

CELDi Spring 2021 IAB Meeting & Research Symposium

April 8 – April 9, 2021

A Virtual Conference Hosted By

University of Arkansas Fayetteville, AR

Accessing the Symposium

The University of Arkansas uses Teams Video Conferencing to host the Symposium. In order to join a Teams meeting, you will need to download the Teams software onto your device. You will be prompted to install the software when you click on a Teams meeting link. Once that is done, click the link again to join the meeting.

Once you have joined the Teams meeting, please turn off your video stream and mute your microphone unless you are speaking. This will cut down on bandwidth usage and prevent lag for other participants.

Symposium Interaction Guidelines

We are hoping that the CELDi Research Symposium will be an interactive event where questions are asked and we all learn from each other. However, as we all know by now, virtual meetings do not fully capture the interaction that occurs in an "in-person" meeting. Therefore, to ensure a productive meeting within the constraints we are operating, we ask you consider the following guidelines:

- Please mute yourself when you join the symposium and stay muted unless you are presenting or asking a question. Also, please be sure to be in a quiet location when you participate.
- Please don't share your video feed unless you are presenting or asking a question or instructed to share it.
- To ask questions: use the "raise your hand" feature and you will be called upon by the moderator and/or utilize the chat function to post your question that will be read by the moderator.

Schedule

April 8, 2021 (All times are US Central Time)

3:00pm Welcome & Introductions

3:10pm <u>Keynote Address</u>: Supply Chain Challenges During a Pandemic Chuck Tilmon, Walmart Inc., Vice President, Quality Control

4:00pm Session 1: CELDi Presentations (12-minute Presentation and 3-minute Q&A)

4:00pm: "Selecting Items to Forward Stock for the Defense Logistics Agency," *Manuel Rossetti (University of Arkansas)*

4:15pm: "Freight Lane Assignment Tool for Bay Valley Foods, LLC," *Baski Balasundaram, Austin Buchanan, Sunderesh Heragu, Hao Pan, Hosseinali Salemi, Hamidreza Validi (Oklahoma State University*)

4:30pm: "Boeing - Determining Optimal Inventory Levels for Items Nearing the End of a Production Run," *Lucas Cato, Ronald McGarvey, James Noble, Randolph Bradley (University of Missouri)*

4:45pm: "Leadership During Stages of Supply Chain Disruptions: A Multi-Step Test of Organizational Crisis," *Iana Shaheen (University of Arkansas), Arash Azadegan (Rutgers University)*

5:00pm Break

5:10pm Session 2: CELDi Posters (6-minute Presentation and 4-minute Q&A)

5:10pm: "Vendor Risk Modeling for the Defense Logistics Agency," *Andrew Freeman, Anna Lee, Manuel Rossetti (University of Arkansas*)

5:20pm: "A Simulation-Based Approach to Analyze the Substitutability of High-Speed Rails with Hyperloop Systems," *Akhouri Amitanand Sinha (University of Missouri)*

5:30pm: "Systems Engineering Study on Integrated Sensor Suites," *Joshua Jensen, Joseph Sartini (University of Arkansas)*

5:40pm: "Stochastic Model for Reliable Supply Chain Network Design under Uncertain Disruptions and Demand," *Ali Tolooie, Meghna Maity, Ashesh Kumar Sinha (Kansas State University)*

5:50pm: "Assessment of Structures and Systems for Enterprise Tradeoffs (ASSET)," Brandon Fangio, Greg Parnell, Ed Pohl, Kayla Cotterman, Christina Rinaudo (University of Arkansas)

6:00pm: "Optimizing Warehouse Order Picking Using Collaborative Robots," *Shitao Yu (University of Missouri)*

April 9, 2021 (All times are US Central Time)

9:00am Welcome Back & Introductions

9:10am Keynote Address: Meat Supply Chain Challenges and Opportunities

Malik Sadiq, Tyson Foods, Former Senior Vice President

10:00am Session 3: CELDi Posters (6-minute Presentation and 4-minute Q&A)

