

Northern Crops Institute Annual Update

2017

Northern Crops Institute supports regional agriculture and value-added processing by conducting educational and technical programs that expand and maintain domestic and international markets for northern-grown crops.



Connecting in the Global Marketplace



Director Report | Mark Jirik

Thank you for the warm welcome! I’ve been busy since the first day in the office. I’m currently visiting with a number of our stakeholders at NDSU, those in our four state region, the commodity groups, and also our agribusiness sponsors. I believe that everyone I’ve spoken with agree that there is tremendous opportunity at NCI and that we have a tremendous past to build on.



Jirik

It is humbling to know that NCI was designed and built during one of the greatest agricultural crisis in the last 70 years, during the farm crisis of the 1980’s. The NCI’s mission is: “To support regional agriculture and value added processing by conducting educational and technical programs that expand and maintain domestic and international markets for northern grown crops.”

That piece of our business hasn’t changed, and probably has as much opportunity and criticalness as ever before with growing international markets, but also a burgeoning domestic market for specialty products and ‘local,’ ‘craft,’ ‘niche,’ and ‘boutique,’ tastes. All of these present opportunities for our stakeholders – and for us to support them through our courses and technical services. This does not mean we lose our focus on the international, it means looking at how we do both best in class.

Our intent is to continue to look for ways to make sure the industry, large and small, know that NCI is here, we are growing our technical capabilities, course base, and are utilizing the feed mill, auditoriums, labs and equipment in the best manner possible.

Connect with us!

Did you know you can connect with NCI in more places than just northern-crops.com? Keep current with what is happening by following, liking and sharing NCI on Facebook, Twitter, YouTube and LinkedIn.



NCC Elects Officers

Greg Kessel, a producer from Belfield, North Dakota, was elected the new chairperson of the Northern Crops Council (NCC) at the reorganizational meeting on June 15, 2017. Kessel serves in the North Dakota Barley Council’s permanent seat of the NCC. He began his first council term in 2013.



Kessel

Tregg Cronin, a producer from Gettysburg, South Dakota, was elected the new vice chairperson of the NCC. He serves as a representative for the South Dakota Wheat Commission on the NCC. Cronin started his first term with the NCC this year.

The NCC welcomed newly elected members Cronin and Mark Martinson, a producer from Rolette, North Dakota, representing the U.S. Durum Growers Association.

The NCC also would like to welcome appointed members Ben Vig, a producer from Sharon, North Dakota, who serves in the North Dakota Oilseed Council’s permanent seat of the NCC and Derik Pulvermacher, a producer from Crosby, North Dakota, who serves in the North Dakota Soybean Council’s permanent seat of the NCC.



Mark Martinson, Rolette, N.D., Ben Vig, Sharon, N.D., Vice Chairperson Tregg Cronin, Gettysburg, S.D., and Derik Pulvermacher, Crosby, N.D. stand in front of the NCI after the NCC Reorganizational Meeting on June 15, 2017.

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Mark Weber Retires from NCI

Northern Crops Institute (NCI) would like to wish Mark Weber a wonderful retirement. Weber served as NCI's Director for six years.

NCI held an open house reception at NCI on Wednesday, December 20, 2017. Coffee and rolls were served with a short program.

During the short program, Assistant Director John Crabtree presented Weber with a personalized wrench sign from the staff. During Weber's retirement he will be working to restore his 1948 Chevrolet Fleetmaster.

To see a short video that includes photographs from the open house, please go to: <http://bit.ly/WeberRetirement>.



Assistant Director John Crabtree presents Mark Weber with a personalized gift from NCI's staff.

2018 COURSE SCHEDULE

April 17-19

Pasta Production and Technology

July 16-20

Commodity Soybean Procurement Management for Importers

August 20-25

NCI-INTSOY

September 10-19

Grain Procurement Management for Importers

October 1-4

Barley and Malt Quality: A Field to Brewhouse Perspective

October 8-12

Food Grade Soybean Procurement Management for Importers

Other courses will be added to our schedule as the year progresses. Please check our website

www.northern-crops.com

for the most up-to-date information.

2017-18 Northern Crops Council (NCC)

Greg Kessel, Chair
Belfield, N.D.
N.D. Barley Council

Tregg Cronin, Vice Chair
Gettysburg, S.D.
S.D. Wheat Commission

Dean Bresciani, Ph.D.
Fargo, N.D.
President
North Dakota State University

Anthony Chavez
Minneapolis, Minn.
Buhler Inc.

