STORIES
IN AGRICULTURE AND LIFE SCIENCES

MY CALS ADVANTAGE

CONFRONTING CANCER

STUDENT-CENTERED CALS ADVANTAGE

SHARED LANGUAGE OF SERVICE

VOL. 13 NO. 2, 2019
BUILDING THE CALS ADVANTAGE

Agronomy professor Mary Wiedenhoeft has been a teacher and mentor to many CALS students and alumni over the years—myself included. She was the adviser for Sigma Alpha, the professional sorority for women in agriculture I belonged to as an undergrad and now advise. And Mary was an unceasing supporter for me during my early years as a communications professional.

Mary was honored as a Morrill Professor this fall, a title conferred to faculty who demonstrate outstanding success in teaching and learning as reflected by national or international reputation.

“My parents taught me excellence; my faith provides the passion for people; my husband, family, colleagues and friends give me strength. Mary’s words stuck with me as I approached this issue of STORIES. It takes a village to create the outstanding student experience available for CALS students. Many professors like Mary don’t just teach in the classroom, they also advise, work with student groups and supervise students in their research (read more about Mary’s work with the Good Earth Student Farm on page 28). Assistant teaching professor of food science Kate Gilbert shares a similar sentiment about helping students find careers they are passionate about (see page 24).

Together faculty and staff create opportunities for our students to build their own unique CALS advantage. In the pages that follow, you’ll meet exceptional students who are becoming experts in their disciplines, finding their voices for advocacy, innovating and pursuing entrepreneurship and emerging as leaders—all qualities that Endowed Dean’s Chair Daniel J. Robison speaks about that define the CALS student experience.

I invite you to reach out to those who made your student experience so special here. Let me know if I can help connect you. I’d love to hear your stories. I’ll compile online to share.

Warm wishes from central campus,

Melea Reicks Licht
Greetings alumni and friends!

Since I arrived on a very cold day in January 2019, I have learned a great deal about this terrific college and university, the great state of Iowa and the global impact of both. I have had wonderful opportunities to travel the state and meet many people who work every day to advance the causes we care deeply about — from farming to milling, soils to livestock, crops to trees, schools to communities, and from the basic biology that underlies much of what we do to the energy and machines that make our work possible.

All this matters, and our faculty, staff and students know it! We are more than 300 faculty; more than 300 staff and more than 4,400 undergraduate and graduate students. We are a dynamic enterprise that is pushing forward and adapting to enable the next generation of thinkers and doers, to discover the underlying life and social sciences that enable us to better understand and manage our agriculture and natural resources, and to develop the technology to do so as well. The College of Agriculture and Life Sciences is busy sustaining its excellence and embracing new possibilities. This issue of STORE5ES magazine brings you exciting news about the accomplishments, successes and milestones of people who make up this great college. There is much to be proud of, and much to be optimistic about — even though the challenges in front of our communities, industries and landscapes are as significant as they’ve ever been.

We are ready to take on these challenges. We are:

- Continuing our strengths in teaching, research and extension and our worldwide reputation for excellence.
- Communicating to prospective students about what I call our “CALS Advantage” — advocating for what’s important, innovating with an entrepreneurial mindset, grounding yourself in your discipline, and becoming a leader.
- Attracting new students to join us as part of the Cyclone community, and promoting their success.
- Supporting an inclusive, welcoming culture on campus, and valuing the diversity our students, faculty and staff bring to every discussion.
- Emphasizing how our programs can address both more local issues and more global challenges.
- Building our revenue streams through innovation, efficiency and new ideas.
- Serving Iowans more deliberately through agriculture and natural resources extension and outreach.
- Recognizing and celebrating our students, faculty, staff and alumni who continue to advance within the show, Millenkamp noted she used the skills learned through College of Agriculture and Life Sciences entrepreneurial courses to create her business, EllieMax Music.

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WHERE MUSIC AND ENTREPRENEURSHIP MEET

EllieMax Millenkamp (senior, ag business), was featured on season 17 of NBC’s “The Voice,” a reality show using blind auditions to find the industry’s new talent. Millenkamp, originally from Idaho, was selected to perform on country-music star Blake Shelton’s team. While she didn’t advance within the show, Millenkamp noted she used the skills learned through College of Agriculture and Life Sciences entrepreneurial courses to create her business, EllieMax Music.

SUCCESS FOR CALS STUDENT TEAMS:

- Agricultural Business Club: Outstading Club Award, Agricultural and Applied Economics Association
- Dairy Judging Team (above right): third place overall and reasons, Central Star Accelerated Genetics Dairy Cattle Judging Contest; third place reasons and fourth place overall, Intercollegiate Dairy Cattle Judging Contest at the World Dairy Expo
- North American Colleges and Teachers of Agriculture: Overall Sweepstakes Award
- Power Pullers: first place written design report and third place design judging, Association of Agricultural and Biological Engineers International Quarter-Scale Tractor Student Design Competition
- Horticulture Club: first place, 2019 Mid-American Collegiate Horticultural Society Competition
- livestock Judging Team: high team overall, Aksarben Senior Collegiate Livestock Judging Contest
- Soils Judging Team: second place, Central Region Collegiate Crops Contest

CALS STUDENT APPOINTED TO BOARD OF REGENTS

Zack Leist (junior, ag business), was appointed to the Board of Regents, State of Iowa, by Governor Kim Reynolds. Leist serves as chair for the travel committee for the student Agricultural Business Club. He’s head of finance for Alpha Gamma Rho and has served as a CALS Ambassador.

SUCCEES FOR CALS STUDENT TEAMS:

- Agricultural Business Club: Outstading Club Award, Agricultural and Applied Economics Association
- Dairy Judging Team (above right): third place overall and reasons, Central Star Accelerated Genetics Dairy Cattle Judging Contest; third place reasons and fourth place overall, Intercollegiate Dairy Cattle Judging Contest at the World Dairy Expo
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CALS ALUMNI, FRIENDS HONORED BY COLLEGES, ISU ALUMNI ASSOCIATION

CALS graduates and friends were honored by Iowa State University for professional excellence and service during Homecoming events in October. To learn more about CALS alumni awards and the 2019 honorees visit www.alumni.cals.iastate.edu.

CALS AWARDS:

Floyd Andre Award, Steve Berger ('86 ag business), farmer, conservation leader, Wellman, Iowa
George Washington Carver Distinguished Service Award, Diane Birt, Distinguished Professor, ISU Department of Food Science and Human Nutrition
Henry A. Wallace Award, Dhamu Thamodaran ('83 PhD economics), executive vice president, chief strategy officer and chief commodity hedging officer, Smithfield Foods, Inc.
Outstanding Young Professional Award, Kelly Norris ('08 horticulture, '11 MLS), director of horticulture and education, Greater Des Moines Botanical Garden
Outstanding Young Professional Award, Mike Taylor ('93 ag studies), co-founder and partner, Midwest Growth Partners

ISU College of Human Sciences Award:
Virgil S. Lagomarcino Laureate Award, Larry Ebbers ('62 ag and life sciences education, '68 MS, '71 PhD education), University professor emeritus, ISU School of Education

ISU Alumni Association Award:
James A. Hopson Volunteer Service Award, Ben Zelle ('14 ag business, management information systems), territory customer support manager, John Deere

CALS ALUMNI EARN TOP NATIONAL AWARDS

• Tom Ammer ('75 fisheries and wildlife biology), retired last year as the Wyoming Game and Fish Department water management supervisor after nearly 38 years with the department, Carl R. Sullivan Fishery Conservation Award, American Fishers Society
• Walter Armstrong ('74 ag and life sciences education), key account manager with Bayer CropScience, 2019 International Certified Crop Adviser of the Year, American Society of Agronomy
• Min Du ('01 PhD animal science, food science and human nutrition), professor and Endowed Chair in Growth Biology with Washington State University Department of Animal Sciences, Animal Physiology and Endocrinology Award, American Society of Animal Science
• Peter Ferket ('97 PhD animal science), extension poultry nutritionist, director of the Animal Food and Nutrition Consortium and associate head of the Prestage Family Department of Poultry Science at North Carolina State University, American Feed Industry Poultry Science Association Poultry Nutrition Award
• Cassie Jones ('12 PhD nutritional science), associate professor with Kansas State University Department of Animal Sciences and Industry, 2019 American Society of Animal Science Early Career Achievement Award
• Dustin Loy ('05 animal science, '09 DVM, '11 PhD vet microbiology), molecular diagnostician in the Nebraska Veterinary Diagnostic Center and faculty member in the School of Veterinary Medicine and Biomedical Sciences, Excellence in Diagnostic Microbiology, American Association of Veterinary Laboratory Diagnosticians
• Doug Reynolds ('95 ag and life sciences education), U.S. leader for Marketing and Digital Communications at Corteva Agriscience, 2019 Professional Development Award of Excellence, National Agri-Marketing Association
• Luis Verde ('01 MS plant breeding, '03 PhD), maize product development director of Latin America and global sorghum lead for Corteva Agriscience, 2019 Plant Breeding Impact Award, National Association of Plant Breeders

CALS ALUMS AMONG SEED INDUSTRY’S TOP YOUNG LEADERS

Five college alumni have been recognized as part of Seed World’s 20 under 30 future leaders in the seed industry. Honorees were selected as part of a nomination process.

