agInnovation
science that feeds the world

Fall Business Meeting

September 24, 2026

Chandra Reddy
agInnovation Chair

Time	Item #	Topic	Presenter	Action Requested
10:00 am	1.0	Chair's Welcome and Introductions Approval of the agenda Approval of 7/14/26 meeting minutes Honoring agInnovation Colleagues	Chandra Reddy	None Adoption by Acclamation Approval by Acclamation For information
10:10 am	2.0	Lewis-Burke Associates Updates	Bridget Krieger	For information
10:20 am	3.0	FANR Update	Doug Steele	For information
10:30 am	4.0	Chair Updates & Reflections	Chandra Reddy	Discussion
10:50 am	5.0	Operating Successfully in the Evolving Federal Funding Landscape	Rick Rhodes	Discussion
11:45 am	6.0	MRF Impacts	Sara Delheimer	Discussion
11:50 am	7.0	National Multistate Guidelines Revisions	Chris Hamilton	Vote
12:00 pm	8.0	NRSP-RC Whitepaper Proposal Request	Beth Gugino	Vote
12:10 pm	9.0	Incoming Chair's Initiatives	Gene Kelly	Discussion
12:25 pm	10.0	Financial Update and FY 2027 Budget	Gene Kelly	Vote
12:45 pm	11.0	agInnovation Chair's vote and 2027 meeting announcements	Northeast	Vote
12:50 pm	12.0	Welcoming New agInnovation Leadership: Gene Kelly, agInnovation Chair	Chandra Reddy	For information
12:55 pm	13.0	Unfinished Business	Chandra Reddy	Discussion
12:00 pm - Adjourn				

agInnovation
science that feeds the world ®

LAND - GRANT UNIVERSITY RESEARCH

Approval of the Agenda

Approval of the 7/14/26 Meeting Minutes

agInnovation
science that feeds the world ®

LAND - GRANT UNIVERSITY RESEARCH

Honoring Those Who Served

Retirements, New Positions, New Directors



Scot Hulbert
Washington State University



Clyde Bagley
Southern University and A&M College



Rick Rhodes
agInnovation Northeast
The University of Rhode Island



Gary Thompson
agInnovation South
University of Arkansas

Accepted New Positions

Douglas D. LaVergne	Associate Vice President for Academic Affairs/Dean & 1890 Director-CALNS, Alabama A&M University
Derrick C. Scott	Provost and Vice President for Academic Affairs, Fort Valley University
Johnnie Westbrook	Dean, College of Agriculture, Environmental and Human Sciences, Lincoln University
Mitch McClaran	Professor, Range Management, School of Natural Resources & the Environment, Univ. of Arizona
Amy Charkowski	Dean, Faculty of Land & Food Systems, University of British Columbia
Jon Chorover	Assoc. Dean, Research, College of Agriculture, Life, & Environmental Sciences, Univ. of Arizona
Brett Blum	Director, Arizona Agricultural Experiment Station, University of Arizona
George Smith	Charles-Sander Dean, College of Agriculture, Life & Environmental Sciences, Univ. of Arizona
Darren Haver	Assoc. Vice President, Agriculture and Natural Resources, University of California
Derek McClean	Janet Q. Lawson Endowed Dean, S. J. & Jessie E. Quinney College of Agriculture & Natural Resources & Director, Utah Agricultural Experiment Station, Utah State University
Raj Khosla	Cashup Davis Family Endowed Dean, College of Agricultural, Human, & Natural Resource Sciences, Washington State University
Sieg Snapp	Assoc. Dean for Research, College of Agricultural, Human, & Natural Resource Sciences, Washington State University
Brian Mealor	Interim Assoc. Dean and Director, Wyoming Agricultural Experiment Station, College of Agriculture, Life Sciences, & Natural Resources, University of Wyoming

Accepted New Positions

Eric Bishop von Wettberg	Professor, Faculty Fellow Gund Institute for Environment, University of Vermont
Jason Hubbart	Professor of Physical Hydrology, West Virginia University
Diane Rowland	Professor of Plant Physiology, University of Maine
Beth Gugino	Assoc. Dean for Research Operation & Graduate Education; Assoc. Director of the Pennsylvania Agricultural State Experiment Station, Penn State
Jessica Leahy	Interim Dean, College of Earth, Life, & Health Sciences and Director of the Maine Agricultural & Forest Experiment Station, University of Maine
Joe Moritz	Interim Assoc. Dean and Interim Assoc. Director, West Virginia Agriculture and Forestry Experiment Station, West Virginia University
Linda Prokopy	Dean, College of Agriculture & Life Sciences and Director of the Vermont Agricultural Experiment Station
Asim Zia	Assoc. Dean, Research, College of Agriculture & Life Sciences, University of Vermont
Lynette Orellana	Interim Dean & Director, University of Puerto Rico Mayagüez
Carlyle C. Brewster	Interim Assoc. Dean for Research & Director CU Experiment Station, Clemson University
Paula Agudelo	Professor of Plant Pathology, Clemson University
Raúl Machiavelli	Professor of Biometry & Statistics, University of Puerto Rico Mayagüez

Accepted New Positions

Gary Pierzynski	Professor, Ohio State University
Jamie Strange	Assoc. Dean for Research & Graduate Education and Director of the Ohio Agricultural Experiment Station
Chad Cotti	Interim Director, Michigan State AgBioResearch
Joleen Hadrich	Senior Assoc. Dean, University of Minnesota Extension
Linda Nagel	Interim Dean of CFANS and Interim Director of MAES
Troy Runge	Interim Dean for Research & Extension, College of Agriculture & Life Sciences, UW Madison
Heather White	Assoc. Director, Wisconsin Agricultural Experiment Station
Gregory Goins	Professor, Dean & Research Director, College of Agriculture & Environmental Sciences, North Carolina A & T State University
Lewis Whitesides	Interim Provost & Vice President for Academic Affairs, South Carolina State University
Kwaku Addo	Interim Dean & Director of Land-Grant Programs, College of Agriculture, Food, & Natural Resources, Prairie View A&M University
Devaiah Kambiranda	Interim Vice-Chancellor for Research, Southern University Agricultural Research & Extension Center



agInnovation
science that feeds the world

LAND - GRANT UNIVERSITY RESEARCH

THANK YOU

agInnovation
science that feeds the world

LAND - GRANT UNIVERSITY RESEARCH

Lewis-Burke Associates Update

Bridget Krieger

Senior Principal



LEWIS–BURKE ASSOCIATES LLC

lewis-burke.com



Navigating Uncertainty in the Federal Government

agInnovation Annual Meeting

September 2026

Where Are We Now?

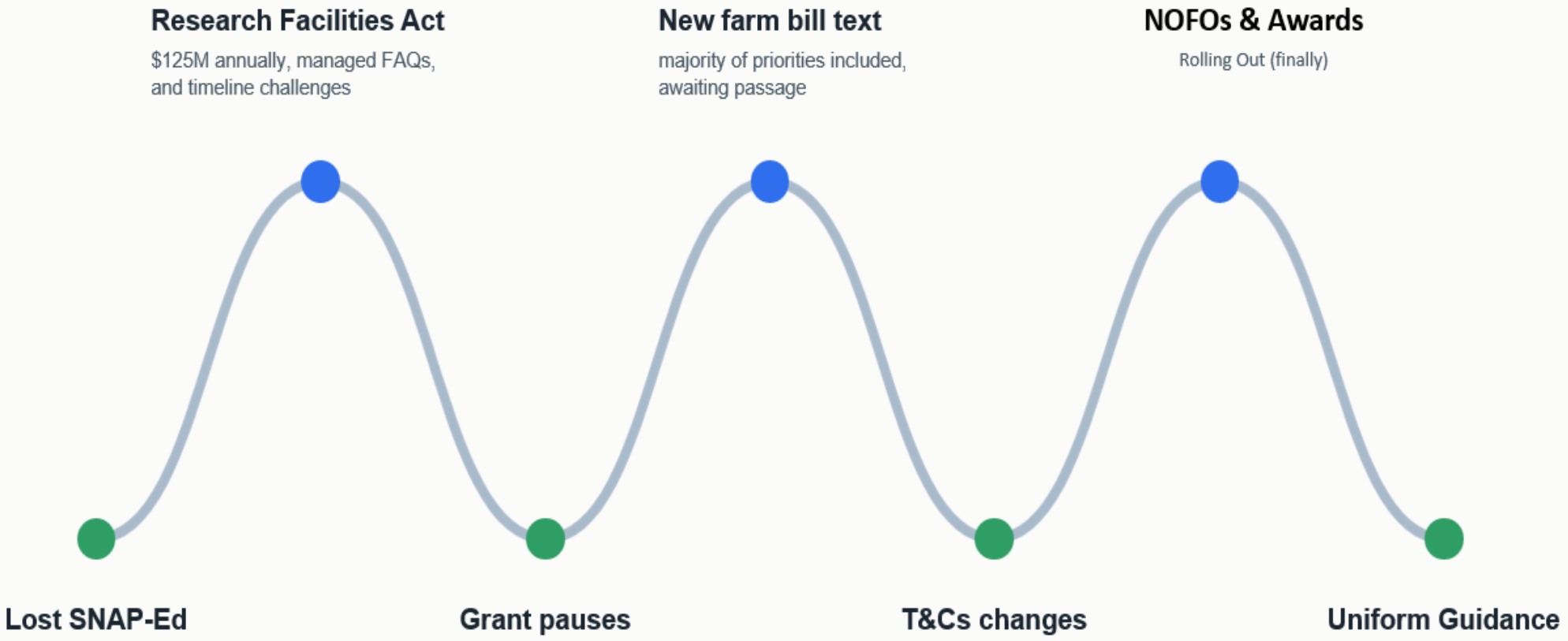
Trump Administration:

- 18 months into second Trump term
- Some Cabinet changes, but otherwise relatively stable
- Unprecedented OMB Power
  - Uniform Guidance (Over 340,000 comments) – currently on pause through Dec 11
- USDA reorg ongoing; however, ongoing support across REE & release of RFAP NOFO

119th Congress: Razor Thin Margins, Few Legislative Days, Legacies on the Line

- Everything is STILL about the Midterms on November 3, 2026
- To Do list is substantial:
  - *In Process: FY 2027 appropriations bills*
  - *In Process: National Defense Authorization Act (NDAA)*
  - *In Process: Farm Bill – extended through Sep 30, 2026*

We have already navigated A LOT



Preparing for next year – navigating uncertainty in Congress

More than 15 percent of Congress announced they will not seek reelection or lost primary

Even candidates riding the anti-establishment, "change election" wave, will still face the same Congressional institutions that determine committee assignments, leadership roles—seniority matters

Getting Wins Under Gridlock

Messaging bills, **oversight hearings**, and dear colleague letters will be common tools to make progress

Committees of Interest

- Significant turnover in both chambers will force a reshuffling of committee assignments
- Prime opportunity to educate freshmen and new committee members
- Too many variables to project where Members will land, especially with Agriculture, appropriations, and the uncertain fate of the Farm Bill
- **Position now: *"What does your boss want to do next year? How can we help?"***

Navigating Uncertainty - Administration

Maintain our reputational trust

APLU and each university has a strong individual reputation that helps us to maintain credibility when policy implementation issues arise

- This was critical within USDA and on Capitol Hill

Anticipate New realities:

- Short turnaround times, slow NOFO releases
- Public Private partnerships

Leverage other champions

- The Administration's relationship with Congress will change dramatically - more tense, possibly more responsive (?)
  - The lame duck begins – the rift between Congress and the Administration will get wider

Advocacy Strategies in the new Congress

Long term planning
foreshadowing the capacity push

Tap into partners and understand their needs
How can we develop symbiotic relationships

Explain our needs, but be specific
what will you do with the money?

