

REQUEST FOR PROPOSALS

AgTech Innovation Hub

2024 – 2025 Request for Proposals

December 2023

For the second year, the Nationwide Mutual Insurance Company, Ohio Farm Bureau, and The Ohio State University College of Food, Agricultural and Environmental Sciences are collaborating through the AgTech Innovation Hub. The Hub converges on research and innovation activity focused on developing new solutions to help the agricultural community understand, manage, and mitigate climate risk. Hub efforts will support applied research, technology transfer, the exchange of knowledge and experience, and transdisciplinary innovation in support of agricultural technology. This is an invitation to submit a letter of intent to the Nationwide/OSU AgTech Innovation Hub for Innovation RFP 2 as the first step in a research project selection process.

ELIGIBILITY

Interdisciplinary projects are encouraged. However, the PI must be an active CFAES appointed faculty or researcher with Principal Investigator Status with the Ohio State University, College of Food, Agricultural and Environmental Sciences. The number of different submissions (as a PI or co-PI) is not restricted.

PRIORITY AREAS OF INTEREST

The awards are not intended to fund basic lab research. Successful projects will drive change towards mitigating and managing climate risk including ecosystem sustainability, food security, new solutions for supply chain challenges or addressing factors that may shift the supply chain, and agricultural production in an innovative and unique way targeting significant advancement of the technology field.

Projects chosen will be funded for one year, with terms as established in the Statement of Work. Select projects may receive additional funding through subsequent RFP processes and measurable progress, but all chosen projects are expected to demonstrate tangible value at the end of the first year. As such, each proposal should clearly articulate the intended outcomes and short-term impact that the project will have on the agricultural industry, as well as how the project will impact the mitigation and/or management of current and emerging climate risk. The following categories describe overarching topics of interest for the Hub, as well as examples of each. The selection process will look to identify the projects that best meet the goals of the Hub and create diverse representation across all categories.



1. Understanding, Managing, and Mitigating Risks

Projects aimed at helping farmers, ranchers, and other ag operators identify and reduce hazards, keep workers safe, and protect assets across the agricultural enterprise. The outcomes from these projects will benefit the agricultural community and would also be of interest to Nationwide by enhancing its ability to protect and support its customers.

Examples:

- Preventing or reducing weather damage to farm property (e.g., buildings, structures, storage) or equipment through advancement of materials, construction methods, wind-break strategies, etc.
- Detection or prevention of equipment failures or contamination in food or harvested crops
- Technology advancements to promote accuracy in application (avoiding misapplication, overspray, waste), reduce risk of human error, and increase worker safety
- Promoting road safety through better visibility or signage for slow-moving vehicles or fleet management technology

2. Sustaining Viable Production Agriculture

Projects that help improve the profitability of farmers, ranchers, and other ag operators by reducing enterprise costs, improving yield, identifying emerging threats to agriculture, informing best management practices, or generally improving an agricultural process. Outcomes from these projects will largely impact the well-being of producers and build a more resilient food system. Note: Nationwide does not offer crop insurance, but the indirect effects of viable, productive, and profitable crops are still important for the agricultural community.

Examples:

- Understanding or addressing changing conditions due to climate change – geographies suited for crop production shifting, emergence of pathogens in new places or with resistances, planting dates and conditions, etc.
- Research that advances climate-readiness or ability to withstand adverse weather events for farms or ag operations. This includes ways to build resilience in the total operation (crops, structures, storage, infrastructure) to help farms and ag operations get back up and running following a weather event.

3. Risk Perception and Customer Insights

Projects that involve understanding or influencing agricultural producer perception of emerging threats to the food system or other insights on possible audience and customer bases. Outcomes from these projects may inform communications, education efforts, and strategic initiatives for support



and service units in the agricultural field.

