

# Grain Quality Newsletter

News and Highlights from NC-213: Marketing and Delivery of Quality Grains and BioProducts Coproducts.

Volume 40:3

NC-213: The U.S. Quality Grains Research Consortium

## NC-213 Administrative Advisor/Coordinators Office now Accepting Nominations for The Andersons Awards - 2021

The Office of the NC-213 Administrative Advisor/Coordinator invite you to submit nominations for the 2021 Andersons Cereals and Oilseeds Award of Excellence and for the 2021 Andersons Cereals and Oilseeds Early-in-Career Award of Excellence. **The deadline for nominations is Friday, February 12, 2021.** Please contact Bill Koshar, NC-213 Administrative Support, if you need assistance with a nomination – don't hesitate to make a nomination simply because you are not sure you can get all the materials together in time. Also, we ask that you think "outside of the box." Please consider a work group, USDA Agency, A Department Head, or an Academic Department from a Land Grant Institution.

**The Andersons Cereals and Oilseeds Award of Excellence Description:** The Andersons Cereals and Oilseeds Award of Excellence, created in 1999, is the opportunity to recognize individuals or teams that have made superior contributions to science and/or education related to cereals and oilseeds.

The award will consist of a \$1,000 cash award and a plaque.

### Eligibility-

- 1-Must have demonstrated a well-documented history of leadership, superior contributions to science and/or education related to cereals and oilseeds.
- 2-Can be associated with a university, and it is desirable that the nominee be from private industry or a state or federal agency. A team award is also encouraged. Nominee need not be a member of NC-213.

### Nomination Package-

- 1-Not more than three letters of support including at least one letter from industry.
- 2-A statement that describes the nominee's background, contributions, and impacts on the cereals and oilseed industry, research community, or educational programs (maximum five pages, single-spaced, 12 point font).
- 3-A complete curriculum vitae/resume.

Any past nominations less than two years old (includes those from 2019 and 2020) will be automatically included. Any past nomination may be updated by the nominator if desired.

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This award is an important tradition of NC-213 and it provides an excellent opportunity to honor our colleagues for superior contributions to science and/or education related to quality of cereals and oilseeds. Past award winners are listed below.

1999-Lowell Hill	2007-Dirk Maier	2015 No Recipient.
2000-Charles Hurburgh	2008-Tim Herrman	2016 Joe Needham
2001-Fred Bakker-Arkema	2009-David Jackson	2017 Klein Ileleji
2002-Marvin Paulsen	2010-Lawrence Johnson	2018 No Recipient.
2003-Lloyd Bullerman	2011-Floyd Dowell	2019 Frank Arthur
2004-Florence Dunkel	2012-Subi Bhadriraju	2020 Senay Simsek
2005-Richard Stroshine	2013 Mark Casada	
2006-Donald Wicklow	2014 Bill Ravlin	

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**The Andersons Cereals and Oilseeds Early-in-Career Award of Excellence Description:** The Andersons Cereals and Oilseeds Early-in-Career Award of Excellence, created in 2011, recognizes individuals early in their careers whose work has significantly contributed to improvements in science, innovation, technology implementation, policy formation, and/or education related to quality of cereals and oilseeds from processing to consumption, and who show outstanding promise of continuing those contributions into the future.

The award consists of a plaque and a \$500 honorarium for presenting an invited presentation at an NC-213 meeting or NC-213-related event on a topic consistent with NC-213 objectives within two years of being the Recipient of the Award.

**Eligibility-**

- 1 – Must have become associated with NC-213 within the past five years, have worked in their current position level no more than 10 years, and be no more than 40 years old as of January 1 of the year the award will be given.
- 2 – Can be associated with a university, private industry, or a state or federal agency.

**Award Criteria-**

- 1 – Significant contributions in science, innovation, technology implementation, policy formation, and/or education related to quality of cereals and oilseeds from processing to consumption.
- 2 – Shows outstanding promise of continuing those contributions into the future.

