

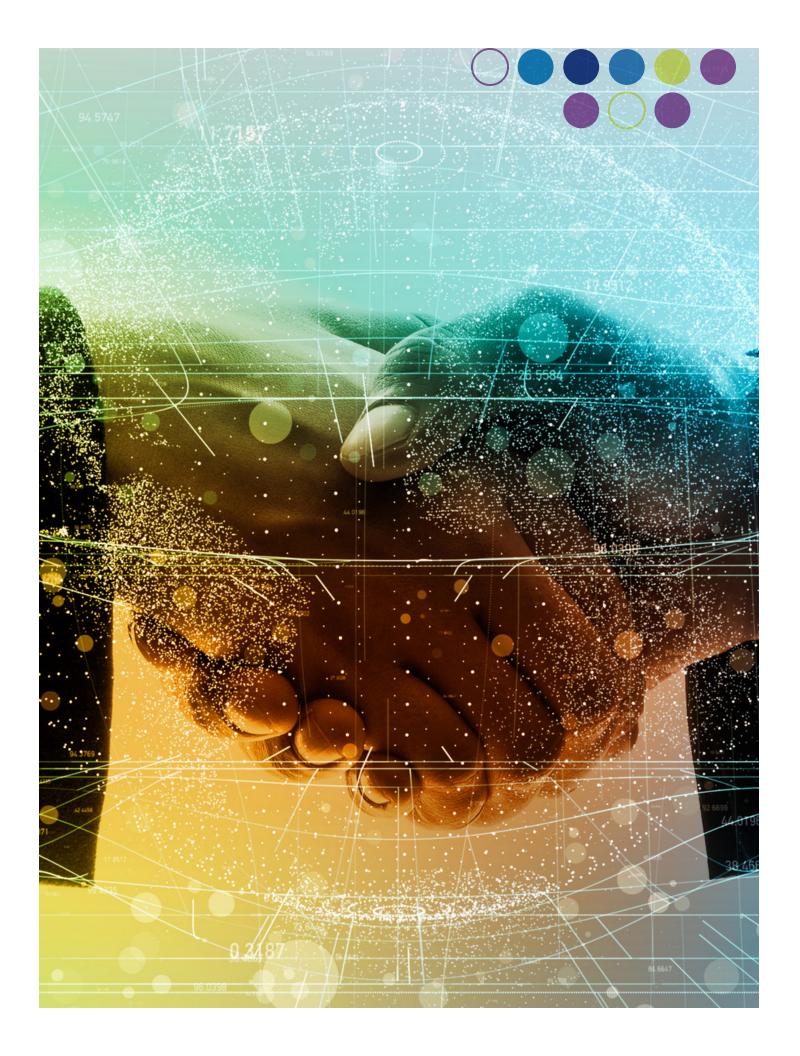
# The National Center for Supply Chain Automation Annual Symposium

APRIL 8-10, 2019 McCormick Place Convention Center Chicago





National Center for Supply Chain Automation RESOURCES FOR EDUCATION & INDUSTRY



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# WELCOME

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As Principal Investigator for the National Center for Supply Chain Automation (SCA), it is my pleasure to welcome you to our second National Symposium for Supply Chain Automation. The Symposium focuses on our collective mission to increase the number of highly skilled supply chain technicians to meet the growing national demand. Our leadership team has worked tirelessly over many months to bring you a program that is filled with many exciting activities, speakers, and interactive sessions that build capacity and further your work in technology education.

#### Hands-On Access to Technology

From AI to blockchain to mechatronics, staying apprised of the latest technologies in supply chain automation is critical for educators like you who offer certification programs, technical degree programs, and continuing education training to ensure workers' skills keep up with the pace of technology. On Monday April 8th, you will experience a personalized tour of the Daifuku-Wynright Innovation Center, where you will see more than 60,000 square feet of the most advanced supply chain automation technology available today. Immediately after, you will take part in an exclusive reveal of the soon-to-be-released Certified Automation Technician (CAT) certification, a national, ISO-accredited, industry certification for Supply Chain Technicians.

#### **Capacity-Building Workshops**

National recognition of the impact that training in STEM occupations has on the U.S. workforce has resulted in increased opportunities to fund education and training programs for the next generation of automation workers. However, building internal capacity to apply for and administer grant funding is a challenge for many organizations. Tuesday's program includes an informative series of workshops from special guest speaker Dr. Celeste Carter, Lead Program Director at National Science Foundation. These workshops are intended to facilitate your college's entry into the prestigious Advanced Technological Education (ATE) community.

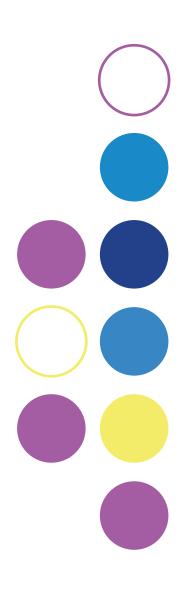
#### **Industry Perspectives**

Technology educators need opportunities to network with peers and interact with industry experts who are on the cutting edge of future advances. Offering the National Symposium concurrently with ProMat 2019 brings educators together with representatives from leading companies in the materials handling industry for the largest exhibit of its kind in the Americas. Tuesday also allows time to explore the ProMat show floor and then come back together for a debriefing session to share insights, learning, and new ideas from the floor. On Wednesday, experience UPS' Chicago Area Consolidation Hub (CACH) Facility, where approximately 1.5 million packages are sorted each day, and learn how to make connections with UPS in your communities. SCA Symposium sessions are scheduled so that you may also attend ProMat keynotes and other fun events.

Our National Visiting Committee and Project Leadership Team are pleased that you have joined us for this valuable, collaborative networking and learning opportunity. I hope you'll take advantage of all that is offered and share your thoughts and feedback with our team. Again, welcome! We look forward to our time together at the National Symposium.

