

SOT FDA Colloquia on Emerging Toxicological Science Challenges in Food and Ingredient Safety



Food from Genetically Engineered Plants: What Role for Metabolomics?

June 13, 2018



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Welcome from FDA

Dennis Keefe, PhD

Director

Office of Food Additive Safety

College Park, MD





Office of Food Additive Safety



Mission:

To protect and enhance consumer health by ensuring the safety of substances added to food and food contact materials

Programs:

- Food Additive Petitions and Color Additive Petitions
- Generally Recognized as Safe (GRAS) Substance Notifications
- Food Contact Substance Notifications
- Biotechnology Consultations



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Colloquium Series



- Partnership of U.S. FDA's Center for Food Safety and Applied Nutrition (CFSAN) and the Society of Toxicology (SOT)
- Stimulate a dialogue among leading toxicology experts on future-oriented toxicological science relevant to food and food ingredient safety assessment
- Information for FDA employees and the public
- Not a forum for soliciting regulatory advice or discussing food or food ingredient regulatory issues
- They are a forum to discuss the latest toxicological science in the context of food chemical safety.



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FDA's Oversight Role in Foods Derived from Genetically Engineered Plants*

- **The Coordinated Framework**

(<https://www.fda.gov/downloads/Food/IngredientsPackagingLabeling/GEPlants/UCM537311.pdf>)

- **FDA's Biotechnology Consultation Program**

- Limited to Foods Derived from New Plant Varieties
- Co-Managed by CFSAN & CVM
- 1992 Policy Statement on Foods Derived from New Plant Varieties
- Inventory of Biotechnology Consultations

<https://www.accessdata.fda.gov/scripts/fdcc/?set=Biocon>

- **Genome Editing: Request for Comments (82 FR 6564, January 19, 2017)**

*<https://www.fda.gov/Food/IngredientsPackagingLabeling/GEPlants/default.htm>



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Welcome from SOT

Norbert Kaminski, PhD

SOT Past President, Colloquium Chair

Michigan State University

East Lansing, MI





Society of Toxicology Mission

**To Create a Healthier and Safer World by Advancing the Science
and Increasing the Impact of Toxicology**

Among Strategic Priorities

- Strengthen the Relevance and Impact of Toxicology
- Develop and Support Toxicologists to Capitalize on Future Opportunities
- Expand Outreach and Impact Globally



Colloquium Impact

- Fourth year of quarterly colloquia
- Wide-ranging topics related to toxicology and food safety
- Global audience from all employment sectors
 - Over 300 registered today on-site and by webcast
- Resource for 24/7 learning
 - www.toxicology.org for recordings and slides



2018-2019 Colloquia

- October Food Tolerance Allergenicity
- December Bio-Printing as a Tool for Testing
- February Foods and Flavor Modifiers
- April/May Has the Time Passed for Separate Cancer and Non-Cancer Risk Assessment?



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SOT FDA Organizing Committee

Bryan Delaney, PhD, DABT, ATS, Committee Chair, DuPont Pioneer, Johnston, IA

Allen Rudman, PhD, Committee Co-chair, FDA Lead, US FDA, CFSAN, College Park, MD

Jason L. Aungst, PhD, US FDA, CFSAN, College Park, MD

Suzanne Compton Fitzpatrick, PhD, DABT, US FDA, CFSAN, College Park, MD

Norbert E. Kaminski, PhD, Michigan State University, East Lansing, MI

Jieun Lee, PhD, DABT, Kellogg, Battle Creek, MI

Stephen M. Roberts, PhD, University of Florida, Gainesville, FL

Jia-Sheng Wang, MD, PhD, University of Georgia, Athens, GA

Jeffrey J. Yourick, PhD, DABT, ATS, US FDA, CFSAN, Laurel, MD

Patricia Ganey, PhD, SOT Council Contact, Michigan State University, East Lansing, MI

Norbert E. Kaminski, PhD, Colloquium Chair, Michigan State University, East Lansing, MI

Jason Dietz, PhD, Colloquium Co-chair, US FDA, CFSAN, College Park, MD



Colloquium Leads

- **Chair: Norbert Kaminski, PhD**
Michigan State University, East Lansing, MI
- **Co-chair: Jason Dietz, MS**
CFSAN, US FDA, College Park, MD

Agenda

8:45 AM–9:25 AM

Introduction to the Safety Assessment of Foods from Genetically Engineered Plant Varieties

Jason Dietz, CFSAN US FDA, College Park, MD

9:25 AM–10:05 AM

Factors Influencing the Composition/Metabolic Profile of Food from Plants

Sherry Flint-Garcia, USDA/ARS, University of Missouri, Columbia, MO

10:05 AM-10:25 AM

Break



Agenda (continued)

10:25 AM-11:05 AM

Introduction to Metabolic Profiling

Ann Knolhoff, CFSAN, US FDA, College Park, MD

11:05 AM-11:45 AM

Composition Testing in the Safety Assessment of Foods from Genetically Modified Crops

Bryan Delaney, DuPont Pioneer, Johnston, IA

11:45 AM-12:45 PM

Roundtable Discussion

Moderator: Norbert Kaminski

All speakers and Co-chair

Additional Panelist: Supratim Choudhuri, CFSAN, US FDA, College Park, MD

