

Ecology & Evolution Graduate Program Newsletter

September -October 2016

Previous newsletters may be found at:
<http://rci.rutgers.edu/~deenr/news.html>

Please let us know if you have made presentations, published papers, received grants and awards, or traveled to do research. Don't be shy about sending in material for the newsletter! Keep those emails, cards, letters, and social media posts coming! Send your news and accomplishments to pjmorin@rci.rutgers.edu.

Congratulations!

Henry John-Alder received special recognition from Provost Lily Young for his service and important contributions to advance *faculty excellence* at Rutgers.

Rob Pecchia (Lockwood Lab) won an award for best oral presentation at the 7th Annual Student Conference on Conservation Science at the American Museum of Natural History. His presentation was titled "The establishment threat of the brood parasitic Pin-tailed Whydah (*Vidua macroura*) in North America and the Antilles".

Joanna Burger was at the Waterbird Society meetings in S.C., where she received the Curry Lindahl Award for Distinguished Research. It has been awarded only 3-4 times over a 40 year period!

Presentations:

Steven Handel-

American Society of Landscape Architects annual meeting, 2016, New Orleans, LA. "Designing campus landscapes for enhanced educational value" S. Handel and C. Kaunzinger.

American Society of Landscape Architects annual meeting, 2016, New Orleans, LA. "Improving ecology in the City – Increasing diversity through design." S. Handel.

Peter Morin presented two research seminars highlighting projects in the Morin Lab:

Rutgers Camden, Department of Biology. 29 September 2016. "Message in a bottle: experiments on ecology and evolution with microbes"

Yale University, Department of Ecology and Evolutionary Biology. 26 October 2016. "Messages in a bottle: experiments on ecology and evolution with microbes"

Publications:

Julie Lockwood (and others)-

Robinson, O.J., O. Jensen, S. M. Provost, S. Huang, N. Fefferman, A. Kebir, and J.L. Lockwood. In Press. Evaluating the impacts of fishing on sex-changing fish: a game-theoretic approach. *ICES Journal of Marine Science*. Chosen as "Editor's Choice" for the issue in which it will appear

Virzi, T., J.L. Lockwood, R.G. Lathrop Jr., and D. Drake. In Press. Predicting American oystercatcher breeding distribution in an urbanized coastal ecosystem using maximum entropy modeling. *Waterbirds*.

Gilroy, J.J. and **J.L. Lockwood.** 2016. Simple settlement decisions explain common dispersal patterns in territorial species. *Journal of Animal Ecology*. DOI: 10.1111/1365-2656.12545

Gilroy, J.J., **J.A. Avery** and **J.L. Lockwood.** 2016. Seeking international agreement on what it means to be 'native'. *Conservation Letters*. DOI: 10.1111/conl.12246

Aagaard, K. and **J.L. Lockwood.** 2016. Severe and rapid population declines in exotic birds. *Biological Invasions* 18: 1667-1678.

Aagaard, K., J.L. Lockwood and **E.J. Green.** 2016. A Bayesian approach for characterizing uncertainty in declaring a population collapse. *Ecological Modelling* 328: 78-84.

Burkhalter, J.C., J.L. Lockwood, B. Malso, K.H. Fenn, and K. Leu. 2016. The choice of cost surrogate affects the cost-effectiveness of protected area network design within urban landscapes. *Conservation Biology* 30: 403-412.

Lena Struwe (and others)-

Favre, A., I. Michalak, C.-H. Chen, J.-C. Wang, J. Pringle, S. Matuszak, H. Sun, E. Liu, Y.-M. Yuan, **L. Struwe**, & A. N. Muellner-Riehl. 2016. Out-of-Tibet: the spatio-temporal evolution of *Gentiana* (Gentianaceae). *Journal of Biogeography* [online only so far, not yet in print]

Frazer*, L. J., S. Morris-Marano*, J. Blake-Mahmud*, & L. Struwe. 2016. Eat your weeds: edible and wild plants in urban environmental education and outreach. *Plant Science Bulletin* 62(2): 72-84

Grant, J., **L. Struwe**, J. Pringle, B. von Hagen, J. Molina*, & K. Lepis*. 2016. Gentianaceae. Pages 1344-1353. In: *Catálogo de plantas y líquenes de Colombia, vol. 1* (R. Bernal, S.R. Gradstein, & M. Celis, eds.), Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá.

Poinar, G., Jr. & **L. Struwe**. 2016. An asterid flower from neotropical mid-Tertiary amber. *Nature Plants* 2(3): 16005. [with cover image]

Nikitas, J. & **L. Struwe**. 2016. Brief review of INCI names, botanical nomenclature of cosmetics ingredients. AHPA Report January 2016: 9-10.

Malin Pinsky –

Marine dispersal scales are congruent over evolutionary and ecological time. 2016.

Pinsky, M. L., P. Saenz-Agudelo, O. Salles, G. R. Almany, M. Bode, M. L. Berumen, S. Andréfouët, S. R. Thorrold, G. P. Jones, and S. Planes. *Current Biology*: in press.