Sincerely,

**Colleen Molko** Principal Investigator The National Center for Supply Chain Automation



# NATIONAL VISITING COMMITTEE

The National Center for Supply Chain Automation

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**Thomas O'Brien, Ph.D.** Chair, NCSCA Executive Director Center for International Trade and Transportation California State University, Long Beach

Thomas O'Brien is the Executive Director of the Center for International Trade and Transportation (CITT) at California State University, Long Beach (CSULB) and the Associate Director of Long Beach Programs for the METRANS Transportation Center, a partnership between CSULB and the University of Southern California. He also serves as the director of the FHWA Southwest Transportation Workforce Center. His teaching and research focus on logistics, supply chain management, and goods movement policy. Dr. O'Brien has a Master's degree in Urban Planning and Development and a Ph.D. in Policy, Planning, and Development from the University of Southern California. He is both an Eno and Eisenhower Transportation Fellow and a member of the Transportation Research Board's Intermodal Freight Transport Committee.



#### Phil Jones

Industry Leadership Team Co-Chair, NCSCA Director, Supply Chain Engineering Target Corporation

Phil Jones is a Director of Supply Chain Engineering at Target Corporation. His teams are responsible for Vendor Relationship Management for suppliers of material handling systems and automation for Target, and business processes such as field Operating Expenditure budgets, Capital Expenditures, and Asset Management software tools. Jones also focuses on recruiting maintenance technicians and engineering talent, and on developing technical career paths at Target at many levels in the organization. He has served on Target's Technical and Engineering Coalition working group and currently serves as co-chair of the Industry Leadership Team for the National Center for Supply Chain Automation. In this capacity, he focuses on industry support of a National Science Foundation grant to increase the number of qualified supply chain technicians. Phil has 21 years of experience with Facilities/Maintenance & Engineering Management. He was also an artillery officer in the U.S. Army for 10 years. Phil is married and has one daughter, and enjoys traveling, landscaping and home projects, and supporting his daughter's competitive swimming events.



#### **Nick Little**

Asst. Director, Executive Development Eli Broad College of Business Michigan State University

Nick Little is Assistant Director of Executive Development Programs at the Eli Broad College of Business at Michigan State University (MSU). He has over 25 years industry and international experience in Supply Chain Management. He introduced the first computerized order entry and replenishment system on British Railways and led feasibility studies for several UK Post Office supply chain systems. In 1995, Nick joined Michigan State University to work on a research project in procurement as part of the integrated supply chain and helped write several reports. In 2001 Nick joined Executive Development Programs at MSU where his passion for people development was aligned with industrial experience to help design, develop and deliver educational programs, often customized, for global corporate clients in many industry verticals. Nick is currently chair of the Supply-Chain Council's North America Leadership Team, was elected to the APICS Educational & Research Foundation Board with current role as Corporate Secretary and Treasurer. A founding member of the global Supply Chain Talent Academic Initiative, he is working globally with industry, academia and professional bodies to close the quantity and quality gaps in supply chain talent.

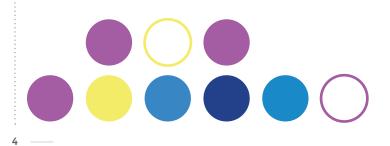


#### Larry Warford

Senior Consultant for Workforce Development The League for Innovation in the Community College

Dr. Laurance Warford is a nationally recognized workforce, career technical, and continuing education expert, having published several articles, books and book chapters and made numerous presentations and keynote addresses to national and international audiences in these areas. From 2002 thru 2018 he served as Senior Workforce Consultant and project manager for the League for Innovation in the Community College, an international two-year college organization. His work with the League consisted of several seminal projects in workforce training and the transition of students through our systems of education and into careers. Perhaps most compelling was a five-year Department of Education funded project, College and Career Transitions Initiative (CCTI) that provided pioneering work in the establishment of career pathway models designed to ease transitions from education to work.

Dr. Warford served over 40 years as an administrator in community colleges in Oregon and Iowa and was selected to be a community college consultant to the Department of Labor in 2001. He earned his Ph.D. from the University of Oregon and his M.A. and B.A. from the University of Northern Iowa.



# PROJECT LEADERSHIP TEAM

The National Center for Supply Chain Automation

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#### **Colleen Molko, Principal Investigator**

Colleen Molko's professional background includes 20 years of managerial experience in both government and the community college system. She has experience with academic affairs, resource development, and project management, as well

as counseling. Molko also serves as the Dean, Grants Development and Administration at Norco College (Southern California). Molko earned her Bachelor of Science in Business and Management at the University of Redlands and a Master of Arts in Rehabilitation Counseling from California State University, San Bernardino. A lifelong learner, she has earned certificates in Management Development, Facilitative Leadership, Curriculum Development and Leadership and holds a Certified Rehabilitation Counselor credential through the Commission on Rehabilitation Counselor Certification. She is passionate about the power of education to change lives.



#### Jim Reeves, Interim Executive Director

Jim Reeves is the Interim Executive Director for the National Center for Supply Chain Automation. Reeves brings more than 25 years of experience in senior leadership roles in higher education. Having a diverse work background, he

has served as a college faculty member, student services officer, CFO and COO. His academic credentials include a master's degree in education and a dual-major bachelor's degree in psychology and physical education. With his vast experience in the areas of project and budget management, Reeves is well equipped to provide leadership to the National Center.



#### Terryll Bailey, External Evaluator

Terryll Bailey is the Founder and President of The Allison Group, an accomplished consulting firm in Seattle, Washington, focused on external evaluation, systems thinking and skill standards research in

emerging technologies. Over the last 30 years, the firm has designed and produced workforce development research and evaluation projects for mid-sized and large organizations across the U.S. Bailey has worked with numerous organizations to manage performance and change and to provide formative and summative evaluation of grant-funded projects. She has been involved with the National Science Foundation Advanced Technological Education Program for 15 years as a consultant and external evaluator, and has served on the Advisory Board for the Manufacturing Technology Advisory Group since its inception in 1996. Bailey currently serves on the Workforce Development Advisory Board for North Seattle Community College. Bailey has attained certification in systems thinking and collaborative conflict resolution and her clients include Fortune 100 corporations, federal, state and local government agencies, foundations, public schools, colleges and universities.



