FIRST NY TECH VALLEY

REGIONAL JUDGE BIOS

2018 New York Tech Valley Regional

Rensselaer Polytechnic Institute | Troy, NY

March 15-17, 2018

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JUDGE ADVISOR

Thomas Barone, P.E. is president of Sustainable and Innovative Solutions. He is the former Senior Director of Energy and Sustainability at the NYS Office of Parks, Recreation, and Historic Preservation where he managed the energy efficiency and renewable energy programs for the Agency's 5,000 buildings. Previously, Tom was the Acting Vice President for Energy Services at the New York State Energy Research and Development Authority (NYSERDA) where he oversaw NYSERDA's operations and energy efficiency and renewable energy deployment and services programs. Tom has over 30 years of experience in the energy efficiency industry in various roles within the commercial, industrial, residential, and multi-family sectors. Tom is a licensed professional engineer in New York State and received a bachelor's degree and master's degree in Civil Engineering from Rensselaer Polytechnic Institute. Tom has judged at the NY Tech Valley Regional for four years, the New York City Regional, the Hudson Valley Regional, the Central NY Regional and the World Championships in St. Louis.

JUDGE MANAGER

John Neun, P.E. has had a long career determining how to make paper machines run more efficiently all over the world. Over the past 40 years, he has worked for manufacturing companies and consultants as a technical contributor and manager, and has developed proficiencies in machine design, structures, machine and structural vibration, experimental design and statistical analysis, project management, and paper manufacture. He is a past mentor and chairman of a founding FIRST robotics team, and has been involved in educational robotics since 1999. He has bachelor's degree and master's degrees in mechanical engineering from Rensselaer Polytechnic Institute, has six US Patents, and is a registered Professional Engineer in New York State.

JUDGES

Peter Altenburger has been with National Grid since 1992 in a number of engineering and operations roles. He currently holds the position of Director – Transmission Planning and Asset Management and leads a team of engineers responsible for performing studies and sponsoring capital projects to maintain the reliability of the transmission system in National Grid's upstate New York service territory. He received a Master of Science in Electrical Engineering from Rensselaer Polytechnic Institute and a Bachelor of Engineering in Electrical Engineering from Manhattan College.

Ross Battaglia is a veteran of the United States Navy and a resident of Malta, NY. Ross served as an electrical operator onboard two nuclear powered vessels and completed his education in Nuclear Engineering Technologies. After leaving the Navy, Ross joined KLA-Tencor as a field service engineer supporting leading edge inspection and metrology equipment. Over the past 15 years Ross has held various engineering, operations and leadership roles within KLA-Tencor and he is currently serving as the Operations Director supporting GLOBALFOUNDRIES and IBM Microelectronics.

John Boucher has been involved with FIRST in one role or another for 20 years. Parent, Lead Mentor for FRC 237, Robot Inspector and Judge. John has been judging in the New England district for 4 four years. He has judged twice at the championship. His two children are both alumni of the FIRST program. His daughter was Chief Volunteer Coordinator for the FRC program for 5 years. She is now a solutions engineer at Salesforce. His son is a design engineer at Pratt and Whitney (UTC) and a mentor for FRC 237. John has a BFA from the University of Bridgeport. John has been with Beckson MFG for 30+ years. Beckson is a manufacturer of plastic pumps and hardware for the chemical and recreational boating industry. He is currently the Technical Procurement Lead for their five divisions. He is also a principal at Applied Plastic Tech, an injection molding facility in Worcester, MA.

Robert Brennan enlisted in the U.S. Navy Submarine Force as a nuclear reactor operator. After serving seven years he honorably finished his service as a quality assurance supervisor for submarine repair activities, working across multiple ship classes and propulsion plants. After separating from the U.S. Submarine Force he joined semiconductor manufacturing as a field engineer for Tokyo Electron America where he was selected to be Engineer-in-Charge and Project Manager for the Single Wafer Deposition department. There he installed, maintained, modified, and repaired various engineering machines and processes from reactive ion etching to atomic layer deposition. Robert currently works as a Staff Equipment Engineer and Project Manager at GLOBALFOUNDRIES in Malta, New York. He has years of experience in the troubleshooting and repair of various atmospheric and vacuum manufacturing robots including those of Yaskawa, Kawasaki, Brooks Automation, and the JEL Corporation. Robert has a Bachelor's of Science in Electrical Engineering and has a career focus in power systems, robotics, and leading engineering projects.

