



COLLEGE OF AGRICULTURE AND LIFE SCIENCES  
**CENTER FOR ADVANCED  
INNOVATION IN AGRICULTURE  
VIRGINIA TECH.**

**2022 CAIA Impactful Activities Seed Grant RFA**

Deadline: Thursday, October 20, 2022, 5:00 pm

**Purpose:** The Center for Advanced Innovation in Agriculture invites proposals for the 2022 CAIA Impactful Activities program. The long-term goal of this program is to advance the CAIA mission through programmatic efforts bolstering the impact of research activities. CAIA seeks to **leverage science and technology to create transformative solutions to support agriculture and food systems, the environment, and communities** in the Commonwealth and beyond. Priority will be given to proposals developing programmatic activities designed to enhance the impact of CAIA research. Stakeholder involvement is an important aspect of this grant program.

**Funding Categories:** The Impactful Activities program will provide funding at the ‘seed-packet’ grant level of \$10,000 and the ‘seed by the pound’ grant level of \$30,000.

- **‘Seed-Packet’ Grant Level:** These target the initial steps in building capacity with a goal of establishing tangible outcomes and outputs serving as evidence for future external grant opportunities. Stakeholder involvement includes contribution to concept development.
- **‘Seed by the Pound’ Grant Level:** This is a ‘multiplier’ grant targeting the transition of a concept into beta testing and/or translation to practice. Stakeholder involvement includes engagement in testing and evaluation, yielding evidence for large-scale integrated grants.

Stakeholders are defined as those constituents that are not part of the university academic workforce and have potential for directly benefiting from the outcomes of the project. This can include Virginia Cooperative Extension agents in addition to other external partners.

**Focus Areas:** Submissions are encouraged in two focus areas. Within each focus area, it is expected that the impactful activities completed should leverage and highlight the research expertise of the project team. Although some funds may be used to advance research activities in order to facilitate their applicability for stakeholder engagement or workforce preparation, the bulk of project resources should support the proposed impactful activities.

1. **Bridging the Technology Gap.** Interactions at the Virginia Tech Agriculture and Natural Resources Summit highlighted the need to translate research advancements for increased awareness and potential for adoption among the broader agricultural and food system community and to support bridging the technology gap between current agricultural practices and the state-of-the-art innovation driven through research. Proposals that address technologies for advancing any disciplines included within the College of Agriculture and Life Sciences are eligible. Human centered design processes are included. **Activities under this focus area must: 1) identify one or more key stakeholder group(s) targeted; 2) propose a**

*strategy(ies) for meaningful and novel engagement with the group(s); and 3) have a clear assessment plan to evaluate impact of these engagement activities. Stakeholder engagement includes but is not limited to: technology demonstrations; on-farm research; train-the-trainer; technology fairs; industry engagement; policy engagement; and other relevant activities.*

- 2. *Workforce Preparation.*** The suite of researchers at Virginia Tech working in the CAIA space has expanded dramatically over the past several years; however, our workforce preparation programs do not yet make effective use of our institutional expertise. ***Activities under this focus area must: 1) create a workforce preparation program focused on one or more CAIA platforms; and 2) have a clear assessment plan to evaluate impact of this workforce preparation program. Workforce preparation programs may focus on developing the K-12 pipeline, on programs for undergraduate and graduate students, or on training opportunities for current industry professionals.***

***Eligibility:*** All CAIA affiliate faculty are eligible to serve as PIs for this call. A limited number of co-PIs may be unaffiliated with CAIA; priority will be given to teams with predominantly CAIA affiliate faculty.

***Available Funds:*** Project teams funded at the \$10,000 level may be 2 to 3 investigators within a targeted disciplinary area, though multidisciplinary integration is given priority. Larger (3 or more), transdisciplinary project teams may be funded at the \$30,000 level. CAIA has set aside \$100K for this RFA.

***Project Timeframe:*** The project funds must be expended no later than June 10, 2023 in order to utilize the resources during the fiscal year (FY23). Any funds remaining in the account will be recalled to the CAIA account.

***Reporting Requirements:*** A 3-page final report outlining the activities undertaken and the results and impacts must be submitted within 60 days of the completion of the project, and no later than September 30, 2023. An impact statement for the external stakeholder audience should be appended to the 3-page final report, and can also be included in the annual Elements reporting system. Thank you letters, addressed to the supporting stakeholders and illustrating the importance of the work and the (potential) impact to them should be appended to the report. These letters should be sent to supporting stakeholders at the time of report submission, copying CAIA Director Susan Duncan at [duncans@vt.edu](mailto:duncans@vt.edu). Each team is expected to share project progress/outcomes at the CAIA Big Event on March 16, 2023. The intention is to increase awareness of CAIA efforts to benefit stakeholders across the state and nation.

***Acknowledgement:*** All publications, posters, websites, field day presentations, etc. funded by this internal competitive grant program must include the following statement: "This activity was funded, in part, with an internal competitive grant from the Virginia Tech Center for Advanced Innovation in Agriculture and the Virginia Agricultural Experiment Station".

