

I am seeking motivated Ph.D. students interested in joining the Gouhier lab at Northeastern University's Marine Science Center in Nahant, Massachusetts for the 2015-2016 academic year (<http://www.northeastern.edu/synchrony>). Students will be partially funded by a \$1,200,000 NSF CyberSEES award whose goal is to develop new mathematical and computational tools to understand the effects of climate in complex and interconnected coastal ecosystems ([http://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1442728](http://www.nsf.gov/awardsearch/showAward?AWD_ID=1442728)).

Overall, members of the lab are primarily interested in understanding how ecological and environmental processes occurring at different spatial and temporal scales affect the structure, dynamics, and functioning of interconnected marine ecosystems. To address this topic, we use a combination of mathematical models, computer simulations, and statistical analyses of large datasets. Students in the lab are expected to develop an independent research project based on their primary interests with significant input and support from the PI. Research topics can run the gamut from fundamental theoretical ecology (e.g., non equilibrium metacommunity dynamics) to applied conservation biology (e.g., marine reserve network design). Students will have access to a traditional wet lab to conduct experimental work in coastal ecosystems and a dry lab for high-performance computing. Funding via teaching and research assistantships is available. Students with a background in mathematics and programming are particularly encouraged to apply.

The Marine Science Center is located just 15 miles from Boston and is home to a diverse faculty with expertise in conservation biology, fisheries, evolutionary ecology, climate change, ecosystem functioning, and quantitative ecology.

If you are interested in joining the lab, please read my letter to prospective students (<http://www.northeastern.edu/synchrony/people/prospective-students>) and then send me (Dr. Tarik Gouhier: [tarik.gouhier@gmail.com](mailto:tarik.gouhier@gmail.com)) an email with (1) your CV including GPA and GRE scores, (2) a brief description of your research interests (no more than one page), and how they relate to the lab's.