



**Blacksburg, VA June 1-4, 2026**

Conference program

# Schedule:

## Monday June 1<sup>st</sup>, 2026

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6:30 - 8:30 pm Welcome reception and Registration ([University Club of Virginia Tech](#))

## Tuesday June 2<sup>nd</sup>, 2026

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7:45 - 8:15 am Registration and Coffee and pastries ([Graduate Life Center](#) - GLC)

8:30 - 8:45 Introduction and welcome remarks ([GLC Auditorium](#))

### Session 1. Variable impacts of a changing world

Moderator: Kate Langwig

8:45 - 9:10	<b>KEYNOTE: Cherie Briggs</b> (UC, Santa Barbara) <i>Beyond the outbreak: how climate and context shape the long-term persistence of an amphibian fungal pathogen</i>
9:10 - 9:35	<b>KEYNOTE: Rachel Penczykowski</b> (Washington U., St. Louis) <i>Responses of wild plant–pathogen systems to environmental change</i>
9:35 - 9:50	<b>Emma Krasovich Southworth</b> (Stanford) <i>Nonlinear effects of tropical cyclones on dengue transmission across 25 countries</i>
9:50 - 9:55	<b>Andrea Graham</b> (Princeton) and <b>Stephen Gaughran</b> (UC, Berkley) <i>Demographic and evolutionary origins of a severe immunopathology in the bottlenecked northern elephant seal</i>
9:55 - 10:00	<b>Desire Nalukwago</b> (Stanford) <i>How close is too hot? Quantifying thermal stress and the limits of behavioral buffering in mosquito disease vectors across global climate gradients</i>

10:00 - 10:10 Q&A

10:10 - 11:10 Coffee Break (GLC multipurpose room)

## Session 2. Disease impacts and management

Moderator: Kate Langwig

11:10 - 11:35	<b>KEYNOTE: Scott Carver</b> (University of Georgia) <i>Advancing infectious disease management in free-ranging wildlife</i>
11:35 - 11:50	<b>Samantha Hoff</b> (University of Vermont) <i>Environmental conditions drive selection and recovery following disease-induced declines</i>
Cancelled	<del><b>Andrew Storfer</b> (Washington State University) <i>Speak of the devil: Community genomics of Tasmanian devils and a transmissible cancer</i></del>

11:50 - 12:00 Announcements

12:05 - 1:20 Lunch at [Eggleston Lawn](#) (with Optional EEID discussion)  
12:45 – 1:10 Optional EEID community forum discussion with Pete Hudson and Paul Cross (GLC Auditorium)

## Session 3. New and established disease interventions

Moderator: Joseph Hoyt

1:20 - 1:45	<b>KEYNOTE: Kim Pepin</b> (US Department of Agriculture) <i>Emergency management of infectious disease involving wildlife</i>
1:45 - 2:10	<b>KEYNOTE: Daniel Streicker</b> (University of Glasgow) <i>Interrupting pathogen transmission in natural populations</i>
2:10 - 2:25	<b>Scott Nuismer</b> (University of Idaho) <i>Human adaptation to climate change drives increased spillover risk</i>
2:25 - 2:30	<b>Samantha Bents</b> (Stanford) <i>Disentangling mechanisms behind semiannual SARS-CoV-2 dynamics in the post-Omicron era</i>
2:30 - 2:35	<b>Isabelle Danforth</b> (Virginia Institute of Marine Science) <i>An empirical test of the imperfect vaccine hypothesis with infectious hematopoietic necrosis virus (IHNV) in rainbow trout</i>
2:35 - 2:40	<b>Cora Hirst</b> (Emory) <i>Preventing disease emergence following eradication: applications to mpox</i>

2:40 - 2:50 Q&A

2:50 - 3:30 Coffee Break (GLC Multipurpose room)

