

## CENTER FOR INDUSTRIAL RESEARCH AND SERVICE

IOWA STATE UNIVERSITY  
University Extension  
College of Engineering


[www.ciras.iastate.edu](http://www.ciras.iastate.edu)

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*Harvest Innovations production line at facility located in Indianola, Iowa.*

## CIRAS Assistance Allows Harvest Innovations to Focus on Growth

When Noel Rudie, director of research at Harvest Innovations, talks about the history and the successes experienced at the company over the past two years, he immediately acknowledges the level of service and depth of assistance provided by CIRAS. "The utilization of resources from CIRAS has allowed Harvest Innovations to focus on growth," says Rudie.

Harvest Innovations is a manufacturer of the finest ingredients for the food industry based on the natural nutritional benefits provided by cereal grains, legumes, and oil seeds. The company takes a holistic approach to manufacturing for its customers by starting with the highest quality raw materials and minimally processing so integrity remains intact. Because Harvest Innovations processing is hexane free, all of its products are considered natural.

Harvest Innovations was formed with the acquisition of Soy Innovations in early 2009.

"New investors provided not only financial resources but industry experience as well," says Rudie. "While they were a reputable manufacturer of soy ingredients for the food industry, Soy Innovations was under resourced."

With only twelve employees prior to the new ownership, the company quickly grew to twenty employees in July of 2009. "As a small company, Harvest Innovations had no internal resources to train employees, and local options for training were not adequate for the company's needs," says Rudie.

### ***A Wealth of Services Provided by CIRAS***

At the time of the acquisition, Harvest Innovations contacted CIRAS for employee safety training. Brenda Martin, account manager at CIRAS, connected them with the

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Center for Industrial Research and Service  
2272 Howe Hall, Suite 2620, Iowa State University  
Ames, Iowa 50011-2272

[www.ciras.iastate.edu](http://www.ciras.iastate.edu) • 515-294-3420 • Fax 515-294-4925

**CIRAS Mission Statement: Improve the quality of life in Iowa by enhancing the performance of industry through applied research, education, and technology-based services.**

## CIRAS

### Ames

#### Ronald Cox, PhD

CIRAS Director, College of Engineering Associate Dean  
515-294-9592 • [rcox@iastate.edu](mailto:rcox@iastate.edu)

#### JoAnn Miller

Chief Operations Officer  
515-294-4449 • [jvmiller@iastate.edu](mailto:jvmiller@iastate.edu)

#### Jeff Mohr, PE, Jonah

Lean Manufacturing; Noise Control; Training Within Industry  
515-294-8534 • [jeffmohr@iastate.edu](mailto:jeffmohr@iastate.edu)

#### Melissa Montalbo-Lomboy

BioPreferred Program  
515-294-5472 • [mmlomboy@iastate.edu](mailto:mmlomboy@iastate.edu)

#### Glenn Norton

BioPreferred Program  
515-294-1035 • [nortong@iastate.edu](mailto:nortong@iastate.edu)

#### Michael O'Donnell

EDAUCP Program Director;  
Supply Chain/Distribution Management  
515-294-1588 • [modonnll@iastate.edu](mailto:modonnll@iastate.edu)

#### Jessica Riedl

BioPreferred Program  
515-294-5416 • [jesriedl@iastate.edu](mailto:jesriedl@iastate.edu)

#### John Roberts, PE

Finite Element Analysis (FEA); Product Testing  
515-294-0932 • [jarobert@iastate.edu](mailto:jarobert@iastate.edu)

### Ankeny

#### David M. Bogaczyk

PTAP Program Director, Government Contracting  
515-422-6313 • [bogaczyk@iastate.edu](mailto:bogaczyk@iastate.edu)

### Bettendorf

#### Beth White

Government Contracting  
563-370-2166 • [whiteb@iastate.edu](mailto:whiteb@iastate.edu)

### Boone

#### Derek Thompson

South Central Iowa Account Manager  
515-419-2163 • [thompson@iastate.edu](mailto:thompson@iastate.edu)

### Council Bluffs

#### Gordon Bonnes

Government Contracting  
712-308-2229 • [gbonnes@iastate.edu](mailto:gbonnes@iastate.edu)

### Dubuque

#### Rudy Pruszko

BioPreferred Program  
563-583-6496, ext. 18 • [rpruszko@iastate.edu](mailto:rpruszko@iastate.edu)

### Elkader

#### Mark Reinig

Economic Development  
515-294-7883 • [mreinig@iastate.edu](mailto:mreinig@iastate.edu)

### Fort Dodge

#### Brenda Martin

North Central Iowa Account Manager  
515-570-5282 • [bkmartin@iastate.edu](mailto:bkmartin@iastate.edu)

### Grundy Center

#### Ruth Wilcox

MEP Program Director  
515-290-1134 • [rwilcox@iastate.edu](mailto:rwilcox@iastate.edu)

### Marion

#### Julie Fagle

Government Contracting  
319-310-8612 • [jafagle@iastate.edu](mailto:jafagle@iastate.edu)

#### Paul Gormley

Growth Services  
319-721-5357 • [gormley@iastate.edu](mailto:gormley@iastate.edu)

### Pella

#### Steven Devlin

BioPreferred Program Director  
641-613-3298 • [sdevlin@iastate.edu](mailto:sdevlin@iastate.edu)

### Sioux City

#### Robert Coacher

Western Iowa Account Manager  
515-419-2162 • [coacher@iastate.edu](mailto:coacher@iastate.edu)

### Vinton

#### Sean Galleger

Southeast Iowa Account Manager  
515-290-0181 • [galleger@iastate.edu](mailto:galleger@iastate.edu)

### Waterloo

#### Michael Willett

Operations/Production Management; Plant Layout Simulation;  
Theory of Constraints  
319-234-6811 • [mwillett@iastate.edu](mailto:mwillett@iastate.edu)

### Waukon

#### Joseph Papp, PE, CPIM

Northeast Iowa Account Manager  
515-231-1452 • [jpapp@iastate.edu](mailto:jpapp@iastate.edu)

## Engineering Online Learning

[www.ede.iastate.edu](http://www.ede.iastate.edu)

#### Paul Jewell

515-294-1827 • [pjewell@iastate.edu](mailto:pjewell@iastate.edu)

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# Cedar Rapids Manufacturer Rebuilds in the Aftermath of the 2008 Flood

For over 20 years, Bimm Ridder, a sportswear apparel manufacturing firm in Cedar Rapids, Iowa, has supplied screen-printed apparel and headwear to professional sports teams throughout the country.