10:00am: "Development and Assessment of Resilient Telecoms System," *Jeremy Muniz, George Gallarno, Greg Parnell, Ed Pohl, Jingxian Wu, Randy Buchanan (University of Arkansas)*

10:10am: "Early Lifecycle Prediction of Reliability," *Tevari Barker, Matthew Phillips* (University of Arkansas)

10:20am: "Drone-aided Last-mile Logistics with Flexible Launch Points," *Mohamed Salama* (University of Missouri)

10:30am: "Social innovation during the hunger crisis and COVID-19 pandemic: From collaboration to bricolage," Iana Shaheen (University of Arkansas), Arash Azadegan (Rutgers University)

10:40am: "Convergence Issues of Donation and Volunteer in Humanitarian Logistics," *Rakhmat Himawan (University of Missouri)*

10:50am: "Determining Coordinates for Implementing Vehicle Routing Construction Heuristics," Melissa Tilashalski (Virginia Tech), Kimberly Ellis (Virginia Tech), Stanley Griffis (Michigan State University), John Bell (University of Tennessee), Lance Saunders (University of Tennessee)

11:00am Break

11:10am Session 4: CELDi Presentations (12-minute Presentation and 3-minute Q&A)

11:10am: "A Case Study of Inventory Classification (PBIC) Methods Within Large-Scale Multi-Echelon Inventory Systems," *Manuel Rossetti (University of Arkansas)*

11:25am: "Online Freight Consolidation with Loading Restrictions," *Devaraj Radha Krishnan, Tieming Liu (Oklahoma State University)*

11:40am: "MicroBios - Optimizing Inventory for R&D Operations," *Zeynab Oveysi, Grace Floyd, Suchi Rajendran, Ron McGarvey, Andrea Roebuck (University of Missouri)*

11:55am: "Evaluating Appointment Postponement in Scheduling Patients at a Diagnostic Clinic," Burak Eksioglu (University of Arkansas), Mahsa Kiani (Clemson University), Tugce Isik (Clemson University), Alexandria Thomas (Clemson University), John Gilpin (Prisma Health)

12:10pm CELDi Awards - Student Poster, Student Researchers

Keynote Speakers

Chuck Tilmon *Vice President, Quality Control at Walmart, Inc.*



Chuck Tilmon, a native of Texarkana, Arkansas, is the Vice President of Quality Control at Walmart, Inc. where he is responsible for ensuring the quality of fresh food for all U.S. Supercenters and Neighborhood Markets. Chuck's career has spanned several areas in the supply chain, with stints at Arkansas Best Freight in Fort Smith and JB Hunt Logistics in Lowell. Chuck has worked at Walmart since 2002 in a variety of roles, from perishable strategic development, to replenishment and produce sourcing. In his current role in Quality Control, he supports over 350 associates who inspect meat and produce items, ripen bananas, and ensure all items meet Walmart quality specifications

in 48 distribution centers across the U.S. Chuck received his BSIE and MSIE from the University of Arkansas, with his thesis emphasis in quality control.

Malik SadiqFormer Senior Vice President, Tyson Foods



Malik joined Tyson in 2006. Recently he decided to leave Tyson to relocate to Dallas to be near his family and pursue other interests. Most recently, Malik led Tyson's International growth through M&A and creation of strategic partnerships. He has had P&L responsibility for Tyson's \$2B International business. Greatest accomplishments were turning around the International business and acquisitions of Keystone Foods, BRF Thailand and Europe businesses, and the joint venture with Vibra foods. Prior to the international leadership role, Malik led the China and India businesses as its COO and CEO, respectively. Prior to Tyson Foods, Malik gained valuable experience at Hitachi

Consulting and Arthur Andersen where he headed Consumer Products Practice for the Southwest region. Malik earned a Doctorate and Masters degrees in Industrial Engineering and a Bachelor of Science in electrical engineering from the University of Arkansas, Fayetteville.