Doug Goehring
Bismarck, N.D.
Commissioner of Agriculture
N.D. Department of Agriculture

Ken Grafton, Ph.D.
Fargo, N.D.
VP Agricultural Affairs
North Dakota State University

Justin Halvorson
Sheldon, N.D.
N.D. Corn Growers Association

Randy Hinebauch
Chinook, Mont.
Mont. Wheat & Barley
Committee

Dave Katzke
Minneapolis, Minn.
General Mills

Mark Martinson
Rolette, N.D.
U. S. Durum Growers Assoc.

Dwight Mork
Bellingham, Minn.
Minn. Corn Research &
Promotion Council

Drew Parsley
Warroad, Minn.
Minnesota Soybean Research
& Promotion Council

Keith Peltier
West Fargo, N.D.
Proseed

Derik Pulvermacher
Crosby, N.D.
N.D. Soybean Council

Todd Sinner
Casselton, N.D.
SB&B Foods

Greg Svenningsen
Valley City, N.D.
N.D. Wheat Commission

Vance Taylor
Grand Forks, N.D.
North Dakota Mill

Ben Vig
Sharon, N.D.
N.D. Oilseed Council

Chris Westergard
Dagmar, Mont.
Northern Pulse Growers
Association

Thank You

Thank You to All Who Supported NCI Programs and Activities in 2017

North Dakota State University
Agribusiness and Applied Economics
Frayne Olson, Ph.D.
William Wilson, Ph.D.
Cereal and Food Sciences
Clifford Hall, Ph.D.
Plant Sciences
John Barr
Paul Schwarz
Elias Elias, Ph.D.
Rich Horsley, Ph.D.
Frank Manthey, Ph.D.
Senay Simsek, Ph.D.
DeLane Olsen
Kristin Whitney
Adam's Family Farm, Grand Forks, N.D.
ADM
Ross Wyatt
AGT Foods U.S.A.
Eric Bartsch
Benson-Quinn Co.
Thomas Lahey
BNSF Railway Inc.
Darrell Faircloth
Briess Malt and Ingredients
Cassie Liscomb
Buhler, Inc.
Anthony Chavez
Eugene Dust
Michael Ehr
Aidin Milani
Busch Agricultural Resources
Alan Slater
Cargill, Inc.
Katie Jorgenson
April Morgan
Central Farm Service Elevator
Jim Schulz
CHS, Inc.
Anita Florido
Justin Friesz
Mike Klein
Greg Oberle
Dick Carlson
Columbia Grain
Darren Bjornson
Mike Brinda
Duluth Seaway Port Authority
Kate Ferguson
Adele Yorde

Dupont
David Sabbagh
Frontier Futures Inc.
Adam Knosalla
Hunter Grain Company
Paul Skarnagel
Grain Millers Inc.
Roger Mortenson
Greg Gebeke Farm, Arthur, N.D.
Intelligent Malt
Chris Anderson
Katrina Christiansen, Ph.D.
Insta-Pro International
Dave Albin
Kansas State University
Grain Science and Industry
Shawn Thiele
Kelley Bean
John Bartsch
Legume Matrix
Kevin Haas
Minneapolis Grain Exchange
Joe Albrecht
Minnesota Soybean Research &
Promotion Council
Kim Nill
Tom Slunicka
Montana State University
Natural Products Inc.
Paul Lang
North Dakota Barley Council
Steve Edwardson
North Dakota Mill
Vance Taylor
North Dakota Soybean Council
Diana Beitelspacher
Stephanie Sinner
North Dakota Wheat Commission
Neal Fisher
Erica Olson
Jim Peterson
Northarvest Bean Growers
Northern Pulse Growers Association
Shannon Berndt
Osborn Barr
Greta Bierbaum
Kyle Raguse Farm, Wheaton, Minn.
Rahr Malting Co.
Jesse Theis
Curt Jacobson