**Nomination Package-**

- 1 - Up to three letters of support from academic, government, and/or industry personnel.
- 2 - A statement that describes the nominee’s background, contributions, and impacts on the cereals and oilseeds industry, research community, or educational programs (maximum two pages, single-spaced, 12 point font). This should include contributions specifically related to NC-213.
- 3 - A complete curriculum vitae/resume. Past award winners are listed below:

2011 – Senay Simsek	2015 – No award given.	2018 – Anton Bekkerman
2012, 2013 – No award given.	2016 – Gretchen Mosher	2019 – No award given.
2014 – Kingsly Ambrose	2017 – No award given.	2020 – William Morrison

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**Review:** The NC-213 Awards Committee will solicit and review nomination packages.

**Award Date:** The Andersons Cereals and Oilseeds Award of Excellence and The Andersons Cereals and Oilseeds Early-in-Career Award of Excellence, will be announced in early 2021. While all of us are closely monitoring COVID-19 and travel restrictions within our Institutions and USDA Agencies, the Awards Announcement will be determined as we follow the current state of affairs.

**2021 Nomination Instructions-**

Submit nominations by: **February 12, 2021, please send to:** Bill Koshar NC-213 Administrative Support, <[koshar.3@osu.edu](mailto:koshar.3@osu.edu)>

## Florida A&M Professor to Study Crop Traits with ARS in Kansas

MANHATTAN, KANSAS, July 23, 2020 -- A biology professor at Florida A&M University (FAMU) has been awarded a three-year research sabbatical to work with Agricultural Research Service (ARS) scientists in Manhattan as part of the ARS 1890 Faculty Research Sabbatical Program. The program honors the 1890 Land-Grant Universities by giving tenure- and research-track faculty at historically black land-grant universities opportunities to collaborate on research projects at ARS laboratories nationwide.

Gokhan Hacisalihoglu, a professor at FAMU's College of Science & Technology, will work with ARS agricultural engineer Paul Armstrong in Manhattan, using near infrared spectroscopy to measure the oil and protein content of sorghum and flax seeds. They also will probe the genetic underpinnings associated with such key traits and work toward developing new tools for breeding seed lines with improved nutritional qualities. The work is designed to enhance key traits of commercial crops.

Armstrong is with the Stored Product Insect and Engineering Research Unit, which develops sensors and instruments for measuring grain attributes and monitoring stored grain.

Hacisalihoglu (pronounced "hasi-Sali-olu") earned a doctorate from Cornell University in plant biology/genetics. He teaches introductory and advanced biological sciences courses at Florida A&M (FAMU) and his research focuses on food crop improvement, dietary nutrients deficiency, seed composition, and biology education. He has written two books and numerous scientific publications and he has won numerous awards including the FAMU Teaching Innovation Award, the school's Advanced Teacher of the Year Award, the Teacher of the Year Award, an award for excellence in research and best professor of the Arts & Sciences. He is a member of American Society of Plant Biologists and has been a visiting fellow at Michigan State University, Florida State University, Cornell University and the University of Florida. He also won a Fulbright Specialist Award to serve as a consultant at the University of Tokyo in Japan.

The ARS sabbatical program funds up to \$125,000 to awardees to cover supplies, equipment and other related costs. Those interested in applying for the 2021 program should email: [1890frsp@usda.gov](mailto:1890frsp@usda.gov) or visit the [website](#) for more information.

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The Agricultural Research Service is the U.S. Department of Agriculture's chief scientific in-house research agency. Daily, ARS focuses on solutions to agricultural problems affecting America. Each dollar invested in agricultural research results in \$20 of economic impact.

