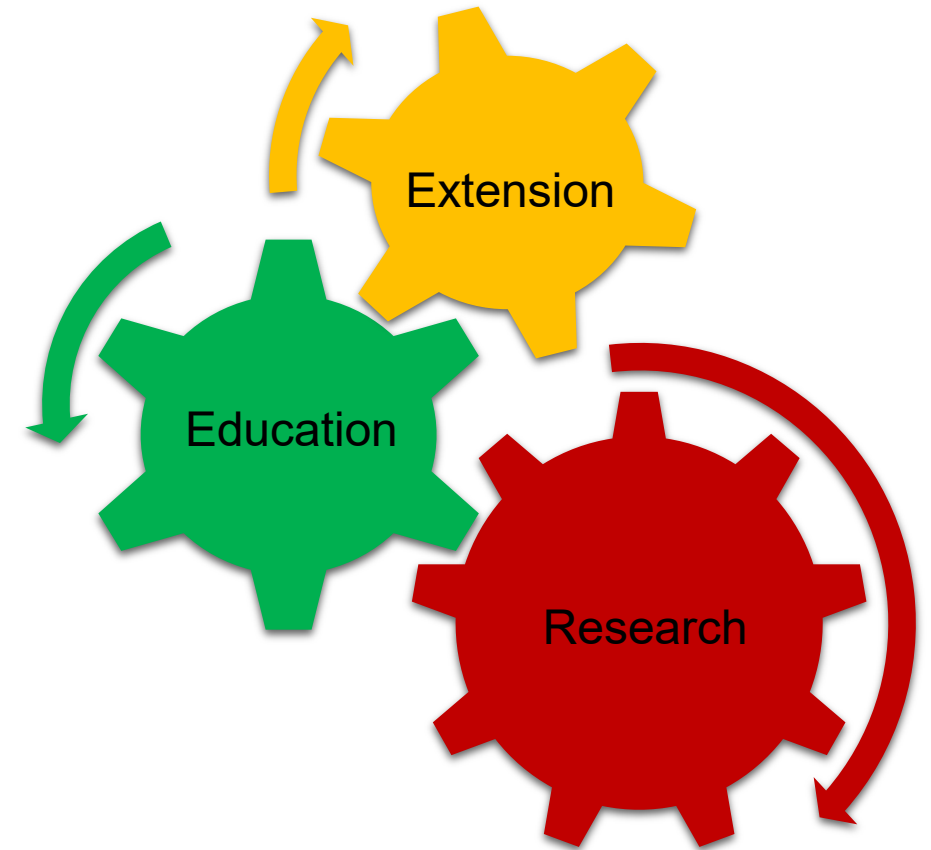


National Institute of Food and Agriculture

- \$1.9 billion allocated to NIFA for FY2021
- NIFA provides capacity grants to land-grant universities
- We provide competitive grants to support research, education and extension at various institutions
 - Land-grant universities, non-land-grants, minority-serving institutions, community colleges, and other organizations
 - Eligibility varies by program and is listed in each Request for Application (RFA)



Discovery

Translation

Innovation

Solution

Artificial Intelligence (AI) is a federal-government-wide priority

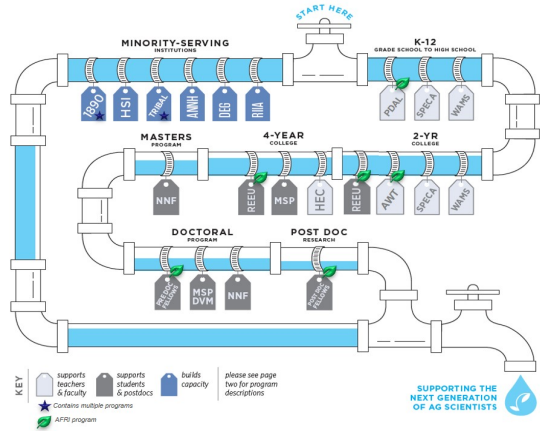
USDA priorities

General priorities from Secretary Vilsack, who will work to address inequity and inequality, meet the moment on climate and nutrition insecurity, and build fairer markets and stronger rural communities.

