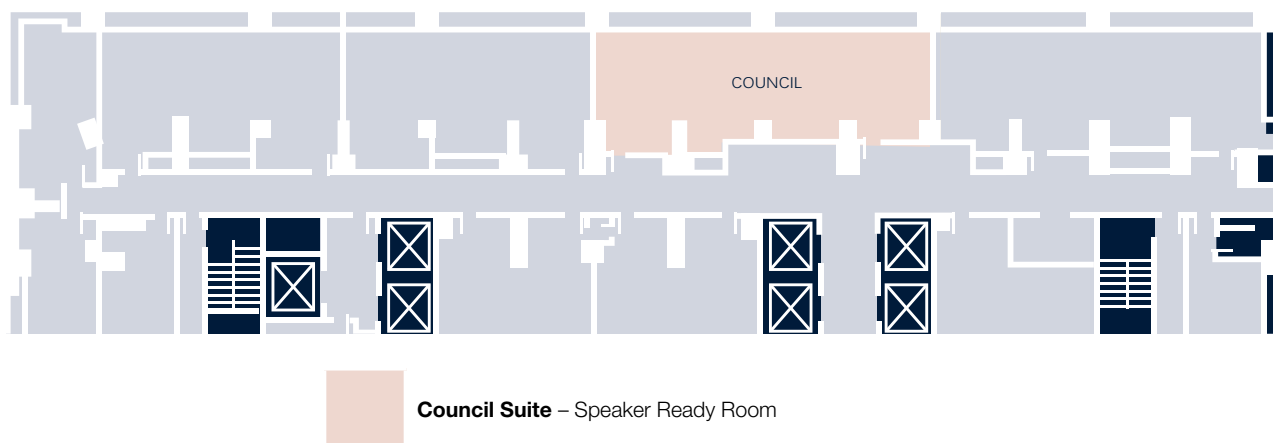
- Grand Ballroom I** – Full Conference Sessions, Plenary Sessions, Epi Competition Breakfast
- Grand Ballroom II** – Full Conference Sessions, Abstract Sessions
- Parlor A and C** – Pre-Conference Workshop Breakouts
- Grand Ballroom Foyer** – Registration, Membership Booth, Networking Breaks, Education Booth, Engagement Booth
- Access to Exhibit/Poster Hall** – Networking Lunch with Poster, Welcome Reception Presentations
- Galleria** – Antibiotic Stewardship Training Course, Pre-Conference Workshop

## Plaza Level



- Pavilion Ballroom** – SHEA/CDC Healthcare Epidemiology Course, Mentorship Breakfast
- Broadway Room** – Antibiotic Stewardship Training Course, Post-Acute and Long-Term Care Course, Full Conference Sessions, Oral Abstract Sessions
- Atrium Ballroom** – Women in Epi Breakfast
- Park Room** – International Lounge

## 3rd Floor Conference Level



- Council Suite** – Speaker Ready Room

## SPREADING INFORMATION NOT INFECTION: MAKING INFECTION PREVENTION AND HOSPITAL EPIDEMIOLOGY DIGESTIBLE FOR THE PUBLIC

**Moderators:** Kari Simonsen, MD and Lauri Hicks, DO

### REGISTRATION OPEN

1:00 – 6:00 p.m.

*Grand Ballroom Foyer*

### COMMUNICATING SCIENCE TO THE PUBLIC

2:00 – 2:50 p.m.

*Galleria*

**Speaker(s):** Joe Palca, PhD

#### Learning Objectives:

- Demonstrate how to effectively communicate science to the public
- Avoid jargon and other pitfalls that limit communication of science to the public

### BLOGS AND SOCIAL MEDIA

2:50 – 3:40 p.m.

*Galleria*

**Speaker(s):**

Setting Up Twitter – **Esther Choo, MD, MPH**

Blogs and Social Media – **Michael Edmond, MD, MPH, MPA**

#### Learning Objectives:

- Demonstrate how to use blogging as a way to communicate information to the public
- Discuss the strengths and limitations of various forms of social media
- Demonstrate how to use social media as a way to communicate information to the public

**BREAK** 3:40 – 4:00 p.m.

### CRISIS COMMUNICATION WITH THE MEDIA AND PUBLIC

4:00 – 4:50 p.m.

*Galleria*

**Speaker(s):** Jonathan Modie, BA, and Jamie Bash, MPH

#### Learning Objectives:

- Discuss the key steps to effective crisis communication with the media and the public
- List common mistakes made during crisis communication

### WORK GROUP BREAKOUT SESSIONS

5:00 – 6:00 p.m.

#### Learning Objectives:

- Demonstrate how to effectively communicate science to the public
- Demonstrate how to use blogging and social media as ways to communicate information to the public
- Demonstrate how to effectively communicate with the media and the public during a crisis situation

### BECOME PART OF NPR'S SCIENCE COMMUNICATION TEAM

*Parlor A*

**Speaker(s):** Joe Palca, PhD, and Madeline Sofia, PhD

### TIPS ON BECOMING A BLOGGER OR SETTING UP YOUR TWITTER ACCOUNT

*Parlor C*

**Speaker(s):** Esther Choo, MD, MPH, and Michael Edmond, MD, MPH, MPA

### CRASH COURSE IN MEDIA TRAINING

*Galleria*

**Speaker(s):** Jonathan Modie, BA, and Jamie Bash, MPH

**SHEA MENTORSHIP BREAKFAST**

(BY INVITATION ONLY)

7:00 – 7:50 a.m.

Pavilion Ballroom

**OPENING PLENARY:  
CROSSING THE  
COMMUNICATION CHASM**

8:00 – 9:30 a.m.

Grand Ballroom I

**Moderators:** Judy Guzman-Cottrill, DO, and  
Matthew Linam, MD, MS**Speaker(s):**Integrating Infection Prevention with Quality and Safety:  
Everyone in One Sandbox – **Zintars Beldavs, MS**The Business of Stewardship: Communicating With and  
Convincing your C-Suite – **Keith Kaye, MD, MPH****Learning Objectives:**

- Identify challenges that cause Infection Prevention and Quality and Safety to work in silos
- Implement strategies to improve the integration of Infection Prevention and Quality and Safety
- Effectively communicate the business case of Antibiotic Stewardship Programs when discussing Antibiotic Stewardship Programs to facility administrators

**NETWORKING BREAK**

9:30 – 10:00 a.m.

Grand Ballroom Foyer

**FULL CONFERENCE****CHALLENGING CASES IN INFECTION  
PREVENTION**

10:00 a.m. – 12:00 p.m.

Grand Ballroom I

**Moderators:** Belinda Ostrowsky, MD, MPH, and  
Shurti Gohil, MD, MPH**Speaker(s):**Case 1 – **Latania Logan, MD**Case 2 – **David A. Nace, MD, MPH**Case 3 – **David Calfee, MD, MS**Case 4 – **Priya Nori, MD****Learning Objectives:**

- Discuss real-world challenges in infection prevention in various healthcare settings
- Compare strengths and weaknesses of solutions to challenging problems
- Formulate management strategies and discuss resources to assist in the implementation of the solutions discussed
- Compare knowledge with other peers and assess clinical acumen in infection prevention

**PREPARING FOR THE NEXT EMERGENCY:  
IMPROVING READINESS IN HOSPITALS,  
LABS AND COMMUNITIES**

10:00 a.m. – 12:00 p.m.

Grand Ballroom II

**Moderators:** Jan Patterson, MD, MS, and  
Julie Trivedi, BS, MD**Speaker(s):**SHEA/CDC's Outbreak Response Training  
Program (ORTP): A Constant State of Readiness!–  
**Judith Guzman-Cottrill, DO**The Antibiotic Resistance Laboratory Network (ARLN) –  
**Marion Kainer, MBBS, MPH**The Council for Outbreak Response: Healthcare-Associated  
Infections & Antibiotic-Resistant Pathogens (CORHA) –  
**Joseph Perz, DrPH MA****Learning Objectives:**

- Become familiar with available training programs and key community partners involved in emergency preparedness and response
- Describe strategies for communication and coordination with local and state public health officials and facilities
- Identify practical strategies to maintain and improve readiness to respond between emergencies

**JOINT SESSIONS****COURSE OVERVIEW**

10:00 – 10:15 a.m.

Pavilion Ballroom

**Speaker(s):****Sarah Haessler, MD****Lauri Hicks, DO****Nimalie Stone, MD, MS****Learning Objectives:**

- Orientation to course materials
- Overview of course structure

**HEALTHCARE EPIDEMIOLOGY:  
INTRODUCTION TO AN EMERGING FIELD**

10:15 – 11:15 a.m.

Pavilion Ballroom

**Speaker(s):** Trish Perl, MD, MSc**Learning Objectives:**

- Obtain a broad overview of the importance of basic concepts in infection prevention, including hand hygiene and asepsis, isolation precautions, disinfection and sterilization, device reprocessing, and environmental cleaning
- Define occupational health-related issues and procedures
- Examine immunization of HCW and patients



## TRANSMISSION OF INFECTIOUS AGENTS IN HEALTHCARE SETTINGS

11:15 a.m. – 12:00 p.m.

*Pavilion Ballroom*

**Speaker(s):** Michael Bell, MD

### Learning Objectives:

- Discuss modes of transmission for important healthcare pathogens
- Evaluate methods for interruption of transmission of pathogens in healthcare settings
- Discuss how to implement effective methods to prevent transmission
- Overview of the modes of transmission of pathogens
- Describe purpose and types of isolation precautions, air handling, personal protective equipment, and other ways of preventing transmission of pathogens in the healthcare setting

## SHEA ANTIBIOTIC STEWARDSHIP TRAINING COURSE

**Track Coordinators:** Kavita Trivedi, MD, and Elizabeth Dodds-Ashley, PharmD, MHS

## READY, SET, GO: ANTIMICROBIAL STEWARDSHIP IN ACTION – USING DATA TO DRIVE DECISIONS

10:00 a.m. – 12:00 p.m.

*Broadway Room*

### Speaker(s):

Introduction – Elizabeth Dodds-Ashley, PharmD, MHS and Kavita Trivedi, MD

Antibiotic Use Data – Whitney Buckel, PharmD

Other Data Elements Useful to Stewardship – Elizabeth Dodds-Ashley, PharmD, MHS

### Learning Objectives:

- Explain how to employ pharmacy related metrics Days of Therapy (DOTs) or Defined Daily Doses (DDD) for measuring antibiotic use and merits of each
- Discuss methods for measuring and reporting the impact of an antibiotic stewardship program including CDC's National Healthcare Safety Network Antibiotic Utilization Module
- Explain how to conduct a needs assessment for your institution
- Describe unique challenges for measuring antibiotic stewardship across multiple sites or within a health system
- Discuss scalability - how and where to expand your program

## READY, SET GO: ANTIMICROBIAL STEWARDSHIP IN ACTION - STEWARDSHIP INTERVENTIONS: FROM BUNDLES TO TIME OUTS

10:00 a.m. – 12:00 p.m.

*Galleria*

### Speaker(s):

Bundle Implementation – Kavita Trivedi, MD

Time Out Implementation – Kristi Kuper, PharmD

### Learning Objectives:

#### Time Out Implementation

- Discuss relevant process and outcomes measures to sustain the business case for antibiotic stewardship interventions
- Describe key elements necessary to implement and maintain various stewardship interventions

#### Bundle Implementation

- Explain how to assess the best types of intervention based on local needs assessment
- Identify best first steps to initiate an antibiotic stewardship intervention in your institution
- Discuss specific stewardship strategies and methods, merits, and drawbacks based on resource availability


## NETWORKING LUNCH WITH POSTER PRESENTATIONS

12:00 – 1:30 p.m.

*Exhibit/Poster Hall*

- 200 **Antimicrobial Resistance and Infection Control Practices: Provincial Long-Term Care Survey in Ontario, Canada**  
**Emily Shing, MPH**, Samir N Patel, Michelle E Policarpio, Jennifer Robertson and Gary Garber, Public Health Ontario, Toronto, ON, Canada
- 201 **Multi-Drug Resistant Organism Acquisition and *Clostridium difficile* Infection with Copper-Impregnated Linens**  
**Gregory R. Madden, MD<sup>1</sup>**, Brenda E. Heon, RN, BSN, CDE<sup>2</sup> and Costi D. Sifri, MD<sup>1</sup>, (1)University of Virginia Health System, Charlottesville, VA, USA, (2)University of Virginia Transitional Care Hospital, Charlottesville, VA, USA
- 202 **A Snapshot of Hospital Cleaning in Australia – Insights from a Large Multi-Site Cleaning Trial**  
**Alison Farrington, RN, MEdT<sup>1</sup>**, Lisa Hall, PhD<sup>2,3</sup> and Brett G. Mitchell, RN, PhD<sup>4</sup>, (1)Institute of Health and Biomedical Innovation Queensland University of Technology, Kelvin Grove, Australia, (2)Institute of Health and Biomedical Innovation, Queensland University of Technology, Brisbane, Australia, (3)School of Public Health, University of Queensland, Brisbane, Australia, (4)Avondale College of Higher Education, Sydney, NSW, Australia
- 204 **Catheter Removal and Outcomes of Multidrug Resistant Central-Line Associated Bloodstream Infection**  
**Jason P. Burnham, MD<sup>1</sup>**, Rebecca P Rojek, MPH<sup>2</sup> and Marin H. Kollef, MD<sup>3</sup>, (1)Washington University in St. Louis School of Medicine, Saint Louis, MO, USA, (2)Barnes-Jewish Hospital, Saint Louis, MO, USA, (3)Washington University in St. Louis, Saint Louis, MO, USA
- 205 **Norovirus Recovery from Floor and Air After Different Decontamination Protocols**  
**Caroline Lopes Ciofi-Silva, PhD<sup>1</sup>**, Camila Quartim de Moraes Bruna, PhD<sup>2</sup>, Kazuko Uchikawa Graziano, Professor<sup>3</sup>, Rita de Cássia Compagnoli Carmona, PhD<sup>4</sup>, Alda Graciele Claudio dos Santos Almeida, MD<sup>5</sup>, Natália Mayumi Inada, PhD<sup>6</sup> and Vanderlei Bagnato, Professor<sup>6</sup>, (1)Campinas Medical Center, Campinas, Brazil, (2)School of Nursing - University of São Paulo, São Paulo, Brazil, (3)School of Nursing, University of São Paulo, São Paulo, Brazil, (4)Enteric Diseases Laboratory, São Paulo, Brazil, (5)Federal University of Alagoas, Maceió, Brazil, (6)Institute of Physics, University of São Paulo, São Carlos, Brazil
- 206 **Hospital-Acquired Viral Respiratory Infections (HA-VRI) in a Tertiary Neonatal Intensive Care Unit (NICU)**  
**Claudette Lapage Poole, MD**, Cecelia Hutto, MD, Bernard Camins, MD and Mark Prichard, PhD, University of Alabama in Birmingham, Birmingham, AL, USA
- 207 **Implementation of an Evidence Based Bundle to Reduce Colorectal Surgical Site Infections**  
**Heather Albert, BSN, RN, CIC<sup>1</sup>**, Nadia Masroor, MPH<sup>1</sup>, Paula Spencer, MSHA<sup>1</sup>, Donna Winborne, BSN, MSHA<sup>1</sup>, Mary Fain, PMP<sup>1</sup>, Kaila Cooper, MSN, RN, CIC<sup>1</sup>, Michael Scott, MB, ChB, FRCP, FRCA, FFICM<sup>1</sup>, Michael Stevens, MD, MPH<sup>2</sup>, Michelle Doll, MD, MPH<sup>2</sup> and Gonzalo Bearman, MD<sup>2</sup>, (1)VCU Health, Richmond, VA, USA, (2)Virginia Commonwealth University Health System, Richmond, VA, USA
- 208 **Barriers and Perceptions of Environmental Cleaning**  
**Laura Pedersen, BS<sup>1</sup>**, Nadia Masroor, MPH<sup>1</sup>, Kaila Cooper, MSN, RN, CIC<sup>1</sup>, Amie Patrick, BSN<sup>1</sup>, Michele Sanders Fleming, MSN<sup>1</sup>, Michelle Doll, MD, MPH<sup>2</sup>, Michael Stevens, MD, MPH<sup>2</sup> and Gonzalo Bearman, MD, MPH<sup>1</sup>, (1)VCU Health, Richmond, VA, USA, (2)Virginia Commonwealth University Health System, Richmond, VA, USA
- 209 **Cost-Effectiveness Analysis of *Staphylococcus Aureus* Screening and Decolonization**  
**Susan Kline, MD, MPH<sup>1</sup>**, Erinn Sanstead, MPH<sup>2</sup>, James R. Johnson, MD<sup>1</sup> and Shalini Kulasingham, PhD<sup>2</sup>, (1)University of Minnesota, Medical School, Dept. of Medicine, Infectious Disease Division, Minneapolis, MN, USA, (2)University of Minnesota School of Public Health, Division of Epidemiology, Minneapolis, MN, USA
- 210 **Impact of Reflex Urine Cultures on Catheter Associated Urinary Tract Infections at an Academic Medical Center**  
**Sonali Advani, MBBS, MPH<sup>1</sup>**, Lawrence Sann, MD<sup>2</sup>, Cindy Smith, BSN, RN<sup>3</sup>, Rupak Datta, MD, PhD<sup>4</sup>, Michael Leapman, MD<sup>5</sup>, Adam Hittelman, MD, PhD<sup>5</sup>, Linda Sullivan, BSN, MBA<sup>6</sup>, Manisha Juthani-Mehta, MD<sup>1</sup> and Richard A. Martinello, MD<sup>7</sup>, (1)Yale School of Medicine, Department of Medicine, Section of Infectious Diseases, New Haven, CT, USA, (2)Yale School of Medicine, Department of Surgery, Section of General Surgery, Trauma and Surgical Critical Care, New Haven, CT, USA, (3)Yale New Haven Hospital, New Haven, CT, USA, (4)Yale University School of Medicine, New Haven, CT, USA, (5)Yale School of Medicine, Department of Urology, New Haven, CT, USA, (6)Yale New Haven Hospital, Department of Infection Prevention, New Haven, CT, USA, (7) Yale School of Medicine, Department of Medicine and Pediatrics, Section of Infectious Diseases, New Haven, CT, USA
- 211 **Compliance with Interventions to Reduce Surgical Site Infection (SSI) Following Total Hip and Knee Arthroplasty**  
**Emily Sechrist<sup>1</sup>**, Jennifer Flaherty, RN, MPH, CIC<sup>2</sup>, Julie E. Mangino, MD<sup>2</sup> and Shandra R. Day, MD<sup>2</sup>, (1)College of Public Health, The Ohio State University, Columbus, OH, USA, (2)The Ohio State University Wexner Medical Center, Columbus, OH, USA
- 212 **Characterizing Mucosal Barrier Injury Laboratory-Confirmed Bloodstream Infections in Pediatric Hematology-Oncology Patients**  
**Hana Hakim, MD, MS<sup>1</sup>**, Amy L Billett, MD<sup>2</sup>, Jiahui Xu, MS<sup>1</sup>, Li Tang, PhD<sup>1</sup>, Troy Richardson, PhD<sup>3</sup>, Eric J Werner, MD<sup>4</sup> and Aditya H Gaur, MD, MS<sup>1</sup>, (1)St. Jude Children's Research Hospital, Memphis, TN, USA, (2)Dana-Farber/Boston Children's Cancer and Blood Disorders Center, Boston, MA, USA, (3)Children's Hospital Association, Lenexa, KS, USA, (4)Children's Specialty Group, Norfolk, VA, USA

- 213 **What Is Working to Reduce Catheter Associated Urinary Tract Infections (CAUTIs)?**  
**Julie E. Mangino, MD<sup>1</sup>**, Robert C. Orellana, MPH<sup>2</sup>, Jamie St. Clair, MS RN<sup>1</sup>, Erik E Abel, Pharm D, MBA<sup>1</sup>, Hannah R Miller, BS<sup>1</sup>, Shandra R. Day, MD<sup>1</sup> and Amy M Knupp, PhD, RN, CNS<sup>1</sup>, (1) The Ohio State University Wexner Medical Center, Columbus, OH, USA, (2)College of Public Health, OSU, Columbus, OH, USA
- 214 **Environmental Cleaning and Disinfection Policies, Protocols and Practices: A Survey of 27 Long-Term Care Facilities**  
**Muhammad Salman Ashraf, MBBS<sup>1</sup>**, Regina Nailon, PhD, RN<sup>2</sup>, Susan S. Huang, MD, MPH<sup>3</sup>, Susan Beach, BA<sup>4</sup>, Margaret Drake, MT, ASCP, CIC<sup>5</sup>, Teresa Fitzgerald, RN, BSN, CIC<sup>6</sup>, Elizabeth Lyden, MS<sup>7</sup>, Teresa A Micheels, MSN, RN, CIC<sup>4</sup>, Michelle Schwedhelm, MSN, RN, NEA-BC<sup>4</sup>, Maureen Tierney, MD<sup>5</sup>, L. Kate Tyner, BSN, RN<sup>4</sup> and Mark E Rupp, MD<sup>1</sup>, (1)Division of Infectious Diseases, University of Nebraska Medical Center, Omaha, NE, USA, (2)Nebraska Medicine, Nebraska Antimicrobial Stewardship Assessment and Promotion Program, Omaha, NE, USA, (3)Division of Infectious Diseases and Health Policy Research Institute, University of California Irvine School of Medicine, Irvine, CA, USA, (4)Nebraska Medicine, Nebraska Infection Control Assessment & Promotion Program, Omaha, NE, USA, (5)Nebraska DHHS, Lincoln, NE, USA, (6)Nebraska Medicine, Nebraska Infection Control Assessment and Promotion Program, Omaha, NE, USA, (7)University of Nebraska Medical Center, College of Public Health, Omaha, NE, USA
- 215 **Impact of Process Measures on Central Line Associated Blood Stream Infections**  
**Neha Nanda, MD** and Alyssa Rodriguez, MHA, Keck Medicine of USC, Los Angeles, CA, USA
- 216 **Isolation for Right Reason and Right Duration – It Takes an Extra Mile to be Right**  
 Nicholas Rister, MD, **Rachel Zhang, MD**, Regan Trappier, RN and Xiaoyan Song, PhD, MBBS, CIC, Children's National Medical Center, Washington, DC, USA
- 218 **PLABSI: Hospital Acquired Bacteremia**  
**Madiha Tahir** and Amy Beth Kressel, MD, MS, Indiana University School of Medicine, Indianapolis, IN, USA
- 219 **How Does Implementation of a Urine Testing Algorithm Effect Testing Stewardship?**  
**Chad Nix, MSc<sup>1</sup>**, Lauren Ogden, MPH, CIC<sup>1</sup>, Corinne Klein, MD<sup>2</sup>, John M Townes, MD<sup>1</sup> and Molly Hale, MPH, CIC, FAPIC<sup>1</sup>, (1) OHSU, Portland, OR, USA, (2)Kaiser Permanente Santa Rosa, Santa Rosa, CA, USA
- 220 **Evaluation of an Enclosed Ultraviolet-C Radiation Device for Decontamination of Keyboards**  
**Heba Alhmidi, MD<sup>1</sup>**, Aaron Ali Sheikh, MSW<sup>2</sup>, Jennifer Cadnum, BS<sup>3</sup>, Annette Jencson, BSMT, CIC<sup>4</sup> and Curtis J. Donskey, MD<sup>2,4,5</sup>, (1)Louis Stokes Cleveland Veterans Affairs Medical Center, Cleveland, OH, USA, (2)Case Western Reserve University, Cleveland, OH, USA, (3)Louis Stokes Veterans Affairs Medical Center, Cleveland, OH, USA, (4)Cleveland VA Medical Center, Cleveland, OH, USA, (5)Geriatric Research Education and Clinical Center, Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA
- 221 **Evaluation of a Patient Activated Ultraviolet-C Radiation Device for Decontamination of Restrooms**  
**Jennifer L. Cadnum, BS<sup>1</sup>**, Annette Jencson, BSMT, CIC<sup>2</sup>, Thirveen Sankar Chittoor Mana, MBA<sup>3</sup> and Curtis J. Donskey, MD<sup>2,4,5</sup>, (1)Louis Stokes Cleveland Veterans Affairs Medical Center, Cleveland, OH, USA, (2)Cleveland VA Medical Center, Cleveland, OH, USA, (3)Case Western Reserve University, Cleveland, OH, USA, (4)Case Western Reserve University, Cleveland, OH, USA, (5)Geriatric Research Education and Clinical Center, Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA
- 222 **Carbapenem-resistant Enterobacteriaceae (CRE) among Central Line-Associated Bloodstream Infections (CLABSI) in Acute Care vs. Long-Term Acute Care Hospitals, 2015-2016**  
**Allan K Nkwata, MPH<sup>1</sup>**, Lindsey M. Weiner, MPH<sup>1</sup> and **Margaret Dudeck, BS, MPH<sup>2</sup>**, (1)Centers for Disease Control and Prevention, Atlanta, GA, USA, (2)Centers for Disease Control, Atlanta, GA, USA
- 223 **A Comparison of the Efficacy of UV-C Devices Operated in a Radiology Suite**  
**Jennifer L. Cadnum, BS<sup>1</sup>**, Annette Jencson, BSMT, CIC<sup>2</sup>, Scott Livingston, MD<sup>3</sup>, Scott Gestric, MD<sup>4</sup> and Curtis J. Donskey, MD<sup>2,3,5</sup>, (1)Louis Stokes Cleveland Veterans Affairs Medical Center, Cleveland, OH, USA, (2)Cleveland VA Medical Center, Cleveland, OH, USA, (3)Case Western Reserve University, Cleveland, OH, USA, (4)Louis Stokes Veterans Affairs Medical Center, Cleveland, OH, USA, (5)Geriatric Research Education and Clinical Center, Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA
- 224 **Developing a Spinal Fusion “Bundle” to Prevent Surgical Site Infection**  
**Marci Drees, MD, MS**, Keith Heitz, MTS, LSSBB, CPhT, Julianne Care, PharmD, Beth Fitzgerald, MSN, RN, CNOR, Andrea C. Rodriguez, MSHA, RN, CNOR, Amy Kohl, MSN, RN, CCRN, Jennifer Johnson, MS, BSN, RN-BC, CENP, Susan Volk, MSN, RN, Pulak Ray, MD, Matthew Powell, MD, Pawan Rastogi, MD, Gerard J. Fulda, MD and Judith A. Townsley, MSN, RN, CPAN, FACHE, Christiana Care Health System, Newark, DE, USA
- 225 **Reducing Inappropriate Urine Cultures through a Culture Standardization Program**  
**David F Dougherty, MD**, Danett Guy, MSN RN, Barbara J Martin, MBA, RN, James Rickwa, BS, Jackie Smith, RN CIC and Thomas Talbot, MD MPH, Vanderbilt University Medical Center, Nashville, TN, USA
- 226 **An Antibiotic Stewardship Quality Improvement Project for Pediatric Urinary Tract Infection in the ED**  
**Elizabeth Miller Walters, BS, RN, CIC<sup>1</sup>**, Jennifer D'Auria, PhD, RN<sup>1</sup>, Cheryl Jackson, MD<sup>2</sup>, Christine Walsh-Kelly, MD<sup>2</sup>, Daniel Park, MD<sup>2</sup> and Zachary I. Willis, MD, MPH<sup>3</sup>, (1)University of North Carolina, School of Nursing, Chapel Hill, NC, USA, (2)University of North Carolina, School of Medicine, Chapel Hill, NC, USA, (3)Division of Pediatric Infectious Diseases, University of North Carolina School of Medicine, Chapel Hill, NC, USA