#### Mel Cossette, Senior Personnel

Mel Cossette is the Executive Director & Principal Investigator for the National Science Foundation funded National Resource Center for Material Technology Education (MatEd) housed at Edmonds Community College in Lynnwood, WA.

She is also Senior Personnel for The National Center for Supply Chain Automation. Cossette has more than 20 years of experience in manufacturing education and has developed technician training programs for industry and educational institutions. She serves on numerous committees and national boards and has worked in various industries prior to holding administrative positions in the community and technical college system. Her recent research focuses on identifying successful practices in the recruitment of women to STEM fields.



#### Jami Dale, Senior Personnel

Jami Dale has been an instructor at Central Piedmont Community College (CPCC) since late 2011 and assumed the role of Program Chair in 2014. Prior to joining CPCC, Dale worked as a Design and Development Engineer with

Ultrablend (Charlotte, NC), a colorant dispenser and paint mixing manufacturer. He also worked as an Automation engineer and later as a Molding/Metrology engineer with Corning Cable System (Hickory, NC). He holds Siemens Mechatronic Systems Certification Program (SMSCP) Levels 1, 2, and 3 Instructor Certifications from the Siemens Technical Academy in Berlin, Germany. Additionally, Dale is an MSSC Certified Production Technician and Greencertified instructor. Recently, he has served as a subject matter expert, guiding the reform of CPCC's Mechatronics Engineering Technology curriculum, an effort funded by a U.S. Department of Labor grant. Dale received his B.S. and M.S. in Mechanical Engineering from the University of North Carolina-Charlotte.



#### Elaine Gaertner, Education Liaison

Elaine Gaertner is currently the Education Liaison with the National Center for Supply Chain Automation, where she assists community colleges and secondary schools in using the National

Center's educational resources. With more than 25 years' experience in leading community college workforce initiatives, Gaertner represented community colleges during an assignment with the Department of Labor Employment and Training Administration. Gaertner is a nationally recognized leader in training community college professionals to deliver customized training to business and industry. She joined the National Center for Supply Chain Automation in 2013 after leading a California Community Colleges labor market research initiative focusing on identifying high growth industries and emerging occupations for use in aligning college curriculum with employer workforce needs.



#### Steve Harrington, Industry Liaison

Steve Harrington is currently the Industry Liaison for the National Center for Supply Chain Automation. In this role, he is responsible for the development and oversight of a National Industry Leadership Team consisting of supply chain industry

leaders and various other industry stakeholders. He has 27 years of experience in warehouse operations most recently as the West Coast Logistics Manager for the Perrigo Co., a Fortune 500 over-the-counter generic drug manufacturer. Harrington is Chairman and past President of the Distribution Management Association of Southern California (DMA), a 250-member logistics industry association he organized and developed. He is a two time "Spirit of the Entrepreneur" award winner for his volunteer work with DMA and for his work in the field of economic development during his prior tenure with the Inland Empire Economic Partnership. He is a graduate from Cal State University Fullerton with a degree in Business.



#### Beverly Hilderbrand, Education Liaison

Beverly Hilderbrand has 24 years of experience in community college education and industry partnerships. She holds a master's degree in Public Administration and a BS in Business Management from Jacksonville State phrand recently joined The National Cer

University. Hilderbrand recently joined The National Center for Supply Chain Automation in the role of Education Liaison. She previously worked with the National Science Foundation as Director of the Consortium for Alabama Regional Center for Automotive Manufacturing (CARCAM), a Regional Center of Excellence grant. She networks with other select Advanced Technological Education (ATE) grants with synonymous focus. Hilderbrand has experience working with educators at all levels with vital industry partners to recruit students into technical career pathways, produce standardized curriculum, and provide educators with shared resources, best practice information, and professional development opportunities.



#### Bob Sompolski, Ph.D., Co-Principal Investigator

Dr. Bob Sompolski is the Dean of Mathematics and Technologies at Oakton Community College in Des Plaines, IL and a Co-Principal Investigator for The National Center for Supply Chain Automation.

As Dean, Dr. Sompolski provides academic leadership to programs that address transfer curricula (Computer Science, Engineering and Mathematics), remedial curricula (Developmental Mathematics) and career curricula (Auto Repair, Business Software Applications, Computer Networking, Electronics, Fire/Paramedic, HVAC and Manufacturing/CAD). Throughout the development of Supply Chain technologies at the college, he proposed curricular representation of courses featuring logistics, radio frequency identification and SAP ERP software. He has been teaching on the collegiate level in Mathematics and Computer Science since 1982, was awarded a B.A. in Mathematics from the Illinois Institute of Technology and received M.S. and Ph.D. degrees in Mathematics from the University of Illinois at Chicago. He has been married since 1988 and has one adult daughter. His professional interests include Computational Mathematics and Parallel/ Distributed Computing. His personal interests include music and cooking.



#### Desiree Wagner, Grants Specialist

Desiree Wagner is the Grants Administrative Specialist for the National Center for Supply Chain Automation. Wagner is a proud graduate of Norco College, having earned her Associate's degree in Social and Behavioral Studies

and Certificate in Culinary Arts. Her pristine administrative skills and amiable demeanor, coupled with her expertise in planning, optimization, execution of grant expenditures and events makes her a valuable asset to the Center.



#### Ned Young, Ph.D., Co-Principal Investigator

Dr. Ned Young is a Professor of Management and MIS at Sinclair Community College in Dayton, OH and Co-Principal Investigator for The National Center for Supply Chain Automation.