• Austin Dobberts ('13 agronomy, ag biochemistry), graduate student, University of Minnesota
• Josh Earl('16 ag and life sciences education), district sales manager, Bayer Crop Science
• Katelyn Fritz ('19 global resource systems, graduate student, North Carolina State University
• Andrew Lauver ('12 ag studies), manager of industry relations, Syngenta
• Kyle Parmley ('16 MS plant breeding, '19 PhD), soybean germplasm enhancement breeder, Bayer Crop Science

HARL ELECTED TO ESTATE PLANNING HALL OF FAME

Neil Harl ('56 ag and life sciences education, '65 PhD economics), retired Charles F. Curtiss Distinguished Professor in Agriculture and Life Sciences, was elected to the National Association of Estate Planners and Councils Estate Planning Hall of Fame® and recognized as a Distinguished Accredited Estate Planner®. The award is given in recognition of distinguished service to the field of estate planning and was presented Nov. 7 at a ceremony during the organization’s annual NAEP® Advanced Estate Planning Strategies Conference.

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E-MAIL stories@iastate.edu
You can’t be a world leader in livestock production, as Iowa is, without also producing the feed to support the industry.

Over the past decade, commercial feed consumption within the state has doubled to 15 million tons. And feed mills throughout Iowa and the Midwest produce much of the corn and corn-based feed products for the pork, beef, dairy and poultry industries nationwide.

“The feed, grain and livestock sectors are key to the success of agriculture in Iowa,” says Iowa State University President Wendy Wintersteen. “As a top land-grant university, Iowa State is at the forefront of critical and cutting-edge research, education and extension programs that support these important sectors.”

Thanks to a teaching and research complex under construction near campus, Iowa State soon will take the lead in preparing in-demand professionals for the industry. On September 13, the university broke ground on the Kent Corporation Feed Mill and Grain Science Complex.

Wintersteen says the facility, “strengthens our ability to carry out our mission” by providing an advanced setting for teaching and research related to feed technology, grain science and animal nutrition, as well as for continuing education and extension.

“This complex will have a huge impact not only for the state of Iowa, but also for the agriculture industry as a whole,” says Mike Gauss, president of Kent Nutrition Group, a well-known provider of animal feed and food products that provided the naming commitment of $8 million in 2017. “Kent Corporation takes pride in partnering with institutions like Iowa State, which not only recognized that our industry had a need for a world-class feed and grain science complex but has brought forth a solution in response to this need.”

When the facility is completed in the summer of 2021, it will provide a learning center for students in majors such as animal science, agricultural biosystems engineering and agricultural business, as well as those pursuing a new minor in feed technology. The minor was developed by faculty in the agricultural and biosystems engineering department along with faculty in the animal science department and debuted in fall 2019. Feed for animals housed at university teaching and research farms will be produced at the feed mill and grain science complex, and students and industry trainees will use the complex to learn how to keep the food system secure and sustainable.

“This partnership is about helping to build something great, today, so we can continue to work together to advance the industry through the learning and research that will go on within it,” says Daniel J. Robison, holder of the Endowed Deans Chair in the College of Agriculture and Life Sciences. “We look forward to partnering with those who made such generous commitments to this project now and far into the future so our students and our faculty benefit — as well as the people in Iowa companies and communities.”

Located on approximately 10 acres of university-owned land southwest of the intersection of Highway 31 and State Avenue in Ames, the complex will include a feed mill tower, feed milling and mixing structures, grain storage and handling facilities to hold 180,000 bushels and a one-story classroom and laboratory building.

Leaders in the industry either generously partnered with Iowa State to bring the $21.2 million complex to fruition. In addition to Kent Corporation, other lead commitments to the project were provided by the Iowa Crop Improvement Association; the largest family-owned, full-line grain-drying and storage equipment manufacturer. “That’s why we are excited that Iowa State’s plans for the feed mill and grain science complex will focus on innovation in support of the grain and feed industries, education of the next generation and continuing education that helps our workforce and customers keep up to speed on the latest developments.”

Additional gifts include a $2.6 million commitment by California Pellet Mill (CPM) of Watsonville and a $1.5 million gift from the Iowa Crop Improvement Association, CPM, a leading supplier of animal feed processing equipment, to providing equipment for the complex.

“We are excited to support Iowa State’s new feed and grain technology minor and its new facility,” says Jim Hughes, general manager of the company. “Students from around the world will have leading-edge equipment and automation that will benefit them for many years to come.”

Jim Rouse, executive director of the Iowa Crop Improvement Association, a nonprofit organization affiliated with the College of Agriculture and Life Sciences that serves as the official seed certifying organization for the state of Iowa, also sees the complex as a hub for expanding new opportunities related to plant science and seed science. “Our commitment reflects part of our nonprofit mission to support education and research in these fields,” says Rouse. “This site will be important for students to explore many aspects of the crop, seed and grain industries, and for Iowans working in these industries to keep up-to-date through extension education and training.”

Charles Sukup agrees. “Our mission is to protect and preserve the grain that feeds the world. Key factors to our success as a company have been innovative ideas and our dedicated workforce,” says Sukup, president of Sukup Manufacturing Co., the largest family-owned, full-line grain-drying and storage equipment manufacturer. “That’s why we are excited that Iowa State’s plans for the feed mill and grain science complex will focus on innovation in support of the grain and feed industries, education of the next generation and continuing education that helps our workforce and customers keep up to speed on the latest developments.”

Left: Ground was broken Sept. 13 for Iowa State University’s new Kent Corporation Feed Mill and Grain Science Complex. Officials at the ceremony included, left to right: Laurine Hulstgraaf-Jeans, president, ISU Foundation; Daniel J. Robison, chair, ISU College of Agriculture and Life Sciences; Jim Rouse, executive director, Iowa Crop Improvement Association; Roger Zylstra, president, Iowa Corn Promotion Board; Charles Sukup, president, Sukup Manufacturing Co.; Jim Hughes, general manager, CPM; and Wendy Wintersteen, ISU President.

“By setting the bar high, we hope that future Iowa State apparel and equipment will feature similar imagery, allowing the university to make a lasting impression on students and the larger community.”
As a young person, Karri Haen Whitmer had a profound fear of public speaking. “I dropped out of my undergraduate speech class at least once before I was able to finish the requirement,” she says. “I remember being called on to speak and only shaking my head no to indicate to the professor I wasn’t going to do it. I definitely did not plan on teaching large classes at the university level.” Yet Haen Whitmer, associate teaching professor in genetics, development and cell biology, conquered her fears. And in 2019, she received the Iowa State University College of Agriculture and Life Sciences’ Excellence in Teaching by Lecturers and Adjunct Faculty Award.

Haen Whitmer earned her bachelor’s degree in microbiology and chemistry at Kansas State University. She got her feet wet in front of a classroom as a teaching assistant and lecturer while working on her master’s in plant sciences at North Dakota State University. When she moved to Iowa State University, she taught both human anatomy and comparative anatomy for four years while working on her doctorate in genetics.

In 2012, she began teaching large foundational courses for the genetics, development and cell biology department. Since then, she’s taught about 1,000 students annually. Each fall she teaches 250 students in two sections of Biology 255—Fundamentals of Human Anatomy. In the spring, she teaches 350 students in two sections of Biology 256—Fundamentals of Human Physiology. Both courses also are offered summers, with about 80 students enrolled in each. Haen Whitmer also is course director for the Biology 256 Laboratory, with about 380 students. “It doesn’t matter if I’m teaching 40 or 400, I can’t envision doing anything else,” she says. “On the first day of class, I tell them the study of basic anatomy and physiology is an ongoing and immensely important part of the human health sciences,” she says. “In history, we find the discoveries of previously overlooked, seemingly trivial, details have resulted in some of the greatest changes in our scientific understanding.”

Haen Whitmer stresses to provide students with critical thinking skills, a thorough understanding of scientific methods and an authentic view of scientific change. “It is our willingness to disregard old perspectives about who and what we are that drives our continued advancement in the field of human medicine,” she says. Senior Lauren Kuper took human anatomy and physiology courses from Haen Whitmer.

“She makes her lectures more than just a classroom setting,” Kuper says. “She takes time to explain important topics in detail, while adding real life examples to connect what we are learning to situations we may face in future jobs or schooling.”

Another student who took classes from Haen Whitmer is junior Nicolas Ronkar. “She always makes the main points clear and slips in a couple of jokes or side comments that are funny or interesting,” Ronkar says. “She also is extremely attentive to her students.”

Both courses also are offered online. Besides distance education students, the online option has become popular with on-campus students, with the two sections enrolling as many as 350 students each year.

In 2016, Haen Whitmer started replacing the older Biology 256 lab curriculum with research-based modules. This year, she received a grant that allowed her to create a cohesive lab text that includes chapters on scientific method, conducting literature searches, human subject experimentation, introductory statistics and scientific presentations. Each week, students in the laboratory course are presented with a scientific problem and asked to speculate about an experiment they could perform. Then they conduct a version of the experiment and discuss whether the results were as expected.

For the past three summers, Haen Whitmer has taught several weeklong outreach courses for high-achieving students in grades 9–11. “I’m a huge fan of talented and gifted (TAG) programs,” she says. “I entered TAG in the third grade and remained a TAG student through high school. Those experiences gave me the confidence I needed to pursue higher education.”

Last summer she taught introductory biology for Upward Bound, a college preparatory program at Iowa State for first generation or income-eligible high school students. She had nine students divided into two sections of the three-week course. “I was a first-generation college graduate, so I could easily relate to this group,” she says. “My goal was to provide the students with exemplary academic enrichment opportunities, along with some practical advice regarding the transition to higher education.”

Her students say she takes the time to explain important topics in detail, even real-life examples and is extremely attentive.
michael Rentz’s academic interest in how land use affects plant and mammal abundance developed when he was a child. “Most of the area around my home in Minnesota was either farmland or woods and streams,” he says. “I spent hours tromping around by myself.” Those woods played a large role in teaching me to answer my own questions through observation and reading.

