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Are we what we eat?

NFSTC co-sponsors biotechnology debate at MSU

One of the current concerns surrounding biotechnology issues is the difference between how people in the United States and Canada perceive these technologies in relation to their counterparts in Europe.

Often referred to as “the transatlantic divide,” it has been argued that those in the U.S. and Canada are more accepting of biotechnology than Europeans. A conference, titled “Biotechnology Issues from a Transatlantic Perspective,” held on the campus of Michigan State University on Nov. 1 examined this divide and its possible origin.

Speakers from the U.S., Canada, the United Kingdom, France, Italy, Greece, Finland, Germany and Austria presented research on public perceptions in their respective countries on both food/crop (also called genetically-modified or genetically-engineered food) and medical biotechnology to about 80 attendees.

One of the main points of the conference was to examine public perceptions and media portrayals of biotechnology in the United States, Canada and various European countries, said Toby Ten Eyck, NFSTC faculty member and organizer of the event.

George Gaskell from the London School of Economics said that people in Europe are more likely than people in the U.S. or Canada to feel that information technologies (such as cell phones and the Internet) will be beneficial in the future. This shows that Europeans are not worried about all new technologies, but make decisions based on perceived benefits. Europeans do not see as many benefits for biotechnology as do people in the U.S. or Canada, and so see little need to pursue it, Gaskell said.



Wolfgang Wagner of Germany addresses the international panel and audience at the MSU conference on biotechnology at The Kellogg Center on Nov. 1. NFSTC co-sponsored the conference.

Conference presenters also highlighted differences between various European countries on the biotechnology front. For example, Timo Rasunen from Finland mentioned that Greenpeace had closed its offices in Finland, while Giorgos Sakellaris from Greece said that the same organization had just opened its second office in Greece. Finland has one of the highest acceptance rates of biotechnology, while Greece has one of the lowest. Nicole Kronberger and Petra Grabner from Austria showed how food traditions within the different countries can be used to partially explain these differences.



“Media portrayals and stereotypes have played a role in perceptions about biotechnology.” – Toby Ten Eyck, NFSTC professor

Robert J. Huggett, Vice President for Research and Graduate Studies at MSU, and Ewen Todd, NFSTC Director, opened the conference, which was sponsored by the NFSTC, Michigan Agricultural Experiment Station, and the Department of Sociology.



Ewen C.D. Todd

Start a holiday tradition by playing it (food) safe

In a rush to cook, clean and prepare for guests, many people forget the essential steps necessary to keep holiday meals safe.

As technology continues to press on, so do advancements in food delivery. Turkeys are now being shipped to consumers' front doors within 48 hours, which hopefully means every step has been taken to ensure food safety along the route. To reduce the risk of foodborne illness, always practice proper food handling and handwashing.

Follow these steps over the holidays:

- When ordering a product, ask if it needs to be shipped cold.
- Make sure food is in the original unopened box or container.
- Poultry meat is safe under refrigeration for three to four days after purchase.
- Log on to the NFSTC website for more information: www.foodsafe.msu.edu
- If you suspect you or someone you know is suffering from a foodborne illness, log on to www.RUsick2.msu.edu

The Christmas season usually brings with it some clusters of people who become ill after eating the same contaminated food item. Following these steps can help keep everyone safe and happy during the holiday season.

NFSTC triples its efforts to help families celebrate

In addition to its research, education and outreach mission, the National Food Safety & Toxicology Center is devoted to making this Christmas a happy one for underprivileged children and families.

One holiday project at the Center this year is to raise money for Heifer International, an organization that promotes self-reliance for people in developing nations. The organization provides animals and training in animal husbandry to families around the world. The gift of the animals provides an income for families. Donations will be collected through Jan. 15 by Cheryl Tarr in 191 FSTB. To learn more, visit the organization's website at <http://www.heifer.org>.

Also, the Center is collecting money and/or canned goods through Jan. 15 to help the MSU Food Bank support financially-strapped students with food throughout the academic year. To donate food, a box is located in the lobby of the NFSTC building. The NFSTC collected \$128 and a large box of food for the MSU Food Bank on Halloween. With your help, we can improve that number over Christmas. To make a financial gift, contact Pattie McNeil at (517) 432-3100.

The Center also participated in Toys For Tots. The Marine Corps Reserve Center marked its 55th year of helping needy children receive toys at Christmas. Nine toys were collected this year at the Center, Gail Church reported.



Santa didn't show, but his elves did

Above: Cheryl Tarr, Vincent Young, Brooke Dennison, Jennifer Ellis-Cortez, Carole Kuehl and Dave Wilson share a meal at the National Food Safety & Toxicology Center holiday social on Dec. 6. Right: Anthony, son of Mary Aldaco, and Jan, son of Markus Hecker are in the holiday spirit. Thanks to Jennifer Sysak and Susan Dies for organizing the festivities, and to the cleaning crew for the extra help./Tanish Stiger





EPA funds pediatric allergy project

Venu Gangur, assistant professor in Food Science and Human Nutrition and NFSTC faculty member, will be a co-principal investigator for an EPA project on markers of exposure and effect in children to investigate atopic (allergic) manifestations. Additional funding will come from the Michigan Great Lakes Protection Fund. Additional PIs on this project include MSU faculty members John Riebow and Wilfried Karmaus.

