



IGP Institute

2020 Year in Review



IGP Supporters and Partners

Supporters



Partners



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Director's Message



Gordon Smith
Director

Well, here we are, and what an unexpected and fascinating year it has been. In January, Dr. Sajid Alavi and I were in Taiwan hosting grain science students as part of a study abroad experience that was jointly offered,

for the first time, with the Kansas State business department's Master of Business Administration program. February progressed normally with family vacations, weddings, and a trip to the Commodity Classic in San Antonio with Dr. Carlos Campabadal and Dean Ernie Minton. In March, Melinda and I spent spring break on vacation where trips were beginning to be cut short due to COVID concerns. After returning to Manhattan, the adventure truly began with the university operating remotely, for the first time in its history, for the next five months.

So, what did we learn, and how does it apply to the IGP Institute and the Department of Grain Science and

Industry? First, the mission of the IGP Institute to provide technical, research-based training benefiting industry professionals globally and enhancing the market preference for U.S. Grains and oilseeds, makes this a people business. People are integral to everything we do and without students, international participants, faculty, staff, and commission partners, this becomes a lonely place. The time apart from the people normally in our lives has allowed reassessment of the critical value of these interactions and their importance to everything we do.

Secondly, our institution is resilient and innovative. Conducting meetings virtually is a radical deviation from normalcy but it is a step-change transformation for a university that traditionally prides itself on face-to-face training. The program managers at the IGP Institute pride themselves on creating content that provides conceptual understanding reinforced by hands-on experiences on the farm, in the mill or bake lab, and at various stops along the grain supply chain. Moving programs to virtual formats has made us rethink how we provide

experiences including streaming live demonstrations. Some specific examples of courses offered virtually will be discussed later in this review.

Finally, the experience over the last year has been transformational. There will be a new reality that hopefully will encompass much of what was good in the pre-COVID world and expand our impact through innovations in distance and hybrid learning approaches. Trina Adams, our distance education manager, is leading our effort to re-think our strategy for courses taught, all or in part, remotely. During the coming year, we will begin to see the changes in these areas using a combination of new methods and technology.

During this challenging year, our success continues to be centered on our strong relationships with key partners including the Kansas Wheat Commission, the Kansas Soybean Commission, the Kansas Corn Commission, the Kansas Grain Sorghum Commission, and the Kansas State University College of Agriculture. Despite the general absence of in-person meetings for much of the year,

communication has been persistent and effective. These collaborators have embraced the challenges with us and helped to promote new ideas and approaches.

On behalf of all of us at the IGP Institute, we thank you for your continued support of our educational programs and outreach activities. We are looking forward to the coming year and a bright future. As always, we welcome your input and are looking to serve you and your organization with excellence.

Sincerely,



Gordon Smith
IGP Institute Director
Professor and Head, Grain Science
and Industry



Before: Carlos Campabal, Gordon Smith, and Ernie Minton at the Commodity Classic in San Antonio in February.



After: Dark, empty halls and classrooms were a common sight during the months of remote operations.

