Welcome to FFAR's Public Conversation

October 5, 2023



Vice Chair's Remarks



FFAR Grants By The Numbers

360 grants awarded

1:1.4 MATCHING RATIO

\$713M

FFAR Board Members

- Kyle Bridgeforth
- Joe Del Bosque
- Doug Buhler
- Doug Cameron
- Nancy Creamer
- David Donnan
- Hon. Dan Glickman
- Krysta Harden
- Denise Heard
- Venkata Kishore
- Michael Ladisch

- Carolyn Lawrence
 Dill
- Chris Mallett
- Pam Marrone
- Ben Noble
- Donald Nkrumah
- Stanley Prusiner
- Danita Rodibaugh
- Polly Ruhland
- Alton Thompson



- **Ex-Officio Members**
- Tom Vilsack
- Chavonda Jacobs-Young
- Susan Marqusee
- Manjit Misra
- Simon Liu

USDA's AIM for Climate Summit



USDA Secretary Tom Vilsack and Former Vice President Al Gore

FFAR staff exploring a virtual reality exhibit

From Left: FFAR's Executive Director Dr. Saharah Moon Chapotin, DMI's Dr. Tim Kurt, NuCicer's Kathryn Cook and Lakner Farms' owner Jeff Lakner







FFAR's Congressional Reception







Sen. Mike Braun (R-IN)

Rep. Jim Baird (R-IN)

Senate Agriculture Committee Chairwoman Debbie Stabenow (D-MI)

Welcoming Secretary Tom Vilsack



DEF

USDA Tom Vilsack **Agriculture Secretary**

CURURI







Executive Director's Address





Our Mission

We build unique partnerships to support innovative science addressing today's food and agriculture challenges.

Our Vision

We envision a world in which everinnovating and collaborative science provides every person access to affordable, nutritious food grown on thriving farms.





We Fund Pioneering Research

BY FOCUSING ON THESE KEY CHALLENGE AREAS:



Next Generation Crops



Advanced Animal Systems



Sustainable Water Management



Health-Agriculture Nexus



Urban Food Systems



Soil Health

We also fund climate-smart research through our AgMission initiative

FFAR Consortia

Our consortia convene partners to fund research for the common good.



















We Invest in the Scientific Workforce



BY FOSTERING THESE PROGRAMS:

NAS Prize in Agriculture Science

New Innovators in Food and Agriculture

Kirchner Food Fellowship

FFAR Fellows

Veterinary Student Research Fellows

OCP Fellowship

FFAR Awards 2015 - 2023



Matching Funders & Grantees

Percent Matching Funds Received, by Donor Type Inception through 2022



Percent of Total FFAR Grantees, by Institution Type Inception through 2022



Impacts & Updates







Impact in Action

FFAR's Impact Report highlights:

- FFAR awarded 68 new grants in 2022 totaling \$128M of which \$82M amount was leveraged from non-federal sources
- 92% of FFAR grantees secured additional funding from a variety of sources during and after receiving FFAR funding.
- Read our Impact Report for project impacts including how OpenTEAM is developing soil health management tools, progress on responding to coffee leaf rust disease, breeding cattle for heat tolerance & more



AIM for Climate Summit

- FFAR supported the <u>AIM for Climate Summit</u>, hosted by USDA in May 2023.
- FFAR staff supported this successful global event from planning stages through execution.
- We also led a plenary session on the importance of agriculture climate research that featured remarks from several FFAR stakeholders.



Efficient Fertilizer Consortium

- Funding research to help farmers use novel and current fertilizers more efficiently, improve soil fertility, decrease input costs, reduce nitrous oxide emissions and improve global food security.
- Cotton Inc., Pivot Bio, United Soybean Board and UK FCDO have signed on; additional members will be announced this Fall.



Reducing Emissions in Cattle



The Global Methane Hub recently joined as a partner and existing steering committee members contributed additional funds.

- GCI recently awarded its first three grants:
 - The University of Illinois is leading an international research study on how diets and different additives in beef and dairy cattle affect enteric methane production.
 - The University of Madison-Wisconsin is combining interventions that address selective breeding, data on milk composition and rumen microbes to reduce enteric methane emissions.
 - Penn State University is developing new enteric methane inhibitors and efficient delivery methods to decrease enteric methane emissions.
- The Consortium is exploring further partnerships to coordinate additional grantmaking.
- Additionally, a Seeding Solutions grant to Pennsylvania State University researchers is investigating using an anti-methanogenic compound derived from plant and fungal sources as a feed additive to reduce enteric methane in ruminants.





