

# Laboratory Capacity Assessment and Pilot Training Program

## Context

Competent laboratories are essential to supporting a well-functioning food safety system worldwide. One of the early activities of the Global Food Safety Partnership (GFSP) was to focus on laboratory capacity building. Given the extent of work currently being undertaken around the world and the complexities and expense associated with laboratory training, the GFSP has taken a phased approach to this work. This has included an initial scoping exercise and needs assessment; and development of a laboratory training pilot, with a view to learn from the pilot to plan a sustainable, scaled up laboratory capacity program.

## Strategy

### *Scoping Current Activity and Identifying Needs*

The UK Food and Environment Research Agency (FERA) was commissioned by the GFSP to undertake a scoping exercise to assess the types of laboratory training currently available and to make recommendations to the GFSP about the best way to approach laboratory training globally. In consultation with key organizations, FERA delivered a report outlining a framework for international food safety laboratories' training and capacity building. The report has been a significant milestone in progressing laboratory training under the GFSP. It addresses: global food safety laboratory capacity building needs and rationale, the role of food analysis in supporting a food safety infrastructure, food analysis requirements along the food chain including detailed annexes and tables for tests and reference methodologies, training requirements and solutions including existing capacity, case studies illustrating interface between public and private labs delivering services in support of national food safety standards, and a framework for future implementation. The report is entitled *A Proposal to Develop a Framework for International Food Safety Laboratories' Training and Capacity Building* by P. Brereton and others, and can be accessed at [www.gfsp.org](http://www.gfsp.org).

---

## ***Capacity Building Responding to Identified Needs***

To draw on and advance the work undertaken by FERA, the GFSP Expert Group for Laboratory Training has planned a Laboratory Training Pilot for China to begin in December 2014 and run through mid-2015. The pilot would be a first step toward a sustained GFSP effort to address the needs in laboratory training. A key underpinning principle of the GFSP Pilot has been consolidating and utilizing existing materials and resources when appropriate and avoiding reinvention wherever possible.

For the purpose of the Pilot, the Joint Institute for Food Safety and Applied Nutrition's (JIFSAN) International Food Safety Training Laboratory (IFSTL), at the University of Maryland, will work with other GFSP partners including Waters Corporation, IFSTL FERA, the Chinese Centre for Food Safety Risk Assessment (CFSA), Nestle, US Pharmacopeia (USP), and the GFSP Secretariat. The Pilot will involve delivering a training program for China on the measurement of veterinary drug residues in food of health and trade concern. In addition to CFSA, the Chinese Academy for Inspection and Quarantine (CAIQ) and the Chinese Academy of Agricultural Sciences (CAAS) will join the pilot as Chinese Government partner organizations. By involving these particular agencies, significant areas of the Chinese food safety system will be actively involved: primary production/agriculture (CAAS), the domestic system (CFSA), and the import/export system (CAIQ).

To evaluate the progress made by the trainees, the participating labs will receive a proficiency test sample from the FAPAS scheme and will be expected to complete the analysis and submit results. The labs will receive a PT report which they will be able to use toward fulfillment of their accreditation requirements as appropriate.

## **Results**

### ***Building on Existing Resources in the Partnership Approach***

The first positive outcome is that this activity successfully built on several years of work by the APEC Food Safety Cooperation Forum (FSCF) Partnership Training Institute Network (PTIN). It has also drawn on significant expertise in laboratory training within the International Food Safety Training Laboratories (IFSTL) at JIFSAN and FERA. The GFSP was able to harness this experience and stakeholders to build on what had previously been done. As a result, significant expertise and investment has been made which is a major achievement in itself.

### ***Scaling Up***

Once the pilot is implemented, it will be determined how it will be most effective to scale up the laboratory training in China and also how the experience from the pilot will be applied to other countries and regions of need.