

## Instructional Staff

Program instructors and resource faculty are drawn from representative sectors of the agricultural biotechnology community. They include research scientists from various MSU departments, other universities, private companies, regulatory officials from state and federal agencies, specialists in information resources, and other individuals experienced in biotechnology implementation from an international perspective.

Our training team has strong expertise and practical experience in all aspects of agricultural biotechnology. Members of our training team have participated and conducted a number of training programs in both local and international settings.



**Application Deadline**  
**May 31, 2025**

### Program fee includes:

Instruction fee, and cost for training materials, group meals, local transportation, etc.

### Organized by

**Michigan State University**

College of Agriculture and Natural Resources (CANR)



**WorldTAP**

**World Technology Access Program**

<https://www.canr.msu.edu/worldtap/>



*For registration and other information  
please contact*

**Dr. Karim M. Maredia**

[kmaredia@msu.edu](mailto:kmaredia@msu.edu)

**MICHIGAN STATE**  
**UNIVERSITY**



**A Short Course in  
Agricultural Biotechnology,  
Biosafety and  
Technology Transfer**

**August 2 - 16, 2025**

## Agricultural Biotechnology, Biosafety and Technology Transfer Program Rationale>>>

An exciting wave of discoveries in biotechnology is revolutionizing agriculture worldwide. Globally, countries are trying to increase the productivity and profitability of the agricultural sector of their economies to feed the growing populations and increase the quality of life for millions of people. These goals must be achieved through practices that sustain those gains while protecting the environment and human health, and conserving biodiversity and other natural resources.

The use, deployment and importation of biotechnology products however, have raised a number of regulatory issues related to risk/benefit analysis associated with environment and human health. This requires an integrated approach towards the use and management of biotechnology so that science and regulations can co-evolve and society can benefit from modern biotechnology. The integrated approach to biotechnology management should include research, policy, regulations, technology-transfer, commercialization, and communication aspects.

Education and awareness on various aspects of agricultural biotechnology including environmental biosafety and food safety issues will help assist government agencies various stakeholders make informed decisions on genetically engineered and gene edited crops and products. This program is designed to help participants better understand various issues surrounding the use and management of agricultural biotechnology globally.



### Program Components

- ◆ Applications of biotechnology in agriculture and global overview of agricultural biotechnology
  - ◆ Biotechnology policies and regulatory framework in a national and global context: environmental biosafety, biodiversity, and food safety
  - ◆ Environmental, food safety and product stewardship issues associated with genetically engineered (GE) and gene edited crops
  - ◆ Greenhouse and confined field trials of GE crops
  - ◆ Commercialization and stewardship of GE crops
  - ◆ Gene editing innovation, application and regulation
  - ◆ International food laws and regulations
  - ◆ Intellectual Property Rights (IPR), technology transfer and commercialization of biotechnology
  - ◆ Public-private sector partnerships
  - ◆ Socio-economic impacts of biotechnology
  - ◆ Biotechnology and international trade
  - ◆ Adoption/acceptance of new technology
  - ◆ Consumer acceptance, public perception, and communication in biotechnology
  - ◆ Field visits to farmers growing biotechnology crops
- Information and training resources in agricultural biotechnology

### >>> Program Description

Michigan State University (MSU) is recognized as a center of excellence in international agricultural development and training. MSU has emerged as a leader among U.S. Land Grant institutions in building capacity in biotechnology research and management around the globe to enhance food and nutritional security, environmental quality, and economic development. MSU partners with public and private institutions to offer a two-week program in agricultural biotechnology. This training program focuses on biotechnology research, policies and regulations, management, and public outreach components as well as biotechnology related trade issues.

MSU research stations, other US universities, farmer groups, commodity and consumer groups, international development organizations and NGOs that are supportive of biotechnology research and development globally. This uniquely diverse training program takes an interactive and participatory approach, and uses a broad mix of training approaches such as applied lecturers, case studies, panel/group discussions, and laboratory, greenhouse, and field visits. In addition, the program will foster linkages and provide opportunities for networking among participants to exchange their experiences and establish regional and global collaborations.

The Program is offered annually and draws from firmly established working relationships with government agencies, industry leaders, MSU faculty specialists,

