Image credit: **NASA**

Global Kids Study: More Trees, Less Disease

A SESYNC-supported study of 300,000 children in 35 nations says kids whose watersheds have greater tree cover are less likely to experience diarrheal disease, the second leading cause of death for children under the age of five.

Published in *Nature Communications*, the study is the first to quantify the connection between watershed quality and individual health outcomes of children at the global scale.

"Looking at all of these diverse households in all these different countries, we find the healthier your watershed upstream, the less likely your kids are to get this potentially fatal disease," says Taylor Ricketts of the University of Vermont's Gund Institute for Environment.

Surprisingly, the team predicts that a 30 per cent increase in upstream tree cover in rural watersheds would have a comparable effect to improved water sanitation, such as the addition of indoor plumbing or toilets.

Read the University of Vermont's release on **our website**.

Predicting insect feeding preferences after deforestation

Like a scene from the movie *Alien*, insect parasitoids inject their eggs into unsuspecting hosts, their offspring grow and eat from within, eventually bursting out leaving dead, empty host vessels. These tiny predators, many of them wasps, can have major ecological and economic impacts.

Understanding how parasitoids and hosts interact, and how their interactions change with human influence, is critically important to understanding ecosystems. New research, led by SESYNC Postdoctoral Fellow Phillip Staniczenko, finds mathematical models can predict complex insect behavioral changes using a simple description of insect preferences. The research, published in the journal *Nature Communications* on October 6, was able to predict parasitism rates after deforestation without the need for extensive field data.

Read the press release in our *Center News*.

New Videos

Introduction to socio-environmental synthesis: Three-part video series

What are socio-environmental systems, what is synthesis, and how does one conduct synthesis research? Our new three-part video series addresses these questions and provide examples that highlight the complexity and rewards of studying the relationships and dynamics between social and environmental systems. The video series also helps to clarify the importance and the process of forming diverse interdisciplinary teams, and provides an overview of some analytical tools used to conduct synthesis research.

Check out the first two videos in the seiries on **our website** or on **YouTube**.

SESYNC Postdoctoral Fellowship Program 2018
Pre-screening Application Deadline: October 27, 2017

SESYNC invites applications from early career scholars for two-year postdoctoral fellowships that begin August 2018. Each fellow works with a **Collaborating Mentor** of their choosing that extends the fellow's current network of collaborators; the mentor may be affiliated with any organization or institution.

Fellows are in residence at SESYNC full-time but are provided travel funds to interact with their mentor and attend conferences.

To learn more and apply, please **visit our website**.

Become a Collaborating Mentor

Collaborating Mentors for 2018 Postdoctoral Fellows
Application Deadline for Mentor Registry: October 27, 2017

SESYNC seeks Collaborating Mentors interested in mentoring incoming SESYNC Postdoctoral Fellows and co-developing socio-environmental synthesis research projects with them. The mentor may be affiliated with any organization or institution.

We welcome mentors from universities, NGOs, government agencies, and other research institutions. This is an ideal opportunity for collaborations across disciplines, as our competitive Postdoctoral Fellowship programs receive applications from scholars across the social, natural, and computational sciences.

To learn more and apply, please **visit our website.**

Request for Proposals

Graduate Student Workshop on Socio-Environmental Synthesis:

Interdisciplinary Skill Building, Proposal Writing, & Collaborating

Application Deadline: November 20, 2017

SESYNC invites applications for the 5th annual Graduate Student Workshop on Socio-Environmental (S-E) Synthesis, to be held January 23-26, 2018, in Annapolis, Maryland. Workshop goals are to:

- Energize and engage students in innovative, team-based, use-inspired S-E synthesis research
- Increase student capacities through S-E synthesis training, skill-building, and networking
- Prepare students for upcoming S-E synthesis research and leadership opportunities at SESYNC

Attendees of this workshop will join 30 of their peers from around the world and across scholarly disciplines. Attendees will participate in highly interactive activities and facilitated discussions as individuals, but will also be given the opportunity while in Annapolis to form the beginnings of diverse, interdisciplinary research teams.

To learn more and apply, please **visit our website**.

SESYNC Publications

Upstream watershed condition predicts rural children's health across 35 developing countries. Published in *Nature Communications* by Diego Herrera and colleagues as part of the Pursuit, Evaluating relationships among human health & welfare, ecological condition & natural resource governance.

Predicting the effect of habitat modification on networks of interacting species. Led by SESYNC Postdoctoral Fellow Phillip Staniczenko in *Nature Communications*.

Disruption, not displacement: Environmental variability and temporary migration in Bangladesh. Led by SESYNC Posdoctoral Fellow Maia Call in *Global Environmental Change*.

The Global Water Grabbing Syndrome. Published in *Ecological Economics* and led by former SESYNC Postdoc Jampel Dell'Angelo.

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