



Iowa's Pioneer Hi-Bred grows to deliver better seeds

The DuPont business is adding more than 225,000 square feet in central Iowa research facilities to support worldwide plant genetics research.

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At the crossroads in a worldwide race to supply the seeds needed to feed a world hungry for food and fuel, Iowa-based Pioneer Hi-Bred is investing heavily in central Iowa research facilities to develop and bring new corn and soybean seed technologies to market.

Pioneer, a DuPont business, has six complexes with more than 225,000 square feet of information management, business operation, research and laboratory space under development. According to Mark Miller, Pioneer's

director of corporate services, scientists in these and other Pioneer facilities are working nonstop to genetically develop corn hybrids, soybean varieties and other crops that produce larger annual yields.

"We're seeing great demand for Pioneer high-performing products and technology," says Miller. "Corn and soybean production must increase to keep up with the demand for food, feed, fuel and materials."

Pioneer's crop genetics research and development team is developing ways

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Semiconductors for mobiles from Iowa firm

Skyworks' designs operate wireless devices

With the completion of an expansion project at Skyworks Solutions, Inc.'s semiconductor design center in Cedar Rapids, the company is now hiring new design engineers, product engineers and technicians to continue its leadership in mobile connectivity and wireless communications.

"Cell phones, BlackBerrys, Palms and other wireless devices are elaborate radios," says Joel Penticoff, Skyworks Solutions senior director of engineering and site manager of the Cedar Rapids location. "Our Iowa facility houses design engineering, layout, prototype development and test optimization for a variety of Skyworks' products.

"These power amplifiers, semiconductors, modules and direct conversion radios enable consumers to not only converse on their cell phones, but to send e-mails, download images and videos, and surf the Internet from their hand sets," he continues.

"Skyworks is constantly striving to develop smaller power amplifiers and semiconducting chips with higher efficiency to consume less battery power at lower costs," Penticoff says.

"Nokia, Samsung, Sony Ericsson, Motorola and other makers of multimedia hand-held devices must optimize every millimeter of their devices, so we need to deliver innovative solutions," he says.

With the completion of nearly 15,000 additional square feet of office and laboratory space, Penticoff says the Iowa

location is now Skyworks' largest U.S. research, design and development center with 100 employees. Helping leverage the multi-million dollar expansion—which will create 31 new high-technology jobs—was a series of tax benefits and credits from the Iowa Department of Economic Development's High Quality Job Creation (HQJC) program.



"Skyworks chose to expand here based on the positive experience the company has had here," he says. "We have an established track record of innovation and successful product development and look forward to growing our business here in the future."

"We feel that Cedar Rapids has the available technological workforce to fill these critical positions," says Penticoff. "And the area's high quality of life and low cost of living are advantageous if we do need to recruit talent."

As hand-held devices evolve from phones to music and video players, Internet devices, cameras and more, advances in wireless technology and robust semiconductors from Skyworks Solutions in Iowa will be important drivers in this evolution. ■

Higher skills for Iowa IT workers

Vouchers are being distributed to Iowa workers for free computer training to help them get the higher skills necessary to compete in today's technology-driven economy. Governor Chet Culver announced the partnership between Microsoft and the state of Iowa to extend free Information Technology (IT) training and certification to up to 5,700 Iowans.

"As Governor, my focus has been on creating good jobs for people across our state," said Governor Culver. "Public-private partnerships, such as Microsoft's Elevate America, play a key role by helping people get the training and develop the skills needed for today's new jobs."

Iowa is the fourth state, along with Illinois, Virginia and Washington, to join Microsoft's Elevate America program. Vouchers for the training in Iowa are distributed by Iowa Workforce Development. ■

Emerson locates \$14-million data center in Iowa

Global back-up for Emerson operations worldwide

Combine a highly qualified workforce with cost-efficient electricity and broadband networks, and you have the main drivers leading Emerson to locate a state-of-the-art data center in the central Iowa community of Marshalltown. That's according to Todd Finders, director, global data center services, Emerson.

"Our new Iowa data center will serve as the global development and back-up facility for Emerson operations worldwide," says Finders. "The servers housed in this facility provide the foundation for enhanced services for our more than 250 manufacturing sites around the world."

