# **Northern Crops Institute**

Annual Update

2015

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.













# Leadership

### A Note from the NCC Chair Keith Peltier, West Fargo, N.D.

**Proseed** 

NCI's mission supports regional agriculture and valueadded processing by conducting educational and technical programs that expand domestic and international markets for northern grown crops. As Director Mark Weber put it, we are in the business of building friends both here and

abroad for our northern grown crops.



Peltier

Our goals for the coming year will enhance our mission:
We would like to get more

We would like to get more people to attend our courses. When customers visit us to gain hands-on experience, chances improve they will buy from this region. National commodity groups, through their overseas affiliated offices, send people

to education courses at various optional training sites available in the U.S. We rely on their efforts to send those people to the NCI. We need the ongoing efforts of our local commodity group leaders to strengthen our ties with the national groups even more.

We will continue to diversify the crop mix that we support while making sure we don't forget the crops that got us to where we are today. We have focused on wheat, durum, soybeans, barley and pulses for the last few years. But, we want to increase our efforts for corn, sunflowers, canola, flax, oats, etc. We need your support to determine course work or projects in these other crops.

We will increase revenues from our feed and flour mill, extruders, presses, etc. Our strategy is to turn Technical Director Neil Doty loose in cultivating his contacts for additional work/testing that we could be doing with our equipment. Neil is creating an industry focus group to help us with long term strategic planning.

We plan to develop a food and feed safety workshop for our partners, so they can adapt to the overbearing regulations of the Food Safety Modernization Act. Our Feed Production Center Manager Kim Koch, Ph.D. will help our partners navigate these challenges through educational workshops. We believe these new regulations will affect the first handlers of commodities more than they know.

We will beef up our electronic communications and look at our branding in everything we do. Betsy Armour our new communication /public relations manager will lead this effort.

If you have any suggestions on how to help us fulfill our mission, please let us know. Anything you can do to help us is greatly appreciated.

### Technical Director Report Neil C. Doty, Ph.D.

NCI's new Technical Director Neil C. Doty, Ph.D. will provide leadership to enhance technical service programs in support of market development. He will also oversee promotional efforts for northern grown crops in domestic and export markets.

Agricultural producers in our Northern states of North



Doty

Dakota, South Dakota, Minnesota and Montana produce the world's finest grain and oilseed crops. Processors around the world are keen to learn more about the quality, versatility and applicability of northern crops in relation to their food and feed product lines. Northern Crops Institute has been established as a preeminent food and feed development center

with a comprehensive array of processing capabilities for developing and improving a wide range of foods and feeds.

NCI's technology inventory includes grain milling, feed production, cereal and snack foods extrusion, frozen and ready to eat baked goods production, pasta production, vegetable oil processing and analytical services. Of particular interest is the recent addition of a pilot-scale Buhler fluid bed dryer to complement NCI's Wenger twin screw extruder. NCI's extrusion system duplicates commercial scale processing conditions for snack foods, breakfast cereals, pet foods, feeds and food ingredients.

Another exciting development is the expansion into food-grade soybean processing technology. NCI has purchased and will take delivery in April 2016 of a MASA MiniStar soy milk and tofu pilot plant system. The system has the capability of producing commercial grade soy milk and tofu products utilizing northern grown soybeans. The system will be invaluable for northern grown soybean producers by demonstrating soy milk and tofu production and evaluating products for soybean buyers around the world.

NCI's future plans will boost its technology promotional efforts with food and feed manufacturers. Our objective is to increase client utilization with NCI's extensive collection of processing capabilities.

### 

### 2015-16 Northern Crops Council (NCC)

**Keith Peltier, Chair** West Fargo, N.D. Proseed

James Aarsvold Blanchard, N.D. N.D. Corn Growers

**Beau Anderson**Williston, N.D.
Northern Pulse Growers
Association

**John Bartsch** Maple Grove, Minn. Kelley Bean

**Dean Bresciani, Ph.D.**President
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Chet Edinger Mitchell, S.D. S.D. Wheat Commission

**Doug Goehring**Commissioner of Agriculture
N.D. Department of Agriculture

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

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**Dave Katzke**Minneapolis, Minn.
General Mills

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**Dwight Mork**Bellingham, Minn.
Minn. Corn Research and
Promotion Council

Perry Ostmo Sharon, N.D. N.D. Soybean Council **Drew Parsley**Warroad, Minn.
Minn. Soybean R&P Council