- Equity and inclusion
- Climate and regenerative agriculture
- Rural economic development
- Nutrition security
- Open and competitive markets



AFRI EDW – a full range of educational research programs that encourage data science/AI/robotics



FAIR and CARE for data: these are fundamental to NIFA awards

CARE Principles for Indigenous Data Governance

Special Collection: Research Data Alliance Results

Practice Papers

The CARE Principles for Indigenous Data Governance

Authors: Stephanie Russo Carroll, Ibrahim Garba, Oscar L. Figueroa-Rodríguez, Jarita Holbrook, Raymond Lovett, Simeon Materechera, Mark Parsons, Kay Raseroka, Desi Rodriguez-Lonebear, Robyn Rowe, Rodrigo Sara, Jennifer D. Walker, Jane Anderson, Maui Hudson

Abstract

Concerns about secondary use of data and limited opportunities for benefit-sharing

AFRI DSFAS – cross-cutting research that generates new knowledge in agriculture and data science/AI

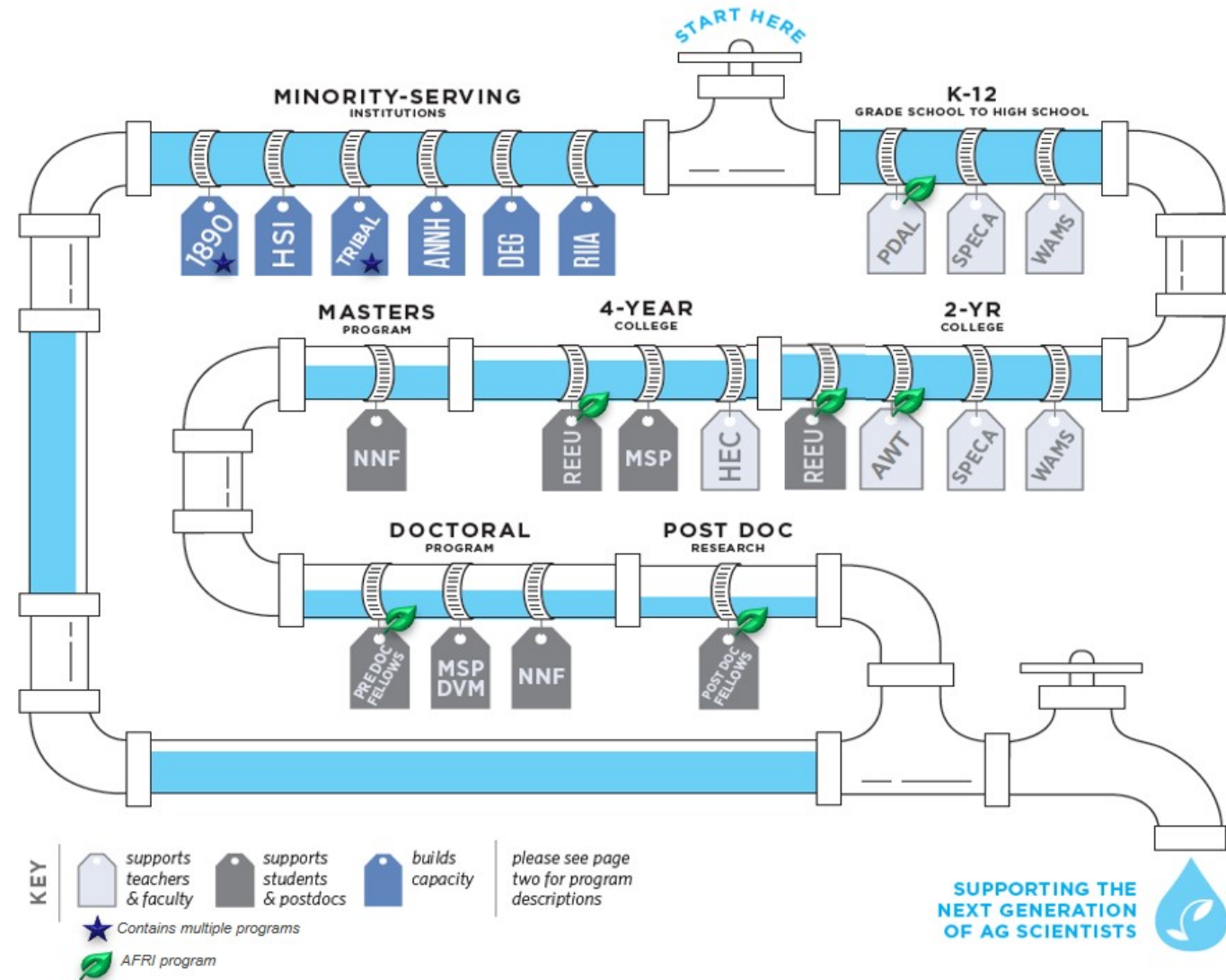


AI Institutes for Climate-Smart Agriculture – joint NIFA and NSF program

AFRI Education and Workforce Development

Goals of NIFA's Education Portfolio

- Improve scientific and agricultural literacy
- Recruit and train a skilled workforce to face challenges and provide needed skills
- Promote greater learning and engagement through improved formal and non-formal instruction and teacher training
- Advance science by supporting more inclusive graduate and postdoctoral training in critical research fields
- *Strengthen educational capacities of MSIs in instruction, curriculum and educational infrastructure*



AFRI Foundational Cross-cutting: Data Science for Food & Agricultural Systems (DSFAS)

Program Area Priority Code: A1541

Proposed Budget Requests: \$650,000 total per project for project periods of 3-5 years; for coordination innovation networks priority only \$1,000,000 total per project for project periods of up to five years

Project Types: Research Projects or Integrated (research, education and /or extension) Projects only

Application Deadline: **October 20, 2022**

Contact: Ann Stapleton, NIFA-DSFAS@usda.gov

Check for RFA updates after November 2021!

