



# Beef Leaders Institute

Young Angus producers get an inside look at beef industry partners.

Story & photos by *Lynsey Meharg, intern*

**R**eproductive technology companies, cow-calf operations, feedlots, packing plants, distributors, grocery stores and restaurants are all part of a huge network of companies, businesses and producers who work together to provide quality beef to consumers. Though many cattle producers know of the other sectors of the beef industry, few have taken the opportunity to further educate themselves on the intricate details that their livelihoods depend upon.

Choosing to be proactive, 20 American Angus Association members involved in the Beef Leaders Institute (BLI), an educational program sponsored by the Angus Foundation, began a four-day, big-picture adventure June 17 to continue their education on the beef industry and its partners.

Activities started at the headquarters of the American Angus Association in Saint Joseph, Mo. Participants filed into the Grant Room, aptly named after the man who brought Angus cattle to the United States, before being welcomed by Bryce Schumann,

Association CEO. Schumann told members that having been selected for BLI meant that an expectation had been set for each of them to take leadership roles in agriculture.

Schumann gave a brief history of the Association, current information on the leadership of the organization and explained the entities that make up the American Angus Association. He emphasized the Association's dedication to Angus youth saying, "juniors involved with Angus need to be advocates not only for our breed, but for agriculture and the beef industry."

"The nation's cow herd is as small as it's been in 50 years," said Schumann. "It's not a fight against other breed organizations, it's a fight for our industry."

► **Above:** Located near Tabor, Iowa, Gregory Feedlot is a CAB-licensed feedyard that has been loyal to CAB since the very beginning of the brand. The family-owned operation includes nearly 3,400 acres of corn and soybeans while feeding 7,000 head of mostly retained-ownership cattle and 12,000 hogs each year.

After the welcome, BLI participants toured the Association headquarters, including the boardroom, library, public relations studio and *Angus Journal* offices. Participants were also briefed on Association entities, including the Angus Foundation, Angus Productions Inc. (API), Certified Angus Beef LLC (CAB) and Angus Genetics Inc. (AGI).

BLI participants ended the evening with a presentation by Tom Brink, president and COO of J&F Oklahoma Holdings Inc.

"This is an opportunity to see different facets of the business," said Brink. "We need more communication through the segments of the industry."

"It's all about value creation in the cattle

**YOUNG**  
FARMERS & RANCHERS

CONTINUED ON PAGE 58

## Beef Leaders Institute CONTINUED FROM PAGE 57

business. That's the reason for the Angus breed's success. You are creating more value for the industry than any other breed," he stated, adding that cattle buyers take notice. Breed doesn't matter if there is no value, he emphasized.

"As a cattle feeder and representative of a large packer, I thank you for challenging other breeds to chase you," he said.

"If you want to find valuable cattle, find cattle that grow fast and grade efficiently," Brink said. "If cattle bring a premium because of your bulls, people will be back to buy them."

### Adding value

Making cattle more valuable is something Tri-Tower Farms of Shenandoah, Iowa, understands. Using Angus bulls to steadily improve their own herd, owners Roger and Cale Jones operate a small feedlot in addition to their cattle and row-cropping operations.

Calving in the spring, Tri-Tower breeds all of the females by natural service because

► **Below:** BLI participants, in addition to hearing about the operations of each tour stop, share personal experiences and thoughts with each other during breaks.



► **Right:** Tri-Tower farms, Shenandoah, Iowa, uses Angus bulls to steadily improve its own herd. Owners Roger and Cale Jones operate a small feedlot in addition to their cattle and row-cropping operations.

of time constraints. Originally, Tri-Tower selected bulls solely for carcass data, but it has recently begun selecting for bulls with more balanced data.

Voicing concern that most bulls possess a high milk expected progeny difference (EPD), Cale stated that his biggest complaint with selecting new bulls is "the milk EPD is getting pretty high." Still, Tri-Tower boasts one bull siring 100% Choice calves with an average of 74% Choice on all calves.

