

The Networker



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National Food Safety
& Toxicology Center

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NFSTC Members

Animal Health & Diag. Lab
Biochemistry
Botany & Plant Pathology
Communications
Entomology
Food Sci. & Human Nutri.
Horticulture
Large Animal Clin. Science
Microbiology
Pathology
Peds. & Human Develop.
Pharmacology/Toxicology
Sociology
Veterinary Medicine
Zoology

International conference is a success

The National Food Safety and Toxicology Center (NFSTC) at Michigan State University teamed with Georgetown University to hold a conference entitled “**Smoothing the way for International Trade: the Politics of Food Safety.**” The conference, held Oct. 12-13, 1999, in Georgetown, Washington, D.C., was supported by the Farm Foundation and the National Alliance for Food Safety (NAFS). In addition to the scientific program, the NAFS held its annual meeting to further chart its future and outline immediate and long-term objectives.

Catherine Bertini, the executive director of the United Nations World Food Programme, presented the first NAFS lecture at the conference. She urged the audience to “pay attention to the ultimate deliverer of food” who, around the world, is likely to be a woman. Eileen Kennedy, the USDA deputy undersecretary for research, education and economics, emphasized the importance of coordinating academic and government efforts. Speakers from the US Trade Representative’s Office, European Union, Latin America, and academia discussed trade issues, non-tariff trade barriers, policy, risk assessment and social impact as they related to world trade.

Lonnie King, dean of the College of Veterinary Medicine at Michigan State University, summarized activities of the NAFS in its board report. Planned pursuits of basic and applied research, serving as an advocate for food safety, coordination and prioritization of research needs, and teaching food safety at the scientific, industrial and consumer levels are all part of the alliance’s mission. Multiple sources of funding and collaboration are major parts of a successful program as envisioned by NAFS members.

**MARK
YOUR
CALENDARS!!!**

**NFSTC Conference
July 11-12, 2000**

**Risk Communication
in Food Safety...
“Motivating and
Building Trust”**

**MSU Kellogg Center
East Lansing, MI**



The Director's View

Dr. Ed Mather

Since the fall issue of this newsletter, many significant activities have occurred. It is gratifying to see the faculty and the center begin to meet its often lofty expectations and fulfill the mission set by the University and its faculty. It is even more gratifying to see the center provide a focal point for faculty to address the many food safety issues that are of increasing national concern.

There was no doubt that genetically manufactured organisms (GMOs) were destined to be an enormous issue when the center held the first conference on risk analysis in food safety a little more than a year ago. International speakers at that conference raised a red flag that the subject was indeed being largely ignored in the United States. It is obvious that GMOs have recently captured much US attention and that center faculty are deeply involved in addressing the issue. The interaction between molecular geneticists, economists, and social scientists working with basic and applied plant and animal scientists are bringing a broad and helpful perspective that can be useful to public understanding and improved public policy.



On another front is work that is progressing on the problem of antibiotic resistance, an issue of agriculture and human health concern. Scientists from the center have received significant support from CDC, FDA, and USDA to study antibiotic resistance, especially in the area of pre-harvest food

safety. A portion of the work is being conducted in collaboration with other universities and especially those members of the NAFS.

It is sometimes dangerous to predict where the next problems will arise, but it has been the concern of many faculty for several years that continually emerging and reemerging food-borne pathogens pose threats that should not be only treated reactively but more proactively. Laboratory work continues on *E. coli* and the genetic factors that make it pathogenic, *Listeria monocytogenes* and its problems to the food processing industry, and *Salmonella* and its resistance factors. How these emerging organisms mutate and gain a foothold in the food chain will be a challenge to the evolutionary microbiologist being recruited by the center.

I would like to mention another area that was identified in last

year's risk analysis conference. That is the need to provide study and research in risk communication. Risk assessment has been well defined in food toxicology and more recently addressed by microbiologists. Risk management has been addressed through Hazard Analysis Critical Control Points (HACCP) implementation in food processing and is now being studied in pre-harvest environments. Risk communication between assessors and managers as well as with the public, however, is not well developed nor practiced. With support from the W.K. Kellogg Foundation, a study is evolving to address risk communication. July's conference will bring national and international experts to campus to continue exploring the issue.