Patrick Corrigan is a school administrator with 22 years of experience in education. In addition to being a principal at both Voorheesville High School and Amsterdam High Schools he has taught economics, psychology and US History. While he still holds teaching credentials in social studies and business, he was originally certified to teach math. He has coached a variety of athletic teams ranging from youth level soccer to collegiate rugby. Patrick has also advised high school extracurricular teams in the Fed Challenge and Model United Nations. He extends his congratulations to the students for their hard work and his appreciation to coaches, advisors and parents for their support in this valuable endeavor. Patrick has a bachelor's of science from SUNY Albany and a master's of science in educational administration from SUNY Brockport.

Lynn DeRose has worked at General Electric's Global Research Center for 28 years and is a member of the Software Systems Technology Lab. She is currently working on developing technologies to enable the Industrial Internet of Things and Inspection as a Service. Her work is helping machines to become self and environmentally aware to enable GE's Brilliant Factories. She is currently working on the development of a system to digitize and optimize manufacturing of autologous medicine, specifically CAR T manufacturing. She is the project leader for RFID implementation at various GE businesses. Her formal education is in Chemistry but she has been working in the field of asset tracking, locating and condition monitoring for the past 18 years. Lynn has been the guest speaker at multiple international conferences, published several papers and filed more than 25 U.S. Patents. Lynn has been a volunteer for the FIRST Technology Challenge and the FIRST Robotics Challenge in the Greater Albany NY area for the past 5 years and recently started a Lego League Jr. team at GE Research.

Bill Fosnight, P.E. is Co-Founder and Chief Development Officer at Alert Innovation, a Boston-based robotics start-up with a mission to improve people's lives through innovation, starting with retail. He was previously Senior Director of Manufacturing Technology at GLOBALFOUNDRIES where he led the deployment of manufacturing automation and software systems worldwide. Prior to joining GLOBALFOUNDRIES, Bill was Senior Vice President of Engineering at Brooks Automation where he directed the development of factory automation and semiconductor process equipment. Prior to Brooks, Bill worked with Asyst Technologies where he managed product development and IBM where he conducted semiconductor manufacturing research. Bill has been awarded 57 patents in manufacturing automation over the course of his 30 year career. He holds an MBA from Cornell University and a Master of Science in Mechanical Engineering from Rensselaer Polytechnic Institute.

Wayne Gannett, P.E. is a Senior Water Resources Engineer with the Albany office of Bergmann Associates, PC. Prior to that, he was the Principal Hydraulic Engineer with the New York State Department of Transportation (NYSDOT). He supervised the Hydraulic Engineering Unit in the Structures Division for 11 years,, where he was responsible for stream hydraulic and scour analysis for new and rehabilitated bridges, as well as special projects in stream stability and highway protection, and climate change adaptation for NYSDOT. He is a member of the Transportation Research Board (TRB) Committee AFB60 on Hydraulics and Hydrology, and the American Society of Civil Engineers (ASCE). Mr. Gannett holds a B.S. in Civil Engineering from the University of Massachusetts and an MBA from Rensselaer Polytechnic Institute.

Jeffrey Goldmeer has worked at GE for more than 15 years. Currently he is the Director of Gas Turbine Combustion & Fuel Solutions at GE Power. Jeffrey has more than 18 years of experience in developing technologies related to fuels and combustion systems. He currently holds 11 patents on a range of combustion, propulsion and measurement technologies. In his current role, Jeffrey is responsible for the strategic development of gas turbine technologies supporting the use of alternative power generation fuels around the globe. Prior to this role, he was the manager of the Combustion Laboratory at GE's Global Research in Niskayuna, NY. Jeffrey received his Ph.D. in Mechanical Engineering from Case Western Reserve University; as part of his dissertation, he performed combustion experiments on board NASA's low-gravity research aircraft (aka the Vomit Comet). He received B.S. and M.S. degrees in Mechanical Engineering from Worcester Polytechnic Institute.

David Gross is a Manufacturing and IT Systems Executive delivering automated manufacturing solutions for customers worldwide. David is currently President of Automated Manufacturing Solutions, LLC leveraging his broad experience designing and delivering automation and manufacturing system technology. He previously held Director of Manufacturing Technology positions at GLOBALFOUNDRIES and Advanced Micro Devices where he led international efforts to deliver advanced manufacturing solutions capability globally. In a semiconductor manufacturing career spanning 30+ years, he led numerous manufacturing start up teams in the US, Europe and Asia. His expertise is leading large teams of manufacturing and engineering management, including business integration through mergers/acquisitions, automation of manufacturing systems, and equipment controls in manufacturing. In addition, David has been active with the following professional affiliations: Industry Board of Advisors, Rensselaer Polytechnic Institute (RPI) Center for Automation Technology and Systems, 2010-2016; Industry Chair, IEEE Robotics and Automation Society, 2009–2013; Steering Committee, Advanced Semiconductor Manufacturing Committee IEEE, 2000 – present. Dave has been a FIRST Robotics Volunteer and Competition Judge annually since 2014.

