

# 3 Year USDA-ARS Postdoc Position



**Postdoctoral researcher in cropping systems diversity needed** to conduct statistical modeling to assess how diversified cropping systems affect ecosystem services using a database of long-term cropping system experiments (<https://drives-network.org>).

Research topics may include: 1) resilience to stressful weather and climate change, 2) economic stability for producers, 3) nutritional outcomes. The postdoc will also help curate data pertaining to their research topic.

Ideal for a candidate with a PhD in agronomy, nutrition, ecology, economics, statistics, or data science with strong statistical skills and interest in agricultural and environmental applications.

Affiliated with the Sustainable Agricultural Systems Laboratory at the USDA-ARS and mentored by the core DRIVES team of ARS and university scientists.

Full-time appointment with a strong preference for being based locally at North Carolina State University in Raleigh, NC. Remote work will be considered for exceptional circumstances.

Applications will be reviewed on a rolling basis.  
The anticipated start date would be early 2025.

## Qualifications and materials for application

- **Applicants must be US citizens or permanent residents**
- A letter of interest describing how your skills and interests make you a suitable candidate for this position
- An updated CV
- A one paragraph statement describing your values, experiences, and contributions to diversity, equity, and inclusion (DEI).
- Contact information and position details of at least two references whom we will reach out to directly for understanding of your past research experiences.

For inquiries and submission, contact [drives\\_project@ncsu.edu](mailto:drives_project@ncsu.edu).

Ann Bybee-Finley, PhD  
Harry Schomberg, PhD  
Katherine Muller, PhD

## **Responsibilities**

- Develop statistical models linking cropping system diversification (crop rotation and cover cropping) with outcomes pertaining to crop yields during stressful weather, economic stability, and/or nutritional outputs.
- Curate data from long-term cropping systems experiments.
- Collaborate with a multidisciplinary team (e.g. agroecologists, soil scientists, and statisticians) and coordinate network activities.
- Lead publication of academic papers and present results at national and international conferences.

## **Necessary qualifications**

- Proficiency in analyzing and visualizing tabular data.
- Proficiency in R statistical software
- Ability to use and understand complex regression models
- Ability to work independently and with a team
- Responsive communicator
- Strong organizational skills
- Able to create and document workflows

## **Preferred qualifications**

- Experience with Bayesian statistical analysis.
- Evidence of strong writing skills
- Knowledge of any of the following:
  - Agroecology
  - Agricultural economics
  - Crop physiology
  - Climate and weather
  - Global change models
  - Process-based models such as DSSAT