Profile raising for new opportunities
programs and relationships with health agencies

Always Educating
So many new members and so many new staffers

Questions



LEWIS–BURKE ASSOCIATES LLC

lewis-burke.com

Appropriations Accounts	FY 2026 Enacted	FY 2027 BAA Request	FY 2027 PBR	FY 2027 House
NIFA Total	$1,677,010	n/a	$1,022,004	$1,642,700
Research				
Hatch Act	$265,000	$300,000	$0	$265,000
Evans-Allen Research (1890 Research)	$89,000	$125,000	$50,000	$89,000
Research Grants for 1994 Institutions	$5,500	$17,867	$5,000	$5,500
McIntire-Stennis	$38,000	$46,000	$20,000	$38,000
Agriculture and Food Research Initiative (AFRI)	$435,000	$500,000	$419,378	$435,000
Cooperative Extension System				
Smith-Lever 3 (b) & (c)	$325,000	$420,000	$175,000	$325,000
Extension Services at 1890 Universities	$72,000	$102,000	$62,000	$72,000
Extension Services at 1994 Institutions	$12,000	$17,867	$11,000	$12,000
Smith-Lever 3 (d)	$88,600	$115,000	$67,000	$88,600
Education				
Payments to the 1994 institutions	$8,000	$17,867	$7,000	$8,000

agInnovation
science that feeds the world

LAND - GRANT UNIVERSITY RESEARCH



FANR Update

Doug Steele

Vice President, Food Agriculture, & Natural Resources, APLU

Association of Public & Land-grant Universities

agInnovation Fall Business Meeting

Thursday, Sept 24th 10:00 am

Grand Junction, Colorado

Douglas L Steele, PhD

Senior Vice President, APLU

Office of Food, Agriculture and Natural Resources (FANR)



USDA Announces New Priorities in 2026

On December 30, 2025, U.S. Secretary of Agriculture Brooke Rollins signed a Secretary's Memorandum, announcing five new priorities for USDA-funded agricultural research and development aimed at strengthening U.S. agriculture:

- **Increasing Profitability of Farmers and Ranchers**
- **Expanding Markets and Creating New Uses of U.S. Agricultural Products**
- **Protecting the Integrity of American Agriculture from Invasive Species**
- **Promoting Soil Health to Regenerate Long-Term Productivity of Land**
- **Improving Human Health through Precision Nutrition and Food Quality**

According to the press release the memo refocuses research investments on applied outcomes that enhance farmer profitability, productivity, export competitiveness, and lower input costs, while moving away from prior policy approaches viewed as burdensome or misaligned with producer needs.

Advocacy and Initiatives

Association of Public & Land-grant Universities

FY28 Appropriations Unified Ask
Research Facilities Act
Capacity Phase I Executive Summary
Capacity Phase II Update (Tripp Umbach)
Capacity Roll Out FY28; Big Ask FY29
LGU Roadmap
Adaptive Roots
Decadal Vision



Framing Our Talking Points

ASSOCIATION OF PUBLIC & LAND-GRANT UNIVERSITIES

-Continuity (Foundational Funding)
-Cost Efficiencies
-Trust
-Knowledge Retention
-Greater Long-Term Returns
-Strategic Stability
-Reduces Risk to Agriculture Producers
-Ability to Quickly Address Immediate or Emerging Concerns



Capacity Messaging

Association of Public & Land-grant Universities

- Lead with a Shared Vision
- Focus on Impact
- Be Solutions Driven
- Use Real People and Real Stories
- Show Leveraging Partnerships
- Clear, Positive Call to Action



BAA Board of Directors

- The LBA contract was approved for the last year of the 4-year contract, with a provision to extend for another 4-year period (with annual review). I am personally very pleased with the work and the team at LBA and look forward to their leadership and assistance as we move into FY28, Farm Bill restart (maybe?) and the development of a capacity campaign for FY28.
- The PBD approved the 2027 operating budgets for the BAA, CARET and Communications and Marketing.
- Reviewed the BAC recommendations for FY28 Unified Ask, which will ready in time for the CARET Washington Conference.
- Approved a name change from the Policy Board of Directors to the BAA Board of Directors to more fully reflect how the PBD has been functioning the last few years.
- The BAA Board of Directors adopted a new meeting schedule where they will meet in person at the BAA Summer Leadership Meeting and APLU Annual meeting and have zoom meetings in April, October and Jan 2027.

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH



Chair Updates and Reflections

Chandra Reddy

Dean & Director,
Tennessee State University

A Productive Year for agInnovation

Operating Landscape and Sector Challenges

- OMBs apathy towards nations research enterprise-Capacity Funding on the Death Bed
- New Immigration Policies Impacting Farm Labor and Graduate Programs
- Tariffs and Ag Supply Chains
- War and Agriculture

Key Strategic Accomplishments

- Roadmap Completion
- A Strategic Plan Development for Operational Excellence
- Science Communications Strategy Training

Transformational Investment Pillars

- **Through agInnovation**
  - Deliver safe, affordable, and nutritious food
  - Improve farmer profitability and resilience
  - Strengthen rural economies
  - Prepare a highly skilled workforce

Adaptive Roots

Building a Unified Communication Strategy for the Land-Grant System Roadmap

In July 2025, agInnovation and ECOP, in coordination with APLU BAA and APS, began work with Adaptive Roots Consulting to design and implement a long-term, comprehensive plan to advance the goals outlined in the Roadmap.

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Adaptive Roots - Update

Deliverables: Communications Strategy	**What agInnovation received**
• Draft implementation plan for communications rollout • Coalition-building strategy co-developed with APLU and LBA	• Communications framework (included engagement calendar and stakeholder map) • Implementation plan with recommended tactics/timelines/roles if Roadmap is developed into comprehensive campaign with coalition building • Outgoing memo with Adaptive Roots' recommendations for options to move Roadmap forward

Societal Benefits

1. Improving America's Health
2. Promoting 4-H and Positive Youth Development
3. Promoting Economic Development for Thriving Communities
4. Supporting Resilient Working Lands
5. Protecting America's Water Supply
6. Building Resilient Food Systems for our National Security

Adaptive Roots – Contract Successfully Concluded

- All deliverables received with link to editable Canva file for future editing
- Web Development will be performed by APLU and will be placed on Ag is America website: https://agisamerica.org/
- The Land-Grant University Roadmap will be formally launched following the midterm elections and the convening of the new Congress in January 2027.
- Budget - $114,000; Remaining Balance - $38,283.92

Adaptive Roots – New Professional Services Contract

- Not to exceed the remaining balance of $38, 283.92
- Communications Materials for Priority Congressional Audiences
- Targeted Media Outreach Guidance Following the Mid-term Elections
- Refined Roadmap Documents

Promoting Roadmap




1301

Strategic meetings on Capitol Hill

1. Articulate agInnovation's priorities
2. Share land-grant impacts
3. Address emerging concerns (*including USDA/NIFA reorganization/OMB proposed revisions to the Uniform Guidance)*
4. Strengthen Key Partnerships
5. Mobilize support for increased federal investment in the nation's food and agricultural research enterprise
6. A 'leave-behind' briefing document was prepared

Senators: Cindy Hyde-Smith (R-MS); Thom Tillis (R-NC); Raphael Warnock (D-GA)
Representatives: Frank Lucas (R-AR); Glenn Thompson (R-PA); Alma Adams (D-NC)

•

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Strategic Meeting with the Farm Journal Foundation

1. Articulate agInnovation's priorities
2. FJF was very familiar with agInnovation – *Thanks-previous agInnovation Chairs and Executive Vice Chairs*
3. Shared Land-grant the six Societal Benefits
4. FJF participated in one of messaging and stakeholder engagement session by Adaptive Roots
5. FJF suggested a formal rollout of the Roadmap
6. FJF suggested that agInnovation ask for a specific bold investment

Grace Burton: Director-Government Affairs

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Strategic Meeting with the Foundation for Food & Agriculture Research (FFAR)

- Articulated agInnovation's strategic priorities and areas of opportunity for collaboration with FFAR's Critical Priority Areas
- Dr. Moon Chapotin demonstrated a strong familiarity with agInnovation
- Emphasized the importance and strategic value of public–private partnerships in advancing shared goals and achieving greater impact.
- Shared the six Societal Benefits of the land-grant university system and discussed their importance to the nation's food and agricultural research enterprise.
- She also recommended a formal, highly visible rollout of the *agInnovation-Land-grant Roadmap*.

Dr. Saharan Moon Chapotin, Executive Director

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Strategic meetings with NIFA and ARS

1. Aligned the agInnovation's priorities with USDA/REE Research & Development Priorities
2. Expressed our concerns regarding the proposed USDA/NIFA reorganization and its potential implications.
3. Expressed our concerns regarding the OMB proposed revisions to the Uniform Guidance and its potential implications
4. Expressed our concerns about the new REE Business Center being under the auspices of ARS

Scott Hutchins, Brent Elrod, Katherine Sixt (NIFA); Jeff Silverstein and Michael Arnold (ARS)

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Mobilizing the Land-grant System to Build a Healthier Nation through Research and Innovation

- The initiative focused on the critical intersection of food systems, agriculture, and public health, recognizing the well-documented relationship between dietary patterns and long-term health outcomes—particularly the prevention and management of chronic diseases highlighted in the MAHA Report.

- agInnovation built upon the foundational work completed by Adaptive Roots (*Societal Benefit #1)* and expanded it into a coordinated, system-wide effort across the land-grant university enterprise.

- Although the initiative is in its early stages, initial discussions with NIH and HHS were encouraging and demonstrated strong potential for future collaboration.

- To strengthen alignment with federal priorities, agInnovation plans to partner with Lewis-Burke Associates to position the initiative for competitive funding opportunities across USDA, HHS, NIH, and other federal agencies.

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Reimagining agInnovation

Reimagining agInnovation: Project Overview

- agInnovation has made important progress
- Transitioning from ESS/ESCOP to agInnovation
- Creating a national branding (*name, external-facing website, blog*)
- Establishing a 501(c)(3) nonprofit
- Taking control of the agInnovation investment funds

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Reimagining agInnovation: Project Overview

- Based on our discussions for the past three years under the leadership of Matt, George, and Steve, we have created an opportunity help agInnovation's national leadership team step back and work through a set of deeply interconnected questions about **structure, governance, decision-making, nonprofit utilization, and future organizational potential**.

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Reimagining agInnovation: Project Overview

- agInnovation is at an important inflection point.
- **The goal is to do this process well**: gather perspectives in advance, synthesize themes, and create the conditions for a productive in-person strategic planning session
- **The challenge to ask**: Do we need to do things differently as an organization? ---gets to the inflection point.

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Reimagining agInnovation

Effective Flow Connections - Selected Contractor

- Effective Flow Connections (EFC) is a Reno, Nevada–based management consulting firm specializing in strategic planning, facilitation, project management, and organizational effectiveness.
- EFC works with nonprofit organizations, government entities, and complex stakeholder environments to help leaders move from ambiguity to clarity and action.
- Kandis Porter and Amanda Hebert bring experience in nonprofit governance, business operations, government systems, and strategic facilitation..

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Reimagining agInnovation

Effective Flow Connections understands that agInnovation is seeking support at the **national level** to explore how our organization can operate more effectively while better utilizing its independent nonprofit structure.

Key themes from the conversation included:

- The agInnovation brand modernization has outpaced updates to organizational structure and governance
- Legacy processes and longstanding institutional practices may limit agility and operational efficiency
- Leadership is interested in exploring how the national organization can function more effectively as an independent business entity while remaining connected to its broader ecosystem

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Reimagining agInnovation

Effective Flow Connections supported this effort through three connected components:

1. **Pre-session survey** to gather individual perspectives on priorities, pain points, opportunities, and concerns (*completed*)

2. **Survey analysis and agenda development** to translate input into a focused working session design *(completed)*

3. **One full-day in-person strategic planning and facilitation session** with the members identified by agInnovation leadership (*completed*)

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Key Takeaways - Strategic Planning Session

- Develop an effective strategy and focus to ensure agInnovation a trusted voice and partner with stakeholders and decision-makers
- Determine how to amplify and organize the national voice
- Strengthen advocacy for science
- Leverage the 501 (c) (3) and pursue organizational redesign and future growth
- Address organizational structure, including committees, meetings, and related structures
- Develop a communication and engagement plan

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Next Steps – agInnovation Strategic Planning

- Establish a working group to guide implementation.
- Clarify agInnovation's national voice, value proposition, and key audiences.
- Assess the current governance, committee, and meeting structures.
- Evaluate opportunities presented by the 501(c)(3) structure.
- Develop an integrated communications, engagement, and advocacy plan.
- Establish timelines, responsibilities, milestones, and measures of success.
- **Thanks – Gene**, his Leadership Team, including the EDs and Me

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Next Steps – agInnovation
Strategic Planning

Additional Comments or Observations from Attendees

Questions-Comments: We Welcome Your Feedback

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

agInnovation
science that feeds the world

LAND - GRANT UNIVERSITY RESEARCH

Alan Alda Center for Communicating Science Workshop

Alan Alda Center - Communicating Science

- Discussions at the 2025 agInnovation annual meeting in St. Louis, MO focused on the need for AES directors to significantly improve the impact of our collective communications about the value that capacity funded programs provide to build and ensure resilient and safe food and agricultural ecosystems.

