Shirley Ann Jackson

The Honorable Shirley Ann Jackson, Ph.D., is the 18th president of Rensselaer Polytechnic Institute of Troy, New York, and Hartford, Connecticut. Described by Time Magazine as “perhaps the ultimate role model for women in science,” Dr. Jackson, a theoretical physicist, has held senior leadership positions in government, industry, research, and academe. Since 1999, Dr. Jackson has led an extraordinary transformation at Rensselaer Polytechnic Institute under an ambitious strategic effort known as The Rensselaer Plan and updated as The Rensselaer Plan 2024. With a focus on Rensselaer as a top-tier technological research university with global reach and global impact, her tenure has been marked by a successful $1.4 billion capital campaign, the hiring of over 300 new faculty, a tripling of research awards and a tripling of applications to the freshman class, the construction of state-of-the-art research platforms, and innovations both in the curriculum and student life.

In 2009, President Barack Obama appointed Dr. Jackson to the President’s Council of Advisors on Science and Technology (PCAST). She also serves on the White House Advanced Manufacturing Partnership Steering Committee 2.0 and the U.S. Department of Energy’s Secretary of Energy Advisory Board. In 2012, Dr. Jackson was elected as an international fellow of the British Royal Academy of Engineering. She is a member of the U.S. National Academy of Engineering and the American Philosophical Society, and a fellow of the American Association for the Advancement of Science (AAAS). She is also a fellow of the American Academy of Arts and Sciences and the American Physical Society, as well as Vice Chair of the Board of Regents of the Smithsonian Institution, a trustee of the Brookings Institution, and a member of the board of the Council on Foreign Relations. She is a life member of the MIT Corporation. Dr. Jackson is a director of several major corporations, including FedEx, IBM, Marathon Oil, Medtronic, and PSEG. From 2006 to 2013, she was chairman of the board of NYSE Regulation. Before taking on the leadership of Rensselaer Polytechnic Institute, Dr. Jackson was appointed chairman of the United States Nuclear Regulatory Commission (NRC) by President William Jefferson Clinton in 1995 and served for four years, reorganizing the agency and revamping its regulatory approach. While at the NRC, she also spearheaded the formation of the International Nuclear Regulators Association and served as the group’s first chairman. Before leading the NRC, she was a theoretical physicist at AT&T Bell Laboratories and a professor of theoretical physics at Rutgers University, where she studied the electronic and optical properties of two-dimensional systems, and layered compounds. Dr. Jackson holds an S.B. in physics and a Ph.D. in theoretical elementary particle physics from MIT. She also has been awarded 52 honorary doctoral degrees.

Ajit Manocha

Ajit Manocha is a business leader with strong executive experience in the semiconductor industry. He is currently a Strategic Advisor for GLOBALFOUNDRIES. Prior to this role, he served as CEO of GLOBALFOUNDRIES from 2011 through 2014. Before joining GLOBALFOUNDRIES, he was executive vice president of worldwide operations and a member of the executive management board at Spansion. In that role, Manocha managed global integrated circuit manufacturing, supply chain management and purchasing for its semiconductor division. Manocha also served as an advisor to the Advanced Technology Investment Corporation (ATIC), GLOBALFOUNDRIES’ investor. Earlier Manocha was
executive vice president and chief manufacturing officer at NXP Semiconductors (formerly Philips Semiconductors). Manocha has also worked at AT&T Microelectronics and AT&T Bell Laboratories. Manocha began his career as a research scientist and was granted over a dozen U.S. and international patents for several inventions in the field of technology for microelectronics, including one for anisotropic etching, a process for treating very-large-scale, patterned integration lithographic masks to retain their shape during processing of VLSI wafers. Manocha served as Chairman of the Board for the Semiconductor Industry Association. He also served on the Board of Directors of GLOBALFOUNDRIES and Mask less Lithography, as well as the TechNet Executive Committee. He previously sat on the boards of SVTC, International SEMATECH, the Crolles Alliance, and ASMC, and has also served as chairman of the board of directors of SSMC in Singapore. Manocha holds a bachelor’s degree from the University of Delhi and a master’s degree in physical chemistry from Kansas State University.

Gavin McIntyre

Gavin McIntyre is the co-founder and Chief Scientist of Ecovative Design. Since founding the company in 2007, he has led all material and biological process development in the company’s strides to replace plastics and foams. Gavin co-invented Ecovative’s patent-pending technology that uses a fungal mycelium to transform agricultural waste into strong biological composite materials. These materials are 100% compostable, and made with a fraction of the energy of conventional plastics. He has served as the principle investigator on grants received from the US EPA, the USDA, the NSF, and the New York State Energy Research and Development Authority. Gavin currently serves on the board of the NYS Pollution Prevention Institute, a subset of the Department of Environmental Conservation, and the Center for Automation Technology and Systems. Gavin received a dual B.S. in Mechanical Engineering and Product Design from Rensselaer Polytechnic Institute, and has a number of utility patents to his name.