Yesenia Herarte is the Lead Supplier Quality Engineer at GE Power. A native of the Dominican Republic, Yesenia graduated with a B.S. in Mechanical Engineering and a Masters in Mechanical Engineering from City College, CUNY. She is a former Internal Vice President of the Latin American Engineering Students Association-Society of Hispanic Professional Engineers at City College, and currently an active member of General Electric Hispanic Forum (GEHF). A strong advocate for the advancement of the Hispanic Community, Yesenia has championed numerous FIRST activities and teams in New York City and Capital Region, inspiring hundreds of students into science and technology, particularly in South Bronx, Amsterdam, and Schenectady schools. Yesenia is an accomplished athlete, and a terrific volleyball player.

John Kent spends his career focused upon the design, development and manufacturing of semiconductors. He joined GLOBALFOUNDRIES quite recently, having moved to NY from Palo Alto, California. John has had executive technology roles at GLOBALFOUNDRIES, KLA-Tencor, Rambus and AMI Semiconductor. His early career years were spent at IBM Burlington, Vermont and East Fishkill, New York. John has worked on both logic and memory development over the years and currently heads the worldwide program management office at GLOBALFOUNDRIES. John holds a Bachelor's of science in Chemical Engineering from Michigan State University.

Martha McCormick is Director of Education for To Life!, a Capital Region Breast Cancer support organization. Previously she spent most of her career at Rensselaer Polytechnic Institute in professional student life positions, and as an instructor of professional and leadership development for Engineering and Management undergraduate students. She has been Director of Training and Consulting, as part of Capital Employee Assistance Program, providing specialized training, staff development and Human Resource Development support throughout the region. She holds a master's degree in Counseling Psychology and Student Development from the University at Albany SUNY.

Greg Mohr is an Advisor Engineer for the Naval Nuclear Laboratory, operated by Bechtel Marine Propulsion Corporation. He currently works at the Knolls Atomic Power Lab in Niskayuna, NY, and served previously at the GE Global Research Center and GE Inspection Technologies. He earned a Ph.D. degree in experimental physics from Washington University in St. Louis, is a Fellow of the American Society for Nondestructive Testing and a member of the Nondestructive Testing Committee of ASTM International, and holds 15 US patents. He has significant technical experience in industrial x-ray nondestructive testing and imaging applications, and in the development of digital imaging, computed tomography, and filmless radiography products and technologies. "Doc" is dedicated to teaching and training the next generation of technical achievers, and has been active in FIRST Robotics since 2010.

Philip Mueller is the Knolls Laboratory Site Director at the Bechtel Marine Propulsion Corporation Naval Nuclear Laboratory (BMPC), for Knolls Laboratory. He brings 35 years of professional experience to the field. Previously, he was the Test Operations Manager and the Prototype Operations Manager at the Knolls Atomic Power Laboratory. He was the Plant Manager for Lockheed Martin Information Technology for six years. Mr. Mueller has a degree from the US Merchant Marine Academy.

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Dr. Ted Nygreen is a retired computer scientist, CIO, corporate Managing Director, and college STEM Dean. Ted was VP of MIS at NBC, and then spent 15 years as Managing Director of an international management consulting firm. His corporate career continued with 12 years as General Manager of a broadcast software company with offices in 18 countries, until he retired and served as a dean in higher education. Ted earned a BS from MIT and Ph.D. from Princeton.

Ryan Oldaker is a project lead with ASML supporting GLOBALFOUNDRIES and has been with the company since 2006. His current project is the introduction of extreme ultraviolet lithography systems at GLOBALFOUNDRIES enabling next generation semiconductors. His focus is system evaluation relating to performance issues and repairs, leading to development of strategies to improve performance, uptime and repairs. His previous project at GLOBALFOUNDRIES included overseeing the successful implementation of over 25 lithography and metrology machines. Prior to moving to New York, Ryan led the introduction of NXT systems at IM Flash in Lehi, Utah. He also began his career with ASML as a service engineer in Lehi before becoming a project lead. Ryan is also a veteran of the Army having served in Iraq for Operation Iraqi Freedom. He has a Bachelor's of Science in Electronic Engineering from DeVry University.

John Prybylowski is Technology Director for the Naval Nuclear Laboratory operated by Bechtel Marine Propulsion Corporation. He has been at Knolls Atomic Power Lab in Niskayuna, NY since 1987. In his current role, he is responsible for developing reactor design technology, core and structural materials, and component and chemistry technologies in support of our Nation's Naval Fleet. He previously served as Materials Development Operation Manager, responsible for the support of manufacturing critical materials, managing corrosion science and testing programs and developing advanced materials to enable advanced propulsion systems. John is the executive sponsor for KAPL's Women in Nuclear affinity group and KAPL's Health and Wellness Initiative. He earned Ph.D. and M.S. degrees in Metallurgy from the Massachusetts Institute of Technology and also a B.S. in Materials Science and Engineering from MIT.

