

Efforts Under Way To Build Animal Disease Fighting Ability

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"We have good technology," Card said, "we have that. The problem is the money to develop these technologies so we can get them into the laboratory for instance."

According to Card, a good example of how an existing problem could be cleared up is in the swine industry.

"Enteric disease of swine is probably most common diarrhea condition that we have in swine."

"The bacteria that causes it is not readily cultured from the pig itself and the reaction of different blood and other tissues to different testing procedures is pretty negative. They don't react the way they should," Card explained.

"So in this swine disease, you get those that have the disease overtly. You can see it. It's a clinical disease of diarrhea in young

pigs, even in some older pigs, but basically young pigs, so it kills and stunts the growth.

"There's a carrier stage, generally in older pigs, and we can't detect that carrier stage."

"I know for a fact that there are two tests that are available, and we have been offered those tests and we hope to bring them in and develop them, but they are in the laboratory phase and it takes quite a lot of money to develop those tests beyond the lab phase to provide the kind of research that a company wants to have before they dump \$10 million, or whatever it's going to be, into the development and sale of a product like that."

"So, we know those two things are available. One is a monochromal antibody and the other is a slide that also takes advantage of an immune phenomena, and they have been developed by two scien-

tists at the University of Arizona.

"We can have that and we will, but developmental research is not really a major function of a diagnostic laboratory, it's really the function of a company that really wants to make sure."

"But the amount of money that can be derived from the sale of this to swine (producers) is so limited, that major companies won't even look at it."

"So we have that kind of problem. We have the technology, but its the development of the material — either the diagnostic material or the material for the treatment — that doesn't get done."

From a purely capitalistic point of view, "It's a limited market, so you don't touch it," Card said. But from the assessment of damage to farmers, he said, "Looking a loses, it's a major loss to hog producers."

State Research

According to Card, the tuberculosis and the enteric swine disease are "a couple of real examples of why we think we need to be doing some of the research ourselves. And we are doing some with John's with Cornell University. We need to bring some of these other issues in."

According to Card, the work with Cornell on John's disease is becoming productive.

"They have some exceptionally talented scientists who are working on the diagnostic techniques for John's. We have a good field program down here in Pennsylvania. So we're helping develop their field program, and they're helping us with their diagnostic techniques."

"That's the kind of thing we're doing as we work together on these problems," he said.

Even beyond the PADLS program, Card and others are getting together on a regional basis to address animal health issues.

"We had a meeting the other day in DuBois with people from Ohio, Cornell, University of Pennsylvania, Penn State, state veterinarians from Virginia, Maryland, two laboratory people from New Jersey, and people from the Ohio Department of Agriculture, and we talked about the concept of getting even more strongly coordinated in how we approach this, because in

the last 10 years I guess, Pennsylvania spent \$1.5 million on John's studies of one kind or another. We're gaining, but \$1.5 million is a lot of money."

Funding

The operational budget for the laboratories involved in PADLS is around \$3 million in round figures for the three laboratories, according to Card. And that doesn't include Summerdale, because those funds run from PDA to Summerdale.

He said, "If you threw the Summerdale budget in, your probably looking at \$4.5 million."

Card said that the annual cost is "operational funding for people, supplies, materials, travel, that sort of thing."

"We probably have, through PDA, \$500,000 per year for research. So we have research money and funds for the diagnostic lab."

"We don't have as much for field studies as we should have. That's one area we're trying to kick up to a decent level so we can get more people involved in these field studies."

The money is needed in order to make the adjustment to equipment and organizations to achieve goals desired. It's less costly than designing new facilities for each disease.

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