AgTech Innovation Hub

Nationwide and The Ohio State University

Request for Proposals

Introduction and Mission

The Nationwide Mutual Insurance Company and The Ohio State University College of Food, Agricultural and Environmental Sciences have agreed to stand up an AgTech innovation Hub aimed at collaborating on research and innovation activity focused on developing new solutions to help the agriculture ecosystem, understand, manage, and mitigate climate risk.

The Initiatives will focus on 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 1 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. One application as PI or co-PI per application cycle may be submitted.

Priority Areas

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 agriculture production in an innovative and unique way targeting significant advancement of the technology field.

Projects do not need to directly address insurable risks, however, applying risk management principles in project design may be viewed favorably. Avoiding, transferring, or mitigation of risk as applicable to reducing insurance claims for existing or potential insurable risks are

useful concepts for project design. Further, projects that address increasing or maintaining profitability in a changing environment would be appropriate. Projects can address any portion of the food supply chain. Collaboration with Extension, industry and other partners external to OSU who can provide valuable input as "user-enhanced" projects is encouraged. As such, programs in scope includes early-stage entrepreneurs, mature companies or producers developing new or value-added products or manufacturing processes, collaboration across institutions or industries, or those seeking new solutions to supply chain or other challenges in the food and agricultural ecosystems.

Most projects will be of short duration with one year of funding, although promising projects may receive additional funding through subsequent competitions and measurable progress. As such, each project idea should clearly articulate the short-term impact of the proposed effort toward mitigating and managing climate risk. Examples include, but are not limited to, recommendations for best management practices in crop or animal production, screening genetic materials for adaptation to growing conditions impacted by climate change, food safety at any point in the food supply chain, traceability, farm safety, increased understanding of insurable risks in the food system, and efforts to move intellectual property along the pipeline toward commercialization.

Topics of interest include:

- New agricultural technologies, use of smart devices and IoT in agribusiness, robotics
- Data driven crop structure management
- Thermal imaging for temperature anomalies in equipment/machinery
- Crop breeding and genetic enhancement for climate change related to crop production and loss including foods with enhanced nutritional value
- Breeding of non-GMO crops resistant to climate change.
- Information that informs agriculture and food policy
- Use of methane/anaerobic digesters
- Increased use of electrification in farm and food processing operations
- The use of controlled environment technologies to mitigate climate risk and disruptions in the food supply chain

Selection Process

The Nationwide/OSU AgTech Innovation Hub will be 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.

The following are the governing steps to follow.

	1	
The lead investigator will submit a Letter of Intent (LOI) following the guidelines below, utilizing the OSU Limited Submission Portal.	March 10	
2. The Hub Council will review the LOI's and select projects for	March 10-23	
advancement to the next step in the process.		
3. Selected project teams will be invited to pitch their proposal to the Hub	Week of April	
Council.	10	
For the pitch, teams will be asked to give a 10-minute project		
presentation with 5 minutes for clarification questions afterwards.		
The presentations may be recorded, and some Council members		
may join virtually. Project teams will be required to submit pre-read		
materials one week in advance of the presentation. The pre-read		
materials will include a copy of the presentation and a draft		
Statement of Work (SOW) utilizing the template. (Attachment A)		
4. Final funding decisions will be made by the council. Project and budget	Week of April	
modifications, subject to mutual agreement between the project team and	17	
the Hub Council, may be requested.		
5. Project teams selected for funding will be required to submit a final SOW	Week of April	
reflecting any final project and budget modifications. The lead investigator	24	
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.		
6. Upon the SOW agreement and documentation of signatures, The OSU	May 1	
Office of Sponsored Programs will establish the award in Workday, create		
the billing schedule, and submit individual project invoices to Nationwide.		
7. After the submission of the invoice, Nationwide will have 60 days to provide the funding.		

Each project lasts a maximum of 12 months beginning on the project start date. The LOI must encompass 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 no-cost extensions will not be viewed favorably.

Requirements for LOI submission:

- 1. 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)
- 2. The Letter of Intent is limited to six pages.
 - Page 1: Cover Sheet
 - name, professional title, department, and e-mail 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 of the project.
 - Page 2-3: Project Details:
 - a descriptive title
 - rationale
 - overall hypothesis or goal
 - · specific objectives
 - approach
 - potential impact and expected outcomes
 - · timeline for project activities
 - Page 4-5: Two-page Curriculum Vitae (CV) of the lead principal investigator
 - Page 6: Detailed budget (Use Attachment B- budget form)

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%.

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 [PDs Last Name].

Funding

It is anticipated that 2-4 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 encompass activities that can be completed within a period of 12 months.

Additional Information

Reporting

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

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."

Statement of Work

ATTACHMENT A STATEMENT OF WORK # _____ 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 #____ ("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") signed by Nationwide on 20 September 2022 and by Ohio State on 22 September 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.

- 1. Title of Research Project
- 2. Specific Work to be Performed
- 3. Principal Investigator/Researchers
- 4. Period of Performance
- **5.** Research Project Schedule
- 6. Payment Schedule
- 7. Project -Detailed Budget (Attachment B) and Budget Justification
- **8.** Proposed Exchanges of Personnel (if any)
- 9. Research Project Reports and Other Deliverables:
- **10.** Trade Secret Protocol Protections (if applicable) and Trade Secret Protocol attached:
- **11.** 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.

- **12.** 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.
- **13.** 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 exchange; and
- e. Any addition Export Control terms and conditions required for the SOW.
- **14.** Additional Special Terms and Conditions for this SOW including publication restrictions, required compliance reviews, and additional associated costs (if appliable):
- **15.** Contacts (Administrative, PI, Billing, etc.):
- **16.** Intellectual Property Rights

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

Primary Investigator:				
Department:				
Department Cost Center #:				
Budget Period (Date): Year 1		Year 1		
A: Salaries				
	Research Associates/Post Doctorates/Lab Personnel	\$		
#	Graduate Students	\$		
#	Undergraduate Students	\$		
	Other (define)	\$		
	Total Salaries	\$		
B: Fr	inge Benefits			
	Research Associates/Post Doctorates (38%)	\$		
	Graduate Students (11.2%)	\$		
	Undergraduate Students (11.2%)	\$		
	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%)		\$		
TOTA	TOTAL BUDGET REQUEST (A through I)			