

#### INFECTIOUS DISEASE ACROSS SCALES TRAINING PROGRAM

#### Spring 2023

## IDASTP NEWSLETTER



Welcome to the Spring 2023 edition of the IDASTP Newsletter. Our program continues to evolve as we are moving into the 4<sup>th</sup> year of the program. This year's IDAS Seminar Series, application deadlines and other activities are detailed within this edition of the newsletter.



Note from the Director

Jacobus de Roode, PhD

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Our fourth year of IDASTP culminated with a very exciting and successful Ecology and Evolution of Infectious Disease conference on our Emory campus. More than 300 in-person and close to 200 online attendees joined us in celebrating the successes of applying ecology and evolution to the study and control of infectious diseases. Our strict COVID protocols ensured that our conference did not become a super spreader event (indeed, only two cases of non-severe COVID were reported). We had a great workshop where our trainees, and other students and postdocs from both Emory and beyond learned about science communication and pandemic scenario modeling. Some of our trainees gave talks, and other presented posters at what would be their first in-person event in several years.

As we have now been going for over three years, we have had our first IDASTP trainees and AOD awardees graduate and move on to exciting new positions. Freddy Lamar and Ian Hennessee have entered the Epidemic Intelligence Service at the CDC, Mike Martin has accepted a post doctoral position at John Hopkins University and Elizabeth Sajewski has accepted a post doctoral position at Yale University. Congratulations on your well-deserved success! While we have said farewell, we are excited to welcome Natalie Dean, Max Lau, Natalia Logan, Maya Nadimpalli, Anne Piantadosi, Elizabeth Rogawski McQuade and Mehul Suthar as new training faculty.

And as we are now coming close to the end of our first NIH training grant, it is time to start thinking about how to grow and improve our training program. To that end, we are excited to have a retreat in April, where we will learn from each other's science, brainstorm about new ideas and set the first steps toward writing a renewal grant for NIH. More details are in this newsletter. We would love to have you join us for a few days in the North Georgia Mountains.



#### 2022 Trainees

IDASTP Trainees Amber Coats and Rachel Pearson will be joined by new trainees Stephanie Bellman and Stephen Mugel for the 2022-2023 academic year. Over the next year, they will gain IDASTP trainee access to opportunities, training and support.



Amber Coats Koelle Lab Microbiology & Molecular Genetics



**Rachel Pearson** Day Lab Immunology & Molecular Pathogenesis



**Stephanie Bellman** *Prokopec & Piantadosi Lab Environmental Health Sciences* 



**Stephen Mugel** Clasen & Gillespie Lab Environmental Health Sciences

#### **STEPHEN MUGEL**

My research addresses why high burden diseases such as malaria, helminthiasis, diarrhea, and respiratory infections often occur in the same people and communities through an environmental and eco-epidemiological lens. Building on international descriptive and cross-sectional analyses, I will focus primarily on forest-boundary communities experiencing rapid landscape change, I will combine ecological spatial regression modeling and public health survey and case-control data to understand spatial structuring of infection risk and generate risk maps of potential enteric pathogen spillover. I will then use mathematical modeling of co-infection dynamics to understand individual risks and epidemiologic patterns that can inform prevention and control efforts.

#### AMBER COATS

My research focuses on characterizing the evolutionary dynamics of seasonal human coronaviruses as a model system for anticipating patterns of long-term evolution of SARS-CoV-2. As part of this research, I plan to identify patterns of adaptive evolution in seasonal coronaviruses that involve point mutations, insertions/deletions, and recombination.

#### RACHEL PEARSON

My dissertation work aims to understand the effects of HIV infection and treatment on Mtb-specific CD4+ T cell molecular programs and function in adults with HIV/Mtb co-infection from Mombasa. Kenya. This work crosses multiple scales of biological organization by assessing CD4+ T cell functional profiles and epigenetic and transcriptional programs within hosts at a single-cell level and linking these results to HIV/Mtb infection and disease outcomes in heterogenous populations. My work will define the phenotypic, functional, transcriptional and epigenetic signatures of total and Mtb-specific CD4+ T cells and link these data with parameters of HIV disease progression (CD4 count and HIV viral load) and latent and active TB disease states. The long-term goal of this project is to identify signaling pathways, molecular programs, and genomic regulatory factors that can be targeted therapeutically to enhance CD4+ T cell function in HIV infection and thereby enhance control of Mtb infection in people living with HIV.

