

Program 2022 Spring Virtual Meeting March 24 – 25, 2022



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Opening Keynote

Seth Bordenstein, Ph.D.

Vanderbilt University
Centennial Endowed Professor of Biological Sciences
Director, Vanderbilt Microbiome Innovation Center
Associate Director of the Vanderbilt Institute for
Infection, Immunology, and Inflammation
Professor of Biological Sciences and Pathology,
Microbiology, & Immunology

Dr. Seth Bordenstein is the founding director of the Vanderbilt Microbiome Innovation Center and associate director of the Vanderbilt Institute for Infection, Immunology and Inflammation. His lab investigates the



evolutionary genetic and functional principles that shape the rules of engagement between animals, microbes, and bacteriophages.

His lab employs hypothesis-driven approaches to (i) decipher the genetics and mechanisms of host-microbe symbioses that impact animal reproduction, evolution, and vector control and (ii) unravel the major rules, if any, that shape host-microbiome associations within and between animal species.

Together with his partner Sarah Bordenstein, he also leads the worldwide outreach program *Discover the Microbes Within! The Wolbachia Project* to bring student-based discoveries on bacteria and biotechnology to classrooms and citizen scientists.

Bordenstein was recently elected as a Fellow of the American Academy of Microbiology in 2021 and received the Elizabeth W. Jones Award for Excellence in Education from the Genetics Society of America in 2020.

Spring 2022 Goldschmidt Lecturer

Kristin Parent, Ph.D.

Michigan State University JK Billman, Jr., MD Endowed Research Professor Director, MSU Cryo-EM Associate Professor of Biochemistry and Molecular Biology

Kristin N. Parent, Ph.D. did her graduate work at the University of Connecticut in Dr. Carol Teschke's laboratory, where she applied protein biochemistry, genetics and biophysical approaches to the assembly of bacteriophages. As a postdoctoral fellow in the laboratory of Dr. Timothy S. Baker at the University of



California, San Diego, she trained in cryo-electron microscopy techniques including classic single particle analysis as well as cryo-electron tomography.

In her own laboratory, Parent employs an integrated, interdisciplinary approach. She established her independent laboratory at Michigan State University in 2013 and has published extensively, secured extramural funding, and established a track record as a researcher, educator, and mentor. She also established the first cryo-EM facilities at MSU and serves as the founding Director of the newly established Talos Arctica cryo-EM facility on campus.

Parent was recently honored to receive the American Society for Microbiology Young Investigator award, and was appointed the JK Billman, Jr., MD Endowed Research Professorship.

Texas Branch ASM Spring Meeting 2022

7:00 PM -7:15 PM Welcome and Opening Remarks

Kelli Palmer, PhD

President of ASM Texas Branch University of Texas at Dallas

7:15 PM -8:15 PM Seth Bordenstein, PhD

Centennial Endowed Professor of Biological Sciences

Vanderbilt University

The Battleground of Sexual Reproduction: How Symbionts Selectively Kill Animal Embryos

8:30 PM-9:30 PM State-wide Virtual Lab Game Night hosted by Texas

State University Microbiology Club

8:30 PM-9:30 PM Texas ASM Business Meeting

Friday, March 25th

9:00 AM -10:00 AM Undergraduate Student Oral Presentations

(in competition for Orville Wyss award)

Chair: Jolene Ramsey, PhD, Texas A&M University

10:00 AM-10:30 AM Goldschmidt Awardee Alumna Presentation

Chair: Patricia Baynham, PhD, St. Edwards

Holly Huse, PhD, D(ABMM), M(ASCP)CM, PHM

Director, Microbiology, Dept. of Pathology

Harbor-UCLA Medical Center

From Bench to Bedside: A Day in the Life of a Clinical

Microbiologist

10:30 AM-10:45 AM BREAK

10:45 AM- 11:45 AM Graduate Student Oral Presentations

(in competition for Charlie Gauntt award)

Chair: Jolene Ramsey, PhD, Texas A&M University

11:45 AM-12:00 PM Postdoctoral Oral Presentation

Chair: Jolene Ramsey, PhD, Texas A&M University

12:00 PM -1:00 PM Ll	JNCH BREAK
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1:00 PM -2:30 PM Concurrent Sessions: Careers Panel

and Education Session

Careers Panel Stepping Stones to a Biomedical Career

and Student Networking Chair: Faith Cox, University of Texas Medical Branch

Undergraduate/Graduate/ Post-doc Networking Event hosted by Texas Medical Center Graduate Student

and Postdoc ASM Chapter

Education Session Chair: Stacy Vasquez, PhD, Dallas College

Karla Fuller, PhD

Associate Professor of Biology and Founding Faculty

Program Coordinator, Science

Stella and Charles Guttman Community College

Mama knows best: Affirming cultural knowledge using

the scientific process

Davida Smyth, PhD Associate Professor Texas A&M San Antonio

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Quang To

Paul L. Foster School of Medicine

Texas Tech University Health Sciences Center

Manga as a fun way to teach host-pathogen

interactions in microbiology

2:30 PM - 3:00 PM BREAK/ GATHER SCAVENGER HUNT

3:00 PM -5:00 PM Student Poster Presentations and Judging

5:00 PM - 7:00 PM DINNER BREAK

7:00 PM - 8:00 PM Goldschmidt Lecture

Kristin Parent, PhD

ASM Distinguished Lecturer Michigan State University

Structure and Evolution of Shigella Phages: From a Neighborhood Near You

8:00 PM - 8:30 PM 8:30 PM -8:35 PM Awards Presentation

Closing Remarks and Announcements

Front image: A Sunset on a Texas Farm by Trey Ratclif, CC BY-NC-SA 4.0