

Consider a Career as a Guardian of Public Safety: Veterinary Pathology

(ARA) - With about three-quarters of the nation's population taking at least one prescribed medication, it's no secret that our bodies need help to be healthy. Heart disease, insomnia, depression and other diseases have reached epidemic levels.

Heart disease has almost quadrupled since 2000. Nearly 80 million people in the United States have heart disease, up from 22 million. More than 70 million people in the United States suffer from insomnia, a number that has stayed the same for a number of years. Roughly 18 million adults in the United States suffer from depression. Ten times more people suffer from major depression now compared to 60 years ago.



Fortunately drugs like Lipitor, Ambien and Zoloft have improved our quality of life and allow people to live longer, healthier lives. Lipitor is used to lower the amount of bad cholesterol, and Ambien is used for people with insomnia to help them sleep better. Zoloft is an antidepressant, but it's also used to help obsessive compulsive disorder, panic disorder, social phobia and post-traumatic stress disorder.

These valuable drugs don't happen by themselves. And often, the frontline of drug discovery and ultimately development begins with a relatively unknown profession: veterinary pathology. These scientists are part of a team that not only finds the drugs that keep us healthy; they also keep thousands of unsafe drugs from ever hitting the drug store shelves.

These individuals are uniquely aware of animals' and humans' responses to drugs, because to know the animal body makes it easy to know the human body.

Ricardo Ochoa, a veterinary pathologist and pharmaceutical consultant, says veterinary pathologists have helped keep thousands of compounds that could have been harmful to humans from getting into development. Ochoa has worked extensively in the pharmaceutical industry discovering and developing drugs as a drug development scientist.

"People don't realize that most of the compounds that we start working with actually don't make it," adds Ochoa. "Veterinary pathologists are guardians of the safety of compounds, and ultimately, of the greater population. The odds of becoming a winner in American Idol are better than getting a compound to the market."

Hundreds of processes go into producing a therapeutic drug. Veterinary pathologists have proved to be invaluable assets in the pharmaceutical industry, but there is currently a shortage in the pipeline that could hinder future pharmaceutical development. Currently there are approximately 1,500 licensed veterinary pathologists – and only a small percentage in the pharmaceutical industry.

Ochoa says that the American College of Veterinary Pathologists (ACVP) is working hard to ensure that there will be sufficient veterinary pathologists to continue to serve humanity. For more information on the profession, and other areas of public health served by veterinary pathologists, go to www.acvp.org. And the next time you pop a pill, quietly thank a veterinary pathologist.

Courtesy of ARAcontent