"If we could AI (artificially inseminate), it would give us more options, but it just hasn't worked for us," Roger Jones said.

Cattle are grazed on ground 40-50 miles away from the farm because of the recent explosion in land prices.

According to Roger, land that could have been purchased for \$1,000 an acre is now priced at \$7,000 an acre in the immediate area surrounding the farm. Females are

grazed on pasture until close to calving, when they are moved to the farm to graze cornstalks during the fall and winter. The cattle are then returned to summer as pairs on pasture.

As a feedlot operator with Tri-County Steer Carcass Futurity (TCSCF), Tri-Tower Farm feeds mostly retained-ownership cattle and collects carcass data on the



► **Above:** BLI participants and regional manager Matt Caldwell discuss the operations of Tri-Tower Farms with owner Cale Jones near the working facilities used for both the feedlot and cow-calf operations.

animals that come through the lot. TCSCF finances the feed cost so producers don't have to pay monthly feed bills. Cattle are fed a total mixed ration (TMR) consisting of dried distillers' grains (DDGs), corn, hay and cornstalks. After cattle are sold, TCSCF then cuts each producer a check for the net profit from the cattle.

Feeding approximately 650 head per year, with 150 having been bred by Tri-Tower, the operation contracts cattle from all over the nation, but mostly from producers to the north and south of the farm.

"The market is depressed in the south," Roger said. "Producers see a chance to retain ownership and make more money, so they send good black cattle."

Adding that a lot of good cattle are undervalued because of location, Roger said the advantage for southern producers feeding cattle at Tri-Tower is the feedlot's location. "Generally, our corn prices are lower," he said. "That means we can feed them cheaper and provide carcass data



► Association CEO Bryce Schumann and activities intern Carrie Horsley join the conversation on the unique aspects of Tri-Tower Farms.

for people of agricultural and non-agricultural backgrounds.

"I hope we give them at least some idea of what animal agriculture really is," Roger said.

### Custom concept

Located in nearby Tabor, Iowa, Gregory Feedlots Inc. is a Certified Angus Beef LLC (CAB)-licensed feedyard that has been loyal to CAB since the very beginning of the brand. Owned by Jim Gregory and managed for 37 years by David Trowbridge, the family-owned operation farms nearly 3,400 acres of corn and soybeans while feeding

7,000 head of mostly retained-ownership cattle and 12,000 hogs each year.

"Quality has always been a big push at Gregory Feedlot," Trowbridge says. That quality was quickly apparent to BLI participants.

Cattle at Gregory Feedlot are custom-fed according to how the owner would like to market them. Whether that market is age-sourced, all-natural or nearly any other program, Gregory can handle it. Feeding nearly 26 different rations twice a day, the feedlot has shown its dedication to its customers time and time again. The operation, though having grown in size, still feels like a family affair.

"We're not big enough to have a dedicated

CONTINUED ON PAGE 60

at the same time." Cattle fed at Tri-Tower are approximately 76% black-hided.

When it comes to implants, Tri-Tower and TCSCF suggest an intermediate implant.

"We want growth, but we don't want to hurt the carcass," Roger stated.

In addition to managing the feedlot, cattle herds and farming operation, Tri-Tower hosts tours

► **Left:** Manager David Trowbridge has helped to implement handling techniques and technology at Gregory Feedlots. Every employee in the facility is BQA-certified, and the facility is audited to retain its reputation as a custom feeder.



► One way Gregory Feedlots has implemented technology is through the use of computer programs to better track information on its cattle. "We love eID (electronic identification) tags," Trowbridge said, adding that through the use of technology they now offer their customers improved data on nearly every animal fed at Gregory Feedlot.

feed-truck driver,” said Trowbridge. “Everyone has to do a lot of different jobs. Everyone helps with everything.”

Running a slick-bunk feeding strategy, Gregory strives to have cattle empty the bunk each day. Though weight gain is of vital importance, Gregory Feedlot never increases cattle more than 1 pound (lb.) per head per day.