Media contact: Dennis O'Brien, (202) 734-1392, e-mail: [dennis.obrien@usda.gov](mailto:dennis.obrien@usda.gov)

## **Food Safety and Quality: Update on Industry Best Practices Virtual Symposium, Cereals and Grains 2020 November 3, 2020, 1:00 PM – 2:30 PM CST**

### **Abstracts & Symposium Summary**

#### **Abstracts**

#### **Vulnerability analysis to determine traceability in a specialty wheat supply chain**

Richa Sharma<sup>1</sup>; Charles Hurburgh<sup>2</sup>; Jennifer Robinson<sup>3</sup>

<sup>1</sup>Consultant, Bay State Milling Company; <sup>2</sup>Professor, Iowa State University; Vice President Corporate Quality Assurance, Bay State Milling Company

Traceability in a supply chain system should be able to trace, track, record and optimize various processes for each supply chain participant. Bay State Milling Company's (BSMC) specialty wheat supply chain is a complex network of supply chain partners- breeders, seedsmen, farmers, elevators, and the mill. BSMC's supply chain partners use specialized techniques and procedures to trace and track processes. The breeder, seedsmen, farmer, elevator, and the mill have their own receiving, cleaning, labeling, production, tracking, tracing, record keeping and dispatch protocols. The method proposed in this study validates the effectiveness of each supply chain participant's protocols for traceability.

The center of this study is HealthSense™ high fiber wheat flour, which delivers up to ten times the amount of dietary fiber of traditional wheat flour, with the performance, taste and texture of traditional refined wheat flour. Since, wheat varieties look similar in appearance it becomes difficult to prevent commingling of HealthSense™ with other wheat varieties. Therefore, a vulnerability analysis system was beneficial to identify critical areas that may negatively impact purity of HealthSense™ flour.

Vulnerability analysis for the specialty wheat supply chain presented in this presentation develops a ranking system based on criticality, frequency, and detection difficulty. The criticality, frequency, and detection difficulty for a process is ranked using a scale from 1 to 5, where 1 being less critical, less frequent, and easy to detect and 5 being highly critical, highly frequent, and most difficult to detect. The vulnerability index was calculated by multiplying the criticality, frequency, and detection difficulty scores. The vulnerability index determines the factors that may contribute to compromise purity of HealthSense™ flour, which then will help in establishing a mitigation strategy.

Keywords: Traceability, specialty wheat, vulnerability analysis, Dietary fiber, HealthSense™

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**A quantitative model of grain mixing behavior: A model for tracing bulk grain in bin emptying operations.**

Heather H Tenboer<sup>1</sup>, Gretchen A. Mosher<sup>2</sup>, and Charles R. Hurburgh<sup>3</sup>.

<sup>1</sup>Graduate Research Assistant; <sup>2</sup>Associate Professor; <sup>3</sup>Professor, Agricultural and Biosystems Engineering, Iowa State University.

While necessary to maintain supply chain efficiency, the handling/mixing of bulk materials is a major point of identity and loss of control in traceability systems. This presentation reports on a quantitative method for modelling the flow behavior and associated mixing of grain when emptying a bulk storage container. The initial patterns and behaviors were determined from physical data on colored materials layered in a container and removed by gravity feed. This model will produce methods for preserving source identity in the load out composition. It is intended to connect with the risk analysis required for traceability and food safety systems in bulk supply chains.

**Covid-19: Lasting Impacts on the Food Industry, Post the Pandemic**

Dr. David Acheson, Founder and CEO of The Acheson Group

The food industry has needed to be adept in responding to challenges presented by the Covid-19 pandemic. Key areas of focus have included protecting employee health, the health of employee's households, assuring predictable supply chains, and maintaining business continuity. Adaptive behavior has also been necessary in how food safety is assured as many employees are working remote. The rate of change has been significant over the last 6 months and these changes appear to be necessary to maintain for at least the next 6 months until the risk of infection is effectively mitigated. Which of these changes will remain and be part of the new normal? How should the food industry plan for the post-pandemic reality?

**Fostering and Strengthening Food Safety Culture in Facilities**

Jessica Burke, Senior Manager, Technical Services BRCGS

A strong food safety culture is a prerequisite to effective food safety management. Learn what steps your organization can take that will influence the beliefs, attitudes, and, most importantly, the behaviors of people that result in lasting change. Become familiar with tools that can assist with assessing your food safety culture. Be prepared for challenges and barriers that may be encountered on your journey to build a food safety culture. Understand requirements of FDA and GFSI such that your facility can demonstrate readiness.