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

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

**Arnold Woodbury** Wyndmere, N.D. N.D. Oilseed Council

### **NCI Thanks Outgoing NCC Members for Their Service**



NCI Director Mark Weber (left) thanked the outgoing NCC board members for their service on the Northern Crops Council (NCC) by presenting each with an engraved clock at the June 2015 meeting. Karolyn Zurn (middle), Callaway, Minn., represented the Minnesota Soybean Growers Association, serving two three-year terms and as Chair during her last two years. Milo "Buzz" Mattelin (right), Culbertson, Mont., finished two terms on the NCC by representing Montana Wheat & Barley Committee. Thank you for your service!

### 2015-16 Industry Advisory Board

- Jennifer Tesch, Chair SK Food International
- Brice Anderson Cargill
- Mark Askegaard
   Askegaard Organic Farm
- Eric Bartsch AGT Foods USA
- David Berg American Crystal Sugar
- Darwin Britzman International Nutrition Consulting Inc.
- Anthony Chavez Buhler Inc.

- Ron DeJongh
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- Mike Keller
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- Terry Selleck
   Bay State Milling
- Robert Sinner
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- Travis Sitter
   Silveus Insurance Group
- Alan Slater
   Busch Agricultural Resources
- Brian Sorenson
   Dakota Specialty Milling

- Scott Stofferahn
  Golden Growers Cooperative
- Tom Streifel Highwater Ethanol
- Rebecca Newman
   Summit Brewing Company
- Vance Taylor
   North Dakota Mill

# Thank Yous

## Thank You to All Who Supported NCI Programs and Activities in 2015

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

Robert Brueggeman

Paul Schwarz

Elias Elias, Ph.D.

Rich Horsley, Ph.D.

Frank Manthey, Ph.D.

Senay Simsek, Ph.D.

Abbiamo Pasta Company

Jim Gibbens

AgriBank, FCB, St. Paul, Minn.

David Bullock, Ph.D.

Alton Grain Terminal

Cory Tryan

**Arthur Companies** 

Joel Moore

Benson-Quinn Co., Minneapolis, Minn.

Randy Narloch

Brushvale Seed Inc.

Breckenridge, Minn.

Paul Holmen

Jon Miller

BNSF Railway Inc.

Brandon Mortensen

Cargill, Inc., Minneapolis, Minn.

Wayne Koester

April Morgan

CHS, Inc.

Inver Grove Heights, Minn.

Ryan Caffrey

Mike Klein

Savage, Minn.

Greg Oberle

Superior, Wisc.

Dick Carlson

Columbia Grain

Minneapolis, Minn.

Darren Biornson

Ron DeJongh

**Dakota Growers Pasta** 

New Hope, Minn.

Alexis Freier-Johnson

David Hahn

**Dakota Specialty Milling** 

Fargo, N.D.

Robert Meyer

Duluth (Minn.) Seaway

Port Authority

Ron Johnson

Adele Yorde

Fargo Brewing Company

Chris Anderson

Frontier Futures, Minneapolis, Minn.

Austin Damiani

Georgetown Farmer's Elevator

Gary Balzum

Hartwick College

Aaron MacLeod

Hunter (N.D.) Grain Company

Paul Skarnagel

Kansas State University

**International Grains Program** 

Jay O'Neil

Minneapolis Grain Exchange

Joe Albrecht

Mark Jossund Farm, Moorhead, Minn.

Montana State University

North Dakota Barley Council

Steve Edwardson

North Dakota Grain Inspection Service

Pat Kehoe

North Dakota Mill, Grand Forks, N.D.

Travis Devlin

Vance Taylor

Kevin Skunes Farm, Arthur, N.D.

North Dakota Port Services

Ashley Ritteman

North Dakota Soybean Council

Diana Beitelspacher

Kendall Nichols

Stephanie Sinner

Suzanne Wolf

North Dakota Wheat Commission

**Neal Fisher** 

Erica Olson

Jim Peterson

Northarvest Bean Growers

Northern Pulse Growers Association

Rahr Malting Co.

Jesse Theis

Richland Organics Inc.

Matt Bohn

Rick Brandenburger

SB&B Foods Inc.

**Robert Sinner** 

Scott Sinner

Todd Sinner

SK Food International

Aaron Skyberg

Joel Owen

South Dakota State University

Sue Goll Commodities Consulting, Inc.