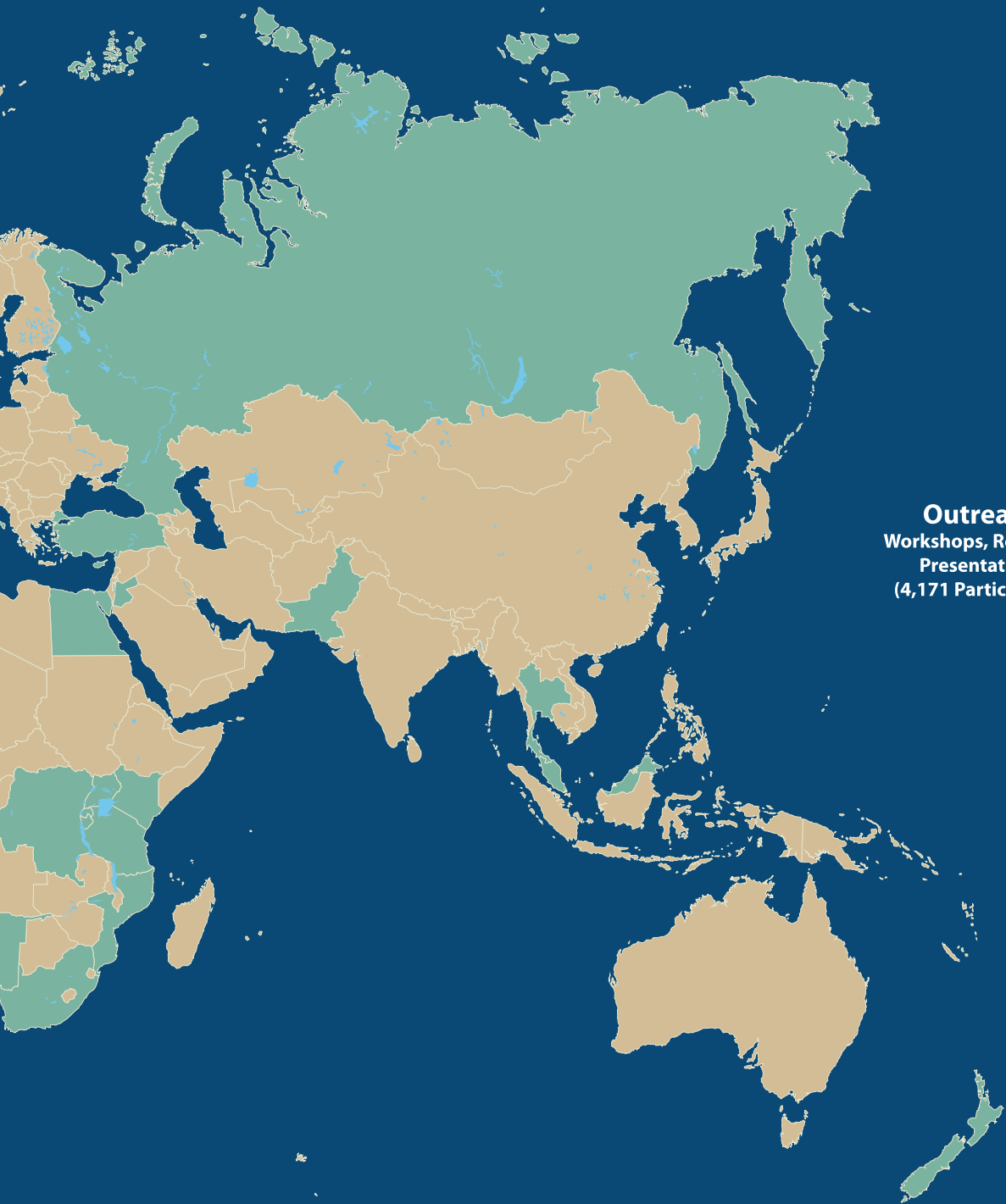
2020

1,308 Participants

45 Countries

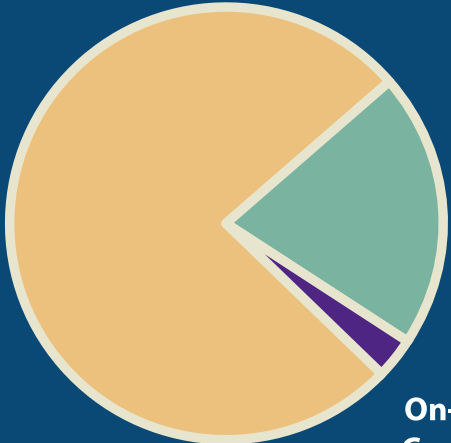
Brazil	Mozambique
Burundi	Namibia
Canada	Netherlands
Chile	New Zealand
Colombia	Nicaragua
Costa Rica	Nigeria
Cyprus	Pakistan
Dominican Republic	Panama
Ecuador	Peru
Egypt	Portugal
El Salvador	Russia
Germany	Rwanda
Guatemala	Senegal
Honduras	South Africa
Indonesia	Spain
Italy	Tanzania
Ivory Coast	Thailand
Jordan	Turkey
Kenya	Uganda
Malawi	United Kingdom
Malaysia	United States
Malta	Venezuela
Mexico	





Total Participants

Outreach
Workshops, Research,
Presentations
(4,171 Participants)



61
Distance
Courses
(1,132 Participants)

8
On-Site
Courses
(176 Participants)



Change of Plans

COVID-19 pandemic interrupts international travel and IGP in-person course delivery.

The spread of the COVID-19 virus made 2020 a challenging year for everyone. As a business that thrives on personal interaction and bringing people from around the world to learn in our university grain science facilities, the IGP Institute faced the unique challenge of finding ways to connect with our clients online while still providing a high-quality educational experience.

As news of the virus circulated early in the year, the IGP staff began to make contingency plans and considered options that would allow them to continue the mission to educate and engage with grain industry professionals from a distance. The university shutdown in mid-March started a chain of events that directly affected everyone and their roles within the organization. Course managers began to reschedule or cancel planned events and activities that required travel. IGP staff gathered necessary equipment and files from work and moved them off campus to continue operations from home offices. Technology support was critical as everyone needed remote server access to shared electronic files.

The continuing shutdown increased in duration and created a strong demand for distance education resources. IGP distance education manager, Trina Adams, and IGP distance coordinator, Cassidy Haines, assumed expanded roles as they helped department faculty and IGP course managers prepare traditional in-person courses to be moved to an online format. Lectures had to be recorded and saved into modules using the university Canvas learning management system. Hands-on demonstrations and labs were recorded on video and edited to work with the digital lectures. Additional language translation requirements added another level of challenges to some of the courses.

Throughout the shutdown, IGP staff communicated exclusively by phone, email, and scheduled Zoom calls. Good communication with our industry partners and commodity groups was critical as everyone worked together to deal with the changes and plan for future events.

By July, the local infection rate had declined enough that the university allowed campus activities to resume for the fall semester under a partial

reopening plan that included a reduced number of people in classrooms and office spaces, and a mask requirement for everyone in close public areas on campus. Following those guidelines, Gordon Smith, department head and IGP Institute director, asked employees to return to their offices on campus at the beginning of August. Employees are allowed some flexibility in their weekly schedules, and most have adopted a hybrid approach, combining working in the office while still using technology to meet clients and partners in an online setting.

Meanwhile, the IGP Institute continues to deliver our educational content through online and on-demand courses while planning to resume in-person classes in 2021 as travel restrictions are reduced.

Entrance

Stay to the right.

[TOGETHER, WE CAN MAKE EVERY WILDCAT A WELLCAT.]



KANSAS STATE UNIVERSITY



Face coverings required in this space.

