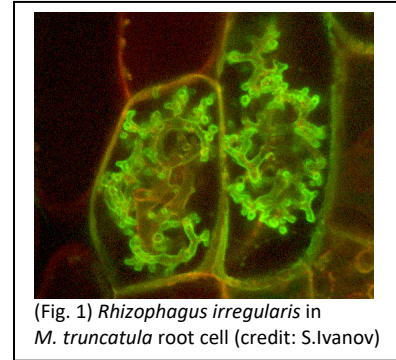


**Boyce Thompson Institute, Ithaca, NY**

**Two postdoctoral positions: Molecular mechanisms underlying development and functioning of arbuscular mycorrhizal symbioses**

**Background:** Research in our group asks (at the molecular level) how do plants develop endosymbiotic associations with fungi from the Glomeromycotina (also known as arbuscular mycorrhizal fungi)? How do the root cells temporarily reorganize their cell biology, physiology and metabolism to accommodate a large fungal endosymbiont (Fig.1)? How do the plant and fungus exchange nutrients and how is the symbiosis regulated? We explore these questions in *Medicago truncatula* and *Brachypodium distachyon* in association with several AM fungi, using a combination of genetics, genomics, biochemistry and cell imaging approaches.



(Fig. 1) *Rhizophagus irregularis* in *M. truncatula* root cell (credit: S.Ivanov)

**Postdoctoral Positions:** We have two openings (1) to study the plants' genetic program for endosymbiosis with arbuscular mycorrhizal fungi and (2) to study phosphate transporters and molecular mechanisms regulating symbiotic maintenance. These projects build on earlier research from our group [1-10].

**Requirements and Application:** Applicants must have a Ph.D. in plant biology or other relevant discipline, a strong publication record and demonstrated expertise with molecular biology, genetics and/or biochemistry. A background in membrane transport, plant cell biology or plant-fungal interactions is advantageous.

**To Apply:** Applicants should submit a CV, a statement of research interests including relevant experience, and contact information of three referees to Maria J. Harrison, ([mjh78@cornell.edu](mailto:mjh78@cornell.edu)). Review of applications will begin immediately and continue until the positions are filled.

**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.

Lab Website: [www.bti.cornell.edu](http://www.bti.cornell.edu)

<https://scholar.google.com/citations?hl=en&user=4qZ00UwAAAAJ>

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