Examples:

- Understanding how the changing workforce/labor shortages impact safety measures and/or farmers' perceptions around hazards and risks
- Understanding farm management practices and farm-level decision-making, as well as how these areas are evolving due to climate change or other macro forces
- Considering the needs of the future farmer – understanding the needs of the next generation; considering the rise of Controlled Environmental Ag and urban farms, the need for young farmers, shrinking land availability
- Understanding perceptions on cyber security risks or connectivity needs in an increasingly tech-heavy industry

CROSS-CUTTING AREA OF INTEREST: Addressing Macro Trends

Projects that look at the macro forces impacting the agricultural industry and attempt to better understand, influence, or address them. Macro forces include climate, but may also include economic, policy, or labor, among others. Agricultural producer needs and impact and/or changing consumer preferences should also be considered. Objectives from these projects may be intertwined with any or all other interest areas.

SELECTION PROCESS

The AgTech Innovation Hub is governed by the Innovation Hub Council comprised of members from The Ohio State University (CFAES), Nationwide Mutual Insurance Company and The Ohio Farm Bureau, with both voting and non-voting members. This Council will determine which of the proposed research projects will move forward to Phase 2 of the application process for potential funding.

Each project lasts a maximum of 12 months beginning on the project start date. The LOI must be limited to activities that can be completed within a period of 12 months. Note that due to the accelerated time frame, the project cannot allow for the recruitment of new staff, post-docs, or graduate students to be successful and requests for no-cost extensions will not be viewed favorably.

The proposal selection timeline is listed in Table 1 (page 4).

The lead investigator will submit a Letter of Intent (LOI) following the guidelines below, utilizing the OSU Limited Submission Portal.	LOI due: February 2nd
The Council will review the LOIs and select projects for advancement to the next step in the process. Lead investigators will be notified of the status of their LOI.	<i>Decisions to be made:</i> March 7th, 2024 Notifications to follow
Selected project teams will be invited to pitch their proposal to the Council. A first draft of the proposed SOW will need to be submitted prior to the pitch (See Attachment A; due date TBD).	Pitches to take place: April 15, 16, 2024 Notifications to follow
Final funding decisions will be made by the Council. Project and budget modifications, subject to mutual agreement between the project team and the Council, may be requested.	<i>Decisions made by:</i> April 22nd, 2024 Notifications to follow
Project teams selected for funding will be required to submit an updated SOW reflecting any final project and budget modifications for review and final approval by the Council. The lead investigator will complete the University required ePA-005 form. The CFAES Office of Research & Graduate Education will submit all approved projects to the OSU Office of Sponsored Programs for processing.	Modified SOWs due: April 29th, 2024
Upon the SOW agreement and documentation of signatures, the OSU Office of Sponsored Programs will establish the award in Workday, create the billing schedule, and submit individual project invoices to Nationwide.	June 1st, 2024 (at the latest)
After the submission of the invoice, Nationwide will have 60 days to provide the funding.	(ongoing)

Table 1: Timeline for the AgTech Innovation Hub 2024 – 2025 proposal selection process.

REQUIREMENTS FOR LETTER OF INTENT SUBMISSION

The Letter of Intent must adhere to the following formatting guidelines:

- Font size must be at least 12-point font
- Margins must be at least one inch in all directions
- Line spacing must not exceed six lines of text per vertical inch
- Page size must be letter (i.e., 8.5 inches × 11 inches)

The Letter of Intent is limited to six pages:

Page 1: Cover Sheet

- Name, professional title, department, and email address of the lead principal investigator (PI) and name, professional title, and department of all collaborating investigators
- The Priority Area that is most closely addressed in the application
- A 250-word executive summary that explains the ‘what’ and ‘why’ of the project
 - The ‘what’ should include what the project hopes to accomplish in the one-year period
 - The ‘why’ should include a view on why this work is meaningful to the agricultural community and/or addressing climate risk, and what the impact would be

Page 2-3: Project Details (see “Additional questions to consider in your LOI” below)