On a fateful Friday in June 2008, the Cedar River rose to an unprecedented 31 feet. To put that figure in perspective, the river level at 12 feet is considered flood stage. The previous high mark was set in 1851, when the river rose to 20 feet.

Bimm Ridder was one of over 1,000 Cedar Rapids businesses nearly destroyed by the aftermath of these floods. “When disaster happens and you know you have to start over, it builds a fire in your belly,” says Gary Ficken, CEO of Bimm Ridder. “We’re now more efficient, smarter, and stronger because we have to be.”

Ficken knows firsthand what a disaster can do to manufacturers. The flood of 2008 submerged his factory in almost seven feet of water and destroyed screen-printing, drying, and other machinery. All totaled, the damages led to a loss of more than \$1.4 million of equipment, inventory, and supplies.

The company was forced to relocate and take on significant debt after sustaining this major loss. Ficken had no flood insurance, and little federal aid was available. He operated his business from the basement of his home for six months. By January 2009, he moved to his current facility in Cedar Rapids.

“During that time, many of our suppliers were very good to us by replacing our equipment at no cost, donating the labor to salvage any machinery that they could, and telling us to ‘pay us when you can,’” Ficken says.

Ficken was also supported by many disaster relief organizations. The Red Cross and Salvation Army provided food to volunteers during the first few weeks after the flood. Bimm Ridder needed to get back into production immediately, so Ficken worked with other screen printers to create solutions that kept them in business. In one local case, the companies’ peak seasons offset each other, so they decided to share employees.

“It was a win-win situation since it kept our people from being laid off and put temporary skilled workers to good use,” Ficken says.

## **CIRAS lends support and learns valuable information**

As a response to the floods and lack of government aid to manufacturers, Iowa State University Extension’s Center for Industrial Research and Service (CIRAS) began developing an Industry Emergency Management plan.

“Nobody was speaking up for the manufacturers,” says Sean Galleger, a CIRAS account manager for southeast Iowa. “We became the eyes and ears for them within organizations providing assistance to flood victims.”

The plan involved contacting companies impacted by the flood and identifying their needs. Bimm Ridder was one of the first companies contacted.

With the help of computerized models from CIRAS, Ficken was able to design a viable and efficient floor plan for his new location. He was also one of the first to participate in Business Continuity Planning, a coordinated effort between CIRAS and manufacturers. The program, developed by CIRAS after the 2008 floods, is a one-day workshop that prepares Iowa businesses for reaction and recovery in the event of a disaster.

Created for owners like Ficken who have gone through some type of disaster, the program assists business owners with the development of a plan to prepare for the worst-case scenario. During an eight-hour, on-site Business Continuity Workshop, owners begin by identifying risks to their business and end by developing an action plan to continually reduce risk over time.

While developing Business Continuity Planning, CIRAS relied on the experiences and information from Bimm Ridder and other manufacturing companies. “By consulting with manufacturers, we get an accurate assessment of what is needed from CIRAS to develop individual continuity plans,” Galleger says.

“The beauty of a business continuity plan is you don’t have to be in a panic,” Ficken says. “Time is very critical in disaster recovery, and the better prepared you are, the better your odds for the business to survive.”

Ficken is a member of the CIRAS Advisory Council. He and the other companies on the council serve as a liaison between CIRAS and business owners.

“The advice from the council lets us know what companies need from CIRAS, how we can improve, and how we can help,” Galleger says.

Bimm Ridder survived its disaster due to Ficken’s business initiative, loyal employees, and supportive competitors and suppliers. However, he knows the benefit of a pre-emptive plan created with the help of CIRAS cannot be underestimated.

*For more information, please contact Sean Galleger at 515-290-0181 or [galleger@iastate.edu](mailto:galleger@iastate.edu).* ■

# Trinity Fabricators Gets a Boost with Bid Match Service

Trinity Fabricators, Inc., a structural steel manufacturer located in New Albin, Iowa, has been receiving valuable services from CIRAS for over a decade.

“When we outgrew our original location in 2001, we asked CIRAS to facilitate a strategic plan related to the construction of the new manufacturing facility, with a focus on floor planning, material workflow, and continuation of production in the new location,” says Mike Verdon, president of Trinity Fabricators, Inc.

The mainstay of Trinity Fabricators’ business has been the creation of structural steel used in over 600 restaurants, including Applebee’s, Olive Garden, TGI Friday’s, Chili’s,

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***With services provided by CIRAS, Trinity Fabricators has been awarded four substantial government contracts since October 2010. CIRAS government contracting specialists work with Iowa businesses to understand the market potential of government procurement, lessen the barriers inherent in government contracting, and assist existing government contractors with market expansion.***

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Bakers Square, and Culver’s. “Most of the restaurants are located in the Midwest, but some have been as far away as Florida, Texas, and Oklahoma,”

Verdon says.

“It’s all about service,” Verdon explains. “These [restaurant construction projects] are notoriously fast-track projects. It’s important to deliver on time and to deliver accurately.”

When Verdon decided to expand Trinity’s business base in 2005, government contracting became

the target. To better poise his business for these prospects, Verdon went through the certification process and established Trinity Fabricators as a HUBZone (Historically Underutilized Business Zone) entity. Small businesses in a designated low-income area receive the benefits of limited-competition contract preferences and special consideration for government subcontracting opportunities.

“Even with the edge of Trinity’s HUBZone status, we fumbled when attempting to develop a working relationship with the federal government and secure government contracts,” says Verdon. “The endless acronyms and lengthy specifications were very overwhelming and discouraging.”

