

Veterinarians: Taking science to the next level

(ARA) - So you think veterinarians are just those friendly folks who treat pets? Welcome to the 21st century and an amazing world of veterinarians who may specialize in animal health but are equally concerned about the health of the human race.

The field: veterinary pathology. The demand is great and the field is growing. Some specialize in recognizing disease and understanding how and why it occurs by examining animals in the clinic as well as studying their organs, tissues, cells, chemicals, molecules and genes. Other vet pathologists work in academia, government and industry. Pharmaceutical companies, for example, need veterinary pathologists to help test new drugs for safety and get approval from the FDA. Consequently, any decline in the number of veterinary pathologists could ultimately mean fewer life-saving drugs and treatments reaching consumers every year.

The need is great, the impact enormous.

"Within the next several years, every senior veterinary pathologist faculty member at Ohio State University will retire," says Paul Stromberg, president of the American College of Veterinary Pathologists and professor in the Department of Veterinary Biosciences at Ohio State. "It's not unique to Ohio State University — it's like that all across the country. There're just not enough people coming up in the ranks to replace them."

"It's hard to believe that a few retiring professors could have much of an impact on our lives. But a shortage of veterinary pathology professors could soon have lasting impact on global human health," says Stromberg. "This shortage will have huge impact on health and medicine, where veterinary pathologists perform critical behind-the-scenes work."

With 75 percent of the emerging infectious diseases over the past 20 years

originating in animals, veterinary pathologists remain on the frontlines of disease prevention as well as that of potential epidemics. Two veterinary pathologists in New York were the first to detect the West Nile virus in the United States. This quick detection is crucial to containing other outbreaks like the Ebola virus or avian flu and is a specialty unmatched by any other profession.

Zoos and pet owners will also be affected. Few zoos have the financial resources to employ a full-time veterinary pathologist. So when zoo animals die of unknown causes, university pathologists perform autopsies to help determine the cause of death. And when a cherished pet dies unexpectedly, the veterinary pathologist at a local university can sometimes provide answers that help owners through the grieving process.

"It's not that the last guy will turn out the lights, go home and that will be the end of the profession," Stromberg says. "The real problem is that the shortage of academic pathologists will slow down progress. Progress in detecting emerging diseases; identifying new drugs and developing new approaches to disease detection, treatment and management; and perhaps, protecting the world from Ebola virus or the next emerging disease or act of bioterrorism."

What it takes to become a veterinary pathologist:

Veterinary pathologists train an additional three to six years after veterinary school. They then must pass a certification exam with the ACVP to become members of the elite organization. There are currently 45 veterinary pathology university programs in the United States.

"We're working hard to help people understand that a career in veterinary pathology academics can be wonderfully rewarding," Stromberg says. "It's ready-made for anyone with a love for animals and a fundamental desire to teach." The rewards of such work can be mind-boggling. For example:

- The work is critical to quality veterinary care and rewards you with immediate satisfaction.
- Contributions benefit a large number of animals and people every day.
- Be the first to recognize a new disease or public health hazard — or to discover something else equally meaningful and important.
- Embark on a lifetime of learning and face exciting new challenges daily.
- Generous compensation packages and flexible hours provide a family-friendly environment.
- Become a key participant in the development of safe and innovative products to meet unmet medical needs, increase agricultural productivity and have a positive impact on customers' business and/or life.

To learn more, visit www.acvp.org.