- 227 **Does Size Matter? Midline Catheters as an Effective Strategy to Reduce Reportable Blood Stream Infections**  
Olivia Gutsell<sup>1</sup>, Herminia Pua, BSN RN<sup>2</sup> and **Jorge P. Parada, MD, MPH<sup>1,2</sup>**, (1)Loyola University Chicago, Maywood, IL, USA, (2) Loyola University Medical Center, Maywood, IL, USA
- 229 **The Microbiome of Dry Surface Biofilm Sampled from Intensive Care Units around the World**  
Karen Vickery, PhD<sup>1</sup>, Khalid Johani, MSc<sup>1,2</sup>, Honghua Hu, PhD<sup>1</sup>, Dayane Costa, BN<sup>1,3</sup>, Stephanie Dancer, FRCPath<sup>4</sup>, Dulcelene Melo, PhD<sup>3</sup>, Iain Gosbell, MD<sup>5,6</sup>, Slade Jensen, PhD<sup>7</sup>, Lillian Kelly Lopes, PhD<sup>3</sup>, **Gregory Whiteley, PhD<sup>7,8</sup>**, Trevor O Glasbey, PhD<sup>9,10</sup>, Liwcy K Lima, MSc<sup>11</sup>, Anand K Deva, MBBS<sup>1</sup> and Anaclara F Tipple, PhD<sup>12</sup>, (1)Macquarie University, Sydney, Australia, (2) Central Military Laboratories and Blood Bank, Riyadh, Saudi Arabia, (3)Federal University of Goias, Goiania, Brazil, (4)NHS Lanarkshire, Glasgow, Glasgow, United Kingdom, (5)Western Sydney University, Campbelltown, Australia, (6)Australian Red Cross Blood Service, Alexandria, Australia, (7)Western Sydney University, Sydney, Australia, (8)Whiteley Corporation, Sydney, Australia, (9)Whiteley Corporation, Tomago, Australia, (10) Macquarie University, Macquarie Park, Australia, (11)Public Regional Hospital of Araguaia, Redencao, Brazil, (12)Federal University of Goias, Goias, Brazil
- 230 **Sustained Zero Central Line Associated Bloodstream Infections (CLABSI) in an Acute Care Oncology Unit Using a Multimodal Intervention Approach**  
 **Jennifer Yim, RN, BSN, CIC<sup>1</sup>**, Jordan Oliver, RN, BSN, OCN<sup>2</sup>, Shruti K. Gohil, MD, MPH<sup>1,3</sup>, Jennifer Hoff, RN, MSN, OCN, CMSRN<sup>4</sup>, Susan Christensen, RN, BSN, MHA<sup>2</sup>, Edward L. Nelson, MD, FACP<sup>5</sup>, Kathleen A. Quan, RN, MSN, CIC, CPHQ, FAPIC<sup>1</sup>, Maria Cynthia Reyes, RN, BSN, OCN<sup>2</sup>, Keith Madey, BBA, MAFIS<sup>1</sup> and Susan S. Huang, MD, MPH<sup>1,3</sup>, (1)Epidemiology and Infection Prevention, University of California Irvine Health, Orange, CA, USA, (2)Department of Nursing, University of California Irvine Health, Orange, CA, USA, (3)Division of Infectious Diseases and Health Policy Research Institute, University of California Irvine School of Medicine, Irvine, CA, USA, (4)Nursing Quality, Research & Education, University of California Irvine Health, Orange, CA, USA, (5)Division of Hematology/Oncology and Chao Family Comprehensive Cancer Center, University of Irvine School of Medicine, Irvine, CA, USA
- 231 **High-Reliability Central Line Maintenance Significantly Reduced CLABSIs in a High Acuity Intensive Care Unit**  
**Kristin Dascomb, MD, PhD<sup>1</sup>**, Caroline Taylor, RN, CIC<sup>2</sup>, Misty Schreiner, RN<sup>2</sup>, Peter Jones, MSLS<sup>2</sup>, Lori Mitchell, RN<sup>2</sup> and Bert Lopansri, MD<sup>2</sup>, (1)Intermountain Healthcare, Murray, UT, USA, (2) Intermountain Medical Center, Murray, UT, USA
- 232 **Efficacy of a UV-A Lighting System for Passive Disinfection of Healthcare Associated Pathogens**  
**Scott Livingston, MD<sup>1</sup>**, Jennifer Cadnum, BS<sup>2</sup>, Michelle Nerandzic, BS<sup>3</sup> and Curtis J. Donskey, MD<sup>1,4,5</sup>, (1)Case Western Reserve University, Cleveland, OH, USA, (2)Louis Stokes Veterans Affairs Medical Center, Cleveland, OH, USA, (3)Louis Stokes Veterans Affairs Medical Center, Cleveland, OH, USA, (4)Cleveland VA Medical Center, Cleveland, OH, USA, (5)Geriatric Research Education and Clinical Center, Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA
- 233 **Reducing CAUTI in the ICU: Challenges and Recommendations for Comprehensive Preventive Strategy**  
**Jennifer Meddings, MD, MSc<sup>1,2</sup>**, Laura Petersen, MHSA<sup>3</sup>, Karen Fowler, MPH<sup>2</sup>, Jane Forman, ScD, MHS<sup>2</sup>, Molly Harrod, PhD<sup>2</sup> and Sanjay Saint, MD, MPH<sup>2,3</sup>, (1)Department of Internal Medicine, Division of General Medicine, University of Michigan Medical School, Ann Arbor, MI, USA, (2)VA Ann Arbor Center for Clinical Management Research, Ann Arbor, MI, USA, (3)University of Michigan, Ann Arbor, MI, USA
- 234 **Risk Factors for *Staphylococcus aureus* Infections Amongst Colonized Infants in the Neonatal Intensive Care Unit**  
**Matthew C Washam, MD MPH<sup>1</sup>**, Heidi Andersen, MD MS<sup>2</sup>, Xinhua Zhang, MD<sup>2</sup>, Andrea Ankrum, MS MS MT(ASCP) CIC<sup>2</sup>, Abigail Johnson, MS<sup>2</sup>, Hansraj Bangar, PhD<sup>2</sup>, Joel E Mortensen, PhD<sup>2</sup>, Mary Allen Staat, MD MPH<sup>2</sup> and David B Haslam, MD<sup>2</sup>, (1) UF Health Shands Children's Hospital, Gainesville, FL, USA, (2) Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA
- 235 **Bacterial Contamination on Lead Aprons and Evaluation of Disinfection Efficiency of a Novel UV-C Device "DCab"**  
**Naresh K Sunkara, Ph.D.<sup>1,2</sup>**, Cynthia J Brehm, BSN, RN, CORN<sup>3</sup>, JOHN E Swartzberg, MD, FACP<sup>3</sup>, Jesse D Alldredge, BSN, RN, CORN<sup>3</sup> and Rebecca S Lopez, BSN, RN<sup>3</sup>, (1)Nosocom Solutions, Emeryville, CA, USA, (2)University of California, Berkeley, Berkeley, CA, USA, (3)Alta Bates Summit Medical Center, Berkeley, CA, USA
- 236 **That Sinking Feeling: Eradicating *Pseudomonas* and *Candida auris* from a Sink Drainage System using a Novel Sink that Generates Ozonated Water**  
**Scott Livingston, MD<sup>1</sup>**, Jennifer Cadnum, BS<sup>2</sup>, Annette Jencson, BSMT, CIC<sup>3</sup>, Scott Gestric, MD<sup>4</sup> and Curtis J. Donskey, MD<sup>1,3,5</sup>, (1) Case Western Reserve University, Cleveland, OH, USA, (2)Louis Stokes Veterans Affairs Medical Center, Cleveland, OH, USA, (3) Cleveland VA Medical Center, Cleveland, OH, USA, (4)Louis Stokes Veterans Affairs Medical Center, Cleveland, OH, USA, (5)Geriatric Research Education and Clinical Center, Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA
- 237 **The Impact of Chlorhexidine Gluconate on the Skin Microbiota of Children**  
**Ashley Kates, PhD<sup>1</sup>**, Michele Zimbric, BS<sup>2</sup>, Kaitlin F Mitchell, PhD, MPH<sup>3,4</sup>, Joseph Skarupka, BS<sup>1</sup>, Megan N Duster, MT<sup>3</sup> and Nasia Safdar, MD, PhD<sup>3,5</sup>, (1)University of Wisconsin-Madison, Madison, WI, USA, (2)University of Wisconsin School of Medicine & Public Health, Division of Infectious Disease, Madison, WI, USA, (3)University of Wisconsin School of Medicine & Public Health, Division of Infectious Diseases, Madison, WI, USA, (4)Department of Population Health Sciences, School of Medicine and Public Health, University of Wisconsin, Madison, WI, USA, (5)William S. Middleton Memorial Veterans Hospital, Madison, WI, USA
- 238 **Evaluation of an Automatic Electronic Alert System for Re-Dosing of Antimicrobial Surgical Site Infection Prophylaxis**  
**Jasmine R Marcelin, MD<sup>1</sup>**, Elizabeth Lyden, MS<sup>2</sup>, Scott Bergman, PharmD<sup>3</sup>, Mark E Rupp, MD<sup>1</sup>, Dillon Clarey<sup>4</sup> and Trevor C van Schooneveld, MD<sup>1</sup>, (1)Division of Infectious Diseases, University of Nebraska Medical Center, Omaha, NE, USA, (2)University of Nebraska Medical Center, College of Public Health, Omaha, NE, USA, (3)Nebraska Medicine, Nebraska Antimicrobial Stewardship Assessment and Promotion Program, Omaha, NE, USA, (4) University of Nebraska Medical Center, Omaha, NE, USA
- 239 **High Braden Scale Score is Correlated with Early Onset of Catheter-Associated Urinary Tract Infection in High-Risk Patients**  
**Alexis Christina Gushiken, MD<sup>1</sup>**, Harsh Harsukh Patolia, BS<sup>2</sup>, Mariana Gomez De La Espriella, MD<sup>1</sup>, Beverly P Sturgill, RN<sup>3</sup>, Tina M Temples, MSIE<sup>3</sup> and Anthony Baffoe-Bonnie, MD<sup>3</sup>, (1)Carilion Clinic-Virginia Tech Carilion School of Medicine, Roanoke, VA, USA, (2)Virginia Tech Carilion School of Medicine, Roanoke, VA, USA, (3)Carilion Clinic, Roanoke, VA, USA



240 **Simulated Use and Multi-Site Clinical Studies Characterizing Contamination Levels in Reprocessed Endoscopes**

Tina Bradley<sup>1</sup>, Martyn Wilkinson<sup>1</sup>, Henning Reuter, PhD<sup>2</sup>, **Marco Bommarito, PhD<sup>3</sup>**, Maren David, MS<sup>4</sup>, Dan J Morse, MS<sup>5</sup> and Assumpta Bennaars-Eiden, PhD<sup>6</sup>, (1)Clinical Microbiology - University Hospitals Birmingham NHS Foundation Trust, Birmingham, United Kingdom, (2)3M Infection Prevention Division, Neuss, Germany, (3)3M Infection Prevention Division, St Paul, MN, USA, (4)3M Health Care, St. Paul, MN, USA, (5)3M Health Care, St Paul, MN, USA, (6)3M Infection Prevention Division, St. Paul, MN, USA

241 **Blinded Review of Surgical Compliance with a Bundle of Evidence-Based Measures Aimed at Reducing Cesarean Section-Related Surgical Site Infections**

Philip McDonald, MD<sup>1</sup>, Bhagyashri Navalkale, MD<sup>1</sup>, **Amar Krishna, MD<sup>1</sup>**, Suganya Chandramohan, MD<sup>2</sup>, Thomas Chevalier, RN, BSN, CIC<sup>2</sup>, Nancy Baran, MS, CIC<sup>2</sup> and Teena Chopra, MD, MPH<sup>1,2</sup>, (1) Division of Infectious Diseases, Department of Internal Medicine, Wayne State University, Detroit, MI, USA, (2)Infection Prevention and Hospital Epidemiology, Detroit Medical Center, Detroit, MI, USA

242 **Nurse Facilitation of a Catheter Associated Urinary Tract Infection Program**

**Carrie J. Tierney, PhD**, APIC national and local member, Pipe Creek, TX, USA

243 **Estimation of the Effectiveness of Influenza Vaccine for the Prevention of Severe Influenza Cases**

**Ginger Giorgiana Cabrera Tejada, Dra**, Juan Gabriel Mora Muriel, Dr, Paula Gras Valenti, Dra, Ana Sofia Lameiras Azevedo, Dra, Cesar Villanueva Ruiz, Dr, Julio Barrenengoa Sañudo, Dr, Carmen Maria Benito Miralles, Lic and José Sánchez Payá, Dr, Hospital General Universitario Alicante, Alicante, Spain

244 **Maximizing Efficiency in a High-Occupancy Setting to Utilize Ultraviolet Disinfection for Isolation Rooms**



**Joshua K Schaffzin, MD PhD<sup>1</sup>**, David Finney, MPH<sup>2</sup>, Adam Wilhite<sup>3</sup>, Zhaoyan Li, MS<sup>3</sup>, Ronald Moore, MBA, CHESP<sup>3</sup> and Beverly Connelly, MD<sup>1</sup>, (1)Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA, (2)Infection Prevention & Control, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA, (3)Crothall Healthcare, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA

245 **Quantifying Bedside Infection Control Competencies through the CDC Targeted Assessment for Prevention Strategy**

**Erica Washington, MPH<sup>1</sup>** and Poppy Markwell, MD, MPH<sup>2</sup>, (1) Louisiana Office of Public Health, New Orleans, LA, USA, (2)Tulane University, New Orleans, LA, USA

246 **Achieving 'Clean': How Well Do Existing Hospital Room Cleaning Protocols Work?**

Mikala T. Caton<sup>1</sup>, Kassidy J. Ohmstede<sup>1</sup>, **Victoria Walsh, MPH<sup>2</sup>**, Ashley A. Tippet, MPH, MLS(ASCP)CM<sup>3</sup>, Puja Y. Shah, MPH<sup>3</sup> and Jesse T. Jacob, MD<sup>4</sup>, (1)Department of Epidemiology, Rollins School of Public Health, Emory University, Atlanta, GA, USA, (2) Emory University, School of Medicine, Division of Infectious Diseases, Atlanta, GA, USA, (3)Emory University, Atlanta, GA, USA, (4)Division of Infectious Disease, Emory University School of Medicine, Atlanta, GA, USA

## FULL CONFERENCE

## THE NEEDLE AND THE DAMAGE DONE: THE INFECTION CONTROL IMPLICATIONS OF OPIATE DIVERSION BY HEALTHCARE WORKERS

1:30 – 2:30 p.m.

Grand Ballroom I

**Moderators:** Kristin Dascomb, MD, MPH, PhD, and David Weber, MD, MPH

### Speaker(s):

Infectious Outbreaks Associated with Diversion and How to Control Them – **Joseph Perz, DrPH MA**

Investigating the Infectious Risks After a Narcotic Diversion Event Has Occurred and Preventing Diversion at Your Facility – **Kimberly New, JD, BSN**

### Learning Objectives:

- Understand the infectious risks associated with drug diversion in healthcare facilities
- Learn to identify if drug diversion is occurring at your facility
- Understand the steps involved in investigating a diversion event at your facility
- Identify key features of a comprehensive prevention program for drug diversion

## ORAL ABSTRACTS: MRSA: NEW PREVENTION FOR AN OLD PROBLEM

1:30 – 2:30 p.m.

Grand Ballroom II

**Moderators:** Jesse Jacob, MBA, MD, MSc, and John Townes, MD

10089 **Successful Control of MRSA Outbreak in the NICU using Universal Decolonization/Screening of Healthcare Workers**

**Supriya Narasimhan, MD, MS (Epi)**, Nancy Johnson, RN, MSN, CIC, Lisa Hansford, RN, MSN, CNS, CIC, Balaji Govindaswami, MBBS, MPH and Vidya K Mony, DO, Santa Clara Valley Medical Center, San Jose, CA, USA

10125 **Estimating the Efficacy of Chlorhexidine Decolonization in Preventing MRSA: A Bayesian Approach**

**Eric Lofgren, PhD**, Washington State University, Pullman, WA, USA

10411 **What You Don't Know Can Hurt Your Patients: Using Combined Analysis of Genomic and Epidemiologic Data to Identify Unsuspected Transmission of MRSA in the Healthcare Setting**

**Michael Phillips, MD<sup>1,2</sup>**, Anna Stachel, MPH, CIC<sup>2</sup>, Dan Ding, MS<sup>2</sup>, Yi Fulmer, PhD<sup>2</sup>, Kenneth Inglima, MS<sup>2</sup>, Richard Copin, PhD<sup>1</sup>, Nur Hasan, PhD<sup>3</sup>, Kelly Moffat, BS<sup>3</sup>, Jennifer Lighter, MD<sup>1,2</sup>, Sarah Hochman, MD<sup>1,2</sup>, Maria Aguero-Rosenfeld, MD<sup>1,2</sup>, Cathy Manley-Cullen, MS, RN<sup>2</sup>, Seth Blumberg, MD, PhD<sup>1</sup>, Robert Press, MD, PhD<sup>1,2</sup>, Manoj Dadlani, MS<sup>3</sup>, Rita Colwell, PhD<sup>3</sup> and Bo Shopsin, MD, PhD<sup>1,2</sup>, (1)NYU School of Medicine, New York, NY, USA, (2) NYU Langone Medical Center, New York, NY, USA, (3)CosmosID, Rockville, MD, USA

10490 **Impact of a Rapid Diagnostic Test for MRSA in Respiratory Isolates for Critically Ill Patients**

**Sara Revolinski<sup>1,2</sup>**, Justine Preedit, PharmD<sup>1</sup>, David Hermann, PharmD<sup>1</sup>, Adam Biggs, PharmD<sup>1</sup>, Blake Buchan, PhD<sup>3</sup>, Anne Daniels, PharmD<sup>1</sup> and Angela M Huang, PharmD<sup>1</sup>, (1)Froedtert & the Medical College of Wisconsin, Milwaukee, WI, USA, (2)Medical College of Wisconsin School of Pharmacy, Milwaukee, WI, USA, (3) Medical College of Wisconsin, Milwaukee, WI, USA

## SHEA/CDC TRAINING COURSE

**Track Coordinators:** Sarah Haessler, MD, and Lauri Hicks, DO

## THE COMPENDIUM STRATEGIES FOR PREVENTING HAIs

1:30 – 2:30 p.m.

Pavilion Ballroom

**Speaker(s):** Deborah S. Yokoe, MD

### Learning Objectives:

- Identify priority recommendations of Compendium of Strategies to prevent healthcare-associated infections in acute-care settings and associated resources
- Identify practical methods and tools to meet basic and advanced recommendations

## PRACTICAL STRATEGIES FOR SURVEILLANCE

2:45 – 3:15 p.m.

Pavilion Ballroom

**Speaker(s):** Molly Hale, MPH, CIC

### Learning Objectives:

- Identify core components of an HAI surveillance program
- Select optimal methods for collection and analysis of surveillance data
- Correlate relationship between surveillance and prevention activities
- Evaluate surveillance findings and incorporate into effective intervention plans

SHEA ANTIBIOTIC STEWARDSHIP  
TRAINING COURSE

## WHAT EVERY STEWARD SHOULD KNOW ABOUT PHARMACOKINETICS – PHARMACODYNAMICS

1:30 – 2:00 p.m.

Galleria

**Speaker(s):** James Lewis, PharmD

### Learning Objectives:

- Review PK and PD properties of different antibiotic agents and their application to selection of appropriate dosing based on patient, pathogen, and syndrome characteristics
- Discuss approaches to therapeutic monitoring of antibiotics such as vancomycin and aminoglycosides
- Review approaches for IV to PO conversion

**ALLERGIES, INTERACTIONS AND ADVERSE EVENTS, OH MY!**

2:00 – 2:30 p.m.

Galleria

**Speaker(s):** Julie Ann Justo, PharmD, MS**Learning Objectives:**

- Discuss different types of allergic reactions to antibiotics and how they may be prevented or minimized
- Review common drug-drug interactions and explain strategies to avoid them
- Discuss common adverse events associated with various Antibiotics

**SHEA/CDC/AMDA INFECTION PREVENTION IN PAC & LTC CERTIFICATE COURSE****Track Co-Chairs:** Nimale Stone, MD, and Robin Jump, MD**INTRODUCTION TO THE POST-ACUTE AND LONG-TERM CARE SETTING**

1:30 – 2:30 p.m.

Broadway Room

**Speaker(s):** Robin Jump, MD, PhD, and Deborah Patterson-Burdsall, PhD RN-BC, CIC**Learning Objectives:**

- Appreciate the unique aspects of healthcare delivery in the PA/LTC setting
- Discuss the new regulatory requirements for nursing home IP/stewardship programs and the influence of compliance on daily operation in PA/LTC settings
- Discuss the cultural factors and determinants of quality indicators in PA/LTC settings

**MANAGING OUTBREAKS**

2:45 – 3:15 p.m.

Broadway Room

**Speaker(s):** David A. Nace, MD, MPH**Learning Objectives:**

- Describe how the long-term care environment influences outbreak risk and impacts outbreak detection and response
- Identify common causes of outbreaks in post-acute and long-term care settings
- Discuss strategies to manage outbreaks that occur in the long-term care environment

**NETWORKING BREAK**

2:30 – 2:45 p.m.

Grand Ballroom Foyer

**FULL CONFERENCE****HANDS ON VS. HANDS OFF SURVEILLANCE**

2:45 – 4:00 p.m.

Grand Ballroom II

**Moderators:** John Boyce, MD, and Pranavi Sreeramoju, MD, MPH**Speaker(s):**Pro — Electronic Surveillance is Needed to Improve Hand Hygiene Compliance – **Kari Simonsen, MD**Con — A Traditional Approach is Needed to Improve Hand Hygiene – **Matthew Linam, MD, MS**Peace Maker- The Praises and Perils of Electronic Surveillance for HAIs- Where is the Compromise? – **Daniel Morgan, MD, MS****Learning Objectives:**

- Describe types, implementation and data to support electronic hand hygiene surveillance to improve hand hygiene compliance
- Describe strategies to improve hand hygiene, including traditional methods, implementation and data to support, including potential cons of electronic hand hygiene
- Demonstrate larger context on the use of electronic surveillance beyond hand hygiene (HAIs), including some challenges and successes

**PRO/CON: CARROT OR STICK**

2:45 – 4:00 p.m.

Grand Ballroom I

**Moderators:** Edward Septimus, MD, and Emily Shuman, MD**Speaker(s):**Carrot: Incentives Are More Effective to Change Behavior – **Grace Lee, MD**Stick: Accountability and Consequences Are More Effective to Change Behavior – **Thomas Talbot, MD, MPH**The Best of Both: It's All Context – **Joost Hopman, MD****Learning Objectives:**

- Describe a specific infection control intervention in which incentives can change healthcare worker behavior
- Describe a specific infection control intervention in which the threat of adverse consequences can change healthcare worker behavior
- Explain factors that an infection prevention team should consider when determining whether an intervention should be based on incentives or consequences

## SHEA/CDC TRAINING COURSE

## ENVIRONMENT AND CLEANING

3:15 – 4:00 p.m.

Pavilion Ballroom

**Speaker(s):** Philip Carling, MD**Learning Objectives:**

- Understand the evidence implicating the environment as a source of healthcare associated infections
- Describe the role of environmental cleaning to disrupt the cycle of transmission
- Outline the evidence behind the various available strategies to disinfect the environment including chemical agents, and UV lights
- Discuss methods for measuring cleanliness

## STERILIZATION &amp; DISINFECTION

4:15 – 4:45 p.m.

Pavilion Ballroom

**Speaker(s):** William Rutala, PhD, MPH**Learning Objectives:**

- Describe the Spaulding classification scheme for disinfection of patient care items
- Understand the advantages and disadvantages of the various chemical agents and mechanical processes used to disinfect medical equipment
- Describe available methods for sterilization and the types of indicators used to ensure the process was effective
- Outline the controversies surrounding the reprocessing of endoscopes and disinfection of other complex medical instruments

## SHEA ANTIBIOTIC STEWARDSHIP TRAINING COURSE

## AN UPDATE ON DURATION OF THERAPY AND THERAPEUTIC MONITORING: OUR ROLE AS STEWARDS

2:45 – 3:15 p.m.

Galleria

**Speaker(s):** Kavita Trivedi, MD**Learning Objectives:**

- Explain the science behind duration of antibiotic therapy
- Review the uses of inflammatory biomarkers in antibiotic stewardship programs

## TACKLING LIABILITY ISSUES IN ANTIBIOTIC STEWARDSHIP

3:15 – 4:00 p.m.

