# **Job Description**

Posting Title: Research Fellow - Spatial Analysis of Terrestrial Job Title: RESEARCH FELLOW

Job Opening ID: Carbon Balance Effects of U.S. Biofuel Org Group:

Feedstock Production Org Grou

104176 Vice Pres Research

Work Location Ann Arbor Campus Department: U of M Energy Institute

City: Ann Arbor State: Posting Begin Date: 12/05/2014 Full/Part Time: Part-Time Posting End Date: 01/05/2015 Regular/Temporary: Salary From: \$45000.00 Regular FLSA Status: Exempt Salary To: \$65000.00

Return to Previous Page Switch to Internal View

## **How to Apply**

A cover letter is required for consideration for this position and should be attached as the first page of your resume. The cover letter should address your specific interest in this position and outline skills and experience that directly relate to the position. Also required and can be attached after the resume are 1-3 published papers for which you are the lead author, a curriculum vitae, and the names of three references.

#### Job Summary

The University of Michigan Energy Institute (UMEI) coordinates research, education and public outreach to address important problems associated with the production and use of energy. By convening diverse interests with world-class expertise, the institute facilitates partnerships that integrate science, technology and policy solutions to develop economically and environmentally sound strategies that meet pressing energy challenges.

UMEI is sponsoring a part-time (32 hours/week), one-year, extendable postdoctoral fellowship for a scientist with expertise in terrestrial ecology, biogeochemistry and environmental informatics. The fellow will work with the director of UMEI's transportation energy and climate project to conduct pioneering analyses and spatially explicit assessments of the regional effects of biofuel production. The research will entail estimating net primary production (NPP) and net ecosystem production (NEP) on U.S. croplands and associated regional land conversion, and modeling the relationship of these terrestrial resource impacts to market and policy factors associated with biofuel production and consumption over the past decade.

The fellow will be responsible for applying the above knowledge and skills as outlined by the Qualifications (below) to test hypotheses related to changes in NEP and other carbon balance effects at regional and national scales within the coterminous United States. The work will involve identifying and using existing public data sets (rather than field work). It will apply ecological science and statistical methods to develop original estimates of net CO2 emissions impacts and examine how they compare to previously published estimates derived from other methods. The fellow will be encouraged and supported in developing proposals for additional research on the topic and the fellow's own related scholarly interests.

Postdoctoral fellows are required to be in residence for the duration of the appointment, write reports and papers suitable for peer-reviewed publication and presentations on the research and its significance, and assisting in writing proposals for ongoing work.

### Required Qualifications\*

- \* A recently completed Ph.D. in a relevant discipline, such as terrestrial ecology, natural resources, geography, biogeochemistry or other earth and environmental science.
- \* Expertise in the terrestrial carbon cycle and land-use dynamics.
- \* Proven skills in quantitative methods of spatial analysis, including geographic information system (GIS) tools and other methods of environmental informatics.
- \* Familiarity with key public data bases, including the USDA Cropland Data Layer and other relevant agricultural and land-use data and surveys.
- the first the first the second of the second

ˆ Excellent English writing and speaking skills and demonstrated accomplishment in publishing peer-reviewed papers and reports.

## **Background Screening**

The University of Michigan conducts background checks on all job candidates upon acceptance of a contingent offer and may use a third party administrator to conduct background checks. Background checks will be performed in compliance with the Fair Credit Reporting Act.

#### **U-M EEO/AA Statement**

The University of Michigan is an equal opportunity/affirmative action employer.

Return to Previous Page

Switch to Internal View