



Position Announcement

Research Assistant II / Forests Genetics Research Manager

Department of Forestry, College of Agriculture and Natural Resources, Michigan State University

Position description: Join a growing team and make your mark on the future! The Department of Forestry at Michigan State University is seeking a talented tree/plan genetics scientist to fill a critical role in improving tree species to be more adaptable to climate change. This position is subject to the collective bargaining agreement between MSU and the Administrative Professionals Association of MSU.

The Forest Genetics Research Manager will oversee all phases of research on Michigan forest genetics and tree improvement. The successful applicant will participate in the development and implementation of study plans for the improvement, propagation, and deployment of improved Michigan forest species in both natural and managed stands. Breeding goals include mitigating effects of climate on seedling survival, tree growth, long-term survival, reproductive output, resistance to pests and pathogens, as well as identifying adaptive traits and genotypes for use in assisted migration and forest management. Additionally, the Forest Genetics Research Manager will work as part of the [Forest Genetics Lab](#) to explore marker assisted selection and genomic approaches to aid in predicting (mal)adaptation across species' ranges. The position benefits from the long-term partnership between MSU and the Michigan Department of Natural Resources through the Michigan Cooperative Tree Improvement Program. The position holds the potential for extending research in new directions and to collaboratively pursue additional research funding. MSU's strengths in forest genetics and genomics provide a collaborative environment that supports success. Specific duties include:

- 25% - Oversee the maintenance of shared laboratory, greenhouse, nursery, and trial spaces. Including, mowing, spraying, and minor repairs.
- 25% - Oversee the planning and preparation of sites for future forest genetics studies and aid in the evaluation and management of existing trials and study sites.
- 25% - Responsible for plantation design, plantation establishment, field collections, and compiling and analysis of data from complex experiments involving tree growth and improvement, seedling production, disease and pest resistance, nursery practices, and plant propagation.
- 15% - Coordinates and cooperates with geneticists and others to create and analyze populations for breeding goals and coordinates the distribution of improved materials as needed.
- 10% - Contribute to authorship / co-authorship of publications based on existing and new data as appropriate.

Physical demands and health risks related to this position include (but are not limited to) lifting 50lb boxes of seed or seedlings, lifting backpack sprayer with herbicide/pesticide, lifting 5gal buckets of seedlings or bags of soil, carrying 50lb loads approximately 100 ft., wearing a respirator, and spraying/mixing organophosphate or carbamate insecticides.

Required qualifications: Knowledge equivalent to that which normally would be acquired by completing a four-year college degree program in forestry, plant breeding, genetics, or closely related field; three to five years of related and progressively more responsible or expansive work experience in overseeing research projects and laboratory operations, operating and maintaining a variety of laboratory equipment, performing specialized and difficult analytical and research techniques, and designing research experiments in forest genetics, tree improvement, and plant propagation; familiarity with R or other closely related programming language; or an equivalent combination of education and experience. The position requires the candidate to acquire a pesticide application certification within the first year.

Preferred qualifications: The preferred candidate will have an MS in Forestry, Plant Breeding, Genetics, or a closely related field, documented ability to bring projects to completion, evidence of effective independent and collaborative work, strong skills in written and verbal communication, and experience in managing personnel and projects.

Location: The position is based at Michigan State University in East Lansing, MI, USA.

To Apply: Apply online at <https://careers.msu.edu> to position number 942222. Upload the following required documents: 1) a letter of interest detailing qualifications for the position; 2) resume/curriculum vitae; and 3) at least three professional references with contact information. Incomplete applications will not be considered.

Application deadline: Application review will begin on May 8, 2024. Questions about the position should be directed to Dr. Jeremy Johnson at jeremyjo@msu.edu.

MSU is an affirmative action, equal opportunity employer, committed to achieving excellence through a diverse workforce and an inclusive culture that encourages all people to reach their full potential. We actively encourage applications from, and nominations of, women, persons of color, veterans, persons with disabilities and other individuals who can contribute to the intellectual diversity and cultural richness at Michigan State University. MSU is committed to providing a work environment that supports employees' work and personal life.