Society honors NFSTC professor

John Giesy, NFSTC faculty member and zoology professor, received the Society of Environmental Toxicology and Chemistry (SETAC) North America/ABC Laboratories Environmental Education Award. The award is one of the highest honors given by the Society to recognize a group, individual, organization or corporation for significant contributions to environmental education. Giesy accepted the award at the Society's meeting on Nov. 16 in Salt Lake City. Cited among Giesy's accomplishments in the past 22 years: training of more than 60 graduate students, 25 post-doc fellows, and 25 visiting scientists, many of whom have gone on to be leaders in their fields. In 1995, Giesy received the Founder's Award, which is the highest award given by the Society.

Graduate assistant wins poster award

Laura R. Carter recently received the 2002 Young Investigator Award for her poster presentation at the 2002 Annual Meeting of the American College of Veterinary Pathologists in New Orleans. Carter received first place in the Toxicology category. Her poster, titled "Mucous Cell Metaplasia Induced by Inhaled Fine Airborne Particles and Allergen in the Pulmonary Airways of Rats" was co-authored by J Harkema, G Keeler, J Wagner and E Timm. Carter is pursuing her Ph.D. in Inhalation Toxicology under the supervision of NFSTC faculty member Jack Harkema in the Department of Pathobiology and Diagnostic Investigation at Michigan State University.

NFSTC helps submit large proposal

Two of the largest contract proposals in NFSTC's history were recently submitted to the National Institutes of Health. The Microbiology Research Unit and the Zoonoses Research Unit proposals are headed by NFSTC faculty members and other faculty members. The two multimillion proposals were a major effort involving almost 20 faculty members for each project. The proposals were also new territory for Contracts and Grant Administration, and included detailed budgets assembled on a very tight deadline by multiple staff and faculty members. These proposals demonstrate the possibilities when a skilled multidisciplinary team works together and show that the NFSTC is a leader in pursuing major contract funding, emphasizes NFSTC Director Ewen Todd.



Dr. Yoko Hirabashi from the National Institute of Health Sciences in Japan, third from right, and Kai Hung Wang from Taiwan, second from left, visited the laboratory of NFSTC faculty members Chia-Cheng Chang, third from left, James Trosko, second from right, and Tim Zachareski, not pictured. Hirabashi gave a seminar and visited faculty members. Wang will be studying how to isolate human adult stem cells and to use cell to cell communication assays to detect foodborne toxins and toxicants with Chang through February. The international visitors worked with Brad Upham, far left, and Mei Tai, far right.

Professor helps create WHO report

NFSTC faculty member John Giesy's work as advisor to the World Health Organization has culminated in a committee report on the state of the science on endocrine disrupting compounds in the environment. The report, which took three years to develop and is now available, is intended to help WHO develop a policy for the protection of humans and wildlife, and is a global concern for regulators.

RUsick2 web forum going full force

Although in operation for only a month, the data from the www.RUsick2.msu.edu Foodborne Disease Forum has already augmented the ability of the health departments to identify outbreaks that might otherwise have gone undetected. About eight times as many people have visited the web-based forum as reported foodborne illnesses in the Greater Lansing Area during the same period last year. In addition to increasing rates of reporting, another objective of the RUsick2 Forum is the early identification and characterization of any intentional contamination of our food or water supply as an act of bioterrorism. The Christmas season usually brings with it some clusters of people who become ill after eating the same contaminated food item. What makes the Forum unique is that Forum visitors can see most of the data that other visitors have contributed.



Emerging disease requires more research

Firearm deer hunting season ended on Nov. 30, but concerns about Chronic Wasting Disease are ongoing. Chronic Wasting Disease (CWD) is a neurologic disease of deer and elk that was first diagnosed at a research facility in Colorado in 1967 and most recently as close as Wisconsin.

So far none of the 3,431 deer samples collected before Dec. 13 have tested positive for CWD in Michigan, but the Michigan Department of Natural Resources is still seeking samples from specific counties at the DNR lab, available at (517) 373-9358.

According to the DNR's preliminary estimates, 288,000 deer were harvested this year, an increase over last year. Estimates were more than 750,000 hunters spent more than \$500 million for food, lodging, transportation and equipment during the hunting season. Final estimates will be available around April.

Because deer hunting is a big sport in Michigan and many families consume the deer meat, CWD could have serious future consequences to people and industry, says Ewen Todd, NFSTC director. "The emerging disease is not well understood and will require careful assessment of the risks and an educational program for hunters – an integrated approach for which the NFSTC already has a unique capacity to provide," Todd says.



Hunters visit the Roscommon Buck Pole at the end of firearm hunting season./Trent Wakenight

While there is no evidence that the disease can be naturally transmitted to humans, the DNR advises hunters and consumers to take simple precautions including handwashing, avoiding contact with nervous tissues, sanitizing equipment and knowing proper cooking and storage temperatures for meat. For more information on venison field dressing, meat preparation and recipes, read *Michigan Venison* online at <http://www.msue.msu.edu/msue/imp/modac/65793001.html>

Register for the First World Congress on Food Irradiation
ONLINE at <http://www.foodsafe.msu.edu/congress.html>

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Kirsten Khire,
Director of Communications,
by phone: 517-432-3100;
fax: 517-432-2310; or email:
khirek@cvm.msu.edu

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