Post-Doctoral Research Position, *Colletotrichum* genomics

We are seeking applications for a Post-Doctoral Researcher to study transcriptome and genome evolution of five closely related species of *Colletotrichum* fungi impacting the health and productivity of grasses used for bioenergy, food, and turfgrass. The incumbent will: (1) Develop and test hypotheses related to infection and cellulolytic degradation of host tissue by diverse *Colletotrichum* strains, (2) Take the lead on performing inoculations of grasses with these pathogens for RNA-Seq analysis from the host/pathogen interaction, and (3) Contribute to a larger collaborative *Colletotrichum* genome sequencing initiative.

Using genomic and transcriptomic (RNA-Seq) resources provided through a grant from the DOE/Joint Genome Institute (JGI), we seek to understand the molecular basis of host specialization, pathogenicity, cellulosic biomass degradation and other traits that characterize this diverse, yet closely related group of grass pathogens. Fully assembled genomic datasets will soon be available for 20 *Colletotrichum* isolates and mapped transcriptomes for 14 of these isolates. Data analysis will be facilitated through inclusion in the JGI MycoCosm Fungal Genome pipeline.

The incumbent will work under the joint direction of Dr. Bruce Clarke, Rutgers University, Dept. of Plant Biology & Pathology, and Dr. Jo Anne Crouch, USDA-ARS. The position will be physically located at the Rutgers University’s Cook Campus in New Brunswick, NJ.

**Qualifications**
A Ph.D. in plant pathology, microbiology, mycology or a closely related field is required. Candidates should be proficient in working with large datasets, and must have strong analytical, statistical and writing skills. Candidates with experience working with fungi and/or plant pathogenic microorganisms, or any of the following areas are especially encouraged to apply: next-generation sequencing datasets; comparative genomics using Galaxy tools; experience analyzing RNA-Seq data; population and evolutionary genetics; phylogenetics. Skills in bioinformatics (python, perl, R, etc) are desirable.

**Terms of Appointment**
Starting salary is $37,000 - $45,000 depending on experience, plus Rutgers University benefits. Funds are guaranteed for one year, and renewable for a second year pending satisfactory research progress and availability of funds.

Position is available starting February 2013. Review of applications will begin January 23, 2013, and continue until a suitable candidate is found.

**Applications should be sent to:**
Bruce Clarke (clarke@aesop.rutgers.edu) and Jo Anne Crouch (joanne.crouch@ars.usda.gov) and must include: (1) a cover letter containing a brief description of research interests and career goals, (2) curriculum vitae, (3) PDFs of two publications, and (4) contact information for three references.

Rutgers University is an equal opportunity, affirmative action educator and employer. Applications from women and minorities are encouraged.