“When overfeeding, you’ll see a rise in consumption, but not in gain,” Trowbridge explained.

Innovations such as flood-irrigating hayfields with wastewater from the feedlot offer monetary advantages to Gregory Feedlot. In addition, though hauling dry manure from the pens and having it custom-spread might be a huge upfront cost (approximately \$200,000), the gain from not having to buy as much fertilizer is roughly \$370,000.

Gregory Feedlots is not afraid to capitalize on technology.

“We love eID (electronic identification) tags,” Trowbridge told BLI participants, adding that through the use of technology they now offer their customers improved data on nearly every animal fed at the lot. “We try to educate our producers. I guarantee we’ve sold Angus bulls just by letting customers know where they can improve.”

Though correct management is extremely important to a feedlot’s success, Trowbridge credited his employees for the success

► **Right:** BLI participants were able to see all aspects of a feedlot on the tour stop at Gregory Feedlot. “We run a hotel and restaurant,” Trowbridge said. “We’ve got to keep the rooms full and the feed going out.”

enjoyed at Gregory Feedlots. Every employee in the facility is Beef Quality Assurance (BQA)-certified, and the facility is audited a great deal to retain the reputation it has as a creditable custom feeder.

“I have a great crew; two guys have been here for 20 years,” Trowbridge said. “My crew takes care of things, they get the credit.”

“We run a hotel and restaurant,” Trowbridge says. “We’ve got to keep the rooms full and the feed going out.”



### Genetic potential

Breeding and feeding great cattle is a hefty job in itself; however, when producers want to multiply valuable bloodlines quickly, they know who to call. Located in Sioux Center, Iowa, Trans Ova Genetics is a premier reproductive center focused on providing industry-leading technologies and expertise to cattle breeders. Offering everything from gender-sorted semen to cloning, Trans Ova is at the forefront of reproductive science.

Founded in 1980, Trans Ova has grown to encompass 170 full-time employees and offers numerous services to customers. The company currently serves the seedstock, showstock and the bucking stock businesses, but is hoping to expand into the commercial sector.

“We make embryos and we make a lot of them,” said Mark Allan, director of marketing and genomics.

In addition to offering a small amount of gender-sorted semen, Trans Ova offers embryo transfer (ET), *in vitro* fertilization (IVF), genetic engineering, cloning and a large recipient program as part of its reproductive toolbox. Offering all these services allows Trans Ova to be a one-stop shop for advanced reproductive technologies.

On any given day, the company has 80-100 incubators flying around the world carrying eggs procured through the IVF facility, Allan explained. Trans Ova also owns the largest herd of beef cattle in Iowa, numbering around 10,000 head total, allowing customers to use company-owned recipients to carry eggs obtained through its ET and IVF programs. Recipients are held to strict standards, including age limits, testing for diseases and disposition. This program allows Trans Ova to perform around 16,000 transfers annually.



► Trans Ova Genetics is a premier reproductive-technologies center focused on providing industry-leading technologies and expertise to cattle breeders. Offering a limited amount of gender-sorted semen, using the machine shown here, Trans Ova strives to be a full-service reproductive center for its customers.



Trans Ova is also making strides in the medical field through the creation of the Tc (transchromosomal) Bovine™. Sanford Applied Biosciences (SAB) partnered with Trans Ova to produce fully human antibodies in genetically engineered cattle. Essentially, the cow's antibodies are turned off and human antibodies are inserted. The animals are used to study human diseases, as well as to test human vaccines. SAB animals are housed at Trans Ova's Genetic Advancement facility.

This technology has already proven itself in a different subject, the Cystic Fibrosis pig, created by the University of Iowa.

The genetically modified pig produced more scientific breakthroughs in two years than conventional research had allowed in 25 years, said Allan. This research lays the groundwork for possible genetically modified livestock in the future — for example, modifying a horned breed to be polled — which would be incredibly valuable to some producers.