- Descriptive title
- Rationale
 - This should include why the proposed project is important, how it will be meaningful to stakeholders (producers, consumers, other industry members), and anything else to demonstrate the ‘why’.
- Overall hypothesis or goal
- Specific objectives
 - This section should include what you hope to achieve with the project.
 - This section can include both 1-year and long-term objectives, but be clear on what will be accomplished during the project period
- Approach
 - A detailed explanation of your approach is not needed. Please keep information high-level and use layman’s terms as much as possible.
- Potential impact and expected outcomes
 - This should include the potential impact to producers, consumers, and potentially Nationwide (or other industries).
 - This can include both 1-year and long-term impact and outcomes but be clear on what will be accomplished during the project period.
- Timeline for project activities

Page 4-5: CV

- 2-page Curriculum Vitae (CV) of the lead principal investigator

Page 6: Detailed budget

- Use Attachment B in this document (called: Budget Form)
- Maximum funding per project is \$150,000
- Note: Budget justification will be required for the Statement of Work

Budget Guidance

- Allowable Expenses: Personnel support (salary and fringe) for faculty, students, or staff. Additional allowable expenses include materials and supplies, travel, publication costs, rental fees, student tuition/fees and other expenses.



- All expenses should be directly related to the project and clearly defined in the budget narrative. Non-employees, collaborators, visiting scholars, or volunteers should **not** be included in personnel support.
- Facilities & Administration costs (i.e., indirect costs) are capped at 12%.

Details to consider in your LOI:

1. How does this project support the goals of the AgTech Innovation Hub: to better understand, mitigate, and manage climate risk across the agricultural landscape?
2. What do you anticipate as the short term (1 year) and longer term (2 – 5 year) impacts of this work?
3. How do you plan to share your knowledge with producers, agricultural advisors, or others who might benefit from the findings?
 - a. Provide a plan for tangible results or learnings that can be shared with farmers for their benefit and/or as an opportunity for Nationwide and Ohio Farm Bureau to use or share for the benefit of their ag customers/members.
4. How will the project address a need of the producer or lead to an outcome that positively impacts the agricultural community?
5. How might this benefit Nationwide in their mission to Protect People, Businesses, and Futures with Extraordinary Care?
 - a. CFAES, the Ohio Farm Bureau, and Nationwide are seeking insights and solutions that can help them better support and protect farmers and ag operators both now and into the future. Within this goal, Nationwide has the ability to help the agricultural community prevent, protect against, and recover from events related to climate change and more. This includes finding ways to prevent or mitigate damage to their structures, equipment, livestock, and storage; identifying and addressing hazards that could lead to an interruption in operation; promoting worker safety; and creating resiliency in their operations.
 - b. More information about Nationwide’s roots in agriculture and how we protect farmers can be found as a supplementary document: Nationwide Agribusiness 2023.

Submitting your LOI:

When submitting the LOI, we will only accept LOI in the portable document format (PDF) and all materials must be in a single file. Access the OSU Submission System <https://orapps.osu.edu/fundops/opportunities> and select the NW AgTech Innovation Hub. Attach the PDF LOI by clicking, “Apply to This Opportunity.” Name the file as: Letter of Intent [PIs Last Name].

ePA_005

Complete the ePA-005 form. Attach the SOW and the proposed budget. The ePA-005 is the University’s proposal pre-approval application used by investigators who are submitting proposals to external sponsors. The sponsor should be noted as Nationwide Mutual Insurance Company. For more information about the ePA-005 process, see the [Office of Research and Graduate Education Proposal Development resource on this topic](#).



ADDITIONAL INFORMATION

Funding

It is anticipated that 2-5 projects will be awarded up to \$150,000, based on available funds. Each project lasts a maximum of 12 months beginning on the project start date. The project scope must be limited to activities that can be completed within a period of 12 months.

Reporting

Awardees will be required to submit a bi-annual and final report on their progress.