OCP Fellows

- The FFAR-OCP Disruptive Fertilizer Technology Fellows Program is enhancing fertilizer efficiency research & technology development
- In June 2023, FFAR & OCP North America announced three fellows as our first cohort









- In Nov. 2022, FFAR awarded \$1M to Tuskegee University to create an endowment to advance organic agriculture and farming practices.
- Clif Bar & Company provided a matching \$1M for a total \$2M investment.
- This award will fund future research opportunities & activities that increase organic farming practice adoption in the Southeast.





ACTION RFA

- The Achieving Conservation through Targeting Information, Outreach and Networking (ACTION) program promotes projects that increase farmer & landowner adoption of conservation practices.
- Walton Family Foundation provided matching program funds.
- Three awardees to be announced soon.
- Research seeks to understand how to best support farmers' use and adoption of conservation practices including edge-of-field practices such as wetlands, buffers and controlled drainage.



AgMission[™] Research Agenda | High Priority Topics

Intersection of climate mitigation and adaptation: *this overarching topic is mission critical*

- How can we build the knowledge base for a resilient agriculture system that can cope with climate impacts?
- Targeted research on diversification of production systems as a climate solution for resilience both economically and physically.

Agroforestry as a climate solution

 Identify practical agroforestry solutions, the economic value to farmers and benefit for emissions /sequestration/resilience and what it would take to scale these solutions.

Pasture and grazing lands

• Look for key questions of interest for both mitigation and adaptation, as well as biodiversity co-benefits.

Social science research

 Barrier to supply chain action is farmer recruitment. Can evaluation of existing/past programs help inform new program design?





Research Strategy



Research Strategy Development Process



Stakeholder Input

Analysis

Implementation

Stakeholder Input By the Numbers

17 EXPERTS IN PANEL DISCUSSIONS

WRITTEN COMMENTS SUBMITTED

50+

76

FOOD AND AGRICULTURE STAKEHOLDER ORGANIZATIONS INTERVIEWED

Our Research Goal

A U.S. food and agriculture system that supports producers and their communities, sustains the environment and equitably nourishes our population



Priority 1: Cultivating Thriving Production Systems





Priority 2: Sustaining Vibrant Agroecosystems



Priority 3: Bolstering Healthy Food Systems



Priority 4: Strengthening the Scientific Workforce





The Impacts We Seek



Sustainably Intensified Production

Increased Environmental Sustainability

Improved Human Health



Working Across the Whole Value Chain



Key Drivers

Diversity, Equity & Inclusion



Complementarity with Federal Agencies



Matching Funds



Industry Collaborations



Geographic Scope

Excellence Through Competition Actionable Science, Translational Research



A Convergence Approach





The Research Continuum

Basic	Translational	Adaptive	
Ř		፝ቑ፟፟ቚ፟ቑ፟ ቚ፟ቑ፟፟ቚ፟ቑ፟፟ቚ	
Basic research is directed toward greater knowledge or understanding of the fundamental aspects of phenomena.	Translational research puts the findings of basic science to productive use, turning knowledge into tools and technologies.	Adaptive research is designed to adjust a technology to specific conditions or to customize a technology.	



Research Strategy Implementation

	Research Strategy	Workplan	
	2024-2028	Annual	
	High-level	Identifies specific objectives	
	Lays out priorities, key drivers and desired impacts	Aligns with priorities, key drivers and desired impacts	
WARD A MAR			ALL PROPERTY AND ALL AN



Informed by stakeholder input

Looking Forward

- We will continue to communicate the results from our Research Strategy Refresh in the coming months and are looking forward to funding new bold research that aligns with our refreshed strategy.
- FFAR is continuing to expand our investment in climate research. We remain engaged as AIM for Climate partners and will be present at COP28.
- We look forward to growing our Scientific Workforce Development programs by supporting existing fellowship programs and developing new opportunities.
- We are continuing to track and communicate our impacts.
- FFAR is dedicated to enhancing our DEI efforts and continuing to build programs and relationships that reflect inclusivity and equity.



Public Comments & Questions



FFAR[®]

Thank You



🕲 202.624.0700