

## **Job Announcement:** Post-Doc in Agricultural Conservation Program Evaluation at UIUC

A two-year post-doctoral research associate position is available in the Dept. of Agricultural and Consumer Economics (ACE) at the University of Illinois in Urbana-Champaign (UIUC) to use geocomputation and econometrics to measure the on-farm benefits and costs of conservation practice adoption using methods for causal inference and program evaluation. This will entail close collaboration with the USDA Natural Resources Conservation Service (NRCS), and will be conducted in partnership with the USDA Economic Research Service (ERS). It is expected that the postdoc will work in Washington, DC with one or both of these agencies for several cumulative weeks over the course of the project. The postdoc will be under the direct supervision of Professor Ben Gramig at UIUC, and will work with professors Gary Schnitkey (UIUC) and Seong Yun (Mississippi State University), as well as Dr. Laura Gentry (adjunct faculty; director of water quality research, Illinois Corn Growers Association).

The position offers a competitive base salary plus benefits includes annual funding to support the candidate's professional development by attending conferences and presenting their own research. The Dept. of ACE at UIUC ([ace.illinois.edu](http://ace.illinois.edu)) provides a stimulating environment for research and professional development with leading agricultural and environmental economists on the faculty, multiple weekly seminar series spanning the full range of applied economics topics, hosts the annual Heartland Workshop in Environmental and Resource Economics (<https://publish.illinois.edu/heartland/>), and is a comprehensive tier I research university.

### **Scope of Work**

- Construct new data sets that combine weather and site resource information (i.e. soils) from publicly available data sources with USDA survey data that includes farm and operator characteristics, crop yields, input costs and conservation practice adoption
- Estimate models for causal inference of the effect of conservation practice adoption (or a system of individual conservation practices) on crop yield and input costs
- Construct maps *and* tabular statistics to summarize and report overall findings and differentiate region-specific findings about: (i) the sign and magnitude of the effect of adopting different practices on crop yield *and* input costs; and (ii) the rate of adoption of individual practices and systems of practices by crop or crop rotation
- Calculate estimated yield and cost effect information for use in NRCS conservation practice payment scenarios
- Fully document data acquisition, processing and storage consistent with reproducible research protocols, inclusive of programming code to implement econometric estimations
- Synthesize the literature, and write methods and results for peer-reviewed journal publication
- Co-author publications and present research at conferences and to funding to report findings

## Required Qualifications

- Earned PhD in agricultural economics, applied economics, economics or econometrics/statistics within the past 5 years
- Demonstrated experience working with geospatial data to produce data sets suitable for econometric analysis, either directly inside a statistical/econometric package such as R or using a GIS in tandem with a software package for econometric analysis
- Strong programming skills in R, python or a similar language
- Strong writing and oral communication skills

## Desired qualifications

- Experience applying modern microeconomic techniques to perform policy or program evaluation
- Experience using R and/or GIS software for geospatial data processing and/or analysis
- Familiarity with agricultural production and/or conservation practices
- Knowledge of USDA conservation programs

To apply, email the following items to [bgramig@TillinoisDOTedu](mailto:bgramig@TillinoisDOTedu) with the subject POSTDOC: (i) a cover letter explaining how your experience qualifies you and why you are interested in the position; (ii) your CV including PhD degree date; (iii) names and contact information for three (3) professional references; and (iv) a professional writing sample that illustrates the required/desired qualifications for the position. If you have experience developing and contributing programming codes and/or other related resources to CRAN, GitHub or another online data or software repository, please include this information in your CV or other application materials.

This position remains open until filled with an anticipated start date on or before January 2019.

Proof of doctoral degree is required to begin employment. The University of Illinois conducts criminal background checks on all job candidates upon acceptance of a contingent offer.

The University of Illinois is an Equal Opportunity, Affirmative Action employer. Minorities, women, veterans and individuals with disabilities are encouraged to apply. For more information, visit <http://go.illinois.edu/EEO>. To learn more about the University's commitment to diversity, please visit <http://www.inclusiveillinois.illinois.edu>