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SESYNC Feedbacks

News from the National Socio-Environmental Synthesis Center

POSTDOCTORAL FELLOWS | Apply for 2020 Postdoc Program

An Immersive Experience

SESYNC postdocs prepare for an interdisciplinary future



SESYNC'S Postdoctoral Fellowship Program immerses fellows in foundational theories of other disciplines

Public health nursing and environmental history from late antiquity appear to have little in common. One deals with promoting health and providing care for the sick. The other deals with

the interaction of culture and nature in the past. Both fields of study share one thing: they exemplify the range of disciplines represented by **postdocs in residence** at the National Socio-Environmental Synthesis Center (SESYNC). Over the course of two years, the postdocs publish research and develop their skills in socio-environmental synthesis.

The interdisciplinary nature of socio-environmental problems encourages SESYNC fellows to draw from multiple fields of inquiry and combine data, ideas, theories, and methods to approach environmental questions. Since 2012, the postdoc program has supported the work of 53 early-career interdisciplinary researchers. Together, they've published over 180 papers and have been successful in getting jobs aligned with their career goals. [Read full article here.](#)

[Read details on how to apply to 2020 Postdoctoral Fellow program here.](#)
Applications are due Nov 8.

New Postdoctoral Researcher opportunity: Seeking **Postdoctoral Researcher in Ecosystems Modeling.** **Applications are due Nov 1.**

NETWORKS-OF-NETWORKS | Workshop Videos Available



SESYNC Hosts Networks-of-Networks Workshop

On September 12-13, SESYNC hosted the Networks-of-Networks workshop in Annapolis.

Funded by the National Science Foundation (NSF), this workshop aimed to prepare participants responding to NSF's call for proposals focused on funding the development of international networks of networks. The call for proposals is titled "**Accelerating Research through International Network-to-Network Collaborations.**"

The workshop's presenters included representatives from academia, government agencies, and SESYNC, who provided participants with information on effective network communication, participant engagement, network leadership, and management techniques that are effective at fostering and leveraging existing U.S. investments in critical research networks.

Session topics included the following:

- What is the network-to-network approach?
- Existing models and inspiring new networks-of-networks
- Defining a collective mission and vision
- Tools to build and sustain dispersed networks-of-networks
- Collaboration, team science, and leadership training
- Clarifying internal expectations and evaluation.

Recordings of the workshop's sessions, which were originally livestreamed, are now available online. **Slides and resources** from each session are also available for download.



The National Socio-Environmental Synthesis Center (SESYNC) announces that **12 new interdisciplinary research projects** have been supported. The selected projects were submitted through SESYNC's spring request for proposals (RFP) for collaborative team-based synthesis research pursuits around emerging socio-environmental synthesis topics.

The projects include eight research Pursuits and four Workshops. More information about the awarded projects can be found below.

Pursuits

How Does a Historical Perspective Inform Ecosystem Management Targets, Goals, and Outcomes

PIs: Andrew Trant, University, Waterloo; Loren McClenachan, Colby College
Theme: Pressing Socio-Environmental Problem

The Missing Link: Incorporating the Role of Biological Diversity into Projections of Ecosystem Services

PIs: Sarah Weiskopf, U.S. Geological Survey National Climate Adaptation Science Center; Isabel Rosa, Bangor University
Theme: Understanding the Ecology Behind the Societal Benefits of Ecosystems

Predictive Modeling of the Relationships among Infrastructure, Resource Extraction, and Environmental Governance in Latin American Forests

PIs: Anthony Bebbington, Clark University; Rebecca Ray, Boston University
Theme: Socio-Environmental Implications of Large-Scale Infrastructure Projects

Perception versus Reality: How the Consequences of Eutrophication Impact Subsistence Fishery Communities around Lake Victoria

PIs: Jessica Corman, University of Nebraska - Lincoln; Amber Roegner, University of Oregon
Theme: Freshwater and Ecosystems in a Changing World

Characterizing FEW System Typologies across the Continental U.S. for Informed FEW Research

PIs: Rebecca Muenich, Arizona State University; Rebecca Hale, Idaho State University
Theme: Social and Environmental Dimensions of the Food-Energy-Water Nexus

Global Dam Watch: Developing a Community Platform to Map Global Dams, Reservoirs, and River Barriers

PIs: Bernhard Lehner, McGill University; Michele Thieme, World Wildlife Fund
Theme: Freshwater and Ecosystems in a Changing World

Energy-Water Nexus Analysis of Solar Energy Industry

PIs: Ilke Celik, University of Wisconsin - Platteville; Jiquan Chen, Michigan State University
Theme: Social and Environmental Dimensions of the Food-Water-Energy Nexus