## ***A Winning Solution***

As an active member of the Advisory Council at CIRAS, Verdon frequented many of the workshops and strategic planning events hosted by CIRAS over the years. In the fall of 2009, he attended a Bid Preparation Workshop organized by CIRAS’ Procurement Technical Assistance Program (PTAP).

At this Bid Preparation Workshop, Verdon struck up a conversation with Julie Fagle, a CIRAS government contracting specialist. Fagle works with Iowa businesses to create an understanding of the market potential of government procurement, lessen the barriers inherent in government contracting, and assist existing government contractors with market expansion.

Verdon explained to Fagle that Trinity Fabricators has no dedicated staff to examine any government contracting opportunities. “We have no tools or means to make our bidding attempts competitive,” says Verdon.

As one of the services in the PTAP portfolio, Fagle offered the Bid Match software program that is provided at no cost. “By entering parameters to include industry-specific keywords, relevant NAICS [North American Industry Classification System] codes, and demographic information, the Bid Match service filters through local, state, and federal procurement opportunities,” states Fagle. “This is an excellent service our clients can use to identify opportunities in the government sector, which ultimately saves them time and money.”

Participants receive a daily e-mail of government procurement opportunities relevant to their business. Users of the Bid Match service can also perform hybrid searches, using National Stock Number serial numbers throughout a specific region, to determine which large prime contractors

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***“The income generated from these new government contracts, just from October 2010 through January 2011, accounts for two-thirds of our total sales over the last year. Part of the reason we are successful today and how we are now maintaining a year-end bottom line that is in the black is due to the exemplary services we receive from the PTAP team at CIRAS.”***

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***—Mike Verdon***

***Trinity Fabricators***

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*Trinity Fabricators was awarded the contract with the Army Corps of Engineers for the Flood Control Building at Lock and Dam #20 in Canton, Missouri.*

have received a federal contract award. “As a subcontractor, this gives us a leg up on our competition because we can immediately target our services to the newly awarded prime contractors,” explains Verdon.

### **The Big Payoff**

In the spring of 2010, Verdon made a commitment to utilize the Bid Match software system, devoting time each day to addressing new government procurement opportunities.

As a result of this new practice, Trinity Fabricators has been awarded four government contracts since the summer of 2010. Three are projects with the Army Corps of Engineers, working on lock and dam renovation and maintenance on the Upper Mississippi River. The other project is with the Coast Guard servicing the Port of Dubuque.

“The income generated from these new government contracts, just from October 2010 through January 2011,

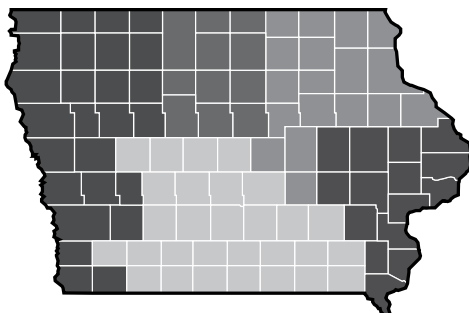
accounts for two-thirds of our total sales over the last year,” says Verdon. He further explains that these new accounts covered 80 percent of the year-end profit.

“Part of the reason we are successful today and how we are now maintaining a year-end bottom line that is in the black is due to the exemplary services we receive from the PTAP team at CIRAS,” says Verdon.

### **About the Procurement Technical Assistance Program**

Operated by CIRAS, PTAP helps businesses with the marketing of products and services to federal, state, and local governments by matching a company’s strengths with procurement opportunities. Services from PTAP include contractor registration and certification, bid preparation, marketing, and post-award assistance, including electronic commerce and radio frequency identification.

*For more information, please contact Julie Fagle at 319-310-8612 or [jafagle@iastate.edu](mailto:jafagle@iastate.edu).*



### **Account territories**

Account managers provide initial needs assessments and explore and match resources to client needs. The state of Iowa is divided into five account manager territories. Their contact information follows.

- North Central—*Brenda Martin* • [bkmartin@iastate.edu](mailto:bkmartin@iastate.edu)...515-570-5282
- South Central—*Derek Thompson* • [thompson@iastate.edu](mailto:thompson@iastate.edu)...515-419-2163
- Southeast—*Sean Galleger* • [galleger@iastate.edu](mailto:galleger@iastate.edu)...515-290-0181
- Northeast—*Joseph Papp* • [jpapp@iastate.edu](mailto:jpapp@iastate.edu)...515-231-1452
- Western—*Bob Coacher* • [coacher@iastate.edu](mailto:coacher@iastate.edu)...515-419-2162

# Seminar Focuses on Job Creation Strategies for Iowa

On May 20, policymakers gathered at the State Historical Building in Des Moines for the second annual Iowa Family Impact Seminar, “Iowa: Fertile Grounds for Growing Business.”

Presentations focusing on job creation strategies for Iowa were provided by Ron Cox, associate dean for extension in the College of Engineering at Iowa State University and director of the Center for Industrial Research and Service; Paula Nissen, public service executive for Iowa Workforce Development’s Regional Research and Analysis Bureau; and Sammis White, associate dean of the School of Continuing Education and a longtime professor of urban planning, both at the University of Wisconsin–Milwaukee.

Cox opened the seminar by discussing the impact of manufacturing in the United States and Iowa, how manufacturing has changed in the past decade, and what he sees as important steps in improving our industrial base and the quality of jobs in Iowa.

The nation’s competitive strength in manufacturing emerged in part due to the ramp up in the industry as

after the service sector. Iowa consistently ranks among the 10 states most dependent on the manufacturing sector. However, like the nation, Iowa has felt the impact of the recent economic downturn, losing nearly 15% of its manufacturing employment.

Cox provided a stark example of recent trends. “Imports of cotton trousers, shorts, and slacks from China have increased from \$280 million in 2003 to \$2.7 billion in 2009. There has also been a degradation of wages in the Great Lakes and Plains states compared with average U.S. wages over the past several decades,” Cox stated. Iowa’s workers earn an average of about 80 percent of the U.S. average wage.

