

The College of Veterinary Medicine at Cornell Institutes Problem-Based Learning Approach

The Smith-Kilborne Program gives students an introduction to the fight against animal diseases.

By Stephen Sabetti

Richard Goldstein was the clinical member of a team – comprised of toxicologists from the New York State Animal Health Diagnostic Center, which is part of Cornell's College of Veterinary Medicine, and staff at the US Federal Drug Administration and pet food manufacturer Menu Foods – that determined melamine as the contaminant that caused kidney failure in 15 cats and one dog in the US in spring 2007. The U.S. Department of Agriculture and Cornell University College of Veterinary Medicine's are partnering in the delivery of the Smith-Kilborne Program. The program, reactivated in 2002 under the current format, helps introduce veterinary students to different foreign animal diseases, including the foot-and-mouth disease, bovine spongiform encephalopathy ("Mad Cow Disease") and avian flu.

Every year during the last week of May, one student from each veterinary school in the U.S. (and occasionally from other Colleges abroad), get an opportunity to participate in the Smith-Kilborne Program. The students spend their first three days at Cornell, participating in disease outbreak simulations before departing to the Plum Island Animal Disease Center, where students receive hands-on experience with selected foreign animal diseases.

Plum Island was purchased by the U.S. government during the Spanish-American War, and served as a coastal defense fort during World Wars I and II. Following its deactivation in the 1950s, the island was transferred to the U.S. Department of Agriculture, which established the Plum Island Animal Disease Center, as a biocontainment research laboratory for the study of highly infectious foreign animal diseases. In 2003 the island center was transferred to the newly created Department of Homeland Security, but continued to host the research, diagnostic and teaching missions of the USDA.

Hands-on experience is part of the program for all Cornell students.

"We have a problem-based learning approach for a significant part of the time [at the college]. It's not the only way, but it's early in the program," says Stephanie Specchio, director of communications at Cornell. "Small groups come together with a mentor and a tutor and they are given a 'Here's a case, what are you going to do to solve it?'"

At a Glance

Location: Ithaca NY

Opening Date: 1894

Number of Students: 341

Financial Aid Offered: Direct loan

Programs Offered: DVM, dual degree Ph.D.

Website: www.vet.cornell.edu Problem-based learning began in 1993, a result of a joint effort by the dean and the faculty who were looking to move Cornell forward as it approached its centennial. In their first year at the college, students participate in this program, which fosters more interaction with teachers.

"Usually, at the beginning of any case, students don't know much about what a case is about," says Katherine Edmondson, assistant dean for learning and instruction. "So, there's a lot of hypothesis generation and a need for questions. The cases will unfold one page at a time, so on Monday, [students] simply meet their patient and get to know its injury. [Students] are very skilled at finding information. When a gap in their knowledge becomes apparent to them, either because they know they don't know or the faculty asks, they're very good at getting information. When they're given the opportunity to participate, they really do."

The opportunity to gain first-hand experience is also integrated in extracurricular activities. For instance, students who



participate in the Southside Community Center's Well Pet Clinic take the lead with patient examinations. At 6:30 p.m. on the first Wednesday of every month, students in the veterinary program partner with a community center to bring well pet care to community residents. For \$10, pets receive basic veterinary treatment, such as physical examinations and vaccinations. The exams are usually performed by students in their first or second year at the college. Faculty and community veterinarians are on-site to assist when needed.