Galleria

**Speaker(s):** Keith Hamilton, MD**Learning Objectives:**

- Identify legal concepts that are applicable to the practice of antibiotic stewardship
- Define the nature and extent of medical-legal risk in the practice of antibiotic stewardship
- Discuss approaches for management of risk in the practice of antibiotic stewardship

## SHEA/CDC/AMDA INFECTION PREVENTION IN PAC &amp; LTC CERTIFICATE COURSE

## OCCUPATIONAL HEALTH AND SAFETY

3:15 – 4:00 p.m.

Broadway Room

**Speaker(s):** David A. Nace, MD, MPH**Learning Objectives:**

- Review common occupational health issues in the long-term care setting
- Identify how to manage common occupation health issues in long-term care settings
- Identify regulatory requirements pertaining to occupational health issues in long-term care

## ORAL ABSTRACTS: A FRESH LOOK AT THE FUNDAMENTALS

4:15 – 5:30 p.m.

Grand Ballroom II

**Moderators:** Elizabeth Marrero, MS, RN, and Vini Vijayan, MD10321 **Using Simulations to Assess Self-Contamination during Enhanced Personal Protective Equipment (E-PPE) Doffing at Four Ebola Treatment Centers**

**Kimberly Erukunuakpor, MPH<sup>1</sup>**, Lisa M. Casanova, PhD<sup>1</sup>, Collen K. Kraft, MD<sup>2</sup>, Andi L. Shane, MD, MPH, MSc<sup>3</sup>, Susan Ray, MD<sup>3</sup>, Joel M. Mumma<sup>4</sup>, Victoria Walsh, MPH<sup>3</sup>, Francis T. Durso, PhD<sup>4</sup>, Ashley Ferguson<sup>4</sup>, Christina L. Gipson<sup>4</sup>, Craig Zimring, PhD<sup>4</sup>, Jennifer DuBose<sup>4</sup> and Jesse Jacob, MD<sup>3</sup>, (1)Georgia State University, Atlanta, GA, USA, (2)Emory University Hospital, Atlanta, GA, USA, (3)Emory University School of Medicine, Atlanta, GA, USA, (4)Georgia Institute of Technology, Atlanta, GA, USA

10144 **Barriers to Effective Audit and Feedback of Hand Hygiene Compliance: A Qualitative Study**

**Daniel J. Livorsi, MD, MSc<sup>1,2</sup>**, Cassie Cunningham Goedken, MPH<sup>1</sup>, Michael Sauder, PhD<sup>3</sup>, Mark Vander Weg, PhD<sup>1,2</sup>, Eli Perencevich, MD, MS<sup>1,2</sup> and Heather Schacht Reisinger, PhD<sup>1,2</sup>, (1) Iowa City VA Healthcare System, Iowa City, IA, USA, (2)University of Iowa Carver College of Medicine, Iowa City, IA, USA, (3)University of Iowa Department of Sociology, Iowa City, IA, USA

- 10510 **Nurses Coping with PPE: Batching Care and Opportunities for Transmission**  
**Lynn A Gregory, MSN<sup>1,2</sup>**, Lauren Weston, MPH<sup>3</sup>, Molly Harrod, PhD<sup>3</sup>, Laura Petersen, MHA<sup>4</sup> and Sarah L. Krein, PhD, RN<sup>5</sup>, (1) Center for Clinical Management Research, Ann Arbor, MI, USA, (2) University of Michigan Department of Internal Medicine, Ann Arbor, MI, USA, (3) VA Ann Arbor Center for Clinical Management Research, Ann Arbor, MI, USA, (4) University of Michigan, Ann Arbor, MI, USA, (5) VA Ann Arbor Center for Clinical Management Research and University of Michigan, Ann Arbor, MI, USA

- 10535 **Hand Hygiene Patterns in 38 North American Hospitals Captured by Automated Hand Hygiene Monitoring**

**James W. Arbogast, Ph.D.<sup>1</sup>**, Gregory A. Robbins, BA<sup>1</sup> and John Boyce, MD<sup>2</sup>, (1)GOJO Industries, Inc., Akron, OH, USA, (2) J.M.Boyce Consulting, LLC, Middletown, CT, USA

- 10560 **What Capabilities of an Electronic Hand Hygiene System Can Improve Compliance**

**Ashley A. Tippet, MPH, MLS(ASCP)CM<sup>1</sup>**, Jesse T. Jacob, MD<sup>2,3</sup>, Victoria Walsh, MPH<sup>4</sup>, Puja Y. Shah, MPH<sup>1</sup> and James P. Steinberg, MD<sup>1</sup>, (1)Emory University, Atlanta, GA, USA, (2)Emory University School of Medicine, Atlanta, GA, USA, (3)Division of Infectious Disease, Emory University School of Medicine, Atlanta, GA, USA, (4)Emory University, School of Medicine, Division of Infectious Diseases, Atlanta, GA, USA

- 9979 **Bias in Studies Estimating the Effect of Discontinuing Contact Precautions for Methicillin-Resistant Staphylococcus aureus**

**Justin J O'Hagan, ScD**, Sujjan Reddy, MD, MS, John Jernigan, MD, MS and Rachel Slayton, PhD, MPH, Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, GA, USA

## JOINT SESSIONS

## STEWARDSHIP OF THE FUTURE

4:15 – 5:45 p.m.

Grand Ballroom I

**Speaker(s):**

The Educated Guess: Using Prediction Scores to Guide Empiric Therapy – **Julie Ann Justo, PharmD, MS**

Crafting Stewardship Interventions to Your Local Reality – **James Lewis, PharmD**

**Learning Objectives:**

- Describe settings where prediction scores can assist in identifying better identify patients at risk for infections due to resistant pathogens
- Outline scenarios where targeted empiric therapy may be employed based in individual patient risks

*This session is co-sponsored by SIDP.*

## SHEA/CDC/AMDA INFECTION PREVENTION IN PAC &amp; LTC CERTIFICATE COURSE

## STRENGTHENING IP/STEWARDSHIP AT CARE TRANSITIONS

4:15 – 5:30 p.m.

Broadway Room

**Speaker(s): Nimalie Stone, MD, MS, and Ghinwa Dumyati, MD**

**Learning Objectives:**

- Describe the role of inter-facility transfer as a driver of HAI/AR within healthcare networks
- Identify opportunities to improve the information exchanged between acute and post-acute providers during care transitions
- Provide examples of how hospital epi programs have engaged nursing homes in infection prevention and stewardship

## SHEA/CDC TRAINING COURSE

## THE SCIENCE OF SAFETY

4:45 – 5:45 p.m.

Pavilion Ballroom

**Speaker(s):**

Where and How Healthcare Epidemiology Fits with Clinical Quality and Patient Safety – **Keith Kaye, MD, MPH**

**Learning Objectives:**

- Describe what culture of safety is and represents and how it overlaps with healthcare epidemiology
- Cite the roles of healthcare quality and patient safety departments
- Define the ways in which infection prevention and antimicrobial stewardship interact with hospital quality and patient safety
- Relate the importance of leadership in leading safety efforts in healthcare
- Relate strategies for communicating safety and quality issues to the C-suite, to providers and patients
- Recognize healthcare epidemiology as a career pathway towards healthcare quality and patient safety

## WELCOME RECEPTION

## #SHEAMEMBERSHIPMATTERS

5:45 – 7:15 p.m.

Exhibit/Poster Hall

This Welcome Reception is open to all attendees. Please join SHEA President, Keith Kaye, MD, MPH, and other attendees to mingle, meet, network, visit with poster presenters, and hear about why SHEA Membership matters.



**SHEA EPI COMPETITION BREAKFAST**

6:30 – 7:50 a.m.

Grand Ballroom I

**FULL CONFERENCE****HAI PREVENTION IN PEDIATRICS 2018**

8:00 – 9:30 a.m.

Grand Ballroom II

**Moderators:** Galit Holzman-Pazgal, MD, and Joshua Schaffzin, MD, PhD**Speaker(s):***C. difficile* Infection in Children: Challenging Questions – Thomas J. Sandora, MD, MPH

Preventing Pediatric CLABSI: What else can we do? — Susan E Coffin, MD, MPH

Ventilator-Associated Events: Updates on Pediatric VAE Surveillance and Prevention – Grace Lee, MD

**Learning Objectives:**

- Evaluate recent data on screening for asymptomatic carriage of *C. difficile* and preferred first-line treatment of CDI and whether these data are applicable to children
- Discuss whether efforts should be focused on optimizing reliability to core CLABSI prevention bundle elements or adding new interventions beyond the current bundle
- Summarize practical approaches for performing VAE surveillance in children and data from the national 2017 pediatric VAE pilot

**ORAL ABSTRACTS: THE DAILY REPORT**

8:00 – 9:30 a.m.

Grand Ballroom I

**Moderators:** Cindy Prins, PhD, MPH, and Geeta Sood, MD**9921 Novel Method of Calculating Adjusted Antibiotic Utilization by Microbiological Burden**

**Hana Rac, PharmD<sup>1</sup>**, Brian McCullough, PharmD<sup>2</sup>, Bruce M. Jones, PharmD<sup>3</sup>, Sue Lau, PharmD<sup>4</sup>, Geneen M. Gibson, PharmD<sup>5</sup>, Shawn H. MacVane, PharmD<sup>6</sup>, Elias B. Chahine, PharmD<sup>7,8</sup>, Brad J. Crane, PharmD<sup>9</sup>, Pamela Andrews, PharmD<sup>10</sup>, Kayla R. Stover, PharmD<sup>11,12</sup>, Kathey B. Rumley, PharmD<sup>13,14</sup>, Majdi N. Al-Hasan, MBBS<sup>15</sup>, Whitney Jones Nesbitt, PharmD<sup>16</sup>, Virginia H. Fleming, PharmD<sup>17</sup>, Christopher M. Bland, PharmD<sup>3,18</sup>, Jordan Ryan Wong, PharmD<sup>19</sup>, Megan Seddon, PharmD<sup>1</sup>, Joseph Kohn, PharmD<sup>20</sup>, Darrell T. Childress, PharmD<sup>21</sup>, Christian M. Shaw, PharmD<sup>22</sup>, John C. C. Williamson, PharmD<sup>23</sup>, S. Travis King, PharmD<sup>11,12</sup>, Rebekah H. Wrenn, PharmD<sup>24</sup>, Julie Ann Justo, PharmD, MS<sup>1,20</sup> and P. Brandon Bookstaver, PharmD<sup>1,20</sup>, (1)University of South Carolina College of Pharmacy, Columbia, SC, USA, (2)University of Tennessee Medical Center, Knoxville, TN, USA, (3)St. Joseph's/Candler Health System, Savannah, GA, USA, (4)Orlando Health, Orlando, FL, USA, (5) St. Joseph's/Candler Health System, Savannah, GA, USA, (6) Medical University of South Carolina, Charleston, SC, USA, (7)Palm Beach Atlantic University, West Palm Beach, FL, USA, (8)Wellington Regional Medical Center, Wellington, FL, USA, (9)Blount Memorial Hospital, Maryville, TN, USA, (10)Orlando Health - South Seminole Hospital, Longwood, FL, USA, (11)University of Mississippi Medical Center, Jackson, MS, USA, (12)University of Mississippi School of Pharmacy, Jackson, MS, USA, (13)Vidant Medical Center, Greenville, NC, USA, (14)Campbell University College of Pharmacy and Health

Sciences, Buies Creek, NC, USA, (15)University of South Carolina School of Medicine, Columbia, SC, USA, (16)Vanderbilt University Medical Center, Nashville, TN, USA, (17)University of Georgia College of Pharmacy, Athens, GA, USA, (18)University of Georgia College of Pharmacy, Savannah, GA, USA, (19)Grady Health System, Atlanta, GA, USA, (20)Palmetto Health Richland, Columbia, SC, USA, (21) East Alabama Medical Center, Opelika, AL, USA, (22)Wilson Medical Center, Wilson, NC, USA, (23)Wake Forest Baptist Health, Winston-Salem, NC, USA, (24)Duke University Hospital, Durham, NC, USA

**10243 Impact of Hospital Value-Based Purchasing (VBP) on Catheter-Associated Urinary Tract Infection (CAUTI)**

**Heather E. Hsu, MD, MPH<sup>1</sup>**, Chanu Rhee, MD, MPH<sup>1</sup>, Rui Wang, PhD<sup>1</sup>, Maximilian Jentzsch, BA<sup>1</sup>, Kelly Horan, MPH<sup>1</sup>, Robert Jin, MS<sup>1</sup>, Alyna Chien, MD, MS<sup>2</sup> and Grace M. Lee, MD, MPH<sup>3</sup>, (1) Department of Population Medicine, Harvard Medical School and Harvard Pilgrim Health Care Institute, Boston, MA, USA, (2)Division of General Pediatrics, Boston Children's Hospital, Boston, MA, USA, (3)Department of Pediatrics, Stanford University School of Medicine, Palo Alto, CA, USA

**10302 Evaluating the Performance of the CDC Standardized Antimicrobial Administration Ratios (SAARs)**

**Haley K. Holmer, MPH<sup>1</sup>**, Amy Pakyz, PharmD<sup>2</sup>, Miriam R. Elman, MPH<sup>3</sup>, Samuel F. Hohmann, PhD<sup>4</sup>, Rochelle Fu, PhD<sup>1</sup>, Kristi Kuper, PharmD<sup>5</sup> and Jessina C. McGregor, PhD<sup>1,3</sup>, (1)Oregon Health & Science University/Portland State University, School of Public Health, Portland, OR, USA, (2)Virginia Commonwealth University School of Pharmacy, Richmond, VA, USA, (3)Oregon State University/Oregon Health & Science University College of Pharmacy, Portland, OR, USA, (4)Vizient, Chicago, IL, USA, (5) Vizient, Katy, TX, USA

**10196 A Framework for Composite Measures for HAI Prevention in the National Healthcare Safety Network (NHSN)**

**Mathew R. P. Sapiano, PhD**, Daniel A. Pollock, MD, R. Douglas Scott II, PhD, James Baggs, PhD and Jonathan R Edwards, MStat, Centers for Disease Control and Prevention, Atlanta, GA, USA

**10279 Validation and/or Audit of Mandatory Reported Data Does Not Predict HAC Penalty Status**

**Kathleen Gase, MBA, MPH, CIC, FAPIC<sup>1</sup>**, Kathleen McMullen, MPH, CIC, FAPIC<sup>2</sup> and Hilary M. Babcock, MD, MPH<sup>3</sup>, (1)BJC HealthCare, St. Louis, MO, USA, (2)Christian Hospital, St. Louis, MO, USA, (3)Washington University in St. Louis, Saint Louis, MO, USA

**10165 Tracking Antibiotic Appropriateness and Antimicrobial Stewardship Interventions: Is There a Practicable Metric?**

**Jacqueline T Bork, MD<sup>1,2</sup>** and Rohini Dave, PharmD<sup>2</sup>, (1) University of Maryland School of Medicine, Baltimore, MD, USA, (2) VA Maryland Healthcare System, Baltimore, MD, USA

## SHEA/CDC TRAINING COURSE

## NHSN MEASURES: LEARNING RISK ADJUSTMENT AND ASSESSING PREVENTION IMPACT

8:00 – 9:30 a.m. *Pavilion Ballroom***Speaker(s):** Jonathan Edwards, MStat, and Margaret Dudeck, BS, MPH**Learning Objectives:**

- Summarize decisions on how to prioritize surveillance efforts
- Identify analytical methods for assessing temporal changes in infection rates
- Indicate the role of risk adjustment when analyzing infection rate data
- Identify methods of analysis for assessing intervention effectiveness
- Assess, interpret, and summarize data that are imprecise
- Using NHSN to understand and benchmark your hospital's data

## SHEA ANTIBIOTIC STEWARDSHIP TRAINING COURSE

## DIAGNOSTIC STEWARDSHIP: BEGINNING CONCEPTS

8:00 – 8:45 a.m. *Galleria***Speaker(s):** Daniel Morgan, MD, MS**Learning Objectives:**

- Describe appropriate ways to obtain a culture specimen and other samples for microbiology testing
- Review approaches to detecting and reporting antibiotic susceptibilities, including selective reporting
- Identify strengths and weaknesses of the antibiogram to assist with decisions on recommendations for empirical therapy

## CASE STUDY #1: MANAGEMENT OF RESISTANT GRAM-NEGATIVE INFECTIONS

8:45 – 9:30 a.m. *Galleria***Speaker(s):** Christopher Pfeiffer, MD, MHS**Learning Objectives:**

- Identify common mechanisms of resistance for different bug/drug combinations including Gram-negative organisms
- Discuss therapeutic options for highly resistant organisms
- Discuss MICs and breakpoints and their role in determining appropriate therapy

## SHEA/CDC/AMDA INFECTION PREVENTION IN PAC &amp; LTC CERTIFICATE COURSE

## STRATEGIES TO PREVENT INFECTIONS &amp; MDROs

8:00 – 9:30 a.m. *Broadway Room***Speaker(s):** Deborah Patterson-Burdsall, PhD, RN-BC, CIC**Learning Objectives:**

- Describe risk factors and interventions to prevent device-associated infections among residents in post-acute and long-term care
- Review challenges in diagnosis of infection due to *C. difficile* and MDROs in post-acute and long-term care
- Describe strategies for preventing the spread of Multidrug Resistant Organisms in post-acute and long-term care

## NETWORKING BREAK

9:30 – 10:00 a.m. *Grand Ballroom Foyer*

## FULL CONFERENCE

## HAI PREVENTION IN 2018: BEST PRACTICES

10:00 a.m. – 12:00 p.m. *Grand Ballroom I***Moderators:** Dennis Drapiza, RV, MPH, BS, and Daniel Livorsi, MD**Speaker(s):**CDI: Robots, Vaccines & Transplants? – **L. Clifford McDonald, MD**SSI: Bundles and Beyond! – **Marin Schweizer, PhD**CLABSI: Newest Approaches to Approach Zero – **John M. Townes, MD****Learning Objectives:**

- Review latest high-impact studies on CDI, SSI, and CLABSI prevention
- Synthesize recent data with current practices and guidelines to garner new potential prevention strategies for your institution

**INFECTION PREVENTION: BUILDING GLOBAL CAPACITY AND VIEW**

10:00 a.m. – 12:00 p.m.

*Grand Ballroom II***Moderators:** Ann-Christine Nyquist, MD, MPH, and Michael Stevens, MD, MPH**Speaker(s):**IPC and AMR: Perspective from South East Asia – **Kalisvar Marimuthu, MBBS, MRCP**IC in Low and Middle Income Countries and SHEA: Partnerships for the Future – **Mirian Dal Ben, MD, Msc, PhD**IPC and AMR, the Latin American Perspective – **Mirian Dal Ben, MD, Msc, PhD**IPC and AMR, the Doctors Without Borders Perspective – **Joost Hopman, DTMH, MD****Learning Objectives:**

- Understand the commonalities and unique challenges in infection prevention and AMR across low and middle-income countries
- Understand regional efforts and priorities in infection prevention and AMR across low and middle-income countries

**SHEA/CDC TRAINING COURSE****APPROACH TO EPIDEMIC/OUTBREAK INVESTIGATION**

10:00 - 10:45 a.m.

*Pavilion Ballroom***Speaker(s):** Arjun Srinivasan, MD**Learning Objectives:**

- Identify and define an outbreak
- Illustrate how to perform an outbreak analysis
- Analyze how to manage and control an outbreak
- Indicate methods to find and investigate cases in an outbreak investigation
- Recognize when a formal risk factor study is needed and how to select the appropriate study design (e.g., case control vs. cohort) for an outbreak investigation
- Recognize when and how to communicate with facility administrators, risk management, public affairs, clinical staff and patients/families about the need for, progress of, and outcome of an outbreak investigation
- Review the potential role of molecular typing of microbial isolates in an outbreak investigation

**PROBLEM SESSION: OUTBREAK IN THE OR**

10:45 – 11:15 a.m.

*Pavilion Ballroom***Speaker(s):** Arjun Srinivasan, MD**Learning Objectives:**

- Apply the lessons of outbreak investigation to a real-world example
- Identify some of the practical issues that arise when doing an outbreak investigation

**UNIQUE ASPECTS OF PEDIATRIC INFECTION CONTROL**

11:15 a.m. – 12:00 p.m.

*Pavilion Ballroom***Speaker(s):** Thomas Sandora, MD, MPH**Learning Objectives:**

- Identify risk factors for healthcare-associated infections that are unique to children
- Discuss common pediatric infections and how to prevent them
- Define unique aspects of infection control in special populations, including neonatal intensive care units
- Describe pediatric modifications to typical infection prevention strategies

**SHEA ANTIBIOTIC STEWARDSHIP TRAINING COURSE****CASE STUDY #2: MANAGEMENT OF RESISTANT GRAM-POSITIVE INFECTIONS**

10:00 – 10:45 a.m.

*Galleria***Speaker(s):** Ghinwa Dumyati, MD**Learning Objectives:**

- Identify common mechanisms of resistance for different bug/drug combinations including Gram-positive organisms
- Discuss therapeutic options for highly resistant organisms
- Discuss MICs and breakpoints and their role in determining appropriate therapy

**RAPID DIAGNOSTIC TESTS AND HOW TO IMPLEMENT THEIR USE: MINI-LECTURE & CASE STUDY #3**

10:45 - 11:30 a.m.

*Galleria***Speaker(s):** Graeme Forrest, MBBS**Learning Objectives:**

- Describe strengths and weaknesses of common rapid diagnostic tests and used in the microbiology lab
- Discuss how the microbiology lab and the antibiotic stewardship program can collaborate to maximize use of rapid diagnostic tests to improve antibiotic use

**HOW TO FIND RESOURCES AT YOUR INSTITUTION OF HEALTH SYSTEM**

11:30 a.m. – 12:00 p.m.

*Galleria***Speaker(s):** Mohamad G. Fakih, MD, MPH**Learning Objectives:**

- Review how your antibiotic stewardship program intersects with the institution's strategic plan
- Describe how to engage non-traditional stewards such as students, quality improvement teams, and nurses
- Explain how to develop and present a business case to institutional leadership for maintenance of a program

SHEA/CDC/AMDA INFECTION PREVENTION  
IN PAC & LTC CERTIFICATE COURSE

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CHANGING APPROACHES IN  
SURVEILLANCE

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10:00 – 11:15 a.m.

*Broadway Room***Speaker(s):** Theresa Rowe, DO**Learning Objectives:**

- Review surveillance criteria used to define infections in post-acute and long-term care settings
- Compare different methods for surveillance data collection in post-acute and long-term care settings
- Identify how to use surveillance data to guide infection prevention and antibiotic stewardship efforts in post-acute and long-term care

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CDI MANAGEMENT

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11:15 a.m. – 12:00 p.m.

*Broadway Room***Speaker(s):**

*Clostridium difficile* in Post-Acute & Long-Term Care Settings  
– Robin Jump, MD, PhD

**Learning Objectives:**

- Define the management and prevention of CDI in post-acute care

## NETWORKING LUNCH WITH POSTER PRESENTATIONS

12:00 – 1:30 p.m.

