International Food Safety Training Laboratory (IFSTL)

Global trade in food is now a necessary part of daily commerce. With this fact comes the increasingly urgent need for harmonization of food safety standards and testing methods. The IFSTL has been created to address this pressing need.

The United States imports more than $80 billion worth of food from 150 countries.[1] Imports now account for about 15% of the total U.S. food supply of which the vast majority comes from abroad. For example, 60% of U.S. fresh fruit and vegetables, and 75% of U.S. seafood are imported. Food imports have grown 10% per year since 2002 – twice the historical rate – in response to consumer demand. This growth rate increases risks to food safety and public health,[2] and makes the Government's job of assuring food safety and security more difficult at a time when resources are already stretched. The challenge is compounded by the fact that foods that are inherently more likely to pose safety risks (ready-to-eat foods, fresh produce, and seafood) now account for a bigger share of U.S. imports.

Given these facts and with U.S. imports growing rapidly from all world regions, The University of Maryland and Waters Corporation (NYSE: WAT) will build and operate the first U.S.-based laboratory for training domestic and foreign food producers, the International Food Safety Training Laboratory (IFSTL). The IFSTL will provide a means for countries exporting to the United States to enhance their food safety testing and quality assurance capabilities. This will allow them to meet the safety requirements demanded by U.S. consumers, the US FDA, and Congress. In addition to bolstering import safety generally, the IFSTL will enhance the U.S. and China's cooperation on food safety and fulfill a U.S. pledge under the Strategic and Economic Dialogue to conduct training for Chinese officials on U.S. regulatory standards and requirements.[3]

The new facility will have the capacity to teach an estimated 200 food and government workers per year, and is expected to open in July 2011. The IFSTL will be located in the Patapsco Building in College Park, MD on the University of Maryland campus at the Joint Institute for Food Safety and Applied Nutrition (JIFSAN) International Training Center. The IFSTL will deliver hands-on, laboratory-based training to scientists in the application of state-of-the-art, "fit-for-purpose" analytical techniques suitable for monitoring compliance with the broadest range of food safety standards. The Laboratory is expected to begin offering courses in the summer of 2011. JIFSAN will be responsible for curriculum and training at IFSTL, and will operate the lab as a self-supporting facility.

JIFSAN is joint venture between the University of Maryland and the US FDA with responsibilities for multi-disciplinary research and education.

Waters
THE SCIENCE OF WHAT'S POSSIBLE.™

Waters Corporation, a publicly traded laboratory analytical instrument and software manufacturer headquartered in Massachusetts, is a market leader in providing food safety solutions. Waters has made a commitment to fund the development of the Laboratory's physical facility, to provide necessary funding to operate and maintain the Laboratory, supply equipment and technology, and help design and deliver training courses.

---

[1] *U.S. International Trade in Goods and Services: Annual Revision for 2007*, Bureau of Economic Analysis, U.S. Department of Commerce, June 2008.

[2] The Centers for Disease Control and Prevention estimates that each year 76 million cases of foodborne illness occur, more than 300,000 persons are hospitalized and 5,000 die from foodborne illness.

[3] U.S.-China Strategic and Economic Dialogue *Joint Progress Statement* on the safety of food and feed, signed June 18 by U.S. HHS and China's AQSIQ in supportive of 2007 bilateral MOA; http://www.fda.gov/bbs/topics/news/international/progress_HHS_China.pdf.

THE TRAINING LABORATORY

The IFSTL will educate foreign officials, industry professionals, and domestic scientists on U.S. and international food safety standards and regulations.

Attendees will receive training in all aspects of food safety risk management, including the use of laboratory analytical instrumentation, establishing suitable methods of analysis, and appropriate data management. Instruction will be offered in detection, confirmation, and quantitation of a broad range of chemical contaminants, (including agricultural chemicals such as pesticides and veterinary drug residues), toxins (such as mycotoxins and shellfish toxins), and pathogenic organisms.

Technology will include mass spectrometry, UPLC with both PDA and fluorescence detection, and a full-range of microbiological tools. Training duration will vary from course to course, depending on the content, but will range from a minimum of one week, up to a maximum of three weeks. The courses will be offered to groups of 10 to 20 individuals, and those completing all aspects of the course and lab work will earn a certificate of accomplishment. Fee schedules for individual courses have yet to be announced.

The IFSTL will be under the overall supervision of the Director of JIFSAN, with the day-to-day operations controlled by a Laboratory Manager. Full-time teaching professionals and graduate research assistants will assist the Laboratory Manager. Lecturers and assistants will also be provided by University of Maryland faculty, FDA scientists, and industry consultants as needed.

BENEFITS OF THE IFSTL

- **Improves the capacity of FDA to provide training to foreign inspectors:** Every year, the FDA receives (and has to turn away because of budget limitations) requests from foreign governments to train their officials on U.S. regulatory standards and requirements. By partnering with private-sector companies, universities, and possibly other governments on the International Food Safety Training Laboratory, FDA can bolster this important initiative.
- **Reduces pressure on FDA:** At the IFSTL, scientist trainees can learn the latest methods of analysis, be trained on the state-of-the-art instrumentation, and become qualified in the use of FDA approved methods. The program will reduce risks to food safety and ease pressures now growing on U.S. agencies.
- **Leverages expertise in food safety:** The IFSTL enhances public-private cooperation and leverages expertise of governments, leading corporations, health experts, and universities.
- **Supports U.S.-China cooperation and relations:** The existence of the IFSTL enhances U.S. and China cooperation on food safety and fulfills a U.S. pledge to China to conduct training for Chinese officials on U.S. regulatory standards and requirements.
- **Promotes harmonization and best practices:** JIFSAN and IFSTL will serve as a focal point for government and industry food safety professionals. The organization will be a source of information on U.S. food safety regulations, testing methods, and chemistries, as well as other relevant notices and announcements. This will help in the movement towards harmonization of global food safety standards and spread the use of best practices (Good Manufacturing Practices and Good Agricultural Practices).

For more information contact:

JIFSAN
University of Maryland
2134 Patapsco Building
College Park, MD 20742-6730

Tel.: (301) 405-8382
Fax: (301) 405-8390
Email: jifsan@umd.edu