Larval connectivity across temperature gradients, and its potential effect on heat tolerance in coral populations

2016. Kleypas, J., D. Thompson, F. Castruccio, E. Curchitser, **M. L. Pinsky**, and J. Watson. *Global Change Biology* [doi: 10.1111/gcb.13347](https://doi.org/10.1111/gcb.13347)

Judy Weis has edited a new book –

Biological Invasions and Animal Behavior. 2016. Edited by Judy Weis and Daniel Sol. Cambridge University Press. For more information see -

<http://www.cambridge.org/us/academic/subjects/life-sciences/animal-behaviour/biological-invasions-and-animal-behaviour?format=HB>

Grants:

Dr. Julie Lockwood and Dr. Christina Romagosa (University of Florida) were awarded Pursuit funding from the National Socio-Environmental Research Center (SESYNC) to explore the role of the pet trade in producing invasive vertebrates within the United States. The funding supports three synthesis and computational workshops where we will bring in national and international policy-makers and scientists that specialize in invasive species management over the next two years in Annapolis, MD. The title of the Pursuit is: Linking trade, biology and pet owner decisions to the risk of vertebrate invasions in the US.

Dr. Lena Struwe received a grant from the Rutgers Center for Cultural Analysis, to support an Interdisciplinary Working Group for the 2016-17 Academic Year, *Resilience: places, cultures, and environments in Latin America*, Co-PI: Struwe, PI: Jorge Marcone, Additional Co-PIs: Peter Guarnaccia, Jeffrey Lawrence, Laura C. Schneider, Marcy Schwartz (Sep 2016-Sep 2017).

Dr. Malin Pinsky has received several new grants –

2016-20 NSF Dynamics of Coupled Natural-Human Systems, “CNH-L: The dynamics of adaptation to climate-driven variability in California Current fisheries and fishing communities.” Abbott, J., D. Holland, A. Punt, M. Poe, and M. Pinsky. \$1,499,962 (\$444,236 to Rutgers)

2016-20 Nippon Foundation, “Nereus Program Expansion.” Cheung, W., Y. Ota, D. Pauly, W. Swartz, D. Gascuel, T. Frölicher, E. Sunderland, J. Kittinger, A. Boustany, M. Pinsky, R. Rykaczewski, H. Hosein, and Q. Hanich. \$140,000 to Rutgers.

2016-19 Gordon and Betty Moore Foundation, “Evolutionary adaptation potential: From novel science to practical application.” M. Colton, M. Webster, D. Schindler, M. Pinsky, \$1,000,541 (\$431,551 to Rutgers).

2016-18 NOAA Cooperative Institute for the North Atlantic Region. “Projecting and communicating changes in North American marine species distributions.” Pinsky, M. L., \$94,132.

Faculty Achievements and Activities:

Professor Julie Lockwood was one of 12 international scientists to be invited to participate in a workshop on the future of invasion science held at Cambridge University this September. This unique 2-day workshop was designed as a horizon scan of emerging and future issues that are expected to challenge risk assessment and management of non-native species over the next few decades.

Dr. Lena Struwe established an Online portal launched for vascular plant specimen data and specimen images on the National Network of Small Herbaria: Mid-Atlantic Region, serving data to iDigBio and GBIF: see <http://nansh.org/portal/collections/misc/collprofiles.php?collid=316>

Lena Struwe also oversaw the Reorganization of all angiosperms in Chrysler Herbarium from Cronquist's system to APG III; checking all current names of specimens; formed the undergraduate Herbarium Army

Malin Pinsky was on a research exchange at the Center for Ecological and Evolutionary Synthesis at U. Oslo as part of the GreenMar project (<https://www.greenmar.uio.no/>). He was specifically starting a project to understand the genomic architecture of rapid evolutionary changes in cod populations that experienced intense fishing over the last century, in collaboration with Bastiaan Star and Anne Marie Eikeset.

Welcome:

Emily Moberg joined the Pinsky Lab as a postdoc on their Coastal SEES project. She just finished a Ph.D. with Mike Neubert at WHOI

Sarah Gignoux-Wolfsohn just joined the Pinsky Lab as a postdoc (co-advised with Brooke Maslo) to test for rapid evolution of resistance to white-nose syndrome in bats. She just finished her Ph.D. at Northeastern with Steve Vollmer.

Katrina Catalano joined the Pinsky Lab as a Ph.D. student working on reef fish metapopulation dynamics. She just finished her undergraduate degree at Boston U.

Wijnand Boonstra is visiting the Pinsky Lab from the Stockholm Resilience Center. He's a sociologist interested in how fishers adapt to environmental change.

Transitions:

Congratulations to **Josh Echols** (Handel Lab) on the successful defense of his Master's thesis on September 9, 2016.

Congratulations to **Michael Allen** (Burger Lab) on the successful completion of his Qualifying Exam on October 12, 2016

Congratulations to **Ariel Kruger** (Morin Lab) on the successful defense of her Preliminary Proposal on November 2, 2016

Alumni News:

Ileana Pérez-Rodríguez will be starting as an assistant professor at the University of Pennsylvania on July 1, 2017. She writes that she is looking for prospective graduate students to kick-start her research program within the Department of Earth and Environmental Science and in association to the Center for Energy Research. She is looking for candidates interested in microbial biogeochemistry from a deep-time and energy-use perspective. The prospective student(s) will be expected to work at the interface between geology, chemistry, and biology.