***Proposal Format:*** The project description of each grant proposal must not exceed three (3) pages. In addition, the proposal must include the budget, a two-page CV for each PI and Co-PI, stakeholder letters, and additional information as outlined below. The CVs should offer insight into the expertise of the investigators and their capacity to successfully complete the proposed project (see guidelines below). Evidence of any additional resources that the project team has secured to complement the

proposed work and that can increase its impact should be included in the budget form. Relevant prior work from VT internal seed grant resources should be described and funding sources acknowledged. If the proposed project relates to any Hatch projects, please identify the Hatch project. Letters stating intended participation from the external stakeholders (individual or group) are expected. See detailed proposal formatting specifications below.

**Submission:** Proposals are to be submitted by email to Becca Emery at [bek0788@vt.edu](mailto:bek0788@vt.edu) no later than 5:00 pm, Thursday, October 20. The email subject line should state 'CAIA – Impactful Activities proposal [PI name]

### **Proposal Preparation Guidelines.**

For those who have participated in the Grant Writing Workshop sponsored by the Virginia Agricultural Experiment Station, this is an excellent opportunity to practice writing the **Overview** section of a NIFA or NSF proposal. Provide the necessary details for peers to understand the context and current technology/workforce situation.

#### **1. The project description section of the proposal must not exceed three (single-space, font 11) pages.**

**Use headers representing each of the bulleted sections below:**

- **Problem statement, current knowledge, gap in knowledge/lack of something,** and statement of need/consequences of not meeting the need: Describe the limitations in research, Extension, and/or education that limit progress.
- **Rationale and significance of the technology innovation/ workforce preparation:** Describe how the proposed work addresses the focus area of the RFA, the importance of the proposed work in developing/advancing partnerships with external stakeholders, and the needs that must be addressed for development/translation/adoption for creating an impactful, transformative solution. and how the current limitations are restricting growth and opportunities in agriculture, food, health, and life sciences producers, industries, and/or communities in Virginia and beyond.
- **Goal and objectives** and how these advance CAIA's mission and goals relevant to the RFA.
- **Plan of work/methods/approach.** Brief, descriptive summary of the approach. Address the expectations for each of the focus areas, as listed earlier in this RFA. Include an evaluation plan.
- **Interdisciplinary approach and involvement of stakeholder(s):** Describe why an interdisciplinary team is needed and will enhance the project and the scholarship. NOTE: If the team is not interdisciplinary, then explain why the team is needed to accomplish the objective/goal.
- **Innovation/Creativity/Originality, Expected Outcomes, Positive Impact:** Describe the team management, outcomes and why they are important, positive impact, and products that will be created by the project team to enhance their competitive advantage. Specifically describe future extramural grants and opportunities (beyond preliminary data development).

#### **2. In addition to the three-page project description outlined above, the proposal must include:**

- A cover page (use attached form) that includes: the project title, PI and Co-PI investigator name(s), unit/discipline, and contact information (VT address, email, telephone), identification

of Focus Area addressed by the proposal; and clearly define the CAIA platforms and CAIA priorities that are advanced by the proposed project.

- Short list (3-6) relevant citations.
- Two-page CV should be attached for each PI/Co-PI. CV should help the reviewer recognize the expertise that the PI/Co-PI contributes to the effort.
- Budget page should include the budget and a brief justification for budget items and information on available resources to the team that will complement the proposed work and can leverage the probability of success. Fringes should be included per OSP guidelines.
- List of relevant prior or ongoing external and internal seed grants and/or Hatch projects related to this proposal, including a brief description of how each provides complementary information but not redundancy to the proposed project.
- Stakeholder(s) letters that address their involvement/role and/or interest in the proposed project.

**Questions:** Direct questions to Susan Duncan; duncans@vt.edu.

**Proposals will be reviewed by a panel and scored using the following guidelines:**

Criteria	Points	Low Range	High Range
Proposal includes all defined sections.	5	Missing sections; difficult to find the information	Clearly follows the proposal format and guidelines
Linkage to CAIA Platform(s) – from cover page and based on evidence as described through the proposal	20	Limited coherence in description of linkage or poorly justified linkage	Clear linkage to CAIA with multiple CAIA platforms, and well justified within text
Potential impact of proposed activity	25	Limited impact either in terms of meaningful engagement with stakeholders or breadth of audience	Impacts likely to drive actionable, measurable interest among or change in target audience, and dissemination to public
Approach and Evaluation Plan	25	Approach/Evaluation plan lacking depth or with limited linkage to proposed impacts of activity	Approach/Evaluation plan creating measurable and defined objectives clearly evaluating efficacy and impacts of proposed activity
Feasibility of Budget Request and how this leverages prior funding, if appropriate;	5	Budget request clearly inappropriate or incomplete, given activities proposed or inappropriate use of budget	Budget request appropriate for activities proposed and well invested in activities. Demonstrates how prior internal funding, if available, is complementary, but not redundant, and leverages the success of this proposed project.
Stakeholder Engagement	10	Vague, undefined partnerships and/or approach; no letters of interest included	Evidence of external partnerships initiated; impact on a broader set of stakeholders evident.
Project Team	10	One or more gaps in expertise in project team or team not affiliated with CAIA	No gaps in team and team clearly affiliated with CAIA. Team clearly affiliated with CAIA and area(s) of expertise appropriate for scope of objectives.