- On Monday, agInnovation sponsored a one-day Alda Center for Communicating Science workshop to strengthen science communication skills.

- 30 Directors, representing all five regions, actively participated

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Alan Alda Center - Communicating Science

- The Alda Center, based at the SUNY Stony Brook, is internationally recognized for helping scientists and research leaders communicate complex ideas clearly, authentically, and with impact.

- This workshop was tailored specifically for agInnovation directors, focusing on strengthening our ability to consistently, clearly, and effectively articulate the purpose, benefits, and public value of the diverse and interconnected research portfolios supported by agricultural experiment/research stations across the United States.

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Alan Alda Center - Communicating Science

- **The first half of the day** used group-based exercises and improvisational techniques to introduce and develop core communication tools that enhance clarity, empathy, and audience connection.

- **The second half of the day** transitioned those tools into actionable strategies through the Alda Method, guiding participants to identify their specific audiences, understand their audiences' goals, and craft effective messages across a range of situational contexts.

- **By the end of the day**, directors left with a shared framework and practiced messaging that clearly communicates the value proposition of agricultural experiment stations, how the AES's unique structure supports innovation and continues to benefit agricultural and food systems at the state, regional, and national levels.

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Key Takeaways

- **Know your audience**…who are they, what do they know about the topic of your message, and what is your relationship to them?
- Keep your audience and your goal for them at the center of every communication strategy

- **Structure Matters**… after you strategize, order your content so you lead with the 'hook,' and the 'so what,' prioritize what your audience wants to know, and end with something memorable

- **Passion is contagious**…if your tap into what make your work/research unique and exciting, you can help others buy into it.

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Key Takeaways

- Try connecting your work/research to what your audience already knows and cares about.
- **Stories** help give context and meaning.
- **Use plain language and relatable analogies…** to make complex concepts easier to understand. Explain why the work matters to the audience and build trust through clear, honest communication.
- **Mistakes happen…** take a moment to regroup, then refocus on the task at hand with your colleagues and the audience.

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Key Takeaways

- **Practice! Practice! Practice!** Out loud and with others. It makes a difference

- **Find your inspiration in your work**… Don't be afraid to share that joy and purpose…. (Right, Jodie?)

Are there any additional takeaways the participating directors would like to share?

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Concluding Remarks

- As Dr. Gene Kelly begins the position as agInnovation Chair, he brings an adaptive, visionary and authentic leadership style characterized by flexibility, open-mindedness, and responsiveness to emerging challenges and opportunities. His principled, values-driven approach, steadfast commitment, and distinguished record of service will foster innovation, strengthen organizational resilience, and position agInnovation for continued growth and success.

- Through the collective efforts of my leadership team, particularly the EDs, and the development of the bold, forward-looking *Reimagining agInnovation* framework, we have established a strong foundation for the future. This framework positions Gene and his leadership team to build upon our progress, accelerate innovation, strengthen collaboration, and propel agInnovation to even greater levels of impact, influence, and national leadership.

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Concluding Remarks

“Alone we can do so little; together we can do so much.” — Helen Keller

Throughout my tenure as Chair of agInnovation, teamwork was the foundation of everything we accomplished. I extend my sincere appreciation to each of you for your unwavering support, valued counsel, and steadfast commitment.

It has been a privilege and an honor to serve alongside you as we worked together to advance the mission, influence, and impact of agInnovation.

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

agInnovation
science that feeds the world

Operating Successfully in the Evolving Federal Funding Landscape

Rick Rhodes

agInnovation
Northeast



NAAAN

NORTH AMERICAN AGRICULTURAL ADVISORY NETWORK

Three countries.
One agricultural partnership.

The NAAAN's Big and Bold Approach

Building and Improving Agricultural Capacity for a Resilient Food System

The NAAAN fills a critical gap by **identifying problems**, **aggregating and curating** agricultural expertise and leadership, and **implementing solutions** through on-the-ground partnerships.

Increased agricultural capacity and global knowledge exchange **increases returns on investment** in agricultural research.

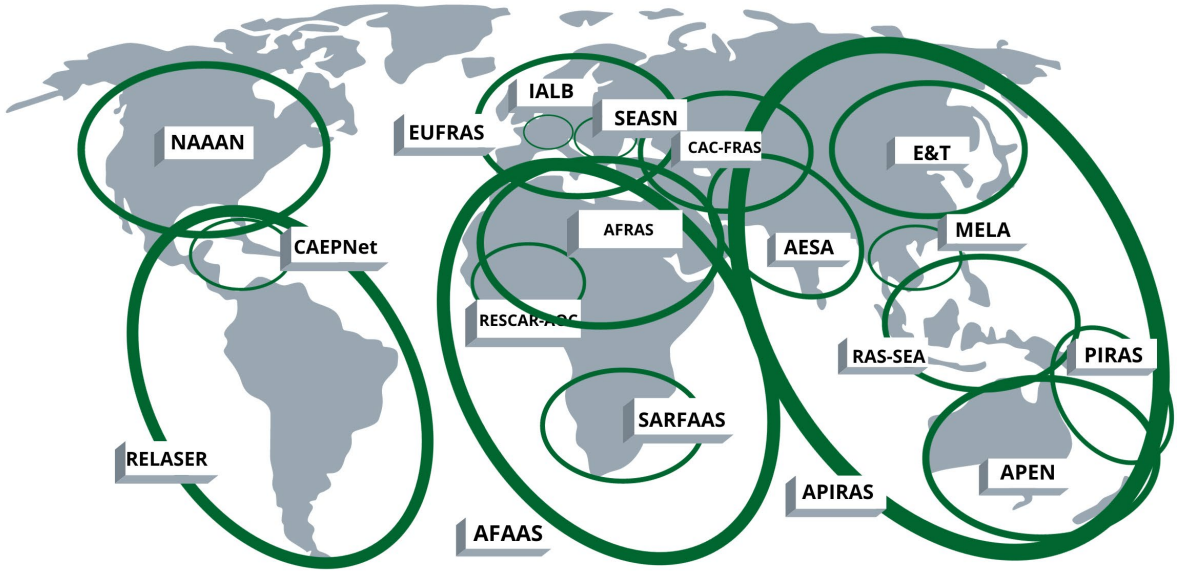
Three countries.
One agricultural partnership.



NAAAN has connections to nearly every country in the world via 17 sister global networks.

Global Reach and Impact

The NAAAN is the **regional representative for North America in the Global Forum for Rural Advisory Services (GFRAS)** as one of 18 regional agricultural networks. It joined GFRAS in 2020, bringing Canada, Mexico, and the U.S. to the global agricultural policy table for the first time.



global forum for rural advisory services
forum mondial pour le conseil rural
foro global para los servicios de asesoría rural

GFRAS Global Funders & Partners

NAAAN Partners

Canada

Agriculture and Agri-Food Canada

nciaf

Deans Council Agriculture, Food & Veterinary Medicine
Conseil des doyens Agriculture, Alimentation & Médecine vétérinaire

CAHRC-CCRHA
Canadian Agricultural Human Resource Council
Conseil canadien pour les ressources humaines en agriculture

Mexico

Agricultura
Secretaría de Agricultura y Desarrollo Rural

AMSDA
(in process)

Ingredion

United States

CSU System
Colorado State University

Association of Public & Land-Grant Universities

FarmRescue
Since 2005

EDEN
Extension Disaster Education Network

Together We Grow
Cultivating Talent Harvesting Potential

North American Agriculture & Food Security:
Addressing Challenges to Thrive

Regina, Saskatchewan, Canada

May 11-13, 2027

- Address **shared challenges** in **extension** and **rural advisory services**:
  - **Emerging technologies**
  - **Creative financing for agriculture**
  - **Biodefense and disaster preparedness**
  - **Water management and soil health**
- **Empower producers**, **communities**, and the next generation of **agricultural leaders**
- **Engage with leaders** across public and private sector, higher education, farming and ranching, and indigenous and first nation communities
- **Strengthen food security** through partnership, dialogue, and coordinated action



We invite you to join us for this first of its kind trinational meeting.

North American Agriculture & Food Security:
Addressing Challenges to Thrive

Regina, Saskatchewan, Canada | May 11-13, 2027

Thematic Working Groups

1. Biodefense and Disaster Management *(Applications for extension)*
2. Digital Tools and AI for Water Management and Soil Health
3. Livestock and Genetics
4. Workforce Issues in Agriculture *(Who is making a difference with Young Professionals?)*
5. Creative Financing for Investment in Agriculture and Extension Work *(What is working and what is needed?)*
6. The Role of Higher Education in Extension across North America *(Creating Connection and Synergies)*



Learn More and Register

naaan.csusystem.edu/regina-2027

agInnovation
science that feeds the world



Incoming Chair Initiatives

Gene Kelly

Professor of Pedology & Director,
Colorado Agricultural
Experiment Station
Colorado State University

Reimagining Initiative Survey Results

Future Opportunities and Impact

Multiple Choice Question	Where should agInnovation have greater influence or impact over the next 5-10 years?
Federal research funding	18/20
Public awareness of agricultural research	18/20
Philanthropic funding	16/20
Industry partnerships	14/20
National policy engagement	14/20
State and regional policy engagement	5/20
Shared research infrastructure	4/20
International collaboration	2/20



Initiative Survey Results

Organizational Design and Governance

Multiple Choice Question	Which components of the current structure would benefit most from examination during this initiative?
Relationship with APLU	11/20
Communications and visibility	11/20
Utilization of the 501(c)(3)	10/20
Committee structure	9/20
Governance structure	8/20
Funding model	8/20



Reimagining Initiative Survey Result





Current Value and Strengths

National visibility for agricultural research
18/20 or 4.85, where 5 is extremely valuable and 1 is not valuable

Information sharing and communication
16/20 or 4.80, where 5 is extremely valuable and 1 is not valuable

Federal advocacy and representation
15/20 or 4.65, where 5 is extremely valuable and 1 is not valuable

Reimagining Initiative Survey Results

Financial Architecture

501(c)(3)

How important is it for agInnovation to pursue funding sources beyond traditional federal appropriations?

Essential	**13/19**
Very Important	**5/19**
Moderately Important	**1/19**
Slightly Important and Not Important	**0**
Average	**4.6/5**



Proposed Initiatives



Enhance Communication and Advocacy

1. Utilize the Roadmap as the foundation to articulate the critical need to make long-term investments in research administered by members of agInnovation.

- Continuously refresh the website to include content provided in the Roadmap.
- Establish a media presence (conventional and social) for agriculture, science, policy, and general interests.
- Integrate analytics to optimize content for target audience growth and network expansion to enhance national visibility.

Proposed Initiatives

Enhance Communication and Advocacy



2. Engage scientists in advocating for science that feeds the world.

- Create a Science Advocacy Academy to help carry the agInnovation message outlined in the Roadmap.
- Proposed process 1) solicit nominations from agInnovation members; 2) invite nominees to participate in a series of virtual trainings on authorization through appropriations, capacity and competitive funding, principles of engagement, & effective science communication; and 3) finish with Hill visits and reception.

Proposed Initiatives



Explore New Funding Opportunities

3. Capitalize on the 501(c)(3) non-profit to pursue funding opportunities from parties interested in making charitable contributions to advance agInnovation.

- Develop a surveyed and prioritized set of private capacity-building funding opportunities aligned with advocacy, outreach, and public education.
- Identify and pursue prospects that fund advocacy, public education, and capacity building in alignment with agInnovation.

agInnovation
science that feeds the world

From Regional Strength to Regional Capacity

You already have the science. You already have extraordinary institutions. And you already have many of the relationships.

The opportunity now is to connect those assets at the scale of the problems you are being asked to solve.

What emerged across the regions

- Move from state-by-state and institution-by-institution work toward **regional connective capacity**.

- Be proactive at multiple scales: **organizational capacity, relationship building, and getting science into decisions earlier**.

- Make science more usable: translate, convene, co-produce, evaluate, and tell the public-value story.

- Build the infrastructure that lets the region act before the crisis: governance, staffing, data, coalitions, communications, and flexible funding.

Bottom line: The next step is not starting over. It is connecting what already exists.

From Regional Capacity to National Action

These sessions affirm the direction we are heading — and give us the insight to shape these initiatives together as we move forward.

Bottom line:
We are not starting from scratch. The sessions showed that the science, institutions, and relationships are already here. The Chair initiatives give agInnovation a way to connect them — and the regional results will help fine-tune how we do that.