Michael Molnar

Mike Molnar likes to be introduced simply as “a manufacturing guy from industry” with 30 years of industry experience in advanced manufacturing. Today Mike leads the NIST Advanced Manufacturing Office for extramural manufacturing programs and also serves as the director of the interagency Advanced Manufacturing National Program Office (AMNPO). Chartered by the White House, the mission of this interagency team is to foster industry-led partnerships to strengthen competitiveness and innovation in U.S. manufacturing. The AMNPO supports administration initiatives such as the National Network for Manufacturing Innovation and the Advanced Manufacturing Partnership. Information may be found at: www.manufacturing.gov. He is active with volunteer organizations and professional societies, and is currently serving as the president of SME (Society of Manufacturing Engineers).
F. Mike Tucker

F. Michael Tucker was appointed President of the Center for Economic Growth in March 2007. The Center for Economic Growth (CEG) is a regional, not-for-profit, private-sector economic development organization promoting growth through accomplishment of strategic initiatives, industry attraction and regional outreach. Prior to joining CEG, Mr. Tucker served as President of the Harriman Research and Technology Development Corporation where he was responsible for initiating and overseeing the redevelopment of the 300-acre W.A. Harriman State Office Campus into a world class Research and Technology Park. For more than 25 years Mr. Tucker was a principal with Mercer Companies, Inc., an Albany based real estate and energy development firm. Mr. Tucker oversaw the development, financing and operation of Mercer’s commercial office, senior housing and hydroelectric projects throughout New York State. In addition, he was responsible for Mercer’s property management and real estate brokerage services. Mr. Tucker’s has extensive experience in business, economic development and energy related issues. Mr. Tucker graduated from Villanova University and the Villanova School of Law. He is an attorney and a licensed real estate broker. He is active in legal, real estate and economic development organizations at the local, state and national levels. He currently serves as a Director of the New York State Economic Development Council and is on the boards of numerous not-for-profit organizations throughout Tech Valley. He served as the Chairman of the Town of Bethlehem Industrial Development Agency, is a Trustee of Ulster Savings Bank, and is a member of the MedTech Board of Directors’ Advisory Council. He is also a member of Governor Cuomo’s Capital Region Economic Development Council.

Jonathan S. Dordick

Jonathan S. Dordick is the Vice President for Research and the Howard P. Isermann Professor of Chemical and Biological Engineering at Rensselaer Polytechnic Institute. Prof. Dordick received his B.A. degree in Biochemistry and Chemistry from Brandeis University and his Ph.D. in Biochemical Engineering from the Massachusetts Institute of Technology. He has held chemical engineering faculty appointments at the University of Iowa (1987-1998), where he also served as the Associate Director of the Center for Biocatalysis and Bioprocessing, and Rensselaer Polytechnic Institute (1998-present) where he also holds joint appointments in the departments of Biomedical Engineering, Materials Science and Engineering, and Biology. Prof. Dordick’s research group includes chemical engineers, bioengineers, materials scientists, biologists, chemists and microbiologists all focused on gaining a quantitative understanding of biological principles and applying them to advance bioengineering, nanobiotechnology, drug discovery, and biomanufacturing. He has received numerous awards, including the 2007 Marvin J. Johnson Award and the 2007 Elmer Gaden Award both of the American Chemical Society, the 2003 International Enzyme Engineering Award, the 1998 Iowa Section Award of the American Chemical Society, and an NSF Presidential Young Investigator Award in 1989. He was elected as a Fellow of the American Chemical Society in 2010, a Fellow of the American Association for the Advancement of Science in 2004, and a Fellow of the American Institute of Medical and Biological Engineers in 1996. He presently serves on the Scientific Advisory Boards for several biotechnology companies and venture capital firms, and has cofounded a number of companies, including EnzyMed (now part of Albany Molecular Research, Inc.), Solidus Biosciences, and The Paper Battery Company. Dr. Dordick has published over 330 papers and is an inventor/co-inventor on nearly 40 patents and patent applications.
Mike Russo

