



## **AGENDA: “Overcoming antimicrobial resistance: From a One Health Perspective”**

**Shirliff Biofilm Day – Friday, June 13, 2025**

- 8:00 – 9:00 AM**                      **Registration**  
Drexel University  
Geary Auditorium in the Drexel’s New College Building
- 9:00 – 9:10 AM**                      **Opening remarks and Foundation Update**

Session 1: Host-pathogen interactions – Session Chair: DJ Hall, Drexel University

- 9:10 – 9:50 AM**                      **Dr. Cagla Tukul (Keynote speaker), PhD, Temple University**  
Pathogenic bacterial biofilms in the gut
- 9:50 – 10:20 AM**                      **Dr. Kendra Rumbaugh, PhD, Texas Tech University Health Sciences Center**  
Bacterial and host response to biofilm dispersal in wound infections
- 10:20 – 10:40 AM**                      **Dr. Nathan Archer, PhD, Johns Hopkins School of Medicine**  
*Staphylococcus aureus* in skin inflammation
- 10:40 – 10:55 AM**                      *BREAK*

Session 2: Mechanisms of antimicrobial resistance – Session Chair: Jeffrey Freiberg, Vanderbilt

- 10:55 – 11:25 PM**                      **Dr. Paul Dunman, University of Rochester**  
PT/Rif a therapeutic option for bacterial keratitis
- 11:25 – 11:55 AM**                      **Dr. Garth Ehrlich, Drexel University**  
The Bacterial RelA Rheostat Controls both Virulence and Persistence
- 11:55 – 12:15 PM**                      **Dr. Kim Davis, PhD, Johns Hopkins Bloomberg School of Public Health**  
Studying antibiotic persistence in *Yersinia* and *S. aureus* models of infection

12:15 – 1:15 PM

*Boxed Lunch*

Session 3: Diagnostic and therapeutic modalities – Session Chair: Kristie Brao, Harvard

1:15 – 1:55 PM

**Dr. Steve Goodman (Keynote Speaker), Nationwide Children's**  
The Role of Extracellular DNA structure in the offense and defense of biofilm pathogenesis

1:55 – 2:25 PM

**Dr. Michel Koo, University of Pennsylvania**  
Unveiling Biofilm Microbiomes and Therapies: From Real-Time Imaging to Nanoengineering

2:25 – 2:45 PM

**Dr. Josh Lieberman, University of Washington**  
Current Landscape of Clinical Molecular Diagnostics for Endocarditis

2:45 – 3:00 PM

*BREAK*

Session 4: Host and Microbial Metabolism – Session Chair: Josh Lieberman, U of Washington

3:00 – 3:30 PM

**Dr. Tammy Kielian, PhD, University of Nebraska Medical Center**  
*Staphylococcus aureus* biofilm programs leukocyte metabolism to promote infection persistence

3:30 – 3:50 PM

**Dr. Jeffrey Freiberg, MD, PhD, Vanderbilt University**  
Arginine metabolism influences antibiotic tolerance in *Staphylococcus aureus* Biofilms

Session 5: Fungal Biofilms – Session Chair: Nathan Archer, Johns Hopkins

3:50 – 4:20 PM

**Dr. Brian Peters, University of Tennessee Health Science Center**  
Vaginal fungal biofilms: novel therapeutic approaches to manage *Candida albicans* infection

4:20 – 4:40 PM

**Dr. Kristie Brao, MD, PhD, Harvard Medical School**  
Evaluation of Invasive Candidiasis at Autopsy

4:40 – 4:45 PM

**Closing Remarks** (Drs. Garth Ehrlich and Nate Archer)

4:45 PM

Close of Meeting

5:00 - ?? PM

Happy Hour @ Tir Na Nog

**SYMCEL** 