

We're All Connected:

Illinois Takes a Global Approach to Sustainability

By Herbert Whiteley

Nearly 100 years ago, the conservationist John Muir, founder of the Sierra Club, wrote: "When we try to pick out anything by itself, we find it hitched to everything else in the Universe."

This interconnectedness is one of the reasons that our College places a high value on including a global dimension in all its activities, and why our faculty members are conducting research in African wilds, aiding wildlife conservation in zoological institutions, and educating leaders around the world about environmental sustainability.

Interconnectedness is especially evident when it comes to human, animal, and environmental health in the twenty-first century. We must find ways to prevent the next bird flu, SARS, or other infectious disease from jumping from one species to another—with devastating consequences.

Dr. Thomas Gillespie, a new faculty member with a joint appointment in our Department of Pathobiology and in anthropology, is addressing this problem. He directs the University of Illinois Earth and Society Initiative on Emerging Disease & Ecosystem Health, which unites programs and researchers across the Urbana campus who investigate urgent questions about the relationship between the environment, sustainable development and agriculture, and human and ecosystem well-being.

His research, conducted with Dr. Tony Goldberg, is based in a Ugandan national park. Using surveys of area residents, observations of primate behaviors, evolutionary microbiology, and data about landscape features, they look for the causes of disease transmission between

species. Ultimately, they hope to identify effective public health and conservation intervention strategies that will help protect human health worldwide from emerging infectious disease.

Two faculty members based in Chicago—Drs. Michael Kinsel and Karen Terio, with the Zoologic Pathology Program of the College's Veterinary Diagnostic Laboratory—are actively engaged in the management of endangered species at North American zoos. They also are involved in conservation medicine projects in Namibia and elsewhere and conduct research into diseases affecting wild and captive animal populations.

Dr. Terio is working to figure out why captive cheetahs are affected by *Helicobacter*-associated gastritis, while their wild counterparts are not. The findings about the immune system may have implications for human populations suffering from ulcers.

Fifteen years ago, Dr. Val Beasley of our Department of Veterinary Biosciences started the Envirovet Summer Institute. This unique program focuses on the interface between wild areas and areas dominated by human activity, and advocates a multidisciplinary approach to finding sustainable solutions to environmental problems. More than 250 veterinarians, veterinary students, and wildlife biologists from around the world have studied with him and an international Envirovet faculty to learn to work with society for the protection of animal and human health.

Closer to home, the volunteer-run Wildlife Medical Clinic promotes the health and well-being of Illinois wildlife and provides an invaluable dimension to veterinary education. Under the direction of Dr. Julia Whittington, the clinic treats nearly 2,000 injured or ill animals every year—from robins and eagles to foxes and turtles. It gives student volunteers a structured, supportive environment for gaining hands-on medical experience from their first weeks in veterinary school. At the same time, it assists the Illinois Department of Natural Resources on disease surveillance issues that affect public and environmental health.

Whether conducting life-saving research into emerging infectious disease or preparing professionals to address the health concerns of our planet, our College is taking a global approach to issues that have an impact right here in Illinois. Only by simultaneously addressing the health of human populations, animal populations, and the environment can we learn strategies to promote and sustain a healthier planet.

Feel free to connect with me any time. You can reach me at dean@cvm.uiuc.edu.