**CED11: Technology and Innovation for Small Farms Advisor**

**DESCRIPTION**

This position will support agricultural technology innovation and adoption for small to medium scale family farms. The research and extension approach will evaluate, demonstrate, and improve a variety of on-farm technologies developed and scaled for small-acreage and diversified farms to create workable, profitable, solutions to their key challenges and to increase small-farm environmental and economic resilience. The position will also work with regional economic development, academic, industry, and governmental organizations to promote regional prosperity through collaborative efforts. The cross-disciplinary focus may come from multiple fields, working with a variety of stakeholders. A minimum qualification is a master’s degree in plant science, agricultural engineering, plant physiology, agronomy, plant pathology, entomology, soil science, horticulture, agroecology, or a related discipline. Computer science experience is preferred.

**JUSTIFICATION**

While ANR has long focused in technical fields such as agricultural and plant sciences, and environment-related issues such as nutrient and water use efficiency, as well as work on community development and rural assistance, these areas have tended to work separately. Given the increasing pressure on rural communities and the agriculture industry, with outsized impact on small farms due to labor shortages, increased regulation, drought and limited water supplies, access to markets, and more, it is an important time to integrate ANR's research and extension efforts with community and economic development activities to support small scale farmers in evaluating and integrating agricultural technologies in their operations. This will better ensure long-term community resiliency, particularly for small farms in the Central Valley and their communities.

This advisor would focus on providing technical assistance with a variety of on-farm technologies, developing a tool lending library at KARE for farmer use, and collaborating with other regional entities developing, evaluating, and integrating appropriate technologies for small farm production and marketing. The focus would include both enhancing profitability of small-scale, local or direct-marketed, and diversified farms and strengthening the local food system supply chain, while enhancing both near and long-term community resiliency in the face of a changing climate and pressure on small farms and their role in the food system.

The advisor will serve as the regional lead for appropriate agriculture technology supporting the economic viability and climate resilience of small farms and rural communities in Fresno and adjacent counties. High priority subject areas include climate smart agriculture, water-saving technologies, appropriately sized precision agriculture tools, and post-harvest processing/product development technologies in support of broader community development and food system resiliency.

**EXTENSION**

The position will be expected to work in partnership with organizations involve with small-scale and diversified agriculture, historically underserved communities of farmers, community development, and environmental justice, take an active role in public outreach and develop strong collaborations with key community groups and other non-governmental organizations. The advisor will collaborate with UCCE Advisors and Specialists, as well as other UC and CSU system academics, and USDA-ARS researchers.

**RESEARCH**

The candidate would address key questions in areas such as the following: 1. How can agricultural technologies supporting sustainable, climate smart agriculture practices be appropriately scaled on smaller farms to increase community resilience? 3. What co-benefits of implementing appropriate; scaled climate smart agricultural technology to increase community resilience?

**ANR NETWORK**

IGIS, CIWR, UC IPM, SAREP, UC Small Farms Network, the UC ANR RECS, and Cooperative Extension in Fresno, Tulare, and Kings Counties.

**EXTERNAL NETWORK**

Central Valley Community Foundation, UC Merced, California State University, Fresno, SBDC, Small Farm Technology Innovation Alliance, CAFF, UC CITRIS, Fresno County EDC

**SUPPORT**

The advisor will be provided with an office, telephone, high speed wireless internet access, storage space, access to KARE laboratories, office supplies, clerical and administrative support.

**OTHER SUPPORT**

Fresno Future of Food (F3) Initiative, USDA, EDA, ANR competitive grants and local community groups. Program support will come from UC ANR general funds.

**HEADQUARTERS AND COVERAGE AREA**

The position will be located at Kearney Research & Extension Center (KARE), covering Fresno County and neighboring counties of Tulare, Kings, Madera, and Merced counties.

**DEVELOPED AND PROPOSED BY**

Gabe Youtsey (UCANR Chief Innovation Officer), Glenda Humiston (UCANR Vice President), Khaled Bali (Interim Director Kearney REC), Karmjot Randhawa (UCCE Fresno/Tulare/ Madera/Kings County Director), Ruth Dahlquist-Willard (UCCE Small Farms Advisor), Fresno DRIVE Future of Food F3 Advisory Group