South Dakota Soybean Processors Inc.
Thomas Kersting
South Dakota State University
Dairy And Food Science Dept.
John Haberkorn
Dept. of Animal Science
Keith Underwood
Dept. of Biology and Microbiology
Bill Gibbons
Dept. of Economics
Lisa Elliott, Ph.D.
Greg Svenningsen Farm, Valley City, N.D.
The Money Farm, Fargo, N.D.
Mike Krueger
The Soyfoods Council
Linda Funk
USDA/GIPSA/ FGIS
Noah Brook
U.S. Dry Bean Council
Roman Kutnowski
Ellen Levinson
U.S. Grains Council
U.S. Soybean Export Council
U.S. Wheat Associates
Roy Chung
Matt Weimar
Joe Sowers
Steve Wirsching
University of Illinois
Dept. of Agricultural and Consumer
Economics
Craig Gundersen, Ph.D.
University of Minnesota
Dept. of Agronomy &
Plant Sciences
Jochum Wiersma, Ph.D.
Valley Malt
Andrea Stanley
Wenger Manufacturing Inc.
Brian Plattner

*Thank
You!*

NCI Thanks Outgoing NCC Members for Their Service

The Northern Crops Council (NCC) would like to thank the following outgoing council members for their service commitment to the Northern Crops Institute: John Bartsch, Kelley Bean Company who served as an industry representative from Maple Grove, Minnesota (not pictured); Chet Edinger, producer from Mitchell, South Dakota, who represented the South Dakota Wheat Commission; and Perry Ostmo, producer from Sharon, North Dakota, who represented the North Dakota Soybean Council.



Former NCI Director Mark Weber presents Chet Edinger, producer from Mitchell, S.D., who represented the S.D. Wheat Commission on the NCC, an engraved clock for his service.



Former NCI Director Mark Weber presents Perry Ostmo, producer from Sharon, N.D., who represented the N.D. Soybean Council on the NCC, an engraved clock for his service.

Thank You to NCC's November Meeting's Guest Speaker



Policy and Marketing Director Jim Peterson from the North Dakota Wheat Commission gave an industry report during the November NCC Meeting.

Thank You

2017 Agribusiness Sponsors!

AGT Foods USA
Ameriflax
Amity Technology, LLC
Arrow K Farms
Askegaard Organic Farm
Colfax Farmers Elevator, Inc.
Columbia Grain
Dakota Growers Pasta Co., Inc.
Dakota Specialty Milling
Healthy Food Ingredients
Kelley Bean Co., Inc.
Minnesota Corn Growers Association
North Dakota Corn Growers Association
North Dakota Farm Bureau
North Dakota Farmers Union
North Dakota Grain Dealers Association
North Dakota Grain Growers Association
North Dakota Soybean Growers Association
Northern Canola Growers Association
Northern Plains Potato Growers Association
Proseed
Red River Commodities
Richland IFC, Inc.
SB&B Foods, Inc.
Sue and Dave Katzke
U.S. Durum Growers Association
Weber Farms

A Special Thank You to Our 2017-2018 Funding Partners

Minnesota Department of Agriculture
Minnesota Soybean Research and Promotion Council
Minnesota Wheat Research and Promotion Council
Montana Wheat and Barley Committee
State of North Dakota
North Dakota Oilseed Council
North Dakota Soybean Council
North Dakota Wheat Commission
Northarvest Bean Growers
Northern Pulse Growers Association
South Dakota Department of Agriculture
South Dakota Soybean Research and Promotion Council
South Dakota Wheat Commission

New NCI-INTSOY Course Promotes Northern-Grown Soybeans to International Participants



Samuel Adu Ntim

During the week of June 5-10, 2017, the Northern Crops Institute (NCI) hosted international participants who were sponsored, in part, by the

U.S. Soybean Export Council (USSEC), World Initiative in Soy for Human Health (WISHH), the Minnesota Soybean Research and Promotion Council, the North Dakota Soybean Council, and the South Dakota Soybean Research and Promotion Council.

The NCI-INTSOY course educated participants about practical processing methods and innovative applications for soybean ingredients in meat, beverages, baking, snacks, traditional soy foods and animal-feed products.

According to WISHH, participants praised the NCI-INTSOY course because of the great effort and collaboration to increase knowledge about U.S. soy and for making crucial introductions to U.S. soybean producers and companies. A 2017 NCI-INTSOY participant, Samuel Adu Ntim, chief executive officer of Yedent Agro Group of Companies Limited in Ghana, was extremely happy with his experience: "It (NCI-INTSOY) is a phenomenal program that I think a lot of companies and entrepreneurs and a lot of people in emerging markets should try to access. It is an excellent partnership, and we give thanks to WISHH (and other sponsors) for this opportunity," Adu Ntim said.

