Ruth Yanai is seeking new graduate students (MS or PhD) to participate in a large collaborative project investigating above and belowground carbon allocation, nutrient cycling, and tradeoffs involved in multiple resource allocation. The Multiple Element Limitation in Northern Hardwood Ecosystems (MELNHE) project has field sites located at Hubbard Brook, Jeffers Brook, and Bartlett Experimental Forests in the White Mountains of New Hampshire. Since 2011, thirteen stands have received full-factorial N x P treatments annually in 0.25-ha plots, with six stands treated with Ca. Research in the MELNHE project includes aboveground diameter growth, leaf production by species, foliar nutrient resorption, soil respiration, soil mineralization, beech bark disease, mycorrhizae, and snail and arthropod diversity. More information on the project can be found at http://www.esf.edu/melnhe.

QUERCA (Quantifying Uncertainty Estimates and Risk for Carbon Accounting) is a new project, building on the strengths of QUEST (Quantifying Uncertainty in Ecosystem Studies; http://quantifyinguncertainty.org). The goal of QUERCA is to develop and disseminate peer-reviewed tools and approaches for error propagation for use by carbon accounting technicians and researchers, especially those in tropical countries seeking support from REDD+ to reduce deforestation and forest degradation for climate mitigation. QUERCA will help support students working in the MELNHE project who are interested in contributing to this effort.

We welcome inquiries from prospective students interested in forest ecology, nutrient cycling, and uncertainty analysis. Applicants should be self-motivated, excited to work as part of a multi-investigator project, have laboratory and field experience, and be comfortable living and working in a group setting. A field crew blog from previous years is available at https://shoestringproject.wordpress.com/.

Ideally, new students join us at the start of the summer field season at the beginning of June, so as to become familiar with the field sites and our research activities before starting classes in late August.

Funding will consist of a combination of research and teaching assistantships. A stipend, full tuition waiver, health insurance, and a summer position with the field crew in New Hampshire will be provided. Prospective students may apply to the Department of Forest and Natural Resources Management or the Graduate Program in Environmental Science, both at the SUNY College of Environmental Science and Forestry, Syracuse, NY.

We appreciate communicating with students as part of the application process. Students are encouraged to review MELNHE (and QUEST) data and publications and supply their own ideas for research in relation to the project. Prospective students should begin that conversation by requesting the password for Ruth’s project materials from Mary Hagemann at forestecology@esf.edu.

Thanks!

Ruth Yanai
Professor