*Exhibit/Poster Hall*

### 300 **Risk Factors for Community-Onset *Clostridium difficile* Infection**

**Tina M. Temples, MSIE**, Carilion Clinic, Roanoke, VA, USA  
Virginia Polytechnic Institute and State University, Blacksburg, VA, USA

### 301 **Relative Consumption of Carbapenems in ICUs at an Academic Medical Center**

**Jacob W. Pierce, MD<sup>1</sup>**, Andrew Kirk, BS<sup>2</sup>, Kimberly Lee, PharmD<sup>1</sup>, John Daniel Markley, DO<sup>2</sup>, Amy Pakyz, PharmD<sup>3</sup>, Gonzalo Bearman, MD<sup>1</sup>, Michelle Doll, MD, MPH<sup>1</sup> and Michael P. Stevens, MD, MPH<sup>1</sup>, (1)Virginia Commonwealth University Health System, Richmond, VA, USA, (2)Virginia Commonwealth University School of Medicine, Richmond, VA, USA, (3)Virginia Commonwealth University School of Pharmacy, Richmond, VA, USA

### 302 **Use of Electronic Health Record Algorithms To Enhance Antimicrobial Stewardship Interventions**

**Elise M. Martin, MD, MS<sup>1</sup>**, Brandy Bryant, MPH<sup>2</sup>, Jennifer Curello, PharmD<sup>2</sup>, Christine Pham, PharmD<sup>3</sup>, Annabelle de St. Maurice, MD, MPH<sup>1</sup>, Meganne Kanatani, PharmD<sup>2</sup> and Daniel Z. Uslan, MD, MBA, FIDSA, FSHEA<sup>1</sup>, (1)David Geffen School of Medicine at UCLA, Los Angeles, CA, USA, (2)UCLA Health, Los Angeles, CA, USA, (3)UCLA Health, Santa Monica, CA, USA

### 304 **Antibiotic Absolution: Prescriber Views on the Causes of Antibiotic Overuse in Outpatient Settings**

**Mike R. Kohut, PhD<sup>1</sup>**, Sara C. Keller, MD, MPH, MSHP<sup>2</sup>, Jeffrey A. Linder, MD, MPH<sup>3</sup>, Pranita D. Tamma, MD, MHS<sup>4</sup>, Sara E. Cosgrove, MD, MS<sup>5</sup>, Lisa E. Davidson, MD<sup>6</sup>, Kathleen Speck, MPH<sup>7</sup>, Melissa A. Miller, MD, MS<sup>8</sup> and Julia E. Szymczak, PhD<sup>9</sup>, (1)Armstrong Institute for Patient Safety and Quality at Johns Hopkins Medicine, Baltimore, MD, USA, (2)Johns Hopkins Medicine, Baltimore, MD, USA, (3)Northwestern Feinberg School of Medicine, Chicago, IL, USA, (4)Johns Hopkins University School of Medicine, Baltimore, MD, USA, (5)Johns Hopkins Medical Institutions, Baltimore, MD, USA, (6)Carolinas Medical Center, Division of Infectious Diseases, Charlotte, NC, USA, (7)Johns Hopkins Medicine Armstrong Institute for Patient Safety and Quality, Baltimore, MD, USA, (8)Agency for Health Research and Quality, Department of Human Health and Services, Rockville, MD, USA, (9)Perelman School of Medicine at University of Pennsylvania, Department of Biostatistics, Epidemiology and Informatics, Philadelphia, PA, USA

### 305 **Patients at Risk for Aortic Rupture are Often Exposed to Fluoroquinolones During Hospitalization**

**Barbara Trautner, MD, PhD<sup>1</sup>**, Andrew Spiegelman, PhD<sup>2</sup>, Larissa Grigoryan, MD, PhD<sup>1</sup> and Scott Anthony LeMaire, MD<sup>1,3</sup>, (1)Baylor College of Medicine, Houston, TX, USA, (2)The Advisory Board Company, Washington, DC, USA, (3)The Texas Heart Institute, Houston, TX, USA

### 306 **The GI mPCR panel: Does Finding More Bugs Lead to Inappropriate Drugs?**

**Margaret E Newman, MD**, Natasha N Pettit, PharmD, Emily Landon, MD, Angella Charnot-Katsikas, MD, Jennifer Pisano, MD, Kathleen G Beavis, MD and Jessica P Ridgway, MD, MS, University of Chicago, Chicago, IL, USA

### 307 **Impact of Prospective Audit with Intervention and Feedback on Meropenem use in a Medical Intensive Care Unit**

Andrew William Kirk<sup>1</sup>, Jacob W. Pierce, MD<sup>2</sup>, Kimberly Lee, PharmD<sup>2</sup>, Daniel Markley, DO, MPH<sup>2</sup>, Amy Pakyz, PharmD<sup>3</sup>, Gonzalo Bearman, MD<sup>2</sup>, Michelle Doll, MD, MPH<sup>2</sup> and **Michael Stevens, MD, MPH<sup>2</sup>**, (1)Virginia Commonwealth University School of Medicine, Richmond, VA, USA, (2)Virginia Commonwealth University Health System, Richmond, VA, USA, (3)Virginia Commonwealth University School of Pharmacy, Richmond, VA, USA

### 308 **Variation in a Novel Antipseudomonal Antimicrobial Consumption Metric in the Hospital Setting**

**Pamela Bailey, DO<sup>1</sup>**, Roy Sabo, PhD<sup>2</sup>, Daniel Tassone, PharmD<sup>3</sup>, Leroy Vaughan, MD<sup>3</sup>, Michael Stevens, MD, MPH<sup>1</sup> and Daniel Markley, DO, MPH<sup>1,3</sup>, (1)Virginia Commonwealth University Health System, Richmond, VA, USA, (2)Virginia Commonwealth University, Richmond, VA, USA, (3)Hunter Holmes McGuire Veterans Affairs Medical Center, Richmond, VA, USA

### 309 **Assessment of a Predictive Tool for Recurrent *Clostridium difficile* Infection in a Long-Term Care Facility**

**Joseph Devlin, BS<sup>1</sup>**, Richard Feinn, PhD<sup>1</sup>, Anjali Poudyal, RN, BSN<sup>2</sup>, Jennifer Herbst, JD<sup>1</sup> and Thomas Murray, MD/PhD<sup>1</sup>, (1) Frank H. Netter, MD School of Medicine at Quinnipiac University, North Haven, CT, USA, (2)Masonicare, Wallingford, CT, USA

### 310 **Prolonged Antimicrobial Prophylaxis Following Cardiac Device Procedures: Harm without Any Benefit?**

**Archana Asundi, MD<sup>1</sup>**, Maggie Stanislawski, PhD<sup>2,3</sup>, Payal Mehta<sup>4</sup>, Anna E. Baron, PhD<sup>2,3</sup>, Howard S. Gold, MD<sup>5</sup>, Hillary Mull, PhD<sup>6</sup>, P. Michael Ho, MD<sup>2,7,8</sup>, Kalpana Gupta, MD, MPH<sup>4</sup> and Westyn Branch-Elliman, MD, MMSc<sup>4</sup>, (1)Division of Infectious Diseases, Boston Medical Center, Boston, MA, USA, (2)Seattle-Denver Center of Innovation for Veteran-Centered and Value-Driven Care, Seattle, Washington and Denver, CO, USA, (3)University of Colorado School of Public Health, Aurora, CO, USA, (4)VA Boston Healthcare System, West Roxbury, MA, USA, (5)Beth Israel Deaconess Medical Center, Boston, MA, USA, (6)Center for Healthcare Organization and Implementation Research (CHOIR), VA Boston Healthcare System, West Roxbury, MA, USA, (7)University of Colorado School of Medicine, Aurora, CO, USA, (8)VA Eastern Colorado Healthcare System, Denver, CO, USA

### 311 ***Clostridium Difficile*: Implementing a Decision Tree to Decrease Testing and Infection Rates**

**Supriya Mannepalii, MD, CIC<sup>1,2</sup>**, Sandy Bozarth, MSN, RN, CIC<sup>3</sup>, Christine A. Williams, RN, CIC<sup>3</sup>, Sabrina Broome, BSN, RN, CIC<sup>3</sup>, Wanda Hester, RN, CIC<sup>3</sup> and Stephen Pirkle, BSN, RN<sup>3</sup>, (1)Northeast Georgia Health System, Gainesville, GA, USA, (2)NGPG, Gainesville, GA, USA, (3)Northeast Georgia Medical Center, Gainesville, GA, USA

### 312 **A Laboratory Time-Bomb: Opportunities for Improvement in Laboratory Management following Repeated Exposure to *Burkholderia Pseudomallei***

**Leighanne O. Parkes<sup>1,2</sup>**, Matthew P. Cheng<sup>1,2</sup>, Karl Weiss<sup>2</sup> and Gerasimos J. Zaharatos<sup>1,2</sup>, (1)Division of Infectious Diseases, Department of Medicine and Division of Medical Microbiology, Department of Clinical Laboratory Medicine, McGill University Health Centre, Montreal, QC, Canada, (2)Division of Infectious Diseases, Department of Medicine and Division of Medical Microbiology, Department of Clinical Laboratory Medicine, Jewish General Hospital, Montreal, QC, Canada


### 313 ***Clostridium difficile* Testing Methods Reported by Long-Term Acute Care Hospitals (LTACHs) to the National Healthcare Safety Network (NHSN), 2017**

Parneet Kaur Ghuman, MPH, **Margaret Dudeck, BS, MPH**, Lindsey M. Weiner, MPH and Allan K Nkwata, MPH, Centers for Disease Control and Prevention, Atlanta, GA, USA

### 314 **Healthcare Worker (HCW) Gown Doffing Strategies and Implications for Self-Contamination Errors**

**Diane Mulvey, BSN, RN<sup>1</sup>**, Jeanmarie Mayer, MD<sup>1,2</sup>, Lindsay D Croft, PhD, MS<sup>1,2</sup>, Matthew H Samore, MD<sup>1,2</sup> and Frank Drews, PhD, MS<sup>2,3</sup>, (1)Division of Epidemiology, University of Utah School of Medicine, Salt Lake City, UT, USA, (2)VA Salt Lake City Health Care System IDEAS Center, Salt Lake City, UT, USA, (3)Department of Psychology, University of Utah, Salt Lake City, UT, USA



 *Top Poster Abstract*



- 315 **Nationwide Implementation of a *C. difficile* Infection Prevention Bundle across the VA Hospital System**  
**Julie A Keating, PhD<sup>1</sup>**, Chidi Obasi, MD, PhD<sup>1,2</sup>, Linda McKinley, BSN, MPH<sup>1</sup>, Jackson Musuuzza, MD, PhD<sup>1,2</sup>, Mary Jo Knobloch, PhD, MPH<sup>1,2</sup>, Christopher Crnich, MD, PhD<sup>1,2</sup>, Charlesnika T. Evans, PhD, MPH<sup>3,4</sup>, Martin E. Evans, MD<sup>5</sup>, Daniel Livorsi, MD<sup>6,7</sup>, Daniel Morgan, MD, MS<sup>8</sup>, Eli Perencevich, MD, MS<sup>9,10</sup>, Heather Schact Reisinger, PhD<sup>6,10</sup>, Marin L. Schweizer, PhD<sup>6,7</sup>, Katie J. Suda, PharmD, MS<sup>4,11</sup> and Nasia Safdar, MD, PhD<sup>1,12</sup>, (1)William S. Middleton Memorial Veterans Hospital, Madison, WI, USA, (2) University of Wisconsin, School of Medicine and Public Health, Madison, WI, USA, (3)Northwestern University, Department of Preventive Medicine and Center for Health Care Studies, Institute for Public Health and Medicine, Chicago, IL, USA, (4)VA Center of Innovation for Complex Chronic Healthcare, Hines, IL, USA, (5)Lexington VA Medical Center, Lexington, KY, USA, (6)Iowa City VA Health Care System, Iowa City, IA, USA, (7)University of Iowa, Carver College of Medicine, Iowa City, IA, USA, (8)VA Maryland Health Care System, Baltimore, MD, USA, (9)Iowa City VA Healthcare System, Iowa City, IA, USA, (10)University of Iowa Carver College of Medicine, Iowa City, IA, USA, (11)University of Illinois at Chicago, College of Pharmacy, Chicago, IL, USA, (12) University of Wisconsin School of Medicine & Public Health, Division of Infectious Diseases, Madison, WI, USA
- 316 **Evaluation of an antimicrobial Stewardship Initiative on Respiratory Viral Panel Based Antibiotic De-Escalation**  
**Pavithra Srinivas, PharmD<sup>1</sup>**, Kaitlyn Rivard, PharmD<sup>1</sup>, Andrea Pallotta, PharmD<sup>1</sup>, Vasilios Athans, PharmD<sup>2</sup>, Kristin Martinez, PharmD<sup>3</sup>, Samantha Loutzenheiser, PharmD<sup>4</sup>, Simon Lam, PharmD<sup>1</sup>, Gary W. Procop, MD<sup>5</sup>, Sandra S. Richter, MD<sup>6</sup> and Elizabeth Neuner, PharmD<sup>1</sup>, (1)Cleveland Clinic, Cleveland, OH, USA, (2)Cleveland Clinic Avon Hospital, Cleveland, OH, USA, (3)Cleveland Clinic Fairview Hospital, Cleveland, OH, USA, (4)Cleveland Clinic Medina Hospital, Medina, OH, USA, (5) Department of Laboratory Medicine, Cleveland Clinic, Cleveland, OH, USA
- 317 **Decreasing *Clostridium difficile*: One Hospital's Experience**  
**Susan Fletcher-Gutowski, MS, BSMT, CFPH, CIC**, Rebecca Mayer, MPH, BSMT and Tejal Mehta, MD, St. Mary Mercy Hospital Livonia, Livonia, MI, USA
- 318 **Setting up a Hospital-Wide Central Venous Catheter Registration in a University Medical Centre in the Netherlands**  
Stephanie M van Rooden, PhD, Cathalijne van Breen, MSc, Jenneke Ebbers, Willie Dekker, Karin Swart-van de Beek, Nils Wetzels, MD, Ingrid A J Veldhuizen and **Annemarie van t Veen, MD, PhD, MBA**, University Medical Centre Utrecht, Utrecht, Netherlands
- 319 **Impact of a Pharmacist-Driven Education and Antibiotic Self-Stewardship after 48 Hours at a Community Teaching Hospital**  
**Jeffrey C Pearson, PharmD<sup>1</sup>**, Oussayma Moukhachen, PharmD, BCPS<sup>2</sup>, Vito Iacoviello, MD<sup>3</sup> and Patricia Masters, PharmD, BCPS<sup>3</sup>, (1)Beth Israel Deaconess Medical Center, Boston, MA, USA, (2) MCPHS University, Boston, MA, USA, (3)Mount Auburn Hospital, Cambridge, MA, USA
- 320 **Chlorhexidine Bathing: Patient Perceptions, Practices, and Barriers at a Tertiary Care Center**  
**Ginger G. Vanhoozer, BSN<sup>1</sup>**, Ian Lovern<sup>2</sup>, Nadia Masroor, MPH<sup>1</sup>, Michelle Doll, MD, MPH<sup>1,2</sup>, Salma Abbas, MBBS<sup>1</sup>, Kaila Cooper, MSN, RN, CIC<sup>1</sup>, Michael P. Stevens, MD, MPH<sup>1,2</sup> and Gonzalo Bearman, MD, MPH<sup>1,2</sup>, (1)Virginia Commonwealth University Health, Richmond, VA, USA, (2)Virginia Commonwealth University School of Medicine, Richmond, VA, USA
- 321 **Rates of Inappropriate Antibiotic Prescribing Are High within a Veterans Affairs Hospital**  
**Rameez H Phulpoto, MD<sup>1</sup>**, Nathan R. Shively, MD<sup>2</sup>, Deanna J. Buehrle, PharmD<sup>3</sup>, Cornelius J. Clancy, MD<sup>1,3</sup> and Brooke K. Decker, MD, CIC<sup>1,3</sup>, (1)University of Pittsburgh Medical Center, Pittsburgh, PA, USA, (2)Division of Infectious Disease Allegheny Health Network, Pittsburgh, PA, USA, (3)Veterans Affairs Pittsburgh Healthcare System, Pittsburgh, PA, USA
- 323 **Association between Empiric Therapy, Susceptibility, and Treatment Failure in Women with Urinary Tract Infections**  
**Gregory B Tallman, PharmD, MS<sup>1</sup>**, Miriam R. Elman, MPH<sup>1</sup>, Brie N. Noble, BS<sup>1</sup>, Adriane N. Irwin, MS, PharmD<sup>2</sup>, Peter K. Atkins, BS<sup>1</sup>, Young Yoon Ham, BS<sup>1</sup>, Kallie R. Waldrip, MS<sup>1</sup>, Laura R. Abell, BS<sup>2</sup>, Anavice J. Jimenez, BS<sup>2</sup>, Craig D. Williams, PharmD<sup>1</sup>, David T. Bearden, PharmD<sup>1</sup>, Jon Furuno, PhD<sup>1</sup> and Jessica C. McGregor, PhD<sup>1</sup>, (1)Oregon State University/Oregon Health & Science University College of Pharmacy, Portland, OR, USA, (2)Oregon State University College of Pharmacy, Corvallis, OR, USA
- 324 **A National Survey of Testing Practices for Asymptomatic Carriage of *C. difficile***  
**Preeta Krishnan Kutty, MD, MPH<sup>1</sup>**, Susan E. Beekmann, RN, MPH<sup>2,3</sup>, Ronda Sinkowitz-Cochran, MPH<sup>1</sup>, David Kuhar, MD<sup>1</sup>, L. Clifford McDonald, MD, FSHEA<sup>1</sup> and Philip Polgreen, MD<sup>2,3</sup>, (1) Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, GA, USA, (2)University of Iowa, Carver College of Medicine, Iowa City, IA, USA, (3)Infectious Disease Society of America Emerging Infections Network, Iowa City, IA, USA
- 325 **Assessment and Implementation of Antimicrobial Stewardship Programs in Long-Term Care Facilities**  
**Philip Chung, PharmD, MS<sup>1</sup>**, Scott Bergman, PharmD<sup>1,2</sup>, Trevor C van Schooneveld, MD<sup>3</sup>, Regina Nailon, PhD, RN<sup>1</sup>, Mark E Rupp, MD<sup>3</sup>, Michelle Schwedhelm, MSN, RN, NEA-BC<sup>1</sup>, Maureen Tierney, MD<sup>4</sup>, L. Kate Tyner, BSN, RN<sup>1</sup> and Muhammad Salman Ashraf, MBBS<sup>3</sup>, (1)Nebraska Medicine, Nebraska Antimicrobial Stewardship Assessment and Promotion Program, Omaha, NE, USA, (2)College of Pharmacy, University of Nebraska Medical Center, Omaha, NE, USA, (3)Division of Infectious Diseases, University of Nebraska Medical Center, Omaha, NE, USA, (4) Nebraska DHHS, Lincoln, NE, USA
- 326 **Previous Antibiotic Prescribing in Pediatric Patients with *Clostridium difficile* Infections, Minnesota, 2009-2016**  
**Maria L. Bye, MPH<sup>1</sup>**, Alexandra R. Buck<sup>1</sup> and Stacy M. Holzbauer, DVM, MPH<sup>1,2</sup>, (1)Minnesota Department of Health, St. Paul, MN, USA, (2)Career Epidemiology Field Officer Program, Division of State and Local Readiness, Office of Public Health Preparedness and Response, Centers for Disease Control and Prevention, Atlanta, GA, USA
- 327 **Cost Analysis of Computerized Clinical Decision Support Tool and Incentive Plan for *Clostridium difficile* Testing**  
**Gregory R. Madden, MD**, Jason A. Lyman, MD, MS, Kyle B. Enfield, MD, Amy J. Mathers, MD, Melinda D. Poulter, PhD and Costi D. Sifri, MD, University of Virginia Health System, Charlottesville, VA, USA
- 328 **Development of an Antimicrobial Prescribing Quality Evaluation Pathway for Adult Patients with Community-Acquired Pneumonia**  
**Lauren Epstein, MD, MSc<sup>1</sup>**, Erin N. O'Leary, MPH<sup>1</sup>, Francisca Abanyie-Bimbo, MD, MPH<sup>1</sup>, Ghinwa Dumyati, MD<sup>2</sup>, Daniel Muleta, MD, MPH<sup>3</sup>, Marion Kainer, MD, MPH<sup>3</sup> and Shelley Magill, MD, PhD<sup>1</sup>, (1)Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, GA, USA, (2)University of Rochester Medical Center, Rochester, NY, USA, (3)Tennessee Department of Health, Nashville, TN, USA

- 329 **Evaluating Patient Perceptions of Contact Isolation and a Personal Protective Equipment-Free Zone**  
Catherine Shaughnessy<sup>1</sup>, Kelsey Baubie, MS<sup>1</sup>, Lauren Barko<sup>1</sup>, Rebecca Reis, RN<sup>2</sup> and Nasia Safdar, MD, PhD<sup>3,4</sup>, (1)University of Wisconsin, School of Medicine and Public Health, Madison, WI, USA, (2)UW Health, Madison, WI, USA, (3)William S. Middleton Memorial Veterans Hospital, Madison, WI, USA, (4)University of Wisconsin School of Medicine & Public Health, Division of Infectious Diseases, Madison, WI, USA
- 330 **Comparison of Adherence to Antimicrobial Stewardship Bundles Targeting *Staphylococcus Aureus* Bacteremia and Candidemia Between Medical Doctors and Pharmacists in an Academic Teaching Hospital in Japan**  
Yuki Moriyama, M.D.<sup>1</sup>, Masahiro Ishikane, M.D.<sup>1,2</sup>, Kayoko Hayakawa, M.D., Ph.D.<sup>1,2</sup>, Kei Yamamoto, M.D.<sup>1</sup>, Tsubasa Akazawa, Ph.D., Yuko Sugiki, RN<sup>4</sup> and Norio Ohmagari, M.D., M.Sc., Ph.D.<sup>1,2</sup>, (1)Disease Control and Prevention Center, National Center for Global Health and Medicine, Tokyo, Japan, (2)AMR Clinical Reference Center, National Center for Global Health and Medicine, Tokyo, Japan, (3)Pharmaceutical Department, National Center for Global Health and Medicine, Tokyo, Japan, (4)Infection Control and Prevention, National Center for Global Health and Medicine, Tokyo, Japan
- 331 **Does *C. difficile* Testing Stewardship Improve Predictive Value of PCR results?**  
Molly Hale, MPH, CIC, FAPIC, Chad Nix, MSc, Kevin Langstaff, BS and Dawn Nolt, MD MPH, OHSU, Portland, OR, USA
- 332 **Using Quality Improvement Methodologies to Reduce *Clostridium difficile* Testing Delays**  
Sarah Baron, MD<sup>1</sup>, Belinda Ostrowsky, MD, MPH<sup>2</sup>, Michael Levi, Sc.D<sup>2</sup>, Audrey Adams, RN, BSN, MPH<sup>1</sup>, Wendy Szymczak, Ph.D.<sup>2</sup>, William Southern, MD, MS<sup>1</sup>, Takahiro Tanaka, MS, MHA<sup>1</sup>, Jennica Meehan, MS<sup>1</sup>, Lisa LaFalce, MHA, BSN, RN-BC, NEA-BC<sup>1</sup> and Carol Sheridan, RN MSN OCN BMTCN<sup>1</sup>, (1)Montefiore Medical Center, Bronx, NY, USA, (2)Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY, USA
- 333 **Inappropriate *Clostridium difficile* Testing in Community and Healthcare Facility-Onset *C. difficile* Infection**  
Stella I Okoye, MD<sup>1</sup>, Majdi N. Al-Hasan, MBBS<sup>2</sup>, Sharon Weissman, MD<sup>1</sup>, Kamla Sanasi, MD<sup>1</sup> and Sangita Dash, MD<sup>1</sup>, (1) Palmetto Health/University of South Carolina, Columbia, SC, USA, (2)University of South Carolina School of Medicine, Columbia, SC, USA
- 334 **Burden of Antimicrobial Overuse Attributable to Unnecessary Urine Culture Ordering in Intensive Care Units (ICU).**  
Barry John Rittmann Jr, MD<sup>1</sup>, Julia Collins<sup>2</sup>, Michelle Doll, MD, MPH<sup>1</sup>, Michael Stevens, MD, MPH<sup>1</sup> and Gonzalo Bearman, MD, MPH<sup>1</sup>, (1)Virginia Commonwealth University Health System, Richmond, VA, USA, (2)Virginia Commonwealth University Health Systems, Richmond, VA, USA
- 335 **Quantifying Practice and Context as a First Step to Improving Hospital Cleaning**  
Lisa Hall, PhD<sup>1,2</sup> and Alison Farrington, RN, MEdT<sup>3</sup>, (1)School of Public Health, University of Queensland, Brisbane, Australia, (2)Institute of Health and Biomedical Innovation, Queensland University of Technology, Brisbane, Australia, (3)Institute of Health and Biomedical Innovation Queensland University of Technology, Kelvin Grove, Australia
- 336 **Weekly Point Prevalence as a Method for Measuring Antibiotic Use in Nursing Homes**  
Grant Barney<sup>1</sup>, Christina B Felsen, MPH<sup>1</sup> and Ghinwa Dumyati, MD<sup>2</sup>, (1)New York Rochester Emerging Infections Program at the University of Rochester Medical Center, Center for Community Health & Prevention, Rochester, NY, USA, (2)University of Rochester Medical Center, Rochester, NY, USA
- 337 **Healthcare Worker Perceptions Toward Computerized Clinical Decision Support Tools for *C. difficile* Infection**  
Natalia Blanco, PhD, MPH<sup>1</sup>, Lyndsay M. O'Hara, PhD, MPH<sup>1</sup>, Gwen Robinson, MPH<sup>1</sup>, Jeanine Brown, MSN, CCRC<sup>1</sup>, Emily Heil, PharmD, BCPS-AQ ID<sup>1,2</sup>, Clay H. Brown, PhD, M.S.<sup>1</sup>, Brian D. Stump, PharmD, BCCCP<sup>3</sup>, Bryant W. Sigler, MS, HACCP<sup>3</sup>, Anusha Belani, MD<sup>3</sup>, Heidi L. Miller, BSN, RN<sup>4</sup>, Amber N. Chiplinski, PharmD<sup>4</sup>, Rebecca Perlmutter, MPH CIC<sup>5</sup>, Lucy Wilson, MD ScM<sup>5</sup>, Daniel Morgan, MD, MS<sup>1,6</sup> and Surbhi Leekha, MBBS, MPH<sup>1</sup>, (1) Department of Epidemiology and Public Health, University of Maryland School of Medicine, Baltimore, MD, USA, (2)Department of Pharmacy Practice and Science, University of Maryland School of Pharmacy, Baltimore, MD, USA, (3)Frederick Memorial Hospital, Frederick, MD, USA, (4)Merit Health, Hagerstown, MD, USA, (5)Maryland Department of Health, Baltimore, MD, USA, (6)VA Maryland Health Care System, Baltimore, MD, USA
- 338 **Reducing Blood Culture Contamination Rate in the Emergency Department with a Quality Improvement Intervention**  
Ann Marie Keegan, BSN, RN, CIC, Claudiu Georgescu, MD, Nancy Maenle, EMT, Heather Byrd, MLS(ASCP), Deanna Montanaro, RN, Constance Stec, BS, H(ASCP) and Geehan Suleyman, MD, The University of Toledo Medical Center, Toledo, OH, USA
- 339 **Rapid Respiratory Panel Testing: Impact of Active Antimicrobial Stewardship**  
Salma Abbas, MBBS<sup>1</sup>, Shaina Bernard, PharmD<sup>2</sup>, Kimberly B. Lee, PharmD<sup>2</sup>, Christopher Doern, PHD<sup>3</sup>, Amy Pakyz, PharmD, MS, PhD<sup>4</sup>, Michelle Doll, MD, MPH<sup>5</sup>, Gonzalo Bearman, MD, MPH<sup>2</sup> and Michael P. Stevens, MD, MPH<sup>6</sup>, (1)Virginia Commonwealth University Health, Richmond, VA, USA, (2)Virginia Commonwealth University Health System, Richmond, VA, USA, (3)VCU School of Medicine, Richmond, VA, USA, (4)Virginia Commonwealth University, Department of Pharmacotherapy & Outcomes Science, Richmond, VA, USA, (5)Virginia Commonwealth University School of Medicine, Richmond, VA, USA, (6)VCU Health, Richmond, VA, USA
- 340 **Potential for the Current National Healthcare Safety Network (NHSN) >3 Days after Admission Definition of LabID Healthcare Facility Onset-*Clostridium difficile* Infection (HO-CDI) to Overestimate Rates**  
Heather Y. Hughes, MD, MPH<sup>1,2</sup>, Monica D. McCrackin, MSN, RN, CIC<sup>1</sup>, Robert Williford, MS<sup>2</sup>, Cassandra Salgado, MD, MS<sup>2</sup> and Scott Curry, MD<sup>2</sup>, (1) Ralph H. Johnson VAMC, Charleston, SC, USA, (2)The Medical University of South Carolina, Charleston, SC, USA
- 341 **Divide and Conquer: Implementing a Comprehensive Antimicrobial Stewardship Program with Prospective Audit and Feedback in an Urban Community Hospital**  
Alfredo J Mena Lora, MD<sup>1,2</sup>, Rick Chu, PharmD<sup>2</sup>, Ella Li, PharmD<sup>2</sup>, Martin Cortez, PharmD<sup>2</sup>, Dawn Hannahs, RN CIC<sup>2</sup>, Paula Ashley, BSN MBA<sup>2</sup>, Sherrie Spencer, RN AGNP<sup>2</sup>, Eden Takhsh, MD<sup>2</sup> and Susan Bleasdale, MD<sup>1</sup>, (1)University of Illinois at Chicago, College of Medicine, Chicago, IL, USA, (2)Saint Anthony Hospital, Chicago, IL, USA
- 342 **Independent Impact of Time to Antibiotics on Mortality in Sepsis Identified through Electronic Medical Record Alerts**  
Saranya Seetharaman, MBBS, MPH<sup>1</sup>, Christina Wilson, PT, MBA<sup>2</sup>, Mark Landrum, MD<sup>3</sup>, Sonia Qasba, MD, MPH<sup>4</sup>, James C. Fackler, MD<sup>5</sup>, JoEllen Harris, RN, CIC<sup>6</sup>, Renee Blanding, MD, MPH<sup>5</sup>, Trish M Perl, MD, MSc<sup>7</sup>, Aaron M Milstone, MD, MHS<sup>5</sup> and Geeta Sood, MD<sup>5</sup>, (1)Johns Hopkins Bayview Medical Center, Baltimore, MD, USA, (2)Premier Inc., Charlotte, NC, USA, (3) Howard County General Hospital, Columbia, MD, USA, (4) Suburban Hospital, Bethesda, MD, USA, (5)Johns Hopkins Medical Institutions, Baltimore, MD, USA, (6)Johns Hopkins Medicine, SAINT PETERSBURG, FL, USA, (7)Johns Hopkins University, Baltimore, MD, USA