#### STEPHANIE BELLMAN

My doctoral research seeks to understand the ecology and epidemiology of an emerging vectorborne disease, Heartland virus (HRTV), in a crossscales framework. Specifically, in aim 1, I will predict the suitability for lone star ticks and the potential for HRTV exposure across GA using data collected at 40 state parks and WMAs throughout Georgia. Aim 2 will quantify the spatial phylogenetic relationships of HRTV isolated across GA. The final aim will rely on opportunistic testing of banked human blood to quantify HRTV seroprevalence in Georgia. These aims will create a multi-scale picture of HRTV circulation and risk in Georgia.



#### **IDASTP Award of Distinction (AOD)**

The IDASTP Award of Distinction was created to further support student research that fits with the infectious disease across-scales approach. Student support includes funds for research supplies, training and travel.



**Aniruddha Deshpande** Lopman Lab Epidemiology



**Vishnu Raghuram** Read and Goldberg Lab Microbiology and Molecular Genetics



**Courtney Victor** Freeman Lab Environmental Health Sciences

#### ANIRUDDHA DESHPANDE

My research focuses on understanding the impacts of climate change via hydrological changes on enteric disease burden via mechanistic modeling. A fundamental way climate change will affect enteric disease dynamics is by reshaping how populations move and in turn how they are structured. I will examine the impact of explicit modeling of population mixing and movement on rotavirus dynamics. I will incorporate these findings to project rotavirus burden based on population projections aligned with shared socioeconomic pathways in climate change. Lastly, I will examine the attributable health cost of flooding due to climate change.



**IDASTP YOUTUBE** 

CHANNEL

#### VISHNU RAGHURAM

Staphylococcus aureus is a prominent hospital-associated pathogen that caused over 119,000 infections and 20,000 deaths in the US in 2017. The goal of this project is to further our understanding of *S. aureus* evolution and its ability to produce toxins and other disease-causing molecules in response to genetic and environmental factors. I plan to use bioinformatic and molecular genetics based approaches to identify signatures of both short-term host adaptation and long-term evolutionary changes in *S. aureus*.

#### COURTNEY VICTOR

My research aims to improve methodologies used to conduct exposure assessment of environmental fecal contamination as it relates to child health. Specifically, I will be using data generated from novel technologies such as 16s sequencing and multiplex enteric pathogen detection assays to evaluate the association between a large-scale improvement to a piped water network and child gut health in Mozambique. The objectives of my dissertation will interrogate this association across a number of scales: the environment (i.e., water supply), within-host, household, and across the community.



APPLICATION REOUIRMENTS

**APPLICATION** 

PORTAL

PROGRAMING &

SUPPORT



IDASTP is very proud of the students who have help build IDASTP over the last 4 years. Each student not only gained training in across-scales research but helped build a dynamic program that produced professionals who will aid in the advancement of a number of infectious disease fields. Join us in thanking and celebrating their contributions and successes.

## IDASTP Alumni 2019 to 2022



TRAINEES

Ashley Alexander Trainee 2021-2022 Goldberg & Read Labs Population Biology, Ecology & Evolution



Ian Hennessee Trainee 2021-2022 Clasen & Kitron Lab Environmental Health Sciences



**Frederica Lamar** *Trainee 2020-2021 Levy & Freeman Labs Environmental Health Sciences* 



**Elizabeth Sajewski** Trainee 2019-2021 Lopman Lab Environmental Health Sciences



Kelsey Shaw Trainee 2019-2020 Civitello Lab Population Biology, Ecology & Evolution



**KM Barnett** 

AOD 2021-2022 Civitello Lab

Lynda Bradley

Civitello Lab

AOD 2020-2021

Population Biology,

Ecology & Evolution

Population Biology, Ecology & Evolution







Vincent Giacalone AOD 2021-2022 Tirouvanziam Lab Immunology & Molecular

**Carol Liu** AOD 2021-2022 Lopman Lab Epidemiology

Pathogenesis



Ecold Sand AOD Gera

Michael Martin AOD 2020-2021 Koelle Lab Population Biology, Ecology & Evolution

Sandra Mendiola AOD 2020-2021 Gerardo & Civitello Labs Population Biology, Ecology & Evolution