- PIs should plan to provide a minimum of two reports, one short-form and the other more comprehensive, during mid and end-of-project respectively.
 - The short-form, mid-project report should include the following:
 - Identify green, yellow, or red status for the overall area (project status) and financial status as well as brief details as to the rationale for each rating
 - 3-5 bullet points outlining project status and accomplishments (Bullet points can stay at a high-level)
- The CFAES team (Kim Winslow.52) will work with you to gather this information.
- The end-of-project report will be more comprehensive, highlighting project accomplishments and dissemination plans. Structure is TBD.

Intellectual Property

Ohio State faculty and research scientists working via a grant must submit disclosures of discoveries, inventions, designs, works of authorship (including computer software), mask works and other intellectual property to Ohio State's Technology Commercialization Office (tco.osu.edu). Questions about intellectual property developed under this program should be directed to Ohio State's Technology Commercialization Office at the website listed above.

Compliance

You are responsible for ensuring the research project complies with all university research policies and guidelines on human subjects, animal welfare, conflict of interest, controlled substances, hemp licensing, institutional data policy, responsible conduct of research training, and hazardous materials.

Acknowledgments

All publications and posters resulting from work done using these funds are required to include the following acknowledgment: "Salaries and research support provided by state and federal funds appropriated to The Ohio State University, College of Food, Agricultural, and Environmental Sciences."

QUESTIONS?

Questions about project ideas, rationale, letters of interest, and pitch presentations should be directed to Kim Winslow (winslow.52@osu.edu).

Questions about research policies, budgets, the submission process, and statements of work should be directed to Lori Kaser (kaser.37@osu.edu).

ATTACHMENT A (template)

STATEMENT OF WORK # *(office use only)*

FOR

**A RESEARCH PROJECT UNDER THE
AGTECH INNOVATION HUB MASTER AGREEMENT**

This SOW may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument. The Parties agree that a facsimile or .pdf copy of a signature of a Party hereto shall have the same effect and validity as an original signature.

THIS STATEMENT OF WORK # *(office use only)* (“SOW”), effective as of the last signature date on this SOW (“SOW Effective Date”) is by and between Nationwide Mutual Insurance Company (“Nationwide”) and The Ohio State University (“Ohio State”).

Ohio State and Nationwide are parties to that certain AgTech Innovation Hub Master Agreement (the “Agreement”), with an effective date of September 16, 2022. The terms and conditions of the Agreement are incorporated herein by reference and are made part of this SOW in their entirety. Unless otherwise stated, each capitalized term used herein has the same meaning established for it in the Agreement.

This SOW, referred to here in some instances and in the Agreement as a “Statement of Work” or “SOW”, is for a Research Project. The Research Project, including but not limited to services required in the Research Project, shall be subject to and performed in accordance with:

The terms and conditions of the Agreement; and the terms and conditions of this SOW, which are binding upon Ohio State and Nationwide.

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1. Title of Research Project
 2. Specific Work to be Performed
 - a. This should be a summary of the methods of this project as well as anticipated outcomes. The work outlined in this section will set the expectations for the project period.
 3. Principal Investigator/Researchers
 4. Period of Performance
 5. Research Project Schedule
 6. Payment Schedule
 - a. *Monthly invoices will be submitted to Nationwide via the Office of Sponsored Program. Invoices will be provided for each project on a cost-reimbursable basis for expenses incurred related to the project, as described in the Budget (Attachment B).*
 - b. *If agreed to, advance payment may be issued to cover large out-of-pocket expenses or fees, including but not limited to equipment, materials, or supplies. In this case, an invoice will be submitted by the OSP with documentation of intended use. Follow-up documentation to show actual expenses incurred should be available upon request.*
 7. Project Detailed Budget (Attachment B) and Budget Justification
 8. Proposed Exchanges of Personnel (if any)
 9. Research Project Reports



