

Iowa's Research Facilities Provide Business Successes

Legislators toured Iowa State University's (ISU) research facilities late last week and received an update on the research projects that scientists are working on. They toured the BioCentury Farm, the U.S. Department of Energy's Ames Laboratory, the Midwest Forensics Resources Laboratory, the Veterinary Teaching Hospital, and the C-6 Chamber at the Virtual Reality Application Center.

The Ames Laboratory creates innovative materials, technologies, and energy solutions. The lab directs the development of applied technologies and affects the transfer of these technologies to industry.

The total workforce at the Ames Laboratory is 400 with 250 scientists and engineers. The federally licensed Porcine Circovirus Vaccine was developed jointly by ISU and Virginia Tech. Last year, there were 73 million doses of the PCV2 vaccine used in the U.S. Since Iowa produces 25% of the U.S. pork, it is estimated that this vaccine had a \$110 million impact on Iowa.

In the past year, the results through Iowa's three Regent institutions are:

- 177 new intellectual property disclosures,
- 174 patent applications,
- 143 new patents awarded, and
- 269 total license and option agreements yielded income.

Iowa's premier economic development program, the Grow Iowa Values Fund, provides an annual appropriation to the Regent institutions to develop research into new products that can then be marketed by businesses. A number of projects funded in earlier years of the Values Fund are demonstrating a significant impact on job and wealth creation. For example, nine startup companies whose projects received \$1.9 million in funding from the Values Fund in 2006 reported \$9.1 million in sales increases, for an average impact of \$3.6 million per company.

Legislators also received an update on the Institute for Physical Research and Technology (IPRT). IPRT provides scientific expertise to Iowa companies to help them solve manufacturing problems.

One of the products recently tested by ISU staff was from Prefense LLC of Muscatine. They studied the length of time a hand sanitizer retained its antibacterial properties. Just in time for what appears to be an intense flu season, the company can go to the marketplace with a next generation hand sanitizer that provides protection for 24 hours.

The Virtual Reality Applications Center allows engineers to use technologies as a digital test bed to create, evaluate and share virtual prototypes. They can analyze a factory, a product, or a piece of machinery, and make changes to the prototype before construction begins. One of the applications at the center viewed by Legislators helped John Deere with innovative designs. In virtual reality, large equipment like a John Deere combine, can be easily viewed and manipulated to explore design options.

Legislators plan to visit similar centers at the University of Northern Iowa and the University of Iowa.