2023 TRAINEE & AOD DEADLINE APRIL 3, 2023 APPLICATION PORTAL



# 2023 IDAS SEMINAR SERIES

#### Wednesdays at 12 PM

In-Person: O. Wayne Rollins Research Building Room 1052

Virtual: Join the IDAS Listserv to receive Zoom Link

The fourth annual seminar series supported by the IDASTP (Infectious Disease Across Scales Training Program) and the MP3 Initiative (Molecules and Pathogens to Populations and Pandemics). This weekly series of seminars and discussions on infectious disease research and control across scales is presented by visiting Emory speakers, Emory faculty/postdocs and IDASTP students. Seminar and discussion topics are chosen to provide a broad overview of the current status of the field. Attendance of seminars will allow attendees to keep up to speed with developments in the field, and also provide a weekly opportunity to meet with peers and faculty in the IDASTP program. We encourage anyone interested in the infectious disease across scales research approach to attend.

All seminars are open to everyone. Speaker schedule and Talk Titles can be found on the <u>IDASTP Website</u>.

2023 IDAS Seminar Series Homepage

To schedule a 1-1 Zoom meeting with a guest speaker, email tswink@emory.edu.

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#### JOIN THE IDAS COMMUNITY

Join Emory University's diverse and unite community of researchers focused on infectious disease across scales research approach.



#### Speaker Schedule

- 1/11/23 Lance Waller, RSPH, Emory University
- 1/18/23 Jacobus de Roode, ECAS, Emory University
- 1/25/23 Betsy Foxman, University of Michigan
- 2/01/23 Lauren Childs, Virginia Tech
- 2/08/23 Andrew Wargo, VIMS, William & Mary
- 2/15/23 Adam Lauring, University of Michigan
- 2/22/23 Maria Diuk-Wasser, Columbia University
- 3/15/23 Mercedes Pascual, University of Chicago
- 3/22/23 Deanna Kulpa, ENPI, Emory University
- 3/29/23 Daniel Kaufmann, University of Montreal
- 4/05/23 David Weiss, EARC/SOM/VC, Emory University
- 4/12/23 Emily Bruns, University of Maryland
- 4/19/23 Nic Vega, ECAS, Emory University
- 4/26/23 Thomas Gillespie, ECAS, Emory University

EEID 2022 👸

#### Ecology and Evolution of Infectious Diseases 2022 International Workshop and Conference

EEID 2022 brought together scientists from around the world to discuss the latest research on pressing issues, including the role of climate change in driving infectious disease, and the importance of racial and other social disparities in causing inequity and preventing effective control of disease. The explicit focus on social justice and infectious disease showcased the crucial integration of biomedical science, social science, public health and ecology.



June 3-9, 2022

<u>T H E M E S</u> Pandemic Scenario Modeling Science Communication Human and Animal Mobility Socioeconomics and Land Use Social Justice and Infectious Disease Infectious Diseases Across Scales



W O R K S H O P Pandemic Scenario Modeling and Science Communication June 3 – 6, 2022

The workshop focused on acquiring skills that disease ecologists and epidemiologists will need to respond to the next global pandemic.

Specifically, students learned how to work with disease forecasting models, and model different scenarios for an outbreak of a new pandemic. They then split into two sub-groups: one focused on the impacts of socio-economics and human land use, and another focused on using human mobility data to understand and inform outbreak response.

Concurrently, all participants learned communication skills in order to better communicate their science with policy makers and the public.





Forty early career investigators attended a workshop led by Jacobus de Roode (EEID Director, Emory), Karen Lips (Univ. of Maryland), Maryn McKenna (Emory), Sam Whitehead (Kaiser Health News), Noam Ross (EcoHealth Alliance), Sam Scarpino (Rockefeller Foundation), and Calistus Ngonghala (Univ. of Florida) at Emory University's The Hatchery: Center for Innovation.





#### C O N F E R E N C E Ecology and Evolution of Infectious Diseases June 6 – 9, 2022

**5 1 7** ATTENDEES 325 In-Person 192 Virtual

**207** DIFFERENT INSTITUTIONS from across the world

**4 7** PRESENTATIONS 12 Keynote Speakers 34 contributed Talks 1 documentary premier

**SCHEDULE** 

IDASTP YouTube Channel

**209** POSTERS 3 Sessions 130 in-person 79 virtual

2 NEW SESSION TOPICS Social Justice in Infectious Disease & Science Communication



**EEID HIKE** 



- EEID required additional precautions for in-person attendees:
- Fully Vaccinated
- Wear Masks Indoors (including presentations & posters)

We want to thank everyone for the extra effort to keep everyone safe!