USDA-NIFA and NSF Invest a total of \$220M in Artificial Intelligence Research Institutes

New investment builds on the first round of Artificial Intelligence (AI) Research Institutes funded in 2020.



“In the tradition of USDA-NIFA investments, these new institutes leverage the scientific power of U.S. land-grant universities informed by close partnership with farmers, producers, educators and innovators to provide sustainable crop production solutions and address these pressing societal challenges,” said *USDA-NIFA Director Dr. Carrie Castille*.

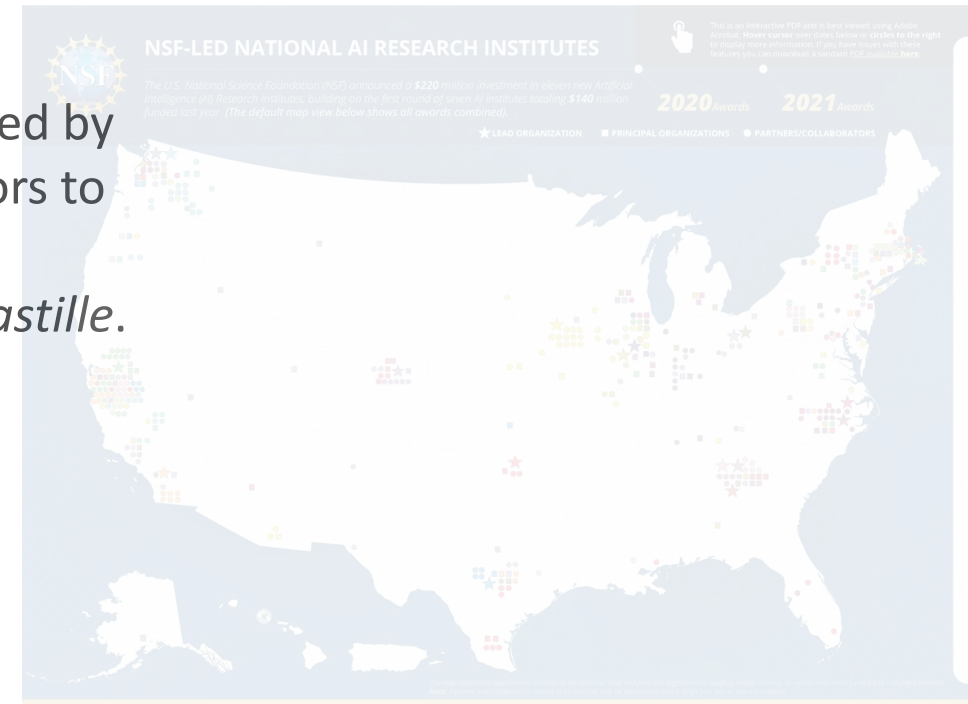
“These innovation centers will:

speed our ability to meet critical needs in the future agricultural workforce

provide equitable and fair market access

increase nutrition security and

provide tools for climate-smart agriculture.”



The FY22 solicitation is now available, and the webinar is November 16. See <https://nifa.usda.gov/funding-opportunity/artificial-intelligence-ai-research-institutes> and <https://beta.nsf.gov/funding/opportunities/national-artificial-intelligence-research-institutes> .

New in 2021

USDA-NIFA Institute for Agricultural AI for Transforming Workforce and Decision Support (AgAID) Prediction, decision support, and robotics-enabled agriculture, using a unique adopt-adapt-amplify approach to develop and deliver AI solutions to agriculture that address pressing challenges related to labor, water, weather and climate change.

USDA-NIFA AI Institute for Resilient Agriculture (AIIRA) AI-driven digital twins that model plants at an unprecedented scale; tools for crop improvement and production for resiliency to climate change. Focusing on Native American bidirectional engagement and farmer programs.

[USDA-NIFA AI Institute for Next Generation Food Systems](#),

[USDA-NIFA AI Institute for Future Agricultural Resilience, Management and Sustainability](#)



I am happy to take questions!

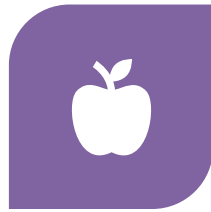
AFRI Farm Bill Priorities



Plant Health,
Production, and
Plant Products



Animal Health,
Production, and
Animal Products



Food Safety,
Nutrition, and
Health



Bioenergy, Natural
Resources, and
Environment



Agriculture
Systems and
Technology



Agriculture
Economics and
Rural Communities

NIFA funded projects must support at least one priority area