

### **Postdoctoral Position: Arbuscular mycorrhizal fungi and hyphae-associated microbial communities**

A postdoctoral position is available to join a research group studying the association of plants and arbuscular mycorrhiza (AM) fungi. 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. Recent profiling studies revealed that microbial communities tightly associated with extraradical hyphal surfaces are conserved across fungal species and soils (1). Building from these analyses, we will use high-resolution spatial mapping (HiPR-FISH) (2) to map the spatial structure of hyphal microbe communities, and analyze community functions.

**Requirements:** Applicants must have a Ph.D. in microbial genomics, plant-microbiomes or microbiology; a strong publication record and demonstrated expertise with sequence-based microbial community analyses, or analyses of microbiome functions. Experience with microbial genetics, secondary metabolites, chemistry or microscopy 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, ([mjh78@cornell.edu](mailto:mjh78@cornell.edu)).

**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, [www.bti.cornell.edu](http://www.bti.cornell.edu). 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>

(2) Shi, H., Shi, Q., Grodner, B. *et al.* Highly multiplexed spatial mapping of microbial communities. *Nature* **588**, 676–681 (2020). <https://doi.org/10.1038/s41586-020-2983-4>