What emerged from the regions	Chair Initiative
Connect assets at the scale of the problems	**Use the Roadmap** to organize and communicate the case for long-term investment
Get science into decisions earlier	**Science Advocacy Academy** to prepare scientists to engage clearly and credibly
Tell the public-value story	**Enhanced communication and advocacy** across media, policy, and public audiences
Build capacity before the opportunity hits/crisis	**501(c)(3) funding strategy** to support advocacy, outreach, public education, and capacity-building

d

agInnovation
science that feeds the world



Financial Update & FY2027 Budget

Gene Kelly

Proposed 2027 Budget

	2027 Proposed	2026 Approved	2026 Actual/Encum
	INCOME		
Previous CY Carryover (estimate)	$120,000	$100,000	$120,000
agInnovation Assessment	$100,000	$100,000	$100,000
Other	$27,000	$24,000	$24,000
TOTAL INCOME	$247,000	$224,000	$244,000

Proposed 2027 Budget

	2027 Proposed	2026 Approved	2026 Actual/Encum
EXPENSES			
Unchanged Budget Lines			
NCFAR Membership	$1,000	$1,000	$1,000
Operating	$1,500	$1,500	$1,400
agInnovation 501(c)(3)	$3,000	$3,000	$1,200
Meeting Support (Annual Meeting)	$20,000	$20,000	$12,000

Proposed 2027 Budget

	2027 Proposed	2026 Approved	2026 Actual/Encum
EXPENSES			
Budget Line Increases			
Communications and Advocacy	$63,000	$50,000	$12,000
Promotion (chair travel, initiatives, etc)	$40,000	$30,000	$28,000
agInnovation Awards	$30,000	$21,840	$22,000

Proposed 2027 Budget

	2027 Proposed	2026 Approved	2026 Actual/Encum
EXPENSES			
Budget Line Decreases			
Professional Development	$20,000	$30,000	$25,295
Website (agInnovation and ESCOP)	$12,500	$25,000	$2,500
agInnovation Committee Meetings	$0	$10,000	$0
NRSP RC Stakeholder (travel)	$0	$1,500	$0

Proposed 2027 Budget

	2027 Proposed	2026 Approved	2026 Actual/Encum
EXPENSES			
New Budget Lines			
Capacity Building Engagement	$50,000	$0	$0
Science Communications Survey	$6,000	$0	$0
TOTAL EXPENSES	$247,000	$193,840	$105,395
PROJECTED BALANCE-END OF CY	$0	$30,160	$138,605

Comparison of Budget Proposed Over Past 5 Yrs

	2027	2026	2025	2024	2023
Total Budget Proposed	$247,000	$193,840	$239,000	$183,000	$136,00
Communications and Advocacy	$63,000	$50,000	$50,000	$10,000	$15,000
Websites	$12,500	$25,000	$20,000	$1,000	$1,000
Proposed New Line- Capacity Building Engagement	$50,000	$0	$0	$0	$0
Previous Initiative Lines					
Roundtables with Stakeholders	$0	$0	$35,000	$0	$0
Planning Team In-person Meeting	$0	$0	$0	$35,000	$0
Strategic Advocacy- Facilitator	$0	$0	$2,500	$15,000	$0
AG-NGINE	$0	$0	$50,000	$50,000	$50,000

agInnovation
science that feeds the world

LAND - GRANT UNIVERSITY RESEARCH



MRF Impacts

Sara Delheimer

Program Coordinator
Multistate Research Fund

Multistate Research Fund
IMPACTS

Sara Delheimer, Program Coordinator

sara.delheimer@colostate.edu





As part of **NRSP-1**, the **Multistate Research Fund Impacts Program (MRF Impacts)** communicates the innovations and impacts of Hatch Multistate collaborations.

THE NEED

Decision-makers seek stories about **impact** & **ROI**.

Publicly-funded projects are accountable to the *public*.

But reports in NIMSS are *technical*; NIMSS has *internal* audience.

OUR SOLUTION

Integrated professional **communicator** & **strategy**

Cohesive brand, *focused* materials & training to communicate Hatch Multistate project **IMPACTS**

→ Provide **accountability**

→ Generate ***positive*** **exposure** & **support**

250

Impact Statements

80+

Infographics/Videos

65+

Impact Trainings

STRENGTHS & SUCCESSES





A BRANDED, EASY-TO-USE WEBSITE

mrfimpacts.org

Multistate Research Fund
IMPACTS

Home | Impact Statements | Archive | Toolkits | Impact Writing Resources | About | Engage

Collaboration.
Innovation.
Impact.

The Hatch Multistate Research Fund (MRF) supports agricultural innovation and resilience by providing federal capacity funds to collaborative projects that address high-priority regional and national issues in agriculture. Projects are led by researchers at land-grant universities and agInnovation, a nationwide network of agricultural experiment stations. The Multistate Research Fund is administered by the U.S. Department of Agriculture's National Institute of Food and Agriculture.

The Multistate Research Fund Impacts Program (MRF Impacts) communicates the impacts of these projects.

Learn more about us →

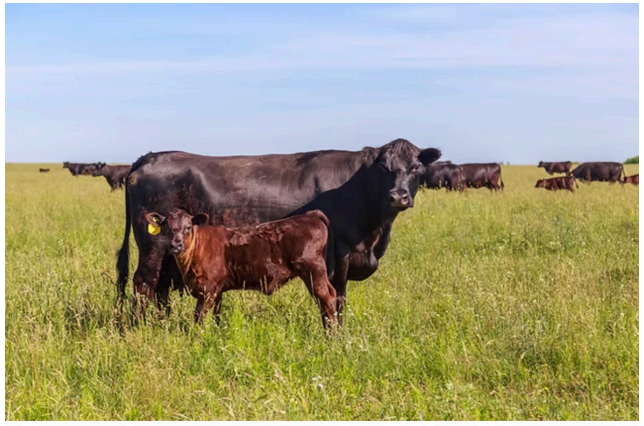


SEARCH BY PROJECT NUMBER

Visit our Archive for a complete list of impact statements available by project number.

FILTER BY TOPIC

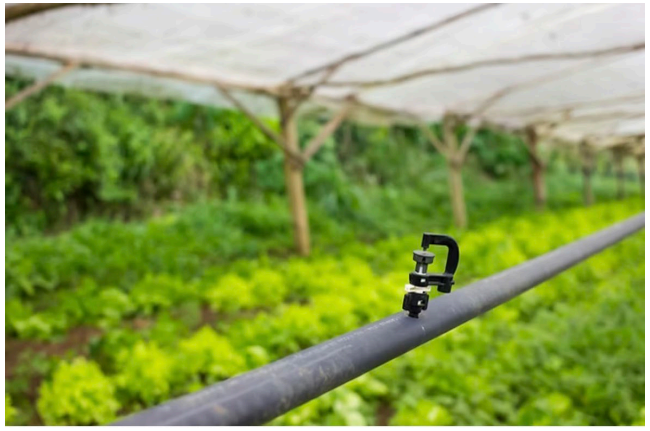
- All Posts
- Air Quality
- Animal Health/Welfare
- Automation
- Beef
- Biodiversity
- Biofuels/Bioproducts/Biotechnology
- Cattle
- Crop Yield/Quality
- Dairy
- Emergency Response
- Economic Resilience
- Energy
- Environmental Health
- Fisheries/Aquaculture
- Food Safety
- Food Security
- Forestry
- Fruits/Vegetables
- Goats
- Grains



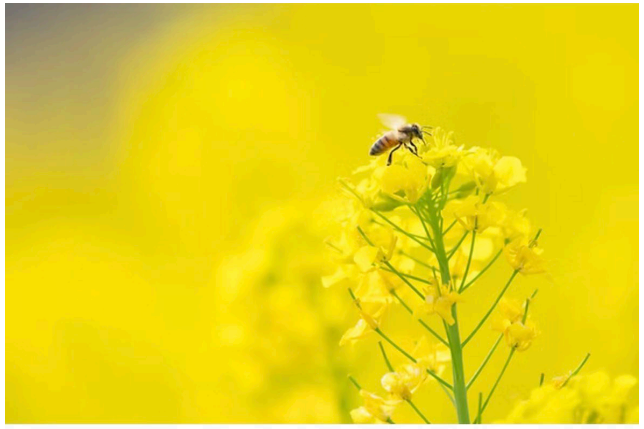
Improving Reproduction in Cattle & Sheep



Managing Insect Pests in Corn



Smart Irrigation



Supporting & Sustaining Bee Health

FILTER BY INSTITUTION

- Alabama A&M University
- American Samoa Community College
- Auburn University
- Central State University
- Clemson University
- Colorado State University
- Cornell University
- Delaware State University
- Florida A&M University
- Fort Valley State University
- Iowa State University
- Kansas State University
- Kentucky State University
- Langston University
- Lincoln University
- Louisiana State University
- Michigan State University
- Mississippi State University
- Montana State University
- New Mexico State University
- North Carolina A&T University
- North Carolina State University
- North Dakota State University
- Ohio State University
- Oklahoma State University
- Oregon State University
- Pennsylvania State University
- Purdue University

Website Performance





MANY, MANY, HIGH-QUALITY IMPACT STORIES

Strengthening the Future of Plant Breeding

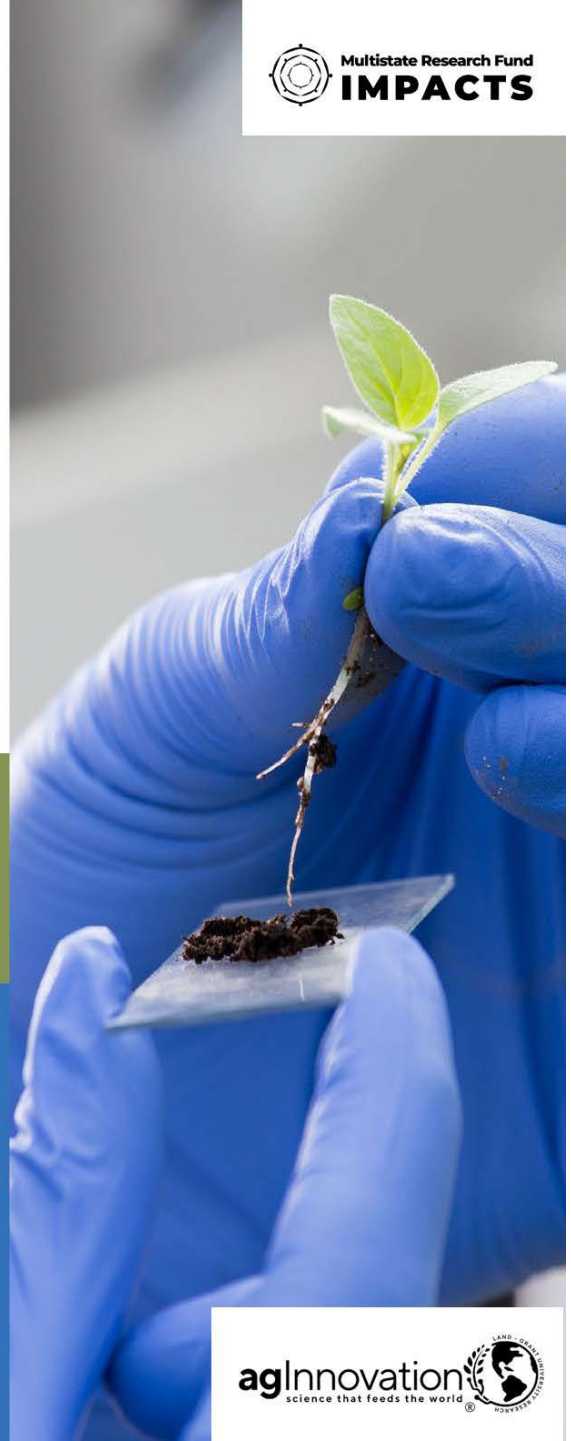
Since the advent of agriculture, human societies have bred plants. Breeding is responsible for plant varieties with stronger resistance to pests, diseases, and environmental stressors, higher yields, better flavor, more nutrients, greater ornamental impact, and greater economic value. Plant breeding is essential to supplying a growing global population with food, fiber, fuel, medicine, landscaping, and ecosystem services.

Future advances in plant breeding require continued investment in capacity—the people, education, infrastructure, resources, and programmatic support.

The Plant Breeding Coordinating Committee brings together plant breeders at land-grant institutions and the USDA to address plant breeding issues and strengthen public plant breeding programs.

Highly trained plant breeders with access to robust infrastructure and the latest technology will support resilient agriculture, healthy communities, and thriving environments and economies.