The Ecological Consequences of Declining Nitrogen Concentration in Plants Worldwide

Workshops

[Workshop on the Potential of Urban Nature to Support Sustainability in Latin America: A Synthesis from a Socio-Environmental Perspective](#)

PIs: Camilo Ordóñez-Barona, University of Melbourne; Tahia Devisscher, University of British Columbia; José Soto, University of Arizona

Theme: Pressing Socio-Environmental Problem

[Co-Generating a System Model to Improve Opportunities for Proactive Management of the *Batrachochytrium salamandrivorans* \(Bsal\) threat in North America](#)

PIs: Evan Campbell Grant, USGS Patuxent Wildlife Research Center; Riley Bernard, Pennsylvania State University and USGS Patuxent Wildlife Research Center

Theme: Pressing Socio-Environmental Problem

[Synthesizing Research on Pastoral Governance of Common-Pool Resources](#)

PIs: Lance Robinson, International Livestock Research Institute; Mark Moritz, The Ohio State University

Theme: Pressing Socio-Environmental Problem

[Planning Workshop for Counter Climates: Petro-Infrastructure and Indigenous Land, Water, and Atmosphere Protection in Canada and the American Midwest](#)

PIs: Zoe Todd, Carleton University; Ozayr Saloojee, Carleton University

Theme: Pressing Socio-Environmental Problem

ANNOUNCEMENT | New Director of Research

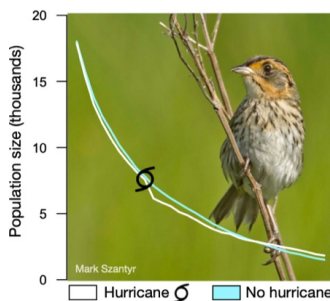


SESYNC Announces New Director of Research

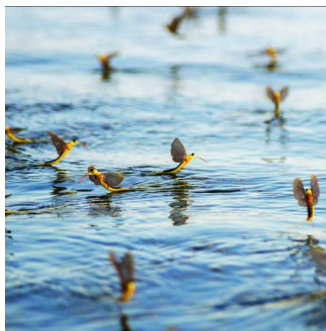
The National Socio-Environmental Synthesis Center (SESYNC) is pleased to announce the naming of Dr. Carrie Hritz as the Center's new Director of Research. In this role, Dr. Hritz is responsible for leading the Center's research programs and communications. She also works with leadership to develop calls for proposals, identify partnership and collaboration opportunities, and support research teams throughout the project cycle. Dr. Hritz was previously SESYNC's Associate Director of Research.

[Read full article here.](#)

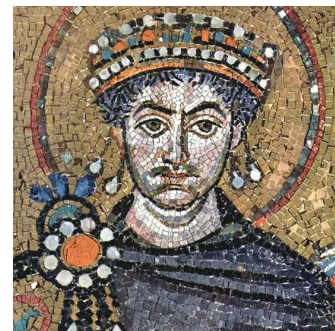
SESYNC RESEARCH | Publications from SESYNC Scholars



A recent *New York Times* article featured research led



SESYNC Director Margaret Palmer co-authored a review



SESYNC Postdocs Merle Eisenberg and Lee

by SESYNC postdoc Christopher Field, showing the resilience of coastal bird populations to hurricanes. Read the full [article](#) "Framework for quantifying population responses to disturbance reveals that coastal birds are highly resilient to hurricanes," published in *Ecology Letters*.

[Read SESYNC article.](#)

on the restoration of river flow regimes with former SESYNC postdoc Albert Ruhi. Ruhi is an assistant professor of Environmental, Science, Policy, and Management at the University of California, Berkeley. Published in *Science*, the [review](#) is titled "Linkages between flow regime, biota, and ecosystem processes: Implications for river restoration."