Students, faculty, staff and visitors must wear face coverings over their mouths and noses while on K-State campuses in all hallways, public spaces, classrooms and other common areas of campus buildings. Face coverings must also be properly worn when in offices or other work spaces or outdoor settings where a best physical distancing cannot be maintained.

[TOGETHER, WE CAN MAKE EVERY WILDCAT A WELLCAT.]

Staff seeking to report an interruption to face covering requirements should call:
 RSM Coordinator | 785-532-5868
Students seeking to report an interruption to face covering requirements should call:
 Student Access Center | 785-532-6443



KANSAS STATE UNIVERSITY

STANLEY



ACTIVATE SWITCH TO OPEN



Fever greater than 100.4 F



Chills



Repeated shaking with chills



Muscle pain



Headache



Sore throat



Nausea/Vomiting



Diarrhea



Cough, shortness of breath or difficulty breathing



New loss of taste or smell



Congestion/Runny nose

If you are experiencing any of the above symptoms, call 785-532-6544 BEFORE entering the building.

If you are not experiencing any of these symptoms, please enter the building.

[TOGETHER, WE CAN MAKE EVERY WILDCAT A WELLCAT.]



KANSAS STATE UNIVERSITY

The grain science department and the IGP Institute reopened in August after months of remote operations, but with limits on the number of people allowed in buildings and classrooms, and with mask requirements for staff and students.



Learning the Ropes

Wheat commissioners experience the importance of wheat quality in flour production.

You can tell or show people how to do something, but the best way for many to learn is by doing it themselves. This is the reason that wheat commissioners and staff from around the U.S. travel to Manhattan, Kansas to learn the basics of modern wheat milling along with how the quality and type of wheat used influences the milling process and baked products produced with the flour.

The IGP Institute works to bring wheat commission growers and staff from wheat-producing states to the three-day course held at the IGP Institute every year. In 2020, we hosted 10 participants from around the U.S. representing the Washington Grain Commission, Oregon Wheat Commission, Kansas Wheat Commission, U.S. Wheat Associates, and Team Marketing Alliance.

IGP associate director and flour milling and grain processing curriculum manager, Shawn Thiele, explained the popularity of the course. “This course is always a big hit and very eye-opening for wheat commissioners. The flour milling and baking processes are much more

complicated than people think, and this course helps participants understand what millers and bakers are looking for and why quality is so important. It also helps the participants better relate and speak to customers about U.S. wheat by providing a clear understanding of the milling and baking process.”



The course covers the six classes of U.S. wheat, grain cleaning and conditioning, an overview of the milling process including the equipment used and an explanation of milling flows, along with an introduction to the math used in milling and blending practices. Participants also spend time in the Kansas Wheat Innovation Center and receive hands-on experience on tabletop milling equipment

in Shellenberger Hall as well as in the Hal Ross Flour Mill. The course concludes with time in the bakery lab learning how different classes and qualities of wheat affect flour functionality in bread, cakes, and cookies.

Brian Cochrane, a course participant and Washington Grain Commissioner, emphasized that learning about all of the factors that go into making good quality flour, from the type of wheat used to the variables in the milling process is critical. “I enjoyed the hands-on approach. Our millers and bakers just want a consistent product. Seeing how all of the factors from wheat characteristics to milling techniques are more complicated than just ‘throw the wheat in there, grind it, and it’s flour,’” helped his understanding of the entire process.





Participants in the Flour Milling for Wheat Commissioners and Staff course held February 25–27 learn the basics of the milling process in Shellenberger Hall by using the tabletop mills and sifters to produce flour.



Need for Feed

Latin American participants learn the benefits of U.S. soy for feed manufacturing.

Aquaculture is one of the fastest-growing protein consumption markets in the world, and the demand for quality feed is high in Latin America. The IGP Institute, in partnership with the United States Soybean Export Council (USSEC), developed a new training course to demonstrate the nutritional benefits of using U.S. soy to provide increased performance in their aquaculture feed products.

The course was originally planned to be offered in a blended learning style with basic training being offered online and completed before the participants traveled to IGP for the advanced level featuring hands-on demos and on-site lectures. Once again, the pandemic restrictions required changes to the agenda including new dates and deadlines, as well as completing the advanced section through live online lectures and recorded demonstrations.

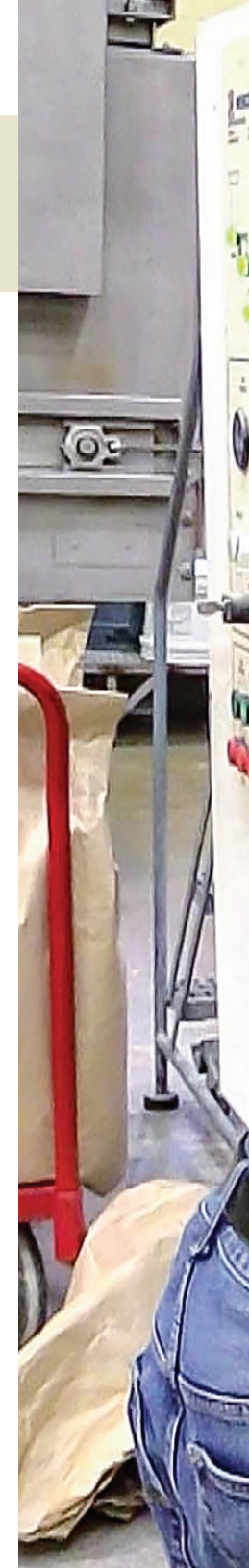
The course was originally planned for 34 participants, but the online format for the advanced level live online delivery allowed additional attendees

from the various companies for a total of 71 people. The topics presented covered the overall aquaculture feed manufacturing process from receiving the soybeans to a full demonstration of the extrusion process used to create floating or sinking feed. Nutrition topics for fresh water and marine aquaculture species were covered, along with guidance on how to achieve international industry certifications that ensure buyers receive high-quality products.