Dr. Young has been teaching at Sinclair since 1994, having spent eight of those years in a department chair role where he managed the creation of Sinclair's Supply Chain Management program. He holds a B.S. in Computer Science, an M.B.A. in Management and a Ph.D. in Educational Leadership, where his dissertation work concentrated on the Malcolm Baldrige National Quality Award. Before moving to the educational sector, Dr. Young worked for 15 years in the industrial sector, primarily concentrating on software systems development, maintenance and management.





# THANK YOU PARTNERS

The National Center for Supply Chain Automation extends its sincere thanks to the following individuals and organizations, whose commitments of time, resources and talents continue to make lasting impacts on supply chain technician education and the development of the future workforce in our industry. Marilyn Barger, Ph.D., Principal Investigator and Executive Director, Florida Advanced Technological Education Center (FLATE)

Charlie Blum, Facility Engineer, UPS

Leo Reddy, Chairman & CEO, Manufacturing Skills Standards Council (MSSC)

Paul Perkins, President, Amatrol

**Rebecca Hein**, Networking Coordinator & Meeting Planner, Material Handling Equipment Distributors Association (MHEDA)

Gordon Hellberg, Vice President, Daifuku

Liz Richards, CEO, Material Handling Equipment Distributors Association (MHEDA)

**Tim Tewalt**, Director, Industrial Mechanics, Chippewa Valley Technical College

### THANK YOU FOR YOUR PARTNERSHIP















### ANNUAL SYMPOSIUM

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# MONDAY APRIL 8TH

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#### PROMAT CHECK-IN 8:15-8:45 AM

## KEYNOTE ADDRESS: BLOCKCHAIN TECHNOLOGY FOR SUPPLY CHAINS

8:45-9:45 AM Grand Ballroom - \$100

#### Karim R. Lakhani, Harvard Business School

Blockchain technology has the potential to address and resolve many manufacturing and supply chain challenges and add new value to businesses. This technology will create a new normal for supply chains where trust and transparency are the major differentiators to staying competitive. In this keynote, Harvard's Karim Lakhani will detail how incorporating blockchain technology into operations can have a tremendous impact on transparency, identity and trust, payments, flexibility and responsiveness — and result in a more efficient, cost-saving, risk-reducing supply chain. You'll hear specific use cases and pilot projects to provide context into the power of blockchain. More importantly, you will learn how firms can incorporate blockchain into their businesses to transform your supply chain.

## BUS CHECK-IN: TOUR OF DAIFUKU WYNRIGHT INNOVATION CENTER

10:00 – 10:30 AM Meet at the Main Lobby Driveway Marriott Marquis Chicago at McCormick Place 2121 S Prairie Ave, Chicago, IL 60616

#### BUS DEPARTURE AND TRAVEL TO OFF-SITE LOCATION 10:30 - 11:30 AM

#### WELCOME, PROGRAM OVERVIEW, AND LUNCH

11:30 AM - 12:30 PM Daifuku Wynright Innovation Center

Speaker

**Colleen Molko**, Principal Investigator, The National Center for Supply Chain Automation

#### TOUR OF DAIFUKU WYNRIGHT INNOVATION CENTER NARRATED LIVE TECHNOLOGY DEMONSTRATIONS 12:30 - 2:00 PM

Facilitators Gordon Hellberg, Vice President, Daifuku

**Steve Harrington,** Industry Liaison, The National Center for Supply Chain Automation

#### INDUSTRY CERTIFICATIONS: INTRO TO THE INDUSTRY VALIDATED "CERTIFIED AUTOMATION TECHNICIAN" (CAT)

2:15 – 3:00 PM Daifuku Wynright Innovation Center

Career and Technical Education programs are leading the way to ensure that students are career-ready when they exit their post-secondary programs. Technical curricula provide the means for students to acquire technical and academic skills that are necessary to their success in the workforce. CTE programs are strengthened when they are able to offer opportunities for students to earn industry-recognized credentials that provide proof of skills competency. Credentialing increases students' incentive to complete a technical program and increases their employability and potential for career growth.

The National Center for Supply Chain Automation in collaboration with MHI, the Manufacturing Skills Standards Council (MSSC), and Amatrol have worked to develop an industry endorsed certification for supply chain automation. We are excited to announce that the Certified Automation Technician (CAT) credential will be piloted in 2019, providing a baseline to validate entry level workers' skills and a tool to test/validate existing workers' skills. Our plans for the pilot program and future roll-out of the credential will be unveiled at this workshop.

#### Moderator

**Steve Harrington**, Industry Liaison, The National Center for Supply Chain Automation

Presenters Leo Reddy, Chairman & CEO, MSSC

Paul Perkins, President, Amatrol

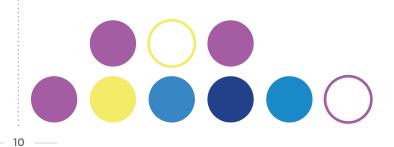
#### BUS CHECK-IN FOR RETURN TO MARRIOTT MARQUIS CHICAGO

3:15 PM

#### SPONSORED RECEPTION

4:30-6:30 PM VU Rooftop Bar 133 E. Cermak Rd., 22nd Floor, Chicago, IL 60616

Join us at the VU Rooftop Bar (approximately 4 blocks from McCormick Place) for a networking reception, generously sponsored by MSSC and Amatrol.