Sue Goll

SunOpta, Inc., Moorhead, Minn.

**Curt Petrich** 

Mark Halvorson

Greg Svenningsen Farm, Valley City, N.D.

The Money Farm, Fargo, N.D.

Mike Krueger

**Trading Technologies** 

Leo Murphy

USA Dry Pea and Lentil Council

USDA FAS Cochran Fellowship Program

USDA/GIPSA/ FGIS

Lynn Thomas

U.S. Dry Bean Council

U.S. Grains Council

U.S. Sovbean Export Council

Teodoro Cortes

U.S. Wheat Associates

Roy Chung

Matt Wiemar

Joe Sowers

Joe 20Met2

Steve Wirsching Joel Thorsrud Farm, Hillsboro, N.D.

University of Minnesota

Wheat Value Consulting

John Oades, Ph.D.



### **NCI Welcomes Three New Staff Members**



Neil C. Doty, Ph.D.



**Betsy Armour** 

Northern Crops Institute (NCI) announced three recent additions to the organization's team. Neil C. Doty, Ph.D., was named NCI's technical director in a consulting capacity, Betsy Armour was appointed to communications & public relations manager and Sam Briss was named food

technologist.



Sam Briss

"I am pleased that Neil, Betsy and Sam are part of the NCI team. Neil will provide expertise to our technical program, Betsy will serve as our communications liaison to our stakeholders and the media and Sam will provide technical services as our newest food technologist," NCI Director Mark Weber said. "Their combined experience will help support NCI as we continue to promote northern grown crops globally."

Doty will play a key role at the NCI and will be responsible for providing technical service programs in support of market development along with promotional efforts for northern grown crops into both domestic and export markets.

Armour will direct communications and public relations efforts to enhance NCI's message and outreach efforts.

Briss will conduct laboratory analyses, assist with pilot-scale processing and will also participate in demonstrations and training for domestic and international trade team and short course participants.

# A Special Thank You to Our 2014-2015 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 Barley Council
North Dakota Soybean Council
North Dakota Wheat Commission
Northarvest Bean Growers
Northern Pulse Growers Association
State of South Dakota
South Dakota Soybean Research and Promotion Council
South Dakota Wheat Commission

# Thank You 2015 Agribusiness Sponsors!

AGT Foods USA Ameriflax Askegaard Organic Farm Bay State Milling Company Buhler, Inc.

Dakota Growers Pasta Co., Inc.

Dakota Specialty Milling

Sue and Dave Katzke

Columbia Grain

Becky and Kim Koch Kelley Bean Company

North Dakota Farmers Union

North Dakota Grain Dealers Assn.

North Dakota Grain Growers Assn.

North Dakota Mill and Elevator

Northern Canola Growers Assn.

Northern Plains Potato Growers Assn.

Northern Pulse Growers Assn.

Proseed

**Red River Commodities** 

Red River Valley Sugarbeet Growers Assn.

Richland IFC, Inc.

SB&B Foods, Inc.

SK Food International

**Summit Brewing Company** 

U.S. Durum Growers Assn.

Weber Farms

### Connect with us!

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



# NCI Holds Meeting to Discuss Opportunities in Southeast Asia



Ramos

On Tuesday, November 3, 2015, Northern Crops Institute (NCI) invited its stakeholders to provide recommendations on expanding marketing

opportunities in Southeast Asia for crops grown in our four-state region of Minnesota, South Dakota, Montana and North Dakota.

NCI welcomed Dr. Norman Ramos, division vice president for La Filipina, the second largest food and feed company in the Philippines to be the featured speaker at the meeting. Dr. Ramos provided information about the current growth opportunities in Southeast Asia for northern grown crops.

Ramos focused specifically on the major opportunities in the animal feed industry and its need for soybean meal. Ramos stated, "In any of the animal industries, the basic protein source is soybean meal. No Asian country

is capable of growing soybeans. All soybean meal is being imported and is coming from either the Unites States or South America. The exception is China, as it keeps to its own requirement."

During the meeting, the discussion with stakeholders continued to center on the incredible growth in agricultural markets in the Southeast Asia region. Currently, the agricultural markets are expanding at a four percent rate of growth. "The more efficient companies become in Southeast Asia the more raw materials they will need to bring in," Ramos said. "For example, American soybean meal is the best choice and it commands a premium."