Participants learned the latest trends in feed manufacturing production techniques, and how the manufacturing process affects the overall quality and nutritional content of the products. The high quality of U.S. soy as a primary ingredient was demonstrated throughout the course, and the Latin American industry representatives were provided with access to technical experts in the U.S. who could answer questions and help with the future development of the world-wide industry.

Carlos Campabadal, IGP Institute feed manufacturing and grain quality management outreach specialist, stated, “The evaluation following this course showed that participants learned key technical information that will allow them to enhance their overall aquaculture feed production using U.S. soy products to improve aquaculture growth performance from a nutritional perspective.”

Plans are currently being made to offer the course again in 2021 for new participants using the original blended learning format. If travel is still restricted, more demonstrations will be recorded, and the on-site portion will be changed to online live delivery.





Grain science faculty member and extrusion specialist, Sajid Alavi, leads a recorded demonstration of the process and equipment used to create floating or sinking feed for the aquaculture industry.



Back on Track

IGP Institute market expertise guides the delivery of grain by rail to Mexico.

The United States–Mexico–Canada Agreement (USMCA) is the new free trade agreement between Canada, Mexico, and the United States that became effective on July 1, 2020. It replaced the North American Free Trade Agreement (NAFTA) and brought new opportunities for more balanced trade throughout North America.

The IGP Institute in partnership with the U.S. Grains Council, organized a visit to Mexico in March of 2020 to facilitate a better understanding of market access and procurement of grain delivered by rail from the United States. Mexico has long been the top importer of corn from the U.S. and also imports large amounts of grain sorghum, DDGs, and soybean meal. Guy Allen, IGP agricultural economist and grain marketing and risk management curriculum manager, traveled with USGC representatives to visit 10 Mexican companies that import U.S. commodities by rail.

Reece Cannady, USGC manager of global trade commented on the arrangement with IGP, “The Council values our partnership with IGP as we know there is a wealth of expertise to draw from in our endeavors to help solidify established connections in long-term markets overseas and develop new markets for U.S. grains around the world.



The purpose of the trip was a fact-finding mission to assess ways to improve their market access and procurement and risk management capabilities. The new USMCA agreement allows the extension of domestic trade with the U.S. using existing rail capabilities, and the in-

person visit provided an opportunity to discuss potential market access with a focus on the quality of the corn and other grains received.

Cannady added, “With USMCA, we feel like doing business across borders into Mexico should be almost as easy as moving grain from state to state. One of the big hurdles we’re observing today isn’t regulatory—it has to do with a need for modernizing Mexican business practices so they have access to more risk-averse sellers here in the States, allowing them to purchase closer to the farmer.”

As a result of the mission, the IGP Institute has an opportunity for additional training targeting the various grain industry partners in Mexico. Allen states, “With assistance from IGP and Kansas State University, we plan to develop and provide further education and training programs on physical contracting of agricultural commodities, the importance of hedging strategies utilizing futures markets for both the underlying commodity and foreign exchange, and options on futures and appropriate strategies for end-users.”



Guy Allen, IGP agricultural economist and grain marketing and risk management curriculum manager, discusses opportunities for improved trade provided by the new USMCA agreement during a visit with Mexican industry representatives.



Ahead of the Curve

Previous work developing on-demand content eases online transition.

The IGP Institute faced many challenges in 2020 caused by the COVID-19 pandemic, but the biggest one was the interruption of our normal in-person training schedule that brings hundreds of participants from around the world to take courses at Kansas State University.

When the spread of the virus led to interruptions in travel schedules and a shutdown of our conference facility in mid-March, there was an immediate need for expansion of our online educational offerings as many courses were canceled or rescheduled. The only way forward was to move many of our traditional classes to online or on-demand for the remainder of the year or until travel restrictions and limits on public gatherings are relaxed. The prior efforts by the distance education staff to allow for on-demand access to course topics made this quick transition possible.