343 **Controlling Legionella: A Snapshot of Clinical Practices And Water Management in SHEA Research Network Hospitals**

**Karen Ehret<sup>1</sup>**, Allison T Chamberlain, PhD<sup>1</sup>, Laura Cooley, MD, MPH<sup>2</sup>, Ruth L Berkelman, MD<sup>1</sup> and Scott Fridkin, MD<sup>3</sup>, (1)Emory University Rollins School of Public Health, Atlanta, GA, USA, (2) Centers for Disease Control and Prevention, Atlanta, GA, USA, (3) Emory University School of Medicine, Atlanta, GA, USA

344 **Diagnostic Stewardship for *Clostridium difficile* Works! Reduction of Healthcare-Onset Rates, Vancomycin Use, and Contact Precaution.**

**Salah Qutaishat, PhD** and Reta Gibbons, MT(ASCP), BSN, Munson Medical Center, Traverse City, MI, USA

345 **Statewide Evaluation of Stewardship Interventions in Acute Care Hospitals**

Christopher Evans, PharmD<sup>1</sup>, Katie Thure, MPH<sup>2</sup>, Honour McDaniel<sup>3</sup>, **Cullen Adre, PharmD<sup>4</sup>**, Vicky Reed, RN<sup>4</sup>, Pamela Talley<sup>1</sup> and Marion Kainer, MD, MPH<sup>1</sup>, (1)Tennessee Department of Health, Nashville, TN, USA, (2)CSTE Applied Epidemiology Fellowship, Nashville, TN, USA, (3)University of Kentucky Department of Health Behavior and Society, Lexington, KY, USA, (4)TN Department of Health, Nashville, TN, USA

346 **Knowledge and Attitudes about Antimicrobial Education amongst Pediatric Residents at an Academic Teaching Hospital**

Theresa Madigan, MD, Luke Radel, MD and **Nipunie Rajapakse, MD MPH**, Mayo Clinic, Rochester, MN, USA

347 **Are Many Patients Diagnosed with Healthcare-Associated *Clostridium Difficile* Infection Colonized with the Infecting Strain On Admission?**



**Melany Gonzalez-Orta, MD<sup>1</sup>**, Carlos Saldana, MD<sup>2</sup>, Jennifer Cadnum, BS<sup>1</sup>, Annette Jencson, BSMT, CIC<sup>3</sup>, Chetan Jinadatha, MD<sup>4</sup> and Curtis Donskey, MD<sup>5</sup>, (1)Louis Stokes Veterans Affairs Medical Center, Cleveland, OH, USA, (2)Cleveland Clinic Foundation, Cleveland, OH, USA, (3)Geriatric Research, Education, and Clinical Center, Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA, (4)Central Texas Veterans Healthcare System, Temple, TX, USA, (5)Louis Stokes Cleveland Veterans Affairs Medical Center, Cleveland, OH, USA

10532 ***Clostridium difficile*: Clinical Characteristics and Outcomes of Positive and Indeterminate Testing**

**Joseph Boyd, MD<sup>1</sup>**, Stephen Blatt, MD<sup>2</sup> and Jennifer Steinbrunner, BS, CCRP<sup>1</sup>, (1)TriHealth, Cincinnati, OH, USA, (2) Good Samaritan Hospital, Cincinnati, OH, USA

10564 **Is the Empiric Use of Vancomycin in Urology Inpatients Justified?**

**Jennifer Robles, M.D.<sup>1</sup>**, Jonathan Schmitz, M.D., PhD<sup>1</sup>, Matthew Marshall, PharmD<sup>1</sup>, Whitney Jones Nesbitt, PharmD<sup>1</sup>, Daniel Barocas, M.D.<sup>1</sup> and George E Nelson, MD<sup>1,2</sup>, (1)Vanderbilt University Medical Center, Nashville, TN, USA, (2)Vanderbilt University School of Medicine, Nashville, TN, USA



**PLENARY: IT'S NOT WHAT YOU SAY, IT'S HOW YOU SAY IT**

1:30 – 2:30 p.m.

Grand Ballroom I

**Moderators:** Judy Guzman-Cottrill, DO, and Matthew Linam, MD, MS**Speaker(s):** Joe Palca, PhD**Learning Objectives:**

- Identify key elements for effective communication to the media and public
- Implement strategies to engage your patients and their families as active members in infection prevention

**NETWORKING BREAK**

2:30 – 2:45 p.m.

Grand Ballroom Foyer

**FULL CONFERENCE****R2D2 VS ELBOW GREASE: ENVIRONMENTAL**

2:45 – 4:00 p.m.

Grand Ballroom I

**Moderators:** Joan Hebden, MS, RN, and Matthew Washam, MD, MPH**Speaker(s):**

Gizmos and Gadgets — A Review of New Technologies for Environmental Services for Infection Prevention – **William A. Rutala, PhD, MPH**

Real House Keepers of X- Stories of Success Using Human Factor Engineering – **Loretta Litz-Fauerbach, MS, CIC**

Changing the Culture to Empower Environmental Services for Infection Prevention – **David Calfee, MD, MS**

**Learning Objectives:**

- Review a series of new technologies and data to support their use by environmental services (EVS) (and related) for infection prevention (including UV, H2O2 misters, impregnated fabrics and surfaces, ATP)
- Describe integration of the new technologies into environmental infection prevention; what are best uses, implementation (successes and challenges) using human factors engineering, and building business case
- Review strategies for education, changing the culture of HHWs and assessing the competence of HCW, such as those for environmental services

**LOOKING BEYOND OUR PATIENTS: ONEHEALTH PERSPECTIVE**

2:45 – 4:00 p.m.

Grand Ballroom II

**Moderators:** Kelly Kauber, MPH, and Marisa M'Diangelo, MD, MPH**Speaker(s):**

One Health Approach to Address Antimicrobial Resistance at the National Level – **Dawn Sievert, PhD, MS**

Antibiotic Stewardship in U.S. Animal Agriculture – **Nora M. Wong, MPH**

**Learning Objectives:**

- Describe the multi-partner, collaborative surveillance conducted to identify and respond to foodborne antibiotic resistance
- Describe antibiotic use in animal agriculture and the impact of recent federal policy changes
- Describe alternatives to antibiotics and management practices that reduce the need for antibiotics

**JOINT SESSIONS****POST-ACUTE AND LONG-TERM CARE: CHANGING THE NATIONAL LANDSCAPE AND INFECTION PREVENTION**

2:45 – 3:45 p.m.

Pavilion Ballroom

**Speaker(s):** Nimale Stone, MD, MS**Learning Objectives:**

- Describe the differences in infrastructure for clinical care and infection prevention in post-acute and long-term care settings compared with acute care hospitals
- Describe the gaps and challenges in implementing infection prevention and antibiotic stewardship programs in post-acute and long-term care settings
- Highlight the national initiatives which are driving surveillance and prevention activities in this setting



## SHEA/CDC TRAINING COURSE

## OVERVIEW OF ANTIBIOTIC STEWARDSHIP

3:45 – 4:45 p.m. *Pavilion Ballroom***Speaker(s):** Pranita Tamma, MD, MPH**Learning Objectives:**

- Discuss the rationale for antibiotic stewardship
- Discuss the elements and activities of a stewardship program
- Discuss approaches to help prescribers make good decisions about antibiotics
- Translate emerging national initiatives to encourage and enhance antibiotic stewardship

## NETWORKING BREAK

4:45 – 5:00 p.m. *Grand Ballroom Foyer*

## SHEA ANTIBIOTIC STEWARDSHIP TRAINING COURSE

## THE NEVER EVENTS: MANAGING PROVIDER AND PATIENT EXPECTATIONS

2:45 – 3:15 p.m. *Galleria***Speaker(s):**Antibiotic Never Events in Hospitalized Patients – **Pranita Tamma, MD, MHS****Learning Objectives:**

- Identify clinical situations representing common conditions misdiagnosed as infections in which a stewardship intervention to eliminate antibiotic use is appropriate
- Establish communication strategies for both patients and providers that promote appropriate antibiotic use when implementing stewardship interventions

## MANAGING OUTLIER PHYSICIANS: THE RELUCTANT STEWARD

3:15 – 3:45 p.m. *Galleria***Speaker(s):** Lauri Hicks, DO**Learning Objectives:**

- Discuss outlier prescribers in your institutions
- Identify methods for collaborating with outlier clinicians to promote appropriate Antibiotic use
- Describe ways to handle the poor Infectious Diseases physician steward

## JOINT SESSIONS

## ANTIBIOTIC STEWARDSHIP IN SKILLED NURSING FACILITIES AND LONG-TERM CARE

3:45 – 4:45 p.m. *Galleria***Speaker(s):** Sarah Kabbani, MD, MSc**Learning Objectives:**

- Define the unique challenges for resources, team development and measurement in long-term care settings
- Identify starter strategies for implementing effective antibiotic stewardship in long-term care settings
- Describe collaborations between acute care and long-term care to create effective antibiotic stewardship programs

## FULL CONFERENCE

## IT'S NOT AN ISOLATED ISSUE

4:15 – 5:45 p.m. *Grand Ballroom I***Moderators:** Surbhi Leekha, MBBS, MPH, and Corrine Klein, MD**Speaker(s):**To Isolate or Not for Endemic Pathogens: that is the question! – **Gonzalo Bearman, MD, MPH**Isolation Duration: How Long is Too Long? – **Christopher Pfeiffer, MD, MHS**Controversies & Advances in Airborne Isolation and Respiratory Protection – **Barbara I Braun, PhD****Learning Objectives:**

- Synthesize current data and guidelines supporting and refuting use of Contact Precautions for endemic "bad bugs" such as MRSA, ESBLs, and *C. difficile* in acute care facilities
- Understand the rationale and most recent data to generate informed recommendations for the duration of Contact Precautions for colonization of "bad bugs" such as MRSA, CRE, and *C. difficile*
- Discuss and understand controversial issues and best practices in administering an effective respiratory protection program

## ORAL ABSTRACTS: MICROBES ON THE MOVE

4:15 – 5:45 p.m.

Grand Ballroom II

### Moderators:

- 9810 **Inpatient Mobility and Unit Susceptibility of Hospital-Acquired *Clostridium difficile* Infection (CDI)**  
**Kristen Bush, MPH<sup>1,2,3</sup>**, Gourab Ghoshal, PhD<sup>4</sup>, Ghinwa Dumyati, MD<sup>1</sup>, Melissa Trayhan, MS<sup>2</sup>, Samir Farooq, MS<sup>2</sup>, Hugo Barbosa, PhD<sup>4</sup>, Caroline Quill, MD, MSHP<sup>1,2</sup>, Robert White, MS<sup>2</sup> and Martin Zand, MD, PhD<sup>1,2,3</sup>, (1)University of Rochester Medical Center, Rochester, NY, USA, (2)Rochester Center for Health Informatics, Rochester, NY, USA, (3)Clinical and Translational Science Institute, Rochester, NY, USA, (4)University of Rochester, Rochester, NY, USA
- 9974 **Microbial Burden on Environmental Surfaces in Patient Rooms**  
**John Boyce, MD<sup>1</sup>**, Nancy L. Havill, MS<sup>2</sup> and Kerri A. Guercia, MT (ASCP)<sup>2</sup>, (1)J.M.Boyce Consulting, LLC, Middletown, CT, USA, (2)Yale-New Haven Hospital, New Haven, CT, USA
- 10192 **Sharing Is Not Always a Good Thing: Use of a DNA Marker to Investigate the Potential for Dissemination of Pathogens from Ward to Ward on Shared Medical Equipment**  
**Heba Alhmidi, MD<sup>1</sup>**, Jennifer Cadnum, BS<sup>2</sup> and Curtis J. Donskey, MD<sup>3,4,5</sup>, (1)Louis Stokes Cleveland Veterans Affairs Medical Center, Cleveland, OH, USA, (2)Louis Stokes Veterans Affairs Medical Center, Cleveland, OH, USA, (3)Case Western Reserve University, Cleveland, OH, USA, (4)Cleveland VA Medical Center, Cleveland, OH, USA, (5)Geriatric Research Education and Clinical Center, Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA
- 10205 **Spores on Wheels: Wheelchairs are a Potential Vector for Dissemination of Pathogens in Healthcare Facilities**  
**Annette Jencson, BSMT, CIC<sup>1</sup>**, Jennifer Cadnum, BS<sup>2</sup>, Brigid Wilson, PhD<sup>3</sup> and Curtis Donskey, MD<sup>4</sup>, (1)Cleveland VA Medical Center, Cleveland, OH, USA, (2)Louis Stokes Veterans Affairs Medical Center, Cleveland, OH, USA, (3)Geriatric Research Education and Clinical Center, Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA, (4)Louis Stokes Cleveland Veterans Affairs Medical Center, Cleveland, OH, USA
- 9793 **Pathogens Causing Central-line Associated Bloodstream Infections in Acute Care Hospitals – United States, 2010-2016**  
**Shannon Novosad, MD MPH**, Lucy Fike, MPH, Ronda Sinkowitz-Cochran, MPH, Alexander J. Kallen, MD, MPH and David Kuhar, MD, Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, GA, USA
- 10365 **Evaluating the Healthcare Facility Invasive CRE Transfer Network in Greater Atlanta Metropolitan Area, 2016**  
**Daniel Fridkin<sup>1,2,3</sup>**, Christopher Bower, MPH<sup>1,3,4</sup>, Jesse Jacob, MD<sup>5</sup>, Susan Ray, MD<sup>1,5</sup>, Scott Fridkin, MD<sup>1,5</sup>, Rachel Slayton, PhD, MPH<sup>6</sup> and Prabasaj Paul, PhD, MPH<sup>7</sup>, (1)Georgia Emerging Infections Program, Decatur, GA, USA, (2)Atlanta Veterans Affairs Medical Center, Decatur, GA, USA, (3)Atlanta Research and Education Foundation, Atlanta, GA, USA, (4)Atlanta Veterans Affairs Medical Center, Atlanta, GA, USA, (5)Emory University School of Medicine, Atlanta, GA, USA, (6)Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, GA, USA, (7)Division of Healthcare Quality Promotion, CDC, Atlanta, GA, USA

## SHEA/CDC TRAINING COURSE

### SPECIAL POPULATIONS: IMMUNOCOMPROMISE, DIALYSIS & BURN PATIENTS

5:00 – 5:45 p.m.

Pavilion Ballroom

**Speaker(s): Deborah Yokoe, MD**

#### Learning Objectives:

- Recognize how to apply and modify healthcare epidemiology, antibiotic stewardship, and infection prevention approaches for immunocompromised populations
- Review the special issues associated with these populations including increased use of invasive devices, increased use of broad-spectrum empiric antibiotics and how intense exposure to the healthcare system increases risks of MDRO acquisition

## SHEA ANTIBIOTIC STEWARDSHIP TRAINING COURSE

### TELEMEDICINE: OPPORTUNITIES IN STEWARDSHIP

5:00 – 5:45 p.m.

Galleria

**Speaker(s):**

TeleHealth and Stewardship — How We Reach ALL Hospitals – **Edward A Stenehjem, MD, MSc**

#### Learning Objectives:

- Describe various ways of utilizing telemedicine to enhance stewardship opportunities
- Discuss strengths and weaknesses of off-site stewardship services

SHEA/CDC/AMDA INFECTION PREVENTION  
IN PAC & LTC CERTIFICATE COURSE

## CHALLENGING SITUATIONS

5:00 – 5:45 p.m.

*Broadway Room*

**Speaker(s):** Robin Jump, MD, PhD,  
Deborah Patterson-Burdsall, PhD RN-BC, CIC,  
Theresa Rowe, DO, and Nimale Stone, MD, MS

**Learning Objectives:**

- *Discuss challenging infection control situations that might arise in post-acute and long-term care such as outbreaks, healthcare personnel vaccination, and antibiotic overuse*

4TH ANNUAL SHEA EDUCATION AND  
RESEARCH FOUNDATION DINNER

(TICKETED EVENT)

6:00 – 9:30 p.m.

*World Forestry Center*

This is a pre-purchased ticketed event.

**Please note:** Transportation will be provided for this event.  
Please meet outside the Hilton Portland Downtown Lobby  
starting at 5:30 p.m.

## WOMEN IN EPI BREAKFAST

6:30 – 7:50 a.m.

Atrium Ballroom

## POSTER VIEWING BREAKFAST

7:00 – 7:50 a.m.

Exhibit/Poster Hall

## FULL CONFERENCE

### I'M HERE TO SEE THE BABY

8:00 – 9:30 a.m.

Grand Ballroom II

**Moderators:** Jonathan Crews, MD, MS, and Michelle Hoffman, MD

#### Speaker(s):

Seasonal and Age — Related Visitor Restrictions in NICUs: A Look at the Evidence – **Kari Simonsen, MD**

MDRO Colonization and Infection in NICU Infants – **Latania Logan, MD**

Family Engagement: Parents as Partners for Infection Prevention Efforts – **Kristina Bryant, MD**

#### Learning Objectives:

- Discuss controversies in visitation policies in NICU settings, and the level of evidence to support common recommendations
- Describe HAI risks associated with MDRO colonization in NICU infants
- Explore efforts to engage families in understanding and communicating best practices for infection prevention to improve NICU safety and care quality

### LTC: SHOULD I STAY OR SHOULD I GO

8:00 – 9:30 a.m.

Broadway Room

**Moderators:** Muhammad Salam Ashraf, MBBS, and Robin Jump, MD, PhD

#### Speaker(s):

Antibiotic Use in Nursing Home Residents at the End-of-Life – **Jon Furuno, PhD**

Surviving Sepsis and Nursing Homes Residents: What is Realistic? – **Theresa Rowe, DO**

Hidden Costs of High Staff Turnover in Nursing Homes – **Nimale Stone, MD, MS**

#### Learning Objectives:

- Discuss antibiotic use and stewardship in nursing home residents at the end of life, including discussions with concerned loved one
- Recognize implications of the Surviving Sepsis Campaign and the re-admissions Reduction Program on the care of nursing home resident
- Describe challenges related to staff turnover on infection prevention and control in the post-acute and long-term care setting

### PRO/CON: SWITCHING IT UP: CLOSTRIDIUM DIFFICILE INFECTION PREVENTION. IS STEWARDSHIP OR INFECTION PREVENTION THE KEY TO REDUCTION?

8:00 – 9:30 a.m.

Grand Ballroom I

**Moderators:** Kelly Cawcutt, MD, MS, and Jasmine Marcelin, MD

#### Speaker(s):

Pro — The Antibiotic Police – **Ebbing Lautenbach, MD, MPH, MSCE**

Con — Infection Prevention Army – **L. Clifford McDonald, MD**

Peace Maker – **Melinda Neuhauser, PharmD, MPH**

#### Learning Objectives:

- Describe the advantages and disadvantages of antibiotic stewardship as the key intervention to reduce *C. difficile* infections
- Describe the advantages and disadvantages of infection prevention as the key intervention to reduce *C. difficile* infections

## SHEA/CDC TRAINING COURSE

### LEADERSHIP AND COMMUNICATION SKILLS

8:00 – 8:45 a.m.

Pavilion Ballroom

**Speaker(s):** Hilary M. Babcock, MD, MPH

#### Learning Objectives:

- Discuss Agenda development, Inclusiveness, Action and follow up
- Review responsibility and task management, and Feedback mechanisms
- Identify the importance of collaboration with other hospital groups/teams and stakeholders
- Recognize the basics of effective communication
- Indicate basic skills for effective negotiation
- Demonstrate how to speak to the financial impacts and cost-effectiveness of proposed interventions



## THE HOSPITAL EPIDEMIOLOGIST AS A CLINICIAN EDUCATOR

8:45 – 9:30 a.m.

Pavilion Ballroom

**Speaker(s):** Thomas J. Sandora, MD, MPH**Learning Objectives:**

- Distinguish principles of adult learning necessary to effectively teach and to design educational interventions
- Identify varying forums and tools for effective delivery of education including didactic lectures, small-group case-based discussions, and one-on-one instruction
- Classify the target audience and be able to vary teaching modalities & methods based on audience, level of training and knowledge base
- Identify mechanisms for delivering education including unit-level training, hands-on skills demonstration, computer-based modules, and simulation
- Assess the stage of the learner, ensure topic is meaningful and relevant to learner's work, articulate goals, encourage active learner involvement, and provide feedback
- Recognize presentation tools effectively and appropriately, develop effective written educational materials, and educate individual HCP and other stakeholders
- Use varying teaching methods targeted at specific audience needs and goals

## SHEA ANTIBIOTIC STEWARDSHIP TRAINING COURSE

## CASE STUDY #4: STEWARDSHIP AND C. DIFFICILE INFECTION

8:00 – 9:00 a.m.

Galleria

**Speaker(s):** Belinda Ostrowsky, MD, MPH**Learning Objectives:**

- Define laboratory approaches to testing for *C. difficile* testing and interpret results
- Review the association between use of Antibiotics and the development of *C. difficile* infections
- Identify strategies to decrease *C. difficile* infection rates that include improving antibiotic use and understand how to implement them in a collaborative group including infection prevention

## CASE STUDY #5: PEDIATRIC CASE – INTERVENTION TO IMPROVE ANTIBIOTIC USE IN PEDIATRICS AND THE NICU

9:00 – 9:30 a.m.

Galleria

**Speaker(s):** Matthew Kronman, MD, MSCE**Learning Objectives:**

- Discuss practical examples of Antibiotic stewardship implementation
- Identify strategies for implementing effective Antibiotic stewardship targeting an institution-specific problem and special populations such as the neonates and the immunosuppressed

## NETWORKING BREAK

9:30 – 10:00 a.m.

Grand Ballroom Foyer

## FULL CONFERENCE

## BEAUTY AND THE BEASTS: TALES FROM THE FRONT LINES OF RESPONSE TO EMERGING THREATS

10:00 a.m. – 12:00 p.m.

Grand Ballroom I

**Moderators:** Marisa D'Angeli, MD, MPH, and Shannon Novosad, MD, MPH, BS**Speaker(s):**Beauty: Progress on Surveillance and Novel Strategies for Prevention and CRE – **Maroya S. Walters, PhD, ScM**Beast: mcr-1 and Carbapenem-Resistant *Enterobacteriaceae* (CRE) – **Maroya S. Walters, PhD, ScM**Beast: *Candida auris* – **Emily Lutterloh, MD, MPH**Beast: Non-tuberculosis mycobacteria – **Belinda Ostrowsky, MD, MPH****Learning Objectives:**

- Describe and discuss emerging multi-drug resistant organisms (MDROs) and non-tuberculous mycobacteria (NTM)
- Identify potential real-world solutions to overcome challenges with MDRO and NTM prevention and response

## HOW TO PUBLISH WHAT WE DO

10:00 a.m. – 12:00 p.m.

Grand Ballroom II

**Moderators:** Jennifer Han, MD, MSc, and Daniel Livorsi, MD**Speaker(s):**Planning Your Interventions with an Eye Toward Publication – **Charlesnika T. Evans, PhD, MPH**Performing Your Intervention or Outbreak Investigation Using Rigorous Methods – **Jessina McGregor, PhD**How to Write-Up Your Experience to Optimize Publication – **Jon Furuno, PhD****Learning Objectives:**

- Describe preferred study designs to implement a high-quality intervention
- Recall a statistical analysis technique (such as time series analysis) that can be used to evaluate the effectiveness of an intervention used to write a manuscript describing an intervention
- Describe a statistical analysis technique that can be used to determine the cause of an outbreak
- List checklists (such as STROBE) that can be used to write a manuscript describing an intervention

## ORAL ABSTRACTS: AT THE INTERSECTION OF ANTIBIOTICS AND RESISTANCE

10:00 a.m.– 12:00 p.m.

