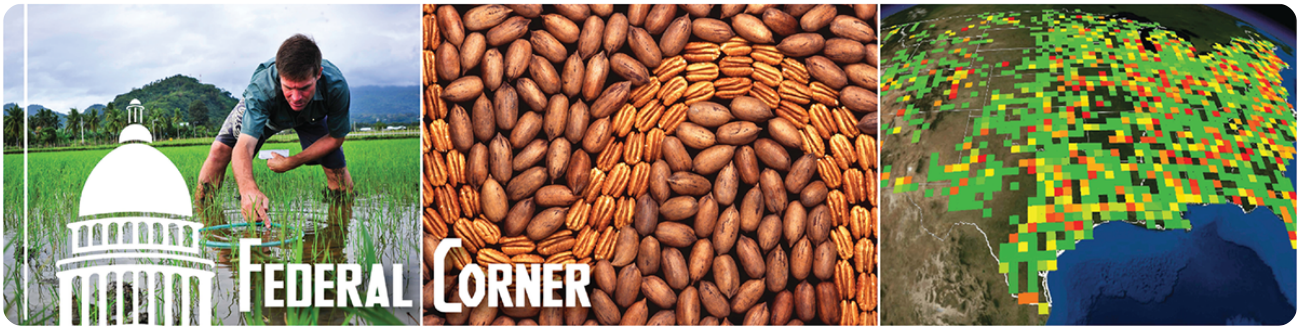
Science Societies

Together we'll go FFAR

By Sally Rockey

November 19, 2020



The Federal Corner is a bi-monthly column featuring writers from a diversity of federal agencies. Its purpose is to give funding agencies a chance to reach out directly to members.



Sally Rockey

Authorized in the 2014 farm bill, the Foundation for Food & Agriculture Research (FFAR) forms unique public–private partnerships to fund bold science addressing the critical food and agricultural challenges of our time. When FFAR began, agriculture research constituted only 2% of the federal R&D budget. Congress created FFAR to infuse more funds into the research enterprise using a novel approach. At the same time, Congress provided FFAR with funding to leverage non-federal resources for pioneering research. While an independent non-profit, we work closely with the USDA to complement and advance its mission and serve as the USDA's fundraising arm to bring private funds to areas of mutual research interest.

Unique Funding Model Maximizes Impact

FFAR connects funders, researchers, government agencies, farmers, and ranchers to pioneer the next frontier of agriculture innovation. Our vision is to provide every person access to affordable, nutritious food grown on thriving farms. Our model requires a 1:1 match, meaning that FFAR matches public funding with private-sector investment to amplify impact. The private-sector match often exceeds FFAR's investment, bringing in more resources for groundbreaking research. During the past five years, we partnered with more than 400 organizations, demonstrating the success of our funding model.

By building public–private partnerships, the research FFAR supports is often near term where results can be quickly transformed into actionable solutions to urgent food and agriculture challenges. Scientists collaborate with us to generate agile solutions that once seemed impossible. The private sector finds value in working together on issues that are either too costly or high risk to tackle individually. Working primarily in the "precompetitive space" allows results and data to be shared across the sector and with the public as FFAR's contribution assures public availability of results. Some FFAR-funded research is quite basic where there is a need to increase fundamental knowledge in a white space or gap, which when filled, will accelerate progress in a specific area.

Stakeholder Engagement Critical to Success

Our esteemed Board of Directors, Challenge Area Advisory Councils, and our funding partners come from across the food supply chain. We include farmers and ranchers in all activities to ensure that we are cognizant of critical issues facing their enterprises. Stakeholders are not just providing input but are embedded in decision-making processes like our rigorous peer review.



Senator Durbin (IL) and Dr. Sally Rockey tour the Realizing Increased Photosynthetic Efficiency (RIPE) Project research facility at the University of Illinois. FFAR funds this project along with the Bill & Melinda Gates Foundation and the British government's Foreign, Commonwealth & Development Office (FCDO).

FFAR has emerged as a central force in agriculture not only because of the bold research we support, but also due to our convening power. We seek input early in the research process, often through convening

events that inform our programs and consortia. These convenings include experts from the academic community, government organizations, the private sector, producers, farmers, and potential funders. These events often are revolutionary in bringing non-traditional partners to the table, which is a FFAR imperative.