**Symposium Overview**

In July 2020, the FDA launched **The New Era of Food Safety Blueprint**. The 10-year plan is designed to “bend the curve of foodborne illness in this country by reducing the number of illnesses”. Included in the Blueprint’s 4 Core Elements are Tech-Enabled Traceability and Food Safety Culture. The food industry has responded rapidly to the evolving pandemic and many of the lessons learned will become a part of the new normal in food manufacturing.



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In this Symposium:

- Learn about development of a breeder-to-final product traceability system for a specialty wheat grown and handled through a traditional bulk grain supply chain. In line with FDA foundational components for traceability, the vulnerability analysis focused on identification of critical tracking events and key data elements. Learn how technology assures supply chain identity and purity tracking and enables reliable traceback.
- Building upon the risk analysis required for traceability and food safety systems in bulk supply chains, this presentation will focus on a quantitative method for modelling the flow behavior and associated mixing of grain when emptying a bulk storage container. This model will produce methods for preserving source identity in the load out composition.
- Have you been wondering what the food industry will look like post-pandemic? Catch a glimpse of the future through the eyes of someone on the forefront of helping the food industry through the pandemic, Dr. David Acheson of The Acheson Group. Begin preparing now for the future of food manufacturing.
- Hear directly from contributors to the GFSI standard regarding auditor expectations as they evaluate your organizations food safety culture program. Learn best practices as well as practical steps your organization can take to build a lasting food safety culture. Become familiar with tools that will assist with assessing your food safety culture.

Submitted by Dr. Charles R. Hurburgh  
Professor, Agricultural and Biosystems Engineering  
Professor in Charge, Iowa State Quality Initiative  
Iowa State University



## OUR DEDICATION TO QUALITY PRODUCTS AND SERVICE

The Andersons is committed to providing the best value to our customers. We've created a strong team infrastructure dedicated to tenuring and establishing relationships with steamship lines, railroads, and facilities. These relationships, coupled with established origination and quality operation management, translates to the greatest value The Andersons has to offer.

OUR ROOTS ARE ANCHORED IN HARD WORK, INNOVATION, AND OUR ABILITY TO EXCEED CUSTOMERS' EXPECTATIONS.

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## Update on University of Illinois at Urbana-Champaign Corn Processing Workshops

In light of the current situation with the pandemic, we have decided to postpone opening registration for the Corn Processing Workshops (CPW) for now. Many companies still have travel restrictions in place, while the number of Covid cases continues to be an issue.

When we open registration, we will announce the details through our email list. As we mentioned in September (below), many things are tentative. Since our workshops use a relatively small in-person format, we have some flexibility to safely host the workshops once pandemic issues have been resolved. The safety of our speakers and participants is our first concern.

Please let me know if you have any questions.

Sincerely,  
Kent

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We are moving forward with plans for the next **Corn Processing Workshops (CPW)** tentatively planned for **January 25-28, 2021**.

January 25-26, 2021 – Corn Wet Milling

January 27-28, 2021 – New Technologies in Ethanol Production

Tentative registration fees: \$1195 for each workshop. Full refunds allowed if due to Covid-19 restrictions. Both workshops will be held at the University of Illinois at Urbana-Champaign and feature great speakers that are a hallmark of CPW. Expect also poster presentations during evening receptions. We plan to open our registration page in early November. You can register for either workshop or both. Seating usually fills up quickly, so please plan now as best as you can. During these times of uncertainty, many things are “tentative”; but we wanted to let you know that we fully intend to host CPW 2021. Workshops will follow all pandemic guidelines but will be held in person. We will send updates as more details become available.

## Industry Sales Manager - Grain and Feed, for Central Western USA

### Department

FOSS North America  
6509 Flying Cloud Dr., Suite 130  
US-55344 Eden Prairie  
John Folino  
+1 +1952 974 9892 313

We are looking for an Industry Sales Manager for Central Western USA to join our largest sales- and service subsidiary in North America.