Emerson, a Fortune 100 company and global leader in bringing technology and engineering together, provides innovative solutions to customers through its network power, process management, industrial automation,

climate technologies, and appliance and tools businesses.

Finders says the Iowa data center joins a similar facility that has just come on-line in St. Louis. The two data centers are key centerpieces of a consolidation strategy within Emerson that will consolidate more than 135 data centers worldwide.

The data center is an expansion of an existing Emerson building and, according to Finders, the new facility has more than twice the capacity since the expansion. "This new facility will be a vital resource as Emerson continues to grow," he says.

Emerson in 1992 acquired Fisher Controls, which has manufactured control valves and regulators in Marshalltown for more than 125 years. Its customer base includes companies in the chemical, food

and beverage, oil and gas, life sciences, power, pulp and paper, refining, water and wastewater industries.

Emerson's Iowa expansion comes on the heels of the well-publicized "plug-in" of Google's \$600-million data center in Council Bluffs and Microsoft's selection of West Des Moines for its next massive data center. At the same time, Iowa is becoming a go-to destination for data centers.

Statistically one of the most secure locations in the U.S., information contained in an Iowa data center is safe from weather and terrorist threats.

Safe, secure and cost effective. That's the Iowa advantage for storing crucial corporate data. And, it's the innovative solution Emerson chose when it made Iowa its data center home. ■



The newly operational Emerson data center in Marshalltown houses more than 200 server cabinets containing 6,000 servers. The \$14-million state-of-the-art facility provides the foundation for enhanced connectivity among Emerson's more than 250 manufacturing sites around the world.

Official opening for IBM Services Delivery Center

Up to 1,300 jobs at new Dubuque, Iowa center



Governor Chet Culver of Iowa, along with IBM, state and local leaders, cut the ribbon to open the new IBM technology services delivery center, located in the historic Roshek Building in downtown Dubuque. IBM has hired several hundred people to work in the new facility and intends to employ up to 1,300 by the end of 2010.



**Iowa Governor
Chet Culver**

“I am committed to bringing high-quality jobs to our state, and I want to thank IBM for their partnership,” said Governor Culver.

“IBM’s decision to locate their new technology delivery center in the region makes the company a key player in Iowa’s growing information technology economy. I am pleased to welcome them to our state.”

“IBM’s global delivery centers are critical in delivering information technology services to our clients around the world,” said Mike Daniels, senior vice president and group executive, IBM Global Technology Services. “Today we celebrate the opening of a new center in Dubuque, Iowa, that will be a key hub in our delivery network, serving clients in the United States. We are delighted to partner with the city of Dubuque and the state of Iowa and look forward to a successful and enduring relationship.”

In January 2009, IBM announced the signing of

a 10-year lease, with optional extension years, to occupy the Roshek Building. The City of Dubuque, Dubuque Initiatives and IBM have worked together to upgrade the facility to make it a “green” building. With the



**Mike Daniels
IBM Senior VP**

goal of achieving Leadership in Energy and Environmental Design (LEED) certification, steps have been taken to ensure the renovation meets green building standards in the six categories outlined by the U.S. Green Building Council: sustainable sites, water efficiency, energy and atmosphere,

materials and resources, indoor air quality and innovation in design.

IBM is working with institutions of higher learning in the tri-state area of Iowa, Illinois and Wisconsin to recruit and train potential employees. In addition, IBM is looking for opportunities to partner with these schools to better prepare students for opportunities in the information technology industry, including the types of roles found at IBM.

The new facility joins an extensive network of more than 80 IBM delivery centers worldwide where employees maintain, monitor and support computer hardware and software and manage information technology services for thousands of IBM clients. ■



Eurofins \$10-million consolidation project in Des Moines was assisted by a \$200,000 award from the Iowa Department of Economic Development-administered Community Economic Betterment Account (CEBA).

eurofins expanding headquarters in Iowa

Four years after moving its U.S. headquarters to Des Moines, Dr. Michael Russell, Eurofins U.S. food division CEO, says the Belgium-based laboratory testing company will continue to acquire laboratories throughout North America and grow its headquarters in Iowa's capital city.