Mike is the Director of US Government Relations, Regulatory Affairs and Strategic Initiatives for GLOBALFOUNDRIES. In his role, Mike is responsible for strategic plan development and execution to support business needs, policy development and lobbying. Mike directly interfaces with the Administration and top lawmakers in Washington DC, as well as those on the state level. Mike works closely with the Administration in DC in an advisory capacity and is leading several initiatives to develop nationally scalable platforms in areas most important to the US economy. Current initiatives include those focused on ensuring education is demand driven, improving supply chain access to innovation and markets, improving the nation’s power grid and the development of a regional manufacturing technology automation center. Prior to joining GLOBALFOUNDRIES, Mike was a senior staffer for US Senator Kirsten Gillibrand, as well as the Director of the 20th Congressional District of New York in the US House of Representatives for then Congresswoman Gillibrand, responsible for all staff and operations in the 10 county 20th Congressional District. Prior to working with Senator Gillibrand, Mike was an Executive Officer for the nation’s oldest industrial union, responsible for all of the union’s operations in the Northeastern United States. An expert in organizational development and effectiveness, Mike has led initiatives in total workplace redesign as well as innovative work in the development of workplace safety cultures. Throughout the 80’s and 90’s, Mike was a national voice in what he believed would be the effect of losing the manufacturing base in the US, citing its importance to innovation, maintaining a robust and secure supply chain...and to the U.S. economy in general, and continues to speak on the topic today.

Jennifer Clark

Jennifer Clark is the Director of the Center for Urban Innovation and an Associate Professor in the School of Public Policy at the Georgia Institute of Technology. Dr. Clark’s research focuses on regional economic development, manufacturing, industrial districts and innovation. Her first book, Remaking Regional Economies: Power, Labor, and Firm Strategies in the Knowledge Economy won the Best Book Award from the Regional Studies Association in 2009. She recently published Working Regions: Reconnecting Innovation and Production in the Knowledge Economy (2013). Her work focuses on policy models aimed at rebuilding the links between innovation and manufacturing in the US. She has collaborated on manufacturing and innovation policy projects with a broad range of organizations including the OECD, and the Canadian, UK, and US governments. Dr. Clark earned her Ph.D. in City and Regional Planning from Cornell University, a Master’s degree in Economic Development and Planning from the Humphrey School of Public Affairs at the University of Minnesota, and holds a B.A. from Wesleyan University in Connecticut. At Georgia Tech, Dr. Clark teaches courses on urban and regional economic development theory, analysis, and practice as well as research design and methods. She is also a distinguished visiting fellow with the Institute of Advanced Studies at the University of Birmingham, UK.
**Joseph Ensor**

As Sector Vice President and General Manager at Northrop Grumman Corporation’s ISR & Targeting Systems Division, Mr. Ensor has executive responsibility for all division operations, including a wide range of programs in C4ISR, surveillance systems, combat avionics, space systems, EO/IR targeting and surveillance, and global sensors. Previously he served as Vice President and General Manager of Engineering, Manufacturing & Logistics, where he had executive responsibility for 10,000 employees at 17 campuses across the U.S. working across all business areas. He also served as Vice President and General Manager of Space and ISR Systems and prior to that as Vice President Combat Avionics, where he had executive responsibility for radar programs on platforms such as F-22, JSF, B1-B and C130 aircraft. In this position, Mr. Ensor also was responsible for a subsidiary, California Microwave. His Program Management background spans many electro-optical and radar development programs. His academic credentials include a bachelor’s degree in computer science from Loyola College, and a master’s degree in business administration from the University of Maryland. He also completed the General Manager Program at Harvard Business School, as well as the University of Maryland Executive Marketing Strategy Program.

**Brenan McCarragher**

Dr. Brenan McCarragher is the Associate Director for Special Projects / Business Development within the Strategic Systems Program at The Charles Stark Draper Laboratory, Inc. He was previously responsible for the hardware and software design, testing and verification, and transition to production of the MK6 MOD1 Guidance System. Within the Trident Guidance program, he was also responsible for the development and fielding of the Enhanced Ground Test (EGT) program, the Guidance Emulator / Shipboard Interface Test Module, and the successful Multistar Enhanced Prelaunch experiment on DASO 24. Prior to his involvement with the Trident Guidance program, he worked on several other areas as a systems engineer at Draper, including a small satellite project, several MEMS-related projects and an air-dropped surveillance project. Prior to joining Draper, he was a Professor and Associate Dean at the Australian National University, and a production and operations management consultant to several industries, including Ford Australia, Comalco, BHP, Rio-Tinto, and Telstra Telecommunications. He has authored more than 130 technical publications and over 20 corporate reports. McCarragher holds a Ph.D. in Mechanical Engineering from MIT and an M.Ed in Technology Management from the University of New South Wales (Australia).