Broadway Room

**Moderators:** David Banach, MD, MPH, MS, and Jesse Jacob, MBA, MD, MSc

### 9990 **Treating Fear: Emotional Factors that Shape Antibiotic Prescribing in Acute Care Settings**

Mike R. Kohut, PhD<sup>1</sup>, Pranita D. Tamma, MD, MHS<sup>2</sup>, Sara E. Cosgrove, MD, MS<sup>3</sup>, Lisa E. Davidson, MD<sup>4</sup>, Kathleen Speck, MPH<sup>5</sup>, Melissa A. Miller, MD, MS<sup>6</sup> and **Julia E. Szymczak, PhD<sup>7</sup>**, (1) Armstrong Institute for Patient Safety and Quality at Johns Hopkins Medicine, Baltimore, MD, USA, (2) Johns Hopkins University School of Medicine, Baltimore, MD, USA, (3) Johns Hopkins Medical Institutions, Baltimore, MD, USA, (4) Carolinas Medical Center, Division of Infectious Diseases, Charlotte, NC, USA, (5) Johns Hopkins University, Baltimore, MD, USA, (6) Agency for Health Research and Quality, Department of Human Health and Services, Rockville, MD, USA, (7) Perelman School of Medicine at University of Pennsylvania, Department of Biostatistics, Epidemiology and Informatics, Philadelphia, PA, USA

### 10057 **Nursing Home Characteristics Associated with Increased Rates of *Clostridium difficile* Infection (CDI), National Healthcare Safety Network (NHSN) 2016**

Elisabeth Mungai, MS, MPH<sup>1</sup>, Jeneita M Bell, MD, MPH<sup>1</sup>, Nimalie Stone, MD, MS<sup>1,2</sup>, Angela M Anttila, PhD<sup>1</sup> and Jonathan R Edwards, MStat<sup>3</sup>, (1) Centers for Disease Control and Prevention (CDC), Atlanta, GA, USA, (2) Division of Healthcare Quality Promotion, Atlanta, GA, USA, (3) Centers for Disease Control and Prevention, Atlanta, GA, USA

### 10006 **It's a Big World Out There: Barriers and Hazards Related to the Physical Environment in Patients on Outpatient Parenteral Antimicrobial Therapy**

**Sara C. Keller, MD, MPH, MSH<sup>1</sup>**, Ayse P. Gurses, PhD, MS, MPH<sup>2</sup>, Mike R. Kohut, PhD<sup>3</sup>, Deborah Williams, BSN, MPH<sup>4</sup> and Sara E. Cosgrove, MD, MS<sup>5</sup>, (1) Johns Hopkins Medicine, Baltimore, MD, USA, (2) Johns Hopkins Medicine Armstrong Institute for Patient Safety and Quality, Baltimore, MD, USA, (3) Armstrong Institute for Patient Safety and Quality at Johns Hopkins Medicine, Baltimore, MD, USA, (4) Johns Hopkins Home Care Group and Pharmaquip Infusion Pharmacy, Baltimore, MD, USA, (5) Johns Hopkins Medical Institutions, Baltimore, MD, USA

### 10151 **A Comparative Study of the Epidemiology of Carbapenem Resistant Enterobacteriaceae Infection and Colonization between 2008-13 and 2016.**

**Scott A Borgetti, MD**, Alfredo Mena Lora, MD, Susan C. Bleasdale, MD and Elaine Cha, University of Illinois at Chicago, College of Medicine, Chicago, IL, USA

### 10177 **The Tip of the Iceberg, Antibiotic Stewardship and Fluoroquinolone Use at Hospital Discharge: A Multi Hospital Study**

**Valerie Vaughn<sup>1</sup>**, Scott Flanders, MD<sup>1</sup>, Vineet Chopra, MD, MSc<sup>2</sup>, Anna Conlon, PhD<sup>1</sup>, Anurag Malani, MD<sup>3</sup>, Rama Thyagarajan, MD<sup>4</sup> and Tejal N Gandhi, MD<sup>5</sup>, (1) University of Michigan, Ann Arbor, MI, USA, (2) University of Michigan Medical School, Ann Arbor, MI, USA, (3) St. Joseph Mercy Health System, Ann Arbor, MI, USA, (4) Beaumont Health System, Dearborn, MI, USA, (5) University of Michigan Health System, Ann Arbor, MI, USA

### 10183 **High Relative Abundance of *Klebsiella Pneumoniae* Carbapenemase-Producing *Klebsiella pneumoniae* (KPC-Kp) within the Gut Microbiota is Associated with Increased Risk of Bloodstream Infection (BSI) in Long-Term Acute Care Hospital (LTACH) Patients**

**Teppei Shimasaki, M.D.<sup>1</sup>**, Anna M. Seekatz, Ph.D.<sup>2</sup>, Christine M. Bassis, Ph.D.<sup>2</sup>, Yoona Rhee, M.D., Sc.M.<sup>1</sup>, Rachel D. Yelin, M.P.H.<sup>1</sup>, Louis Fogg, Ph.D.<sup>1</sup>, Thelma Dangana, M.B.B.S., M.S.<sup>1</sup>, Enrique Cornejo Cisneros, M.D.<sup>3</sup>, Robert A. Weinstein, M.D.<sup>1</sup>, Koh Okamoto, M.D.<sup>4</sup>, Karen Lolans, B.S.<sup>1</sup>, Michael Schoeny, Ph.D.<sup>1</sup>, Michael Y. Lin, M.D., M.P.H.<sup>1</sup>, Nicholas M. Moore, Ph.D.<sup>1</sup>, Vincent B. Young, M.D., Ph.D.<sup>2</sup> and Mary K. Hayden, M.D.<sup>1</sup>, (1) Rush University Medical Center, Chicago, IL, USA, (2) University of Michigan Medical School, Ann Arbor, MI, USA, (3) Hospital Nacional Cayetano Heredia, Lima, Peru, (4) University of Tokyo Hospital, Tokyo, Japan

### 10426 **Use of a Computer-based Prediction Tool (WISCA) for Improving Empiric Antibiotic Prescribing**

**Mary Ellen Acree, MD<sup>1</sup>**, Lance Peterson, MD<sup>1</sup>, Nirav Shah, MD<sup>1</sup>, Jessica P Ridgway, MD, MS<sup>2</sup> and Kamaljit Singh, MD<sup>1</sup>, (1) NorthShore University HealthSystem, Evanston, IL, USA, (2) University of Chicago, Chicago, IL, USA

### 10439 **Further Reduction in Antimicrobial Use After Institution of Handshake Stewardship in a Pre-existing Pediatric ASP**

**Natasha A Nakra, MD<sup>1</sup>**, Jean Wiedeman, MD<sup>2</sup> and Daniel Tancred<sup>3</sup>, (1) University Of California Davis School of Medicine, Sacramento, CA, USA, (2) University California Davis School of Medicine, Sacramento, CA, USA, (3) University of California Davis School of Medicine, Sacramento, CA, USA

## SHEA/CDC TRAINING COURSE

### OCCUPATIONAL INFECTION PREVENTION

10:00 – 11:00 a.m.

Pavilion Ballroom

**Speaker(s):** Thomas Talbot, MD, MPH

#### Learning Objectives:

- Illustrate the role of healthcare personnel (HCP) in the transmission of healthcare-associated infections
- Identify the recommended strategies, including immunization and use of screening tests, designed to prevent
- HCP-associated transmission of pathogens
- Identify the approach to HCP infected with a blood borne virus
- Summarize the management of contagious disease exposures among HCP, including the use of post-exposure prophylaxis

## THE ROLE OF THE LABORATORY IN HEALTHCARE EPIDEMIOLOGY

11:00 a.m.– 12:00 p.m. *Pavilion Ballroom*

**Speaker(s):** Joost Hopman, DTMH, MD

### Learning Objectives:

- Discuss the major roles of the clinical laboratory in infection prevention, outbreak response, and antibiotic stewardship
- Identify promising developments in rapid and/or molecular diagnostic testing in the microbiology lab, including when and how such testing should be incorporated into infection prevention efforts
- Assess test characteristics (e.g. sensitivity, specificity, positive and negative predictive value) and that a change in testing methodology may result in an apparent change in incidence or prevalence of an infection or pathogen
- Develop and interpret an antibiogram that is consistent with Clinical and Laboratory Standards Institute (CLSI) recommendations
- Know when to utilize molecular typing methods for infection prevention and outbreak response, and describe the strengths and limitations of existing typing methods

## SHEA ANTIBIOTIC STEWARDSHIP TRAINING COURSE

## CASE STUDY #6: ADULT CASE – INTERVENTION TO IMPROVE MANAGEMENT OF COMMUNITY ACQUIRED PNEUMONIA

10:00 – 10:45 a.m. *Galleria*

**Speaker(s):** Priya Nori, MD

### Learning Objectives:

- Discuss practical examples of Antibiotic stewardship implementation
- Identify strategies for implementing effective Antibiotic stewardship targeting an institution-specific problem and special populations such as the neonates and the immunosuppressed

## STEWARDSHIP AT THE BEDSIDE: ENGAGING FRONT-LINE PROVIDERS

10:45 – 11:15 a.m. *Galleria*

**Speaker(s):** David Ha, PharmD

### Learning Objectives:

- Recognize the role of ‘staff’ nurses in antibiotic stewardship programs
- Explain the various healthcare personnel roles in long term care facilities involved in antibiotic therapy decisions

## STEWARDSHIP AND INFORMATICS

11:15 a.m.– 12:00 p.m. *Galleria*

### Speaker(s):

Utilizing Informatics to Grow Your Stewardship Program–  
**Kristi Kuper, PharmD**

### Learning Objectives:

- Identify how information technology infrastructure may assist stewardship programs
- Describe how to assess IT resources and external proprietary software programs
- List examples of how information technology has assisted successful stewardship programs in various settings

## NETWORKING LUNCH WITH POSTER PRESENTATIONS

12:00 – 1:30 p.m.

*Exhibit/Poster Hall*

- 400 **Alternative Doffing Strategies of Personal Protective Equipment (PPE) to Prevent Self-Contamination**  
**Michelle Doll<sup>1</sup>**, Kathryn Osei-Bonsu<sup>1</sup>, Nadia Masroor, MPH<sup>2</sup>, Kaila Cooper, MSN, RN, CIC<sup>2</sup>, Christopher Doern, PhD<sup>1</sup>, Kimberly Jefferson, PhD<sup>1</sup>, Savion Adamson<sup>2</sup>, Justin Thomas<sup>2</sup>, Ian Lovern<sup>1</sup>, Heather Albert, BSN, RN, CIC<sup>2</sup>, Yvette Major, MBA, MT(ASCP)<sup>2</sup>, Mike Stevens, MD, MPH<sup>3</sup>, Gordon Archer, MD<sup>1</sup> and Gonzalo Bearman, MD<sup>4</sup>, (1)VCU School of Medicine, Richmond, VA, USA, (2)VCU Health, Richmond, VA, USA, (3)Virginia Commonwealth University School of Medicine, Richmond, VA, USA, (4)Virginia Commonwealth University Health System, Richmond, VA, USA
- 401 **Declines in Healthcare-Associated, Community-Onset Methicillin-Resistant *Staphylococcus aureus* Bloodstream Infections, 2009–2015**  
**Kelly Jackson<sup>1</sup>**, Cedric Brown<sup>1</sup>, Joelle Nadle, MPH<sup>2</sup>, Susan Petit<sup>3</sup>, Susan Ray, MD<sup>4,5</sup>, Ruth Lynfield, MD<sup>6</sup>, Ghinwa Dumyati, MD<sup>7</sup>, William Schaffner, MD<sup>8</sup> and Isaac See, MD<sup>1</sup>, (1)Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, GA, USA, (2)California Emerging Infections Program, Oakland, CA, USA, (3)Connecticut Department of Public Health, Hartford, CT, USA, (4)Atlanta Veterans Affairs Medical Center, Decatur, GA, USA, (5)Georgia Emerging Infections Program, Decatur, GA, USA, (6)Minnesota Department of Health, St. Paul, MN, USA, (7)University of Rochester Medical Center, Rochester, NY, USA, (8)Vanderbilt University School of Medicine, Nashville, TN, USA
- 402 **Knowledge, Attitude, and Practices on Vaccination and Occupational Health Among Healthcare Workers in a Teaching Hospital Mexico City**  
**Lucia Martinez-Hernandez, MD<sup>1</sup>**, Lopez-Enriquez Claudia, MD<sup>2</sup>, Donis-Hernandez Jose, MD<sup>3</sup> and Virgen-Cuevas Margarita, MD<sup>3</sup>, (1)Hospital Español, Mexico City, Mexico, (2)Hospital Español de México, Mexico City, Mexico, (3)Hospital Español de México, Mexico City, Mexico
- 403 **Role of Hand Hygiene Ambassador and Implementation of Directly Observed Hand Hygiene among Residents in Nursing Homes**  
**Shuk Ching Wong, MNurs**, Chi Chung Vincent CHENG, MD and Kwok Yung Yuen, MD, Queen Mary Hospital, Hong Kong, Hong Kong
- 404 **Risk Factors of Healthcare-Associated Infections in ICU Are Effectively Identified by Machine Learning Approach**  
**Ksenia I. Ershova, M.D., M.Sc.<sup>1</sup>**, Olga N. Ershova, M.D., Ph.D.<sup>2</sup>, Oleg Khomenko, M.Sc.<sup>1</sup>, Ivan Savin, M.D., Ph.D.<sup>2</sup>, Nataliya Kurdyumova, M.D., Ph.D.<sup>2</sup> and Gleb Danilov, M.D., Ph.D.<sup>2</sup>, (1)Skolkovo Institute of Science and Technology, Moscow, Russian Federation, (2)Burdenko Neurosurgery Institute, Moscow, Russian Federation
- 405 **Do Universal Chlorhexidine Baths Increase the Prevalence of Antiseptic Resistance Genes in MRSA and Reduce Susceptibility To Chlorhexidine?**  
**Angela Chow, MBBS, MPH, MS, PhD**, Pei-Yun Hon, Wei Zhang and Brenda Ang, MBBS, MPH, Tan Tock Seng Hospital, Singapore, Singapore
- 406 **Will the Use of Nasal Octenidine Gel Increase the Prevalence of Antiseptic Resistance Genes And Reduce Octenidine Susceptibility in MRSA?**  
**Angela Chow, MBBS, MPH, MS, PhD**, Pei-Yun Hon, Wei Zhang and Brenda Ang, MBBS, MPH, Tan Tock Seng Hospital, Singapore, Singapore

- 407 **Do Nasal Antiseptics and Universal Antiseptic Baths Increase the Prevalence of Antiseptic Resistance Qac Genes in Methicillin-Resistant *Staphylococcus aureus* (MRSA) in Extended Care Facilities?**  
**Angela Chow, MBBS, MPH, MS, PhD** and Pei-Yun Hon, Tan Tock Seng Hospital, Singapore, Singapore
- 408 **Antifungal Prescribing Patterns in the Outpatient Setting -- United States, 2015**  
**Sharon Tsay, MD**, Monina Bartoces, PhD, Snigdha Vallabhaneni, MD MPH, Brendan R. Jackson, MD MPH and **Lauri Hicks, D.O.**, Centers for Disease Control and Prevention, Atlanta, GA, USA
- 409 **Are Academic Hospitals Treated Fairly in the CMS Hospital Acquired Condition Reduction Program?**  
**Mayar Al Mohajer, MD MBA CAQ FACP<sup>1</sup>**, David Nix, PharmD<sup>2</sup> and Keith Joiner, MD MPH<sup>3</sup>, (1)Baylor College of Medicine, Houston, TX, USA, (2)University of Arizona- Department of Pharmacy Practice and Science, Tucson, AZ, USA, (3)University of Arizona- Eller College of Management, Tucson, AZ, USA
- 410 **Prevalence and Contact Precautions Status of CRE Colonized Patients at Hospital Unit Admission**  
**Katherine E Goodman, JD<sup>1</sup>**, Patricia J Simner, PhD, D(ABMM)<sup>2</sup>, Abida Kazmi, MS<sup>2</sup>, Avinash Gadala, MS, B.Pharm<sup>3</sup>, Clare Rock, MD, MS<sup>3,4,5</sup>, Lisa Maragakis, MD, MPH<sup>5,6</sup>, Sara E. Cosgrove, MD, MS<sup>6</sup> and Aaron M Milstone, MD, MHS<sup>6</sup>, (1)Department of Epidemiology, Johns Hopkins School of Public Health, Baltimore, MD, USA, (2)School of Medicine, Division of Medical Microbiology, Johns Hopkins University, Baltimore, MD, USA, (3)The Johns Hopkins Hospital, Baltimore, MD, USA, (4)Johns Hopkins Medicine Armstrong Institute for Patient Safety and Quality, Baltimore, MD, USA, (5)Johns Hopkins University School of Medicine, Baltimore, MD, USA, (6)Johns Hopkins Medical Institutions, Baltimore, MD, USA
- 411 **Adapting CDC Infection Prevention Guidance: Addressing the Challenges and Needs of Specialty Outpatient Settings**  
**Barbara I. Braun, PhD**, Beth Ann Longo, DrPH, MSN, MBA, RN, Brette Tschurtz, MPH, Kristine Donofrio and Hasina Hafiz, MPH, The Joint Commission, Oakbrook Terrace, IL, USA
- 412 **Beyond the Abacus: Leveraging the Electronic Medical Record for Reporting Central Line-Days**  
**Patrick C. Burke**, Lori Eichmuller, Steven M. Gordon, MD and Thomas G. Fraser, MD, Cleveland Clinic, Cleveland, OH, USA
- 413 **Methicillin Resistant *Staphylococcus* (MRSA) Isolation tied to Hand Hygiene (HH) compliance**  
**Anupama Neelakanta, MD, MPH<sup>1</sup>**, Kristi Clutts, RN, CIC<sup>2</sup>, Wendy Betts, RN, CIC<sup>3</sup> and Catherine Passaretti, MD<sup>4</sup>, (1)Carolinas HealthCare System, Charlotte, NC, USA, (2)Carolinas Healthcare system, Charlotte, NC, USA, (3)Carolinas Healthcare system, Charlotte, NC, USA, (4)Carolinas Healthcare System, Charlotte, NC, USA
- 414 **Incidence, Risk Factors, and Outcomes Associated with Hospital-Onset Peripheral Intravenous Catheter-Associated *Staphylococcus aureus* Bacteremia**  
**Mica M Blauw, BS<sup>1,2</sup>**, Betsy Foxman, PhD<sup>1</sup>, Juan Wu, ScD, MS<sup>2</sup>, Janice E Rey, BSMT(ASCP), CIC<sup>2</sup>, Neelay Kothari, MD, MPH<sup>2</sup> and Anurag N. Malani, MD<sup>2</sup>, (1)University of Michigan School of Public Health, Ann Arbor, MI, USA, (2)Saint Joseph Mercy Health System, Ann Arbor, MI, USA



- 416 **Utility of the RAND-Modified Delphi Method for Determining the Components of a National Surveillance System to Implement an Antimicrobial Resistance Action Plan in Japan**  
**Nobuaki Matsunaga, M.D., M.P.H., Ph.D.<sup>1</sup>**, Kayoko Hayakawa, M.D., Ph.D.<sup>1</sup>, Fumie Sakamoto, BSN, MPH, CIC<sup>2</sup>, Shigeki Misawa, Ph.D.<sup>3</sup>, Yuichi Muraki, Ph.D.<sup>4</sup>, Shuhei Fujimoto, MD, Ph.D.<sup>5</sup>, Hiroshige Mikamo, M.D., Ph.D.<sup>6</sup>, Nobuo Murakami, M.D., Ph.D.<sup>7</sup>, Keigo Shibayama, M.D., Ph.D.<sup>8</sup>, Tetsuya Yagi, M.D., Ph.D.<sup>9</sup>, Katsunori Yanagihara, M.D., Ph.D.<sup>10</sup>, Taichi Tajima, R.N.<sup>1</sup>, Yoshiaki Gu, M.D., M.P.H., Ph.D.<sup>1</sup> and Norio Ohmagari, M.D., M.Sc., Ph.D.<sup>1</sup>, (1)AMR Clinical Reference Center, National Center for Global Health and Medicine, Tokyo, Japan, (2)Infection Control Division, Quality Improvement Center, St.Luke's International Hospital, Tokyo, Japan, (3)Department of Clinical Laboratory Juntendo University Hospital, Tokyo, Japan, (4)Department of Clinical Pharmacoepidemiology, Kyoto Pharmaceutical University, Kyoto, Japan, (5)Department of Bacteriology and Bacterial Infection, Division of Host Defense Mechanism, Tokai University School of Medicine, Kanagawa, Japan, (6)Department of Clinical Infectious Diseases, Aichi Medical University, Aichi, Japan, (7)Center for nutrition support & infection control, Gifu university hospital, Gifu, Japan, (8)Department of Bacteriology II, National Institute of Infectious Diseases, Tokyo, Japan, (9)Department of Infectious Diseases Nagoya University Graduate School of Medicine, Aichi, Japan, (10)Department of Laboratory Medicine, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan
- 417 **Impact of Targeted Decolonization on Transmission of Methicillin-Resistant *Staphylococcus aureus* in a NICU**  
**Michael Bozzella, DO, MS**, Tracie Harris, MT(ASCP), Lamia Soghier, MD, FAAP, CHSE, Lisa Zell, BSN, RN, Billie Lou Short, MD and Xiaoyan Song, PhD, MBBS, CIC, Children's National Health System, Washington, DC, USA
- 418 **Increased 30-Day Mortality among Children with Carbapenem-resistant Enterobacteriaceae**  
**Kathleen Chiotos, MD, MSCE<sup>1</sup>**, Pranita D. Tamma, MD, MHS<sup>2</sup>, Kelly B. Flett, MD, MMS<sup>3</sup>, Matthew Naumann, BS<sup>2</sup>, Manjiree V. Karandikar, MD, MBS<sup>4</sup> and Jennifer Han, MD, MSCE<sup>5</sup>, (1)Children's Hospital of Philadelphia, Philadelphia, PA, USA, (2)Johns Hopkins University School of Medicine, Baltimore, MD, USA, (3)Children's Hospital Boston, Boston, MA, USA, (4)Boston Children's Hospital, Boston, MA, USA, (5)University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, USA
- 419 **Rapid Containment of an Influenza A Outbreak in a Locked Behavioral Unit**  
**Michelle Ordoveza, MD<sup>1</sup>**, Angela Gabasan, RN, MSN, CIC<sup>2</sup> and Emilia Mia Sordillo, MD, PhD, FACP, FIDSA<sup>1</sup>, (1)Mount Sinai St Luke's & Mount Sinai West, Icahn School of Medicine at Mount Sinai, New York, NY, USA, (2)Mount Sinai West, New York, NY, USA
- 420 **Impact of a Novel, Mobile Air Purification System on the Bacterial Air Burden during Routine Care**  
**Werner Bischoff, MD PhD<sup>1</sup>**, Gregory Bryan Russell, MS<sup>1</sup>, Elisabeth Susanne Willard, BS<sup>1</sup> and John Stehle Jr., PhD<sup>2</sup>, (1)Wake Forest School of Medicine, Winston Salem, NC, USA, (2)Wake Forest Baptist Medical Center, Winston Salem, NC, USA
- 421 **Investigation of Hospital-Onset (HO) Methicillin-Resistant *Staphylococcus aureus* (MRSA) Blood Stream Infections (BSIs) at High Burden Acute Care Facilities in 2 States, 2016**  
D. Cal Ham, MD, MPH<sup>1</sup>, Isaac See, MD<sup>1</sup>, Shannon Novosad, MD MPH<sup>1</sup>, Matthew Crist<sup>2</sup>, Garrett Mahon, MPH<sup>1</sup>, Kevin Spicer<sup>2</sup>, Pamela Talley<sup>3</sup>, Andrea Flinchum<sup>4</sup>, Marion Kainer, MD, MPH<sup>3</sup>, **Maroya S. Walters, PhD, ScM<sup>5</sup>** and Alexander J. Kallen, MD, MPH<sup>1</sup>, (1)Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, GA, USA, (2)Division of Healthcare Quality Promotion, CDC, Atlanta, GA, USA, (3)Tennessee Department of Health, Nashville, TN, USA, (4)Kentucky Department for Public Health, Frankfort, KY, USA, (5)Centers for Disease Control and Prevention, Atlanta, GA, USA
- 422 **Hand Hygiene before Donning Non-Sterile Gloves: Healthcare Workers' Beliefs and Practices**  
**Jure Baloh, PhD<sup>1</sup>**, Kerri A. Thom, MD, MS<sup>2</sup>, Eli Perencevich, MD, MS<sup>1,3</sup>, Clare Rock, MD, MS<sup>4,5,6</sup>, Gwen Robinson, MPH<sup>2</sup>, Melissa A Ward, MS<sup>1</sup>, Loreen Herwaldt, MD<sup>1</sup> and Heather Schacht Reisinger, PhD<sup>1,3</sup>, (1)University of Iowa Carver College of Medicine, Iowa City, IA, USA, (2)University of Maryland School of Medicine, Baltimore, MD, USA, (3)Iowa City VA Healthcare System, Iowa City, IA, USA, (4)The Johns Hopkins Hospital, Baltimore, MD, USA, (5)Johns Hopkins Medicine Armstrong Institute for Patient Safety and Quality, Baltimore, MD, USA, (6)Johns Hopkins University School of Medicine, Baltimore, MD, USA
- 423 **A Critical Examination of the Practice of Active Surveillance for Vancomycin-Resistant *Enterococcus* in the Neonatal Intensive Care Unit**  
**Julia R Glanternik, MD<sup>1</sup>**, Sonali Advani, MBBS, MPH<sup>2</sup>, Michael Aniskiewicz, M (ASCP), CIC<sup>3</sup>, Christina Murdzek, M(ASCP), MHS<sup>3</sup>, Matthew Bizzarro, MD<sup>4</sup>, Robert S Baltimore, MD<sup>1,3</sup> and Richard A Martinello, MD<sup>3,5</sup>, (1)Yale School of Medicine, Department of Pediatrics, Section of Pediatric Infectious Diseases, New Haven, CT, USA, (2)Yale School of Medicine, Department of Medicine, Section of Infectious Diseases, New Haven, CT, USA, (3)Yale New Haven Hospital, Department of Infection Prevention, New Haven, CT, USA, (4)Yale School of Medicine, Department of Pediatrics, Section of Neonatal-Perinatal Medicine, New Haven, CT, USA, (5)Yale School of Medicine, Department of Medicine and Pediatrics, Section of Infectious Diseases, New Haven, CT, USA
- 424 **Impact of an Infection Control Assessment and Response Visit on Dialysis Event Rates**  
**Phillip D. Hahn, MPH, CPH<sup>1</sup>**, Tiina Peritz, RN, BSN, MSC<sup>1</sup>, Kristin S. Privette, MPH<sup>1</sup> and Susan E. Coffin, MD, MPH<sup>1,2</sup>, (1)Philadelphia Department of Public Health, Philadelphia, PA, USA, (2)Children's Hospital of Philadelphia, Philadelphia, PA, USA
- 425 **Use Meaningful Data to Drive Hand Hygiene Improvement in Healthcare Providers**  
**Xiaoyan Song<sup>1,2</sup>**, Deena Levey, RN<sup>3</sup>, Jennifer Yin, RN<sup>4</sup>, Rusty Siedsch, Roberta L DeBiasi, MD, MS<sup>5</sup> and Rahul Shah, MD, MBA<sup>3,6</sup>, (1)Children's National Medical Center, Washington, DC, USA, (2)The George Washington University School of Medicine, Washington, DC, USA, (3)Children's National Health System, Washington, DC, USA, (4)Children's National Health System, Washington, DC, USA, (5)George Washington University School of Medicine, Washington, DC, USA, (6)George Washington University School of Medicine, Washington, DC, USA
- 426 **Hand Hygiene Compliance Assessment Using Covert Embedded Medical Student Monitors**  
Mark Lacy, MD<sup>1</sup> and **Ali R Ghergherehchi, BS<sup>2</sup>**, (1)School of Medicine Texas Tech University Health Sciences Center, Lubbock, TX, USA, (2)Texas Tech University School of Medicine, Lubbock, TX, USA
- 427 **First Report of *Elizabethkingia anophelis* in New York: Re-Emerging Pathogen or Better Detection?**  
**Emil Lesho<sup>1</sup>**, Erik C. Snesrud, MS<sup>2</sup>, Edward Walsh, MD<sup>3</sup>, Ana Ong, BS<sup>2</sup>, Rosslyn Maybank<sup>2</sup>, Yoon I Kwak, MS<sup>2</sup>, Jean Campbell<sup>1</sup>, Anthony Jones<sup>2</sup>, Maryrose Laguio-Vila<sup>1</sup>, Patrick McGann, PhD<sup>2</sup> and Mary Hinkle, MD<sup>2</sup>, (1)Rochester Regional Health, Rochester, NY, USA, (2)Walter Reed Army Institute of Research, Silver Spring, MD, USA, (3)University of Rochester School of Medicine, Rochester, NY, USA
- 428 **Got GAS? Ease the Bloat with Rapid Turnaround Sequencing**  
Melissa Z. Bronstein, MPA, RN, CIC<sup>1</sup>, Erik C. Snesrud, MS<sup>2</sup>, Ana Ong, BS<sup>2</sup>, Rosslyn Maybank<sup>2</sup>, Yoon I Kwak, MS<sup>2</sup>, Anthony Jones<sup>2</sup>, Mary Hinkle, MD<sup>2</sup>, Patrick McGann, PhD<sup>2</sup>, Margaret Pettis<sup>1</sup> and **Emil Lesho<sup>1</sup>**, (1)Rochester Regional Health, Rochester, NY, USA, (2)Walter Reed Army Institute of Research, Silver Spring, MD, USA