"The growth in Southeast Asia is definitely on NCI's radar," NCI's Director Mark Weber said. "We will continue to discuss and focus our efforts in marketing the unique characteristics of our northern grown crops around the world. I believe this meeting provided an outlet for our stakeholders to gain some information and give some great recommendations for our future efforts."

### **NCI Hosts First Webinar**

NCI Feed Center Manager Kim Koch, Ph.D., organized NCI's first webinar on Monday, November 23, 2015.

Funding for the project was provided through the U.S. Grains Council.

The purpose of the webinar was to bring staff and consultants the latest information about the Dry Grind Ethanol Industry's process and products including the "new" high-pro DDGS and Distiller's Corn Oil (DCO). Presentations were provided by Randy Ives of Gavilon, Dr. Jerry Shurson of the University of Minnesota and Dr. Harold Tilstra of Purina Animal Nutrition, L.L.C.

This webinar was the first in a series by Northern Crops Institute. Other webinars will be produced in January 2016. To view the first in the series go to NCI's home page at <a href="https://www.northern-crops.com">www.northern-crops.com</a> and click on the slide that says, "DDGS Webinar — Wednesday, November 18, 2015."

### **Food Safety Modernization Act**



The U.S.
Food and Drug
Administration's
Food Safety
Modernization
Act (FSMA) was
signed into law
on January 4,
2011. FSMA
was enacted to

enable the FDA to better protect public health by strengthening the nation's food safety system. Implementation of FSMA regulations have begun and continue with greater frequency throughout 2016 and beyond for the nation's food and feed production

systems. The FDA will focus more on preventing food safety problems rather than relying primarily on reacting to problems after they occur.

FSMA provides FDA with new enforcement authorities designed to achieve higher compliance rates of food safety standards and to better respond to and contain problems when they do occur. FSMA also gives the FDA new regulations to hold imported foods to the same standards as domestic foods along with directing the FDA to build an integrated national food safety system in partnership with state and local authorities.

NCI recognizes that many of

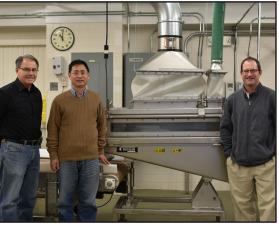
its domestic and foreign industry clients that utilize northern crops will be impacted by the FSMA law. Therefore, NCI is studying how it may participate and assist its clients by providing facilities and personnel for FSMA training activities. Dr. Kim Koch, NCI's Feed Production Center Manager, has been engaged with the FDA to assist in developing training curriculum for the implementation of Preventative Controls for Animal(s) Food production(rules). Dr. Koch plans to become a FSMA trainer in early 2016.

### **NCI Completes Installation of Fluid Bed Dryer**

NCI completed installation of its state-of-the-art Buhler OTW-50 fluid bed dryer to complement NCI's Wenger twin screw extruder on November 18, 2015. The combination of NCI's Wenger extruder and Buhler fluid bed dryer replicates processing capabilities of commercial operations.

The Buhler fluid bed dryer employs high-velocity, heated air for consistent airflow, ensuring uniform product drying. Internally, the dryer conveying process gently agitates products with fluidized air. A high rate of thermal transfer results in superior product characteristics in terms of customized color, texture and size.

The new NCI system can extrude and dry, toast, roast, puff or cool a wide range of food products produced from northern grown crops with conditions that are similar to commercial operations. NCI's Buhler fluid bed dryer will be employed to produce extruded ready to eat cereals, snack foods, feeds, pet foods and specialized food ingredients for NCI clients in product development and educational course demonstration activities.



Technical Director Neil C. Doty, Ph.D., Food Scientist Zach Liu, Ph.D. and Process Project Manager Rilie Morgan stand next to the new Buhler Fluid Bed Drver at NCI.

## **New MASE Soymilk and Tofu Production Equipment to be Installed March 2016**

The Dakotas, Montana and Minnesota region has earned the reputation of being the world's leading source of high quality food-grade soybeans. As the global demand for food-grade soybeans increases, regional food-grade soybean producers and their customers have become interested in the real world evaluation of current and future foodgrade soybean varieties. With that in mind, NCI has set the stage to establish itself as an authority in evaluating and demonstrating the quality of Northerngrown, food-grade soybeans.