**Nabil Nasr**

Dr. Nabil Nasr is the Associate Provost for Academic Affairs and Director of the Golisano Institute for Sustainability at Rochester Institute of Technology (RIT). He also founded the Center for Remanufacturing and Resource Recovery at RIT, which has become a leading source of applied research and solutions in remanufacturing technologies. For over 25 years, Dr. Nasr has worked in the fields of sustainable production, remanufacturing, clean production, and sustainable product development and is considered an international leader in research and development efforts in these disciplines. Dr. Nasr chaired the Advisory Expert Group on Sustainable Production and
Eco-Innovation with the Organisation for Economic Cooperation and Development (OECD). In addition, he also served as an expert delegate for the U.S. government with several international forums, including the Asia Pacific Economic Cooperation (APEC), the United Nations, and the World Trade Organization. He recently served as an invited expert to the 13th International Resource Panel of the United Nations Environment Programme. Dr. Nasr served on The National Academies, National Research Council, National Materials and Manufacturing Board (NMMB) and on several study boards with The National Academy of Sciences. Dr. Nasr has a B.S. in Industrial Engineering from Helwan University, an M.S. in Industrial and Systems Engineering from Rutgers University, an M.Eng. in Manufacturing Engineering from Penn State University, and a Ph.D. in Industrial and Manufacturing Engineering from Rutgers University.

**John Wen**

John T. Wen received his B.Eng. from McGill University in 1979, M.S. from University of Illinois in 1981, and Ph.D. from Rensselaer Polytechnic Institute in 1985, all in Electrical Engineering. From 1981-1982, he was a system engineer at Fisher Controls. From 1985-1988, he was a member of technical staff at the Jet Propulsion Laboratory. Since 1988, he has been with Rensselaer Polytechnic Institute where he is currently the Head of Industrial and Systems Engineering and a Professor in the Department of Electrical, Computer, and Systems Engineering with a joint appointment in the Department of Mechanical, Aerospace, and Nuclear Engineering. From 2005-2013, he served as the Director of a New York State sponsored interdisciplinary research center, Center for Automation Technologies and Systems (CATS). He was also the Interim Director of the NSF Smart Lighting Engineering Research Center in 2009. Dr. Wen was an ASEE/NASA Summer Faculty Fellow in 1993, and a Japan Society for the Promotion of Science (JSPS) Senior Visiting Scientist in 1997. He was an Oversea Assessor for the Chinese Academy of Sciences 2004-2009. He is the co-inventor of the Adaptive Scanning Optical Microscope (ASOM), which was licensed to Thorlabs; the commercialized version of ASOM won the Laser Focus World Innovation Award in 2007 Conference in Lasers and Electro Optics. He was awarded the 2013 IEEE Control Systems Society Transition to Practice Award based on this work. Dr. Wen is a Fellow of IEEE.

**Louise Aitcheson**

Louise joined CEG as the Director of Business Development in January 2002. As the Director of Business Development, her primary responsibilities are developing the CEG’s Technology / Manufacturing Consulting Services, serving as Executive Director of the Chief Executives Network for Manufacturers (CEN), and further developing membership in CEG and CEN. Prior to CEG, Louise worked with Light & Power Communications, Ltd., as Director of Sales, Meetings & Events Group where she had a very successful track record in business development and relationship management with a national client base, which included Fortune 100 firms, governmental agencies and national associations. Prior to Light & Power, she was the Research Director for the Capital District Business Review, where her primary responsibility was compiling the weekly Top 25 Lists as well as the Book of Lists. Louise earned a B.A. in English Literature at Keuka College, Keuka Park, NY.
Mark Schmit

As MEP National Accounts Manager, Mark Schmit has a successful track record of developing outreach programs and partnerships with private-sector entities that solve real-world competitiveness problems while maintaining a mission-driven perspective. Mark identifies new business opportunities that leverage state and federal funding with the goal of improving the competitiveness of U.S.-based manufacturers. Defined as a next generation strategy, supply chain optimization is a key area of focus for Mark and MEP, respectively. Contact Mark at mark.schmit@nist.gov or read more of his posts on the Manufacturing Innovation Blog.