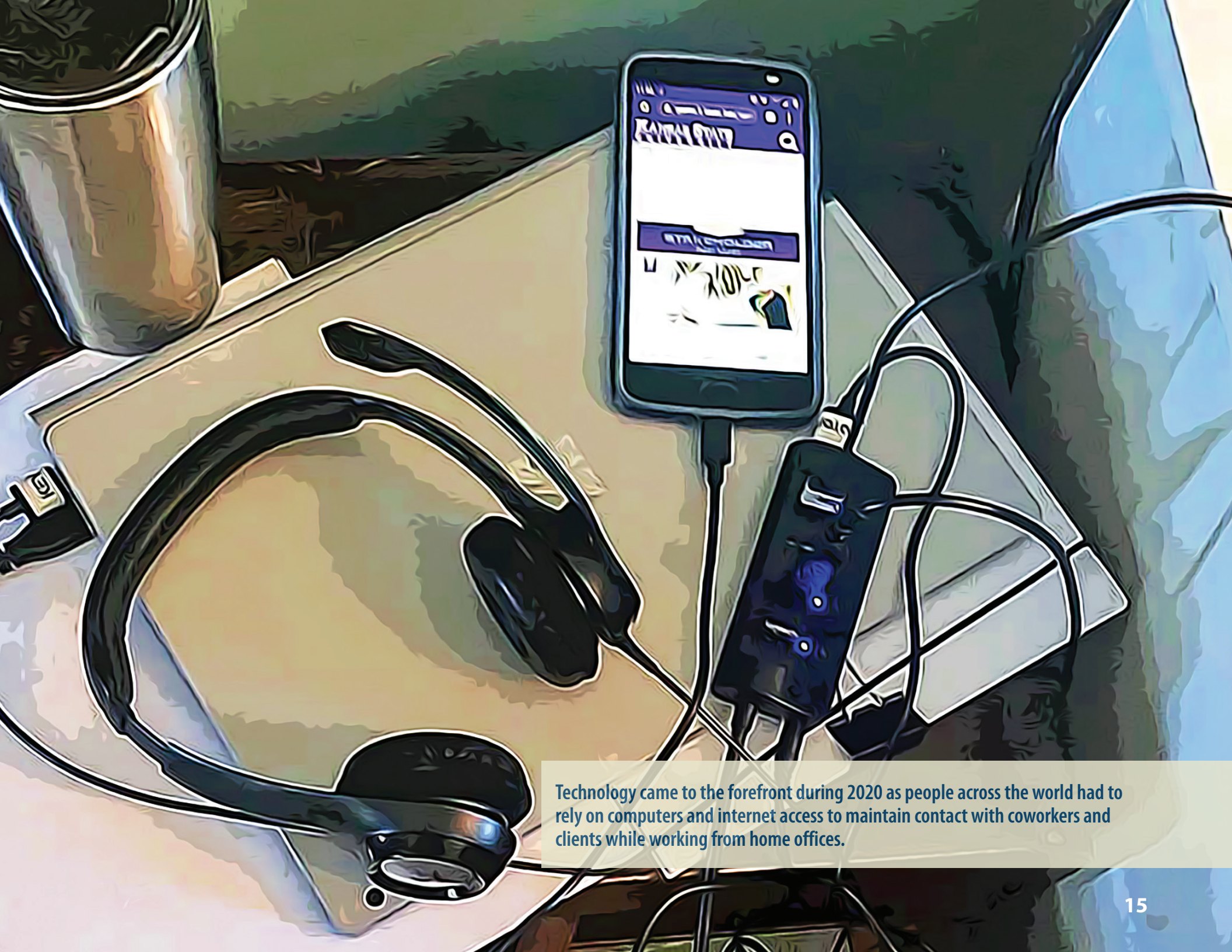
IGP Distance Education Manager, Trina Adams, says that our educational partners including AFIA (American Feed Industry Association) and GEAPS (Grain Elevator and Processing Society) have long

indicated a desire for courses with specific content to be available immediately when needed by a potential client. IGP had already developed and implemented several on-demand products prior to the delivery challenges presented by the pandemic. Previous educational options were only available a limited number of times per year, so employers had to schedule groups in advance and then wait for the course to be offered. The increased flexibility of on-demand access allows companies providing employee training to meet the needs of individual learners on a timely basis. For example, one company purchased a quality assurance module for one participant while a different participant completed the preventive maintenance module.

Content for the on-demand materials is limited to 90 minutes total, and students are typically given a 30-day deadline to complete the 90 minutes of content and a quiz. A certificate of completion is available electronically immediately after the requirements have been met and the successful quiz results are recorded.

Costs for the on-demand courses are set based on association feedback and allow them to determine if a membership discount could be applied to the purchase price, thus adding to the value of the individual memberships. AFIA plans to continue offering the on-demand modules in addition to the full AFIA/KSU 500: Fundamentals of Feed Manufacturing course. The full course continues to approach maximum enrollment each session, while the on-demand product will serve a different target audience.

The IGP course managers and distance education staff continue to explore additional opportunities to meet the needs of our stakeholders and clients. The prior experience from creating on-demand and online content put them ahead of the curve when the pandemic forced us to change our in-person delivery methods for 2020.



Technology came to the forefront during 2020 as people across the world had to rely on computers and internet access to maintain contact with coworkers and clients while working from home offices.



Giving Back

IGP and department distribute 15,000 pounds of flour to the Manhattan community.

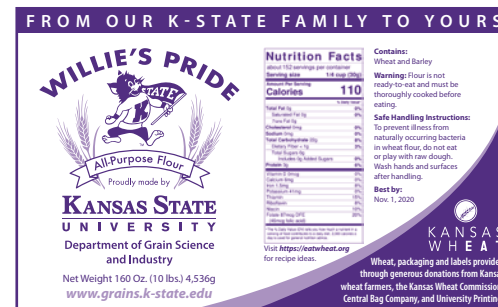
During the early months of the pandemic, many people struggled to find common grocery and household items because of increased demand and disruptions in the supply chain. Bags of flour were one of the products that disappeared from store shelves faster than they could be restocked. With people working from home, baking and cooking from scratch saw a large rise in popularity, leading to a need for more flour production.

The IGP Institute and department milling faculty found an opportunity to give back. With permission and assistance from K-State's administration, plans were made to reopen the Hal Ross Flour Mill to produce and distribute flour to the local community. With full support from the Kansas Wheat Commission, a generous donation of 20,000 pounds of wheat was given by Kansas farmers to help get the project started.