Manufacturing companies pay some of the highest wages in Iowa, about 84 percent of the average U.S. manufacturing wage. Only the finance sector pays higher average wages in Iowa. “Despite the higher manufacturing wages, the overall Iowa wage structure makes it more difficult to keep our youth in the state and to recruit top talent from out of state,” added Cox.

In order to improve the industrial base, the quality of jobs, and Iowa citizens’ standard of living, Cox believes there needs to be agreement on core principles, including increasing gross domestic product per employee by making technological advancements in products, processes, and business practices. Collaborations are essential, as is the development and implementation of a long-range plan. Key performance indicators are critical with a focus on workforce education and talent attraction, technology development, productivity increases, global engagement, and sustainability.

Paula Nissen spoke of the services offered by Iowa Workforce Development in assisting with business development and retention. Services include the development, design, analysis, and presentation of Iowa’s Laborshed Studies, Workforce Needs Assessment, Fringe Benefit Profiles of Employers, Educational Outcomes Measures, Iowa College Student surveys, Dislocated Worker surveys, and Job Vacancy surveys.

Iowa is the only state in the nation that creates these surveys. These services are provided for business recruitment and expansion. The customized surveys and analyses that the bureau has developed and implemented are nationally recognized unique tools used to determine labor availability statistics for an area based on commuting patterns into an employment center, region, or state regardless of political boundaries.

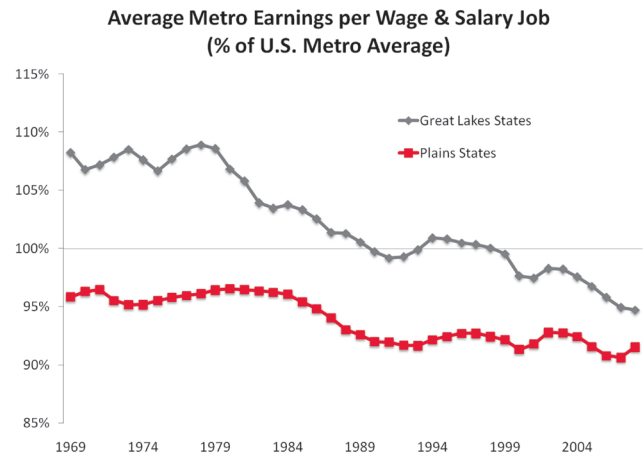
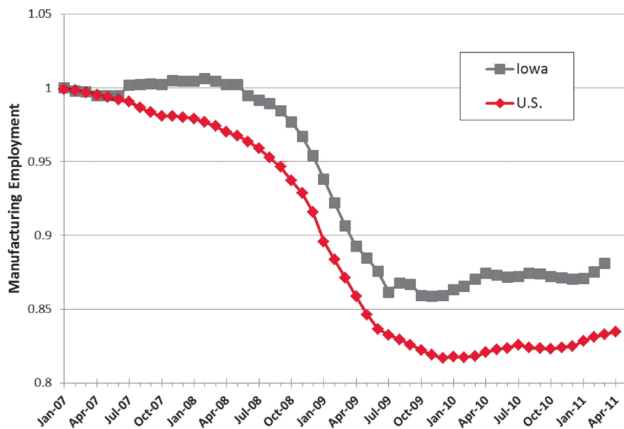
“These surveys give communities the ability to document and illustrate the characteristics of their labor force, which in turn has proven to be a unique and



*Keynote speaker, Sammis White, and attendee, Jim Kurtenbach, discuss job creation strategies.*

a result of World War II. Throughout the rest of the twentieth century, the nation faced several recessions and employment downturns, but manufacturing employment ultimately recovered. However, U.S. jobs lost in the 2000 recession did not return in the ensuing economic recovery. Iowa saw a similar decline in the 2000 recession but was able to recover some of the lost jobs.

Today, Iowa’s manufacturing sector contributes the second largest share to the state gross domestic product



effective tool for retaining and expanding their existing businesses while also attracting prospective new employers into the area,” said Nissen.

Sammis White provided the keynote address at the seminar. He stated there are three obvious ways to create more jobs: (1) attract businesses from elsewhere, (2) work with existing businesses, and (3) create new businesses.

“The first option is simply not viable,” said White. “Only two percent of the state’s growth comes from this opportunity. The current global economy makes this nearly impossible. It’s very expensive and wasteful. The subsidies that are offered to attract new business from outside upset the existing businesses. Those that are attracted are mobile and will most likely move again. Few of these businesses have commitments to their local communities.”

White discussed the proven methods of job creation from the two major sources available to any state, existing businesses and new businesses. According to the Kauffman Foundation, all of the net job growth in the United States in the past decade has come from start-up businesses. Its latest analysis shows that from 1977 to 2005, young companies created an average of three million jobs per year, while existing companies reduced jobs by one million annually.

“Creating partnerships between government, industry, and academia to develop innovation strategies will support the formation of new companies and help existing industries compete globally,” explained White.

White also talked about the importance of identifying and building clusters of businesses that have related

interests. Clusters represent a powerful source of growth, new-firm starts, and quality jobs. Many states have already recognized that a cluster program building on existing regional assets and collaborative dynamics can be a grounded, practical, and cost-effective alternative to more conventional economic development efforts.

“Strong clusters will foster innovation, boost new enterprise, and improve the regional economy,” said White. “The benefits of clusters are impressive as the sum is always greater than the parts.”

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***Creating partnerships  
between government,  
industry, and academia to  
develop innovation  
strategies will support the  
formation  
of new companies and  
help existing industries  
compete globally  
—Sammis White***

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### ***About the Family Impact Seminars***

The Family Impact Seminars are a series of seminars, discussion sessions, and briefing reports providing state policymakers with nonpartisan, solution-oriented research. The Family Impact Seminars were created to better connect research and policy and to promote a family perspective in policymaking. Over half of the states in the country—28 states and the District of Columbia—are part of the Policy Institute for Family Impact Seminars network and are currently conducting or planning to conduct Family Impact Seminars in their capitals.

The seminars target state policymakers, including legislators, legislative aides, governors’ office staff, legislative service agency staff, and agency representatives. Presentations are given by a panel of premier researchers, program directors, and policy analysts. The seminars are sponsored primarily by universities and cooperative extension. ■

Iowa Illinois Safety Council for personnel safety training on forklifts, fire extinguishers, lock out tag outs, confined spaces, and hazard communications.