Strong public plant breeding programs are key to the success and sustainability of public and commercial efforts. They provide foundational knowledge, broadly beneficial innovations, and a long-term safety net for agricultural production and national security.



Multistate Research Fund IMPACTS

agInnovation science that feeds the world

What does the Plant Breeding Coordinating Committee do?

Provide leadership on priorities

The committee alerts decision makers and stakeholders about strengths, weaknesses, and threats to agricultural security that can be addressed with plant breeding.

Increase awareness and support

The committee facilitates communication among plant breeders, government agencies, university administrators, and the industry.

Public speaking guidelines for plant scientists improve communication between plant breeders and non-technical audiences.

Videos, podcasts, white papers, popular press articles, and other materials have raised awareness of the practice and impacts of plant breeding.

Assess capacity in the U.S.

The committee collects, analyzes, and shares data about plant breeding capacity and critical gaps. Federal agencies use this information to develop policies, grants, and programs.

Address education and training needs

Recently developed core concepts for graduate-level plant breeding education help ensure students receive the knowledge and skills they need to succeed in plant breeding careers.

Committee members host and update an online library of e-books, webinars, articles, videos, and other materials about plant breeding so users can train themselves on various topics.

Sustain plant breeding programs

The committee has raised awareness about the importance of succession planning for plant breeding programs and developed best practices for hiring and onboarding new plant breeders, documenting methods and operational knowledge, and managing data and intellectual property.

Enhance access to plant genetic resources

The committee reviews methods for conserving, characterizing, sharing, and using plant genetic resources. Committee members also contribute to a database of high-quality genomics, genetics, and breeding data for a wide variety of crops.

Why is the multistate committee structure important?

With support from federal capacity grants, the committee brings together plant breeders from land-grant institutions in almost every state. This structure helps the committee:

Share data, tools, and genetic resources, improving **efficiency** and **productivity**

Spur innovation by sharing **expertise** from different crops and environments and experience with various technologies

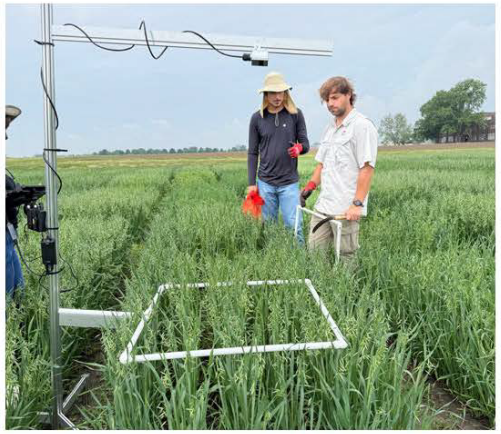
Test new tools, methods, and varieties at multiple locations and scales, generating **consensus** and **unbiased perspectives**

Coordinate breeding efforts no one state or institution has the capacity to perform

Support long-term continuity needed for plant breeding

Develop **shared goals** to guide policy

Use **teaching and Extension** roles to provide plant breeding outreach, training, and education nationwide



Committee Funding & Participation

SCC80: Strengthening the Public Plant Breeding Community is supported in part by USDA NIFA through Hatch Multistate Research Fund capacity grant allocations to State Agricultural Experiment Stations at participating land-grant institutions, including: University of Alaska Fairbanks, University of Arizona, University of Arkansas, Auburn University, University of California, Davis, Clemson University, Colorado State University, Cornell University, University of Florida, University of Georgia, University of Hawaii, University of Idaho, University of Illinois, Iowa State University, Kansas State University, University of Kentucky, LSU AgCenter, University of Maine, University of Maryland, University of Massachusetts, Michigan State University, University of Minnesota, Mississippi State University, Montana State University, University of Nebraska, University of New Hampshire, New Mexico State University, North Carolina State University, North Dakota State University, Ohio State University, Oklahoma State University, Oregon State University, University of Puerto Rico, Rutgers University, South Dakota State University, Texas AgriLife Research, Tuskegee University, Utah State University, University of Vermont, Virginia Tech, Washington State University, West Virginia State University, University of Wisconsin, University of Wyoming. **Learn more:** nimss.org/projects/19248

This Impact Statement was produced in 2026 by the Multistate Research Fund Impacts Program, which is supported by agInnovation, the State Agricultural Experiment Stations, and the Hatch Multistate Research Fund provided by USDA NIFA. **Learn more:** mrfimpacts.org

RESEARCHERS ACROSS AMERICA ARE ADVANCING NUTRITION.

Collaborative research by land-grant universities plays an important role in advancing our understanding of human health and nutrition and improving access to and consumption of safe, high-quality, nutritious foods nationwide.



Researchers tackle nutrition issues in many ways.

DISCOVERING compounds that are *beneficial* to human health and understanding the role they play in preventing chronic diseases

BREEDING fruit and vegetable varieties with *enhanced* nutrients

UNDERSTANDING how marketing and policy affect nutrition

How do these projects impact you?

They *prevent* **DISEASE** and *promote* **WELLNESS**.

They *reduce* **HEALTHCARE COSTS** and strain on the system.

They help communities *thrive*.

Research has informed policies and programs that improve the availability and consumption of nutritious foods in under-served communities. Research has influenced the creation of mobile food markets and pantries and influenced decisions that allowed food stamp spending at CSAs and farmers markets and allowed food banks to accept imperfect produce. In addition to providing fresh produce to more communities, these efforts reduce food waste, lower food bank operating costs, and give farmers new sales outlets.



PHYTONUTRIENTS

Research suggests compounds in green tea could help regulate bad cholesterol, fight inflammation (Connecticut), prevent fatty liver disease (Ohio), and promote bone health (Oklahoma). A chemical in vegetables like broccoli and cauliflower leads to prostate cancer cell death (Arizona, Oregon), and compounds in green leafy vegetables and eggs can reduce the risk of macular degeneration (California).

HEALTHY VARIETIES

Various multistate projects are breeding fruits and vegetables with enhanced nutrients. For example, scientists bred potatoes with high levels of potassium, which reduces hypertension, folate, which protects against birth defects and heart disease, antiglycemic properties that could help fight diabetes, and antioxidants that have numerous health benefits. New bean varieties with modified sugar content and higher zinc are suitable for people with certain dietary needs and restrictions.

SALT

Studies revealed a way to reduce the particle size of salt so it transfers to taste buds more efficiently, which means less salt can be used without affecting taste (Louisiana).

FAT

Scientists developed new tools that reduce the amount of oil foods soak up during frying, making them less fatty (Illinois & Virginia Tech)

FOOD SAFETY

Research has led to innovative ways to enhance the safety and shelf life of fresh produce, including electron beam irradiation for sanitizing complex-shaped fresh fruits and vegetables (Texas), chemicals that delay ripening (California, Florida & Michigan), and high pressure processing that kills bacteria without additives and leaves nutrients intact (Ohio & Minnesota). Researchers also developed a method that helps nutrients in milled rice sustain washing, making milled rice more nutritious (Mississippi). Other scientists designed antimicrobial and anti-moisture packaging for pre-cut fresh produce.

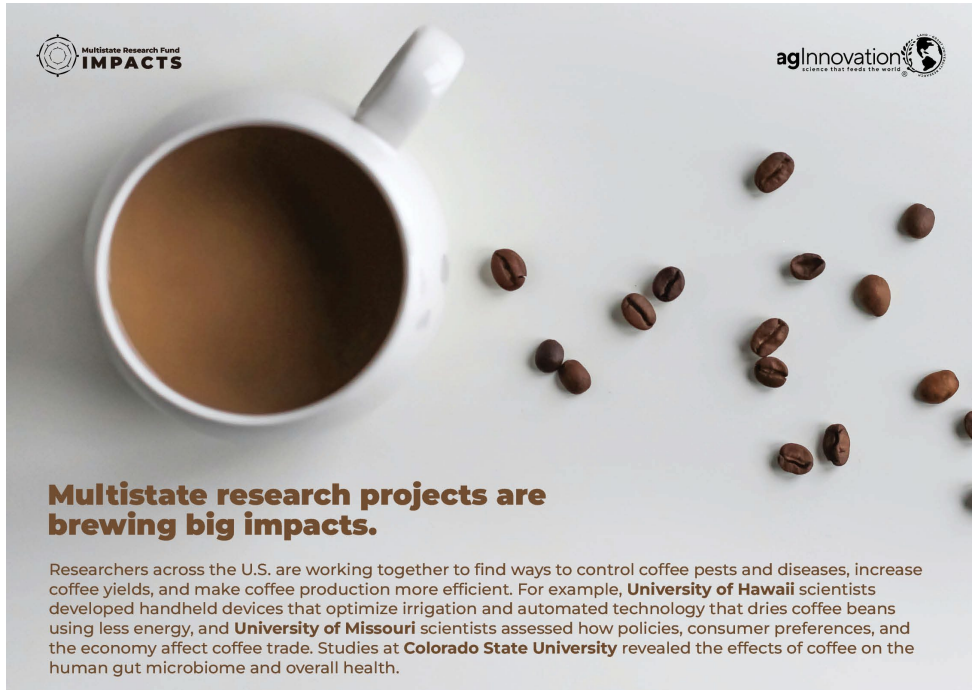
NANOTECHNOLOGY

Using nanotechnology, researchers designed tiny carriers that can deliver nutrients and antimicrobials directly into cells (Illinois, Louisiana, Maryland, Tennessee, Texas & Virginia Tech)



A team of researchers from 25+ land-grant universities is illuminating how consumer preferences, marketing strategies, food labels, and trade and retail policies affect consumer behavior. This information helps design effective programs and policies that enhance consumption of nutritious foods. Effective marketing and informative labels also help consumers choose desirable fruits and vegetables.

The Multistate Research Projects featured here are supported in part through USDA-NIFA by the Multistate Research Fund, an amendment to the Hatch Act of 1887. **Learn more about these projects: *bit.ly/MRF-Nutrition***



Multistate research projects are brewing big impacts.

Researchers across the U.S. are working together to find ways to control coffee pests and diseases, increase coffee yields, and make coffee production more efficient. For example, **University of Hawaii** scientists developed handheld devices that optimize irrigation and automated technology that dries coffee beans using less energy, and **University of Missouri** scientists assessed how policies, consumer preferences, and the economy affect coffee trade. Studies at **Colorado State University** revealed the effects of coffee on the human gut microbiome and overall health.



Supporting Rural Communities

Rural areas face many challenges, but they also have many strengths. Hatch Multistate research projects are amplifying the voices of rural families, showcasing their strengths, and addressing their needs. Scientists are studying changes in rural areas and finding ways to address major economic, environmental, and health crises. Research and Extension ave helped increase access to utilities, healthcare, jobs, and food in rural areas and improved emergency response to hurricanes, wildfires, and COVID-19.

Science puts the cherry on top!

Sweet cherry acreage has increased partly due to dwarfing rootstocks developed by land-grant university researchers. These rootstocks allow more trees per acre.

Other studies found packaging films that extend the shelf life and protect the quality of cherries during shipping. Using these films, growers are able to ship cherries by boat, which is slower, but cheaper than shipping by air.

Research also showed that cooling cherries with chilled water and added calcium salts can extend shelf life.



Blueberry research has juicy impacts!

Researchers at land-grant universities developed *new blueberry varieties* with desirable qualities, like *cold hardiness* and *pest tolerance*.

Michigan State University, **Oregon State University**, **Washington State University**, and the **University of Florida** are *improvin pollination*.

Washington State University developed *organic, biodegradable mulch*.

Rutgers University and **Cornell University** are testing tools to *reduce herbicide use*.

University of Maine, **University of Delaware**, and **University of Vermont** identified routes of preharvest pathogen contamination in wild blueberries grown in the Northeast.

Oregon State University is using UV light to *reduce fungal loads*.

University of Georgia developed affordable *automated technologies* that could *improve harvest efficiency*.

University of Florida found ways to *minimize shipping damage*.





PARTNERS ARE AMPLIFYING OUR CONTENT



agInnovation
science that feeds the world

WHO WE ARE | OUR TOP PRIORITY | OUR WORK IN ACTION | EN

Curious about where this innovative work is being done?
Check out our interactive map below to learn more about an experiment station near you. Click a star (representing each state's Land-grant institution) and discover the latest research highlights and impact stories happening now!

View All Stations & Branches

See the Impact of Multistate Research

All Posts | Impacts | Events | News | Funders



AgInnovation
Jun 8, 2025 · 6 min read

Controlled Environment Technology and Use

For over 40 years, a committee of land-grant university researchers, Extension specialists, and industry and international partners has worked to advance the design...