Now an assistant teaching professor for the Department of Natural Resource Ecology and Management (NREM), Rentz says the rest of his school years after he moved to Mankato following sixth grade were spent in a desolate neighborhood that housed farmland or woods and streams, “It is magical.”

In May 2014, Rentz earned a master of science degree in wildlife sciences from the University of Montana. For the past three summers, Rentz is involved in two courses at the Bod and Conrad French Conservation Education Camp. The facility, located 50 miles west of Mankato, Minnesota, is operated by NREM for hands-on field education in forestry, fisheries and wildlife.

For the past three summers, a course on wildlife population methods has been held at the camp. “It is a field-technique-heavy course that can substitute for an on-campus course in the fall,” Rentz says. “It is three weeks of actually doing science and learning by doing.”

In August 2015, Rentz was one of four professors involved in the first multidisciplinary experience for animal ecology majors interested in the department’s wildlife option. “We took 12 students to French Camp for two weeks of data collection and field experience followed by a half semester on-campus analyzing our data and samples,” Rentz says. “We hope to expand this course in the future.”

“They have been dreaming about their careers for years, and the first time they get to do science on their own is magical.”

“My mom wants us to get as much hands-on experience as possible. We backpacked over 35 miles in Glacier National Park, and we completed a ‘mark and recapture’ on deer mice to find the population size in a specific area,” Houseman says. “Having the opportunity to take these classes with such a great professor allowed me to discover my personal interests and find my career path.” Rentz clearly enjoys what he does. “I love watching students grow, how they take on new challenges, and how students learn to use the scientific method to answer their own questions.”

“It is so rewarding to observe students when they have those ‘ah-ha’ moments and get excited about a topic.” In 2019, Bundy received awards for Early Achievement in Academic Advising from both the College of Agriculture and Life Sciences and Iowa State University. “I love being able to watch students grow from their freshman year, when they are a little lost, to when they are making career plans in their junior and senior years,” Bundy says. Tyler Leow, a junior, has been one of Bundy’s advisees since his freshman year. “Dr. Bundy has gone out of her way to help me on multiple occasions. She goes above and beyond her job description to help students and advisors,” he says. Besides personally advising about 100 students annually, Bundy is the department’s academic advising coordinator. She assigns incoming students to a faculty adviser and provides advising training for new faculty.

Bundy teaches nearly 400 students each year, coordinates the department’s learning community, and oversees the transfer student program. She is one of the advisers for Veterinarians Without Borders, an undergraduate club helping improve animal lives abroad. Originally from St. Louis, Bundy earned a bachelor’s degree in animal science at the University of Missouri. She received her doctorate in 2008 and her master’s degree in 2005 in breeding and genetics from the University of Nebraska-Lincoln.

For the past three summers, Bundy worked for a swine breeding company in West Des Moines. During that time, she decided to teach night courses in statistics at Des Moines Area Community College. “That made me realize how much I missed the classroom. I was thrilled to find an opportunity to join the Iowa State University animal science department,” she says. In 2014, Bundy was hired to teach a course in genetic improvement of animal lives abroad. “I was classically trained as an animal breeder so this is my favorite course to teach,” she says. “I want students to understand the technical knowledge, but I also want to get them excited about opportunities within the field.”

She also teaches three other courses—an animal science orientation class required for all incoming freshmen, a similar course covering the unique challenges facing transfer students and a lab that explores the care and use of animals in research settings.

“Teaching is an incredible experience,” says Jennifer Bundy, assistant professor in animal science. Bundy says advising programs, transfer programs and learning communities are part of a strategic plan to aid in student retention. “Students who form a bond with faculty members or peers are more likely to stay at Iowa State,” she says. “We want to provide every resource for students to make those connections.”

Bundy says advising programs, transfer programs and learning communities all are part of a strategic plan to aid in student retention. “Students who form a bond with faculty members or peers are more likely to stay at Iowa State,” she says. “We want to provide every resource for students to make those connections.”
Thomas Lübberstedt is pushing the boundaries of genetics and its use in developing tools and methods to make plant breeding more efficient.

INTERNATIONAL CREDENTIALS
Lübberstedt grew up on a horticultural farm in Germany and earned his degrees from the universities of Munich and Heidelberg. He spent several years working in Germany, and then Denmark, before coming to Iowa State in 2007 to take an endowed chair position.

Since arriving, he has helped isolate two important virus-resistance genes for corn — work that has involved collaborations in China and in Africa that can improve resistance to the emerging threat of Maize Lethal Necrosis Disease in East Africa, an effort supported by the U.S. Agency for International Development.

Lübberstedt is quickly passionate about his work combining plant breeding and molecular genetics. This is one of the most exciting scientific areas to be in, because of the tremendous progress in plant genomic research over the past decades and its impact on plant breeding,” he says. “This will remain a key area to address major societal challenges in the decades ahead.”

ADVANCING DOUBLE HAPLOID RESEARCH
Much of Lübberstedt’s research has been to improve technology for doubled haploids (DH), and he is known for establishing the first public doubled haploid facility in the United States. This work builds on research by another well-known Iowa State plant breeder, Sherret Chase (see sidebar). Chase, an agronomy professor in the 1940s and 1950s, was the first to exploit a natural genetic anomaly in corn he termed “double haploids.”

DH technology allows creation of inbred lines that carry only a single, maternal genome. Through several steps, doubled haploids can be used to accelerate development of pure genetic lines for research and plant breeding. However, as Chase discovered, the trait only happens in a small fraction of plants. Ever since, other scientists, including Thomas Lübberstedt, have been working to improve the efficiency of producing doubled haploids.

Lübberstedt has recently identified germplasm with a higher rate of spontaneous haploid genome doubling. Backcrossing this germplasm into breeding lines can significantly increase doubled haploids via a process that avoids using a common inbred, the toxic chemical colchicine.

“This was a lucky find,” says Lübberstedt. “It’s a good example of his tendency to think about his work combining plant breeding and molecular genetics. This is one of the most exciting scientific areas to be in, because of the tremendous progress in plant genomic research over the past decades and its impact on plant breeding.”

One of the benefits of creating doubled haploids without the use of colchicine is to improve breeding systems for organically grown corn, a goal of a multi-partner U.S. Department of Agriculture Organic Research and Extension Initiative grant Lübberstedt is leading. Another goal of that research is to create a mechanism for organically grown corn to resist pollenization by transgenic pollen floating in from conventional fields, a problem that may result in huge losses for organic farmers.

Lübberstedt also is one of the primary researchers on a $7.3 million USDA Specialty Crop Research Initiative grant with the University of Florida, where his role is to implement doubled haploid technology for sweet corn.

COLLABORATOR AND TEACHER
USDA Research Geneticist Paul Scott (’66 biochemistry and biophysics) is a partner on the USDA organic grant. Scott says about his colleague: “Thomas is a creative thinker and a very organized manager. He’s also quite selfless.”

Scott’s comment reflects regard Lübberstedt’s contributions expressed by colleagues who nominated him for the recent GALS research award. This outlined many achievements beyond a long list of publications and grants, including his dedication to teaching, mentorship of graduate students, postdocs and visiting scientists. They also emphasized his leadership to launch and direct a distance master’s program in plant breeding that has 50 graduates worldwide.

Candice Gardner (’79 bacteriology), research leader for the USDA North Central Plant Introduction Center in Ames, has worked with Lübberstedt on several projects, recently on the Germplasm Enhancement of Maize program. She first met Lübberstedt when he came to campus to interview. “Thomas is an excellent collaborator,” she says. “He deserves a lot of credit for creating the doubled haploid center, which provides widespread access to genetic resources that otherwise would only be available to a few well-resourced seed companies. It’s a good example of his tendency to raise everyone up.”

Above: Thomas Lübberstedt’s work includes establishing the first public doubled haploid (DH) facility in the United States at Iowa State University. Here, he holds a corn ear that shows its distinctive DH “color marker.”

Left: Plant breeder Thomas Lübberstedt’s first met Lübberstedt when he came to campus to interview. “Thomas is an excellent collaborator,” she says. “He deserves a lot of credit for creating the doubled haploid center, which provides widespread access to genetic resources that otherwise would only be available to a few well-resourced seed companies. It’s a good example of his tendency to raise everyone up.”

Above, from left: Andreas Verzegnassi, now a plant breeder at GRS in Brazil; Kun Hu, now a post doc at Michigan State University; Chris Castello, now a plant breeder with Corteva in Brazil; and Raquel Pires, now a professor at the Federal University of Lavras, Brazil.

SHERRET CHASE: A PIONEER IN CORN BREEDING
Technologies that underpin modern corn breeding began decades ago at Iowa State University. One such technology — doubled haploid plants — are thanks to Sherret Chase, a member of the botany faculty from 1947-1954.

Chase earned degrees from Yale and Cornell University, where he conducted research alongside future Nobel prize-winning botanist and geneticist Barbara McClintock.

He is best known for identifying “haploids” of maize — plants with a single set of chromosomes. This led Chase to pioneer early techniques to obtain “doubled haploid” lines to accelerate the rate of selection for desirable genetic characteristics.

He left Iowa State to work as a geneticist for DuKalt Ag Research (later part of Monsanto), where he developed the first successful commercial corn hybrid using doubled haploids. Over time, he was recruited for a number of prestigious academic and industry positions.

Chase, who turned 101 this year, will be presented with the Iowa State University College of Agriculture and Life Sciences Award for Sustained Excellence at the Baker Plant Breeding Symposium in Ames, Iowa, on March 6, 2021.
“Either I would win my battle with cancer and I would look back at this time of my life with triumph, or I would meet my heavenly father,” she says. “Either way the ending would be sweet.”