With the population of the world expected to rise by 3.5 million in the next 30 years, how we will continue to feed the world has become a hot issue.

"The question is how far can we back up the generation gap?" Allan asked. Trans

► **Above:** "We make embryos and we make a lot of them," said Mark Allan, director of marketing and genomics. In order to house all those animals, donors and progeny are housed in a series of runs and specially designed barns located at Trans Ova.

Ova is leading the way to answering that question.

### Product processing

A plaque certifying the Tyson plant located in Dakota City, Iowa, as having harvested 2 million head for the *Certified Angus Beef®* (CAB®) brand hangs in the front hallway to greet visitors and employees alike. Processing roughly 4,800 head per day, the facility, which employs 4,400 people, is a finely tuned machine and provided a valuable opportunity for BLI participants to see a side of the beef industry that most never see.

The plant processes only U.S. beef, explained Jason Poole, complex manager. With 1,100 people working per shift, it is constantly in motion, shipping anywhere from 55,000 to 60,000 boxes of beef each day. The technology needed to accomplish that feat is extensive. Boxes are carried

CONTINUED ON PAGE 62



► **Left:** Trans Ova implements advanced technology to help producers close the generation gap by using ET on young females as a way to increase the elite genetics in a producer's herd. The facilities at Trans Ova are designed so that the best care possible is given to each animal.

around the facility on a network of conveyor belts, robots perform preprogrammed tasks of moving boxes around the cooler, and unmanned cranes stack the boxes high above the cooler floor. Meanwhile, across the facility, new team members are being taught the ins and outs of the facility and food safety through interactive courses offered in 26 different languages.

With the plant receiving cattle 24 hours a day, at any given time there are 1,200-1,400 live animals onsite, Poole said. Cattle are unloaded and allowed to rest in pens for an hour or more before they are brought into the plant. Upon entering the plant, cattle are harvested and enter the first phase of the breakdown process. Once the hide is removed, it is sent to the tannery and the carcass is graded before being railed to the cooler, where it must chill to 45° F within 24 hours. When the carcass leaves the cooler, it begins the final breakdown process. The carcass is broken down as it progresses through the room until it is boxed for shipment a mere 28 minutes later.

Employees offer differing levels of experience and expertise. From the white-helmet-wearing intermediate workers all the way up to the black helmets of the most experienced workers, an array of colors can be seen working on the processing floor. Most workers stay on the same job each day with workstations that are adjusted to better suit each worker. More-experienced employees working in higher-stress jobs are afforded more breaks so that every worker enjoys a suitable work environment. A fully certified physical therapist is on site every day to tend to workers.

With so much care given to employees, it is no surprise that Tyson uses preventive maintenance on equipment to ensure that the flow of the plant is not interrupted.

In 1975, 850,000

cattle a week were harvested. According to the USDA nearly 40 years later, 650,000 cattle are harvested per week in the United States, meaning fewer cattle are producing more beef than ever before.

### Niche marketing

Founded 33 years ago in Austin, Texas, Whole Foods Market provides consumers fresh, natural and organic foods at a reasonable price. Offering a different perspective of the retail industry, Whole Foods has been a feature of the BLI tour for several years.

The BLI group visited the Whole Foods Market in Omaha, Neb., where customer outreach specialist Maria Watts explained how the company strives to make every store unique and offers as many seasonal and local products as possible. Great care is taken with each product offered so that each customer receives the highest-quality item possible. Every evening, products that need to be misted or are very delicate are removed from their carefully planned displays and placed into coolers. Each morning, produce is removed from coolers and crafted into

artistic displays. Organic products are separated from natural products by wooden barriers so the integrity of the organics is not jeopardized.

Whole Foods Market has implemented animal welfare standards for each animal product offered through the store. Watts said Whole Foods believes “the humane treatment of animals should be guided by an attitude of care, responsibility and respect” and the company, “works closely with farmers and ranchers to focus on raising animals for high-quality, great-tasting meat.”