The past year has been invigorating but next year promises to be even more so. The new millennium has brought a vastly increased intensity to our lifestyle, and I predict that food safety-related concerns will share that intensity. So, hang on, the ride is going to be exciting!





Congressman cares about food safety

U.S. Representative Fred Upton was the most recent Michigan congressman to visit and meet with faculty at the NFSTC. Of particular interest to the Congressman from the 6th District was the subject of GMOs, their scientific contribution, their contribution to agriculture marketing and their potential influence on international trade. In the next few months, the subject of labeling such products will occupy a considerable amount of congressional debate.

Also of interest to Congressman Upton and his staff were discussions concerning food-generated endocrine disruption, potential food-producing allergies and farming systems that increase or reduce pre-harvest food microbial contamination and/or antibiotic resistance. Assisting in the two-hour briefing, moderated by Interim Director Ed Mather, were Paul Bartlett, epidemiologist; Les Bourquin, food scientist; Tim Zacherewski, biochemist; and Chris Vanderpool, social scientist.

Over the past year, Congressman Upton is one of several congressmen and senators who visited the center to offer support and receive information on food safety. The recent addition to the staff of an information officer will aid greatly in providing additional public service from the center.

First Lecture in Robert Leader Endowed Series

In his thought-provoking and well-documented presentation, **“The Mosaics of Comparative Medicine and Food Safety,”** Dr. Roger O. McClellan related his thoughts on the complicated and multidisciplinary problems involving food safety. His lecture on Oct. 27 at the National Food Safety and Toxicology Center drew from his many years of experience in comparative medicine and toxicology.

Officially retired in January as president of the Chemical Industry Institute of Toxicology (CIIT), he served with the Atomic Energy Commission, as head of the Lovelace Inhalation Toxicology Institute, and with General Elec-

tric following his graduation from Washington State University where he received his DVM degree. As President of the CIIT, he worked effectively with academia, industry and government and understood the role of each.

“Institutions and scientists receive public funds not as a one-way transaction but rather as part of a compact with the public...”

Dr. Roger O. McClellan

In his day and a half with scientists, students and friends at the center, he shared insight on a number of issues.

“Institutions and scientists receive public funds not as a one-way transaction but rather as part of a compact with the public to use the funds to conduct research and develop information that will serve the public,” Dr. McClellan said. He also commented that the NFSTC, through its many disciplinary faculty, use of very sophisticated emerging technologies, and computer-generated data merging capabilities could make a significant contribution to improving food safety.

NFSTC Interim Director Ed Mather was delighted with Dr. McClellan’s visit. “He truly represented the thoughts that the late Dr. Leader would have appreciated and endorsed.”

NFSTC TO RECEIVE GRANT

Dr. Linda Mansfield, Departments of Microbiology and Large Animal Clinical Sciences, was instrumental in securing a grant for further research at the National Food Safety and Toxicology Center. Dr. Mansfield, awarded the grant from the USDA National Needs Fellowship, wrote the proposal for the project, *Integrated Microbial Food Safety Training Program to Address Threats to Human Food Safety*.

“This effort grew out of our *Bad Bug Club* meetings where we discussed our research on pathogens of humans and animals,” Dr. Mansfield said.

The project is designed to support graduate students in multidisciplinary graduate programs focusing on food safety.

As project leader, Dr. Mansfield will cooperate with faculty from the College of Veterinary Medicine, including Drs. Oliver Duran, Large Animal

Clinical Science (LCS), Daniel Grooms (LCS), John Kaneene (LCS), Michael Bagdasarian (MIC), Roger Maes (AHDL), Martha Mulks, Microbiology (MIC), Robert Walker (AHDL), Edward Walker (Entomology), and John Linz (Food Science and Human Nutrition).

For more information about the NFSTC, contact Pat Stewart, Communications Coordinator, at phone: 517-432-3100; fax: 517-432-2310; or e-mail: stewartp@cvm.msu.edu.

Check out our website <http://foodsafe.msu.edu> for more information on July's conference



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