Speaker Bios and Abstracts: VIP Look Book

16th Annual NDIA Great Lakes Chapter Annual Meeting

Nick Cucci
Great Lakes Chapter President
NDIA

Nick Cucci is an innovation executive with 15+ years of experience working with clients across industries to help design, develop, and commercialize products. Nick is a strategic advisor at Hatch Defense, serves as president of the board of directors for the National Defense Industrial Association (NDIA) Great Lakes Chapter, and a member of the Innovative Executives League. Nick supports the National Multiple Sclerosis Society, USA Hockey, Special Operations Forces (SOF) community, and the Midwest startup ecosystem. Nick holds a bachelor's degree and MBA from Roosevelt University with highest honors.

Berardino Baratta
CEO
MxD

Berardino Baratta is an accomplished leader in technology and advancing manufacturing, with more than 25 years of experience in the industry. As the CEO of MxD, the digital manufacturing and cybersecurity institute, Berardino works with the U.S. Department of Defense and a nearly 300-member ecosystem to drive economic prosperity and support national security by increasing U.S. manufacturing competitiveness.

Through MxD's diverse array of projects and partnerships, Berardino oversees critical efforts to enhance digital readiness and cybersecurity across the manufacturing sector, prepare the workforce for the advanced manufacturing jobs of the future, and ensure resilient and secure supply chains in an era of increased geopolitical disruption.

Berardino's diverse experience includes recent roles as Vice President of Projects and Engineering and Sr. Director of Technology Strategy for MxD. Prior to joining MxD, Berardino was CEO of Potentia Analytics, an AI healthcare startup, and held multiple positions at Freescale, including General Manager of Freescale Semiconductor's Multimedia Applications Division. He began his career with Metrowerks Corporation, a leading provider of Software Development tools, where he led engineering through its growth from startup through acquisition by Motorola Corporation. Berardino received his Bachelor of Mechanical Engineering (Honours) from McGill University.

Michael A. Brown
Partner
Shield Capital

Michael Brown is a partner at Shield Capital and a Distinguished Senior Fellow at the Institute for Security and Technology. He serves on the Board of the Information Technology and Innovation Foundation (ITIF) and on the Boards of Advisors at the Center for a New American Security (CNAS) and Reagan Institute's National Security Innovation Base project. He is a council member of the Council on Global Competition and Innovation, a senior advisor to the Defense Panel at the Special Competitive Studies Project, a former advisor to the U.S. Navy's Science and Technology Board and a former visiting scholar at the Hoover Institution. He currently serves on the Boards of Directors for five private companies: Strider Intel, Asimily, Nexla, Anetac and Code Metal.

Michael previously served as the Director of the Defense Innovation Unit (DIU) at the U.S. Department of Defense (2018-2022). During his tenure, fielded 50 new capabilities to the military and created National Security Innovation Capital.

From 2016 to 2018, Michael was a White House Presidential Innovation Fellow co-authoring a Pentagon study which was a catalyst for the Foreign Investment Risk Review Modernization Act (FIRRMA).
Prior to civil service, Michael was the CEO of Symantec Corporation (2014-2016), at the world's 10th largest software company. He is the former Chairman and CEO of Quantum Corporation (1995-2003).

Michael received his BA degree in economics from Harvard and his MBA from Stanford University.

Dr. Arun Seraphin, Ph.D.
Executive Director
Emerging Technologies Institute

Dr. Arun Seraphin is the Executive Director of The Emerging Technologies Institute (ETI). He was promoted from his previous position as the Deputy Director of ETI in May 2023. Before joining the ETI team, a Professional Staff Member on the staff of the United States Senate Committee on Armed Services. His areas of responsibility include acquisition policy, Pentagon management issues, Department of Defense's science and technology programs, information technology systems, technology transition issues, defense laboratories, Small Business Innovation Research program, manufacturing programs, and test and evaluation programs. As such he assists Senators in their oversight of DOD policies and programs, including in the authorization of budgets, civilian nominations, legislative initiatives, and hearings. He rejoined the committee staff in 2014, after previously serving there between 2001 and 2010. In 2009, he was named one of ten Defense "Staffers to Know" by Roll Call, a Capitol Hill newspaper. From 2010 to 2014, Dr. Seraphin served as the Principal Assistant Director for National Security and International Affairs at the White House Office of Science and Technology Policy (OSTP). During this time, he both led (in an Acting capacity) and served as the deputy director of the OSTP National Security and International Affairs division. His areas of responsibility included developing and implementing White House initiatives and policies in areas including defense research and engineering; weapons of mass destruction; defense manufacturing and industrial base; science,