## Session 4. Novel Directions: Ecological Drivers and Intervention

Moderator: Joseph Hoyt

3:30 - 3:55	<b>KEYNOTE: Elizabeth McGraw</b> (Pennsylvania State University) <i>When years of basic research in EEID inform field interventions for disease control: stories from the current moment</i>
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3:55 - 4:10	<b>Ben Lukubye</b> (Emory) <i>Experimental evidence that cattle manure drives the rise and fall of schistosome transmission</i>
4:10 - 4:15	<b>Elias Rosenblatt</b> (University of Minnesota) <i>Ecological drivers of SARS-CoV-2 outbreaks in white-tailed deer</i>
4:15 - 4:20	<b>Joseph DeMarchi</b> (University of Tennessee) <i>Load-dependent host competence links individual infection processes to pathogen persistence in multi-host communities</i>
4:20 - 4:25	<b>Shenglai Yin</b> (University of Oklahoma) <i>Multi-scale ecological processes shaping highly pathogenic avian influenza transmission</i>

4:25 - 4:40 Q&A (10 min) and Announcements

5:00 - 7:00	<b>Poster session 1: (Owens Ballrooms)</b> Even # Posters 5:00-6:00, Odd # posters 6:00-7:00 Please see the conference <a href="#">website</a> for poster abstract program.
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7:00 Dinner on your own (see website for [recommendations](#))

## Wednesday June 3<sup>rd</sup>, 2026

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7:45 - 8:15 am Coffee and pastries (GLC Multipurpose room)

8:15 – 8:30 Announcements

### Session 5. Embracing Variation in EEID

Moderator: Dana Hawley

8:30 - 8:55	<b>KEYNOTE: Jessica Metcalf</b> (Princeton) <i>The demographic thicket of immunity's tangled banks</i>
8:55 - 9:20	<b>KEYNOTE: Joe Mihaljevic</b> (Northern Arizona University) <i>Not all hosts are equal: Thermal gradients, stochasticity, and heterogeneous infection outcomes</i>

9:20 - 10:05 Coffee break (GLC Multipurpose room)

### Session 6. Embracing Variation cont.

Moderator: Dana Hawley

10:05 - 10:30	<b>KEYNOTE: Daniel Becker</b> (University of Oklahoma) <i>Immunological diversity as a missing link in zoonotic risk prediction</i>
10:30 - 10:45	<b>Clara Malekshahi</b> (University of Pennsylvania)

	<i>Wild bird ecology is driving the transmission and dissemination of HPAI H5N1 in North America</i>
10:45 - 10:50	<b>Arik Hartmann</b> (Virginia Tech) <i>Exposure dose shapes infection outcomes and host responses to an emerging fungal pathogen</i>
10:50 - 10:55	<b>Carlos Molinero</b> (University of Georgia) <i>Linking host phylogeny, ecology, movement and parasite specialism to transmission in birds</i>

10:55 - 11:10 Q&A (10 min) and Announcements

11:15 - 12:20 Depart for hikes from GLC (Boxed lunch to go)

- McAfee's Knob - Bat
- Cascade Falls - Mosquito
- Mountain Lake - Salamander

5:00 - 6:30 Return from hike (Eggleston Lawn)

6:00 - 8:00	<b>Lawn Party (<u>Eggleston Lawn</u>)</b> Dinner and drinks provided
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## Thursday June 4<sup>th</sup>, 2026

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7:45 - 8:15 am Coffee and pastries (GLC Multipurpose room)

8:15 - 8:30 Announcements

### Session 7. Back to the Basics: Incorporating Ecological Feedbacks

Moderator: Lauren Childs

8:30 - 8:55	<b>KEYNOTE: Alex Strauss</b> (University of Georgia) <i>Updates to the healthy herds hypothesis and impacts of predators on disease: Thermal sensitivities and paratenic potential</i>
8:55 - 9:20	<b>KEYNOTE: Mallory Harris</b> (University of Maryland) Modelling behavior-disease feedback with social division
9:20 - 9:35	<b>Christina Harden</b> (Pennsylvania State University) <i>Rats everywhere, all the time: a mixed-methods approach to mapping the human-reservoir interface in Lassa-endemic Nigeria</i>
9:35 - 9:40	<b>Kyle Dahlin</b> (Virginia Tech)