"The Kansas Wheat Commission and the K-State Department of Grain Science and Industry have a long history of working together on projects for the wheat industry, combining stakeholder input with the department's flour milling expertise,"

stated Justin Gilpin, chief executive officer for the Kansas Wheat Commission and Kansas Association of Wheat Growers.

"Kansas wheat farmers were glad to help support this project. Wheat is a staple food for many Americans and this project by K-State will help put it in the hands of people in need."



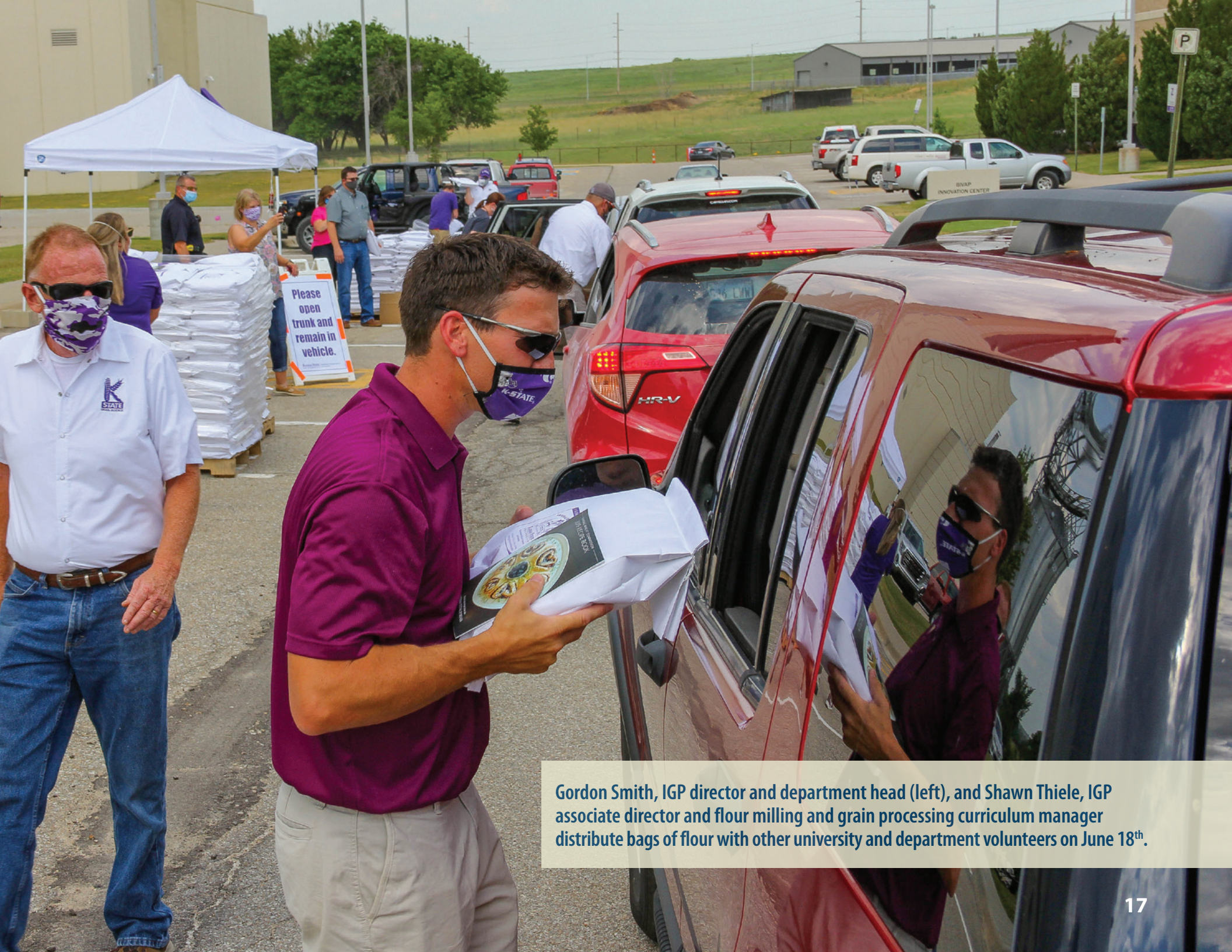
As news of the idea spread, many people and organizations lined up to help by supplying volunteer labor for milling and bagging the flour, or by providing donated materials for the labels and bags. Kansas State University President, Richard Myers, was an enthusiastic supporter of the project and worked several hours to help bag flour during the mill run.

After milling the wheat on June 4th, the department bagged 1,500 10-pound bags

of flour and scheduled the distribution event for June 18th in front of the Hal Ross Flour Mill. Local news media helped promote the donation and covered the event while volunteers from across the university and partner organizations handed out the flour. Vehicles formed a steady line throughout the afternoon and all of the flour was gone in less than four hours, averaging nearly six cars per minute.

Gordon Smith, IGP Institute Director and Department Head for K-State Grain Science and Industry commented on the successful effort, "This was an opportunity to take our expertise and give back to the local community at a time where it seemed appropriate."

The popular event was officially recognized when Kansas Wheat and the K-State Department of Grain Science and Industry were recognized as Ag Heroes by the Kansas Department of Agriculture during the 2020 Ag Growth Summit.