The Industry Sales Manager for Grain and Feed is responsible for the sale of the organization's products in the specified market segment of grain and feed for the specified region of the South-Central part of the USA (Nebraska to Texas).

This position sells the Company's products and services using technical, organizational, and customer knowledge to influence customers and assist them in applying the Foss products/services to their needs resulting in revenue generation. In addition, he/she provides input and participates in the marketing, market planning and technical development of products and services.

The Industry Sales Manager will work out of a home office. Travel required (primary within US) in the range of 75%. The Industry Sales Manager reports to the VP of Sales. There are no direct reports to this position.

### Position Requirements and Specifications

The ideal candidate comes with

- Bachelor's Degree in Science, Agriculture, Milling or Engineering
- A minimum of 5 years' experience in a sales role in a business-to-business sales environment
- A strong track record of meeting/exceeding sales revenue projections in capital equipment sales; experience in driving revenue in technical products/instruments strongly preferred
- Experience in cross-selling and Value Based Selling (benefits and profit enhancement proposition) rather than selling price alone
- Computer skills for proposals and presentations including Microsoft Office suite applications such as PowerPoint and Excel required

### Major Position Accountabilities:

Your job is to sell instrumentation to food producing, food processing and agricultural accounts, defined by FOSS Market Segments.

This includes to:

- Be responsible for overall sales performance in the territory that is met in manner that maximizes customer satisfaction and is within sales budget for that region
  - Create sales strategies for each account including Key Accounts and national Accounts
  - Create and manage territory plan including measurable goals, dollars by product line, and timetable for actions
  - Maintain accurate records with respect to prospects, pre-implementation planning/proposal preparation, sales calls, quotations, pricing, etc., using CRM system
  - Master effective communication with the VP of Sales, Market Segment Managers and other persons in the company
- Furthermore, we expect you to
- Provide input to marketing/sales with respect to competition and competitive pricing including products, applications, new product development etc.
  - Participate in trade shows

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#### Critical Success Factors:

We are looking for an experienced candidate who comes with excellent sales skills from a B2B role

If you are experienced within near infrared (nir) technology, it is a great plus.

If you can recognize following characteristics, you might be the one we are looking for:

- Action oriented with a proven ability to achieve results
- Strong customer focus with ability to effectively interact with current and prospective customers to close sales or provide customer care
- High degree of integrity and professionalism
- Ability to work with a variety of personalities and styles
- Strong relationship building skills both internally and externally
- Experience as a self-starter and multi-tasker, self-motivated, with a capacity to perform in a fast-paced environment
- Effective written and verbal communication skills, including presentation skills

#### Application

If you think the job is interesting - and you possess the necessary qualifications, please send your application via the link below.

All applications for vacant positions will be welcomed and considered on the relative merits of the applicant against the role profile for the position regardless of race, nationality, ethnic origin, gender, sexual orientation, marital status, disability, family status, age, or religion.

#### FOSS

FOSS is the world's leading producer of innovative analytical instruments that monitor and control food quality. We provide solutions that improve customers' business by running a sustainable *and* profitable operation while helping deliver high quality products for consumers.

We live in a world with a fast-growing population and to meet the growing demand for food, the global food production will have to increase by 60 per cent by 2050. The world's population is becoming wealthier and the global middle class is growing, which creates new food demands. This means the food producers need to find smarter ways to make the best use of our valuable resources and to eliminate food waste. At FOSS, we have the know-how to help companies address these global trends and turn them into opportunities – in a way where sustainability and good business go hand in hand.

The family-owned company FOSS was founded in 1956 in Hillerød, Denmark and development and production takes place in Denmark, Hungary and China. FOSS products are marketed and sold through a global network of sales subsidiaries in 30 countries. FOSS employs around 1,500 highly qualified employees worldwide.

[Apply for job as Industry Sales Manager, Grain and Feed, for Central Western USA in FOSS North America](#)

#### ANALYTICS BEYOND MEASURE

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