Dr. Zach Liu joined the NCI staff early in 2015 as NCI's food scientist with emphasis upon soy foods development. Dr. Liu has extensive experience in foodgrade soybean evaluation and soy food product development since 1998. Dr. Liu has developed specifications for the

purchase, installation, and operation of a pilot scale soy milk and tofu production system. NCI ordered a soy milk and tofu production system from MASE, a Japanese-based company well known for building world-class soy milk and tofu production equipment.

The MASE MiniStar equipment is scheduled to arrive and be installed in March 2016. NCI will have the capability to perform soy foods product development activities with commercial-grade technology. NCI's MASE MiniStar soy milk and tofu pilot plant will function as NCI's platform to educate food-grade soybean buyers on Northern-grown soybean quality.



### **Doty Presents at Montana Pulse Days**

NCI Technical Director Neil C. Doty, Ph.D., presented "New Opportunities for Economic Development," at Montana Department of Agriculture's Montana Pulse Days on Wednesday, December 9, 2015.

Doty also took "The Pulse Pledge" which is a commitment to eat pulses once a week in 2016.

The Montana Department of Agriculture will be launching a new website (pulsepledge.com) on January 1, 2016, where photos of people taking "The Pulse Pledge" will be featured.





## **Southeast Asia Commodity Risk Management Seminar**

Singapore, Indonesia, Malaysia, Philippines, Thailand, India • April 27-29, 2015



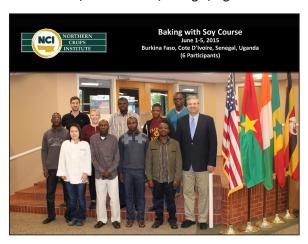
The Southeast Asia Commodity Risk Management Seminar was designed to help participants understand why risk management is essential to business success when experiencing commodity price and margin volatility.

#### The seminar was sponsored by:

- Minnesota Soybean Research and Promotion Council
- North Dakota Soybean Council
- South Dakota Soybean Research and Promotion Council
- U.S. Soybean Export Council
- United Soybean Board
- American Soybean Association
- U.S. Department of Agriculture

### **Baking with Soy Course**

Burkina Faso, Cote D'Ivoire, Senegal, Uganda • June 1-5, 2015



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

### **Soy Flour Procurement Seminar**

Guatemala, Myanmar, Thailand • June 9-11, 2015



NCI's Soy Flour Procurement Seminar helped buyers learn how to purchase soy and also gave them the opportunity to be introduced to North Dakota soybean producers and processors.

### The seminar was sponsored by:

- American Soybean Association (WISHH Program)
- North Dakota Soybean Council
- Minnesota Soybean Research and Promotion Council
- South Dakota Soybean Research and Promotion Council



### Utilization of U.S. Wheat Classes in Pasta Production

Nigeria, Peru • June 15-19, 2015

NCI's customized pasta production course assisted pasta processors in creating the right blend of wheat to meet their pasta specifications. Hands-on pasta processing and cooking quality evaluations supplemented course lecture topics which included U.S. wheat supply and price outlook, wheat quality evaluation, and quality tests for flour and semolina.

#### The course was sponsored by:

U.S. Wheat Associates



## **Contracting for Wheat Value Workshops**

Korea • August 3-6, 2015

Malaysia, Philippines, Singapore, Vietnam • September 28-30, 2015

Quality control and purchasing personnel from Korea and South Asia attended the Contracting for Wheat Value Workshops at NCI this summer.

At the workshops, wheat buyers learned how to better manage supply chains and how to write contracts that accurately specify the wheat they want to purchase. Participants learned about wheat quality testing and procurement through lectures and end-product evaluations.

#### The workshops were sponsored by:

U.S. Wheat Associates



### COURSE SCHEDULE

April 12-14
Pasta Production and Technology

September 12-21
Grain Procurement Management for Importers

Other courses will be added to our schedule as the year progresses. Please check our website <a href="https://www.northern-crops.com">www.northern-crops.com</a> for the most up-to-date information.







### **Grain Procurement Management for Importers**

Bolivia, Ecuador, Egypt, Germany, Israel, Japan, Jordan, Lebanon, Morocco, Netherlands, Panama, Peru, Saudi Arabia, Switzerland, Tunisia, United Arab Emirates, USA, Venezuela • September 14-23, 2015



NCI welcomed 32 participants from 18 countries to the Grain Procurement Management for Importers Course. The course highlights how companies can make effective purchases while decreasing their financial risk.