Michael P. Ridley

Michael Ridley is NYSTAR’s Director of High Performance Computing, overseeing the state’s research interest in the two supercomputers located at SUNY Stony Brook and RPI, as well as all IT research investments that NYSTAR is engaged in. In 2010 Michael started a mobile gaming company, Deadmans Productions. Michael designed, and developed numerous apps with a team of experienced developers, designers and other experts. Deadmans Productions achieved numerous awards and highlights in the Apple App store and have been downloaded over 250,000 times in 32 countries. In 2012 Michael became co-founder and CTO of a mobile e-commerce company, Privato Inc., Michael organized and led a multi faceted team to develop a robust e-commerce platform for high-end luxury products. In 2013 Michael was tasked to head up Governor Cuomo’s New York State Business Incubator and Innovation Hot Spot program. This is the most aggressive program of its type in the nation with a multiyear multi-million dollar plan to improve the technology transfer and commercialization from the innovation pipeline to a structured incubation program.

Johanna Duncan-Poitier

Johanna Duncan-Poitier is the Senior Vice Chancellor for Community Colleges and the Education Pipeline for the State University of New York (SUNY). She provides system oversight and coordination for SUNY’s 30 community colleges that educate a quarter of a million students with an annual operating budget of $1.8 billion. In her dual role, she also provides leadership to strengthen STEM education, teacher preparation and connections between SUNY’s 64 campuses and New York State’s (NYS) Pre K–12 schools and business leaders to improve college readiness, completion rates and prepare a highly-qualified workforce. At SUNY, she led the launch and development of a statewide collaborative of cradle-to-career partnerships, the Smart Scholars Early College High Schools, the SUNY Empire State STEM Learning Network, and the development of a multi-million dollar consortium of 30 community colleges dedicated to high-demand careers. Ms. Duncan-Poitier also serves as one of six New York State Commissioners for the Education Commission of the States (ECS). Ms. Duncan-Poitier formerly served as the Senior Deputy Commissioner of Education P-16 for the New York State Education Department; responsible for regulatory oversight of the 700 school districts, all NYS public and private colleges and universities and
the preparation and licensure of 750,000 licensed professionals in 47 health, business and design professions. In addition, she previously provided campus-based leadership for the City University of New York (CUNY) at Queens College, York College and Bronx Community College. Johanna Duncan-Poitier earned a Baccalaureate degree from Queens College and a Master’s degree from Bernard M. Baruch College, both from the City University of New York. She received two honorary degrees including a Doctor of Laws from Saint Joseph’s College and a Doctor of Humane Letters from D’Youville College. She has been recognized with numerous honors and awards, including: the Governor’s Outstanding Leadership Award; the President’s National Award for Excellence in Administering Science, Mathematics, and Engineering Programs; the Faculty Council of Community Colleges Distinguished Service Award; and the New York State Association for Women in Administration – Pathfinder’s Award.

**Patricia Downs**

Patricia Downs, Senior Workforce Advisor, is responsible for CCAT’s workforce-related activities in research and planning, program development, outreach and advocacy, information and referral, employer engagement and partner development. Ms. Downs designed and developed the CT Manufacturing Job Match, an initiative that matches pre-screened “job ready” candidates with employers in a process that incorporates services such as pre-interviews, assessments and credentials, and “speed interview events” focused on the hiring needs of manufacturers. Ms. Downs is the senior manager for a $1.3 million DoD federal planning grant awarded to the State of Connecticut under the Office of Economic Adjustment, to support and strengthen the New England region’s aerospace and defense industry sector. She also managed three previous DoD OEA grants awarded to the Town of East Hartford, to develop an employee transition service delivery model for dislocated aerospace and defense workers. Prior to her employment at CCAT, Ms. Downs worked for the State of Connecticut for 24 years in a variety of senior management positions at the Department of Economic and Community Development.

**Christopher Traci**

Chris is a Vice President at The Wessel Group, a public affairs and political strategy consulting firm focused on supporting clients seeking to expand their economic success here in the U.S. and expand market access and opportunities overseas. His clients include the United Steelworkers, as well as several other manufacturers, labor unions, and associations. He provides strategy and policy development services, as well as direct advocacy, for his clients in the areas of energy and environment, industrial and manufacturing development, infrastructure, and international trade. Chris is an advisor to United Steelworkers International President and Advanced Manufacturing Partnership Steering Committee Member Leo Gerard, and in that capacity serves on AMP 2.0’s Working Teams on the National Network for Manufacturing Innovation and Manufacturing Image. Prior to joining The Wessel Group in 2006, he spent 7 years working on Capitol Hill as a member of the Democratic Staff of the House Oversight Committee under Rep. Henry A. Waxman (D-CA). A native of Cleveland, Ohio, and graduate of Vanderbilt University, Chris lives in Alexandria, Virginia, where he spends most of his time chasing around an energetic one-year-old.