AMERICA'S PUBLIC & LAND-GRANT UNIVERSITIES

Leveraging Discovery, Education, and Engagement for Climate-Smart Solutions







APLU BOARD ON AGRICULTURE ASSEMBLY

Multistate Research Fund Impacts

Managing Antimicrobial Resistance

Scientists at land-grant universities have teamed up to tackle the complex problem of antimicrobial resistance in agriculture. This interdisciplinary, multistate team is uniquely positioned to develop and implement comprehensive solutions as well as targeted strategies for different types of animals, environmental conditions, and management styles.

APLU BOARD ON AGRICULTURE ASSEMBLY

RESEARCHERS STUDYING AVIAN DISEASE RESISTANCE AND IMMUNITY WIN NATIONAL AWARD FOR OUTSTANDING COLLABORATION AND IMPACT

In Food Security by AgIsAmerica / September 17, 2025

ST LOUIS, Mo., Sept. 16. — At the Joint agInnovation and Extension Awards Ceremony, Dr. Chris Ashwell ar Hubbart received the 2025 Excellence in Multistate Research Award on behalf of a multistate team working understand the genetic bases of immunity and resistance to avian diseases.

agisamerica.org

LAND-GRANT UNIVERSITIES: Advancing Soil Health And Conservation To Build Resilient Lands

JULY 2026 TOOLKIT

- Improving soil surveys
  University of Illinois, Iowa State University, Kansas State University, Michigan State University, University of Minnesota, University of Missouri, University of Nebraska, North Dakota State University, Ohio State University, Oregon State University, Purdue University, South Dakota State University.
  Supported by Hatch Multistate Capacity Funds.



Agricultural Systems

PHOTO: Edwin Remsberg, University of Maryland

Research and Extension make agricultural systems more efficient, profitable, competitive and resilient.

Strategies and tools for managing crop pests and diseases have increased productivity and profitability.

- Extension units nationwide diagnose pest problems. In **New Mexico**, free diagnoses saved producers an estimated $36,000 in testing fees in 2025, while also supporting biosecurity and export compliance. In **Indiana**, lab results and recommendations saved clients $890,000 in reduced crop loss and pesticide use. In **Maine**, diagnoses saved the potato industry over $6 million in 2024. *New Mexico State University Cooperative Extension Service, Purdue Extension, University of Maine Cooperative Extension; funded by Smith-Lever (3b&c) Capacity Funds, Other USDA Capacity – Extension, State Appropriations.*
- Extension professionals in **North Dakota** lead a national coalition to raise awareness of soybean cyst nematode and adoption of management practices, resulting in average yield gains worth nearly $58 per acre nationwide. *NDSU Extension Service.*
- A corn rootworm monitoring network creates an estimated $160 million benefit for **Iowa's** farmers. *Iowa State University; funded by Hatch Multistate Capacity Funds.*
- Integrated pest management practices prevented yield losses of 10% to 40% while also reducing insecticide applications across major crops in **Louisiana** for estimated annual savings up to $10 million in rice, $11 million in sugarcane, $20 million in soybean, $9 million in corn and $3 million in cotton. *LSU Ag Center; funded by Smith-Lever (3b&c) Capacity Funds, State Appropriations.*

Continued

The National Land-grant Impacts Database (NIDB) documents the impacts of land-grant universities' (LGU) research, education and Cooperative Extension. The featured projects and programs are supported by a variety of funding sources and partners. Much of this work is supported by USDA's National Institute of Food and Agriculture capacity and competitive grants programs. Capacity funding forms the foundation for the LGU's agricultural research and Extension system.

This document was prepared by the NIDB communications team. The Association of Public and Land-grant Universities' Board on Agriculture Assembly manages the NIDB.

APLU Board on Agriculture Assembly

USDA National Institute of Food and Agriculture U.S. DEPARTMENT OF AGRICULTURE

Research and Extension help growers select the best varieties for their needs.

- Crop varieties developed by plant breeders in **North Carolina** boost farmers' profitability, enable new value chains and foster agricultural resilience, generating billions in economic impact. *North Carolina Agricultural Research Service; funded by Private Grants & Contracts, Hatch Capacity Funds.*
- In **North Dakota**, guidance on wheat varieties, pest and weed management, fertilizers and marketing will yield an estimated $1 million economic impact. *NDSU Extension Service; funded by State Appropriations, Smith-Lever (3b&c) Capacity Funds.*
- **Texas** trials show growers the top-performing hybrids of cotton and grain sorghum. Using top performing hybrids on just 10% of the state's planted acres would result in $18.5 million in additional revenue for corn producers and $15.6 million for sorghum growers. *Texas A&M AgriLife Extension; funded by Private Grants & Contracts.*
- To improve soil health and protect farm productivity and profitability, a **multistate team** identified the best cover crop options for southern farmers and ranchers. A new cover crop selector tool and seeding rate calculator facilitate successful adoption. *Auburn University, Arkansas Cooperative Extension, Clemson University, University of Florida, University of Georgia, University of Kentucky, Lincoln University, Louisiana State University, Mississippi State University, University of Missouri, University of Puerto Rico, University of Tennessee, Texas A&M AgriLife Research, Virginia Tech, Virginia State University; funded by Hatch Multistate Capacity Funds.*

Pollination is essential for agriculture.

- A **multistate team** developed new bee monitoring tools, pest management strategies, breeding techniques and forage improvements to support roughly 2 million managed honey bee colonies and other bees. In **Oregon**, beekeepers save about $5 million each year through reduced colony losses and lower costs for medications and hive maintenance. *Multiple institutions; Hatch Multistate Capacity Funds. Oregon State University Extension Services; funded by State Appropriations, Other USDA Capacity - Research.*

Research has led to automated, smart technology for precision agriculture.

- As part of a **multistate team** developing automated systems for specialty crops, **Tennessee** scientists showed drones could help pollinate crops. **Washington** scientists developed an operator-assisted apple harvest system that reduces labor needs and prevents ladder-related injuries. A **Florida** system uses machine vision and deep learning to detect strawberry bruises and size in packinghouses. **Arizona** researchers designed an energy-efficient mechanized system that improves weed control by over 85% while reducing hand weeding labor by about 30%. After adopting automated thinning and weeding systems, growers and companies estimated saving 114,000 hours of labor and $1.4 million per year. *University of Arizona, University of Florida, University of Tennessee, Washington State University and other institutions; funded by Hatch Multistate Capacity Funds.*
- **Mississippi** scientists developed a robotic system that removes plastic debris from cotton fields and could significantly reduce related losses, which can be up to $750 million per year. Cleaner cotton also supports mill efficiency and strengthens international market competitiveness. *Mississippi Agricultural and Forestry Experiment Station; funded by Other USDA Competitive, Non-Profit Grants & Contracts.*
- **New Mexico** studies showed combining soil moisture sensors with remote sensing can help growers reduce irrigation inputs and pumping energy by 25%. *New Mexico Agricultural Experiment Station; funded by Other USDA Competitive.*

Continued



USDA National Institute of Food and Agriculture
UNITED STATES DEPARTMENT OF AGRICULTURE

Land-grant Scientists' Work Safeguards Livestock

January 15, 2026



GUEST AUTHOR

Sara Delheimer, Program Coordinator, Multistate Research Fund Impacts Program

Flies, ticks and other arthropods are serious pests in animal agriculture.

They can damage skin, cause inflammation and allergic reactions and transmit disease-causing pathogens. Flies, in particular, are responsible for billions of dollars in damage and control costs each year in the United States. Losses and costs experienced by producers are often passed along to consumers as higher prices. In addition, movement of these pests from agricultural settings to nearby communities has resulted in lawsuits, zoning limitations and animosity between farmers and residents. Controlling arthropod pests is increasingly challenging due to emerging pests, insecticide resistance, environmental changes and changing livestock management practices.

20+

projects shared
on NIFA website

42,523

page views
on NIFA website

20+

projects shared
in NIFA Update

100,000+

subscribers
to NIFA Update

Farm Progress by informa | BEEF



Land-grant scientists' work safeguards livestock

Sara Delheimer, Program Coordinator, Multistate Research Fund Impacts Program



FoodSafety magazine

January 15, 2026

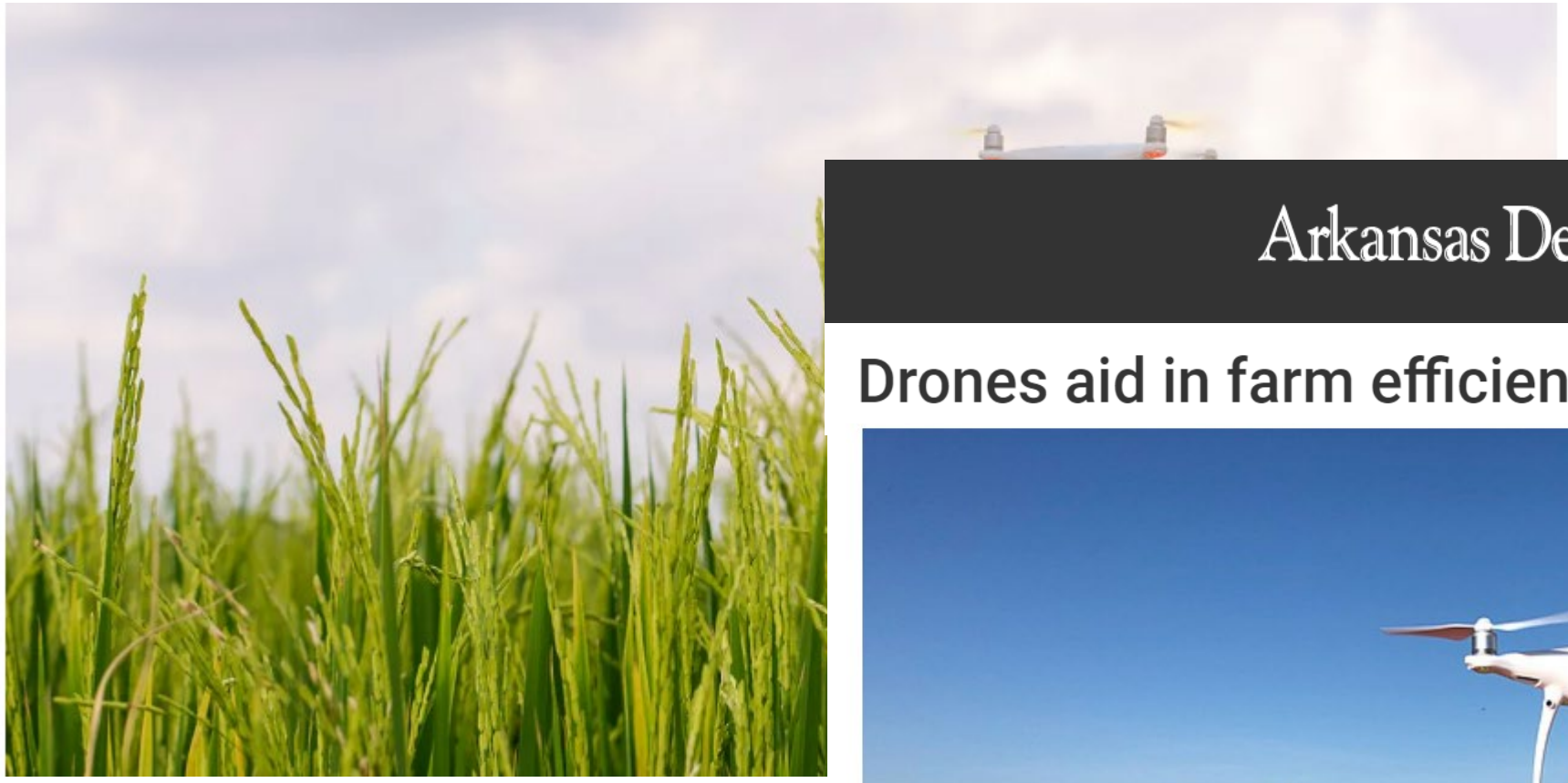
Institutions Nationwide Collaborate in USDA-Funded Project to Improve Microbial Food Safety

FarmProgress

DELTA FarmPress

Drones in agriculture research propels multistate award

The University of Arkansas was among the institutions recently recognized for drone research and outreach.



Arkansas Democrat Gazette

Drones aid in farm efficiency across Arkansas, U.S.



AGRILIFE TODAY

Texas A&M AgriLife involved in multistate and international seedling improvement project

Object is to provide high-quality, better-performing seedlings for vegetable nurseries, growers

JUNE 16, 2020

The Texas A&M AgriLife Research and Extension Center in Uvalde is one among several institutions throughout the nation involved in a multi-year, multi-state seedling improvement project.