#### The course was sponsored by:

- U.S. Wheat Associates
- U.S. Grains Council
- U.S. Department of Agriculture FAS Cochran Fellowship Program

### **Soybean Procurement Management for Importers**

Japan, Singapore, South Korea, Taiwan • October 5-9, 2015



NCI hosted the Soybean Procurement Management for Importers Course to provide food grade soybean buyers with the latest risk management tools for procuring food grade soybeans from this region, and a better understanding of food grade soybeans as it relates to handling, storage, transportation and quality characteristics.

#### The course was sponsored by:

- Minnesota Soybean Research and Promotion Council
- North Dakota Soybean Council
- Northern Food Grade Soybean Association

## **Barley & Malt Quality: Field to Brewhouse Perspective**

United States • October 12-15, 2015



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.

Algeria...Bolivia
Burkina Faso...China...Cote D'Ivoire
Ecuador...Egypt...Germany...Guatemala
Guyana...Haiti...India...Israel...Italy...Japan...Jordan
Korea...Lebanon...Malaysia...Malta...Morocco

# Buyers from 43 Nations Educated by NCI in 2015

Myanmar...Netherlands...Nigeria...Panama...Peru
Philippines...Saudi Arabia...Senegal...Singapore
South Korea...Spain...St. Vincent...Switzerland
Taiwan...Thailand...Trinidad...Tunisia...Uganda
United Arab Emirates...United States
Venezuela...Vietnam



### Singapore | March 21 -27, 2015

NCI's Feed Production Center Manager, Kim Koch, Ph.D. attended the 9<sup>th</sup> Asia Grain Transportation Conference in Singapore. The conference is a joint effort of USSEC and USGC for Asia Pacific buyers/users of U.S. grains, soybeans and soybean meal. Conference topics included transportation issues such as logistics at origin and final destination; cost of containers vs bulk from and to different ports; the disposition of the world's fleet; contracting and specs; supply and demand in the countries in the region; the drivers of the demand; and projections into the future.



### Mongolia Feb. 27, 2015

A team from Mongolia toured NCI and received an update on regional agriculture. The purpose of their visit was to look at Amity Technology seeding equipment for purchase.



### Eurasia | March 25, 2015

A group of 20 professionals from several countries in Eurasia visited NCI. They were part of the Special American Business Internship Training Program's Agribusiness program of the U.S. Department of Commerce. The delegates represented industry specialists who were seeking information on trends and innovations in agribusiness. The program introduced them to industry developments and also assisted them with establishing contacts in America for future projects and activities.



### China | March 30 - 31, 2015

NCI's Food Scientist Natsuki Fujiwara spoke at the North Dakota Better for You Food Ingredients Conference hosted in Qingdao, Shandong, China by the North Dakota Trade Office (NDTO). More than 110 of China's largest food manufacturers and processors attended the event.

The annual conference is designed to further introduce North Dakota's high quality food ingredients to the Chinese food manufacturing market.



### Vietnam | June 13 -23, 2015

NCI's Feed Production Center Manager Kim Koch, Ph.D., visited the Mekong Delta for the Market Impact Mission sponsored by the U.S. Grains Council. The purpose of the Mission was to explore market opportunities in dairy and agua.



### Vietnam | May 23 - 25, 2015

NCI's Feed Production Center Manager Kim Koch, Ph.D., spoke at the 21st S.E. Asian Feed Technology and Nutrition Workshop in Vietnam. This is his third time presenting for this event. This year, he was a breakout session leader in feed manufacturing technology. He also led discussions with USSEC Country directors on how NCI can have a greater presence and influence in the Asia Pacific region, particularly in Southeast Asia.



### Europe June 22, 2015

The North Dakota Wheat Commission hosted a seven person team from Italy, Malta, Netherlands and Spain. They visited NCI to receive updates and learn more about the region's wheat crop.



### **USA** June 22 - 26, 2015

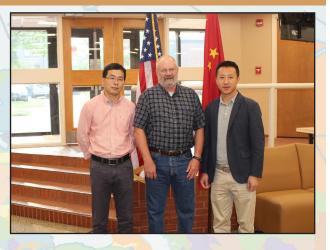
NCI's Food Scientist Natsuki Fujiwara attended the Advanced Bread course offered by the San Francisco Baking Institute in South San Francisco, Calif. Fujiwara joined 17 bakers from different countries. The course was led by Dider Rosada, a master baker from France.