Whole Foods markets its beef through a system of tiers requiring different levels of management. The first tier requires only that animals live their lives with space to move around and stretch their legs. Tier five plus requires that animals live their entire life and be slaughtered on one farm.

To confirm that producers are practicing approved production methods, Whole Foods audits every farmer and rancher who produces products for their stores. Watts explained that this close-knit relationship with their producers allows their customers to be more informed about what they are buying and who produced it.

Whole Foods Market is certainly a different perspective on the industry, but



PHOTO COURTESY OF TYSON FOODS

► Above: Processing roughly 4,800 head per day, the Tyson–Dakota City facility, which employs 4,400 people, is a finely tuned machine and was a valuable chance for the members of BLI to see a side of the beef industry that most never see.

it allows yet another avenue for willing producers to market their product to consumers who might otherwise not eat beef.

### Distribution

Serving a five-state area locally and an additional 13 states nationally, Sysco Lincoln Inc. offered the unique opportunity for producers to see how their product moves from the packer to the distributor to the consumer. Though the task of distributing products to hungry consumers may seem simple, the planning and technology required to keep the operation running is only apparent after stepping from the reception area into the warehouse. The change in environment and energy is

► **Right:** After touring the Tyson-Dakota City packing plant, BLI participants enjoyed a meal at CAB-licensed restaurant Brewburger's, which offered specialty hamburgers at its location in Omaha, Neb.

► **Below:** Founded in 1980, Trans Ova has grown to encompass 170 full-time employees, though it still retains its family atmosphere through tours and the Trans Ova intern program.

colossal, and only then could the participants of BLI fully appreciate the scope of how Sysco really operates.

Leaving the bright, businesslike atmosphere of reception and stepping through to the dimly lit warehouse is the first indication that Sysco Lincoln is a fast-paced business that requires employees to work quickly and accurately. As participants filed into the warehouse filled with ceiling-high shelves, meat buyer Kurt Brockhaus explained that the Lincoln inventory is valued at roughly \$16 million; however, the supply would last a mere 15-16 days if all orders were stopped. The facility consists of multiple coolers, below-zero-degree freezers, loading docks, storage areas, test kitchens and offices. With 100

salesmen responsible for the area covered by Sysco Lincoln, 15,000 different products are sold to restaurants, schools, hospitals and anyone else who needs a full-service distributor.

Moving through the warehouse, Brockhaus joked that the best way to explain one vital piece of warehouse equipment is through the children's movie *Monsters Inc.* He explained that just like the monsters in the movie who selected doors in a warehouse, the mini loader, an automated robot that moves up and down the aisles on tracks, automatically selects items that will soon be needed for orders and places them on lower shelves. Once the items are in place, orders are assembled by employees armed with *Star Wars*-like scanners strapped to

their forearms to scan codes on the boxes and print labels needed for the order. The technology eases the jobs of everyone in the warehouse by eliminating simple tasks that would otherwise take up much-needed time.

Moving from the warehouse to the loading docks, Brockhaus explained that an important component of how Sysco deals with food safety is through its cooled loading docks. Produce and meats move from coolers directly to cooled trucks without breaking the cold chain so the products don't

CONTINUED ON PAGE 64



► **Whole Foods Market** provides consumers fresh, natural and organic foods at a reasonable price. Whole Foods' beef is marketed through a system of tiers that requires different levels of management from producers.



## Beef Leaders Institute CONTINUED FROM PAGE 63

experience a change in temperature until they are delivered to the buyer.

From the docks the group moved to the meat coolers where Brockhaus answered questions about what his consumers are demanding.

“For years, we’ve been saying we need more ribeyes,” he stated, explaining that instead of producing more ribeyes, producers started breeding cattle with larger ribeyes. “Now they’re too big!”