	technology, engineering, and mathematics (STEM) education; cybersecurity; and promoting innovation in government research and engineering organizations. He also led interagency groups on small business programs and on improving the quality of the Federal STEM workforce. He was on detail to OSTP from the Defense Advanced Research Projects Agency (DARPA) where he was the Special Assistant for Policy Initiatives to the Director of DARPA. Dr. Seraphin has also worked on the United States House of Representatives Committee on Science's Subcommittee on Research as a professional staff member. He began his work in Congress in the Office of Senator Joseph Lieberman as the 1999-2000 Materials Research Society – Optical Society of America Congressional Science and Engineering Fellow. In these positions, he covered both civilian and defense research and development programs. Between 1996 and 2000, Dr. Seraphin worked in the Science and Technology Division of the Institute for Defense Analyses, where his research included work on defense technology transition, microelectromechanical systems (MEMS), export controls, technology forecasting, and international research cooperation. His work included detailed technical analyses supporting the DARPA MEMS program, the Army Science and Technology Master Plan, and the Military Critical Technologies Program. In 1996, Dr. Seraphin earned a Ph.D. in Electronic Materials from the Massachusetts Institute of Technology, where he performed research on silicon nanotechnology. His research focused on the development of novel silicon nanostructures and tailoring their optical properties. He also holds bachelor's degrees in Political Science with a concentration in American Government and Engineering Science with a concentration in Materials Science from the State University of New York at Stony Brook.
	**David Boulay, Ph.D.** **President** **IMEC** My passion is creating a competitive future for the organizations and workforce of Illinois." Responsibilities: My leadership has developed from diverse settings that extend from a family-owned business, to manufacturing, universities and non-profits. These various experiences help guide our public-private partnership's strategic direction to serve as a catalyst for small and mid-sized company competitiveness. I grew up in a family-owned business where I learned first-hand about the trial, challenges, and pride that I see in the owners and leaders of companies we work with today. I recognize their situations, understand their challenges and have the tools and knowledge to help accomplish their goals. I have also had the good fortune to work in various manufacturing roles from food plant sanitation to maintenance supervision to production, plant manager and business unit manager in companies such as Frito-Lay and Pillsbury. Through these experiences, I learned how company success is reliant on the skills and talents of its' workforce. This has driven my passion in human

	resource development. My Ph.D. included a primary focus on high performance work practices in small and mid-sized companies and career pathways for workers. I bring a diverse blend of expertise in performance management, small business development, and organizational growth strategies to IMEC. I have helped create and implement several initiatives to increase the flow of state and federal funding to manufacturers for projects, update worker skills, and help smaller manufacturers adopt new technology and business practices to improve energy efficiency. Qualifications: Ph.D. in Workforce Development and Education from The Ohio State University Master of Business Administration from Franklin University Bachelor of Science in Operations from Binghamton University
	**Kate Timmerman, Ph.D.** **CEO** **Chicago Quantum Exchange** Kate Waimey Timmerman is CEO of the Chicago Quantum Exchange, advancing the science and engineering of quantum information between the CQE community, across the Midwest, and around the globe. The CQE is a consortium - comprised of the University of Chicago, Argonne National Laboratory, Fermi National Accelerator Laboratory, the University of Illinois Urbana-Champaign, the University of Wisconsin-Madison, Northwestern University, and Purdue University, - that fosters emerging research, trains the workforce of the future, and grows the quantum economy. Under Kate's leadership, the CQE has grown to include more than 50 industry and other partners, provides global insights, builds local programs, and the Midwest region has been designated a top global quantum technology ecosystem. The CQE leads federal initiatives, including The Bloch Quantum US Economic Development Administration Tech Hub and National Science Foundation Regional Innovation Engine development award. Kate is a member of the World Economic Forum Global Future Council on Next Generation Computing, the Advisory Council at Argonne's Chain Reaction Innovations, and board members at P33 and Intersect Illinois. Kate earned her Ph.D. in neuroscience from the University of California, Davis and her bachelor's degree from Oberlin College.