The five day intensive baking course focused on artisan breads including French bread, sour dough, Italian bread and bread baked with different types of preferment.



### Algeria July 29, 2015

The North Dakota Wheat Commission hosted two officials from the Algerian Office of Cereals (OAIC). They visited the state to receive updates on the 2015 Northern Durum crop and to learn more about durum breeding, research, production practices and transportation logistics. Algeria is consistently a top buyer of U.S. durum, purchasing nearly five million bushels in 2014-15.



### China | July 6 - 7, 2015

Two representatives from Guangdong Wens Foodstuffs Group Company, LTD, in China, visited NCI and had a tour with Feed Production Center Manager Kim Koch, Ph.D.

Guangdong Wens Foodstuffs Group Company is the largest pork producer in China. The main topic of discussion was swine feed nutrition and feedmill design.



### Caribbean Aug. 17, 2015

The North Dakota Wheat Commission hosted representatives from mills in Guyana, Haiti, St. Vincent and Trinidad.

They visited North Dakota to find out more about hard red spring wheat production. The team received updates on quality, breeding programs, transportation issues and supplies of the 2015 crop.



### Southeast Asia Aug. 23 - Sept. 5, 2015

NCI's Food Scientist Natsuki Fujiwara participated in the USA Dry Pea and Lentil Council Trade Mission to Southeast Asia. Natsuki traveled with five U.S. Pulse exporters and USDPLC representatives. They traveled to Kuala Lumpur, Malaysia, Bangkok, Thailand, Jakarta, Indonesia and Manila Philippines. The trade mission provided technical and marketing support to key food manufacturers who are interested in and/or working with U.S. Pulses and importers.



### India | Sept. 16, 2015

The U.S. Soybean Export Council (USSEC) Food Grade Soybean trade team from India had a tour of NCI and talked with processors from SK Food International, SB&B Foods and Richland Organics.



### **USA** | Sept. 11 - 13, 2015

NCI's Food Scientist Natsuki Fujiwara attended the "Pulse: Bakery and Snack Product Development Course," that was sponsored by USA Dry Pea & Lentil Council. There were 32 participants that spent their time during the three day course with lectures and hands-on activities at the The Culinary Institute of America.



### 19 Countries | Sept. 16, 2015

The US Dry Bean Council and the North Central Bean Growers met with their sponsored trade team in NCI's auditorium on Wednesday, September 16. Forty participants from 19 different countries visited NCI. NCI's Food Scientist Natsuki Fujiwara also gave a presentation.



### U.S. Wheat Associates oct. 2, 2015

The U.S. Wheat Associates Overseas Staff visited and toured NCI, North Dakota Wheat Commission Office, NDSU's Cereal Science's spring wheat and durum quality labs, farms, elevators and North Dakota Mill.

U.S. Wheat Associates Overseas Staff supports NCI's coordination when setting up courses from around the world. They visited North Dakota to find out more about wheat production and they also received updates on quality of the 2015 crop.



## **USA** Oct. 18 - 21, 2015

NCI's technical staff attended the American Association of Cereal Chemists International (AACCI) International Centennial Meeting in Minneapolis, Minn. NCI's staff attended the meetings and also had a booth during the conference.



### Japan | Oct. 6, 2015

The North Dakota Wheat Commission hosted the Nisshin Trade Team from Japan.

They visited North Dakota to find out more about wheat production. The team received updates on quality, breeding programs, transportation issues and supplies of the 2015 crop.



### China Nov. 3 - 6, 2015

NCI's Food Scientist Natsuki Fujiwara recently visited Shanghai, China, where she conducted the seminar, "Pea Flour Processing and Application." The seminar was hosted by the USA Pulses. Natsuki also attended one-on-one meetings and company tours during her visit to China.



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2015 Annual Update

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# 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

Zhisheng (Zach) Liu, Ph.D., food scientist

#### **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 Weber, director
John Crabtree, assistant director
Linda Briggs, office manager
Betsy Armour, communications/public relations manager
Janel Brooks, account technician
Neil Doty, Ph.D., director of technical services
Kim Koch, Ph.D., feed production center manager
Natsuki Fujiwara, food scientist
Rachel Carlson, food technologist
Sam Briss, food technologist
Rilie Morgan, process project manager

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