Brockhaus explained that many of his restaurants prefer a ¾-inch-thick 10- to 16-inch ribeye. He also said that unlike some boxed beef, where cuts can vary by as much as 8½ lb. per box, CAB varies by just 1½ lb. within a box, offering his buyers a more uniform product. Brockhaus added that when Sysco began carrying CAB products,

customers quit ordering Prime products and that most buyers upgraded by at least one quality grade.

Leaving the coolers to move back to the warmer offices, Brockhaus introduced the in-house menu-making service Sysco

provides for customers before moving on to the test kitchens where corporate chefs Lane Rosenberry and Brian Everman explained how Sysco brings customers into the kitchens to demonstrate how to prepare various products.

“We have to be masters of everything,” Chef Lane stated, explaining that they work with establishments ranging from fine-dining restaurants to hospitals to elementary schools.



► **Above:** The first tier of animal welfare at Whole Foods Market requires only that animals live their lives with space to move around and stretch their legs; however, tier five plus requires that animals live their entire life and be slaughtered on one farm.



► **Above:** Whole Foods Market charges a premium for locally sourced beef guaranteed to be produced using humane methods.



► **Right:** Whole Foods Market offers another avenue for willing producers to market their product. Staying educated on the retail industry is just one way the cattle industry is evolving with the consumer.



Both chefs have participated in CAB-certification courses in Wooster, Ohio.

"It's been cool putting faces with farmers," Chef Lane added. "People don't understand the care that goes into producing beef by you guys."

### Genomics

Utilizing technology to better manage livestock has come a long way in a short

period of time. Producers can now use a plethora of different tools to better track data, including submitting information to breed organizations for parentage, defect testing and genomic-enhanced EPDs (GE EPDs).

With the push for adding value to livestock via additional information, the American Angus Association has built a relationship with GeneSeek Laboratories located in Lincoln, Neb. Founded in 1998 by a joint venture between a private-sector laboratory and a University of Nebraska professor, GeneSeek has quickly come to the forefront in genetic testing.

"One thing we're always trying to do is use the latest technology," said Tim Mitchell, operations manager at GeneSeek.

This year, GeneSeek is on track to test 1 million samples, including nearly any species, though cattle, swine and canines make up the majority of their samples. GeneSeek has a collection of millions of blood and hair samples on site at the lab in Lincoln and goes to great pains so that each sample is correctly recorded. Each sample, upon entering the lab, is entered into the computer and barcoded so that it can be tracked from that point on within the lab.

From there a sample's route depends on which tests need to be run. With multiple labs running a number of different tests, GeneSeek is capable of running everything from basic to in-depth tests. The most important factor affecting testing is the quality of the sample received by the lab.

"It all goes back to the quality of the sample," Mitchell said. Finding the perfect test for both producers and the lab seems to be the No. 1 problem faced by both sides. "We haven't found the perfect method for the ranch that still gives us the data we need in the lab."

Mitchell did offer advice to producers looking for a way to provide more effective samples. Filling the entire circle with blood and making sure the blood soaks through to the back of the blood card, providing a dozen or more hairs and allowing samples adequate time to dry properly at an ambient temperature are all ways to ensure that your sample lasts longer in the lab, said Mitchell.

CONTINUED ON PAGE 66



► **Below & right:** The mini loader, an automated robot that moves up and down the aisles on tracks, automatically selects items that will soon be needed for orders and places them on lower shelves. Once the items are in place, orders are then assembled.





With 60 employees on staff and another 20 to be added by fall, GeneSeek continues to grow. Adding that the company is getting closer to sequencing the whole cattle genome, Mitchell admitted cost-effectiveness is a concern to producers.

“With newer technology, it’s getting faster and cheaper,” he said.

#### **Retail ready**

The final stop for the BLI tour was the Cargill–Nebraska City plant, where BLI participants were welcomed by Bill Ackerman, food safety, quality and regulatory manager. Originally built in 1995, it was expanded to encompass 200,000 square feet in 2000. What makes that expansion unique is that

► **Left:** Serving a five-state area locally and an additional 13 states nationally, Sysco Lincoln Inc. offered the unique opportunity for producers to see how their product moves from the packer to the distributor to the consumer.