	<i>Rethinking mosquito biting rates: exploring how disturbed blood-feeding shapes vectorial capacity</i>
9:40 - 9:45	<b>Michelle Launi</b> (University of Maryland) <i>Who drives transmission? Quantifying sex-based differences in pathogen transmissibility</i>
9:45 - 9:55	Q&A
9:55 - 10:45	Coffee Break (GLC Multipurpose room)

## Session 8. Back to the Basics: Modeling mechanisms of disease

Moderator: Lauren Childs

10:45 - 11:10	<b>KEYNOTE: Megan Greischar</b> (Cornell) <i>Unraveling the constraints on evolution towards ever greater host exploitation</i>
11:10 - 11:25	<b>Daniela Florez Pineda</b> (Notre Dame) <i>Quantifying the strength of cross-protection between dengue and zika: A mechanistic analysis of subnational transmission in Brazil</i>
11:25 - 11:40	<b>Siyu Chen</b> (Cornell) <i>Multiscale modelling reveals accelerating community outbreak risks of measles in the United States</i>
11:40 - 11:55	Q&A (10 min) and Announcements
11:55 - 1:15	Lunch (with Optional Events)
12:00 - 1:10	<b>Teaching Workshop (GLC Room C)- boxed lunch provided</b> Organizers: Arietta Fleming-Davies and Sarah Budischak
12:15-1:05 <b>Lawn)</b>	<b>Careers Panel (GLC Auditorium) – grab lunch to go (Eggleston</b> Organizers: Evie Rynkiewicz, Dana Hawley

## Session 9. Back to the Basics: Multi-host and multi-pathogen

Moderator: Leah Johnson

1:15 - 1:40	<b>KEYNOTE: Vanessa Ezenwa</b> (Yale) <i>Parasite interactions: coinfection, context, and complexity</i>
1:40 - 2:05	<b>KEYNOTE: Michael Cortez</b> (Florida State University) <i>Partitioning the effects of disease and non-disease processes on disease dynamics in multi-host communities</i>
2:05 - 2:20	<b>Sarah Troy</b> (UNC Chapel Hill) <i>Warming up to disease: Experimental warming alters seasonal multi-pathogen dynamics in tall fescue</i>
2:20 - 2:25	<b>Anna Pérez-Umphrey</b> (Virginia Tech) <i>Effects of coinfection on host viremia and scent in a zoonotic arbovirus system</i>