EEID 2022

#### **Documentary Viewing: Making Pandemics**

EEID 2022 attendees were treated to a special viewing of *Making Pandemics,* A film by Marie-Monique Robin's new film in collaboration with Juliette Binocheand and Serge Morand (CNRS).

The documentary featured many scientists around the world including Thomas Gillespie, IDASTP Steering Committee member and Professor of Environmental Health Sciences, Emory College of Arts and Sciences.





### EEID Organizing Committee

Jaap de Roode (Prof. Biology)

Ashley Alexander (PBEE student)

Lynda Bradley (PBEE student)

Dave Civitello (Asst. Prof. Biology)

> Tom Gillespie (Prof. ENVS)

lan Hennessee (EHS student)

Katia Koelle (Prof. Biology)

Freddy Lamar (postdoc, EHS)

Ben Lopman (Prof. Epidemiology)

Michael Martin (PBEE student)

Micaela Martinez (Asst. Prof. Biology)

Sandra Mendiola (PBEE student)

Kelsey Shaw (PBEE student)

Kayoko Shioda (postdoc, EPI)

Todd Swink (Asc. Dir. IDASTP & MP3)

Maggie Weber (undergrad, Biology)

David VanInsberghe (postdoc, SoM)

#### **EEID Sponsors**

EEID 2022 was made possible by the generous contributions from the following sponsors:





The Hatchery Center for Innovation

Infectious Disease Across Scales Training Program The MP3 Initiative Dean, College of Arts and Sciences Dean, School of Medicine Senior Vice President for Research Department of Biostatistics and Bioinformatics Department of Environmental Sciences Department of Biology Department of Epidemiology Laney Graduate School Dean, Rollins School of Public Health **Emory Global Health Institute** Department of Pathology Department of Microbiology and Immunology Gangarosa Department of Environmental Health **Division of Infectious Disease** 

#### Q & A with IDASTP Training Faculty, Trainees and Award of Distinction Awardees



#### **NATLIE DEAN, PHD** IDASTP Training Faculty

MP3 FSUP Awardee Assistant Professor, Biostatics and Bioinformatics Rollins School of Public Health, Emory University

#### What does across scales mean to you?

"Across scales" is about deepening scientific inquiries by building connections across disciplines. With a better understanding of immunology and pathogen evolution, we can design better strategies for monitoring vaccine effectiveness. We ask better questions when we have broader expertise at the table – when the different scales work together.

#### How did you get into your research?

I've been interested in infectious diseases since I first learned about HIV and Ebola in high school. My interest in biostatistics came later, because first I had to learn the field existed. Since then, I have been drawn to quantitative problems in infectious diseases, particularly about how to design studies. During my postdoc, I worked closely with Ira Longini and Betz Halloran, who have worked on vaccine evaluation for decades. I am drawn to the complex dynamics of infectious diseases along with the opportunity for realworld impact.

#### Describe your most exciting research finding.

As a postdoc, I had the opportunity to work on a Phase III

Ebola vaccine trial in Guinea. Being one of the first people to see how well the vaccine worked, and, therefore, how great of an impact it could have to protect people, the excitement of that will be hard to top. Hundreds of thousands of doses of the rVSV-ZEBOV vaccine have since been administered, and I am proud that I was able to contribute this effort, along with so many others.

#### What do you see as your research trajectory?

My methodological interest is in vaccine evaluation, including both the design of flexible Phase III trials adapted for the outbreak setting, as well as observational studies like the test negative design. I am currently involved in studies of chikungunya and COVID-19 vaccines, as well as an arbovirus prevention trial. While my focus thus far has been on vaccines targeting emerging infectious diseases, I am exploring working on different pathogens, as long as the scientific problems excite me. Along with Ben Lopman, I am co-director of the Emory Alliance for Vaccine Epidemiology (EAVE). A major goal is to grow this community as a supportive environment for faculty and trainees. (Reach out to us if you're interested!)