The participants heard various speakers; watched demonstrations; and participated with hands-on labs in various locations throughout Minnesota, North Dakota, and South Dakota. There were a number of tours



2017 NCI-INTSOY course participants sample different beverage products while visiting the South Dakota University Campus.

throughout the tri-state area, and also a visit to soybean producer Kyle Raguse's farm near Wheaton, Minnesota. NCI staff accompanied the lectures, demonstrations and tours to answer questions from both participants and the media.

NCI's former Director Mark Weber celebrated the success of the course by thanking speakers, sponsors and staff for "delivering a top-notch soy program that is sure to be the next flagship course for the NCI." Weber also declared, "The NCI-INTSOY course truly illustrates why NCI exists, and that is to continue to provide quality educational and technical programming to expand international markets for our northern-grown crops."

Due to the positive feedback from participants, sponsors

and staff, the NCI has begun the process of assembling the NCI-INTSOY course programming for 2018. The scheduled date for the 2018 NCI-INTSOY is Monday, August 20 through Friday, August 25.

PLAN TO ATTEND

NCI-INTSOY
AUGUST 20 - 25, 2018



WWW.NORTHERN-CROPS.COM

NCI's Baking and Pasta Laboratory Capabilities



Doty

Baking Laboratory

The NCI baking laboratory is designed for both product development and instructional purposes. Baking characteristics

of the different wheat classes can be demonstrated in breads, frozen dough, cakes and cookies.

The equipment in the baking laboratory includes:

- Hobart mixers
- Commercial size horizontal mixer
- Rounder
- Moulder
- Proof cabinets
- Electric ovens
- Gas oven with steam
- Blast freezer
- Consumer breadmaking machines

NCI's baking laboratory is designed for identifying the baking characteristics of various wheat samples. Unique wheat variety characteristics can be evaluated in pan breads, hearth breads, buns, cakes, cookies, and other baked goods along with frozen dough goods.



Food Scientist Natsuki Barber prepares croissants in the NCI baking laboratory during the Baking With Soy course.

The baking laboratory is well-suited for product development, product testing, and specialized training.

NCI has the capability to evaluate the quality of durum semolina and flour. NCI analysis of durum semolina includes proximate analysis including protein, ash, lipid, and moisture content.

NCI also maintains laboratory equipment to determine:

- Durum semolina and flour falling number
- Speck count
- Granulation
- Gluten index
- Grit
- Total starch
- Resistant starch
- In-vitro glyceic index
- Rheological dough analysis



A strawberry shortcake, baked by NCI Food Technologist Rachel Carlson with dry bean flour, is on display in the baking laboratory during the Value-Added Applications of U.S. Dry Bean Course.

NCI can evaluate further the quality of durum semolina and flour by providing professional pilot pasta production services.

Pasta Laboratory

The pasta processing laboratory is equipped to evaluate the impact of durum wheat and a host of additional ingredients and processing conditions and end product quality for traditional dry, refrigerated and frozen pasta. The laboratory is available for pasta product development, process testing and training.

The pasta processing laboratory has a 100-kg/hour Demaco® pasta extruder for evaluating the impact of durum semolina, flour and processing conditions on pasta quality.

The computerized data collection system, controls and monitors enable regulation and observation of the critical variables in the process.

The batch dryer is equipped with microprocessor controls to demonstrate both conventional and high-temperature drying of long- and short-cut pasta.

NCI provides pilot-scale twin-screw extrusion laboratory services. The extrusion laboratory utilizes a Wenger® X-25 twin-screw extruder mated to a laboratory scale Buhler® fluid bed dryer.

The extrusion laboratory also has the capability of producing a wide range of expanded products including snack foods, breakfast cereals, pastas, breadings, half products and textured vegetable protein products.

The extrusion laboratory can produce puffs, chips and flakes. Plus, it can convert hard wheat and durum wheat semolina and flour into a wide variety of food ingredients and finished products.



NCI's Process Project Manager Rillie Morgan and Food Scientist Natsuki Barber are demonstrating how to make spaghetti noodles.

Educational Courses

NATTO Summit

Japan, USA • March 14-15, 2017



The NATTO Summit was coordinated by the Northern Food Grade Soybean Association and hosted by NCI. The event was designed to discuss supply chain opportunities and challenges in the natto industry. The summit allowed suppliers to highlight the significance of the Red River Valley to the natto industry.