Baier has made tenacious positivity her hallmark. The senior in agricultural education inspired thousands while serving as a national FFA officer and battling cancer.

When Baier was elected to national office in the fall of 2017, she knew she was signing up for a rigorous schedule. National FFA officers take leave from their educational and professional pursuits to focus on their 12-month commitment.

“It is a huge honor traveling, over 100,000 miles coast-to-coast impacting nearly 700,000 FFA members and stakeholders through keynote addresses, workshops, camps, sponsor visits and more,” says Baier. “That’s why she initially thought the frequent colds and sinus infections she suffered were due to jetlag or contact with hundreds of youth. But, when antibiotics failed to help and her swollen lymph nodes hardened, doctors looked deeper and took biopsies.

THE DIAGNOSIS

The results came the day after her 21st birthday – May 17, 2018. She took the call as she stood outside a restaurant between donor visits.

“I heard my doctor say the words, ‘Hodgkin’s Lymphoma’ and it was like my brain was in slow motion,” Baier remembers. “Then she said, ‘a form of cancer’ and it clicked. I thought, ‘this can’t be real. I’m supposed to travel the country and speak on behalf of FFA. What happens if I lose my hair and people think I’m weak? What happens if I don’t have that much time to live?’”

The second half of her national officer term included an intense chemotherapy regimen. She returned to Des Moines every two weeks for treatment.

“I relied on my faith and my parents to give me strength. We knew there had to be a reason I was going through this during what was supposed to be the best year of my life,” she says. “Commitment and persistence were not new to Baier. Growing up in Adel, Iowa, which lacked a high school agriculture program, she traveled every day to nearby Earlham to pursue her passion for FFA. She showed livestock and was active in her family’s farming operation – she and her father built a 50-head SimAngus herd while she was in high school. But, this schedule was a test even for her.

GENUINE LEADERSHIP

In Arizona Baier met an FFA student named Jackson. Something about him was different.

“I finally shared about my cancer in my keynote at the conclusion of my visit. Jackson then shared with me about losing his sister to cancer and his own diagnosis with a rare blood disease,” Baier says. “I had this image of leadership as perfection on a stage, but I learned that being genuine and sharing my story with others took more leadership.

There were many lessons for Baier that year, including we are more successful if we fight our fears together. Fighting cancer made me realize I had no idea about the burdens others carry. We have to show up as leaders to encourage everyone to find their place. Sharing positivity and helping youth realize their own value became my purpose.”

Cindy Hefner, program coordinator with National FFA, coaches the national officer team.

“Erica encountered other FFA members who had Hodgkin’s Lymphoma, and they were inspired by her strength and courage,” Hefner says. “She decided to use her situation for the good – to be intentional in seeking out the ‘why’ and help others cope. She’s always putting others first and spreads joy wherever she goes.”

Erica Baier knew her story would have a happy ending.
Erica Baier is one of many students to receive financial support from donors via Student Emergency Support Fund. In many cases these funds are the determining factor for a student to continue their education. To support students in crisis contact Andy Zehr, CALS director of marketing and new student programs, at azehr@iastate.edu or (515) 294-9123.

On October 27, 2018, she was diagnosed with adenocarcinoma of the lung. The tumor was located in her left lower lobe. She had undergone surgery to remove her entire left lung. She then participated in six months of chemotherapy, coupled with radiation. Her doctor declared her cancer was in remission from cancer. She was one of several students to receive financial support from the Harold Crawford Student Emergency Support Fund. The financial support allowed her to reduce the number of hours she was working outside of class to support herself, Tyler says. Those funds made a huge difference. “I’m unbelievably grateful for the support that helped our family get back on our feet, the ability to talk to staff that cared and to get tutoring,” Baier says. She enrolled in the college’s SMART STEPS program with retention coordinator Audrey Kennes. The program provides free tutoring support, academic coaching workshops and one-on-one meetings to ensure student needs are being met. (Read more from Kennes on page 20.) Supporting her future was a good investment, says Tyler.

“Erica showed everyone she had the extraordinary grit, courage and determination to succeed,” he says. “Plus, she has this relentlessly positive attitude. It will be an emotional and exciting moment when she crosses the stage to receive her degree.”

Baierredicate her next big battle — figuring out her post-graduation plans after student teaching this spring. In the running are graduate work, teaching high school agriculture and Christian outreach. The future is hers to create.

STORIES EXTRA: www.stories.ca/iastate.edu
Hear how Erica Baier related her story of perseverance with humor and grace to tens of thousands of FFA members in her National FFA Officer retiring address – visit STORIES website for a link to a video of her moving speech.

For students like Kaleb Baber, scholarship support opens up a world of possibilities through study abroad. If you’re interested in learning how you can help CALS students participate in life-changing study abroad experiences, contact Shelley Taylor, director of CALS study abroad at staylor@iastate.edu or (515) 294-5383.

“I think studying abroad is critical. It gives students a different perspective on agriculture and also allows them to see a different culture,” says McDaniel. “I recommend my advisee take advantage of studying abroad while they are here because in the future they might not have the same opportunities.”

In addition to traveling and serving the International Agriculture Club at Iowa State, Baber is the fundraising chair for the Agronomy Club. He also has worked as a research assistant collecting and processing soil and water samples for the Agricultural Water Management Research Group. And, he was a peer mentor for the Department of Agronomy guiding incoming freshmen to successful four-year experiences.

Studying abroad helped Baber develop soft skills like independence and confidence. “It used to be that I couldn’t imagine even traveling abroad, but now I’d live abroad if the right opportunity arises,” he says.

Baber: Kaleb Baber shares his Cyclone pride on his passport at Mt. Festpint in Freúng National Park in Tanzania while studying abroad.

On October 14, 2018, he was accepted into the national office of FFA. Baber had joined Iowa State University chapter in his freshman year. He served as president of his chapter. Baber attended Iowa State University, located in Ames, Iowa. He is one of the 76,000 students studying at Iowa State. Baber is a senior in agronomy from Weston, Missouri.

Baber studied abroad in Australia, Argentina and Spain. Baber spent the majority of his time in Australia. The FFA chapter there incorporated their annual study abroad course during spring break rotating among Australia, Argentina and Spain. Baber worked on a sheep station in New South Wales. Baber is the recipient of the Elmer L. Fehr and Walter R. Fehr Endowed Scholarship, the Agronomy Academic Fellowship and the Donni Study-Abroad Leadership Scholars Scholarship. Baber has the same opportunities.”

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Leading is second nature to Battles. “I have a particular interest in leadership, so I’m grateful for all the chances CALS provides to work out and practice those skills,” he says.

From his participation in the Vermillion International Leadership Program, to the Globe Leadership Fellows Program, to the Dean’s Leadership Class, to the multitude of leadership positions he’s held in various service organizations, Battles is grateful to CALS and Iowa State for propelling his academic and career goals forward.

“My courses, the meaningful structure of my degrees and active learning communities go far beyond the basics, and with good reason — the world will not settle for mediocrity,” Battles says.

And neither does he. Battles has excelled academically since stepping onto Iowa State’s campus. As a freshman, he earned the Floyd Andree Scholarship for Excellence in Agriculture, and he was recently recognized with a high scholarship award for being in the top 2% of his 2021 CALS class. He’s regular on the Dean’s List as well as a member of the university and CALS honors programs.

“Empowering others through service is a fundamental part of my degrees and active learning communities go far beyond the basics, and with good reason — the world will not settle for mediocrity,” Battles says.

LEARNING TO LEAD
Battles also is pursuing a minor in learning and leadership sciences. Jan Wiersema, associate teaching professor in agronomy, has taught Battles in two of the minor’s foundational classes.

“Nick seems to see the world in possibilities, not problems,” Wiersema says. “He has a desire to use his knowledge and skills to solve problems and enhance learning and life for others.”

EMPOWERING OTHERS THROUGH SERVICE
Battles is dedicated to serving others. His long list of service activities includes being a Cyclone Aide and Adviser, a CALS Ambassador and a member of the college’s technology advancement committee. He also serves in UNICEF, the National Alliance on Mental Illness and Food at First.

“I’ve always understood that I come from quite a privileged background. With privilege, in my opinion, comes a responsibility to empower others,” he says.

Nicole Nicholson supervised Battles as a Cyclone Aide and adviser. “Nick is always asking how he can help, and he is always there for people whenever they need him,” Nicholson says. “As a Cyclone Aide adviser this past year, I saw the care and compassion he showed for every student he mentored and, whether he knows it or not, that was inspiring to me.”

Battles returned more determined that the experience was a springboard for study abroad and leadership experiences at Iowa State. Above: Battles serves as a Cyclone Aide and advisor, mentoring and welcoming fellow students.

CHANING THE WORLD FOR THE BETTER
Battles studied abroad in Wageningen, Netherlands, this fall thanks to the Louis M. Thompson Study Abroad Scholarship, which helped fund his trip. He is learning about irrigation and water management, economics, international policies and sustainability.

“Having the chance to interact with and hear the perspectives of peers from around the world on pressing issues I care deeply about is extraordinary,” he says.

Battles will apply his overseas experience to his career following graduation from Iowa State in 2021, though those plans are not yet firm. What is certain? Battles will work to make a difference wherever his path leads.

“My degree programs make me so excited for a career in public service,” Battles says. “I think everyone, to some degree, grows up wanting to change the world for the better.”

At age 18, Battles spended two months working in India interviewing farmers about their use of micro-irrigation systems. The sequence was a springboard for study abroad and leadership experiences at Iowa State. Above: Battles serves as a Cyclone Aide and advisor, mentoring and welcoming fellow students.