# Describe the impact the MP3 funding has had on your research.

The resources provided by the MP3 faculty startup program have given me the flexibility to take my time in exploring the wealth of opportunities here at Emory. A little over one year into my position, it has been wonderful to meet with colleagues from across the university and plan out the next chapter.



#### MAYA NADIMPALLI, PHD IDASTP Training Faculty

MP3 FSUP Awardee Assistant Professor, Environmental Health, Rollins School of Public Health Emory University

#### What does across scales mean to you?

I study how human exposures to animals and the environment can impact our risk of becoming colonized or infected with antibiotic-resistant bacteria. To me, "across scales" means the various dimensions we need to consider in order to understand antibiotic resistance transmission — from the level of mobile resistance elements, like plasmids or transposons which allow resistance genes to move between bacteria, to bacteria themselves and microbial communities more generally, and to humans and animals, and our interactions with one another.

#### How did you get into your research?

I started working on this topic during my PhD, when I was lucky enough to join a research team working with community groups in eastern North Carolina to understand if industrial hog farms in the region might be a source of exposure to a novel strain of methicillin-resistant S. aureus that was emerging on pig farms across the globe. I was motivated to keep working on this topic after my PhD, when I realized that many of the countries with the highest burden of antibiotic-resistant infections are the same countries where the type of industrial hog farming that is common in eastern NC is aggressively expanding

#### How has the program shaped your research?

I plan to use MP3 start-up funds to help build my team. I joined Emory Rollins in May 2022 and am excited to start bringing on students and staff.

#### (Nadimpalli continued)

#### Describe your most exciting research finding.

I led a research study in Cambodia during my post-doc with the goal of understanding whether meat and fish products might be a source of multidrug-resistant bacteria to the larger population. I was very surprised to see substantial similarities between the bacterial strains we recovered from meat products and what my collaborators were detecting in the stool of healthy women. The scale of overlap that we saw – in phenotype, sequence type, and mobile resistance elements – is almost unheard of in high-income countries and I was excited to confirm that this was a research area that was extremely important to focus on.

#### What do you see as your research trajectory?

In addition to my ongoing research at the human-animal interface, I've begun working on two new topic areas over

the past few years that I am excited to develop during my career at Emory. First, I've begun working with gut microbiome data to understand how the microbiome may play a role in determining our susceptibility to becoming colonized or infected with drug-resistant pathogens, particularly for children living in high exposure settings. Second, I've been exploring whether antibiotic-resistant infections might disproportionally impact minority communities in the United States. I'm using both clinical data and environmental surveillance tools to investigate this from multiple angles. I'm looking forward to developing all of these research areas over the next several years.

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AMBER COATS

Koelle Lab Microbiology and Molecular Genetics

#### What does across scales mean to you?

To me, the term "across-scales" refers to research that considers multiple aspects of an infectious disease. It means studying an infectious disease across time, spatially, between populations, or beyond. In terms of an infectious disease, the various population scales are very important. For example, when considering the current SARS-CoV-2 pandemic, it is currently unknown where new variants of concern (VOCs), such as Omicron, come from. One hypothesis is that VOC evolve during chronic infections. To study questions such as whether VOCs arise in chronic infections, you must link two important population scales: the viral population evolving within one person (within-host scale) and the population of viral variants circulating worldwide (between-host scale). There can be drastic differences in the evolutionary dynamics observed at each of these population scales, so linking various scales together allows us to better understand how the overall system works.

#### How did you get into your research?

When I first came to Emory University, I was initially interested in studying molecular pathogenesis. However, the COVID-19 pandemic began while I was rotating in different labs and choosing a research path. Being immersed in active research during the pandemic showed me how much richer our understanding of infectious diseases becomes when integrating methods and perspectives from different fields. In particular, during my rotation in the Koelle lab I really fell in love with how complex viral evolution is, despite viruses themselves seeming outwardly simple in composition. That contrast between the enormous opportunity for discovery In studying viruses that have fewer genes than I have fingers and toes is really inspiring. Today, I am fascinated with how our immune systems shape viral evolution and how this interaction drives disease dynamics on different time scales and in different populations.

#### How has the program shaped your research?

The IDASTP program has taught me to think more broadly and has helped me expand my research focus to ask deeper questions about how viruses evolve at different scales. When I first joined the training program, I was still trying to solidify my thesis project topic. Over the course of my first year in IDASTP, I started to appreciate what "across-scales" means from new perspectives. Now, my project directly links within-host and between-host scales to understand how viruses evolve and emerge from chronic infections.