- 429 **Predicting the Impact of a Regional Strategy for Containing a Novel Multidrug-Resistant Organisms (MDRO)**  
**Prabasaj Paul, PhD, MPH<sup>1</sup>**, Rachel Slayton, PhD, MPH<sup>2</sup>, Alexander J. Kallen, MD, MPH<sup>2</sup>, Maroya S. Walters, PhD, ScM<sup>3</sup> and John Jernigan, MD, MS<sup>2</sup>, (1)Division of Healthcare Quality Promotion, CDC, Atlanta, GA, USA, (2)Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, GA, USA, (3)Centers for Disease Control and Prevention, Atlanta, GA, USA
- 430 **Antimicrobial Stewardship in Arkansas: A Statewide Antimicrobial Stewardship Initiative Approach**  
**Corey Lance, PharmD<sup>1</sup>**, Kelley Garner, MPH, MLS(ASCP)<sup>1</sup> and Marsha Crader, PharmD<sup>2</sup>, (1)Arkansas Department of Health, Little Rock, AR, USA, (2)University of Arkansas for Medical Sciences, Little Rock, AR, USA
- 431 **Neonatal Intensive Care Unit Multidrug Resistant Organism Colonization: The Growing Threat of Gram Negative Rods**  
**Abigail E Mudd, BA<sup>1</sup>**, Jane M Gould, MD<sup>2</sup>, Patricia Hennessey, RN<sup>3</sup> and Andrea Levine<sup>3</sup>, (1)Dornsife School of Public Health, Drexel University, Philadelphia, PA, USA, (2)Drexel University College of Medicine, St. Christopher's Hospital for Children, Philadelphia, PA, USA, (3)St. Christopher's Hospital for Children, Philadelphia, PA, USA
- 432 **Thinking Beyond the Hospital Walls: Adaptive Preparedness Strategies for US Ebola Assessment Hospitals**  
**Robert Nickla, BS, M(ASCP)**, Oregon Health Authority State Public Health Laboratory, Hillsboro, OR, USA
- 433 **A Longitudinal Comparison of Oregon *Clostridium difficile* Infection Data Reported to EIP and NHSN, 2012-2015**  
**Roza Tammer, MPH, CIC<sup>1</sup>**, Valerie L. S. Ocampo, RN, BSN, MIPH<sup>1</sup> and Rosalie D. Walker Patterson, RN, MSN<sup>2</sup>, (1)Oregon Health Authority, Portland, OR, USA, (2)Sky Lakes Medical Center, Klamath Falls, OR, USA
- 434 **Analysis of Healthcare Associated Tuberculosis Exposures at an Academic Medical Center**  
**Dana Pepe, MD, MPH<sup>1</sup>**, Sonali Advani, MBBS, MPH<sup>1</sup>, Michael Aniskiewicz, M (ASCP), CIC<sup>2</sup>, George Paci, RN<sup>2</sup>, Ellen Macone, RN<sup>3</sup>, Linda Sullivan, BSN, MBA<sup>2</sup> and Richard A. Martinello, MD<sup>4</sup>, (1)Yale School of Medicine, Department of Medicine, Section of Infectious Diseases, New Haven, CT, USA, (2)Yale New Haven Hospital, Department of Infection Prevention, New Haven, CT, USA, (3)Yale New Haven Hospital, Department of Quality and Safety, New Haven, CT, USA, (4)Yale School of Medicine, Department of Medicine and Pediatrics, Section of Infectious Diseases, New Haven, CT, USA
- 435 **Outbreak of Scabies in a Neonatal Intensive Care Unit**  
**Vini Vijayan, MD<sup>1</sup>**, Elizabeth Marrero, MSN, RN, CNOR, CIC<sup>2</sup>, Michele Honeycutt, BSN, RN, BSN, CIC<sup>2</sup>, Anna Gaspar, MSN, RN, CCRN<sup>2</sup>, Christy Wisdom, MSN, RN, CIC, FAPIC<sup>2</sup> and Matthew Linam, MD, MS<sup>3</sup>, (1)University of Arkansas for Medical Sciences, Little Rock, AR, USA, (2)Arkansas Children's Hospital, Little Rock, AR, USA, (3)Emory University and Children's Healthcare of Atlanta, Atlanta, GA, USA
- 436 **Assessing Dispersion of *Mycobacterium chimaera* in the Operating Room**  
**Bryan E. Christensen, PhD, MEPC**, Division of Healthcare Quality Promotion, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, GA, USA
- 437 **Carbapenemase-Producing Enterobacteriaceae Surveillance in Ontario, 2012-2017**  
**Emily Shing, MPH**, Samir N Patel and Gary Garber, Public Health Ontario, Toronto, ON, Canada
- 438 **Just-In-Time Hand Hygiene Coaching Improves Hand Hygiene and the Quality of Hand Hygiene Observations**  
**Jorge P. Parada, MD, MPH<sup>1,2</sup>**, Cynthia Koehn, RNC MSM<sup>2</sup>, Kathleen M Fujiu, MBA RN BSN<sup>2</sup>, Ayat Abuihmod, MS<sup>2</sup>, Dominique Wright, MPH<sup>2</sup> and Kevin R Smith, MD<sup>2,3</sup>, (1)Loyola University Chicago, Maywood, IL, USA, (2)Loyola University Medical Center, Maywood, IL, USA, (3)Loyola University Chicago, Chicago, IL, USA
- 439 **Do Patients in Contact Precautions Receive Education on Patient Hand Hygiene?**  
**Anubhav Kanwar, MD<sup>1</sup>** and Curtis Donskey, MD<sup>2</sup>, (1)Geriatric Research Education and Clinical Center (GRECC), Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA, (2)Louis Stokes Cleveland Veterans Affairs Medical Center, Cleveland, OH, USA
- 440 **Visit the Past to Predict the Future: History of Methicillin-Resistant *Staphylococcus aureus* (MRSA) Carriage Predicts Future MRSA Surgical-Site Infection**  
**Anubhav Kanwar, MD<sup>1</sup>** and Curtis Donskey, MD<sup>2</sup>, (1)Geriatric Research Education and Clinical Center (GRECC), Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA, (2)Louis Stokes Cleveland Veterans Affairs Medical Center, Cleveland, OH, USA
- 441 **Clothing and Shoes of Physicians Leaving the Hospital Are Often Contaminated with Healthcare-Associated Pathogens**  
**Anubhav Kanwar, MD<sup>1</sup>**, Jennifer Cadnum, BS<sup>2</sup>, Annette Jencson, BSMT, CIC<sup>3</sup> and Curtis Donskey, MD<sup>4</sup>, (1)Geriatric Research Education and Clinical Center (GRECC), Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA, (2)Louis Stokes Veterans Affairs Medical Center, Cleveland, OH, USA, (3)Geriatric Research, Education, and Clinical Center, Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA, (4)Louis Stokes Cleveland Veterans Affairs Medical Center, Cleveland, OH, USA
- 442 **Common Gaps in Hemodialysis Infection Control Practices Revealed by Standardized Infection Control Assessments**  
**Tiina Peritz, RN, BSN, MSc<sup>1</sup>**, Dana Higgins, MPH<sup>1</sup>, Heather Bayko, MPH<sup>1,2</sup>, Phillip D. Hahn, MPH, CPH<sup>1</sup>, Ami Patel, PhD<sup>1,2</sup>, Susan E. Coffin, MD, MPH<sup>1,3</sup>, Kristin S. Privette, MPH<sup>1</sup> and Eileen Farnon, MD<sup>1</sup>, (1)Philadelphia Department of Public Health, Philadelphia, PA, USA, (2)Centers for Disease Control and Prevention, Atlanta, GA, USA, (3)Children's Hospital of Philadelphia, Philadelphia, PA, USA
- 443 **Laboratory Practices for Identification and Reporting of Carbapenem-resistant Enterobacteriaceae**  
**Charlesnika T. Evans, PhD, MPH<sup>1,2</sup>**, Katie J. Suda, PharmD, MS<sup>3,4</sup>, Margaret Fitzpatrick, MD, MS<sup>4,5</sup>, Swetha Ramanathan, MPH<sup>4</sup>, Nasia Safdar, MD, PhD<sup>6,7</sup>, Martin E. Evans, MD<sup>8,9</sup>, Makoto Jones, MD, MS<sup>10,11</sup>, Christopher Pfeiffer, MD<sup>12,13</sup>, J. Stacey Klutts, MD, PhD<sup>14,15</sup>, Michael S. Icardi, MD<sup>14</sup>, Eli Perencevich, MD, MS<sup>16,17</sup> and Michael Rubin, MD, PhD<sup>18,19</sup>, (1)Northwestern University, Chicago, IL, USA, (2)Center of Innovation for Complex Chronic Healthcare, Hines, IL, USA, (3)University of Illinois at Chicago, College of Pharmacy, Chicago, IL, USA, (4)VA Center of Innovation for Complex Chronic Healthcare, Hines, IL, USA, (5)Loyola University, Maywood, IL, USA, (6)William S. Middleton Memorial Veterans Hospital, Madison, WI, USA, (7)University of Wisconsin School of Medicine & Public Health, Division of Infectious Diseases, Madison, WI, USA, (8)VHA National Infectious Diseases Service, Lexington, KY, USA, (9)Lexington VA Medical Center, Lexington, KY, USA, (10)Salt Lake City VA Medical Center, Salt Lake City, UT, USA, (11)University of Utah, Salt Lake City, UT, USA, (12)Division of Infectious Disease, Oregon Health & Science University, Portland, OR, USA, (13)VA Portland Health Care System, Portland, OR, USA, (14)Central Iowa VA Healthcare System, Iowa City, IA, USA, (15)University of Iowa Hospitals and Clinics, Iowa City, IA, USA, (16)Iowa City VA Healthcare System, Iowa City, IA, USA, (17)University of Iowa Carver College of Medicine, Iowa City, IA, USA, (18)University of Utah School of Medicine, Salt Lake City, UT, USA, (19)VA Salt Lake City Health Care System, Salt Lake City, UT, USA

- 444 **Evaluation of the First Nine Months of the CDC Enhanced Strategy to Slow the Spread of Emerging Carbapenemases**  
**Kate Russell, MD, MPH**, Alicia Shugart, MA, Garrett Mahon, MPH, Sarah Malik, PhD, Paige Gable, David Lonsway, MMedSc, Allison Brown, PhD, MPH, Alexander J. Kallen, MD, MPH and Maroya Walters, PhD, ScM, Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, GA, USA
- 445 **Reporting Accuracy of CLABSI and CAUTI in NHSN: Findings from Data Validation from State Health Departments.**  
 Suparna Bagchi, DrPH<sup>1</sup> and **Jennifer Watkins, MPH, BSN, RN<sup>2</sup>**, (1)CDC, Atlanta, GA, USA, (2)DeKalb Medical Center, Decatur, GA, USA
- 446 **Carbapenem-resistant Enterobacteriaceae, What's in a Name? Assessment of the Modified 2015 CDC Criteria in a Major Teaching Hospital**  
 **Michael Ben-Aderet, MD<sup>1</sup>**, Meghan Madhusudhan, MPH<sup>1</sup>, Matthew Almario, MPH<sup>1</sup>, Johan Kolev, MD<sup>2</sup>, Margie Morgan, PhD<sup>1</sup> and Jonathan Grein, MD<sup>1</sup>, (1)Cedars-Sinai Medical Center, Los Angeles, CA, USA, (2)UCLA Multi-Campus Infectious Disease Program, Los Angeles, CA, USA
- 447 **A Preliminary Case Series of the Ongoing Hepatitis A Outbreak in Michigan: Observation from a Tertiary Medical Center in Greater Detroit.**  
**Suganya Chandramohan, MD<sup>1</sup>**, Parminder Viridi, MD<sup>1</sup>, Aleena Saleem, MD<sup>1</sup>, Nikhila Thammineni, MD<sup>1</sup>, Anupamdeep Singh Mehar, MD<sup>1</sup>, Reda Awali<sup>1</sup>, Amir Laktineh, MD<sup>2</sup>, Angad Singh Gill, MD<sup>1</sup>, Amar Krishna, MD<sup>1</sup>, Jennifer LeRose, MPH<sup>3</sup> and Teena Chopra, MD, MPH<sup>4</sup>, (1)Division of Infectious Diseases, Detroit Medical Center/Wayne State University, Detroit, MI, USA, (2) Department of Medicine, Detroit Medical Center/Wayne State University, Detroit, MI, USA, (3)Division of Infection Prevention and Epidemiology, Detroit Medical Center, Detroit, MI, USA, (4)Infection Prevention and Hospital Epidemiology, Detroit Medical Center, Detroit, MI, USA
- 448 **Risk Factors and Novel Risk Prediction Model for Community Onset ESBL Urinary Tract Infections**  
**Sarah Neill, MD, MPH<sup>1</sup>**, Dheeraj Goyal, MD, MPH<sup>2</sup>, Nathan Dean, MD<sup>1,3</sup>, Peter Jones, MSLS<sup>4</sup> and Kristin Dascomb, MD, PhD<sup>5</sup>, (1)University of Utah, Salt Lake City, UT, USA, (2)Mercy Health, Fairfield, OH, USA, (3)Intermountain Medical Center, Murry, UT, USA, (4)Intermountain Medical Center, Murray, UT, USA, (5) Intermountain Healthcare, Murray, UT, USA
- 449 **Attributable Mortality of Resistances to Quinolone and Cephalosporin in Nosocomial Gram-negative Rod Bacteremia**  
**Hiroyuki Suzuki, MD<sup>1</sup>**, Daniel J Livorsi, MD, MSc<sup>1,2</sup>, Eli Perencevich, MD, MS<sup>1,2</sup>, Kelly K Richardson, PhD<sup>3</sup>, Brice F Beck, MA<sup>3</sup>, Bruce Alexander, PharmD<sup>3</sup> and Michihiko Goto, MD, MSCI<sup>1,2</sup>, (1)University of Iowa Carver College of Medicine, Iowa City, IA, USA, (2)Iowa City VA Healthcare System, Iowa City, IA, USA, (3) Iowa City VA Medical Center, Iowa City, IA, USA
- 450 **Interfacility Communication Gaps: A Carbapenem-Resistant Enterobacteriaceae (CRE) Outbreak Investigation in a Skilled Nursing Facility (SNF)**  
**Wendy Manuel Knight, MPH<sup>1</sup>**, Prabhu Gounder, MD, MPH<sup>1</sup>, Karen Cho, BSN/RN<sup>1</sup>, Audrey Manalo, PHM, M(ASCP)CM<sup>2</sup>, Nicole Green, PhD, D(ABMM)<sup>2</sup> and Dawn Terashita, MD, MPH<sup>1</sup>, (1)Los Angeles County Department of Public Health Acute Communicable Disease Control Program, Los Angeles, CA, USA, (2)Los Angeles County Department of Public Health, Public Health Laboratory, Downey, CA, USA
- 451 **The Effect of Universal Decolonization on MRSA and CRE Acquisition in Adult ICUs: A Pre and Post Intervention Analysis**  
**Jason Moss, DO**, Derek Forster, MD, Lovisa Bjork Olafsdottir, MD, David Burgess, PharmD, FCCP, FIDP, Aric Schadler, MS and Kulwinder Sekhon, MPH, University of Kentucky, Lexington, KY, USA
- 452 **The Fraser Health Experience with Carbapenemase-Producing Organisms: Seven Years of Epidemiology and Control Measures**  
 **Katy Short, MPH**, Tara Donovan, MSc, Petra Welsh, MA and Elizabeth Brodtkin, MD, FRCPC, Fraser Health, Surrey, BC, Canada
- 453 **Down the Drain: Sink Drains as a Reservoir for Carbapenemase-Producing Organisms**  
**Elizabeth Brodtkin, MD, FRCPC**, Dale Purych, MD, FRCPC, Katy Short, MPH, Marc Dagneau, BA and Sandeep Baddan, RN, Fraser Health, Surrey, BC, Canada
- 454 **A Multicenter Investigation to Characterize the Risk for Pathogen Transmission from Healthcare Facility Sinks**  
 **Scott Gestrich, M.D.<sup>1</sup>**, Annette Jencson, BSMT, CIC<sup>2</sup>, Scott Livingston, B.A.<sup>3</sup>, Jennifer Cadnum, BS<sup>4</sup>, Brigid Wilson, PhD<sup>5</sup> and Curtis Donskey, MD<sup>1</sup>, (1)Louis Stokes Cleveland Veterans Affairs Medical Center, Cleveland, OH, USA, (2)Cleveland VA Medical Center, Cleveland, OH, USA, (3)Case Western Reserve University, Cleveland, OH, USA, (4)Louis Stokes Veterans Affairs Medical Center, Cleveland, OH, USA, (5)Louis Stokes Cleveland Veterans Aff Med Ctr, Cleveland, OH, USA
- 455 **Bacterial Burden and Risk Factors for Transmission of Vancomycin-Resistant Enterococcus to Healthcare Workers**  
 **Sarah S. Jackson, MPH<sup>1</sup>**, Anthony Harris, MD, MPH<sup>1</sup>, Laurence S. Magder, PhD<sup>1</sup>, Kristen A. Stafford, PhD, MPH<sup>1</sup>, J. Kristie Johnson, PhD<sup>2</sup>, Loren Miller, MD, MPH<sup>3</sup>, David Calfee, MD, MS<sup>4</sup> and Kerri A. Thom, MD, MS<sup>5</sup>, (1)Department of Epidemiology and Public Health, University of Maryland Baltimore, Baltimore, MD, USA, (2)Department of Epidemiology and Public Health, University of Maryland School of Medicine, Baltimore, MD, USA, (3) LA BioMed at Harbor-UCLA Medical Center, Torrance, CA, USA, (4)Weill Cornell Medicine, New York, NY, USA, (5)University of Maryland School of Medicine, Baltimore, MD, USA
- 456 **Geographic Distribution and Resistance Profile of Multi-Drug Resistant Escherichia coli in the Dominican Republic**  
**Alfredo J Mena Lora, MD<sup>1</sup>**, Patricia Gonzalez, MD<sup>2</sup>, Magnolia Lluberes<sup>2</sup>, Gabriel Grau<sup>2</sup> and Susan Bleasdale, MD<sup>1</sup>, (1)University of Illinois at Chicago, College of Medicine, Chicago, IL, USA, (2) Laboratorios Amadita, Santo Domingo, Dominican Republic
- 457 **The First Year of Testing Carbapenem-Resistant Enterobacteriaceae and Pseudomonas in the Antimicrobial Resistance Laboratory Network: Increasing Detection for More Rapid Prevention**  
**Sarah Malik, PhD<sup>1,2</sup>**, Jennifer Huang, MPH<sup>1</sup>, Garrett Mahon, MPH<sup>1,3</sup> and Allison Brown, PhD, MPH<sup>1</sup>, (1)Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, GA, USA, (2)CFD Research Corporation, Huntsville, AL, USA, (3)Eagle Medical Services, Atlanta, GA, USA
- 458 **Investigating a Human Parainfluenza Virus Type-3 Outbreak in a Level 3 Neonatal Intensive Care Unit**  
**Michael D Williams, D.O.<sup>1</sup>**, Angela Gabasan, RN, MSN, CIC<sup>2</sup> and Krystina Woods, M.D.<sup>1</sup>, (1)Mount Sinai West - Mount Sinai Health System, New York, NY, USA, (2)Mount Sinai West, New York, NY, USA



- 459 **Evaluation of a Novel Approach for Disinfection of Sinks in Healthcare Facilities**  
**Jennifer Cadnum, BS<sup>1</sup>**, Scott Gestrich, M.D.<sup>2</sup>, Scott Livingston, B.A.<sup>3</sup>, Annette Jencson, BSMT, CIC<sup>4</sup> and Curtis Donskey, MD<sup>2</sup>,  
 (1)Louis Stokes Veterans Affairs Medical Center, Cleveland, OH, USA, (2)Louis Stokes Cleveland Veterans Affairs Medical Center, Cleveland, OH, USA, (3)Case Western Reserve University, Cleveland, OH, USA, (4)Geriatric Research, Education, and Clinical Center, Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA
- 460 **Combining Epidemiology with Sequencing to Investigate Methicillin Resistant *Staphylococcus aureus* Transmission**  
**Andrea Ankrum, MS MS MT(ASCP) CIC<sup>1</sup>**, Matthew C Washam, MD MPH<sup>2</sup>, Joel E Mortensen, PhD<sup>1</sup>, Xinhua Zhang, MD<sup>1</sup>, Heidi Andersen, MD MS<sup>1</sup>, Joshua Schaffzin, MD PhD<sup>1</sup> and David B Haslam, MD<sup>1</sup>, (1)Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA, (2)UF Health Shands Children's Hospital, Gainesville, FL, USA
- 461 **Factors Affecting Personal Protective Equipment Use Among Healthcare Personnel: Views from their Side**  
**Molly Harrod, PhD<sup>1</sup>**, Lauren Weston, MPH<sup>1</sup>, Lynn A Gregory, MSN<sup>2,3</sup>, Laura Petersen, MHA<sup>4</sup> and Sarah L. Krein, PhD, RN<sup>1,4</sup>,  
 (1)VA Ann Arbor Center for Clinical Management Research, Ann Arbor, MI, USA, (2)University of Michigan Department of Internal Medicine, Ann Arbor, MI, USA, (3)Center for Clinical Management Research, Ann Arbor, MI, USA, (4)University of Michigan, Ann Arbor, MI, USA
- 462 **Yikes: Less Than Anticipated Efficacy of Alcohol-Based Hand Sanitizer in Reducing the Burden of Methicillin-Resistant *Staphylococcus aureus* (MRSA) on Hands of MRSA-Colonized Patients**  
**Anubhav Kanwar, MD<sup>1</sup>**, Aisha Mustapha, BS, MPH<sup>2</sup>, Jennifer L. Cadnum, BS<sup>3</sup> and Curtis Donskey, MD<sup>3</sup>, (1)Geriatric Research Education and Clinical Center (GRECC), Louis Stokes Cleveland VA Medical Center, Cleveland, OH, USA, (2)Case Western Reserve University School of Medicine, Cleveland, OH, USA, (3)Louis Stokes Cleveland Veterans Affairs Medical Center, Cleveland, OH, USA
- 463 **Transmission Thresholds in Healthcare Facilities: Application to Outbreaks in Long-term Acute Care Hospitals**  
**Damon J.A. Toth, PhD<sup>1,2</sup>**, Karim Khader, PhD<sup>1,2</sup>, Christopher D. Mitchell, PhD<sup>1</sup> and Matthew H Samore, MD<sup>1,2</sup>, (1)Division of Epidemiology, University of Utah School of Medicine, Salt Lake City, UT, USA, (2)VA Salt Lake City Health Care System IDEAS Center, Salt Lake City, UT, USA
- 464 **Inadequate Hand Hygiene (HH) and Contamination During Doffing of Personal Protective Equipment (PPE) for Serious Communicable Diseases**  
**Puja Y. Shah, MPH<sup>1</sup>**, Victoria L. Walsh, MPH<sup>1</sup>, Joel M. Mumma<sup>2</sup>, Jeremy Posey<sup>3</sup>, Francis T Durso, PhD<sup>2</sup>, Kimberly Erukunuakpor, MPH<sup>3</sup>, Lisa M. Casanova, PhD<sup>3</sup>, Collen K. Kraft, MD<sup>4</sup>, Andi L. Shane, MD, MPH, MSc<sup>5</sup>, Susan Ray, MD<sup>5</sup>, Jennifer DuBose<sup>2</sup>, Craig Zimring, PhD<sup>2</sup>, Ashley Tippet, MPH, MLS(ASCP)CM<sup>1</sup>, James P. Steinberg, MD<sup>1</sup> and Jesse Jacob, MD<sup>5,6</sup>, (1)Emory University, Atlanta, GA, USA, (2)Georgia Institute of Technology, Atlanta, GA, USA, (3)Georgia State University, Atlanta, GA, USA, (4)Emory University Hospital, Atlanta, GA, USA, (5)Emory University School of Medicine, Atlanta, GA, USA, (6)Division of Infectious Disease, Emory University School of Medicine, Atlanta, GA, USA
- 465 **Hand Hygiene (HH) Adherence among Healthcare Workers Variation by Time of Day**  
**Victoria Walsh, MPH<sup>1</sup>**, Ashley A. Tippet, MPH, MLS(ASCP)CM<sup>2</sup>, Jesse T. Jacob, MD<sup>3</sup>, Puja Y. Shah, MPH<sup>2</sup> and James P. Steinberg, MD<sup>2</sup>, (1)Emory University, School of Medicine, Division of Infectious Diseases, Atlanta, GA, USA, (2)Emory University, Atlanta, GA, USA, (3)Division of Infectious Disease, Emory University School of Medicine, Atlanta, GA, USA
- 466 **Survey of Methicillin Resistant *Staphylococcus Aureus* Infection Prevention Practices Across U.S. Burn Centers**  
**Saranya Seetharaman, MBBS, MPH<sup>1</sup>**, Ruth Bertuzzi, MSN, RN, CMSRN, CIC<sup>1</sup>, Jackie Steinberg, RN, BSN, MPH<sup>1</sup>, Mark Moore, RN, CIC<sup>1</sup>, Myioishi Gubbings<sup>1</sup>, Julie Caffrey, DO, MS<sup>2</sup> and Geeta Sood, MD<sup>2</sup>, (1)Johns Hopkins Bayview Medical Center, Baltimore, MD, USA, (2)Johns Hopkins Medical Institutions, Baltimore, MD, USA
- 467 **Clinical Failure of Tazobactam-Based Beta-lactam for ESBL Infections: A Meta-Analysis**  
**Khalid Eljaaly, PharmD, MS, BCPS**, University of Arizona, Tucson, AZ, USA, King Abdulaziz University, Jeddah, Saudi Arabia



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**A JOINT MEETING OF**





The Society for Healthcare Epidemiology of America (SHEA) released its **Primer on Healthcare Epidemiology, Infection Control & Antimicrobial Stewardship: Online Course**. It's an online training course for Infectious Diseases students and trainees as well as other physicians and healthcare practitioners interested in increasing and solidifying their understanding of healthcare epidemiology, infection control & antimicrobial stewardship. This course meets the requirements for infectious disease fellows for course work in healthcare epidemiology & infection prevention as outlined by the American Board for Internal Medicine (ABIM). Ideal for remote learning, the modules were designed using state-of-the-art online learning tools based on expert knowledge from leading specialists in healthcare epidemiology.

