

Testimony before the House Appropriations Committee
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**Funding for the Diagnostic Center for Population and Animal Health (DCPAH),
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I would like to thank the committee for allowing me to present today on a request for \$1.5M of recurring funding for the Diagnostic Center for Population and Animal Health (DCPAH), which is the veterinary diagnostic laboratory for the State of Michigan and is part of the College of Veterinary Medicine (CVM) at Michigan State University (MSU). My name is John Baker and I am the Dean of the College of Veterinary Medicine. I have been a faculty member in the college for 32 years. During my time at MSU I have served as the Section Head of Food Animal, Associate Dean for Research and Graduates Studies, and I was appointed to the Michigan Agricultural Experiment Station, which is now called AgBioResearch, and served for 10 years as acting director and associate director before becoming the Dean of the College of Veterinary Medicine.

First, I would like to give a brief history of veterinary diagnostics in the State of Michigan. Unfortunately, the history is built around disasters. Prior to the 1970's, veterinary diagnostics was under the Michigan Department of Agriculture. In the early 70's an event occurred that resulted in the diagnostic laboratory being moved to MSU. This event was the accidental poisoning of livestock in the state, particularly dairy cattle, with polybrominated biphenyl, which you may have heard referred to as PBB. PBB is a chemical flame retardant that was accidentally mixed into animal feed. This event still stands as the worst case of agricultural poisoning, not just in Michigan and not just in the United States, but in the history of the world. Following this event the veterinary diagnostic laboratory was moved to the CVM and was named the Animal Health Diagnostic Laboratory.

There are still ongoing studies as to the effects on humans now looking at second and third generation offspring of people originally exposed to PBB.

The second major event in the history of the Veterinary Diagnostic Laboratory in Michigan was in the early 1990's when Bovine Tuberculosis was detected in deer in the Northeastern Lower Peninsula. Never before had Bovine Tuberculosis become established in a wildlife population in North America. Subsequent testing revealed the disease present in cattle herds. Over 60 affected cattle herds have been detected at this point and active transmission to cattle is still taking place. The United States Department of Agriculture, Michigan Department of Agriculture and Rural Development (MDARD) and Michigan Department of Natural Resources (MDNR), with DCPAH as a partner, continues to work towards eradication of this disease in Michigan. I should also point out that Bovine Tuberculosis is a zoonotic disease, which means this disease can be transmitted from animals to humans. Bovine Tuberculosis is a public health issue in Michigan. As a result of Bovine Tuberculosis in Michigan, a new state-of-the-art laboratory was built on the MSU campus with state funding and is the current DCPAH. Even though the laboratory is over ten years old, from a facilities standpoint it is one of the best in the country. It is undisputed that the four best veterinary diagnostic laboratories in the country are Michigan, New York, California and Texas.

There are over 140 reportable animal diseases in Michigan that are required to be reported to the state veterinarian. Quoting Michigan law, "Office facilities and laboratory services for the investigation of infectious, contagious, or toxicological diseases of animals shall be made available for the state veterinarian's use". As you can see, DCPAH plays a large role in supporting the Office of the State Veterinarian. Recent events clearly demonstrated the importance of this laboratory to the health of domestic animals, wildlife and public health in the State of Michigan. Some examples are:

Chronic Wasting Disease in Deer – This disease was diagnosed last year for the first time in free-ranging Michigan deer. The impact and extent of spread is still being defined by the MDNR with diagnostic support being provided by DCPAH.

Avian Influenza – Last year DCPAH diagnosed avian influenza in Michigan wildlife, but we were spared the devastating outbreak that occurred in Iowa, Minnesota and Wisconsin. The number of birds lost approached 50 million. However,

DCPAH did ramp up and prepare for the worst. We expended funds to do so with no support from the state. To inform you of seriousness this type of situation can be, the outbreak in Minnesota resulted in their diagnostic laboratory going into 24-hour operation.

Seneca Valley Fever Virus – This is a new virus in pigs and with clinical signs that can be confused with Foot-and-Mouth Disease. Foot-and-Mouth Disease is a foreign animal disease that if introduced to the United States, would have a devastating impact on our livestock industries. When this disease shows up at Michigan slaughter facilities, as it has, it is presumed to be Foot-and-Mouth Disease until proven otherwise, and it can have severe economic impacts. Slaughter plants have to discontinue operations and products cannot move into the supply chain.

Canine Influenza – This disease was detected in Michigan last year. Cases are still actively occurring.