#### Describe your most exciting research finding.

I recently started a project studying long-term coronavirus evolution, using the four endemic, seasonal coronaviruses as models for SARS-CoV-2 evolution. Using phylogenetic analysis, I have identified a consistent pattern of cooccurring and recurrent mutations, indicating potential compensatory interactions between these mutations, in all four of the seasonal human coronaviruses. This is exciting because this means epistasis likely occurs in the evolutionary history of all coronaviruses, especially since other studies have identified instances of compensatory interactions in SARS-CoV-2.

#### What do you see as your research trajectory?

Despite how small viral genomes can be, how they evolve is incredibly complex. There are still huge gaps in knowledge when it comes to understanding how mutations can have multiple phenotypic effects when they are in combination with other mutations. It might seem foreign to think of the weather as an enigmatic chaotic system, but the ability to reliably predict rain is a fairly recent innovation, and I think we're standing on the cusp of making equally dramatic and

# Researcher Spotlight

#### (Coats continued)

meaningful advances towards understanding viral evolution. I would love to continue to contribute to this field in order to help close this knowledge gap.

# Describe the impact the IDASTP funding has had on your research.

Funding from IDASTP has provided me with resources that have allowed me to focus on my professional development. IDASTP provides funding for both research training and research-related travel. This funding has allowed me to directly network with the leaders in my field and attend in-person, international conferences. Broadening my network will be invaluable when it comes to the next step in my career. Furthermore, due to IDASTP funding, I was able to attend workshops from outside of Emory that directly focused on the types of skills I utilize in my research. These courses taught me the basics of various types of mathematical modeling and statistics that I use every day in my research.

R IL Du In

RACHEL PEARSON IDASTP Trainee

Day Lab Immunology and Molecular Pathogenesis

#### What does across scales mean to you?

To me, across scales research encompasses a holistic approach to solve problems that plague many levels of the environment and the species that inhabit it. The approach focuses on how to address a problem from a zoomed-out view rather than a narrow focused view within the researcher's specific interests. It broadens the applicability of findings to produce tangible solutions that can be more readily implemented by considering multiple levels of effects: cellular level, species level, population level, etc.

#### How did you get into your research?

I was immediately interested in cross-scales research, particularly how population dynamics in differing locations

shape the human immune response. By studying pathogens, hosts, and their environments, we can better guide human health towards more successful therapies and cures. I have always wanted my research to remain clinically relevant and that requires consideration of population and community dynamics both within individual patients and within their environments. My interest in tackling problems that are immediately relevant to global health led me to research involving *Mycobacterium tuberculosis*, the causative agent of tuberculosis, and HIV.

#### How has the program shaped your research?

Initially, my project consisted of looking at human cellular immune responses *ex vivo* without much of a broad-view approach. Entering the IDASTP has shaped how I think about

Research problems and has taught me to incorporate multiple levels in my methodology. Now, I am still interested in understanding the immune response to different pathogens at the cellular level but am also interested in how the immune responses differ between populations and how that could contribute to resistance or susceptibility to disease.

#### Describe your most exciting research finding.

My most interesting scientific discovery is describing a rare pigment produced by some clinical strains of *Acinetobacter baumannii*. At the time, there were only two publications mentioning a pigment produced by *A. baumannii*. I was excited to learn through observation that this species of bacteria is capable of producing pigment in nutrient-poor environments.

#### What do see as your research trajectory?

In the future, I would like my career to be clinically focused and involve participation from the community (communitybased participatory research). My goal is to have my research focused on solving problems that are of immediate concern to the people in my community or of immediate global concern.

# Describe the impact the IDASTP funding has had on your research.

The funds the IDASTP has provided for me has allowed me to pursue research questions with scientific rigor without regards to time. Without such a strict time constraint on my project, I have been able to explore different avenues of my professional and scientific development. I have had the time to learn R programming language and to enroll in a Certificate in Translational Research (CPTR) program through the Georgia Clinical and Translational Science Alliance. Both of these achievements will aid my future career working in clinical research and with Big Data. These accomplishments would not have been possible if it were not for the funding from IDASTP.