Gordon Smith, IGP director and department head (left), and Shawn Thiele, IGP associate director and flour milling and grain processing curriculum manager distribute bags of flour with other university and department volunteers on June 18th.



2020 IGP Institute Year in Photos



“Even though I work at a flour mill, I do not have a milling background. I really wanted to learn how the mill works and all the details of the flour milling process. This course has given me a much better understanding for what we are doing every day, and it can help me troubleshoot in the future.”

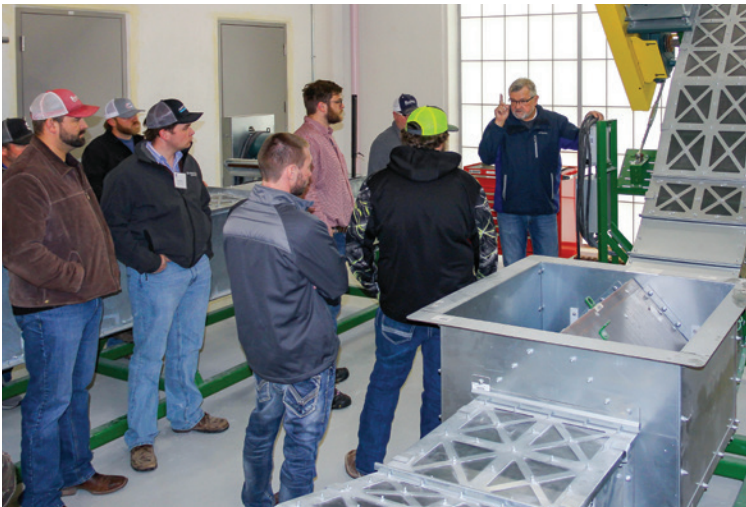
– **Emily Kreinbrink**, The Mennel Milling Company, IAOM–KSU Introduction to Flour Milling participant





"I learned a lot about techniques of inspection for grains like wheat, soybeans, and corn. We also covered trade, and the logistics that go into buying and selling grain."

– **Elsayed Doshtor**, Central Administration of Plant Quarantine, Egypt, USDA Cochran Fellowship Program for Egypt and Jordan – U.S. Grain Inspection participant





2020 IGP Institute Year in Photos



"Ninety percent of wheat that comes from Oregon goes to export, so when we hear comments about falling numbers, I wanted to learn more about that part of it."

– **Jason Middleton**, United Grain Corporation, Oregon Wheat Commission, IGP–KSU Flour Milling for State Wheat Commissioners and Staff participant





"My favorite part was the hands-on training in groups. I learn better by doing and it is always interesting to get viewpoints from different industries."

– **Tim Hieger**, Mid Kansas Coop, NGFA—KSU Food Safety Modernization Act (FSMA) participant





2020 By the Numbers

8 On-site Courses • 176 Participants | 61 Distance Courses • 1,132 Participants

On-site Courses	Month	Participants	Countries
IAOM–KSU Introduction to Flour Milling	January	16	Canada, U.S.
IGP–KSU Pet Food Formulation	January	31	Canada, Italy, Netherlands, Pakistan, Thailand, U.S.
GEAPS–KSU Grain Elevator Managers	January	43	Canada, U.S.
USDA Cochran Fellowship Program for Egypt and Jordan – U.S. Grain Inspection	January	11	Egypt, Jordan
FSMA/HACCP	February	52	U.S.
IGP–KSU Flour Milling for Wheat Commissioners and Staff	February	10	U.S.
Buhler–KSU Expert Milling (English)	March	7	U.S.
Buhler–KSU Expert Milling (Spanish)	March	6	Chile, Guatemala, Panama

Distance Courses	Month	Participants	Countries
GEAPS 500: Introduction to Grain Handling Operations	January	21	Canada, U.S.
GEAPS 501: Management Basics for Grain Facility Supervisors: Understanding Key Roles and Responsibilities	January	9	Canada, U.S.
GEAPS 541: Developing an Effective Safety Culture	January	11	Canada, U.S.
GEAPS 550: Materials Handling I	January	8	Canada, U.S.
GEAPS 506: The Grain Industry in Canada: Climate, Crops, People	February	5	Canada, Cyprus, U.S.
GEAPS 510: Facilities Planning and Design I	February	23	Canada, Spain, U.S.
GEAPS 522: FGIS Grain Inspection Orientation	February	5	Canada, U.S.
GEAPS 524: Grain Drying*	February	2	Canada
GEAPS 551: Materials Handling II	February	16	Canada, Malaysia, Portugal, Spain, United Kingdom, U.S.
AFIA 500: Fundamentals of Feed Manufacturing	February	35	Brazil, Canada, Malaysia, Netherlands, U.S.
GEAPS 525: Management of Pests in Stored Grain	March	5	Canada, U.S.
GEAPS 540: Entry Level Safety	March	10	Canada, Nigeria, U.S.
GEAPS 546: Fighting Grain Silo Fires and Smolders	March	7	U.S.
GEAPS 552: Materials Handling III	March	12	Canada, Nigeria, Portugal, Spain, United Kingdom, U.S.
AFIA 500: Fundamentals of Feed Manufacturing	April	36	Canada, Indonesia, Thailand, Turkey, U.S.
GEAPS 511: Facilities Planning and Design II	May	1	U.S.
GEAPS 520: Grain Quality Management	May	64	Canada, Malaysia, Russia, U.S.