The course was sponsored by:

- North Dakota Soybean Council
- Minnesota Soybean Research & Promotion Council
- South Dakota Soybean Research & Promotion Council
- Wisconsin Soybean Marketing Board
- U.S. Soybean Export Council
- Northern Food Grade Soybean Association

Baking With Soy

Ghana, Kenya, Nigeria • May 8-12, 2017



The Baking with Soy Course was created to give participants information about the nutritional benefits of U.S. soy in bakery products. Participants received hands-on training in the NCI Baking Laboratory to learn different techniques to be applied when baking with soy flour.

The course was sponsored by:

- American Soybean Association (WISHH Program)
- North Dakota Soybean Council

NCI-INTSOY

Cambodia, El Salvador, Ethiopia, Ghana, Guatemala, Indonesia, Mexico, Myanmar, Taiwan, USA • June 4-10, 2017



The Northern Crops Institute (NCI) hosted the former "NSRL-INTSOY" course that was previously held at the University of Illinois at Urbana-Champaign. The NCI-INTSOY course was designed to teach practical processing methods and innovative applications of soybean ingredients in meat, beverages, baking, snacks, traditional soy foods and animal feed products.

The course was sponsored by:

- American Soybean Association (WISHH Program)
- Minnesota Soybean Research and Promotion Council
- North Dakota Soybean Council
- Northern Food Grade Soybean Association
- U.S. Soybean Export Council

Applications of U.S. Pulse Ingredients

China • July 17-20, 2017

This customized course focused on major applications of using pulses as an ingredient. Emphasis was placed on bakery products, pasta and both extruded and fried snacks. Nutritional properties were also highlighted during the course.

The course was sponsored by:

- USA Dry Pea & Lentil Council



South Asian Contracting for Wheat Value

Indonesia, Myanmar, Philippines, Singapore • August 2-4, 2017

Quality control and purchasing personnel from South Asia attended the course. At the course, wheat buyers learned how to better manage supply chains and how to write contracts that accurately specify the wheat they want to purchase. The participants learned about wheat quality testing and procurement through lectures and end-product evaluations.

The course was sponsored by:

- U.S. Wheat Associates



Grain Procurement Management for Importers Course

Algeria, China, Egypt, Israel, Italy, Japan, Morocco, Nigeria, Panama, Philippines, Spain, Sweden, The Netherlands, Tunisia • September 11-20, 2017

NCI welcomed 26 participants from 14 countries to the Grain Procurement Management for Importers Course. The course highlights how companies can make effective purchases while managing their financial risk.

The course was sponsored by:

- U.S. Wheat Associates
- U.S. Grains Council



Value-Added Applications of U.S. Dry Beans

Argentina, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras • September 18-21, 2017



The course focused on the utilization of dry beans in the food industry. More specifically, discussion on the various application related to bakery products and extruded snack products. The course concluded with a plant tour in Western North Dakota.

The course was sponsored by:

- U.S. Dry Bean Council

Barley & Malt Quality: Field to Brewhouse Perspective

United States • October 2-5, 2017



Barley and Malt Quality: Field to Brewhouse Perspective course was held at NCI in October. NDSU Plant Sciences and Institute of Barley and Malt Sciences coordinated the course. There were lectures, discussion sessions and laboratory demonstrations that provided participants with knowledge to understand malt processing and to effectively interpret barley and malt analyses.

Customized Courses and Training Available

NCI is able to provide custom courses and training that enable participants to learn about northern climate crops and their unique qualities, marketability and processing characteristics.

Depending on the needs of your organization, a typical customized course can range from one to three days. We offer lectures, hands-on demonstrations, laboratory demonstrations, tours and case history studies as part of the experience.

Participants will have access to the latest technology and methods. NCI provides experts from the industry and government along with university professors as guest lecturers.

Courses and training can be customized to your specific requirements and are available upon request from your organization. For more information about customized courses and training, please call 701.231.7736 or check out our website at:

www.northern-crops.com/custom-training



Algeria...Argentina...Belarus
Cambodia...Canada...China...Columbia...Costa Rica
Dominican Republic...Egypt...El Salvador...Ethiopia
Ghana...Guatemala...Honduras...Indonesia...Israel

Buyers from 36 Nations Educated by NCI in 2017

Italy...Japan...Kenya...Mexico...Morocco...Myanmar
Nigeria...Panama...Peru...Philippines...Singapore
Spain...Sweden...Taiwan...Thailand...The Netherlands
Tunisia...United States...Vietnam



Southeast Asia | January 13-28, 2017

Food Scientist Natsuki Barber assisted the U.S. Dry Pea and Lentil Council with a series of in-house seminars in Malaysia, Thailand and Indonesia. The companies visited were food manufacturers and importers of U.S. pulses.