"The goal of vegetable nurseries is to provide high-quality, dependable transplants for growers," said Daniel Leskovar, Ph.D., director of the Uvalde center as well as a Texas A&M

Iowa State researchers investigate ways to support changing wine industry in Iowa and the Midwest

July 14, 2025

AMES, Iowa — The wine industry continues to change. New grapes are being introduced, and updated growing methods are improving fruit quality, sustainability and financial returns for producers.

A 2024 report on the **Economic Impact of the Wine Industry in Iowa** estimated that Iowa wine and winery-related tourism represented a value of $374 million in 2022, with a workforce of more than 1,590.

Iowa State University researchers Suzanne Slack, assistant professor of horticulture, and Aude Watrelot, assistant professor of food science and human nutrition, are working with colleagues at several north-



PURDUE UNIVERSITY | College of Agriculture

College News > 2024 News & Stories > NCERA-101 receives 2024 National Excellence in Multistate Research Award

HORTICULTURE & LANDSCAPE ARCHITECTURE

NCERA-101 receives 2024 National Excellence in Multistate Research Award

WASHINGTON STATE UNIVERSITY

College of Agricultural, Human, and Natural Resource Sciences

Biological Systems Engineering

WSU's Lav Khot, colleagues receive multi-state award for ag drone research, extension

Colorado State University College of Agricultural Sciences

Did you know Colorado is one of the top potato-producing states in the US? The San Luis Valley Research Center works with local growers and industry experts to research diseases like potato dry rot and develop climate-stress and disease-resistant potato varieties, directly benefiting Colorado potato growers 🥔

Learn more about the San Luis Valley Research Center ➡️ col.st/itru3

Multistate Research Fund Impacts #NationalPotatoDay



APLU Board on Agriculture Assembly (BAA) reposted this

Multistate Research Fund Impacts Program • You
Communicating the importance of agricultural research & Extension projects supporte...
3w •

As part of a multistate project, researchers at Nebraska Institute of Agriculture and Natural Resources and University of Hawaii at Manoa showed that biochar made from combusted biosolids can be a valuable soil amendment, providing nutrients and absorbing or filtering pollutants.

Learn more: bit.ly/MRF-biosolids

Irrigation Association reposted this

Multistate Research Fund Impacts Program • You
Communicating the importance of agricultural research & Extension projects supporte...
3w •

Wrap up #SmartIrrigationMonth with a look at how multistate research projects are helping producers improve crops, conserve water, cut costs, and reduce environmental impacts: https://lnkd.in/eUvJK7j2

These projects are supported in part by the USDA National Institute of Food and Agriculture.



557

posts by NIFA with MRF Impacts content Jan 2022 – June 2026

319,895

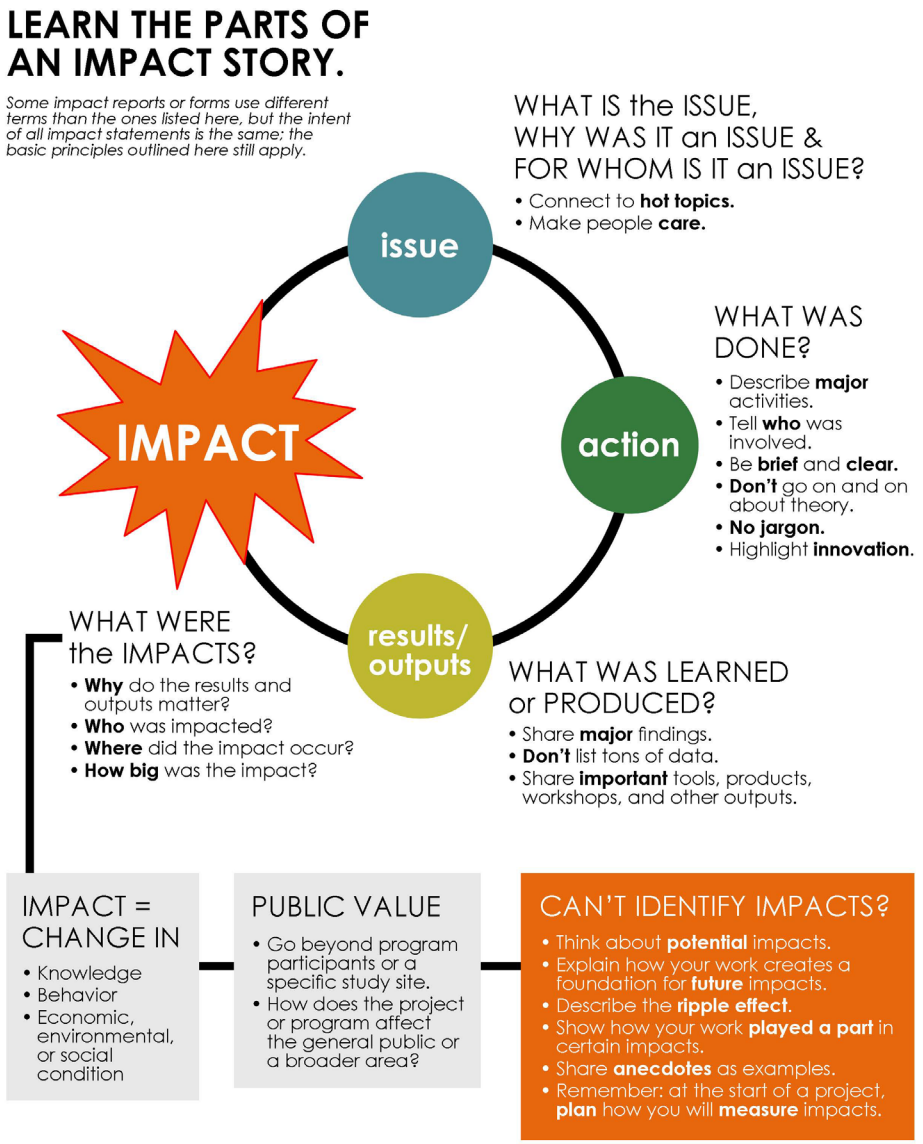
Impressions/views





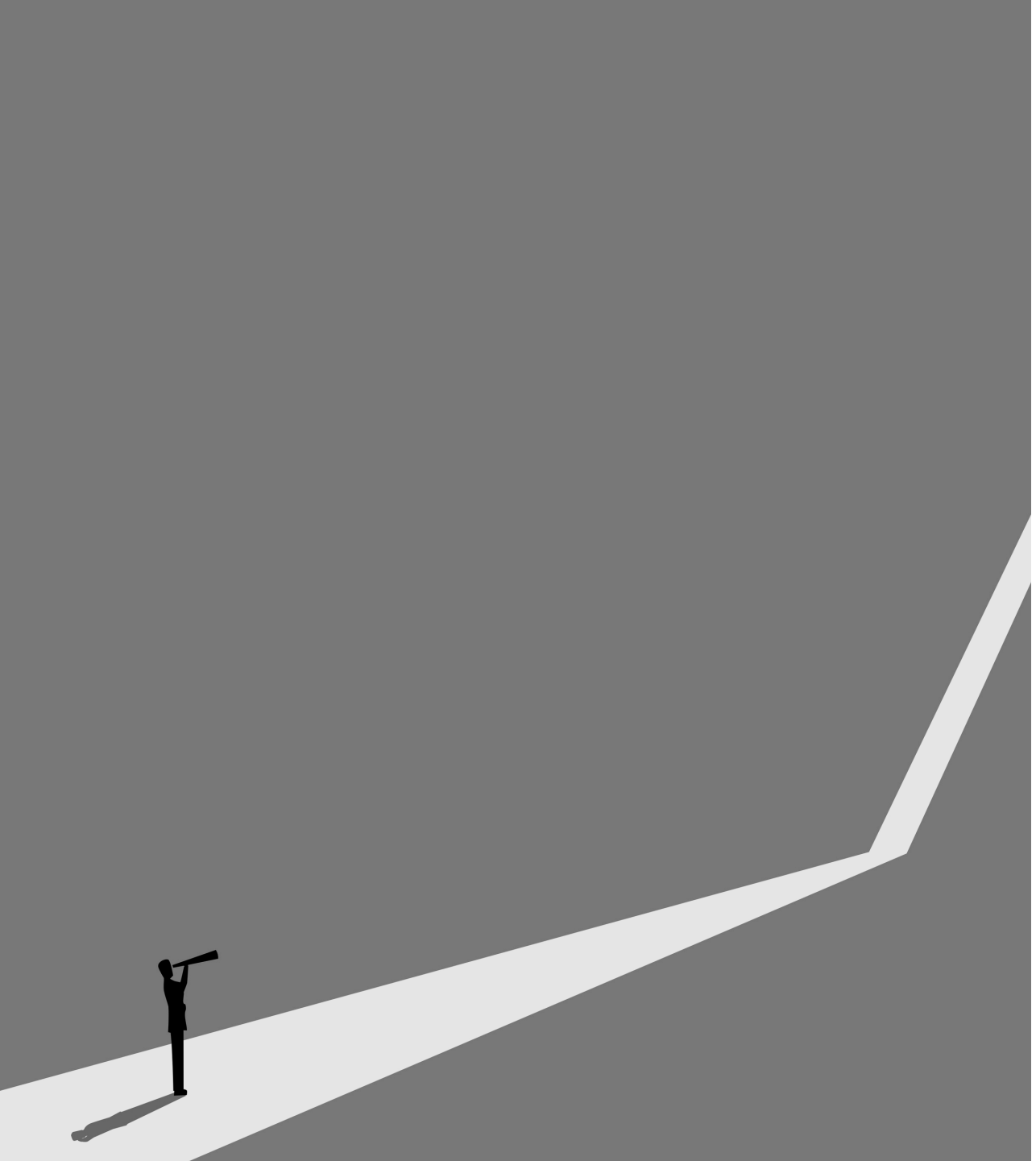
IMPROVING CAPACITY TO REPORT IMPACTS

“Your handouts are the best resources I’ve found on impact reporting...”

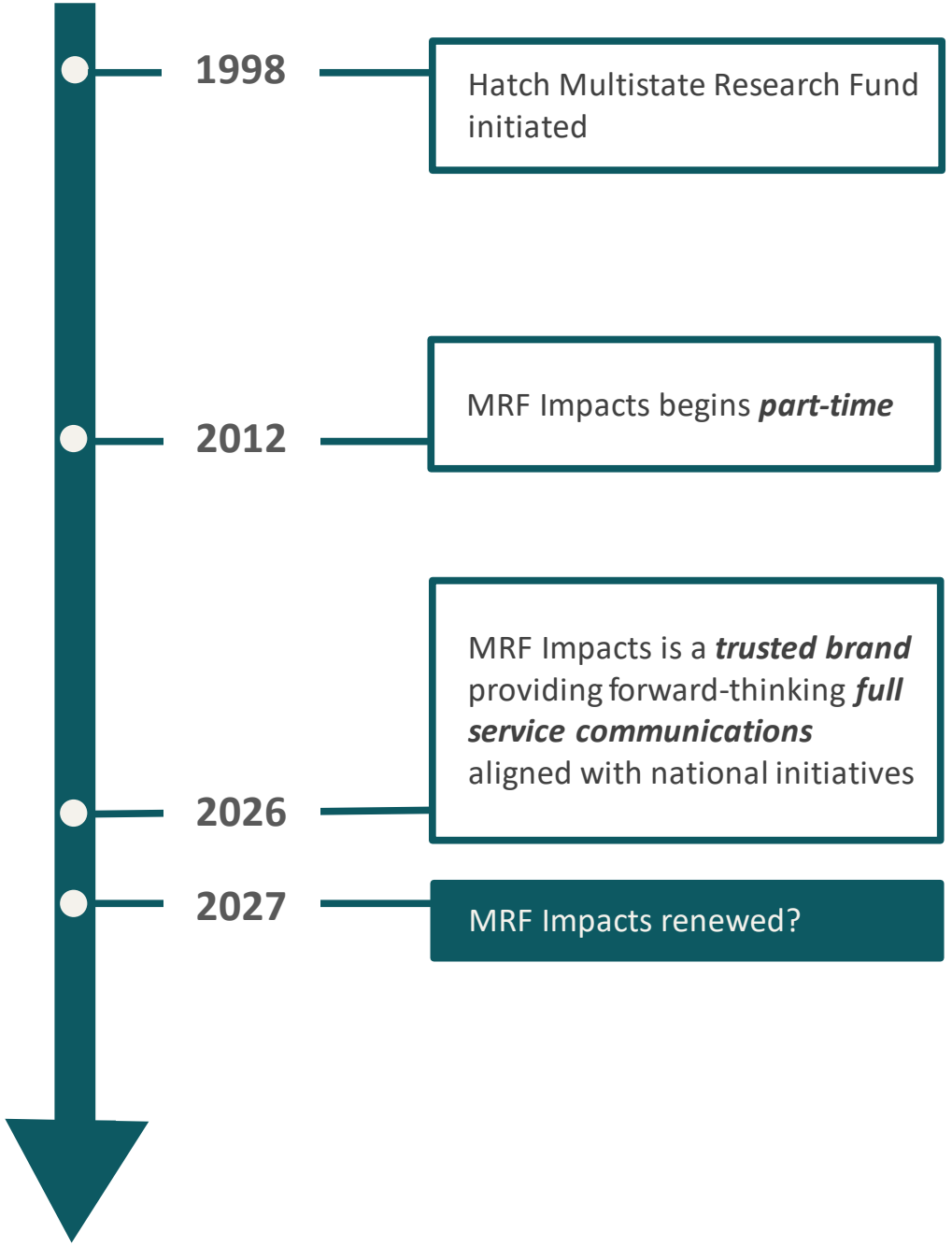


“Our faculty found the training useful, and the training video is getting views. You are making a difference for us here at Nebraska.”

