Postdoctoral Fellowship in Fungal-Plant Associations

The St. Leger laboratory, Department of Entomology at The University of Maryland (UMD), invites applications for a Postdoctoral Scholar – Employee position starting Spring 2020 on a National Science Foundation funded project entitled “Unraveling the mechanisms by which novel fungal-plant associations evolve”. The candidate post-doctoral associate will work on a unique experimental system involving a radiating genus of fungi (Metarhizium spp) which have rapidly diversifying lifestyles. The goal is to ask fundamental questions about lifestyle shifts - where a pathogen jumps from one host (insect) species to another, or changes its role from just pathogen to plant symbiont. By taking a comparative approach, with a strong set of hypotheses from ecological and evolutionary theory, the project will provide insights into the genetic and molecular underpinnings determining evolutionary shifts in lifestyles that will be generally applicable to pathogens and hosts. Understanding these shifts is critical, especially in light of environmental change, invasive species and the laboratories work on transgenic approaches to controlling vectors of human disease. A combination of experimental approaches will be used, and there will be many opportunities to develop new projects to explore the evolution of lifestyle shifts.

Position Qualifications: A Ph.D. with a strong background in molecular microbiology and genetics (or related discipline) is required. Experience working with fungi, particularly filamentous fungi, is a strength. Experience working with bioinformatics tools is helpful but not required.

Salary range is approximately $47,000 to $55,000, depending on qualifications and experience, plus benefits.

Some relevant papers for the project from our group are listed below:

- https://journals.plos.org/plospathogens/article?id=10.1371/journal.ppat.1006260
- https://science.sciencemag.org/content/364/6443/894

Applicants should submit a CV and a summary of research experience via email to Professor Raymond J. St. Leger (stleger@umd.edu). Please highlight in your cover letter why you are interested in this project, and how your skillset/experience is relevant. This position is currently open and applications will be accepted until a suitable candidate is identified. We anticipate a start date Spring 2020.

Three (3) confidential letters of reference should be sent under separate email cover. Minorities and women are particularly encouraged to apply. University of Maryland is an EOE/AAE.