Philippines | March 20-23, 2017

Food Scientist Natsuki Barber attended a trade mission and a conference 'Better for You Food Ingredients' in Manila, Philippines, organized by the North Dakota Trade Office. The team comprised of pulse suppliers who had the opportunity to visit with local pulse processors and food manufacturers.



USA | April 3-5, 2017

Feed Production Center Manager Kim Koch, Ph.D. was in Kansas City, Missouri at the Pet Food Forum. He assisted the Northern Pulse Growers Association in their booth with technical questions. Many of the questions were on technical processing and nutrition questions about using pulses in pet food and treats.

Global Marketing



China | April 10-14, 2017

The first Food Safety Modernization Act (FSMA) Animal Food Lead Instructor course was delivered in China. The Chinese Academy of Inspection and Quarantine hosted the event. The photo above is the group in the training room, where Feed Production Center Manager Kim Koch, Ph.D. was the lead trainer for the activity.



Peru | April 24-27, 2017

Food Scientist Natsuki Barber attended a trade mission along with the conference, 'Better for You Food Ingredients' in Lima, Peru that was organized by the North Dakota Trade Office. The team comprised of pulse suppliers within the state and the group visited with local pulse processors and food manufacturers.



North Africa | May 18, 2017

The U.S. Wheat Associates and the North Dakota Wheat Commission sponsored five team members from the Maghreb North African Wheat Trade Team (Morocco and Algeria) were welcomed and hosted by the NCI.



Mexico | May 31, 2017

Twelve members of the Mexico NAFTA Barley/Beer Industry team visited Northern Crops Institute and were welcomed by NCI staff, Senator Heidi Heitkamp's staff, the North Dakota Barley Council and faculty from North Dakota State University.



USA | May 31 - June 1, 2017

Feed Production Center Manager Kim Koch, Ph.D. was part of a panel and he specifically presented about “Writing a Food Safety Plan for a Feed Mill” at Feed & Grain LIVE 2017” held in Altoona, Iowa. The written plan is part of the requirements included in the Hazard Analysis and Risk Based Preventive Controls for Human Food (21 CFR 117) and Animal Food (21 CFR 507) of the Food Safety Modernization Act (FSMA). Koch’s presentation focused on how to become compliant, where to get help in understanding FSMA, and which parts of FSMA rules apply individual situations.



USA | June 26, 2017

Visitors from a Belarusian beef industry delegation were guests of Mid-America Consultants International (MACI) and spent five days visiting beef producers and processors. While at NDSU they visited with Bill Ogdahl, beef unit manager; Trent Gilbrey, beef cattle research complex manager; and Kim Koch, Ph.D. NCI feed center manager. Koch provided them with a short overview of the role that NCI plays in concentrates, supplements and premixes to the NDSU beef programs along with the technology used in creating supplements and the regional ingredients that are used.



Nigeria, South Africa | June 26, 2017

Northern Crops Institute welcomed the Regional African Trade Team in June. The trade team consisted of 10 participants from Nigeria and South Africa. The North Dakota Wheat Commission hosted the team.



Southeast Asia | August 9, 2017

Northern Crops Institute welcomed the U.S. Soybean Export Council (USSEC)’s Southeast Asian Food Soybean Team. There were approximately 16 team members from Indonesia, Singapore, Thailand and Vietnam.

Global Marketing



Peru | August 14, 2017

Eight Peruvian companies toured North Dakota as part of a reverse trade mission organized by the North Dakota Trade Office (NDTO). The reverse trade mission focused on specialty crops and also built upon the relationships developed during the Peru-North Dakota 'Better for You Food Ingredients' Conference & Exhibition held in Lima in April 2017.



Philippines | August 21, 2017

NDTO staff led a group of Philippine business leaders as they toured the state and met with specialty crop companies. The Philippines-North Dakota reverse trade mission included educational presentations and demonstrations at the NCI and one-on-one meetings with North Dakota companies.