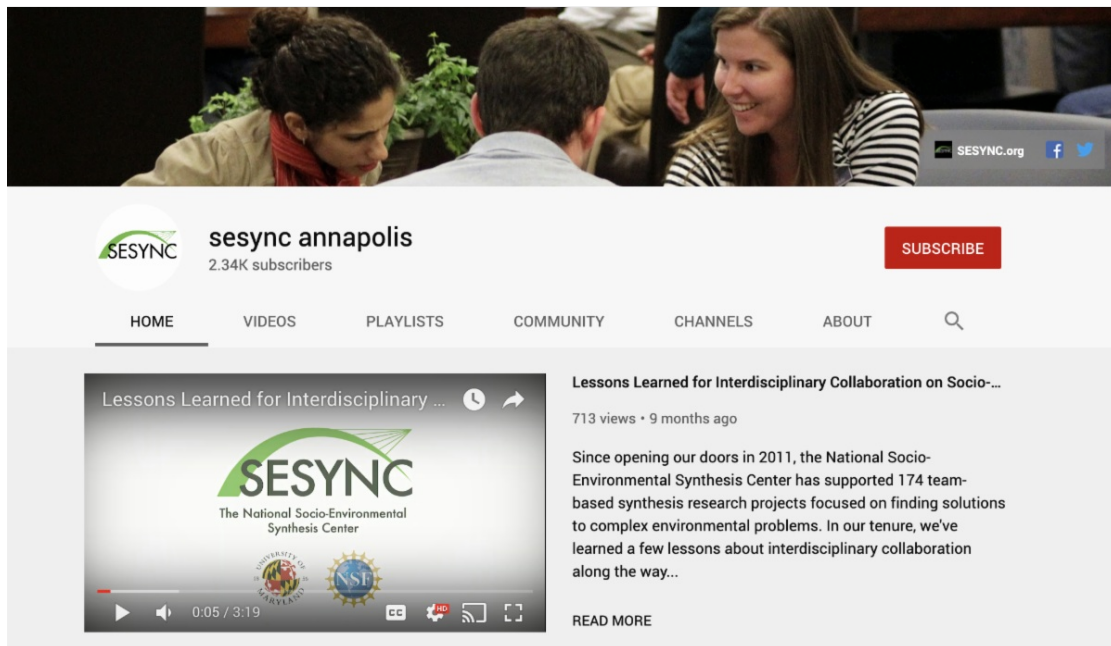
[Read SESYNC article.](#)

Mordechai recently co-authored an article called "The Justinianic Plague: an interdisciplinary review" published in *Byzantine and Modern Greek Studies*. This critical review examines the expanding field of Justinianic Plague and the current paradigm for examining the pandemic that followed. It offers a starting point for interdisciplinary collaboration.

[Read article here.](#)

CONNECT | Tag Your SESYNC Research #NSFfunded

Subscribe to [SESYNC Annapolis on YouTube](#) for videos from our recent [Networks-of-Networks Workshop](#), [Communication Tutorial Series](#), and recent *Research in Action* video [Plants & Pests!](#)



The National Socio-Environmental Synthesis Center (SESYNC) is #NSFfunded through a grant to the University of Maryland. SESYNC brings together the science of the natural world with the science of human behavior and decision-making. Let us help you get the word out. Tag your SESYNC-related research [#NSFfunded!](#)



NEW PUBLICATIONS | SESYNC in the Journals

"Forging future organizational leaders for sustainability science." Published in *Nature Sustainability* by I.J. Gordon and colleagues following the 2018 SESYNC Workshop [Interdisciplinary research matters: Pathways to successful organizational models.](#)

"Regrowing forests contribution to law compliance and carbon storage in private properties of the Brazilian Amazon." Published by Leticia de Barros Viana Hissa and colleagues including SESYNC postdoc Florian Gollnow in *Land Use Policy*.

"Exploring optimal nitrogen management practices within site-specific ecological and socioeconomic conditions." Published in the *Journal of Cleaner Production* by Tingyu Liu and colleagues as part of the Pursuit [Understanding dynamic environmental and socio-economic interactions in food systems to support decision-making towards a sustainable and resilient agriculture.](#)

"The effects of habitat loss and fragmentation on plant functional traits and functional diversity: what do we know so far?" Published in *Oecologia* by former SESYNC postdocs Jenny Zambrano, Noelle Beckman, Lauren Yeager, and their colleagues.

"The total dispersal kernel: a review and future directions." Published in *AoB Plants* by Haldre S. Rogers and colleagues including former SESYNC postdocs Noelle Beckman and Jenny Zambrano. Ideas for the paper arose from the [Seed Dispersal Workshop](#) funded by NSF and held at SESYNC in 2016.

"Spatiotemporal variation in PM2.5 concentrations and their relationship with socioeconomic factors in China's major cities." Published in *Environment International* by Xiuling Zhao and colleagues including former SESYNC postdoc Dexter Locke.

"Phone-call reminders narrow the intention-action gap by increasing follow-through for a residential tree giveaway program." Published in *Urban Forestry & Urban Greening* by Michael S. Hand and colleagues including former SESYNC postdoc Dexter Locke.

"Opinion: Putting all foods on the same table: Achieving sustainable food systems requires full accounting." Published in *PNAS* by Benjamin Halpern and colleagues including former SESYNC postdoc Jessica Gephart.

"Urban plant diversity in Los Angeles, California: Species and functional type turnover in cultivated landscapes." Published in *Plants, People, Planet* by former SESYNC postdoc Meghan Avolio and colleagues.

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