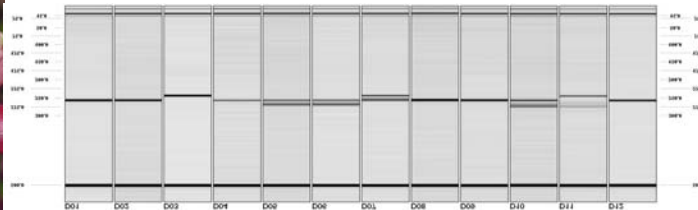


GRADUATE ASSISTANTSHIP IN PLANT PATHOLOGY



POSITION DESCRIPTION: A Master/PhD level graduate research assistantship (GRA) is available starting Spring semester 2002 in the area of Plant Pathology. The research will be focused on the characterization of host-pathogen relationship between *Cornus florida* (flowering dogwood) and *Erysiphe pulchra* (the causal organism of powdery mildew). Ultrastructure and molecular approaches (differential display and EST libraries) will be used to study the interaction between susceptible and resistant cultivars of flowering dogwood and the pathogen. Students will be expected to present their research results at professional meetings and in appropriate peer-reviewed journals. A stipend, tuition, and a student health plan is included in the position.

EFFECTIVE DATE: Search will start March 2002; and continue until the position is filled.

QUALIFICATIONS: The successful candidate will have a B.S. or B.A. in Biology, Biochemistry, Botany, Plant Pathology, Microbiology or a related science. Applicants will be evaluated on the basis of their grades, laboratory experience, English usage, familiarity with biological and molecular techniques, letters of recommendation, GRE scores and letter of intent. The University of Tennessee is an EEO/AA/ Title IX/Section 504/ADA employer.

ENVIRONMENT: The Department of Entomology and Plant Pathology is located on the Agricultural Campus of UT. The successful candidate will work in the Plant Biotechnology Building, which is equipped with state-of-the-art equipment for biotechnology research including, DNA sequencing, Real Time PCR, microarrays, tissue culture, and proteomics. Knoxville is consistently ranked as one of the ten most livable cities in the nation and is less than an hour from the Great Smokey Mountains National Park, one of the most biologically diverse regions in North America.

Questions concerning the research project or facilities should be directed to Dr. Robert N. Trigiano, Professor in Ornamental Plant Pathology and Biotechnology (865-974-0221, rtrigian@utk.edu). For information on how to apply for this position, contact Dr. Ernest Bernard, Professor and Graduate Student Director (ebarnard@utk.edu). For information concerning the Department of Entomology and Plant Pathology, visit <http://eppserver.ag.utk.edu>.

GRADUATE ASSISTANTSHIP (M.S.) AVAILABLE IN ENTOMOLOGY AND PLANT PATHOLOGY AT THE UNIVERSITY OF TENNESSEE-KNOXVILLE

Molecular systematics of the *Simulium jenningsi* species group (Diptera: Simuliidae)



PROJECT DESCRIPTION: The *Simulium jenningsi* species group is comprised of 22 morphospecies, at least four of which likely contain two or more sibling species based upon examination of polytene chromosome banding patterns. Larvae, pupae, and males can be separated, with difficulty, using structural characters. Females, however, are currently inseparable, a conundrum given the group's importance as nuisance and biting pests of humans and other vertebrates. Prior research has shown that nuclear genes are more informative than mitochondrial ones within this group so the successful applicant will concentrate on obtaining sequences from a second single-copy nuclear coding gene, likely one that has never before been used in insect systematics.

PROJECT OBJECTIVES: (1) Elucidate species boundaries, characterize intraspecific variability using molecular sequences, and formally describe, with involvement from other team members, any unnamed cryptic species encountered; (2) Infer phylogenetic relationships among group members using sequences from the mitochondrial and nuclear genomes; and (3) Publish results in peer-reviewed journal articles.

EFFECTIVE DATE: August 2009 or until suitable candidate found.

STIPEND: \$18,000 per year for at least 2 years, with both in- and out-of-state tuition waived and health insurance included.

QUALIFICATIONS: The successful M.S. candidate will have a B.S. or B.A. in biology or a related science. Applicants will be evaluated on the basis of undergraduate grades, letters of recommendation, GRE scores, resume, and letter of intent. The University of Tennessee is an EEO/AA/Title IX/Section 504/ADA employer.

ENVIRONMENT: The Department of Entomology and Plant Pathology is located on the Agricultural Campus of UT and is separate from (but close to) the main campus. The department is partially housed in the new Plant Biotechnology Building that is equipped with the most modern equipment for biotechnology research including DNA sequencing, fragment analysis and fingerprinting, real time PCR, micro arrays, tissue culture, insect and disease physiology, and cytology. Knoxville, a city of 180,000, is the economic and cultural center of eastern Tennessee. It is consistently ranked as one of the ten most livable cities in the nation and lies just 40 miles west of The Great Smoky Mountains National Park. There are myriad outdoor activities, including hiking, camping, canoeing, and fishing.