China | August 27, 2017

Delegates from six companies visited during a reverse trade mission from China focused on identity-preserved soybeans. The mission was led by the NDTO and gathered Chinese soybean buyers and food-grade soybean companies for meetings and tours. NCI hosted a day of presentations, educational sessions and a roundtable discussion on Chinese soybean market conditions and regulations.



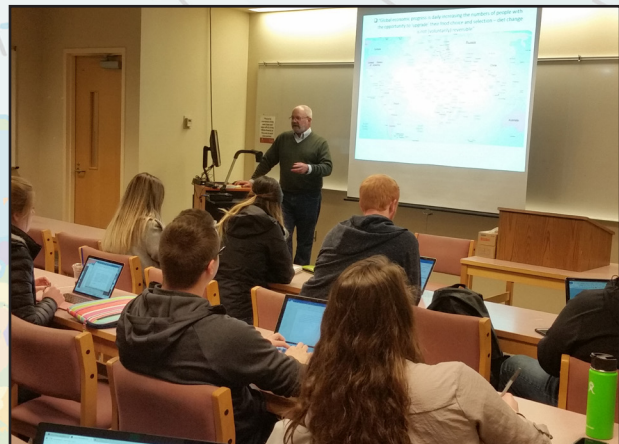
Japan | August 30, 2017

At the end of August, we were visited by the Japanese Industrial Bakery Association Trade Team sponsored by the North Dakota Wheat Commission and U.S. Wheat Associates. While at NCI, the team received a short tour and an brief overview of NCI's course offerings.



Asia | November 3 - 21, 2017

NCI's Consulting Technical Director Neil Doty, Ph.D., gave the 2017 Hard Red Spring Wheat Crop Quality Report to millers and bakers in seven countries (Indonesia, Thailand, Philippines, South Korea, Japan, Taiwan and China) from November 3 through November 21, 2017, for U.S. Wheat Associates.



USA | November 13-17, 2017

NCI Feed Center Manager Kim Koch, Ph.D. lectured during a seminar on "Global Animal Agriculture" at Washington State University - Tri-Cities' campus mid-November. The seminar was on the nuances of international marketing, how important trade relations are (NAFTA) and how much meat the world eats.



South Korea | November 13-17, 2017

Food Scientist Natsuki Barber traveled to Seoul, South Korea to provide a technical seminar and in-house consultation on food barley that was organized by the U.S. Grains Council. The seminar had more than 50 participants and attracted local media attention especially in the healthy food sector.

NCI Product and Process Development

NCI's technical staff has worked with food processors and ingredient suppliers, large to small, established to start-up from all over the globe.

Our technical staff has experience in extrusion, post-extrusion, pasta manufacturing, milling and baking. We can assist in developing fresh/pre-cooked/frozen pasta, noodles, couscous, expanded snacks, texturized foods, imitation extruded foods, ready-to-eat cereals (expanded and flaked), expanded snack foods, and industrial products from food grade materials.

We offer:

- Cost effective service fees
- Confidentiality
- Complete services, including purchase of ingredients (specialty ingredients are supplied by client — other ingredients provided at cost)
- Laboratory for proprietary use (upon approval).

For more information about our technical services, go to: <http://bit.ly/NCIProductDevelopment>



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 Fargo, ND 58108-6050

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2017 Annual Update

Offering Technical Services and Educational Opportunities

Educational Courses:

- Value-enhanced uses
- Grain standards and inspection
- Procurement, risk management
- Quality, processing and milling
- Extrusion technology
- Pasta processing
- Feed milling and manufacturing
- Customized seminars
- Soyfoods

Technical Services:

- Pilot-Scale Processing
- Milling
- Baking
- Pasta processing
- Oilseed cold pressing
- Extrusion
- Post-extrusion
- Feed
- Industrial

NCI Provides:

- Skilled staff
- Up-to-date information
- Fully-equipped labs
- Hands-on experience
- Extrusion
- Confidential environment
- Network of resources

NCI Staff

Mark Jirik, director
 John Crabtree, assistant director
 Linda Briggs, office manager
 Betsy Armour, communications/public relations manager
 Janel Brooks, account technician
 Neil C. Doty, Ph.D., technical director (consultant)
 Kim Koch, Ph.D., feed production center manager
 Natsuki Barber, food scientist
 Rachel Carlson, food technologist
 Rilie Morgan, process project manager
 Zhisheng (Zach) Liu, Ph.D., CFS, food scientist

Connect with us:

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