IDASTP Leadership

#### **IDASTP STEERING COMMITTEE**



Jacobus de Roode, PhD Director, IDASTP Samuel C. Dobbs Professor, Biology Department Emory College of Arts and Sciences Member, Board of Directors, Rosalynn Carter Butterfly Trail

**Stephanie Bellman** IDASTP Trainee Prokopec & Piantadosi Lab Environmental Health Sciences



Cheryl Day, PhD Associate Professor, Department of Microbiology and Immunology, Emory Vaccine Center, Emory School of Medicine

Thomas Gillespie, PhD Professor, Department of Environmental Sciences, Emory College of Arts and Sciences



Rachel Pearson IDASTP Trainee, Day Lab, Immunology & Molecular Pathogenesis



David S. Stephens, MD Vice President for Research, Woodruff Health Sciences Center, Chair, Department of Medicine, Emory School of Medicine

Lance Waller, PhD Professor, Department of Biostatistics and Bioinformatics, Rollins School of Public Health

#### **IDASTP LEADERSHIP**

IDASTP is led by the IDASTP Steering Committee representing ECAS, RSPH and SOM. Training Faculty are recruited from various departments on campus to ensure IDASTP includes a broad spectrum of infectious disease research training faculty.

#### **IDASTP TRAINING FACULTY**

Faculty	Department
Cervantes-Barragan, Luisa	Microbiology and Immunology
Civitello, Dave	Biology
Clasen, Thomas F.	Environmental Health
Day, Cheryl L.	Microbiology and Immunology
de Roode, Jacobus C.	Biology
Dean, Natalie	Biostatistics and Bioinformatics; Epidemiology
del Rio, Carlos	Global Health
Freeman, Matthew	Environmental Health, Epidemiology and Global Health
Galinski, Mary R.	Medicine (Infectious Diseases)
Gerardo, Nicole M.	Biology
Gillespie, Thomas R.	Environmental Sciences
Goldberg, Joanna B.	Pediatrics (Pulmonology, Allergy/Immunology, Cystic Fibrosis
Hunter Fric	Bathology and Laboratory Medicine
(itron Uriel D	Environmental Sciences
Koelle Katia	Biology
	Biostatistics and Bioinformatics:
	Epidemiology
Leon, Juan S.	Global Health
Logan, Latania	Pediatric
Lopman, Benjamin A.	Epidemiology
Lowen, Anice C.	Microbiology and Immunology
Martinez, Micaela	Biology
McQuade, Elizabeth Rogawski	Epidemiology
Mehul, Suthar	Pediatiric Infectious Disease
Moe, Christine L.	Global Health
Nadimpalli, Maya	Environmental Health
Piantadosi, Anne	Pathology & Laboratory Medicine
Read, Timothy D.	Medicine (Infectious Diseases)
Rengarajan, Jyothi	Medicine (Infectious Diseases)
Silvestri, Guido	Pathology and Laboratory Medicine
Stephens, David S.	Medicine
Sullivan, Patrick S.	Epidemiology
Vazquez-Prokopec, Gonzalo VI.	Environmental Sciences
Vega, Nic M.	Biology
Waller, Lance A.	Biostatistics and Bioinformatics



Todd Swink Associate Director, IDASTP & MP3 Initiative tswink@emory.edu **IDASTP** Info









KENNEDY CREEK RESORT **?** 

IDASTP faculty and students will meet April 14-15, 2023, to discuss the evolution of IDASTP in preparation for the renewal of the NIH/NIAID funding T32 grant.

Discussions will feature presentations from IDASTP Training Faculty, Trainees and Award of Distinction Awardees.

A variety of outdoor activities will be available for participants including hiking and camping.

Email tswink@emory.edu to join the **IDASTP** Retreat!

**Important Dates** 

## **2023 IDAS Seminar Series IDASTP Trainee Application & AOD Application Deadline** Spring, Wednesdays, 12 PM – 1 PM ET O Wayne Rollins Research Building, Room 1052 APRIL 3, 2023 Zoom link sent via IDAS Listserv IDASTP **JOIN IDAS LISTSERV APPLICATION PORTAL** 1 **IDASTP Sponsors** The IDASTP is sponsored by the the NIAID and multiple Emory entities. We would like to take time to recognize our sponsors. National Institute of Allergy and Infectious Diseases **Rollins School of Public Emory College of Arts and Sciences** Health

**Emory Department of Biology** 

**Laney Graduate School**