Another critical need for Harvest Innovations was in the area of food safety. CIRAS identified Lester Wilson, a university professor in food science and human nutrition at Iowa State, as a resource. With Wilson's expertise in food processing, he became Harvest Innovations' principal resource for food safety training in three primary critical areas: sanitation, food defense—a required program to be considered a viable certified supplier—and hazard analysis.

"Harvest Innovations had no internal resources available and the services from CIRAS, such as Dr. Wilson's trainings, allowed the company to focus on growth. This training was critical to staff development," says Rudie.

Another key component in the repertoire of CIRAS' services was the business continuity plan provided by Mike O'Donnell of CIRAS. Rudie explains that one of the company's major concerns was the question of continued service to customers if facilities or products are compromised and damaged due to flooding, tornados, etc. "Because

this continuity program was in place, we were a contender as a supplier for a large food company in the U.S.," says Rudie.

"The business continuity plan created by CIRAS was the key factor and continued the dialogue with this large food supplier," explains Rudie. "It provided proof that we were viable as an ingredient supplier."

In March of 2010, Martin introduced Harvest Innovations to the Center for Crops Utilization Research (CCUR) at Iowa State University. Rudie visited with Darren Jarboe, program manager, and Hui Wang, pilot plant manager, to discuss the research processing capabilities of the pilot plant at CCUR.

"The most immediately useful visit was with Dr. Charles Hurburgh discussing NIR spectroscopy for grain and flour analysis," says Rudie. "As a result, we initiated a proof of concept study."

"We also started working with Dr. Wilson on product shelf-life studies. This six-month accelerated study from Iowa State University was initiated because of a customer request, and the resulting data lends to our credibility and helps us expand our business," says Rudie.

Another key outcome of the collaborations with CCUR was emulsion studies. "This level of data



collection is just not possible for a small company," states Rudie.

"CCUR acts as a gateway and central contact point as we know the faculty members and their technical expertise," explains Jarboe. "At the pilot plant and the BioCentury Research Farm, we provide food, feed, and biorenewables research and access to commercialization systems within the university."

"When we toured the CCUR facilities, we were very impressed," says Rudie. "This will be the first place we go to for more pilot runs."

In May of 2010, a customer request drove Harvest Innovations to investigate its carbon footprint. With many corporations becoming more environmentally responsible, having a completed carbon footprint analysis opens doors for new sales contracts.

CIRAS was contracted to complete a carbon footprint analysis of Harvest Innovation's Indianola manufacturing plant. Mike O'Donnell marshaled the resources for the carbon footprint study, and Jessica Reidl was the engineer on the project. She provided the deliverables of a greenhouse gas emissions inventory as well as an inventory management plan. The potential impact of this analysis is an estimated increase of \$7–10M in sales as well as an addition of five full-time employees.







**Darren Jarboe**  
**Center for Crops Utilization Research, BioCentury Research Farm**

Darren Jarboe is the program manager for technology commercialization, marketing, and communications at the Center for Crops Utilization Research (CCUR). He also manages communication and marketing efforts for the BioCentury Research Farm (BCRF).

Established in 1987, CCUR is a multidisciplinary research, development, and technology-transfer program focusing on adding value to Midwest crops, biorenewables development, the application of biotechnology to increase value, and technology transfers to the private sector.

Jarboe has a keen interest in research and outreach efforts related to technology commercialization and entrepreneurship, rural development, farm machinery sanitation, and biomass marketing and utilization. "CCUR is a gateway and a central point of contact for food, feed, and biorenewables research and commercialization projects at Iowa State University," says Jarboe. "We know the faculty members making strides in these areas, and we provide a connection to their technical expertise."

The Center for Crops Utilization Research offers a variety of small pilot-scale biomass- and food-processing research capabilities. The program's pilot plant has 35,000 square feet of processing and support space available for wet processing, dry processing, fermentation and product recovery, hazardous solvents extraction, industrial product development, food preparation, and consumer and sensory testing.

In addition to CCUR's pilot plant, the BCRF offers opportunities for medium pilot-scale research in biomass feedstock production, harvest, transport, storage, pretreatment, preparation, biorefinery processing, and laboratory testing.

Jarboe's past experience includes serving as program coordinator for the Iowa State University Grain Quality Initiative and assistant secretary for the Iowa Crop Improvement Association, as well as experience in auto manufacturing and international agricultural research. He holds BS degrees in agronomy and agricultural business and an MS degree in business administration from Iowa State, and he is currently pursuing a PhD in industrial and agricultural technology.

"With our focus on product growth, Harvest Innovations recently became a supplier for a very large food manufacturer. We therefore added to staff as the numbers show. Where we were at 20 employees in July of 2009, we now have 35 employees," explains Rudie. "The services provided by CIRAS have made a huge impact on our bottom line and have paved the way for significant growth."

### **About Harvest Innovations**

The product mix at Harvest Innovations consists of soy flours, textured soy proteins, extruded soy/cereal blends, multigrain flour blends, and soy oil. Applications include bakery, pasta, cereal, confectionery, meat alternatives, nutritional products, and beverages. According to Harvest Innovations, due to the unique extrusion process, the products are of superior flavor compared with conventional counterparts. They retain the antioxidants present in the soybean and are therefore naturally stable. Soybean products are rich in beneficial phytochemicals such as isoflavones.

Manufacturing is carried out in compliance with current good manufacturing practices (cGMP) prescribed by the U.S. Food and Drug Administration. All products are Kosher and Halal certified. Products certified as non-genetically modified organism (non-GMO), organic (National Organic Program [NOP]), European Union (EU), and Japanese Agricultural Standard (JAS) are also available.

The company uses state-of-the-art equipment and is open to private label and contract manufacturing.

Originally just a soy-focused company, Harvest Innovations continues to expand its product lines.

