When is a Grouper Not a Grouper?

Florida Bureau of Food Laboratories Has Heavy Focus on Consumer Services, Emergency Response

**Director**  
Yvonne Hale, director of the Florida Bureau of Food Laboratories, is a former Air Force brat who attended 12 different schools. As an adult, she has long considered Florida home. Hale studied biology at Florida State University, community health at the University of North Florida and public health at the University of South Florida, where she is now a PhD candidate. Most of Hale’s professional life has centered on the Florida public health laboratory in Jacksonville, where she spent 21 years doing everything from parasitology to TB testing. During that time, Hale honed her quality assurance (QA) skills both on-site and abroad, providing technical assistance to laboratories in El Salvador (as part of the APHL Hurricanes Mitch & Georges project) and in Ivanovo, Russia (as part of a CDC team). “The laboratory experience really paid off to be able to work on these international projects,” she said. When a QA position opened within the Florida Department of Agriculture and Consumer Services (DACS) in the laboratories of the Division of Food Safety, Hale applied and was brought onboard. Three years later, in early 2005, she was promoted to head the Bureau of Food Laboratories, one of three bureaus within the Florida Division of Food Safety.

**Location**  
The three Division of Food Safety bureaus—Food Laboratories, Chemical Residue Laboratories and Food and Meat Inspection—are in Tallahassee, also home to Florida State and Florida A&M universities and the state legislature. “Our population changes depending on the season,” said Hale.

**Facility**  
The 10,000-square-foot Bureau of Food Laboratories occupies two of ten buildings in a DACS laboratory complex. The Bureau of Chemical Residue Laboratories takes up two more buildings, and Bureau of Food and Meat Inspection is located in a separate administration building. The whole complex, said Hale, is more than 30 years old and constantly being upgraded. So far, just the HVAC system has been completely revamped. “For Florida,” Hale said, “air conditioning is a major issue, and it is especially important in a laboratory setting.”

**# Staff**  
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**Revenue**  
“The food and meat inspectors are our direct customers,” said Hale. “We work for the inspection unit.” Thus, the bulk of the bureau’s funding comes from permits issued to grocery stores and other food vendors. Fee-based revenue is supplemented by state funding and grants from the USDA and the FDA, as well as redirect money from CDC bioterrorism grants.

**Distinguishing Characteristics**  
- A heavy focus on emergency response and laboratory integration. Having been hit by anthrax and by several major hurricanes, Hale said, “our state’s been very proactive in preparing for emergencies.” The state Department of Health, for example, checks the messages received by the Department of Agriculture consumer complaint line on a weekly basis. There is a memorandum-of-understanding between the Florida commissioner of agriculture and secre-
tary of health “to provide lab support in either direction,” and there has been cross-training among laboratorians in both state departments. Hale said, “If we needed to go to the Tampa health laboratory to work, my staff already knows those people and are familiar with that facility.” The Division of Food Safety is also an active participant in the evolving statewide laboratory response plan. In January, the state conducted a tabletop exercise simulating a foodborne outbreak. In addition to the state food safety and public health laboratories, the exercise involved state health officials, grocery stores, restaurants and half a dozen federal agencies. “If we’re prepared for emergencies, it helps us no matter what the cause; criminal or natural.”

- One of the few food safety regulatory laboratories in the Laboratory Response Network.
- A member of the Food Emergency Response Network (FERN).

**Notable Success Stories**

- Securing state funding for the department’s first BSL-3 suite and for four positions to work on counter-terrorism.
- Opening the laboratory’s first BSL-3 suite.
- Successfully responding to food-borne disease incidents. In 2003, for example, members of a film crew in Miami and patients at an eating disorders clinic on the Gulf Coast of Florida developed similar symptoms, indicative of food poisoning. The Department of Agriculture identified the source of illness as a histamine—a byproduct from decomposition—from a blue marlin that had not been adequately stored. “We had to locate the distributor of the fish and go to the source of the fish in Costa Rica. That was just one large fish,” Hale said, “This was a good example of everyone working together. None of us stands alone around here.”

**Highest Volume Testing**

The laboratory tests over 12,000 food samples each year, conducting roughly 58,000 analyses. Because 12,000 samples “is not that much compared to the volume of food on the shelves,” testing is targeted to items suspected of contamination and food sold by vendors with a history of safety violations. “A lot of our work,” said Hale, “is chemistry. We look for undeclared allergens or preservatives like sulfite. We look for economic adulteration, such as watered-down orange juice. We look for mercury in seafood. We do seafood authentication to make sure there’s no substitution of cheaper fish species; if the label says grouper, it has to be grouper. And we verify that foods advertised as sugar-free have no sugar added. We also check to see what else is in the food, like bug parts or rodent hairs.”

**Biggest Challenges**

“One of our biggest challenges is to stay current with the new technology and to train staff to go from conventional microbiology to instrumentation.”

**Goals**

- Bringing new technology online to assure compliance with food safety regulations within the state. Hale plans to upgrade testing for mycotoxins and to add a) antimicrobial susceptibility testing, b) chemical analyses for shellfish and marine toxins and c) microbiological testing for norovirus, Hepatitis A and emerging organisms such as Campylobacter and Enterobacter sakazakii.
- Developing and implementing in-house methods to use PCR testing and DNA sequencing for fish speciation. “Down-range, we’d like to do identification of cooked seafood.”
- Upgrading the laboratory information management system (LIMS). “We upgraded our current LIMS in 2000 and it’s now becoming obsolete. This is a priority within the next two to three years. Our division is very proactive; we don’t like to wait until problems arise.”
- Achieving—and then maintaining—International Standards Organization (ISO) accreditation this summer. Accreditation is “not just about quality assurance, but quality improvement. When staff start seeing the need for improvement from the bench level, it’s really good. And we are seeing that happen now.”

**Vacancies**

Five positions are being held vacant in anticipation of cuts in the USDA Microbiological Data Program budget.

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