The University of Tennessee Entomology & Plant Pathology Department offers graduate assistantships on a competitive basis, with waivers of in-state and out-of-state tuition. Learn more about our graduate program at: <http://eppserver.ag.utk.edu/default.html>. Interested persons should contact Dr. John K. Moulton via telephone (865-974-7950; 865-974-8411) or e-mail (jmoulton@utk.edu).

All qualified applicants will receive equal consideration for employment and admissions without regard to race, color, national origin, religion, sex, pregnancy, marital status, sexual orientation, gender identity, age, physical or mental disability, or covered veteran status.

Eligibility and other terms and conditions of employment benefits at The University of Tennessee are governed by laws and regulations of the State of Tennessee, and this non-discrimination statement is intended to be consistent with those laws and regulations.

In accordance with the requirements of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990, The University of Tennessee affirmatively states that it does not discriminate on the basis of race, sex, or disability in its education programs and activities, and this policy extends to employment by the University.

Inquiries and charges of violation of Title VI (race, color, national origin), Title IX (sex), Section 504 (disability), ADA (disability), Age Discrimination in Employment Act (age), sexual orientation, or veteran status should be directed to the Office of Equity and Diversity (OED), 1840 Melrose Avenue, Knoxville, TN 37996-3560, telephone (865) 974-2498 (V/TTY available) or 974-2440. Requests for accommodation of a disability should be directed to the ADA Coordinator at the Office of Equity and Diversity.

BIOLOGICAL SCIENCES MAJORS

POSITION DESCRIPTION: Graduate Research Assistantships (GRA) in **entomology** are available starting Spring, Summer or Fall semesters. Research areas include, but are not limited to: Non-insecticidal control, biological control, insect pathology, insect physiology, host-plant interactions, medical-veterinary entomology, taxonomy, molecular systematics, forest and crop pest management, insect-disease interaction, and insect biodiversity and evolution. GRA's are ½ time employees of the University of Tennessee Agricultural Experiment Station and conduct research on both basic and applied aspects of entomology while earning a M.S. degree in Entomology and Plant Pathology or a Ph.D. in Plants, Soils and Insects with a concentration in Entomology or Insect Pest Management. Research is conducted under the supervision of staff entomologists who also serve as the graduate student's major advisor. Students in crop entomology or IPM may select to conduct research at the West Tennessee Research and Education Center in Jackson.

EFFECTIVE DATE: Spring, Summer or Fall of the current year.

QUALIFICATIONS: The successful M.S. candidate(s) will have a B.S. or B.A. in biology, agriculture, or related science. Ph.D. candidates are expected to have completed a M.S. degree. Applicants are evaluated on the basis of undergraduate grades, letters of recommendation, GRE scores, a resume, and a letter of intent. The University of Tennessee is an EEO/AA/Title IX/Section 504/ADA employer.

STIPEND: GRAs provide a monthly stipend with **both in- and out-of-state tuitions waived**. Ph.D. stipends are dependent on previous experience and available funding from the project leaders. A student health insurance plan is included. Applicants should contact individual professors concerning research proposals and to assure funding for GRA and tuition waivers.

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For Additional information, application procedures, and deadlines contact:

Homepage: <http://eppserver.ag.utk.edu>
Dr. Ernest C. Bernard, Professor
Dept. of Entomology and Plant Pathology
The University of Tennessee
2431 Joe Johnson Dr., 205 Ellington Plt. Sci. Bldg.
Knoxville, TN 37996-4560
Telephone: (865) 974-7135 - FAX: (865) 974-4744
E-Mail: ebernard@utk.edu

BIOLOGICAL SCIENCES MAJORS

POSITION DESCRIPTION: Graduate Research Assistantships (GRA) in **plant pathology** are available starting Spring, Summer or Fall semesters. Research areas include, but are not limited to: soil microbiology, nematology, biological control, physiology of host-parasite interactions, functional genomics, epidemiology of stem and foliage diseases, virology, forest and crop disease management, molecular epidemiology, and insect transmission of plant diseases. GRA's conduct research on basic or applied aspects of plant pathology while earning a M.S. degree in Entomology and Plant Pathology or a Ph.D. degree in Plant, Soils and Insects with concentrations in Plant Pathology or Bioactive Natural Products and are considered ½ time employees of the Tennessee Agricultural Experiment Station. Research is performed under the supervision of staff plant pathologists who also serve as major advisors for graduate students. Students in crop plant pathology may select to conduct research at the West Tennessee Experiment Station in Jackson.

EFFECTIVE DATE: Spring, Summer or Fall of the current year.

QUALIFICATIONS: The successful M.S. candidate(s) will have a B.S. or B.A. in biology, agriculture, or related science. Ph.D. candidates are expected to have completed a M.S. degree. Applicants are evaluated on the basis of undergraduate grades, letters of recommendation, GRE scores, a resume, and a letter of intent. The University of Tennessee is an EEO/AA/Title IX/Section 504/ADA employer.

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