### ANNUAL SYMPOSIUM

# TUESDAY APRIL 9TH

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#### PROMAT CHECK-IN 8:15-8:45 AM

#### KEYNOTE ADDRESS: CLOSING THE SUPPLY CHAIN GENDER GAP 8:45-9:45 AM

Grand Ballroom - S100

#### Reshma Saujani, CEO and Founder, Girls Who Code

It's no secret that the manufacturing and supply chain industry has a serious gender imbalance. We live in an era in which girls are told they can do anything, so why aren't there more women in supply chain leadership roles? In 2012, Reshma Saujani founded Girls Who Code with the mission of correcting the disparity in the tech industry. Since then, she has sparked a national conversation about increasing the number of women in tech and Girls Who Code has reached nearly 40,000 young girls and aims to enroll one million women by 2020. Join us for this groundbreaking keynote as Reshma provides practical strategies for closing the gender gap and why it is a key to the future success of our industry

#### ATE GRANT FUNDING INSIGHTS, TIPS & THE MENTOR-CONNECT HELPING HAND 10:00-10:50 AM

Room S 404 A

Gain an overview of NSF programs of interest to community and technical colleges, whether you are new to ATE, have not received ATE funding recently, or are seeking to scale-up your project proposal. Participants learn from a lead NSF ATE program officer about funding opportunities.

#### Welcome and Introduction

**Mel Cossette**, Internal Evaluator, The National Center for Supply Chain Automation

#### Presenter

**Celeste Carter**, Ph.D., Lead Program Director, Advanced Technological Education, NSF

## NAVIGATING THE YELLOW BRICK ROAD TO THE WORLD OF NSF FUNDING

11:00-11:50 AM Room S 404 A

A panel of experienced NSF ATE Principal Investigators share the kinds of activities and projects that are being funded by NSF ATE and offer their experiences in generating successful grant proposals, including the "do's and don'ts."

#### Moderator

**Celeste Carter**, Ph.D., Lead Program Director, Advanced Technological Education, NSF

#### Panelists Marilyn Barger, Ph.D., Executive Director, FLATE

**Doug Laven, Director**, Mechatronics Technology Education, South Central College

**Douglas Pauley**, Associate Dean, Training & Development, Central Community College

Tara Sheffer, Grants Officer, Columbus State Community College

#### NSF ADVANCED TECHNOLOGICAL EDUCATION GRANTS: REDACTED PROPOSAL REVIEW (WORKING LUNCH) 12:00-12:50 PM Room S 404 A

Learn the requirements, details, procedures and tips for successful ATE proposals, including an overview of the NSF ATE grant program's mission and proposal submission process. During the session, participants review selected redacted proposals that illustrate effective technicques for writing a proposal, including the development of clear needs statements, realistic timelines, and achievable outcomes and impacts.

#### Facilitator

**Celeste Carter**, Ph.D., Lead Program Director, Advanced Technological Education, NSF

## TOUR: PROMAT SHOW FLOOR WITH INDUSTRY REPRESENTATIVES

1:00-2:45 PM South Hall

#### **PROMAT SHOW FLOOR DEBRIEF**

3:00-3:30 PM Room S 404 A

Moderator

Jim Reeves, Interim Executive Director, The National Center for Supply Chain Automation

#### INDUSTRY PRESENTATION: WAREHOUSE OF THE FUTURE, ROBOTICS IN THE SUPPLY CHAIN 3:30-4:30 PM

Room S 404 A

The warehouse of the future is here. With new technologies, including advanced robotics, industry will require skilled technicians with advanced training. Learn about these emerging technologies and how training and education programs need to respond.

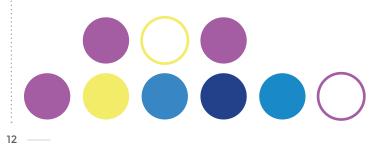
#### Moderator

**Ned Young**, Ph.D., Co-Principal Investigator, The National Center for Supply Chain Automation

#### Presenters

**Roger D. Christian**, Divisional Leader, Yaskawa America, Inc., Motoman Robotics Division

**Bob Graff**, Senior Sales Manager, Education, Motoman Robotics Division, Yaskawa America, Inc.





### ANNUAL SYMPOSIUM

# WEDNESDAY APRIL 10TH

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## PLENARY SESSION: PREVIEW OF MHI 2019 ANNUAL INDUSTRY REPORT

8:45-9:45 AM Grand Ballroom - \$100

#### George W. Prest, CEO, MHI

Scott Sopher, Principal, Supply Chain Practice, Deloitte Consulting LLP

This is your opportunity to be the first to have access to this new report on the trends and technologies that are transforming supply chains. Scott Sopher, the principal with Deloitte Consulting LLP's Supply Chain Practice will join George W. Prest, CEO of MHI in presenting the findings and moderating a panel of manufacturing and supply chain leaders on the report's findings. They will be joined by a panel of manufacturing and supply chain professionals to discuss the real-world significance of the report findings.

#### BEST PRACTICES IN SUPPLY CHAIN TECHNICIAN EDUCATION- PART 1

10:00-11:00 AM Room S 404 A

Learn about best practices in technical education from faculty and education professionals. Topics in this session include Troubleshooting Simulation for Integrated Systems, Flexible Mobile Lab Application and Open Lab Competency Based Learning Model, Flex Delivery.

#### Moderator

Tim Tewalt, Director, Industrial Mechanics, Chippewa Valley Technical College

Presenters

Tom Bux, Director of Workforce Development, Lehigh Carbon Community College

Joe Fullington, Dean, School of Business & Transportation, Gateway Technical College

**Donald Worman**, Manufacturing Technology Instructor, Lehigh Carbon Community College

# BEST PRACTICES IN SUPPLY CHAIN TECHNICIAN EDUCATION - PART 2

11:10-12:00 PM Room S 404 A

Learn about best practices in technical education from faculty and education professionals. Topics in this session include Techniques for Meeting the Foxconn Workforce Development Challenge, Hybrid Flex Lab Education Model and successful programs in CTE Dual Enrollment & Dual Credit programs.

