

The Foundation for Armenian Science and Technology (FAST) in collaboration with the Armenian National Agrarian University (ANAU) is launching a new research project on "Computational Agriculture for improved food systems and resilient policies in Armenia" within the ADVANCE STEM Research grant program. ADVANCE is a grant scheme established to engage top international scientists as Principal Investigators in new research projects conducted in Armenia by the local researchers.

The Computational Agriculture project will be coordination implemented the in with cross-disciplinary teams at University of Illinois at Urbana-Champaign, USA, and KTH Royal Institute of Technology, Sweden.

The aim of the research is to conduct comprehensive simulations through the platforms which allow the evaluation of the effects of various management practices under different weather and soil conditions in a timely and cost-effective manner.

The research team will focus on

- analyzing APSIM platform for modeling and simulation of Armenian agricultural system
- selecting the relevant data as well as identifying the lack of a database for running such models for Armenia
- building a simulator to test, model and simulate, for instance, soil-plant interactions for different regions in Armenia

Granting scheme and opportunities

- An opportunity to conduct cutting-edge scientific research
- Direct research supervision and career advancement by Armenia-based and international Principal Investigators

Research Project in COMPUTATIONAL AGRICULTURE

for improved food systems **Tresilient policies in Armenia**





International PI Dr. Naira Hovakimyan

Local PI Dr. Vardan Urutyan

Eligibility Criteria

Senior researchers

- Ph.D. in Machine Learning, Statistics, Mathematics, Computer Science or similar fields,
- Experience in programming is strongly desirable. Substantial experience and demonstrated proficiency in agricultural modelling.
- Specific experience with machine learning, artificial intelligence, climate change modelling and crop yield simulations is a requirement, as well as the experience handling large databases for modelling and data analysis.

Junior researchers

- Master's Degree in a quantitative discipline, preferably such as Statistics, Econometrics, Business Analytics, or Data Science
- Experience in data analysis and preparation, including
- International travel, capacity building, and networking opportunities
- Competitive monthly remuneration

- experience with large data sets (requiring big-data techniques)
- Agriculture industry experience is a plus

Required Documents

To apply, interested candidates should submit an ONLINE APPLICATION attaching to it the following supporting documents:

Contacts

programs@fast.foundation 060 740 044

- **Curriculum Vitae**
- Statement of Motivation
- Letter of Recommendation

APPLICATION DEADLINE OCTOBER 4, 2021

ADVANCE STEM Research grant program