- a. PIs should plan to provide a minimum of two reports, one short-form and the other more comprehensive, during mid and end-of-project respectively.
 - The short-form, mid-project report will ask the following:
 1. Identify green, yellow, or red status for the overall area (project status) and financial status as well as brief details as to the rationale for each rating
 2. 3-5 bullet points outlining project status and accomplishments (high-level; drawn out detail is unnecessary)
 - b. The CFAES team (Kim Winslow⁵²) will work with you to gather this information.
 - c. The end-of-project report will be more comprehensive, highlighting project accomplishments and dissemination plans. Structure is TBD.
10. Research Project Deliverables
- a. This should include all anticipated deliverables that will be produced as a part of the funded project work including, but not limited to: data, reports, publications, products, Intellectual Property, and any plans for dissemination of findings in an academic, professional, Extension-related, or other setting.
11. Trade Secret Protocol Protections (if applicable) and Trade Secret Protocol attached:
12. Nationwide Data, Nationwide Confidential Information, and Personal Information provided by Nationwide required for Project (if applicable).
- NOTE; Access to Nationwide Network must be specifically approved by CFAES IT Services and the Ohio of Technology and Digital Innovation. A Data Security addendum, including the applicable terms of Exhibit E, the Nationwide Network Data Security Supplement (“Data Security Supplement”), must be attached to this SOW, and shall be incorporated into this SOW by reference. In such case, the Parties agree that Section III (Insurance) of the Data Security Supplement shall supersede Section 5.4 of the Agreement.
13. Third-party Software to be Utilized (if applicable): List ALL third-party Software required for the Project, and, for each open software component: the component name and version, the license applicable to that component (including version, if any), the location on the Web where the component is available, whether it will be modified and whether it will be distributed.
14. Required Export Control Review by the Office of Secure Research, and, if required:
- a. Technology control plan;
 - b. Export license;
 - c. Additional costs for a or b;
 - d. The export classification of the technology to be exchanged; and
 - e. Any additional Export Control terms and conditions required for the SOW.
15. Additional Special Terms and Conditions for this SOW including publication restrictions, required compliance reviews, and additional associated costs (if applicable):
16. Contacts (Administrative, PI, Billing, etc.):
17. Intellectual Property Rights
- a. Pursuant to the terms and conditions of the Agreement, Nationwide has selected the licensing or assignment opportunity checked below (including the date and initials of Nationwide’s



authorized official) for Ohio State Subject Inventions and Joint Subject Inventions arising during and within the scope of the Research Project described in this SOW:

- Option to negotiate a license (Section 11.2 of the Agreement)
- Option term expiring six (6) months after notice of each Ohio State Subject Invention or Joint Subject Invention

- Non-exclusive license (Section 11.3 of the Agreement)

Whichever is the greater of:

(1) An Upfront Technology Access Fee: 10% of the Research Project budget

\$_____

OR

(2) A base fee of \$6,000.

- Assignment of Rights (Section 11.4 of the Innovation Agreement)

Whichever is the greater of:

(1) An Upfront Technology Access Fee: 25% of the Research Project budget

\$_____

OR

(2) A base fee of \$15,000.



**Attachment B
Budget Form**

Budget Form Primary Investigator:

Department:

Department Cost Center #:

Budget Period (Date): **Year 1**

A: Salaries

Research Associates/Post Doctorates/Lab Personnel \$

Graduate Students \$

Undergraduate Students \$

Other (define) \$

Total Salaries \$

B: Fringe Benefits

Faculty (Faculty release time, 26.5%, Off duty pay, 15.4%) \$

Research Associates/Post Doctorates (35.6 %) \$

Graduate Students (8.3%) \$

Undergraduate Students (8.3%) \$

Other (define) \$

Total Fringe Benefits \$

C: Total Salaries & Fringe Benefits \$

D: Materials & Supplies \$

E: Travel \$

F: Publication Costs \$

G: Tuition/Fees (if stipend paid from project) \$

H: Other (define) \$

I: F&A rate 12% (C - H x 12%) \$

TOTAL BUDGET REQUEST (A through I)

Please include justification for budget items and amounts.