The company is moving forward with plans to consolidate its two Des Moines locations into a single space with capacity to grow in the future.

"We anticipate significant growth domestically, because of the increased focus on food and product safety," says Russell. "Companies in the food and beverage, pharmaceutical and cosmetics industries spend years and significant resources in nurturing their brands. All it takes is one quality-control breakdown or food-borne illness outbreak to sully a brand's image in the consumer's mind."

Russell says the Des Moines laboratory — recognized as a Center of Excellence for both vitamin and nutrition testing — specializes in analyzing food, feed, commodities,

pet food and dietary supplements for lipids, amino acids and proximates and minerals for nutrition.

"Our laboratory is equipped with highly sophisticated instruments that enable samples to be tested for contaminants at the parts per billion level," explains Russell. "We have the ability to offer certified audits of food and dietary supplement makers."

There are more than 110 employees that work at Eurofins Des Moines location, and Russell says that number is expected to grow. "We've been very pleased with quality of our Iowa staff and the ability to recruit scientists and technicians here," he says. "We look forward to providing an unparalleled range of testing and support services to our customers from Des Moines for the foreseeable future."

From seed to feed to the center of the dinner plate, Eurofins' Iowa location and employees are helping ensure the integrity of the nation's foods, beverages and dietary supplements. ■

Pioneer Hi-Bred *Continued from Page 1*

ways to increase the amount of ethanol that can be squeezed out of a kernel of corn, build drought tolerance and insect resistance into corn plants, and develop corn that can efficiently use fertilizer.

“Pioneer continues to make large advances in plant genetics,” says Miller. “Our research facilities in central Iowa support all of Pioneer’s molecular breeding around the world.”

Pioneer Hi-Bred’s expansion of research laboratories and information management facilities in central Iowa — and the creation of more than 200 new technology jobs that will result from them — received a \$1-million award from the Iowa Department of Economic Development-administered Physical Infrastructure Assistance Program (PIAP).

“This is an exciting time for Pioneer. Never before has the agricultural industry seen the tremendous opportunity and growth that it does today,” says Miller. “Our continuing investment in Iowa underscores our commitment to agriculture and to Iowa’s economy.”

Leading the world in crop genetics research, technologies and production, research scientists at Iowa-born and grown Pioneer Hi-Bred are daily striving to meet the global demand for food and energy. And with each advancement in corn and soybean performance, Iowa ingenuity grows to meet global food and fuel challenges. ■



Building Iowa’s lead in renewable fuels



Plymouth Energy operates one of the newest ethanol plants anywhere in the nation. Construction of the \$80-million plant near Merrill began over two and a half years ago. Now the renewable fuels company employs 35 people. The project qualified for Iowa tax benefits from the High Quality Jobs Creation (HQJC) program.

CEO Dave Hoffman of Plymouth Energy says, “Everything is done, the contractors are gone. It’s running at 100 percent capacity.” The plant will use 20 million bushels of corn to produce 50 million gallons of ethanol per year.

Output from the northwest Iowa plant and others across the state has made Iowa the nation’s leading producer of biofuels. Latest statistics from the Iowa Renewable Fuels Association show the Hawkeye state has the following ethanol and biodiesel production:

40 ETHANOL REFINERIES IN PRODUCTION

- Nearly 3.3 billion gallons of annual production capacity
- More than 1 billion bushels of corn demand

ONE ETHANOL REFINERY UNDER CONSTRUCTION/EXPANSION

- 275 million gallons of new annual production capacity

15 BIODIESEL REFINERIES IN PRODUCTION

- Nearly 323 million gallons of annual production capacity
- 175 million bushels of soybean demand

To learn more about opportunities for locating your renewable energy company in Iowa, contact the Iowa Department of Economic Development through our web site at www.iowalifechanging.com. ■

New RFID technology from Iowa

Works on overseas shipping containers

Metalcraft Inc., which has been providing property identification tags since 1950, has leveraged that expertise and is now viewed as one of the industry leaders in Radio Frequency Identification (RFID) technology.

According to John Henry, R&D and technical manager at Metalcraft in Mason City, RFID tags are attached to items for easy identification and tracking. “RFID tags function as tiny computers, containing data about the object they’re affixed to,” says Henry. “A silicon chip holds the unique data in each tag, and when combined with an antenna you have an inlay, the core of any RFID tag.”