Harley Johnson, Ph.D.
Director and CEO
Illinois Quantum & Microelectronics Park

Dr. Harley T. Johnson is the Executive Director and CEO of the Illinois Quantum and Microelectronics Park. He is a Founder Professor in Mechanical Science and Engineering at the University of Illinois at Urbana-Champaign, where he has been a member of the faculty since 2001. From 2019-2024, he served as the Associate Dean for Research in The Grainger College of Engineering where he oversaw and supported the $320M annual research portfolio in Engineering at UIUC. In this role, he led corporate relations and oversaw all major engineering partnerships with the federal funding agencies.

As a researcher, Johnson's work focuses on electronic and quantum materials, addressing the role of defects and deformation in their functional properties. He is the PI and Director of the Illinois Materials Research Science and Engineering Center (I-MRSEC), an $18M NSF center (2023-2029) focused on fundamental research in electronic, ionic and quantum materials. In 2019 he founded the NSF "DIGI-MAT" Center on Materials and Data Science, based in UIUC's National Center for Supercomputing Applications (NCSA). He received the NSF CAREER Award, the ASME Thomas J. R. Hughes Young Investigator Award and is a former Fulbright US Scholar. Johnson has also received university recognitions for his leadership in diversity, for outstanding faculty leadership, and, in 2021, he received the university Presidential Medallion for his leadership efforts during the Covid-19 pandemic.

He is a Fellow of ASME and a Fellow of the Society of Engineering Science (SES). He received his graduate degrees from Brown University and his undergraduate degree from Georgia Tech.

Mark Schwartz
CEO
Hatch Product Development & Contract Manufacturing

Mark Schwartz, CEO of Hatch PD, is a Chicago-based product development executive with over 35 years of experience in emerging technologies, product innovation, hardware engineering, and manufacturing. Mark began his career at Motorola and helped develop the first cell phone, StarTAC, before co-founding Product Development Technologies (PDT), a turnkey product development firm, in 1995. Since then, Mark has led the development of thousands of products across industries, including notable smartphones, tactical radios, wearable electronics, satellite communications equipment, and medical devices. After PDT's acquisition by Astronics,

Mark left commercial aviation to become co-founder of Hatch to focus on design-build for complex rugged products in highly regulated industries. Mark actively supports the startup ecosystem, serving as an advisor, investor, and board member for nearly a dozen companies. Mark is a two-time Inc. 500 honoree, Entrepreneur Hall of Fame inductee, and has been recognized as an industry leader for his turnkey product development and manufacturing expertise.

In his spare time, Mark enjoys snowboarding, boating with family, and playing ice hockey.

Jeremy Roehm
Chief of Technology & Partnerships – US
Rolls-Royce Corp.

Jeremy holds the position of Chief of Technology and Partnerships for Rolls-Royce in the United States, based in Indianapolis, IN. In this role, he is accountable for delivery of research and technology activity in the US on behalf of the Rolls-Royce Group, including development of external funding and partnerships. Having joined Rolls-Royce in 2007, Jeremy has over 22 years of experience in the aerospace and defense fields.

Previously, Jeremy held the role of Chief Project Engineer for LibertyWorks Research and Technology, responsible for engineering delivery and execution on a variety of development programs within the LibertyWorks portfolio. Prior to this role, he held the position of Chief of Technology for the Rolls-Royce ceramic matrix composites (CMC) program, leading the development of CMC technology across all global sites. Previously, he led fan and compressor subsystem development for a variety of military and commercial new product introduction programs.

Jeremy holds a Bachelor of Science degree in Mechanical Engineering from Rose-Hulman Institute of Technology, graduating in 2002.