► **Above:** Unlike some boxed beef, where cuts can vary by as much as 8½ lb. per box, CAB varies by just 1½ lb. within a box, offering Sysco’s buyers a more uniform product. Brockhaus added that when Sysco began carrying CAB products, customers quit ordering Prime products.



► Corporate chefs Lane and Brian explain how Sysco brings customers into the kitchens so that they can give them ideas of how to prepare the products the customers have purchased.

Though the plant is producing in five days what took six days to produce in the past, Cargill hopes to get the most out of its equipment rather than expanding. Ackerman admits that the season affects production, and that during the winter months, the plant may only have enough meat to run four days a week. Additionally, the late spring caused a decrease in foods that would normally have been popular during warmer weather. However, being able to adapt is something with which everyone involved with the beef industry is familiar.

The Cargill stop wrapped up the BLI

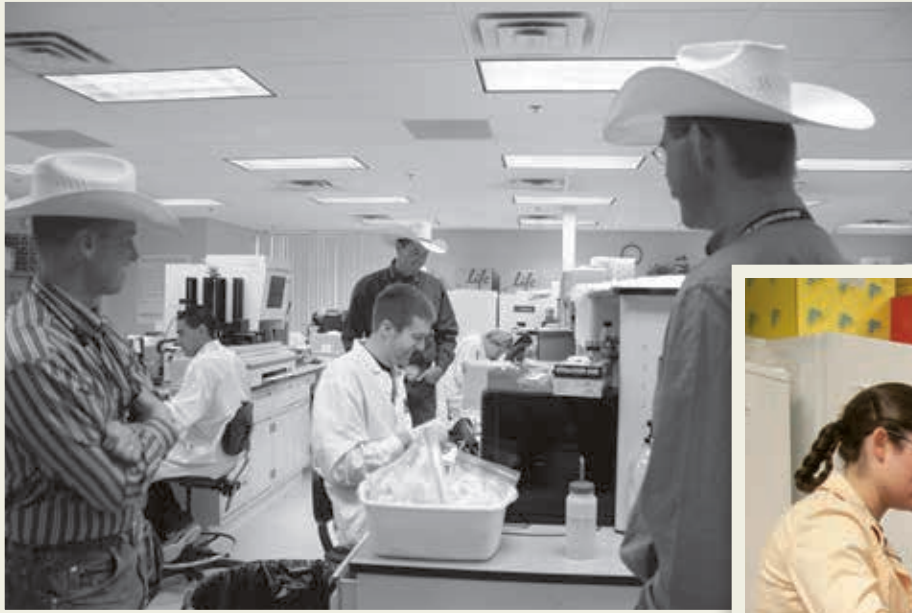
program designed to give young leaders in the Angus business a broader knowledge of the industry in which they participate.

Through the American Angus Association, members are afforded unique opportunities to become more involved leaders and advocates for agriculture and the beef industry. Though the rising age of the American farmer is a cause for concern, with advancements in technology and the passion that young Angus members possess, American agriculture will continue to thrive just as it has in the past.

**AJ**



► With 60 employees on staff and another 20 to be added by fall, GeneSeek continues to grow.



► **Above:** This year, GeneSeek is on track to test 1 million samples, including nearly any species, though cattle, swine and canines make up the majority of their samples. Each sample, upon entering the lab, is entered into the computer and barcoded so that it can be tracked from that point on within the lab.

► **Right:** Once entered into the system, the sample's route depends on which tests need to be run. Here, Heather Bradford, AGI intern, spends a moment explaining the more technical aspects of a 50K chip.



► Twenty Association members involved in BLI, an educational program sponsored by the Angus Foundation, ended their four-day tour with a stop at the Cargill-Nebraska City plant. See "Angus Producers Attend 2013 BLI" on page 54 for names of participants.