The course is comprised of 12 online modules using interactive, engaging case-based scenarios:

1. Pathogen transmission: Diarrheal illness, airborne infections, respiratory viral illness
2. Implementing antimicrobial stewardship
3. Outbreak management in the healthcare setting
4. Approach to control of bioterrorism agents
5. Advanced occupational health management
6. Prevention and management of multidrug resistant organisms including: MRSA, CRE, VRE, ESBL, C. difficile
7. Device Associated Infection: CLABSI, CAUTI and VAP
8. Surgical site infections: Impact, frequency, risk factors

### Accreditation Statement

The Society for Healthcare Epidemiology of America (SHEA) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

### Maintenance of Certification

Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 4 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC point's equivalent to the amount of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

### Physicians

The Society for Healthcare Epidemiology of America (SHEA) designates this live activity for a maximum of *4 AMA PRA Category 1 Credit(s)*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Sign Up to take the Course**

*[www.fellowscourse.shea-online.org](http://www.fellowscourse.shea-online.org)*



### Registration Costs

**Physician Member:** \$349

**Physician Non-Member:** \$399

**Fellows/Allied Professionals  
Member:** \$149

**Fellows/Allied Professionals  
Non-Member:** \$199

## FULL CONFERENCE

**INTERRUPTING THE SLIPPERY SLOPE OF OVER-TESTING TO OVER-TREATING THE URINE**

1:30 – 2:30 p.m.

Grand Ballroom II

**Moderators:** Molly Harrod, PhD, and Valerie Vaughn, MSc, MD**Speaker(s):**CAUTI Evolution: From Improving the Culture of Culturing to Reducing Device Harm – **Mohamad G. Fakih, MD, MPH**A Tale of Two Projects: Stewardship for ABS in Public/Private Settings – **Barbara Trautner, MD, PhD****Learning Objectives:**

- Identify key considerations for improving culturing practices
- Describe a practical approach and ongoing work to reduce over-treatment of asymptomatic bacteriuria

**LEVERAGING THE SYNERGY OF ANTIMICROBIAL STEWARDSHIP AND INFECTION PREVENTION AND CONTROL PROGRAMS**

1:30 – 2:30 p.m.

Grand Ballroom I

**Moderators:** Sarah Kabbani, MD, MSc, and Edward Septimus, MD**Speaker(s):**The CDC Core Elements Across the Continuum of Care– **Edward A Stenehjem, MD, MSc**The Impact of Regulations and Standards– **Marion Kainer, MBBS, MPH**IPC's Supportive Role in Advancing Antimicrobial Stewardship Interventions across the Continuum of Care – **Janet Haas, PhD, RN, CIC****Learning Objectives:**

- Illustrate how the CDC core elements of antibiotic stewardship programs can be used as a framework for ASPs in any healthcare setting
- Examine how the antibiotic stewardship regulatory environment has changed in the past 5 years
- Explore the infection prevention and control program's supportive role in advancing antibiotic stewardship interventions across the continuum of care

*This session is co-sponsored by APIC.***HEALTHCARE ASSOCIATED VIRUSES**

1:30 – 2:30 p.m.

Broadway Room

**Moderators:** Martha Mueller, MS, and Patsy Stinchfield, MS, NP, RN**Speaker(s):**Pro — Hospital Acquired Respiratory Viruses Should Be Used as a Pediatric Quality Measure – **Matthew Linam, MD, MS**Con — Hospital Associated Respiratory Viral Infections Should NOT Be Used as a Pediatric Quality Measure – **Susan E Coffin, MD, MPH****Learning Objectives:**

- Describe efforts surrounding reduction of respiratory HAIs: improving surveillance definitions, infection control practices, and parent/patient engagement and the potential benefits
- Discuss barriers to implementation of respiratory viruses as HAIs tracked nationally as quality measures

## SHEA/CDC TRAINING COURSE

**HOW TO READ A STUDY & PERFORM RESEARCH**

1:30 – 2:00 p.m.

Pavilion Ballroom

**Speaker(s):** Daniel Morgan, MD, MS**Learning Objectives:**

- Examine concepts of study design, implementation of a study infrastructure, analytic methods, data needs and interpretation of data for observational and intervention studies
- Distinguish approaches to evaluate the impact of an intervention, including:
  - Decreases in rates of HAIs
  - Changes in prevalence or incidence of resistant organisms
  - Reductions in inappropriate device use
  - Reductions in Antibiotic use
  - Reductions in length of hospitalization
  - Decreases in cost
- Assess when to use various study designs such as before after and cluster randomized trials, and when to use various analyses such as time-series analysis
- Calculate p values, confidence intervals and effect estimates/ odds ratios to evaluate data for identification of epidemiologic trends, analysis of outbreaks and in the conduct of formal epidemiologic studies
- Assess the process for presentation of analytic study data in varying formats, including summary presentations

## BUSINESS OF INFECTION PREVENTION: PROMOTING GROWTH OF A PROGRAM

2:00 – 2:30 p.m.

*Pavilion Ballroom*

**Speaker(s):** Waleed Javaid, MD

### Learning Objectives:

- Explain the importance of physician and administrative leader buy in for an infection prevention Program
- Indicate how to write and present to institutional leadership a strategic plan and business case for instituting, maintaining, and expanding of an infection control program
- Learn how to successfully recruit physician and administrative champions for planned programs
- Discuss how to develop and present a report detailing the rationale and proposed benefits of a Program or intervention, including financial analysis, improvement in patient safety, and justification for funding of proposed team members
- Demonstrate how to develop and present annual reports detailing interventions, cost-savings/maintenance, improved patient safety

## SHEA ANTIBIOTIC STEWARDSHIP TRAINING COURSE

## DEVELOPING AN ANTIBIOTIC STEWARDSHIP PROGRAM IN AMBULATORY CARE

1:30 – 2:00 p.m.

*Galleria*

**Speaker(s):** Matthew Kronman, MD, MSCE

### Learning Objectives:

- Define the unique challenges for resources, team development and measurement in ambulatory care settings
- Identify starter strategies for implementing effective antibiotic stewardship in ambulatory settings
- Discuss the role of the patient in decision-making

## CASE STUDY #7: ADULT CASE – INTERVENTION TO IMPROVE ANTIBIOTIC USE IN THE IMMUNOCOMPROMISED

2:00 – 2:30 p.m.

*Galleria*

**Speaker(s):** Catherine Liu, MD

### Learning Objectives:

- Discuss practical examples of Antibiotic stewardship implementation
- Identify strategies for implementing effective Antibiotic stewardship targeting an institution-specific problem and special populations such as the neonates and the immunosuppressed

## NETWORKING BREAK

2:30 – 2:45 p.m.

*Grand Ballroom Foyer*

## FULL CONFERENCE

## BEST ORAL ABSTRACT SESSION

2:45 – 4:00 p.m.

*Grand Ballroom II*

**Moderators:** Hilary Babcock, MD, MPH, and  
Belinda Ostrowsky, MD, MPH

### 10157 Predictive Patient-Specific Antibigrams Could Improve Precision of Empiric Antibiotic Therapy: A Performance Evaluation in an Academic Health System

**Shannon Overly, MS<sup>1</sup>**, Jimish Mehta, PharmD, MSCE<sup>1</sup>, Lauren N Hunt, PharmD, BCPS<sup>1</sup>, Brandon Palermo, MD<sup>1</sup>, W Joseph Ketcherside, MD<sup>1</sup>, Ya-Ting Chen, PhD, MPH<sup>1</sup> and Keith Hamilton, MD<sup>2</sup>, (1)ILUM Health Solutions, Kenilworth, NJ, USA, (2)Hospital of the University of Pennsylvania, Philadelphia, PA, USA

### 10260 Utilization of Predictive Modeling to Identify Emerging Statewide Antibiotic Resistance Trends

Kirthana Beaulac, PharmD<sup>1</sup>, Monica Lauren Tlachac<sup>2</sup>, Elke A Rundensteiner, PhD<sup>2</sup>, Kerri Barton, MPH<sup>3</sup>, **Scott Troppy, MPH, PMP<sup>3</sup>** and Shira Doron, MD<sup>1</sup>, (1)Tufts Medical Center, Boston, MA, USA, (2)Worcester Polytechnic Institute, Worcester, MA, USA, (3) Massachusetts Department of Public Health, Boston, MA, USA

### 10342 Implementation of a Female External Urinary Device to Decrease Catheter Associated Urinary Tract Infections

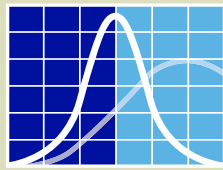
**Dayana Del Carmen Maita Coronel, MD<sup>1,2</sup>**, Leanne O'Connell, RN, MPH<sup>1</sup>, Anne Molloy, RN, MSN<sup>1</sup> and Susan C. Bleasdale, MD<sup>1,3</sup>, (1)University of Illinois Hospital & Health Sciences System, Chicago, IL, USA, (2)University of Illinois College of Medicine, Chicago, IL, USA, (3)University of Illinois at Chicago, College of Medicine, Chicago, IL, USA

### 10549 Carbapenemase-Producing Enterobacteriaceae Surveillance in Washington State, 2012-2017

**Kelly Kauber, MPH**, Tashina Robinson, MS, William G. Lover, PhD and Marisa A D'Angeli, MD, MPH, Washington State Department of Health, Shoreline, WA, USA

### 9885 Assessment and Implementation of Antimicrobial Stewardship Programs in Small and Critical Access Hospitals

**Philip Chung, PharmD, MS<sup>1</sup>**, Scott Bergman, PharmD<sup>1,2</sup>, Muhammad Salman Ashraf, MBBS<sup>3</sup>, Regina Nailon, PhD, RN<sup>1</sup>, Mark E Rupp, MD<sup>3</sup>, Michelle Schwedhelm, MSN, RN, NEA-BC<sup>1</sup>, Maureen Tierney, MD<sup>4</sup>, L. Kate Tyner, BSN, RN<sup>1</sup> and Trevor C van Schooneveld, MD<sup>3</sup>, (1)Nebraska Medicine, Nebraska Antimicrobial Stewardship Assessment and Promotion Program, Omaha, NE, USA, (2)College of Pharmacy, University of Nebraska Medical Center, Omaha, NE, USA, (3)Division of Infectious Diseases, University of Nebraska Medical Center, Omaha, NE, USA, (4)Nebraska DHHS, Lincoln, NE, USA



**SHEA**  
The Society for Healthcare  
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# CDC/SHEA Outbreak Response Training Program (ORTP)

Designed to provide US hospital epidemiologists who oversee infection control programs with the skills, knowledge, and tools available to effectively lead outbreaks at both facility-level outbreaks & large-scale public health emergencies.

## Upcoming “DecisionSim” Modules!

This online simulation-based education enhances decision-making and delivers feedback and improves outcomes through “real-world” training.

Thanks to funding from the Centers for Disease Control and Prevention (CDC), ORTP programming is at **NO COST** to the participants.



### Leadership DecisionSim Module:

Hospital Epidemiologist-Led Hospital Incident Command Systems:  
What to Expect?

**Content Authors:**

Jennifer Hanrahan, DO, MA  
MetroHealth Medical Center

Teena Chopra MD, MPH  
Detroit Medical Center/Wayne State University

### Study DecisionSim Module:

Defending Against Superbugs: An Interactive Case Study Managing an “Outbreak” of Carbapenem-Resistant Enterobacteriaceae (CRE) in a Hospital Setting

**Content Authors:**

Christopher Pfeiffer, MD, MS  
VA Portland Health Care System

Priya Nori MD  
Montefiore Health System  
Albert Einstein College of Medicine

**SHEA/CDC Outbreak Response Training Program (ORTP)**  
**Visit us online for the latest information and online resources.**

[\*\*www.ortp.shea-online.org\*\*](http://www.ortp.shea-online.org)



# Join SHEA Today Because #SHEAMembershipMatters

The Society for Healthcare Epidemiology of America (SHEA) improves public health by establishing infection prevention and antibiotic stewardship guidance for successful implementation across healthcare settings and decreasing antimicrobial resistance.

#SHEAMembershipMatters because SHEA and SHEA members get this done by leading research studies, translating research into clinical practice, developing careers of healthcare epidemiologists, advocating smart policy, promoting antibiotic stewardship, combatting antimicrobial resistance, and advancing the field of healthcare epidemiology.



Stop by the SHEA booth and find out how you can become a member and take advantage of SHEA membership benefits. As a special incentive, we're offering \$50 off new members who join during SHEA Spring 2018.

#SHEAMembershipMatters  
because we are:

## **VALUABLE**

Healthcare professionals value SHEA information and educational resources as essential to professional development and lifelong learning in healthcare epidemiology and antibiotic stewardship.

## **LEADERS IN RESEARCH**

SHEA sets priorities and leads research in healthcare epidemiology and antibiotic stewardship.

## **KNOWLEDGEABLE**

SHEA is the indispensable source of scientific information in the non-governmental sector that informs policy makers and establishes guidance on healthcare epidemiology and antibiotic stewardship.

## **STEWARDS**

SHEA is a leader in promoting the implementation of practical strategies for safe healthcare delivery worldwide, including healthcare associated infection prevention and antibiotic stewardship.

## **CONNECTORS**

SHEA Members benefit from strategic relationships between SHEA and other organizations with similar objectives.

#SHEAMembershipMatters  
because together, we are all  
advocates for building a safer,  
healthier future for all.



## FULL CONFERENCE

**HOW MUCH IS TRULY PREVENTABLE AND HOW HARD SHOULD WE TRY**

2:45 – 4:00 p.m.

*Grand Ballroom I***Moderators:** Marci Drees, MD, MS, and Jennifer Han, MD, MSc**Speaker(s):**Infection Prevention Science: How Much is Truly Preventable and How Hard Should We Try? – **Gonzalo Bearman, MD, MPH**Trying for Zero: Progress or Propaganda? Substance vs Soundbite? – **Lynne Batshon, BS**Hard Questioning of CMS HAC: Does Punitive Policy lead to Improved Infection Prevention Outcomes? – **Lynne Batshon, BS****Learning Objectives:**

- Understand the extent to which HAIs can be eliminated by the current state of infection prevention science
- Re-explore the getting to zero debate and related progress
- Assess the successes and pitfalls of CMS HAC with respect to improved patient care and heightened safety

## SHEA/CDC TRAINING COURSE

**REGULATORY & EMERGENCY PREPAREDNESS**

2:45 – 3:15 p.m.

*Pavilion Ballroom***Speaker(s):** Kathleen Gase, MD, MPH**Learning Objectives:**

- State the role and functions of public health entities at local, state, and national levels
- Review core emergency preparedness concepts, including emergency response planning, incident command functions, and facility response to emergent events
- Assist in policy and response plan development and evaluation for infection-related events, such as bioterrorism or pandemic respiratory pathogens
- Recite an overview of the system of state, federal, and accrediting organization oversight and requirements for healthcare facilities prepare for and survive a visit from CMS, TJC, and State DPH

**PUTTING IT ALL TOGETHER**

3:15 – 4:00 p.m.

*Pavilion Ballroom***Speaker(s):** Sarah Haessler, MD**Learning Objectives:**

- Review an interactive case which leads course participants through the work up of a massive exposure in their healthcare facility
- Identify skills learned to identify which pathogen is responsible, and the mode of transmission
- Identify which healthcare workers and patients were exposed and who needs prophylaxis and/or isolation.
- Apply communication skills to effectively convey information within the healthcare organization and to the media
- List leadership skills to help respond, organize, and manage the massive exposure

## JOINT SESSIONS

**ASK THE ANTIBIOTIC STEWARDSHIP EXPERTS**

2:45 – 4:00 p.m.

*Galleria***Speaker(s):**Our Greatest Antibiotic Stewardship Achievement – **Whitney Buckel, PharmD**Lessons Learned from a Failed Stewardship Intervention – **Pranita Tamma, MD, MHS**How Nursing-Driven ASP Rounds Advanced our Program – **David Ha, PharmD**Patient Perspective – **Brenna Darazs****Learning Objectives:**

- Explore alternative solutions to implementing ASP interventions
- Consider the patient perspective when designing and implementing an ASP

**CLOSING PLENARY: CHANGING THE WORLD THROUGH BETTER COMMUNICATION**

4:15 – 5:45 p.m.

*Grand Ballroom I***Moderators:** Judy Guzman-Cottrill, DO, and Matthew Linam, MD, MS**Speaker(s):**A Call to Action! How to Communicate with Government Leader – **Bradford Fitch**Lessons Learned from The Hill: Pearls and Pitfalls – **Jason Newland, MD, MEd****Learning Objectives:**

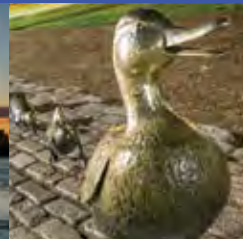
- List benefits of engaging government leaders in advancing infection prevention and antibiotic stewardship policies
- Demonstrate how to effectively communicate infection prevention and antibiotic stewardship with government leaders



SEE YOU NEXT YEAR!

# SHEA Spring 2019 Conference

April 24-26, Boston, MA





CONFERENCE AGENDA

Wednesday, April 18

SHEA Mentorship Breakfast  
7:00-7:50 AM (by invitation only)

**Opening Plenary:**  
Crossing the Communication Chasm  
8:00 - 9:30 AM

Joint Session: Course Overview  
10:00 - 10:15 am

Joint Session: Healthcare  
Epidemiology: Introduction to an  
Emerging Field  
10:15 - 11:15 am

Joint Session: Transmission of  
Infectious Agents in Healthcare  
Settings  
11:15 am - 12:00 pm

Breakout Session:  
Using Data  
10:00 am - 12:00  
pm

Breakout Session:  
Interventions  
10:00 am - 12:00  
pm

Preparing for the  
Next Emergency:  
Improving  
Readiness in  
Hospitals, Labs  
and Communities  
10:00 am - 12:00  
pm

Challenging  
Cases in Infection  
Prevention  
10:00 am - 12:00  
pm

The Needle and  
the Damage  
Done: The  
Infection Control  
implications of  
Opiate Diversion  
by Healthcare  
Workers  
1:30 - 2:30 pm

**Oral  
Abstracts:**  
MRSA: New  
Prevention for an  
Old Problem  
1:30 - 2:30 pm

Allergies, Interactions and Adverse  
Events, Oh My!  
2:00 - 2:30 pm

Hands On Vs.  
Hands Off  
Surveillance  
2:45 - 4:00 pm

Pro/Con: Carrot  
or Stick  
2:45 - 4:00 pm

An Update on Duration of Therapy  
and Therapeutic Monitoring  
2:45 - 3:15 pm

Tackling Liability Issues  
3:15 - 4:00 pm

Stewardship of the Future  
4:15 - 5:45 pm

**Oral Abstracts:**  
A First Look at the  
Fundamentals  
4:15 - 5:45 pm

Special  
Populations:  
Immu-  
nocompromised,  
Dialysis & Burn  
Patients  
5:00 - 5:45 pm

Challenging  
Situations  
5:00 - 5:45 pm

Telemedicine:  
Opportunities in  
Stewardship  
5:00 - 5:45 pm

It's Not an  
Isolated Issue  
4:15 - 5:45 pm

**Oral Abstracts:**  
Microbes on the  
Move  
4:15 - 5:45 pm

Changing the World Through Better Communication  
4:15 - 5:45 PM

Ask the Antibiotic Stewardship Experts  
2:45 - 4:00 pm

Interrupting the  
Slippery Slope of  
Over-testing to  
Over-treating the  
Urine  
1:30 - 2:30 pm

Pro/Con: Healthcare  
Associated  
Virus  
1:30 - 2:30 pm

How to Read a  
Study & Perform  
Research  
1:30 - 2:00 pm

Business of Infection  
Prevention  
2:00 - 2:30 pm

Regulatory &  
Emergency  
Preparedness  
2:45 - 3:15 pm

Putting It All  
Together  
3:15 - 4:00 pm

How Much is  
Truly Preventable  
and How Hard  
Should We Try  
2:45 - 4:00 pm

Looking Beyond  
Our Patients:  
OneHealth  
Perspective  
2:45 - 4:00 pm

R2D2 vs  
Elbow Grease:  
Environmental  
2:45 - 4:00 pm

The Never  
Events  
2:45 - 3:15 pm

Managing Outlier  
Physicians: The  
Reluctant Steward  
3:15 - 3:45 pm

Joint Session: Antibiotic Stewardship  
in Skilled Nursing Facilities and  
Long-Term Care  
3:45 - 4:45 pm

Overview of  
Antibiotic  
Stewardship  
3:45 - 4:45 pm

Joint Session: Post-Acute Care and  
Long-Term Care: Changing The  
National Landscape and Infection  
Prevention  
2:45 - 3:45 pm

Joint Session: Care of the  
National Landscape and Infection  
Prevention  
2:45 - 3:45 pm

It's Not What You Say, It's How You Say It  
**Plenary:**  
1:30 - 2:30 pm

How to Publish  
What We Do  
10:00 am - 12:00  
pm

Occupational  
Infection  
Prevention  
10:00 - 11:00 AM

HA1 Prevention in  
2018: Best  
Practices  
10:00 am - 12:00  
pm

Rapid  
Diagnostic Tests:  
Mini-Lecture &  
Case Study #3  
10:45 - 11:30 am

How to Find  
Resources at  
Your Institution of  
Health System  
11:30 am - 12:00  
pm

CDI Management  
11:15 am - 12:00  
pm

Unique Aspects  
of Pediatric  
Infection Control  
11:15 - 12:00 PM

Problem Session:  
Outbreak in  
the OR  
10:45 - 11:15 am

Approach to  
Epidemic/  
Outbreak  
Investigation  
10:00 - 10:45 AM

Case Study 2:  
Management of  
Resistant Gram  
Positive Infections  
10:00 - 10:45 am

Infection  
Prevention:  
Building Global  
Capacity and  
View  
10:00 am - 12:00  
pm

Occupational  
Infection  
Prevention  
10:00 - 11:00 AM

The Role of  
The Laboratory  
In Healthcare  
Epidemiology  
11:30 am - 12:00  
pm

Beauty and the  
Beasts: Tales from  
the Front Lines  
10:00 - 10:45 am

Stewardship and  
Infectious  
11:15 am - 12:00  
pm

Stewardship at  
the Bedside  
10:45 - 11:15 am

Pneumonia  
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Community  
10:00 - 10:45 am

Management  
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Intervention  
8:00 - 9:00 am

Adult Case –  
Intervention  
10:00 - 10:45 am

Stewardship and  
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Program in  
Ambulatory Care  
1:30 - 2:00 pm

Case Study #7:  
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to Improve  
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2:00 - 2:30 pm

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Joint Session: Care of the  
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It's Not What You Say, It's How You Say It  
**Plenary:**  
1:30 - 2:30 pm

How to Publish  
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10:00 am - 12:00  
pm

Occupational  
Infection  
Prevention  
10:00 - 11:00 AM

HA1 Prevention in  
2018: Best  
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10:00 am - 12:00  
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Rapid  
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Mini-Lecture &  
Case Study #3  
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11:15 am - 12:00  
pm

Unique Aspects  
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11:15 - 12:00 PM

Problem Session:  
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Case Study 2:  
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