One Health is the idea that the health of people is connected to the health of animals, plants, and ecosystems. As the Earth's population grows, people are living closer together, causing changes in climate and land use, increasing global travel and trade, and interacting with animals as food and companions. A One Health approach tackles health threats by looking at all angles - plant, animal, biodiversity, environmental, and human - and recognizes the interconnectedness of these systems with the goal of improving their health outcomes simultaneously. To accelerate research in One Health at NC State, **the NC State Global One Health Academy is pleased to announce a call for applications for seed grants.**

We welcome proposals from NC State faculty and EHRA professionals for seed funding for novel, interdisciplinary One Health research projects aligned with any of three priority areas: combating infectious diseases, driving food and water solutions, and addressing climate change and health disparities. **This call will support individual awards of up to $50,000.** Total funds available for this seed funding call are $150,000, with $50,000 dedicated to each priority area. The total number of projects funded per priority area will depend upon the quality and number of proposals received, as well as the amount requested for individual competitive proposals.

Proposals that involve multiple NC State faculty from across colleges and disciplines are strongly encouraged. **All proposals must include at least one PI that is a [GOHA Affiliate Member](#).** Proposals are intended to support new projects and collaborations, or extensions of existing projects that represent new directions into One Health research. It is expected that projects supported by this funding opportunity will lead to tangible deliverables that help faculty expand and sustain their One Health research activities. Projects must include training opportunities for at least one student (undergraduate or graduate), which should be reflected in the budget.

For proposals in ALL tracks, alignment with the One Health framework should be clear (i.e., the research is at the intersection of human, animal, plant, and/or environmental health).

- For proposals in the *infectious diseases* track, example research topics could include but are not limited to antimicrobial resistance, ecology of emerging or re-emerging infectious diseases, immunization, development of drug, vaccine, and diagnostic technologies, and new strategies for infectious disease prevention and treatment. Infectious diseases that impact human, plant, or animal health will all be considered.
- For proposals in the *food and water solutions* track, example research topics could include but are not limited to strategies to reduce food and water insecurity; linkages between food and water insecurity; impacts of food and water on human, plant, or animal health; antimicrobial resistance in food and water sources; new strategies to improve food hygiene and drinking water quality and reduce exposure to human and animal pathogens; policies and accountability for water, sanitation, and health.
- For proposals in the *climate change and health disparities* track, example research topics could include but are not limited to climate-related migration, the effects of increased extreme weather events, the effects of heightened exposure to air pollution, climate-related biodiversity loss, or other ways that climate change threatens population health and ecology in natural or built environments.

### *General activities supported by GOHA Seed Grants:*
GOHA invites applicants to submit proposals for a variety of activities that support interdisciplinary global One Health research. Project activities may include, but are not limited to:
- Collection and analysis of data
- Hiring a common graduate or undergraduate student

- Organizing and holding research-focused workshops, seminars, or symposia
- Working groups that support idea generation, white papers, review articles, or grant proposals

Proposals should be research-based and aligned with the One Health framework and a GOHA priority area. **We welcome research proposals stemming from all disciplines, including the natural sciences, veterinary medicine, engineering, social sciences, education, and policy.**

## *Timeline:*

Proposals must be received by Wednesday, December 20th, 2023. Award notifications are anticipated in early January, with an award start date of January 15th, 2024. The submitting PI will be notified of the award status, and awarded proposals will receive instructions for the transfer of funds. It is the responsibility of the PI to notify departmental accounting personnel and request a transfer of funds prior to the start of the funding period. PINS records will be generated upon award notification. **All funds must be spent by June 30th, 2024.**

The PI will be required to submit two post-award reports on the outcomes of the seed grant. We will send a reporting form at the end of the award period to collect short-term outcomes, and another reporting form 1 year after the conclusion of the award period to capture longer-term outcomes.

## *Proposal Content:*

Proposals will be reviewed by faculty members from diverse disciplinary backgrounds, so should be written for a broad audience spanning the natural sciences, social sciences, and humanities. Proposals must include:

1. **Cover Page.** Include title, names and affiliations of PI(s), research track (infectious diseases, food and water solutions, or climate change and health disparities), abstract (max 250 words), and budget request.
2. **Project Description.** Up to THREE (3) pages of text maximum describing the project. Project Description should include the following:
   a. Specific goals/objectives
   b. Background/significance
   c. Approach/research design
   d. Preliminary data (if applicable)
   e. Future directions/plans for future support
3. **References Cited.** No page limit.
4. **Budget and Justification.** Limit ONE (1) page. Budgets may include all normally allowed costs of research, except faculty salaries and indirect costs. Budgets MUST include support for at least one student (undergraduate or graduate level; discretion for hourly vs. stipend is up to the PI).
5. **Biosketches for all PIs.** Limit ONE (1) page for each PI.
6. *(optional)* Letter(s) of support may be included as necessary. Limit ONE (1) page each.

All components should be combined into a single PDF for submission. Proposals exceeding page limitations for any component will be returned without review.

## *Review Criteria:*

All proposals will be reviewed by selected members of the Global One Health Academy leadership. Reviewers will assess proposals based on the following criteria:

**Alignment with global One Health (1-10):** The proposed project aligns with the One Health framework. The proposal clearly demonstrates that the planned work is at the intersection of human, animal, plant, and/or environmental health (i.e., it moves beyond the study of a singular component of health and explicitly acknowledges the interconnectedness of these health systems).

**Intellectual merit (1-15):** The proposed project explores a creative and original concept within the area of infectious diseases, food and water solutions, or climate change and health disparities. The project is innovative

in nature and/or how the problem will be addressed/solved. The long-term implications of the work are addressed and significant.

**Description and feasibility of the project (1-15):** The goals and objectives of the project are clearly stated and aligned with a GOHA research priority area. The proposed work is innovative and does not duplicate previously explored areas of research. The research plan is feasible, and the budget is appropriate and justified.

**PI and team (1-5):** The PI and key personnel are clearly defined and qualified to meet the goals of the project. The assembled team has an appropriate contribution from each team member. While it is not a specific requirement to have multi-PI projects, interdisciplinary teams are strongly encouraged.

**Potential for future funding (1-5):** The potential for future external support is high and clearly described. Specific agencies and/or RFPs are identified for future funding opportunities and are appropriate and likely to fund ongoing work generated from this effort.

### *Submission Instructions and Deadline:*

Proposals must be submitted here **by 11:59pm on Wednesday, December 20th, 2023.** Note that all proposals must include at least one PI that is a GOHA Affiliate Member. This requirement can be completed in conjunction with proposal submission by filling out this form. New Affiliate Member applications must be received prior to the submission deadline of 11:59pm on Wednesday, December 20th, 2023.

*Please contact Sid Thakur (sthakur@ncsu.edu) with any questions.*