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CALS Advantage

Colleges and universities across the country to help eliminate barriers that impact their success. After one non-cognitive skills and barriers that address students' cognitive and financial support. Coaching, tutoring, student counseling meetings, goal-setting, academic specific guidelines including weekly increase academic performance. students an individualized plan to program designed to provide high-risk Management and Academic Response SMART is short for Student in the classroom, but also is deeply development, success and holistic college's level of commitment to student success and retention. As a result, we fully exhibited significant improvement compared to peers who did not enroll, and 75% successfully completed the program in good academic standing. As a result, we fully adapted the program this fall and have seen a substantial increase in retention.

“We’re able to provide individualized support and hold students accountable by encouraging them to take ownership of their learning and manage life circumstances.”

One student stated: “My retention coach was the most helpful part for me in this process. I needed another person to keep me on track and motivate me. I really struggled a lot, but she gave me all the tools I needed to succeed. Hopefully I can stay in this program.”

DONORS ARE HELPING CALS ADVISORS RECOGNIZE WHEN AND HOW STUDENTS NEED ASSISTANCE. IF YOU’RE INTERESTED IN SUPPORTING THE COLLEGE BY PROVIDING FINANCIAL SUPPORT FOR ADVISOR TRAINING AND DEVELOPMENT, STUDENT SUPPORT PROGRAMS LIKE SMART STEPS, OR DIRECT SUPPORT TO STUDENTS VIA EMERGENCY OR CITATION GRANTS CONTACT ANDY JENDT, CALS’ DIRECTOR OF MARKETING AND NEW STUDENT PROGRAMS, AT 515-294-3723.

One student shared: “Having a support system to fall back on when I felt as if I couldn’t do it anymore helped me so much. This program helped me get back on track and get to the root of my problems, which then helped me succeed in the long run.”

Providing one-on-one, wraparound care allows us to deliver real-time intervention and address student needs before they escalate into larger issues. Often times, we see students struggling with non-cognitive issues such as mental health, managing work and school, navigating campus and utilizing resources. These factors tend to be a stronger predictor of academic performance than cognitive factors alone. By implementing this program, we’re able to provide individualized support and hold students accountable by encouraging them to take ownership of their learning and manage life circumstances.

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CALS Student Services is more than transactional – it’s a relational space that allows us to be proactive with interventions. SMART STEPS, along with several other programs, has allowed us to have a lasting impact on student success and retention. As stated by one participant, “I would not be graduating this semester without this program.”

The major also offered the opportunity to serve as president of the Agricultural Communications of Tomorrow Club and as an aide of CALS ConneXions, a magazine for CALS students.

Even with her full schedule McGarry finds time to run every day. She had to take a break after she suffered a hairline fracture in Rome last summer. She was there with the Dean’s Global Agriculture and Food Organization (FAQ) of the United Nations. Each year students in the 10-year-old program spend one month in Rome working on food security problems for the FAQ. “It was an intensive program, and I think it was one of the best decisions I’ve made in my college career,” McGarry says. “We had nine students and my team of five students looked at the sustainability implications of shifting to a plant-based diet.”

McGarry graduated from high school in 3.5 years and will graduate college in 3.5 years. Mike Gaul, director of the College of Agriculture and Life Sciences career services office, says McGarry has always been polished and focused.

Maddy McGarry approaches life like she’s training for a marathon. She’s focused. She puts in the work. And, while she trains for one race, or pursues one opportunity, she’s looking ahead for the next.

One of these opportunities was interning with the Congressional Hunger Center last summer in Washington, D.C. McGarry, a senior with a double major in agricultural education and studies, communications option, and international agriculture, wrote stories to increase awareness about global food insecurity. It was just one of many opportunities she’s pursued to address hunger issues.

“I’m always seeking out opportunities and running with them,” McGarry says. “I’m a first generation student and I enjoy challenging myself.”

McGarry wanted to go into journalism, but thought it was too limiting. Then she discovered the communications option in agricultural education and studies that brought together her interests in journalism and agriculture. “It’s a hidden gem,” McGarry says. “Now I’m equipped to make a difference and tell stories about the people who make a difference.”

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CONNECT. ENGAGE. SHARE.

Maddy McGarry earned several scholarships during her college career. The Jay and Julie Cornelius Jacobie Scholarship for Agricultural Study Abroad helped her travel to Panama, and the Dean’s Global Ag and Food Leadership Program Scholarship for Rome supported her participation. She’s been awarded several national and external scholarships and within CALS was selected as a Duane Hinkle Agriculture Scholarship recipient. The Hinkle scholarship was created to support Iowa students pursuing agricultural careers and provides over 35 scholarships per year to CALS students. Visit www.stories.cals.iastate.edu to learn more about the Hinkle scholarship, which is administered through a relationship with the Iowa Farm Bureau.

“She gets it,” Gaul says. “She knows why she’s here, she knows where she’s going and she’s going to get there.”

During her short college career she’s participated in several internships. She worked as a public policy intern for World Food Program USA, a communications intern at the National Pork Producers Council, public relations intern at AMVC Management Services and as a customer insights intern for Vermont. She’s also studied abroad in Rome and Panama, but after two internships in Washington D.C. she’s hoping to land a job in communications in the nation’s capital. She’d like to work for a commodity group, member of Congress or an organization that’s focused on agriculture.

“Washington D.C. is an exciting, historic place and it’s a great place to meet new people,” McGarry says. “And I never get tired of running on the National Mall.”

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When other kids were asking for toys or video games, Thomas Demers was asking for full-size tractors and combines. He was a gearhead from day one.

“My parents bought me the DVD series ‘All About John Deere,’” Demers says. “I remember a video of an orchard tractor Deere had set up autonomously. The farmer operated the tractor from his house by remote control. I thought, ‘That’s cool.’ That was the first real-life application I had seen of precision agriculture.”

Demers is a junior studying agricultural systems technology. This fall, he traveled home weekly to Storm Lake, Iowa, to drive the combine during harvest. Someday soon, Demers sees the farming combine during harvest. Someday soon, Demers was asking for full-size tractors and combines. He was a gearhead from day one.

“We’re using more automatic or robotic systems,” Haughery says. “That’s the nature of how technology is trending.”

REAL-WORLD ROBOTICS

Haughery (PhD industrial and agricultural technology) teaches both introductory and advanced courses in technology systems management.

In his introductory course, Solving Technology Problems (TSM 115), students like Demers don’t just draft code for robots. They actually program a robot with their code and set it to follow a driving course.

The robots are square and about the length of a student’s hand. They run on two continuous bands of tread driven by wheels with a circuit board visible from above. Their route is a black line printed on a table-sized foam board. Each robot mimics actions found in the field — following a row of crops, turning at the end rows, or slowing to unload grain.

Brayden Geilenfeldt, a sophomore in industrial technology, had never coded before signing up for Haughery’s course. True to the course name, Geilenfeldt found himself troubleshooting with his group to solve problems.

“The part that stuck with me the most was the class when our robot just wouldn’t work,” he says. “Something was wrong in the code. That drove me to want to figure out the problem, since I could see it not working in front of me.”

ADVANCED TEACHING TECHNOLOGY

Geilenfeldt’s motivation to problem-solve isn’t a happy coincidence. Haughery is actively designing and leading his course with a focus on the scholarship of teaching and learning. He bases class activities on what previous studies tell him works or doesn’t work.

“It’s a down-and-dirty, rubber-meets-the-road way to get to the best possible teaching methods,” Haughery says. “You make a change, you collect the data, you analyze that data and you find the benefits or detriments of the process so that you can change it the next time.”

In his robotics courses, Haughery pulls out all the steps to find what is working for his students. He tracks grades, analyzes course evaluations and holds appraisals throughout the semester to discover whether the students are picking up more through hands-on work with the robots.

“What we’ve found is robots give our students a tangible feedback loop,” Haughery says. “They develop a program, they upload it to the robot and then they watch the robot run. Let’s be honest — it usually doesn’t work the first time. But they can see where it stops working.”

During the preliminary stage of his research, Haughery found final grades increased by 3% on average when students worked with robotics in a hands-on environment. He also saw higher scores from students who worked with a robot, in comparison with those who only completed the coding assignments.

Though more quantitative data is needed to prove a statistical significance of hands-on robotics activities heightening motivation in the classroom, students are already applying practical lessons — an attention to methodical problem solving and an understanding of the system as a whole.

CRITICAL THINKING, FUTURE FOCUSED

“Technology is changing so quickly in my field,” Geilenfeldt says. “The more I know now, the better I’ll be able to adapt during my career. I’ll be able to understand the system, to work with a robot, in comparison with those who only completed the coding assignments.

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When it comes to landing an internship or job, having the right skills and experience pays off.

Such was the case for Allison Little, a senior in food science, who is interning at The Hershey Company in Hershey, Pennsylvania. Little overseas test trials, writes reports, presents findings and tests new ingredients.

“When I stumbled across the Hershey opportunity, I decided to take a shot in the dark,” Little says. “The 13-month coop has given me the chance to get a better look at the food industry, get hands-on experience leading my own projects and have a better idea of what I want to do with my food science degree when I graduate.”

A number of experiences and connections Little had early in her college career contributed to her successful application. As a junior, Little enrolled in the professional development in food science course, taught by assistant teaching professor Kate Gilbert (’07 food science).

“The professional development class helped me find ways to better describe my strengths to future employers and get feedback on my resume,” Little says.

Gilbert also serves as the internship coordinator for the Department of Food Science and Human Nutrition. In this role, she helps students like Little find applicable work experience for their major and career plan.

“Allison shared with me about the Hershey co-op position and wanted to know if I should apply. I said yes because the position was a good fit for her, plus I encourage students to apply for any position that interests them,” Gilbert says.

