

## BIGMAP ACTIVITIES (continued)

engaging the public and industry in relevant issues

—Enhance undergraduate and graduate education by providing institute research experiences and by developing new courses in biosafety, biosensing, risk analysis, and process management

## PROGRAM AREAS

### RESEARCH

- Biosensing
- Gene flow
- Quantitative risk assessment
- Environmental fate
- Food safety

### GLOBAL PROGRAMS

- Harmonization of risk analysis frameworks
- Process management
- Regulatory processes

### EDUCATION AND OUTREACH

- Annual BIGMAP Symposium
- Risk analysis graduate training
- Iowa Seed & Biosafety Newsletter*  
[www.seeds.iastate.edu/iowa-seed-biosafety-newsletter-archives](http://www.seeds.iastate.edu/iowa-seed-biosafety-newsletter-archives)
- International workshops
- On-line learning modules  
[www.seeds.iastate.edu/bigmap-learning-modules](http://www.seeds.iastate.edu/bigmap-learning-modules)  
“U.S. Regulation of Genetically Engineered Crops”  
“The Safety of Food and Feed Derived from GE Crops”  
“Ecological Considerations: The Environmental Risk Assessment”
- Visiting scientists
- Policy fellows



## FACILITIES

BIGMAP is headquartered in the Seed Science Building located on the Iowa State University campus in Ames, Iowa. Institute facilities include start-of-the-art laboratories and office space to support visiting scientists for short- and long-term collaborations. High-tech conference and meeting rooms are also available to host international and domestic meetings and workshops.

## PARTNERS

BIGMAP partners include the: Iowa State University College of Agriculture and Life Sciences, College of Veterinary Medicine, Office of the Vice Provost, and Extension Services; the National Animal Disease Laboratory; industry associations, and the private sector.

## FOR MORE INFORMATION

For a complete listing of BIGMAP faculty and staff, research publications, news, and upcoming events, visit our Website at:

**[www.seeds.iastate.edu/bigmap](http://www.seeds.iastate.edu/bigmap)**

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## IOWA STATE UNIVERSITY

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# BIGMAP

**The Biosafety Institute  
for Genetically Modified  
Agricultural Products**

**Safeguarding Consumers  
and the Environment**



# THE IOWA STATE UNIVERSITY

## Biosafety Institute for Genetically Modified Agricultural Products (BIGMAP)

Providing science-based analysis on the risks and benefits of genetically modified agricultural products



The Biosafety Institute for Genetically Modified Agricultural Products (BIGMAP) at Iowa State University is an unbiased and credible source of information on biosafety issues for genetically modified agricultural products (GMAPs), both nationally and internationally. Established in 2003, institute faculty provide science-based analysis on the risks and benefits of biotech products, as well as guidance and recommendations to policy and regulatory groups, to private entities, and to the public.

BIGMAP scientists help to safeguard consumers and the environment by studying the impact of GM products on our health, society, economy, climate, and ecosystem. They also work to enhance educational opportunities and to promote successful careers for students and professionals in the field of risk and benefit analysis as it relates to food systems and the bioeconomy.

BIGMAP faculty members are experts in the fields of biotechnology, risk and benefit analysis, seed policies, and regulation. They play an integral role in enabling the institute to be regarded as a lead developer and clearinghouse of reliable information on plant and animal GM products worldwide.



### BIGMAP ACTIVITIES

As part of the institute's mission, BIGMAP faculty and staff work to:

- Form interdisciplinary industry and multi-university teams to review and/or conduct research on the scientific, social, and economic issues that arise during the approval process of new GMAPs, and to answer questions raised by the release of GMAPs
- Conduct fundamental research on the health and environmental safety of GMAPs, including research on quantitative risk assessment, threshold of tolerance, gene-flow, and ethics
- Develop novel, rapid biosensing and testing technologies crucial to the monitoring and regulation of GMAPs
- Examine the consequences of GMAP adoption on the social, economic, and political well-being of the public, both nationally and internationally
- Develop best management practices for field-confined biogenic production in crop systems
- Establish national and international partnerships for research and education on biosafety and bioethical issues
- Develop biosafety systems for the approval and release of genetically modified plants and animal products based on process management
- Recommend standards to facilitate transboundary movement of modified plant and animal products
- Communicate the risk and benefits of GMAPs through extension and education programs by