Paula Rosenberg is a Marketing/Communications professional who recently retired as Program Manager of the New York City office of the New York State Energy Research and Development Authority (NYSERDA). In her 25 years with NYSERDA, she worked in a variety of positions, ranging from writing and editorial, to project management, assistant director of the NYC office, and as NYSERDA representative to the Tech Valley Angel Network (TVAN). At TVAN, Paula vetted companies and entrepreneurs with the potential to participate in NYSERDA's research and development or deployment programs. Her background includes more than a decade of owning a marketing firm and a more than eight years with General Electric's Corporate Communications and Marketing Operations. Paula holds a BA and MLS from the State University of New York at Albany, and is currently creative director of Art & Design.

Andrea Schmitz has 29 years of R&D experience, with 25 of them at General Electric's Global Research Center. She's currently working as a Sensor Electronics Engineer focused on system design and development of software and electronics for Additive manufacturing, medical and industrial applications. Andrea has worked in a variety of research areas including polymer modeling, non-destructive testing and inspection systems for aviation and industrial applications, systems and detectors for healthcare. Andrea was the PI and Project Leader on several government sponsored healthcare system and detector development programs. Applications for these technologies include Breast Cancer detection using Digital Breast Tomosynthesis, increasing imaging access with a portable x-ray system for military or rural hospital use and translating portable, digital technology to the industrial world through development and modification of new x-ray detectors. Andrea earned her B.S. and M.S. degrees in Computer Science from Rensselaer Polytechnic Institute. She is a co-inventor on 5 patents and has over 15 publications and several conference presentations to her credit. Andrea has been a volunteer for the FIRST Technology Challenge and FIRST Robotics Challenge judge for the past 3 years. She is active and passionate about with STEM efforts, including mentoring including being an active member of the Rise-High Board, acting as a Technical Advisor to the program.

Jeff Shein joined Regeneron Pharmaceuticals in Rensselaer, New York in 2011 where he currently works as a Principal Technology Analyst. He is responsible for the assessment and planning of innovation initiatives that involve new and emerging technology. Jeff works closely with the business to define, develop and build proof of concepts or prototypes, detect emerging trends and make recommendations for IT related change. Jeff has more than 15 years' experience managing IT help desks and implementing new technologies in New York City for major advertising and event marketing agencies and has deep knowledge of the IoT (Internet of Things) and gadgets. Jeff holds a B.S. in Communications from St. Johns University.

Dr. William M. Sudduth (known as Mac) spent 42 years building and directing hands-on science centers (museums). Before that he worked for the government as a chemist. He has built and or directed science centers in Oklahoma City; Durham, North Carolina; Louisville, Kentucky; Vancouver, British Columbia; Dallas, Texas; Atlanta, Georgia; and Schenectady, New York (He retired in February 2018). He had served as project manager for two national traveling exhibits and an advisor to 4 IMAX films including one produced by Disney. In his retirement he continues to consult for museums, schools and nonprofits interested in STEM education. He also serves a grant reviewer for NASA, NSF, IMLS, and NEH.

Gene Terwilliger is the Enterprise Integration Director for the Naval Nuclear Laboratory operated by Bechtel Marine Propulsion Corporation. He has been at Knolls Atomic Power Lab in Niskayuna, NY since 1989. In his current role, he is responsible for Information Technology, Materials Management, Procurement, Security, Communications, Project Management and Continuous Improvement. He previously served as Advanced Technology Programs Manager, responsible for thermal hydraulics and structural development, advanced concepts, and scientific programming. Gene also is the Naval Nuclear Laboratory's Spokesperson. He earned B.S. and M.S. degrees in Mechanical Engineering from Union College and a MBA from Rensselaer Polytechnic Institute.

Esther Vargas joined Rensselaer Polytechnic Institute in 2014 as the Director of the Emerging Ventures Ecosystem (EVE), the Institute's venture development program. She was previously Assistant Director of Research and Commercialization and Incubator Site Manager at the University of Central Florida since 2007. Prior to becoming a business incubation professional, Esther spent 12 years in the corporate pharmaceutical and hospitality industries, and 12 years in the entrepreneurial domain as a founder and/or co-founder of four startup ventures in the for-profit and not-for-profit sectors. Her areas of expertise include strategy, commercialization, business and resource development, systems and processes, and project management. Esther holds an MBA in New Venture Development and Marketing from the Kelley School of Business at Indiana University-Bloomington, and a BBA in Managerial Economics from the Inter American University of Puerto Rico.