

## GAY MILLER

2006-07 AAAS Fellow at the U.S. Department of Agriculture  
Animal and Plant Health Division

Unlike Garrick Louis (featured on the previous page), when Gay Miller accepted a 2006-07 AAAS Science & Technology Policy Fellowship placement at the U.S. Department of Agriculture (USDA), she wasn't concerned about leaving behind her children in Illinois. After all, her youngest had just graduated from college. Instead, Gay, a tenured professor of veterinary epidemiology and preventive medicine at the University of Illinois' College of Veterinary Medicine, had to find people to look after her horses, goats, and other livestock that reside on her family's 53-acre farm. Moving to the hustle and bustle of the nation's capitol from rural Illinois was a bit of a shock for this self-professed country girl, but Gay says the fellowship experience far surpassed her expectations.

Working for the USDA's Animal and Plant Health Division, Gay spent her fellowship year researching and providing input into the organization's plans for handling foreign animal diseases that could potentially be introduced into the nation's livestock, including highly pathogenic avian influenza and foot and mouth disease. "If the food animal populations in this country were infected—potentially by an act

of bioterrorism—there would be far-reaching implications not only for the producers who would be affected by such an outbreak, but also for U.S. consumers, our trading partners, and the U.S. economy as a whole," she says.

Although Gay's fellowship work with the USDA builds on her 25 years of academic research into animal diseases that affect food supplies, getting approval to spend a year away from the university was more difficult than she anticipated. "Many in academia don't understand the importance of bringing science to policymakers. I hope that will change as more professors become involved in programs such as the AAAS Fellowships," she says.

In addition to authoring a book chapter for the *Wiley Handbook of Science and Technology for Homeland Security*, Gay worked on a project to integrate the University of California's Lawrence Livermore National Laboratory's epidemiological model with economic models developed at Iowa State University that can estimate the economic impacts and international trade consequences of an avian flu outbreak.

Gay wasn't able to renew her fellowship due to obligations at her university, but she'll continue working on a cooperative agreement with the USDA's National Veterinary Stockpile to examine the epidemiologic and economic consequences associated with a potential foreign animal disease outbreak. She also plans to apply for another AAAS Fellowship when she goes on sabbatical in the future. "My experience as a AAAS Fellow has been far superior to any type of general development that happens during most sabbaticals. I'll certainly be encouraging my colleagues to look into AAAS Fellowship opportunities," Gay says.