- Soy—everything is non-GMO
- Gluten Free Market
- Egg Replacements—soy and yellow bean flour

*For more information, please contact Derek Thompson at 515-419-2163 or [thompson@iastate.edu](mailto:thompson@iastate.edu).*

# Collaborations are Key with Iowa Innovation Gateway

Five years ago, the closing of the Maytag Corporation facilities in Newton became an unfortunate catalyst for economic change. In response to this loss, there emerged an imminent need for regional collaboration, giving rise to a strategic initiative known as the Iowa Innovation Gateway.

The U.S. Department of Labor awarded a seven-county region in central Iowa the first-in-the-nation Regional Innovation Grant (RIG) in the amount of \$250,000 to create a strategic regional innovation plan. The plan, completed in June 2008, was implemented by the Iowa Innovation Gateway (IIG), facilitated in partnership with the Iowa Association of Business and Industry.

"IIG was launched to implement the strategic economic development plan of the RIG," explains Denise Rathman, executive director of the Iowa Innovation Gateway.

For the past three years, IIG has focused on specific transformational goals. The group analyzed worker pipeline supply-and-demand issues to help create a collaborative, regional talent development system. They are building research-informed, data-driven partnerships among business, industry, education, and workforce development organizations, all working together to prepare a pipeline of skilled workers to meet current and future workforce needs, opportunities, and challenges.

In working with business leaders in the seven-county region, IIG is addressing the barriers to economic growth. "Obvious barriers include economic conditions and increasing fuel prices; however, workforce development is the largest barrier we are facing in the state of Iowa," says Rathman.

"It is clear there is an inadequate supply of skilled labor across the region," Rathman says. "For example, Jasper County has one of the highest unemployment rates, not due to lack of available jobs or the amount of available workers, but because the skillsets of these workers do not match the employers' needs."

Rathman explains that the current economic slowdown has provided the opportunity to focus on workforce development issues and solutions. "We have been watching the manufacturing workforce in particular since the baby boomers are now beginning to retire," says Rathman. "It is the perfect time to utilize IIG and its strategies, as we now have a convergence of interests from community colleges and manufacturers."

The latest initiative at IIG is their partnership with the Manufacturing Institute, a division of the National Association of Manufacturers (NAM), through funding from the Lumina Foundation. They are working together on the NAM-Endorsed Manufacturing Skills Certification

System to build a workforce that matches skillsets with industry needs. Community colleges are beginning to build their curricula to match this credentialing system.

CIRAS has always been a strong partner of IIG. "Data from the CIRAS report *Understanding the Greater Jasper County Labor Region, and its Workforce and Industrial Characteristics* was used in the RIG application, making us an early partner assisting with the creation of the Iowa Innovation Gateway," says Ruth Wilcox, CIRAS MEP program director.

"While CIRAS and IIG both have similar economic development missions, we work together to align the workforce with the needs of Iowa manufacturers," says Wilcox. "We look for opportunities to collaborate rather than to duplicate our efforts."



*IIG leaders with Secretary of Labor Hilda L. Solis. From left to right: IIG Co-Chair Rob Denson, Carla Eysink, Kim Didier, Mark Reinig, Deb Calvert, Secretary Solis, Harvey Sprafka, Walt Smith, and IIG Co-Chair Paul Gregoire.*

“CIRAS determines solutions and makes resources available best fitting a particular situation,” explains Rathman. “Not only do we benefit from their programming, we have Mark Reinig serving as a member of our board of directors. As an economic development program manager at CIRAS, he is well networked, knows manufacturing trends across the state, and is a great resource.”

“Striving to collaborate, not duplicate,” says Rathman, “is the perfect descriptor for The Gateway. We have limited resources and must use them effectively and bring all stakeholders to the table if we wish to create a globally competitive region.”

### **About the Iowa Innovation Gateway**

The Iowa Innovation Gateway is a regional collaboration among businesses, education, workforce development, and economic leaders of Jasper, Mahaska, Marion, Marshall, Poweshiek, Story, and Tama Counties. The mission of the initiative is to form a dynamic, vibrant network that works collaboratively to create a globally competitive region in central Iowa.

Funding partners for the IIG regional collaborative include the U.S. Department of Labor, Fisher Division of Emerson Electric, Des Moines Area Community College, CIRAS/MEP, Alliant Energy, MidAmerican Energy, Poweshiek County, Marion County, Marshall County, Jasper County, Tama County, Mahaska County, Iowa Department of Economic Development, Iowa Workforce Development, Iowa Association of Business and Industry, and the NAM Manufacturing Institute.



Connecting Commerce and Communities

***“Striving to collaborate, not duplicate, is the perfect descriptor for The Gateway. We have limited resources and must use them effectively and bring all stakeholders to the table if we wish to create a globally competitive region.”***

***—Denise Rathman***



***Rob Denson (left), president of the Des Moines Area Community College and vice chair of the Iowa Innovation Gateway, and Mark Reinig, CIRAS, signing the GE blade that came through Iowa on its way to last year’s Wind Energy Industry event.***

***For more information, please contact Ruth Wilcox at 515-290-1134 or [rwilcox@iastate.edu](mailto:rwilcox@iastate.edu).***



## Hiring Trends Look Bright for Iowa State's College of Engineering Students

Iowa State's Engineering Career Services recently published the College of Engineering's at-graduation, in-profession outcomes for the bachelor's degree students who celebrated their graduation this spring.

"The outcomes are all very positive for Iowa companies and for engineering students," says Roger Bentley, manager of student and alumni professional development. "In-profession overall placement totaled 68 percent, with four programs enjoying outcomes exceeding 75 percent and two programs reaching 85 percent. Given the improving job market, we expect our postgraduation survey (six months after graduation) to show a placement rate closer to what we typically see, over 95 percent."

There are many points of encouragement for the graduates and for the workforce. According to the data, starting salaries for the graduates increased five percent since spring 2010. Employment of Iowa State engineering graduates is up 13 percent from one year ago. Statistically, employer visits to campus, co-op and internship opportunities, and employer job postings are all on the rise, increasing dramatically from last year.

"We are seeing some macroeconomic recovery trends for employers who are seeking engineering professionals," says Bentley. "The economy's positive signals translate into increased opportunities for our students."