How We Work

After concept review by our Board of Directors and the USDA, and when funding partnerships have been established, research programs are launched that fall into one of our Challenge Areas: Soil Health, Sustainable Water Management, Next Generation Crops, Advanced Animal Systems, Urban Food Systems, and the Health–Agriculture Nexus. Grants are awarded to only those applications deemed exceptional through our two-level review process.

We fund research in the following ways:

- **Requests for Application (RFA):** FFAR issues RFAs to solicit ideas from the broadest group of researchers. The highest quality proposals are selected for funding through a rigorous, competitive review process. Issue-specific RFAs are offered, and we hold an annual competition, called “Seeding Solutions,” for research in any of our Challenge Areas, which requires applicants to provide matching funds.
- **Prizes:** FFAR offers prize competitions to solve an imminent problem in food and agriculture science. Our first prize competition is ongoing, the Egg-Tech Prize, to develop innovative technologies that determine a chick’s sex prior to incubation.
- **Direct Funds:** FFAR may solicit an application from a specific individual or organization that is well-suited to conduct the necessary research. This type of award still requires rigorous peer review.

FFAR’s Consortia

FFAR has been extraordinarily successful in establishing consortia to address common challenges recognized across a sector. Consortia participants, which include FFAR, jointly determine research priorities, pool resources and knowledge, and share research results. We have established six consortia and have funded research using the mechanisms outlined above. They are:

- Irrigation Innovation Consortium (IIC)
- Crops of the Future (COTF) Collaborative.
- International Consortium for Antimicrobial Stewardship in Agriculture (ICASA)
- Precision Indoor Plants (PIP)
- Ecosystem Services Market Research Consortium (ESMC)
- Innovations in Post-Harvest Food Loss and Waste Reduction in the Global Food System

These consortia include more than 70 domestic and international organizations.

Developing the Scientific Workforce

FFAR also bolsters the food and agricultural scientific workforce. Our future is strong with the talent we have seen in the pipeline. We offer opportunities to support current and future scientists.

- **National Academies of Science Prize in Food and Agriculture Sciences (NAS Prize):** Established by FFAR and the Bill & Melinda Gates Foundation, the prize recognizes mid-career scientists who have made an extraordinary contribution to agriculture. This is the first and only agriculture-related prize at NAS.
- **New Innovator in Food and Agriculture Research Award:** Each year, FFAR funds research to help launch early career scientists into successful scientific careers in food and agriculture.

- **FFAR Fellows Program:** Managed by North Carolina State University, this program funds graduate students across the country to pursue bold research and gain professional skills that prepare them for various employment opportunities.
- **The Vet Fellows Program:** In partnership with the American Association of Veterinary Medical Colleges, this program is a three-month fellowship that supports veterinary students to pursue research at the intersection of global food security and sustainable animal production.

Who We Fund

Seventy percent of FFAR grants support scientists at academic organizations, and many awards recognize the scientific talent at land grant universities. FFAR also funds USDA-ARS, small businesses, commodity groups, NGOs, and others.

On the Horizon

While there are many challenges facing agriculture, none is more urgent than climate change. FFAR launched a major initiative, the Agriculture Climate Partnership with the U.S. Farmers and Ranchers in Action and the World Farmers Organization, to bring scientists, farmers, and ranchers together to achieve net negative greenhouse gas emissions by 2030. The goal is for every farmer and rancher to employ at least one climate-smart solution on every acre of farmland. We developed the baseline of knowledge and are planning the platform to support farmers and ranchers in this effort.

Help Spearhead Agricultural Innovation

FFAR welcomes collaboration on projects and initiatives that are detailed on our website: **www.foundationfar.org**. Respond to an RFA, be part of a convening event, join a consortium, and most importantly, share your ideas. Our scientific program directors are available to discuss these with you; their contact information is available

on our website. Let’s venture to the next frontier of agricultural innovation together.

More news & perspectives

Back to issue

Back to home

Text © . The authors. CC BY-NC-ND 4.0. Except where otherwise noted, images are subject to copyright. Any reuse without express permission from the copyright owner is prohibited.