Position #: 2018-007

M.S. Assistantship: Mechanisms for Autumn Nitrogen Resorption in Trees

School of Forestry & Natural Resources, University of Arkansas at Monticello

The School of Forestry & Natural Resources at the University of Arkansas at Monticello is seeking applicants for a M.S. Assistantship available beginning August 16, 2018. The assistantship is half time and carries an annual stipend of $15,000 plus tuition.

**Project:** Nitrogen resorption (the withdrawal of nitrogen from leaves during the fall for storage in stems during winter) makes a major contribution to the high nitrogen use efficiency of trees. Nitrogen from leaves is transported as amino acids through the phloem to stems, where most nitrogen accumulates as bark storage protein. How the nitrogen is moved during this process is poorly understood. The Master’s student will conduct research using transgenic poplar lines under specified environmental conditions to identify mechanisms involved in this nitrogen cycling. The successful candidate will also have the opportunity to learn basic physiological, biochemical and molecular research skills, as well as more complex techniques depending on the student’s qualifications, while developing foundational knowledge for societal benefits, such as enhanced growth, reduced economic cost, and reduced environmental damage from fertilizer use.

**Requirements:** Applicants must have a 2.7 overall undergraduate GPA or 3.0 GPA in the last 60 semester hours of undergraduate courses and satisfactory GRE scores. A B.S. degree in a natural resources-related field is also required. Applicants must have a valid U.S. driver’s license or obtain the same within 60 days of starting employment. Overnight travel is required as well as the ability to work outdoors in all weather conditions.

**Location and Facilities:** The School of Forestry & Natural Resources is located in Monticello, Arkansas in the southeastern portion of the state. The Arkansas Forest Resources Center is also headquartered here, and is administered by the University of Arkansas System Division of Agriculture. The Arkansas Forest Resources Center is the research and extension arm for forest-based programs within the State. Additionally, the USFS Arkansas Forestry Sciences Lab is located at the School. The School and Center maintain several state-of-the-art laboratories (hydrology, soil, quantitative analysis, silviculture, wildlife ecology & management) available for graduate research and education.

**Application & Additional Information:** Graduate program and application information can be found at [http://www.uamont.edu/sfnr](http://www.uamont.edu/sfnr). Applicants must be admitted to the University of Arkansas at Monticello and apply to the School of Forestry & Natural Resources before they can be considered for an assistantship. Applicants must submit all GRE scores, official transcripts, a statement of interests, and three letters of recommendation. Please indicate the position number above on all application materials and inquiries. For additional information, please contact:

Dr. Benjamin Babst, babst@uamont.edu, (870) 460-1348

The position is available until a qualified applicant is selected.

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