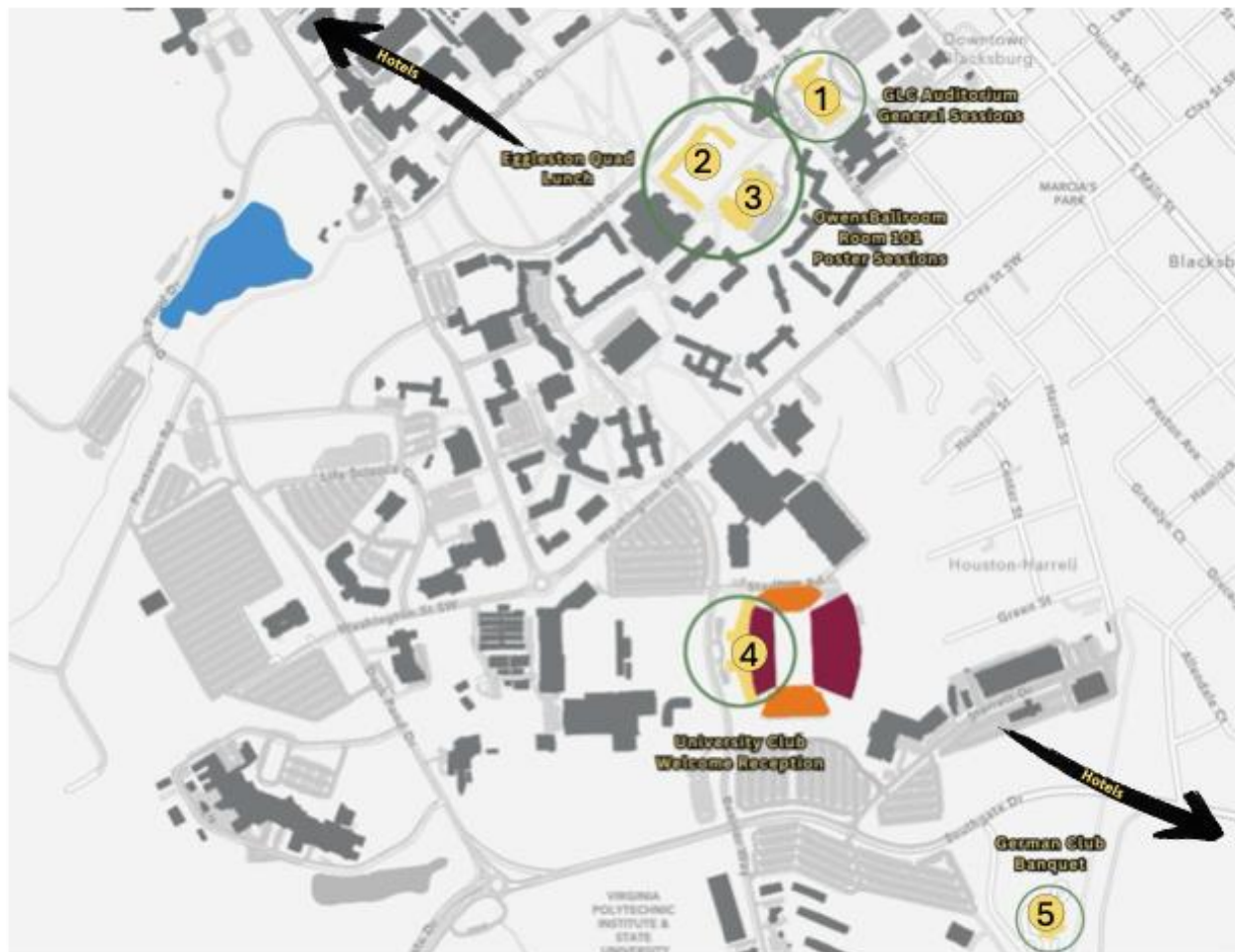
2:25 - 2:30	<b>Allyson Ray</b> (Vanderbilt University) <i>Trade-offs in defense against different classes of parasites maintain intraspecific variation in insect immune responses</i>
2:30 - 2:35	<b>Youngseo Jeong</b> (University of Toronto) <i>Immunodeficient hosts facilitate parasite trait evolution with consequences for virulence in immunocompetent hosts</i>
2:30 - 2:45	Q&A (10 min)
2:45 - 3:30	Coffee Break

## Session 10. Novel directions: Animal Behavior and Disease

Moderator: Leah Johnson

3:30 - 3:45	<b>Sonia Altizer</b> (University of Georgia) <i>Animal migration and infection dynamics in changing landscapes</i>
3:45 - 3:50	<b>Will Rogers</b> (Yale) <i>Social interactions buffer infection costs through distinct effects of resistance and tolerance</i>
3:50 - 3:55	<b>Caroline Amoroso</b> (University of Virginia) <i>Genetic architecture underlying variation in avoidance and resistance to parasites</i>
3:55 - 4:00	<b>Jack Leitch</b> (Virginia Tech) <i>Networks of indirect contact promote spread of an environmentally transmitted pathogen in a highly social species</i>
4:00 - 4:15	Q&A (10 min) and Announcements
4:30 - 6:30	<b>Poster session 2: (<a href="#">Owens Ballrooms</a>)</b> Even # Posters 4:30-5:30, Odd # posters 5:30-6:30 Please see the conference <a href="#">website</a> for poster abstract program.
7:00 - 10:00	<b>The Banquet (<a href="#">German Club of Virginia Tech</a>)</b>