Another strong indicator of recovery was the spring 2011 College of Engineering Career Fair with more than 2,100 students and 165 employers in attendance. Over 530 students met one-on-one with employers to further discuss career opportunities on the following day, increasing interview totals by 67 percent compared to last spring's fair. Director of Career Services Larry Hanneman noted that this was the strongest day-after interviewing the college has seen since spring 2008. "This is surprisingly good news for our students," he says.

Students who attended the College of Engineering Career Fair in February certainly benefited from their networking with employers and recruiters. The career fair provides an opportunity for engineering students of all programs to meet with prospective employers to discuss employment trends and opportunities within specific industries as well as to inquire about future co-op, internship, part-time, summer, and full-time employment.

Prospective employers are welcome to use services provided by Engineering Career Services, including the use of on-campus interviewing suites, recruiting opportunities at career fairs, and access to the Engineering Career Services Management System, an online career management tool for posting internship opportunities and full-time positions that are visible to current students and alumni.

*For more information, please contact Engineering Career Services at 515-294-2540 or [ecs@iastate.edu](mailto:ecs@iastate.edu).*



## USDA Asks CIRAS to Provide Training across the Country

The CIRAS BioPreferred team has been crossing the country providing educational and informational opportunities at conferences and workshops for business and industry as well as government purchasing personnel.

In May, Steve Devlin, Jessica Riedl, and Rudy Pruszko provided information about the BioPreferred Program at the 2011 GSA Expo in San Diego. With over 7,000 attendees, this is the GSA's signature training conference and exposition that is specially designed to benefit federal, state, and local government employees and military members who make or influence acquisition and procurement decisions.

The Expo showcased the latest technologies and systems and provided product and service solutions featuring advancements in sustainability and e-technologies. The annual conference, currently in its 17th year, brought together public- and private-sector leaders in an effort to help shape a more innovative and efficient government.

CIRAS staff were in good company with over 700 exhibitors and GSA schedule holders represented at the event. The Expo was an ideal venue to share the latest product developments and service innovations within the BioPreferred Program.

Other key events for the BioPreferred team over the last several months included a presentation on the characterization of biobased automotive components to the Society of Automotive Engineers and an update of the BioPreferred Program to both the American Organic Chemist Society and the United Soybean Board Technical Advisory Panel on Thermoset Plastics and Coatings/Inks/Solvents.

The BioPreferred Program was enacted as part of the 2002 and 2008 Farm Bills to increase the purchase of

biobased products by the federal government. The USDA is responsible for implementing the program and has contracted with CIRAS to locate companies that produce and distribute biobased products, test products for biobased content, manage the certified biobased product labeling program, disseminate information on the program, and educate procurement personnel about the program and biobased products.

To date, CIRAS staff have located over 3,200 companies that sell 26,000 branded products containing biobased materials and have assisted the USDA in the designation of 66 biobased product categories and subcategories. In January 2011, the USDA labeling program was launched. Under the voluntary program, manufacturers and vendors can, after obtaining certification from the USDA, market their biobased products using the "USDA Certified Biobased Product" label.

### Other events include

- **Governor's Energy Conference**  
August 7–12 (Cincinnati, Ohio)
- **GSA Smart Pay**  
August 16–18 (Las Vegas, Nevada)
- **Nevada Air National Guard**  
August 19 (Nellis Air Force Base, Nevada)
- **Platts Renewable Chemicals Conference**  
September 12–13 (Houston, Texas)
- **ISSA/INTERCLEAN**  
October 19–21 (Las Vegas, Nevada)

For more information, please contact Steve Devlin at 515-490-0439 or [sdevlin@iastate.edu](mailto:sdevlin@iastate.edu).

## Earth Friendly Chemicals Receives USDA Label Approval



Bio HD Cleaner and Degreaser from Earth Friendly Chemicals has the distinction of being one of the first to receive approval as a USDA certified biobased product.

Under the new USDA's voluntary labeling program, manufacturers and vendors can, after obtaining certification, market their biobased product using the "USDA Certified Biobased Product" label.

"After participating in one of the first USDA BioPreferred webinars on the labeling and certification process, it became clear that we should immediately apply and go through the ASTM testing," says Jamie Welch, president of Earth Friendly Chemicals. "Once we received confirmation our products met and exceeded the

biobased requirements, the process to obtain the label was met with ease."

"Obtaining the USDA biobased approval and labeling certification allows us to remain competitive against the many "private" green certifications available for cleaning products," says Welch. "Many products claim to be green; however, not all are biobased. Our products meet both requirements."

## Additions to CIRAS staff



**Gordon Bonnes**  
**Government Contracting**  
**Specialist**

Gordon Bonnes joins the CIRAS Government Procurement Technical Assistance Program team with 20 years of experience as a government supply manufacturing contractor specializing in domestic and international vendor, supply chain, and logistics management. He has a long career in multiplant manufacturing management with an international vendor base involving companies throughout the Caribbean, South Asia, and the Pacific Rim. He was born and raised in Sioux City, Iowa, and graduated from Morningside College in Sioux City with a degree in business administration. Bonnes, an Army veteran, assists western Iowa businesses with growth through government sales.



**Colin Christy**  
**Energy Systems Specialist**

Colin Christy joined CIRAS in May 2011 as an energy systems specialist with expertise in power systems, electrical energy systems, and electric drives. Christy earned his bachelor's degree in electrical engineering from the University of Missouri–Rolla. Upon graduation, he worked in distribution engineering with the Empire District Electric Company in Joplin, Missouri. After earning a master's degree at Iowa State, Christy worked in system planning at Commonwealth Edison (now Exelon) in Chicago and then moved to Salina, Kansas, where he worked as a research and development engineer for Kejr, Inc., a developer and manufacturer of soil investigation equipment. Christy received his PhD in electrical engineering from Kansas State University in 2004. Prior to joining CIRAS, he taught electrical engineering at the American University in Dubai.



