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The U.S. Bureau of Labor predicts a shortage of 28,000 veterinarians by 2011. This shortage far exceeds the existing abilities of the nation's 28 colleges of veterinary medicine to fill that need. The public's image of the veteri-

nary profession as the "Gentle Doctor" serving "All Creatures Great and Small" and "The Other Family Doctor" has been altered by recent events. September 11, 2001, signaled a dramatic challenge for the public practice aspects of veterinary medicine. The events of 9/11 caused congressional leaders to become acutely aware of the significance of veterinary medicine in preventing, detecting and diagnosing animal diseases; in other words, protecting our national security.

Urgent issues that confront our present and future veterinary workforce include agroterrorism, bioterrorism, environmental safety, wildlife diseases, the security and safety of the national food supply in a global market, new or reemerging disease pathogens, and population increases that exceed the demands for veterinary services in companion animals and certain species of production animals. The failure to diagnose foreign animal diseases and zoonotic agents accurately and rapidly, whether induced intentionally or occurring naturally, could lead to the loss of human and animal lives in the United States, as well as catastrophic economic losses.

Colleges of veterinary medicine are the academic wing of the American Veterinary Medical Association and supply the nation with highly trained veterinary scientists. The colleges are also the state, regional and national support base for private practicing veterinarians that serve as first responders in the surveillance of domestic and foreign animal diseases. Diagnostic laboratories at colleges of veterinary medicine provide accurate and rapid detection and diagnostic services to all phases of the animal industry, thus insuring the safety of animal protein food sources and efficient, economical production.

The Mississippi State University College of Veterinary Medicine has four state veterinary diagnostic laboratories fully accredited by the American Association of Veterinary Laboratory Diagnosticians. Only 38 accredited laboratories exist in North America. The Mississippi Veterinary Research and

Diagnostic Laboratory System (MVRDLS) is the only system in the U.S. to have an accredited fish laboratory and one of the few laboratories to have an accredited poultry laboratory. The MVRDL system processes more than 90,000 diagnostic tests annually from veterinary clinicians and the animal industries in the state. This system also provides monitoring and surveillance, through contracts with the Mississippi Department of Health, for domestic, foreign and various other animal diseases that can infect humans.

The Animal Health Center (AHC) of the college serves as the primary referral center to our approximately 650 state veterinarians who care for companion animals and livestock. A recent study in another southern state revealed an average yearly contribution to the state economy of more than \$380,000 per practicing veterinarian. Veterinary specialists in our animal health center provide surgical support, special diagnostic procedures, internal medicine and cancer management to a variety of animals. Services of the center are available on a 24-hour emergency basis, along with continuing education courses and real-time consultation with species and discipline specialists.

Our researchers are working to develop vaccines and other management tools and strategies to reduce disease-related production losses. Poultry and farm-raised catfish are the primary species being targeted. MSU-CVM received more than \$4 million in research grants and contracts from federal and industrial sources in the past year, which is double the amount generated four years ago. The Biomedical Research Center and Center for Environmental Health Sciences have received millions of dollars in research grants and contracts over the past few years. Our scientists' research has prevented the shutdown of a local community's poultry processing plant and prevented the use of unwarranted vaccines. Exciting new discoveries and applications in the emerging fields of proteomics and genomics are aggressively being pursued by our faculty. Discoveries in these areas will eventually lead to the manipulation of diseases at the cellular and molecular level.

In summary, the MSU-CVM is poised to respond to the future needs of the veterinary profession. Adaptability of our academic program allows us to meet the broad demands of public practice by offering more opportunities in nonpractice careers without neglecting the essential and historic commitment to agriculture and animals. The future of MSU-CVM is bright, and we enthusiastically embrace the challenges necessary to meet the needs of clients, society and the nation.