



Ecology and Evolution of Infectious Diseases International Conference
Emory University, Emory Student Center
June 6 - 9, 2022

**All talks are held in ESC Room 2*

**All In-Person Poster Sessions are held in ESC Room 1*

**All times are Eastern Time Zone*

Monday, June 6, 2022

2:00 PM - 5:00 PM	Conference Check-in, Dorm Check-in & Poster Session 1 Hanging	Emory Student Center (ESC)
5:00 PM	Jacobus de Roode	Welcome
5:10 PM - 7:25 PM	Session 1: Pandemic Scenario Modeling	
5:10 PM	Rebecca Kahn <i>Keynote</i>	Pandemic Scenario Modeling: Plans, Parameters & Policy
5:40 PM	Rebecca Borchering	The COVID-19 Scenario Modeling Hub: a multi-model effort to address uncertainty during the pandemic in the United States
5:55 PM	Emily Howerton	How to get the best out of multiple disease models: Context-dependent aggregation methods
6:10 PM	Break	
6:25 PM	Rhys Inward	Using multiple sampling strategies to estimate SARS-CoV-2 epidemiological parameters from genomic sequencing data
6:40 PM	Ayesha Mahmud	Evaluating primary and booster vaccination prioritization strategies for COVID-19 by age and high-contact employment status using data from contact surveys
6:55 PM	Dylan Morris	The kinetics of breakthrough SARS-CoV-2 infections
7:10 PM	Lin Wang	Community-wide interventions minimize the opportunity for super-spreading of SARS-CoV-2
7:25 PM - 9:00 PM	Dinner: Dobbs Common Table (DCT; Student Dining Hall)	

Tuesday, June 7, 2022

8:00 AM - 9:00 AM	Breakfast: Dobbs Common Table (DCT; Student Dining Hall)	
9:00 AM - 12:00 PM	Session 2: Human and Animal Mobility	
9:00 AM	Amira Roess <i>Keynote</i>	<i>Talk Title TBA</i>

9:30 AM	Gonzalo Vazquez-Prokopec <i>Keynote</i>	From individual mobility traits to coupled heterogeneities: untangling the contribution of human behavior on dengue transmission dynamics
10:00 AM	Taylor Chin	Quantifying bias from differential geographic and demographic representativeness in estimates of human mobility
10:15 AM	Jessica Deere	Contact network links and the dissemination of syndromic respiratory disease in wild chimpanzees (<i>Pan troglodytes schweinfurthii</i>)
10:30 AM	Break	
10:45 AM	Jose Herrera-Diestra	Impact of differential mobility patterns and social vulnerability on the COVID-19 outcome in the city of Austin, Texas.
11:00 AM	Moses Kiti	Comprehensive Profiling of Social Mixing Patterns in Mozambique (GlobalMix)
11:15 AM	David Simons	Understanding the structure of rodent species assemblages and land use change on the occurrence of the rodent host of Lassa Fever: An interim analysis
11:30 AM	Juan Sebastian Vargas Soto	Hookworm Prevalence in Ocelots in Costa Rica is Inconsistent with Spillover from Domestic Dogs Despite High Overlap
11:45 AM	Mark Wilber	A model for leveraging animal movement to understand spatio-temporal disease dynamics
12:00 PM - 1:00 PM	Lunch: Dobbs Common Table (DCT; Student Dining Hall)	
1:00 PM - 3:00 PM	Session 3: Socioeconomics and Land Use	
1:00 PM	Benjamin Roche <i>Keynote</i>	Change in landscape use and emergence of zoonoses: how do we explain this link and what can we do?
1:30 PM	Pilar Fernandez	Exploring the socio-ecological interactions of tick-borne diseases using agent-based models
1:45 PM	Ian Hennessee	Effects of land-use change, insecticide resistance, and regional warming on <i>Anopheles gambiae</i> reemergence and resurgent malaria transmission in eastern Rwanda, 2010 – 2020
2:00 PM	Break	
2:15 PM	Pallavi Kache	A landscape typology scheme to assess environmental and social risk factors for dengue in tropical urban settings
2:30 PM	Mauricio Santos Vega	How disease risk awareness and socioeconomic level modulates transmission: coupling infectious disease models with behavioral dynamics
2:45 PM	Nayantara Wijayananda	Spatio-temporal heterogeneity of dengue incidence in Colombo city, Sri Lanka : an assessment of urban risk factors and drivers using point process spatial modelling