“Based on your workshop and suggestions, we received the Southern Region Excellence in Multistate Research Award!”



WHAT’S NEXT



KEY OPPORTUNITIES FY2027-2032

- LGU communicators
- agInnovation Call to Action
- USDA priorities
- APLU capacity funding campaign
- Hatch anniversaries

"**trust** and shared language"

"*complementary* expertise"

"a platform for staying *current* and *forward-looking*"

"*standardized* approaches"

"accelerates innovation"

"large-scale, multi-institutional collaboration allowed us to **compete** for extramural funding"

"once a practice/tool shows promise in one state, the multistate network helps it **spread quickly**"

"a collective approach increases confidence that the recommendations are relevant to real-world conditions"

"The Hatch Multistate framework is one of the few mechanisms that allows scientists to work *across political, institutional, and hydrologic boundaries* to solve this problem **at scale**. This project demonstrates how capacity funding enables **long-term**, **high-impact science** that *directly benefits* farmers, communities, and ecosystems."

"Multistate projects offer a rare kind of continuity…they maintain **momentum** even when faced with budget and time constraints, changing institutional priorities, or local disruptions…they keep a topic alive long enough for meaningful progress."

MULTISTATE RESEARCH FUND IMPACTS

Improving Reproduction in Cattle & Sheep

Researchers in 23 states.

Project area includes 70% of breeding ewes, 56% of breeding cows in the U.S.

Gains in calf or lamb production worth at least $1 billion per year to U.S. producers.

THE CHALLENGE

Reproductive inefficiency is the greatest constraint on the profitability of U.S. livestock systems. Early pregnancy loss alone costs U.S. livestock producers up to $3.7 billion each year. If reproductive efficiency is not improved, producers will continue to face serious losses, and consumers may experience lower supplies and higher prices for meat, dairy, and other goods from cattle and sheep.

Reproductive efficiency is influenced by a wide variety of factors related to animal health, physiology, genetics, hormones, nutrition, environment, and management practices. No single institution has the expertise, facilities, or resources to address reproductive inefficiency across different species, environments, and production systems.



THE MULTISTATE APPROACH

Since 1970, researchers at land-grant institutions have worked together to shed light on factors that influence the reproductive performance of cattle and sheep and provide data-driven solutions. Their discoveries and recommendations have reshaped livestock industry practices, delivering measurable gains in productivity and resilience.

Using federal capacity funding to bring researchers together, this Hatch Multistate project is able to:

- **Address complex issues** more thoroughly than a single researcher, facility, or state.
- **Share expertise across disciplines**, including physiology, molecular biology, immunology, nutrition, biostatistics, and livestock management.
- **Span multiple species and regions**. Over 56% of U.S. breeding cows and 70% of breeding ewes are in states represented by project scientists. A wide reach allows more comprehensive data collection and testing of solutions.
- **Provide continuity** that facilitates long-term research and impact.
- **Collaborate effectively** with federal agencies and international organizations.
- **Leverage competitive grants** by demonstrating established teams with track records of productivity.

Led by land-grant institutions, this project:

- **Integrates research and Extension** to ensure knowledge flows both ways between labs and farms.
- **Educates and trains the next generation** of scientists and producers, supporting the workforce pipeline.

PROJECT HIGHLIGHTS

Discoveries are reshaping industry practices and improving calf and lamb production.

- Bull screening programs can now screen for the mutation that causes HH2, a genetic condition in Holstein dairy cows linked to early embryonic loss. Screening is enabling phaseout of HH2 from Holstein bull pools, reducing embryonic loss across the nation's most popular dairy breed.
- SLICK-genotype bulls, which have greater tolerance to heat, are now commercially available to producers in warm regions worldwide.
- The Open Cow Test is now deployed across beef and dairy systems nationally. The test detects non-pregnancy earlier, enabling producers to re-breed open cows 2 to 3 weeks sooner than conventional methods. Shortening the time between calving improves herd productivity.
- Research on the genetics of puberty status may allow easier identification of heifers with genetically delayed puberty, allowing producers to cull these heifers sooner and save up to $2,500 per heifer in development costs.
- Using validated artificial insemination synchronization protocols, producers can increase pregnancy rates and yield up to 25% more calves.
- Commercial artificial insemination laboratories are piloting deep-learning algorithms that analyze sperm images for specific biomarkers in order to improve sire selection and reduce embryonic loss due to subfertile sires.
- Research identified new molecular targets for improving reproductive longevity.
- Findings have changed gestational nutrition guidelines for livestock.

Research results and recommendations are delivered directly to stakeholders.

Project members share research findings to producers, veterinarians, and other stakeholders through Extension publications, workshops, webinars, and meetings. Hands-on reproductive management workshops in multiple states have led to annual returns of $1,000 to $5,000 per ranch.

Project members are advancing the field.

Methodological tools developed by project members are now publicly accessible resources for the global research community. Project members have authored over 340 peer-reviewed journal articles and multiple book chapters in recent years.

Education and training sustain a national pipeline of scientists.

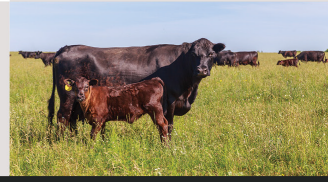
Project members taught and trained more than 120 graduate students and postdoctoral scholars and helped students secure fellowships with federal agencies and industry associations. Project members also developed artificial insemination tools that have benefited instructor lesson plans and students in Kansas, Kentucky, and Nebraska.

ECONOMIC IMPACT

A 1% improvement in calf or lamb production due to this project's innovations (a conservative estimate) would be worth over $1 billion annually to U.S. producers. Thriving beef, dairy, and sheep industries are important for the economy. These industries generate about $243 billion in total production value and support 2.3 million jobs.

BEYOND LIVESTOCK

Many discoveries have broader relevance. This project has attracted over $4 million in National Institutes of Health funding, forming a bridge between federally funded agricultural research and human biomedical science. Findings have informed perinatal medicine, revealed links to endometrial cancer suppression, and improved understanding of and possible therapies for PMOS (formerly called PCOS, a leading cause of infertility in women).



This project is supported in part by USDA NIFA through Hatch Multistate Research Fund capacity grant allocations to State Agricultural Experiment Stations at participating land-grant institutions, including: University of Arizona, University of California, Davis, Colorado State University, University of Connecticut, University of Florida, University of Idaho, University of Illinois, Iowa State University, Kansas State University, University of Kentucky, Mississippi State University, University of Missouri, Montana State University, University of Nebraska–Lincoln, New Mexico State University, The Ohio State University, Pennsylvania State University, South Dakota State University, Texas A&M University, Utah State University, Washington State University, University of Wisconsin–Madison, University of Wyoming. **Learn more: nimss.org/projects/18789**

This Impact Statement was produced in 2026 by the Multistate Research Fund Impacts Program, which is supported by agInnovation, the State Agricultural Experiment Stations, and the Hatch Multistate Research Fund provided by USDA NIFA. **Learn more: mrfimpacts.org**









agInnovation
science that feeds the world

NEWS RELEASE

Embargoed until 10 AM MT September 24, 2026

Researchers Studying Reproductive Performance in Sheep and Cattle Win National Award for Outstanding Collaboration and Impact

Grand Junction, Colo., Sept. 24. — At the agInnovation Annual Meeting, Dr. Andrea Cupp received the 2026 Excellence in Multistate Research Award on behalf of an interdisciplinary team enhancing the reproductive performance of cattle and sheep. Over its 56-year legacy, Hatch Multistate project W4112: Reproductive Performance in Domestic Ruminants has made discoveries and data-driven solutions that have reshaped industry practices, delivering measurable gains in productivity and

Improving Reproduction in Cattle & Sheep

Reproductive inefficiency costs cattle and sheep producers billions of dollars each year. Working together across multiple states and disciplines, researchers at land-grant institutions have made discoveries and data-driven recommendations that have reshaped livestock industry practices, delivering measurable gains in reproductive performance.

- Breeding programs can now screen for a mutation that causes embryonic loss in Holstein cows and phase it out of bull pools, reducing embryonic loss across the nation's most popular dairy breed.
- SLICK-genotype bulls, which have greater tolerance to heat, are now commercially available to producers in warm regions worldwide.
- The Open Cow Test is used nationally, enabling producers to re-breed open cows 2 to 3 weeks sooner than conventional methods.
- Findings may help producers identify and cull heifers with genetically delayed puberty, saving $2,500 per heifer in development costs.
- Using validated artificial insemination synchronization protocols, producers can increase pregnancy rates and yield up to 25% more calves.
- Artificial insemination laboratories are piloting deep-learning algorithms that analyze sperm images in order to improve sire selection.
- Findings have changed gestational nutrition guidelines for livestock.
- Reproductive management workshops have led to annual returns of $1,000 to $5,000 per ranch.
- New educational tools are helping train the next generation of scientists and producers.
- Findings informed human perinatal medicine, revealed links to endometrial cancer suppression, and improved understanding of and possible therapies for one of the leading causes of infertility in women.

Even just a 1% improvement in calf or lamb production due to this project's innovations would be worth over $1 billion annually to U.S. producers. Thriving beef, dairy, and sheep industries help meet consumer demand and are vital to the economy, generating about $243 billion in total production value each year and supporting 2.3 million jobs.



Multistate Research Fund IMPACTS

This project is supported in part by USDA NIFA through Hatch Multistate Research Fund allocations to participating State Agricultural Experiment Stations at land-grant universities, including: University of Arizona, University of California, Davis, Colorado State University, University of Connecticut, University of Florida, University of Idaho, University of Illinois, Iowa State University, Kansas State University, University of Kentucky, Mississippi State University, University of Missouri, Montana State University, University of Nebraska–Lincoln, New Mexico State University, The Ohio State University, Pennsylvania State University, South Dakota State University, Texas A&M University, Utah State University, Washington State University, University of Wisconsin–Madison, University of Wyoming. **Learn more: mrfimpacts.org**

agInnovation
science that feeds the world

Multistate Research Fund
IMPACTS

Sara Delheimer, Program Coordinator

sara.delheimer@colostate.edu

agInnovation
science that feeds the world

LAND - GRANT UNIVERSITY RESEARCH

National Multistate Guidelines Revisions VOTE

agInnovation
science that feeds the world

LAND - GRANT UNIVERSITY RESEARCH

NRSP-RC Whitepaper Proposal Request



Beth Gugino

Associate Dean for Research Operations
& Graduate Education
College of Ag Sciences, Penn State

agInnovation
science that feeds the world ®

LAND - GRANT UNIVERSITY RESEARCH

agInnovation Chair-elect Vote



LAND - GRANT UNIVERSITY RESEARCH

agInnovation®

science that feeds the world



Passing of the Gavel

Chandra Reddy
Outgoing Chair

Gene Kelly
Incoming Chair

agInnovation
science that feeds the world
LAND - GRANT UNIVERSITY RESEARCH

Unfinished Business

Chandra Reddy

LAND - GRANT UNIVERSITY RESEARCH

agInnovation®

science that feeds the world

THANK YOU

HTTPS://WWW.AGINNOVATION.INFO/