Graduate Student-PhD, forest pathology (genetics/genomics)

Position Description:

The Forest Pathology Lab at Michigan State University (East Lansing, MI) is accepting applications for a graduate student (PhD level) to start as a research assistant in the Summer of 2017 and to enroll for Fall 2017. We are looking for a highly-motivated individual to study the population genomics of *Ceratocystis fagacearum*, the pathogen behind the devastating disease of oaks "oak wilt". This is a unique opportunity to combine traditional plant pathology research (microscopy, field and culture work) with molecular and bioinformatics approaches (PCR, qPCR and genome resequencing analyses). The candidate will identify the population structure of *C. fagacearum* in the US and evaluate known assays and, if required, develop novel molecular assays to detect the pathogen. Furthermore, the candidate will investigate seasonal variation in infection of red oak by *C. fagacearum* and seasonal variation in red oak susceptibility. The candidate will be part of a larger project focused on identifying high-risk periods of *C. fagacearum* transmission and infection in Michigan. For further information please go to the following web link: https://forestpathology.msu.edu/research/oak-wilt/.

The Graduate student will have the option of a degree from either the Department of Plant, Soil and Microbial Sciences or the Department of Forestry, depending on their interests. The student will be supported with three years of stipend, tuition waiver and health insurance. Additional fellowship opportunities for graduate students at Michigan State University are also available.

Position Requirements:

The ideal applicant will have an MSc and experience and interest in molecular biology of tree pathogens, particularly in population genetics/genomics and detection assays. Applicants must have a degree in a relevant area, including plant pathology, forestry, mycology, genomics, bioinformatics, physiology, biochemistry, microbiology, botany, or other biological sciences. They should be self-motivated, have strong interpersonal skills and be capable of working in a multidisciplinary team. They must be able to perform experiments independently and write scientific publications and other documents. Applicants with prior experience in next-gen sequencing, bioinformatics, pcr and qPCR are encouraged to apply. Excellent communication, reading, and writing skills in English are also desired. The selected candidate must meet eligibility requirements for work in the U.S. by the start date. Additionally, candidates will need to meet the minimum requirements outlined by Michigan State University's Graduate program (https://grad.msu.edu/).

Instructions For Applying:

If you are interested in this position please contact Dr. Monique Sakalidis via email at sakalidi@msu.edu. Include a short statement of interest, your CV and the contact details of three references. To be accepted into the graduate program you will need to apply through the MSU Graduate School https://grad.msu.edu/apply. Applications must be received by April 20th, 2017 to receive full consideration.

Specific information regarding the Plant pathology graduate program please see
http://www.psm.msu.edu/degree_cerficate_programs.

Specific information regarding the Forestry graduate program please see
http://www.for.msu.edu/graduate/important_information_for_graduate_applicants.

Organization Description:

MSU is an equal opportunity employer and the Department Plant, Soil and Microbial Sciences
and the Department of Forestry is committed to promoting diversity in research.

 Organization Website: www.msu.edu

Closing Date: April 20th 2017