3:00 PM **In-Person Poster Teasers** **50, 30 second teasers**
(Both In-Person Sessions)

4:00 PM - 6:00 PM Poster Session 1 & 2 (In-Person)

4:00 PM Poster Session 1 (In-Person)

5:00 PM Transition to Session 2 posters

5:15 PM Poster Session 2 (In-Person)

6:15 PM - 8:15 PM **Dinner: Dobbs Common Table (DCT; Student Dining Hall)**

Wednesday, June 8, 2022

8:00 AM - 9:00 AM **Breakfast: Dobbs Common Table (DCT; Student Dining Hall)**

6:30 AM - 12:00 PM **Hiking** *Buses will leave from Raoul Hall*

12:00 PM - 1:00 PM **Lunch: Dobbs Common Table (DCT; Student Dining Hall)**

1:00 PM - 2:30 PM **Session 4: Social Justice and Infectious Disease**

1:00 PM Terry McGovern *Talk Title TBA*
Keynote

1:30 PM Reuben Warren *Talk Title TBA*
Keynote

2:00 PM Cinthia Carvajal *Talk Title TBA*
Keynote

2:30 PM - 3:30 PM **Virtual Poster Teasers** **50, 30 second teasers**

3:45 PM - 4:00 PM **Break**

4:00 PM - 5:30 PM **Poster Session (Virtual)**

5:30 PM - 7:00 PM **Dinner: Dobbs Common Table (DCT; Student Dining Hall)**

7:00 PM - 9:00 PM **Documentary Viewing: *Making Pandemics: Preserving Biodiversity to Protect Our Health***

7:00 PM Philip Wainwright, Introduction
Vice Provost,
Global Strategy and Initiatives,
Emory University

7:10 PM MR2 Films *Making Pandemics: Preserving Biodiversity to Protect Our*
Marie-Monique Robin's new film *Health*
with the complicity of Juliette
Binoche and the scientific
contribution of Serge Morand
(CNRS).

Thursday, June 9, 2022

8:00 AM - 9:00 AM **Breakfast: Dobbs Common Table (DCT; Student Dining Hall)**

9:00 AM - 9:50 AM Session 4: Science Communication (Panel Discussion)

9:00 AM Jacobus de Roode, Moderator Emory University
 Sam Whitehead Kaiser Health News Southern Bureau
 Natalie Dean Emory University

9:50 AM Break

10:00 AM - 12:30 PM Session 5: Infectious Diseases Across Scales

10:00 AM Katie Hampson *Talk Title TBA*
 Keynote

10:30 AM Anice Lowen *Drivers of influenza A virus reassortment across scales*
 Keynote

11:00 AM Break

11:15 AM Lewis Barlett Fast-growing parasite strains threaten host populations
 via patch-level population dynamics and high virulence; a
 case study in Varroa and honeybees

11:30 AM Flavia Camponovo Declines in prevalence alter the optimal level of sexual
 investment for the malaria parasite Plasmodium
 falciparum

11:45 AM Malina Loeher IHNV Virulence Evolution Following a Host Jump in
 Salmonids

12:00 PM Kelsey Shaw From individuals to communities: Investigating body size
 as a driver of schistosome dynamics

12:15 PM Ann Tate The impact of within-host interactions on competition
 between co-infected host species

12:30 PM - 12:40 PM Closing Remarks

12:40 PM - 2:00 PM Lunch: Dobbs Common Table (DCT; Student Dining Hall)