Little also credits the experience she gained in associate professor Aubrey Mendonca’s food microbiology lab for preparing her for the co-op. “It gave me the background of understanding how scientific projects are laid out and executed,” she says.

Little started her co-op in the summer of 2019 and says many of her experiences contribute to her career goals. She’s been able to work on the reformulation of existing products to use more cost-effective ingredients and maintain the quality of the product. She also has supported line trials at plants to see how the different lines work.

“This co-op has helped me gain more focus on the type of work environment I enjoy and what I value as an employee,” Little says.

At the end of the day, making sure students are prepared to enter the workforce upon graduation is Gilbert’s goal.

“The end goal of attending college is to enter a career you are passionate about,” Gilbert says. “It takes a village of advisers, career services and faculty to make it happen, but it is worth it to ensure the voice of the American farmer and rancher is heard and heard well,” he says.

His 2019 internship at the U.S. Department of Agriculture Office of Secretary Sonny Purdue in Washington, D.C. included working directly with the 2018 Farm Bill. He also oversees programs directly impacting Iowa State and other land grant universities.

These leadership, internship and work experiences led him being recognized by the College of Agriculture and Life Sciences as a Fred Foreman Scholarship recipient.

“Only a small percentage of CALS students receive this award and I am extremely grateful for this and all the scholarship dollars. They allow me to maintain a high level of involvement, focus on my coursework, and investigate various work opportunities as an undergraduate,” Hlas says.

Hlas has advice for students who, like his younger self, might think they know what they want to do: “In the end, your college experience is entirely what you make of it. Be intentional with your time and use the standard of excellence set by those who came before to build the best version of yourself far beyond the end of your four years.”

BEYOND BOOKS
BUILDING YOUR BEST SELF

Jake Hlas’ journey to Iowa State started with his family’s Simmental cattle operation near Traer, Iowa. As a junior majoring in animal science, he continues to work with his family’s cow-calf operation and travel the country preparing cattle to show.

“That background led me to seek a degree in agriculture, specifically one that will assist me in continuing the cattle operation as well as any other business I might pursue,” he says. “Although my mother graduated from Iowa State, I chose to come to college here because I fell in love with the professors and the passion for excellence CALS instills in its students.”

Early in his Iowa State career, a seminar told him to not set books get in the way of receiving an education, and he took that statement to heart.

“Initially I decided to focus on my fraternity, Alpha Gamma Rho. As co-vice engagement chair, I direct activities that expand community involvement and volunteerism by providing monthly workshops on agriculture to 100 kindergarten students in Des Moines,” Hlas explains. “We may be their only tie to agriculture.”

His campus involvement includes Collegiate Cattlemen, CALS Ambassador, Block and Bridle and the Livestock judging team. He also works at the Iowa Beef Center as a student research assistant for extension program specialist Beth Reynolds.

Hlas served as the Northeast State Vice President for the Iowa FFA Association last year, traveling 35,000 miles to present leadership curriculum to nearly 16,000 high school FFA members. He also met with government officials and developed a passion for being a voice for agriculture on a government level.

“In the future we as an industry will be faced with challenges, and I want to ensure the voice of the American farmer and rancher is heard and heard well,” he says.

His senior internship at The Burns Group in Washington, D.C. afforded him the opportunity to lobby for agriculture on a government level.

“This co-op has helped me gain more focus on the type of work environment I enjoy and what I value as an employee,” Little says.

“Having the right career path.”
Few states have had such a passion as Iowa to nurture the next generation’s interest in the health of Iowa’s wild species. Iowa State’s Jim Dinsmore is a popular emeritus wildlife ecology professor at Iowa State. Jim is also well known as the author of a notable book on Iowa’s natural history, “A Country So Full of Game: The Story of Wildlife in Iowa.”

As a kid, Stephen often spent after-school and holiday hours hanging out in his dad’s office and tagging along on his field trips. Years later, he works in an office in the same building and revisits some of the same places with his students. Their work emails help tell the tale. Jim has long been known as a folklore expert on Iowa’s wildlife and has become a local legend, earning internship hours — her undergraduate degree program requires 400 hours of relevant work experience. She says this experience will help her decide what she wants to do after college.”

It’s amazing how much we overlook. There’s a lot of life in Iowa we tend to look past, especially small things,” says Lord. “For example, there are a lot of different species of dragonflies in Iowa.

Over time, MSIM teams have found six species of odonates (dragonflies and damselflies) never before recorded in Iowa.

Simone Lord, a senior in animal ecology, from Anota, Iowa, started working for the monitoring program following graduation. She says she hopes to work in the field of conservation biology.

“I really appreciate that the broader goal of this effort is to provide information to help ‘keep common species common,’” she says.

Stephen Dinsmore (’90 fisheries and wildlife biology), professor and interim chair for the departments of entomology and natural resource ecology and management, administers the program for Iowa State. His role is, in part, to ensure that protocols for site selection, monitoring and database management are scientifically sound.

“Our partners at DNR use the information our students collect to inform management decisions about what actions to take — such as whether to burn in November or April, or plant grass or forbs — to help the habitats Iowa’s wild species need as healthy as possible,” says Dinsmore. “So we need to make sure that we’re providing good data.”

Few states have had such a comprehensive, long-term effort to monitor animals and plants. Every year, Dinsmore helps review a large pool of candidates from the Midwest and beyond who are vying for the chance to work long hours outdoors for the program. Those who get the opportunity often go on to become professors, researchers or wildlife professionals for agencies and nonprofits.

One of his graduate students, Rachel Vanausdoll (’18 MS wildlife ecology), has become the MSIM’s main program biologist. She does the majority of data analysis, conducts training and field visits, helps write papers and supervises field technicians. Today, she leads the team that includes Hachmeister, Lord and other recent Iowa State graduates.

Johanna Ford (’18 MS wildlife ecology), from the Chicago area, was hired for her expertise identifying birds and butterflies. She’s not sure what she wants to do next.

“For now,” she says, “I’m glad to be part of important conservation work that can help us understand what we need to do to protect Iowa’s wild species for the future.”

The work continues, with support from the U.S. Fish and Wildlife Service, the Iowa Department of Natural Resources, Iowa State University and the U.S. Army Corps of Engineers.

Jim has long been known as a folklorist. He has received many awards for his book, “A Passion for Nature: The Story of Wildlife in Iowa.”

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Left: Simone Lord, a senior in animal ecology, left, examines a field mouse while her monitoring partner Tianna Kinzie, right, examines a white-footed mouse live-trapped at Lower Butterfield Park. The Iowa Department of Natural Resources coordinates the program in partnership with Iowa State University.

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Sometimes the best education is one you can eat. Iowa State University students have an opportunity to do just that with the Good Earth Student Farm.

Organized as a Community Supported Agriculture, or CSA, the farm provides hands-on opportunities for College of Agriculture and Life Sciences students as well as students from other colleges. The farm is entirely student managed and averages around 50 shareholders per year. Shares are available to faculty, staff and students of Iowa State. Located at the Iowa State University Horticulture Research Station, Good Earth operates independently from the research station’s produce operation.

“We started planning in February,” says Ellena Wolff, a junior in horticulture and student farm manager for the 2019 season. “We took inventory of seeds, figured out what crops we wanted to grow and put together a cropping plan. Then I got to pick out the cultivars I wanted to grow.”

Tracking every detail is up to Wolff and assistant farm manager, Abby Kennon, a senior in agronomy. They’re mindful of income and expenses, make agronomic decisions and manage the shareholders who volunteer at the farm. Wolff is the only paid employee of the operation. The farm offers two types of memberships. Paid shares contribute solely financially, while others work three hours a week at the farm and pay a smaller fee. Wolff and Kennon established weekly shifts for the volunteers with work shares. They determined what tasks were to be tackled during each shift, from starting seeds in the greenhouse to planting, watering, harvesting and weeding.

“Working as a team meant we were able to divide up the work based on each other’s skill sets,” says Wolff. “If I was confident in one area, I led and vice versa.”

The full leadership team includes the student organization president, Huang Nguyen, a graduate student in agronomy, and graduate student adviser Moriah Bilenky, a graduate student in horticulture. Guidance for the group is rounded out by faculty advisers Mary Wiedenhoeft (80 agronomy), Merrill Perkins (agronomy), and Ajay Nair, associate professor of horticulture.

The farm started in 1997, but has undergone a few changes since its beginnings. Originally named Mahyah, after the Ioway tribe’s word for “Mother Earth,” the group was known as the Student Organic Farm for a time as well. Students don’t farm credit or get paid for their work on the farm. Experience is their reward. The farm was certified organic at one time and still follows many of those practices. However, the official certification process is time consuming and can be expensive. For now, the group has opted to forego the certification.

“Our shareholders said we trust you,” says Wiedenhoeft. “That means the world to us, but it also saves so much time and of the certification process.”

Everyone who works on the farm attends food safety training to ensure everything is handled appropriately. In addition, they must be trained on various equipment for harvesting and packaging.

Being in charge of the entire process from buying seed to the final harvest of the season has been a valuable learning experience and not just from an agricultural perspective, says Wolff. “I’ve gained leadership skills, made connections and learned so much from others.”

“The Good Earth Farm has been an incredible learning experience and not just from an agricultural perspective,” says Wolff. “I’ve gained leadership skills, made connections and learned so much from others.”

The goal of the Good Earth farm is education. In the past, students have hosted workshops about gardening and canning for the local community. Ultimately, shareholders know the students are in it to learn.

Every season is so different,” says Wiedenhoeft. “As a shareholder, I know not everything will be perfect.”