**Julie Fagle**  
**Government Contracting**  
**Specialist**

Julie Fagle, a government contracting specialist based out of the Cedar Rapids area, provides technical expertise, counseling, and training on government contracting in the local, state, federal, and subcontracting sectors. She was formerly employed at Rockwell Collins where she led subcontract management efforts for a large government program and gained extensive experience in supplier assessments and government regulation compliance. Fagle received a bachelor's degree in business administration from Upper Iowa University. She is certified as a contract assistance specialist with the Association of Procurement Technical Assistance Centers, holds an associate's certificate in contract management with George Washington University, and is a certified trainer with the Center for Veteran Enterprise Federal Contractor Certification program.

## Upcoming Events

### Central Iowa Breakfast, Business, and More September 22, 2011

7 a.m.–9 a.m.

Des Moines, Iowa

### Fall 2011 Engineering Career Fair

September 27, 2011

Noon–6:00 p.m.

Iowa State University  
Hilton Coliseum and  
Scheman Building

### Lean Product Design October 17, 2011

8 a.m.–4:30 p.m.

Altoona, Iowa

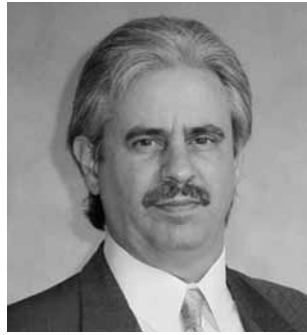
### HACCP Workshop for Meat, Poultry, and Egg Plants

October 13–15, 2011

Ames, Iowa

For more information,  
please visit [www.ciras.iastate.edu/conferences.asp](http://www.ciras.iastate.edu/conferences.asp)  
or contact Ruth Wilcox  
at 515-290-1134 or  
[rwilcox@iastate.edu](mailto:rwilcox@iastate.edu).

### Lean Product Development Workshop on October 17



led by Ron Mascitelli, founder and president of Technology Perspectives. Mascitelli is a recognized leader in the growth of advanced product design and development methods. He presents his workshops and seminars internationally and has created and deployed company-specific lean product development training and improvement programs for over 100 leading firms, including Intel Corporation, Boeing Company, Adidas Group, Halliburton, and countless others.

Past attendees of this event report positive program benefits and outcomes with improvement in their product development performance and product-line profitability. Examples include a 50 percent reduction in launch schedules, significant improvements in gross margins, and enhanced customer satisfaction.

Those that will benefit from this workshop include product-line managers, team leaders, task managers, functional managers, six sigma black belts and green belts, improvement champions, operations managers, process owners, design engineers, and all others with product development responsibilities.

This workshop presents leading-edge, practical tools for slashing waste and increasing speed and efficiency. The lean methods described in this course enable dramatic reductions in time-to-market while freeing up valuable resources for additional project work. Attendees will be actively engaged in the workshop with activities, including a step-by-step procedure for customizing your own lean process that will enable rapid, high-value product development.

The full-day event, located at the Polk County Iowa State University Extension Office in Altoona, will be



### Iowa State University Foundation Gift/Pledge Form

CIRAS has been helping Iowa companies for nearly 50 years. A fund has been established to further assist CIRAS in supporting initiatives to enhance the Iowa economy. Please consider donating to the Center for Industrial Research and Service General Fund.

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

#### Gift Designation

I/We wish my/our gift to be designated to:

- Center for Industrial Research and Service  
General Fund (2700413)
- Other \_\_\_\_\_

#### Corporate Matching Gifts

My/My spouse's/My partner's company offers a match  
for charitable contributions.

Employer name(s) \_\_\_\_\_

Gift Amount \$ \_\_\_\_\_

- Pledge online at [www.ciras.iastate.edu/giving.asp](http://www.ciras.iastate.edu/giving.asp)
- Check enclosed *Make payable to ISU Foundation*
- Please bill my credit card (select one)
- MasterCard  VISA  Discover

Card number \_\_\_\_\_

Expiration date \_\_\_\_\_

Signature \_\_\_\_\_

Clip and send to Iowa State University Foundation • 2505 University Blvd. • Ames, IA 50010-2230

*Thank you for your support.*



## Building a Lean Culture Workshop Provides Tools for Transformation



Michael Hoseus, the co-author of *Toyota Culture: The Heart and Soul of the Toyota Way* and former manager at Toyota's biggest manufacturing facility in North America, was the instructor of full-day workshops offered in Calmar, Ankeny, and Spencer in March.

His presentation, "Building a Lean Culture," revealed how Toyota selects, develops, and motivates its people to become committed to building high-quality products. The course also demonstrated the role of leadership in connecting and simultaneously developing the product and people value streams in an organization.

Leading off with interesting and valuable stories from his days as a Toyota executive, Hoseus orchestrated attendees through a day of problem-solving exercises and organizational assessments revealing gaps in terms of leadership, technical, and human systems that demand attention in order to build a lean culture.

"Companies around the world trying to implement lean are asking the question, 'What are we doing wrong?' They are wondering why their improvements are limited to a small group of people and why they are

not sustained," says Hoseus. "They are missing a key component—the people."

Hoseus was a corporate leader for 13 years in manufacturing and human relations at Toyota's Georgetown, Kentucky, plant. As assistant general manager in human resources, he helped Toyota create a culture that, at the time, was largely foreign to western thinking—that the right process includes input from others to generate consensus. He is currently the executive director for the Center for Quality People and Organizations, an alliance he developed to support those interested in their lean journey, focusing on leadership and cultural aspects of the lean transformation. He is also an adjunct professor with the University of Kentucky's Center for Manufacturing.

Several members from Pella Corporation attended the March 23 lean seminar at the FFA Center on the DMACC Ankeny campus. "This is one of the best seminars I have attended," says Gina Singer, corporate kaizen promotion office manager. "We are already discussing the possibility of bringing Hoseus to speak with a broader cross-section of our organization."

Hoseus will be presenting a workshop in April 2012. Visit [www.ciras.iastate.edu/conferences.asp](http://www.ciras.iastate.edu/conferences.asp) for future details.

For more information, please contact Ruth Wilcox at 515-290-1134 or [rwilcox@iastate.edu](mailto:rwilcox@iastate.edu). ■