## Locations:



1. Graduate Life Center (GLC)  
*Conference Sessions, Registration (Tuesday-Thursday), Hike pick up/drop off*
2. Eggleston Lawn  
*Coffee breaks, Lunch and Lawn Party*
3. Owens Ballroom  
*Poster Session 1 & 2*
4. University Club  
*Welcome Reception and Registration (Monday)*
5. German Club  
*Banquet*

# **EEID Acknowledgements:**

## **Local hosts\* and Planning committee (Virginia Tech)**

\*Dana Hawley, Biological Sciences

\*Joseph Hoyt, Biological Sciences

\*Kate Langwig, Biological Sciences

William Hopkins, Global Change Center

Kylene Kehn-Hall, Center for Emerging, Zoonotic, and Arthropod-borne Pathogens

## **Internal Members (Virginia Tech)**

Kathy Alexander, Fish and Wildlife Conservation

Lauren Childs, Mathematics

Nisha Duggal, Biomedical Sciences & Pathobiology

Luis Escobar, Fish and Wildlife Conservation

Dana Hawley, Biological Sciences

Joseph Hoyt, Biological Sciences

Leah Johnson, Statistics

Chloé Lahondère, Biochemistry

Kate Langwig, Biological Sciences

Amy Pruden, Civil & Environmental Engineering

## **Regional Advisory Committee Members**

Emily Bruns, University of Maryland

Julia Buck, UNC-Wilmington

Holly Gaff, Old Dominion University

Amanda Gibson, University of Virginia

Charles Mitchell, UNC-Chapel Hill

David Rasmussen, NC State

Andrew Wargo, Virginia Institute of Marine Science

Mark Wilber, UT Knoxville

## **Additional Conference Support and Volunteers (Virginia Tech)**

Marlon Cobos, Fish and Wildlife Conservation

Dane Conley, Biological Sciences

Kyle Dahlin, Mathematics

Sarah Gouger, Center for Emerging, Zoonotic, and Arthropod-borne Pathogens

Arik Hartmann, Biological Sciences

Christopher Kailing, Biological Sciences

Oleksandra Klynova, Biological Sciences

Jack Leitch, Fish and Wildlife Conservation

Steph McBride, Global Change Center

Juan-Carlos Mungaray, Biological Sciences

Michaela O'Brien, Global Change Center

Anna Pérez-Umphrey, Biological Sciences

Alice Stitzer, Biological Sciences

Eliza Tarimo, Biological Sciences

Ellie Timmins, Biological Sciences

## **Conference Workshops**

### **EEID modeling workshop**

Lauren Childs, Virginia Tech, Mathematics  
Kate Langwig, Virginia Tech, Biological Sciences  
Angela Peace, Virginia Tech, Mathematics  
Michael Robert, Virginia Tech, Mathematics  
Nick Ruktanonchai, Virginia Tech, Population Health Sciences  
Omar Saucedo, Virginia Tech, Mathematics  
Virginia Tech, Center for Mathematics of Biosystems

### **Vectorbyte workshop**

Leah Johnson, Virginia Tech, Statistics  
Samuel Rund, Notre Dame  
Sadie Ryan, University of Florida  
Catherine Lippi, Virginia Tech, Statistics  
Alicia Surratt, Virginia Tech, Biological Sciences  
Parul Patil, Virginia Tech, Statistics  
Paul Huxley, University of York

### **EEID teaching workshop and Career panel**

Sarah Budischak, Pitzer and Scripps College  
Arietta Fleming-Davies, University of San Diego  
Dana Hawley, Virginia Tech, Biological Sciences  
Evie Rynkiewicz, Fashion Institute of Technology

## **Sponsors**

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Fralin Life Science Institute  
Global Change Center  
Center for Emerging, Zoonotic, and Arthropod-borne Pathogens  
Virginia Tech College of Agriculture and Life Sciences  
Virginia Tech College of Natural Resources and Environment  
Virginia Tech College of Science  
Virginia-Maryland College of Veterinary Medicine  
College of Engineering (Pandemic Prediction and Prevention)  
Center for the Mathematics of Biosystems