Distance Courses	Month	Participants	Countries
GEAPS 544: Preventing and Responding to Grain Dust Explosions	May	8	Brazil, Canada, U.S.
GEAPS 554: Grain Elevator Equipment Maintenance	May	22	Canada, Germany, Portugal, Spain, United Kingdom, U.S.
GEAPS 610: Interpretation of Process Flow Diagrams	May	4	Canada, Germany, U.S.
GEAPS 530: Quality Management Systems	June	22	Canada, U.S.
GEAPS 545: Grain Entrapment	June	8	Canada, U.S.
GEAPS 554: Grain Elevator Equipment Maintenance*	June	11	U.S.
GEAPS 555: Advanced and Preventive Maintenance for Grain Facilities: Conveyance Equipment	June	8	Canada, Portugal, Spain, United Kingdom, U.S.
GEAPS 600: Overview of Milling Principles	June	6	Canada, Russia, U.S.
AFIA 500A: Overview of U.S. Feed Industry and History*	Jan.–June	6	N/A
AFIA 500B: Batching, Mixing and Particle Size Reduction*	Jan.–June	8	N/A
AFIA 500C: Pelleting Process*	Jan.–June	2	N/A
AFIA 500D: Finished Product Packaging and Bulk Loadout*	Jan.–June	2	N/A
AFIA 500E: Basics of Quality Assurance*	Jan.–June	6	N/A
AFIA 500G: Preventive Maintenance, Sanitation and Energy Conservation*	Jan.–June	5	N/A
GEAPS 500: Introduction to Grain Handling Operations*	July	28	U.S.
Wheat By-products Uses Workshop	July	63	Colombia
GEAPS 500: Introduction to Grain Handling Operations	August	29	Canada, Russia, U.S.
GEAPS 501: Management Basics	August	25	Canada, Russia, U.S.
GEAPS 542: Electrical Safety	August	7	Canada, U.S.
GEAPS 550: Materials Handling I	August	16	Canada, New Zealand, U.S.
AFIA 500 - Fundamentals of Feed Manufacturing	August	31	United Kingdom, U.S.
USSEC–IGP Diploma Course: NIR Use and Application for Optimizing U.S. Soy Value	August	35	Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Venezuela
GEAPS 510: Facilities Planning and Design I	September	26	Canada, Germany, U.S.
GEAPS 520: Quality Grain Management	September	23	Canada, New Zealand, Russia, U.S.
GEAPS 524: Grain Drying	September	12	Canada, U.S.
GEAPS 620: Grain Receiving, Cleaning and Conditioning	September	5	Canada, Germany, Russia
USSEC Feed Manufacturing South Asia	September	153	N/A



2020 By the Numbers

Distance Courses Continued

Distance Courses	Month	Participants	Countries
AFIA 500A: Overview of U.S. Feed Industry and History*	July–Sept.	5	N/A
AFIA 500B: Batching, Mixing and Particle Size Reduction*	July–Sept.	5	N/A
AFIA 500C: Pelleting Process*	July–Sept.	4	N/A
AFIA 500D: Finished Product Packaging and Bulk Loadout*	July–Sept.	2	N/A
AFIA 500E: Basics of Quality Assurance*	July–Sept.	7	N/A
AFIA 500F: Boilers and Boiler Efficiency*	July–Sept.	2	N/A
AFIA 500G: Preventive Maintenance, Sanitation and Energy Conservation*	July–Sept.	3	N/A
GEAPS/KSU On-Demand*	July–Sept.	21	N/A
GEAPS 521: Grain Aeration	October	23	Canada, Germany, U.S.
GEAPS 530: Quality Management Systems	October	9	Canada, U.S.
GEAPS 540: Entry Level Safety	October	12	Canada, U.S.
GEAPS 630: Quality Control/Quality Assurance Practices in Flour Milling	October	3	Germany, Ivory Coast, Russia
AFIA 500: Fundamentals of Feed Manufacturing	October	35	Canada, Malaysia, Malta, Pakistan, U.S.
USSEC RAPCO Aquaculture Feed Manufacturing	October	71	Colombia, Costa Rica, Ecuador, Guatemala, Peru
SEC Nigeria Poultry Track Train the Trainer (Basic Level)	November	8	Nigeria
IGP Grain Procurement for Sub-Saharan Africa	December	16	Kenya, Namibia, Nigeria, Senegal, South Africa, Tanzania
US Wheat Storage Seminar for Sub-Saharan Africa	December	65	Burundi, Kenya, Malawi, Mozambique, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Uganda

* On-Demand offerings through Global Campus Canvas Catalog



Our Facilities



IGP Institute Conference Center – our primary building for hosting course participants featuring meeting spaces, technology-enhanced classrooms, and dining facilities



Bioprocessing and Industrial Value Added Products (BIVAP) Innovation Center – research facility for bioprocessing and renewable energy, biomaterials, and extrusion laboratories



Hal Ross Flour Mill – state-of-the-art pilot scale flour mill used for teaching, research, and industry training on full-scale equipment and control systems found in commercial flour mills



O.H. Kruse Feed Technology Innovation Center – a modern feed mill used for teaching feed production, pet food development, grain handling, and featuring an embedded BSL-2 research facility



Faculty and Staff Directory

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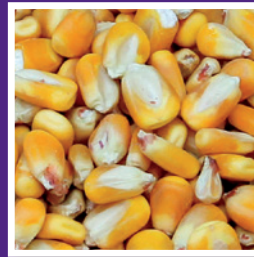
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