“As with any agricultural venture, the weather plays a necessary but unpredictable role. Some seasons teach harder lessons than others. Dry and wet years have certain species hard. What causes one crop to thrive can cut down the others. Dry and wet years have certain species hard. What causes one crop to thrive can cut down the others. But every season is so different,” says Wiedenhoeft. “As a shareholder, I know not everything will be perfect.”

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“The farm not only teaches students how to sustainably grow produce, but also exposes them to the challenges and issues of production systems. Learning how to grow quality produce with limited impact on the environment is something these students understand and practice.”

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“I still want to farm,” says Wolff. “But, because of this experience I am keenly aware of how much I don’t know yet. I’d like to work under someone, learn from someone for a while before I take on that risk myself.”
she took cold showers for two weeks before her host mother told her the "C" on the faucet did not represent the word "cold." Rather, it meant "caliente," which is Spanish for hot.

“I was in the third week of the first research study when the translator told me I had been saying a word wrong the whole time. I thought I was telling the children, ‘I’m going to measure your waist.’ But, I was really saying, ‘I’m going to measure your seat belt,’” Platte says. “Every time I would say that, the little kids would start giggling.”

BRAZIL

In the spring of 2018, the college’s Global Food and Agriculture travel course took her to Brazil for two weeks to explore some of the complex issues surrounding food and agriculture systems there including soy, corn, sugar, coffee and bananas.

“This was unique to me,” says Platte. “I grew up in a rural town, but I didn’t know much about the production of different agricultural products.”

She observed the cultural differences, too, the food, the vibrant colors and the public expressions of love for family.

JORDAN

The following year, Platte applied for a 10-week internship with Cargill. She was accepted and sent to Amman, Jordan, in the summer of 2019, to conduct research with Cargill Animal Nutrition.

“The project was really interesting because in that region they offer products for poultry, dairy and ruminants. With population trends and the increase of aquaculture production, Cargill wanted to see if they should be producing feed for aquaculture,” Platte says. “I wasn’t just looking at Jordan, but in all countries throughout the Middle East. I presented my findings to Cargill and made recommendations of countries where I thought they should be doing sales for aquaculture feed.”

In Jordan, Platte also had the opportunity to do a lot of “cool tourism” things. She floated in the salty Dead Sea, went scuba diving in the Red Sea and was awed by rock-cut architecture in Petra, a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site.

At home in the U.S.

“I was in the third week of the first course. I thought I should be doing something more hands-on in a classroom setting, so I went back to my advisor and said I wanted to spend a year in Latin America, and I had this internship. I thought this was a great opportunity to combine my education and my cultural experiences.”

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One day Cody Acevedo woke up and decided waiting tables wasn’t what he wanted to do the rest of his life.

“I was thinking about what made me happy when I was a child and it was nature,” says Acevedo, a senior in animal ecology.

More specifically, it was a fascination that began with a butterfly hunt in Milwaukee when he was five years old. He remembers his dad making a net out of mesh stitched to a hanger. The two went to an animal ecology.

Pursuing that fascination continued into high school he collected eggs and hatched them in 20-gallon tanks in his room. He says there were so many he could hear them munching on leaves at night. “I was obsessed,” Acevedo says.

He started college in Wisconsin, but because of financial difficulties he had to drop out. Acevedo said it was disappointing because he remembered a high school teacher pointing out that half of the students sitting in her class wouldn’t make it through college. “I was determined not to be that student,” Acevedo says, “but there I was. And those words stuck with me.”

When he decided to go back to school he found Iowa State was one of the few universities to offer a major in animal ecology. Pursuing that major allowed him to work as a summer research assistant for the Iowa Monarch Conservation Consortium.

Last spring, Acevedo joined 13 other students on a trip to Yellowstone National Park. Mike Rentz, assistant teaching professor in natural resource ecology and management, says the trip’s purpose is to show students they can be the scientists doing research in areas like Yellowstone. (Read more about Rentz on page 10.)

“The Yellowstone trip helps them recharge their souls and it shows them that they can, and they should pursue these possibilities,” Rentz says. “Cody really believes this, and I can’t wait to see what he does in his career.”

In September, Acevedo was nominated and received the George Washington Carver Spirit of Innovation and Service Award, which is sponsored by the George Washington Carver Birthplace Association. The award is presented to first-generation college students who are focused on science and research with the goal of continuing their education.

For Acevedo, being nominated for that award was validation he was on the right track. He describes it as an inspiring experience.

“To be in the same room with all these awardees was inspiring because they deemed me to be worthy of this award,” Acevedo says.

After he graduates in May 2021, Acevedo says he’s looking forward to graduate school and hopes to focus on conservation and habitat restoration.

Cody Acevedo’s love of butterflies led him to pursue a career in animal ecology. He earned a national George Washington Carver Spirit of Innovation and Service Award this fall for his focus on science and research.

When Patrice Bailey surfaced from the subway and made his way home from high school in Harlem he saw both Marilyn Lynch’s “Changing Bull” statue and the Apollo Theater. As the assistant commissioner of the Minnesota Department of Agriculture, he has gained quite a different view.

Bailey, (‘01 MS agricultural education and studies and international agriculture) maintains an intense pace. He oversees outreach, agricultural marketing and development, dairy and meat inspection and food and feed safety.

During one week this fall, his agenda included visiting with the White Earth Nation and Tribal College, observing sugar beet harvest, engaging urban students in agriculture and facilitating panels on farm viability and how to foster inclusivity in agriculture.

“I serve as the tribal liaison and coordinate emerging farmer listening sessions to advance the success and sustainability of immigrant farmers, farmers of color and beginning farmers,” Bailey says.

He moved to Minnesota in 2005 and joined the Department of Agriculture this summer. He was previously the outreach coordinator for the Council for Minnesotans of African Heritage. Before moving to Minnesota, he worked at Warburg College in Waveland, Iowa.

“Patrice has already demonstrated a skill for broadening the conversations around agriculture and state policy to include people who are often left out. His passion for agriculture and expertise working with communities of color are a vital asset to the Minnesota Department of Agriculture,” Commissioner Thom Petersen says. “How did this city kid from New York, New York, find his way to agriculture? His mom, a midwife, pointed the way.”

“She said no matter where in the world I find myself I could always be employed in the agriculture industry. Bailey says.

He earned a degree in agriculture from Prairie View A&M University, a historically black college in Prairie View, Texas, and says the legacy of George Washington Carver — Iowa State University’s first black student and faculty member — helped draw him to Iowa State for his major.

“My time at Iowa State was life changing. This university is really based on agriculture, and agriculture is based on relationships,” he says. “People here want to help you be successful.”

Bailey returned to Iowa State this August, and met with administration, faculty and students.

“Be bold and courageous. Chart your own educational course. Your relationship building and community building start here,” Bailey told members of the Iowa State University chapter of Minorities in Agriculture, Natural Resources and Related Sciences, of which he was a member while a student.

He also visited with classes in agricultural education and agricultural economic policy. Students peppered him with questions about everything from hemp production, to mental health initiatives, to career opportunities in public service.

“Part of my job is to change the narrative about what agriculture is and what it isn’t. Agriculture is everything,” Bailey says. “In agriculture you can write your own ticket.”

Above: Patrice Bailey (front, center), assistant commissioner of agriculture, met with administration, faculty and students (including students and members of the CADS Diversity and Inclusion Committee) during a visit to campus this summer. The CADS grant oversees outreach, agricultural marketing and development, dairy and meat inspection and food and feed safety for the state of Minnesota.

Inset: Bailey was hosted by Dean-Dan Robison during his visit.
Greta (Gigi) Pennell takes the science of play seriously. But, not too seriously to dress up as an elf in front of the dog toy segment,” she says. “In much the same way traditional ‘to-do’ projects, whether it’s in the classroom or at home, can get a start in science from day one, there’s always an opportunity to educate and contribute to ecological sustainability.

Pennell’s “Don’t lose your head” toy, based on the principles of inertia, was inspired by “snow people” children often make.

“It’s a very simple stacking toy made of gender-neutral green, yellow and purple wooden balls. The balls have a hole in one side and short peg in the other. The game is to stack them up on a cloth and the challenge is to pull the cloth out from under the snow person without ‘losing your head,’” says Pennell.

Good for all ages and abilities, the toy offers various levels to increase or decrease difficulty depending on fabric and figures used.


“I had the chance to give a lecture at the University of Indianapolis as a visiting scholar and I could personally attest for Dr. Pennell’s outstanding performance in her Gender in Toyland class,” says Danielle Almeida, professor and toy researcher at the National Council for Scientific and Technological Development in Brazil. “Among her professional accomplishments, Dr. Pennell excels in administrative achievements, publications, conference presentations as well as awarded grants.”

In January 2019, Pennell was one of just 20 participants in the 18th International Symposium, Workshop and Exhibition on Toy Design and Inclusive Play in Berlin, Germany. Sponsored by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the focus of the workshop was to develop new toys for children and adults with various levels of ability that increase their joy of playing, support inclusive education and contribute to ecological sustainability.

Her latest research on gendered pet toys is bringing her full-circle, back to zoology and research on non-human play. "In much the same way traditional children’s toy morphed to developmentally staged options and expanded to boy and girl versions with tie-ins to movies and other licensed properties, so too have pet toys. This is especially the case with the dog toy segment,” she says.

In addition to her official research, she’s always making toys for her four grandchildren, two great-grandchildren and neighborhood children.