#### Moderators

**Elaine Gaertner**, Education Liaison, The National Center for Supply Chain Automation

**Beverly Hilderbrand**, Education Liaison, The National Center for Supply Chain Automation

#### Presenters

Gary Saganski, Dean, Advanced Technology Programs, Blackhawk Technical College

**Gregory Phillips**, Electrical Apprenticeship Instructor, Blackhawk Technical College

Mehran Mostajir, Program Director, Advanced Integrated Industrial Technology (AiiT), Columbia State Community College

### SYMPOSIUM EVALUATION SURVEY

12:00 - 12:15 PM

#### Presenter

**Terryll Bailey**, External Evaluator, The National Center for Supply Chain Automation Founder and President, The Allison Group

#### BUS CHECK-IN: TOUR OF UPS CACH FACILITY BOXED LUNCH PROVIDED

12:15 – 12:45 PM Meet at the Main Lobby Driveway Marriott Marquis Chicago at McCormick Place 2121 S Prairie Ave, Chicago, IL 60616

#### **BUS DEPARTURE AND TRAVEL TO OFF-SITE LOCATION** 12:45 - 1:45 PM

#### TOUR OF UPS CACH FACILITY

1:45 - 3:00 PM

During our guided tour, take an up-close look at this UPS facility – the largest operation of its kind in the U.S. – that processes more than 5,000 truckloads and rail cars filled with packages daily. UPS will give an overview of its facility and network, share details of their workforce development initiatives, and provide information about how SCA academic partners can make connections with UPS in their home markets.

## UPS OVERVIEW & MORAINE VALLEY COMMUNITY COLLEGE PARTNERSHIP

UPS CACH Facility 3:00 - 3:30 PM

Learn about how UPS, in partnership with Moraine Valley Community College, developed a "best in class" Plant Engineering Training Program to address their need for trained engineering technicians.

Presenters Charlie Blum, Facility Engineer, UPS

Neil Barker, Faculty Coordinator, Moraine Valley Community College

#### BUS CHECK-IN AND RETURN TO MARRIOTT MARQUIS CHICAGO

3:30 - 4:30 PM

## RECEPTION: MHI INDUSTRY NIGHT WITH CRAIG FERGUSON

4:30 - 7:00 PM

(Optional, \$50 on own expense, benefits MHI Foundation)



## HIGH IMPACT TECHNOLOGY EXCHANGE CONFERENCE

July 22-25, 2019 Hyatt Regency at the Arch St. Louis, MO

Supported by the National Science Foundation's Advanced Technological Education (NSF ATE) program, HI-TEC is a national conference on advanced technological education where secondary and postsecondary educators, counselors, industry professionals, trade organizations, and technicians can update their knowledge and skills.

Register Online www.highimpact-tec.org

## EDUCATOR RESOURCES AND SUPPORT

The National Center for Supply Chain Automation provides resources educators need to establish new programs or enrich existing programs.



Model Program: Examine a model program of study designed to deliver the skill sets supply chain technicians need to successfully enter the field. Developed by NCSCA in collaboration with its Industry Leadership Team



eTextbook: Introduction to the Automated Warehouse is a foundational text for the 21st century supply chain technician. Interactive and engaging content acquaints the reader with skillsets they need to succeed in an automated warehouse or distribution center.

White Papers: Access insightful reports from professionals to help you understand the issues, inspire decisions, and work toward solutions.

Download Now: SupplyChainAutomation.com

# PRESENTER BIOGRAPHIES

## The National Center for Supply Chain Automation

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#### Marilyn Barger, Ph.D.

Dr. Marilyn Barger is the Principal Investigator and Executive Director of FLATE, the Florida Advanced Technological Education Center of Excellence, funded by the National Science Foundation. Dr. Barger has over 20 years' experience in

developing and delivering K20 engineering and technical curriculum. She holds a Ph.D. in Civil/Environmental Engineering from the University of South Florida, where she focused on membrane separation systems designs for water purification. Dr. Barger is a charter member of the National Academy of Inventors, holds a licensed patent for a membrane design and is a registered professional engineer.



#### **Neil Barker**

Neil Barker serves as Faculty Coordinator at Moraine Valley Community College. After many years in industry, as a designer of mining equipment, test engineer of aircraft systems, and more recently a project manager and quality manager for

a leading automotive machine builder, Barker retrained as a technology instructor and began to teach high school. After completing his Master's in STEM Education, he transferred his skills to Moraine Valley Community College. Barker is also an engineering graduate of the University of Bath in England.



#### **Charlie Blum**

Charlie Blum is a Facility Engineer at the UPS Chicago Area Consolidation Hub (CACH). The majority of Blum's 42-year UPS career has been with the Plant Engineering (PE) Department, where his broad range of experience includes training and

development, hiring, and labor relations. Blum completed technical programs with DeVry Institute of Technology, Coyne American Institute, Environmental Technical Institute and Moraine Valley Community College. In partnership with Moraine Valley Community College, Blum assisted in the design of a Plant Engineering Mechanic Training Program that incorporates MVCC classes, in-house training seminars and journeyman assistance to develop employees into skilled PE mechanics.



#### Tom Bux

Tom Bux is the Director of Workforce Development at Lehigh Carbon Community College and has more than 15 years' experience in adult and workforce education. His areas of expertise include leadership and talent pipelines and adult

learning. Bux is a regular contributor to Lehigh Valley Business Journal, and has been published nationally by ATD press. He has a Masters degree in Training and Development from Penn State University.



#### Celeste Carter, Ph.D.

Dr. Celeste Carter is Lead Program Director for the Division of Undergraduate Education (DUE) at the National Science Foundation (NSF), having previously served DUE as a Program Director since 2009. Prior to coming to NSF, Dr. Carter joined

the Division of Biological and Health Sciences at Foothill College in 1994 to develop and head a Biotechnology Program. She received her Ph.D. in Microbiology from the Pennsylvania State University School of Medicine in 1982 under the direction of Dr. Satvir S. Tevethia, and completed postdoctoral studies at the University of California at Berkeley.