Eastern Equine Encephalitis – There have been recent cases in Michigan. A zoonotic disease (diseases transmitted from animals to humans). The case fatality rate in humans is high.

Swine Enteric Coronavirus – Michigan has been dealing with this new disease of pigs for several years.

Toxicological diseases – There have been numerous events in Michigan. The College of Veterinary Medicine and DCPAH have also been involved in testing domestic animals in Flint for lead poisoning. Lead poisoning is a reportable disease to the state veterinarian.

What does DCPAH do:

Preparedness: DCPAH has the tests needed, developed and validated and ready to deploy.

Surge capacity: The ability to ramp up as exemplified last year by the Avian Influenza outbreak.

Prevention: If at all possible through surveillance and monitoring, DCPAH prevents disease outbreaks. One problem with prevention is that it is hard to show an outcome because, if successful, nothing happens.

Containment: In the case of a disease outbreak there needs to be rapid detection followed by containment to limit the spread of disease.

When the new DCPAH building was transferred from the state to MSU, there were no operating funds provided by the State of Michigan. Our veterinary diagnostic laboratory is an accredited laboratory and is accredited through the American Association of Veterinary Laboratory Diagnosticians (AAVLD). The reaccreditation of the laboratory is scheduled for 2017. The following statement is directly from the guidelines for accreditation, "As diagnostic laboratories are a vital part of disease surveillance and monitoring, finances must be available to sustain these assignments. Since these laboratories serve the public good, surveillance resources are not intended to be self-sufficient financially and require financial support commensurate with the public good derived". A copy of this criteria of accreditation is included in the folders provided.

I would call your attention to the handout provided titled *Veterinary Diagnostic Laboratories – Direct State Comparison*. Listed here are a number of states with a large agriculture economic sector showing the direct support received from their state. Michigan is easy to find, we are the state where it is 0.

The DCPAH is projecting deficits. Currently all support staff are paid off of laboratory income (at a cost of approximately \$6.1M). The university provides support for utilities and hazardous waste disposal at the approximate level of \$1.8M. Academic personnel (professors) cost approximately \$1.8M; that is not their full salary but the percent of their time dedicated to diagnostic work. In addition, the building is aging and we have deferred maintenance issues. Please keep in mind it is a very technologically sophisticated building and is expensive to keep in operating order. This is coupled with the constant need to repair and replace expensive equipment. Again, the DCPAH needs to be reaccredited next year, 2017.

Bottom line we are losing money on the testing we do to support Michigan agriculture. We do this for the public good. We have been subsidizing

agricultural testing off of the testing we do for companion animals (dogs and cats) and general fund educational funds that come to MSU. I direct you to the handout titled *Actual and Projected DCPAH Losses*. This graphically represents the losses we have suffered and projects them into the future. We have been covered through reserve accounts; the reserves will run out this fiscal year. Bottom line the primary mission of the CVM is to train veterinary students to serve the people of Michigan. In absence of state support for DCPAH the college will have to remain focused to meet our primary goal in allocation of resources.

Let's come back to prevention and let me refer you to the handout titled *Safeguarding Michigan Animals and Agriculture*. This gets back to what I talked about earlier. It is hard to get credit for successfully preventing something but if you don't prevent, there is a cost. This handout provides you with several scenarios of what a number of animal diseases would cost the State of Michigan. Included are not controlling Bovine Tuberculosis at \$48.8M, an Avian Influenza outbreak at \$27.2M, Foot-and-Mouth Disease (remember I said this would be devastating) at \$207.6M. Here is a bit of trivia for you – the United States has not had a Foot-and-Mouth Disease in a long, long time. The last outbreak in the US was in a town by the name of Niles located in the State of Michigan.

The governor recognizes the importance of agriculture to the State of Michigan and the importance of laboratories to MDARD. The Governor's budget proposal for next fiscal year includes over \$3M in support of MDARD Geagly and Heffron laboratories. I would argue there are 3 legs to the stool and DCPAH is one of them. Not only do we serve animal health and the livestock industry, we are involved with wildlife health with our MDNR partners and human health with the Michigan Department of Health and Human services. We are requesting \$1.5M in recurring operating support for DCPAH.

Bottom line, we are about protecting the health of Michigan's animals, including domestic animals and wildlife. We protect the health of Michigan's livestock and, thus, help support the second-largest economic sector in the state, that being agriculture. Lastly, we play a role in food safety and protecting human health. Please provide us with minimal support to meet these societal needs.

In closing, thank you for the opportunity to speak before your subcommittee today.