Compared to other types of scannable codes, RFID tags have a much longer reading range, they’re reprogrammable and they can store and communicate plenty of information about the object they’re affixed to, including such things as origin and destination.

“Their big advantage is that they can be read wirelessly via radio signals, transferring their data automatically to

an inventory management program,” says Henry.

One hurdle to widespread acceptance of RFID tags, however, is the readability of tags attached to metal surfaces, such as the millions of shipping containers moving across the world’s oceans.

“Metal interferes with the radio signal, especially when the tags are read at longer distances,” says Henry. “One solution is to use tags with a thick insulating layer to separate them from the metal. But these tags stand off the surface and thus are susceptible to accidental removal.”

Working with Iowa State University’s Center for Industrial Research and Service (CIRAS), new RFID technology has been developed that addresses many of these challenges.

“Our partnership with CIRAS culminated in prototypes for two new RFID antenna designs. The new antennae ensure that RFID tags work even when mounted on metal surfaces,” says Henry. Metalcraft signed a

royalty agreement with the Iowa State University Research Foundation to license the new intellectual property and patents are pending.

Metalcraft received a \$117,810 award from the Iowa Department of Economic Development’s Iowa Demonstration Fund to assist it in commercializing the new technology.

The growth of RFID has created a marketplace with hundreds of choices designed to achieve a wide variety of goals. Helping a company select the best RFID tag components is where Metalcraft brings its years of expertise to bear.

Henry says the company can develop RFID tags that withstand environments ranging from mild to extreme and resist abrasion, caustics and acids, solvents, salt air, high temperatures, and UV rays. “Since our founding we’ve provided thousands of businesses throughout North America a range of choices in durable nameplates and labels to meet their tracking and controlling needs.” ■



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guest opinion

Expanding role of Iowa tech industry

Iowa may be known for some of the world's most fertile cropland, but in recent years, we've become fertile ground for rapid growth in information technology as well.

From the recent "plug-in" of Google's \$600-million Council Bluffs data center to Microsoft's planned half-billion-dollar West Des Moines expansion to IBM's 1,300-job-creating expansion in Dubuque, technology leaders are finding Iowa a place to grow.

And why not? Iowa has a supportive business climate and its infrastructure — physical and human — give our technology companies the competitive advantages that allow them to grow and prosper.

CNBC, the leading television business network, listed Iowa as one of the top states in the nation for business. It ranks Iowa fourth among the 50 states in their annual "Top States for Business" survey. The survey, which considers several factors, ranks Iowa first in the category of "cost of doing business."

A recent report detailing the technology industry in Iowa reinforces what we at the Technology Association of Iowa (TAI) have known all along: Iowa's technology industry is a vital part of not only our state's economy but also our competitiveness as a state to lure more attractive jobs and businesses within the market.

"Estimating the Economic Impact of Iowa's Technology Industries" was commissioned by the TAI and written by Dr. David Swenson, Iowa State University economics professor.

Key findings from the report include:

- Jobs at technology firms on average pay \$50,779, 48 percent more than the overall state norm for all jobs.
- The industry generated \$6.27 billion in value added or GDP in 2007.
- Technology firms represent 3.8 percent of the state's jobs and 5.6 percent of employee wages.
- Iowa's technology firms, either directly or indirectly, support 156,641 jobs earning \$6.3 billion in employee compensation. The industry accounts for \$10,696 billion (8.8 percent) of the state's GDP.
- Iowa technology workers in all firms — both technology and non-technology industries — total 54,750 jobs. These workers support 26,471 additional jobs in the state earning \$717.6 million worth of employee compensation and \$1.4 billion of the state's GDP.

Sitting in the heart of America, Iowa resides on the leading edge of America's technological future. And the TAI is dedicated to accelerating the success of our technology industry.

Along with the Iowa Department of Economic Development, TAI works to see that our business climate remains supportive, and the quality and quantity of technology workers are first rate.

For a confidential consultation on how an Iowa location can fuel your company's growth, contact an IDED project manager at 800.245.IOWA or visit www.iowalifechanging.com ■