#### **Roger D. Christian**

Roger Christian is the Divisional Leader at Yaskawa America, Inc., in the Motoman Robotics Division, where he has worked for the past 29 years. In his current role, he recommends focused strategic investment, product development and/or

new market penetration by studying broad market needs and trends and then developing commercial strategies for the Company. Christian currently serves on the Technology Advisory Committee for the Advanced Robotics for Manufacturing (ARM) Institute and is an active member of the ROS Industrial Consortium. His career in robotics began at Bendix Robotics in 1982 as a Mechanical Engineer.

### Joe Fullington

Joe Fullington is the Dean of the School of Business and Transportation at Gateway Technical College, the school's largest academic division, and he recently led efforts to add logistic-supply chain management to the programs offered.

Fullington has worked in business and industry for over 30 years and has led organizations in the construction industry, hospital industry, and now the education sector. Fullington has an MBA and will complete his doctorate in leadership and education in May 2019.



#### Bob Graff

Robert Graff is the Senior Sales Manager, Education for Yaskawa America, Inc. in the Motoman Robotics Division. Graff has over 35 years' experience in education technology and public sector partnerships including product development,

curriculum, education support services, distribution, training/credentialing models & programs, education workforce development and robotics/manufacturing 4.0 career pathway models. Graff is a member of the Ohio Manufacturing Association, Ohio Manufacturing Institute, ACTE, NACFAM, the ARM Institute, the Robotics Industrial Association and serves as an advisory member to numerous workforce boards across the U.S.



#### Gordon Hellberg

Gordon Hellberg is currently Vice President, Integrator Sales at Daifuku/ Wynright Corporation. With more than 35 years in the Logistics and Material Handling Industry, Hellberg previously held positions as VP Sales and Marketing

Schaefer North America, VP Sales TGW USA, and VP General Manager of psb USA.



#### Doug Laven

Doug Laven is currently Director of Mechatronics Technology Education at South Central College (SCC) in North Mankato, Minnesota, where he oversaw the Independent Mechatronics Education Curriculum (iMEC), NSF grant as the project PI. The iMEC is a distance learning

model that uses online, simulation, and remote-access delivery methods for its Mechatronics Engineering Technology (MET) AAS degree program. Laven also served as Director of a DOL CBJT grant that helped launch the Mechatronics program at SCC. Laven previously spent 18 years in industry and held positions of Engineering Manager and President specializing in surface mount packaging.



#### Mehran Mostajir

Mehran Mostajir is the Program Director for Advanced Integrated Industrial Technology (AiiT) at Columbia State Community College. Under his leadership the program went through a major

transformation is now implemented at five high schools in central Tennessee. Mostajir previously held positions as adjunct professor of mathematics at Volunteer State Community College and Tennessee State University, and worked as an engineer and business manager at companies in Tennessee and Pennsylvania. Mostajir graduated from the University of Buffalo with Bachelor and Master of Science degrees in Mechanical Engineering, and Master of Arts in Applied Mathematics. He also has an MBA.



#### **Douglas Pauley**

Doug Pauley is the Associate Dean for Training and Development at Central Community College in Columbus, Nebraska, where he has served in various capacities since 1990 after arriving with an Associate's Degree in Heating

and Air Conditioning and Energy Management and 10 years' experience in related fields. Pauley is currently the Project Officer for the NSF grant titled Mechatronics with Instrumentation and Controls. Under his direction, Central Community College received the Bellwether award in Workforce Development in 2000 and was finalist in 2010 and 2013 for other Workforce Development Initiatives. Pauley received his Bachelor's Degree from Bellevue University in 1992.



#### **Paul Perkins**

Paul Perkins is president and co-founder of Amatrol, Inc., a Jeffersonville, Indianabased manufacturer of technical learning systems and online interactive multimedia software for colleges, industry and high schools. Perkins holds a B.S. Degree in

Mechanical Engineering Summa Cum Laude from Georgia Institute of Technology, is the author of over 20 books on industrial controls and automation, and has designed numerous training systems for teaching engineering and technical skills. His community service activities include serving as Chair of the Indiana State Workforce Innovation Council, past Chair of the National Governors Association State Workforce Board Chairs Association, and board member of many other national, state and local organizations.



#### **Gregory Phillips**

Gregory Phillips currently serves as Electrical Apprenticeship Instructor at Blackhawk Technical College in Janesville, WI. As a U.S. Marine veteran, Phillips worked as an electrician after his military service, and became a state licensed

master electrician in 2006, followed by specialized training through the National Joint Apprenticeship Training Center to become a teacher and instructor for aspiring electricians. He also serves his community as an advisor for high school CTE programs in residential construction.



#### Leo Reddy Leo Reddy is the Chairman and CEO of the Manufacturing Skill Standards Council (MSSC). An industry-led non-profit, MSSC is the national leader in preparing individuals with the core technical competencies needed in today's economy

for front-line technicians in advanced manufacturing and distribution-logistics. Reddy has held this position since 2005. Under his leadership MSSC developed two nationally portable certifications and related training programs: the Certified Production Technician (CPT) and Certified Logistics Technician (CLT).



#### Gary Saganski

Gary Saganski serves as Dean for Advanced Technology Programs at Blackhawk Technical College. He was previously employed by Henry Ford College, where he was the Associate Dean for Industrial Technology and served as the project

director for a multi-state advanced manufacturing grant under the U.S. Department of Labor TAACCCT program. Saganski holds a Bachelor's in Philosophy from Monteith College and a Master's in Public Administration from Wayne State University in Detroit.



#### **Tara Sheffer**

Tara Sheffer currently serves as the Manager for Sponsored Project Operations with Columbus State Community College's Grants Office. With expertise in project management, career development, and process improvement, Sheffer has four

years of experience managing the implementation of more than a dozen federal grants from the National Science Foundation and Department of Labor. She founded the first Career Services Office at The Ohio State University's College of Pharmacy, where she also completed an M.A. in Higher Education and Student Affairs.

