CAIA/CCI Mini-Grants for Experiential Learning Development in Data Analytics and Cyberbiosecurity for Agriculture and Life Sciences

The Center for Advanced Innovation in Agriculture (CAIA), in partnership with the Commonwealth Cyber Initiative (CCI) Southwest Virginia Node, invites applications from CAIA affiliate faculty for mini-grants on experiential learning in data analytics and digital data security for life sciences (cyberbiosecurity) for agriculture.

Intent: CAIA/CCI Mini-Grants for Experiential Learning in Data Analytics and Cyberbiosecurity for Agriculture and Life Sciences are intended to assist faculty in developing educational and experiential learning resources that address the data and security challenges arising in today's modern agriculture and life science industries. Faculty may apply for resources, up to $4000, to create an education, research or extension experiential learning module for a course, winter-mester, or summer program, such as module for the Governors' School for Agriculture or a funded or anticipated Research Experience for Undergraduate (REU) project/proposal, related to data analytics and/or cyberbiosecurity, which involves securing the digital data and technologies in agriculture, health, environment, biotechnology, or other life science field. Developed materials may target middle/high school, community college, undergraduate, or graduate audiences; the proposed work should clearly identify the target audience. It is expected that learning materials created through these grants will be submitted to CAIA upon completion of the project for potential use in courses, other experiential learning opportunities, and support of CCI SW VA Node and CAIA programs, and will be posted as open educational resources through VTWorks. Applicants are encouraged to align objectives and targeted outputs of the grant with the research platforms of CAIA to help advance the goals within the education and training.

Eligibility: CAIA affiliate faculty from any discipline or unit are eligible. We encourage that each proposal includes a collaborator from another CCI SWVA node institution but could be selected from other CCI node institutions as appropriate for the project. A clear description of the CCI-affiliated collaborator role in the project should be stated. Faculty affiliated with the Center for Emerging, Zoonotic, and Arthropod-Borne Pathogens (CeZAP) or Global Systems Science (GSS) are also encouraged to participate as co-PIs or collaborators.

Proposal Application (2 pages):

- Application file document should start with CCI-CAIA Experiential Learning: [Last name of faculty PI]
- Proposal title
- PI and co-PI names, affiliations, emails, role within project
- Objectives
- Description of proposed work, target education audience, and targeted date for implementing the proposed work (which may occur outside of the expenditure funding timeframe)
- Anticipated products to submitted as open educational materials through VT works
- How the proposed work aligns with CAIA research platforms, facilitates CAIA's educational and training targeted impacts, and, if appropriate, CeZAP's goals and educational programs.
- Budget and budget justification

Funding: We expect to award up to 7 mini-grants in the amount of $4,000 each. Funds may be used for student wage or stipends, registrations for appropriate training resources or workshops that benefit the

PI or co-PI in developing their capacity for the project, software (university approved) that is needed for the learning experience, or other reasonable requests. Awarded funds must be expended by June 15, 2022.

Application Materials: Applications should be emailed as a single pdf document directly to Dr. Susan Duncan, Director, Center for Advanced Innovation in Agriculture at duncans@vt.edu. Application materials are due by **5PM on Monday, February 7, 2022.** Applicants will be notified of funding decisions no later than February 21, 2022.

Awarded projects: All presentations, publications, social media or other products resulting from funded projects should acknowledge both Virginia Tech Center for Advanced Innovation in Agriculture (CAIA) and Commonwealth Cyber Initiative (CCI) Southwest Virginia Node for funding the project.