## **Boyce Thompson Institute, Ithaca, NY**

Postdoctoral Position: Microbial communities associated with AM fungi

**Background:** Research in our group asks (at the molecular level) how do plants, arbuscular mycorrhizal (AM) fungi and microbes associate to form a nutritionally-

based symbiosis? AM fungi are mutualistic endosymbionts of plants; their hyphae inhabit the root cortex and the soil, and within these widely differing environments they interact with complex microbial communities. Profiling studies revealed that microbial communities tightly associated with extraradical hyphal surfaces are conserved (at higher taxonomic rank) across fungal species and soils (1). This project focuses on the microbes and will investigate the influence of plant species and genotype on community composition, use high-resolution spatial mapping to map the spatial structure of hyphal microbe communities, and analyze interactions within the microbial community.

**Requirements:** Applicants must have a Ph.D. in microbiology; a strong publication record and demonstrated expertise with either sequence-based microbial community analyses, microbial genetics or analyses of microbiome functions. Experience with microbial biochemistry is advantageous.

**To Apply:** Applicants should submit a CV, names of three references and a statement of research interests and relevant experience to Maria J. Harrison, (<u>mjh78@cornell.edu</u>).

**Project Location:** The Boyce Thompson Institute is a non-profit research institute affiliated with Cornell University and located on the Cornell University campus in Ithaca, New York, <a href="www.bti.cornell.edu">www.bti.cornell.edu</a>. EOE M/F/D/V

## Literature Cited.

(1) Emmett, B.D., Lévesque-Tremblay, V. & Harrison, M.J. Conserved and reproducible bacterial communities associate with extraradical hyphae of arbuscular mycorrhizal fungi. ISME J 15, 2276–2288 (2021). https://doi.org/10.1038/s41396-021-00920-2