### Tim Tewalt



Tim Tewalt is the Program Director of Industrial Mechanics at Chippewa Valley Technical College, where he helps students prepare for careers in maintenance through a leading day/evening program that uses a mix of eLearning, simulation

and hands-on for flexible delivery, learning styles and locations. Tewalt also owns a website services business and has served locally as a city council member in Eau Claire, WI. He holds a Master's degree in Career & Technical Education, Leadership and Administration from the University of Wisconsin, Stout.



#### **Donald Worman**

Don Worman currently holds the position of Manufacturing Technology Instructor at Lehigh Carbon Community College in Schnecksville, PA, where he began teaching after a 30-year career in the

oil, gas and petrochemical industry. His experiences include intense project execution in the areas of design and manufacturing. Worman holds a B.S. in Engineering, Management certificate from Villanova and is a certified engineer in the Commonwealth of PA.



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# **Opportunities for Veterans in Supply Chain Automation**

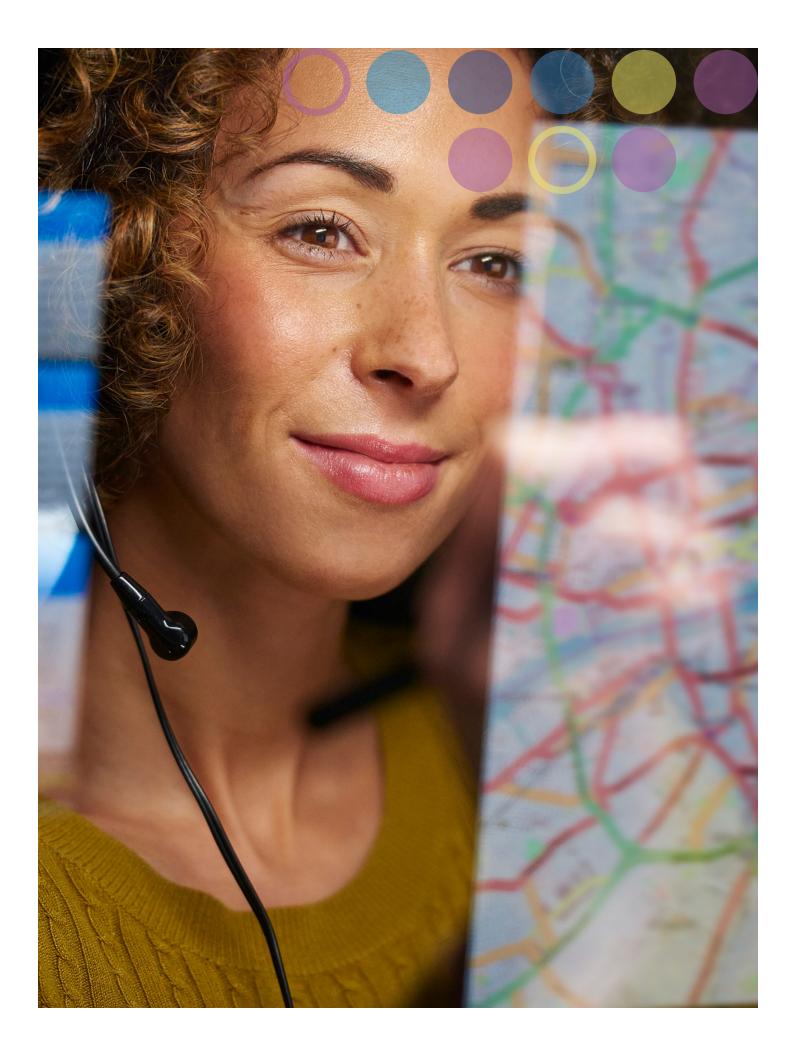
Many military occupational specialties encompass electrical, mechanical or logistical skills that are required in Supply Chain Automation jobs.

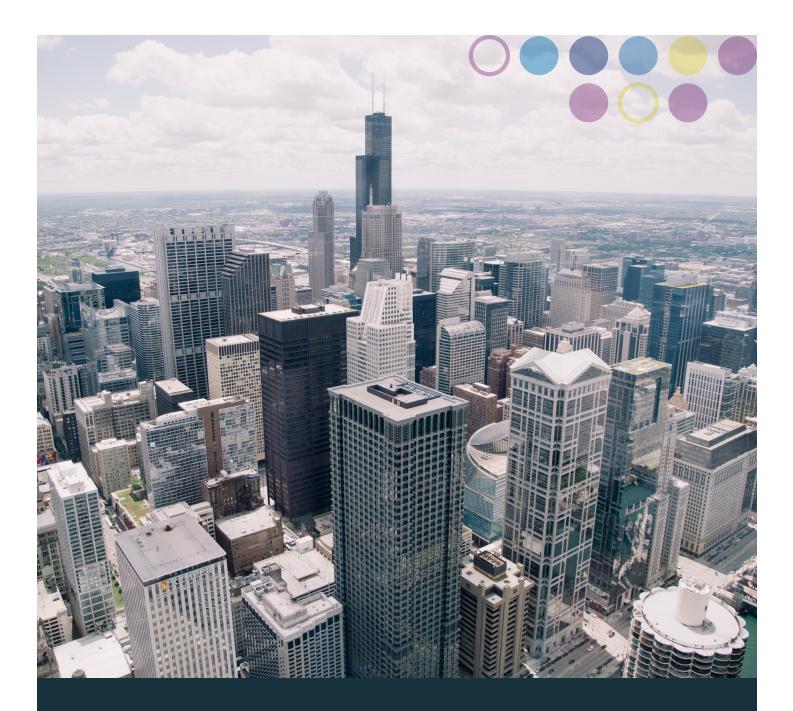
The National Center for Supply Chain Automation has mapped the skills of relevant military occupations to those of the automation industry to help you attract, assess, and communicate with veterans who may be candidates for your programs and to assist with curriculum development.

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