“I enjoy making toys and creating to-do projects, whether it’s in the neighborhood or on a beach walk,” she says. "There’s always an opportunity to play and to learn."
Jeff Rowe, president of global seeds for Syngenta, earned the 2018 Agricultural Business Clubs Outstanding Alumni Award. The award recognizes Rowe’s contribution to agriculture and his career achievements which include more than 21 years in several roles at DuPont, and his current role as president of global seeds for Syngenta. Rowe also earned a law degree from Drake Law School, and a Global Executive MBA from the New York University Stern School of Business and the London School of Economics.

### Q&A WITH SYNGENTA’S GLOBAL SEEDS PRESIDENT

**Jeff Rowe** (95 agricultural business), president global seeds for Syngenta, earned the 2018 Agricultural Business Clubs Outstanding Alumni Award. The award recognizes Rowe’s contribution to agriculture and his career achievements which include more than 21 years in several roles at DuPont, and his current role as president of global seeds for Syngenta. Rowe also earned a law degree from Drake Law School, and a Global Executive MBA from the New York University Stern School of Business and the London School of Economics.

**DURING YOUR TIME AT IOWA STATE WHO PROVIDED INSTRUMENTAL DIRECTION IN YOUR LIFE AND WHY?**

I had such a great experience at Iowa State University with so many professors it’s difficult to name the most influential. There were, however, a couple of classes that had a big impact on my career. Neil Haits’ ag class was a game-changer for me because it introduced me to the law in an entirely new way. For the first time, I saw the law as a critical tool for farmers and agriculture leaders. It had such a big impact on me that I went on to earn a law degree. Dermot Hayes taught an excellent advanced commodity trading class, which inspired me to work as a commodity trader for a few years. My adviser, Rob Dierker, was also a great mentor for me during my time in Ames.

**WHAT IS THE NEXT GREAT AGRICULTURAL ADVANCEMENT? HOW WILL IT IMPACT FARMERS AND SOCIETY?**

Data science will drive the next big advancement in agriculture. Not just predictive, but new prescriptive analytics capabilities developed in other industries have the power to accelerate innovation in agriculture. One example is the technology used by Netflix to make personalized viewing suggestions. While a plant breeder has trial data from only a limited number of locations and years, we can use the same types of preference algorithms from the video streaming world to predict hybrid performance in interested environments. Advancements in data science, coupled with sophisticated genomics tools will not only improve productivity, but also help create a more sustainable agriculture system.

**FROM YOUR EXPERIENCE, HOW DOES THE PUBLIC REGARD SCIENCE AND HOW SHOULD THEY? WHAT DOES THAT MEAN FOR AGRICULTURE?**

Today only 2% of the U.S. population works in any connection with agriculture, and there is less and less informed discussion about plant science and breeding. The decision in Europe to regulate gene editing in the same way as GMOs (genetically modified organisms) is a good example of this. This type of non-science based decision is not good for agriculture or society. It can be challenging, but we — industry, farmers, associations — need to do a better job at telling our story.

**WHY IS SYNGENTA COMMITTING BILLIONS OF DOLLARS TO ADDRESS CLIMATE CHANGE IN AGRICULTURE?**

Climate change is a threat to us all. Farmers are on the front line, feeling the effects of droughts, floods and other forms of extreme weather. Agriculture needs to be part of the solution and, if we get it right, can be a net positive in the global climate challenge. We’re committing $2 billion over five years to advance sustainable agriculture, and to reduce the carbon intensity of Syngenta’s operations by at least 50% by 2030.

**WHAT ADVICE WOULD YOU GIVE NEW STUDENTS ENROLLING IN THE COLLEGE OF AGRICULTURE AND LIFE SCIENCES?**

My advice to students is to seek out on some excellent opportunities abroad for a semester, I worked in a graduate level religion class, I studied abroad for a semester, I worked in a research laboratory, and I earned a minor in psychology — that is a rather unconventional background for an ag business undergrad. I see many students get too locked into their curriculum and they could be missing out on some excellent opportunities to greatly broaden their thinking and experiences. One of the most important skills a student needs to learn is how to interact with different people from different backgrounds. And one of the best ways to learn this skill is to get a diverse educational experience.

**HOW DOES A COMMITMENT TO DIVERSITY AND INCLUSION IMPACT SUCCESS?**

There is a lot of evidence that shows diverse teams outperform and are more innovative. Creating an inclusive environment where everyone can thrive is a priority for me, and I spend a lot of time talking to employees across Syngenta about this. We recently had a month-long campaign focused on mental health. Not everyone is comfortable, but the most important thing is we start to have open conversations. Agriculture in the U.S. has a long way to go, but I see there is a lot of good practice across the industry and groups like the Cultivating Change Foundation are doing a fantastic job. It’s a journey.

**WHAT DOES SUCCESS LOOK LIKE?**

If we can get to a point where it’s the norm to have balanced representation at senior levels in organizations — whether that’s gender, ethnicity, age — this will be a huge step forward, and a lot will follow from this. But what I would like to see is an environment — even a society — where we have true diversity of thought. This will enable us to bring the best minds to the table to solve some of the world’s biggest problems including how we help farmers sustainably and safely feed the world.

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**Jeff Rowe, president global seeds for Syngenta, earned the 2018 Agricultural Business Clubs Outstanding Alumni Award. Club sage spirit coordinator Sadie Gravel and president Riley Arthur presented him with the award.** These encourage students to pursue diverse and broad experiences and ways developing an inclusive society is key to solving the world’s top problems.
THAT HELP

Strategies

Farmers often are the kind of people who like to handle their own problems — hardworking, determined and self-reliant. Asking for help can be difficult.

That’s according to David N. Brown, behavioral health state specialist with Iowa State University Extension and Outreach. He says the economic problems farmers face today may be more than they can handle on their own.

“They may try to tough it out, however, toughing it out just may not work anymore,” Brown says. “They may need more help than they realize.”

According to Brown, suicide numbers in rural areas remain high, and there is mounting evidence farmers are feeling the emotional and mental burdens of a difficult farm economy.

TAKING ACTION

In order to combat the issue, Brown is working with staff and faculty across Iowa State University Extension and Outreach to provide mental health resources to farmers and the communities where they live.

Mental health resources were provided at every farm bill meeting held across the state this fall — more than 50 in total. Numerous resources are available year-round via local and state extension specialists.

• In “Stress on the Farm: Strategies to Help,” participants review the signs of stress, how to cope and help others to cope.

• A similar program, called “Stress on the Farm: Strategies to Help Each Other,” offers a 90-minute scenario-based suicide prevention training.

• The “Mental Health First Aid” is an internationally recognized program that offers eight hours of training designed to give members of the public key skills to help others who are developing a mental health problem, or experiencing a crisis.

• The “Question. Persuade. Refer.” program is a one-hour educational program designed to teach lay and professional gatekeepers about the warning signs of a suicide crisis, and the appropriate response.

ONGOING EFFORT

In partnership with extension staff across the state, Brown is connecting with farmers and their organizations.

Mental health issues can arise even in good economic times, but usually more so when times get tough, says Chad Hart, associate professor in economics and extension grain market specialist.

Hart has partnered with Brown in adding mental health programming to extension programs, including the farm bill meetings, and also at industry conferences including the Iowa Farmers Union statewide convention held in December.

Although it’s a sensitive topic, Hart says farmers seem to appreciate the discussion, as long as they’re approached responsibly and in a way that avoids singling them out.

“Being involved with farming means that you’re used to doing a lot on your own,” says Hart. “But sometimes, even the best of us need help from others.”

Providing Empathy, Relief

Reviews by farmer participants show the programs they’ve attended have been valuable. Some have commented on how they can now, “understand other people’s possible problems,” and that extension and outreach “needs to be commended,” for raising awareness about the issue.

“With the current economic environment in agriculture, along with the weather this past year, this is something that could be laying below the surface, that may surface before long,” one participant wrote in a program evaluation.

As mental health gains recognition across the nation, more resources and programs are being made available.

In October, the United States Department of Agriculture awarded $480,000 to Iowa State University’s Extension and Outreach mental health efforts, as part of the Farm and Ranch Stress Assistance Network program, authorized in the 2018 farm bill.

Looking ahead, 2020 will be a big year for mental health awareness and outreach.

“I feel that we’re really ramping up our programming, among our own staff and also with our outreach,” Brown says. “I see us gearing up and working with the ag-business and producer community, by providing a lot of relief and useful information.”

Iowa State University Extension and Outreach experts like Anthony Santiago (left) are partnering across disciplines to assist farmers with strategies to cope with mounting stress. Sessions on mental health are being well-received by farmers at extension programs and industry conferences.

Farmers at extension programs or industry conferences.

STORIES EXTRA: www.stories.cals.iastate.edu

The Iowa State University Extension and Outreach Concern website provides information on stress, financial and legal assistance and their team offers a 24/7 support line at 1-800-447-1985. Visit STORIES website to find links to the mental health publications and resources mentioned in this article and more avenues for support.

STORIES VOL. 13 NO. 2

As ALUMNI, you are our STRONGEST SUPPORTERS and BEST AMBASSADORS.

In this issue of STORIES, we’ve highlighted a few opportunities for you to help financially support our students and programs — or to help us get the word out to prospective high school students on the extraordinary careers and experiences that lie ahead for them as students in one of our majors.

These are only selected examples of numerous ways you can support our college. If you’re interested in learning about expanded opportunities based on your interests, please contact STORIES editor Mallea Reicks Licht, stories@iastate.edu.

Thank you for how you continue to connect, engage and share! You are part of the team that makes us a world-class college of agriculture and life sciences!
Each adventure at Iowa State is unique.

We would love to show you the people and places that will help you build your CALS Advantage.

Visit campus this spring semester to sit-in on a class, meet current students, connect with an adviser and tour our world-class facilities.

Schedule now to secure the best dates for spring.

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