ACADEMY OF DISTINGUISHED ENGINEERS
Class of 2021

UCONN | SCHOOL OF ENGINEERING
This honor recognizes School of Engineering alumni and friends for their exemplary contributions to the engineering profession through research, practice, education, policy, or service. As leaders and model citizens, these individuals bring pride to UConn Engineering.
Dr. Bruce Abraham is the Chief Technology Officer and a VP at the General Dynamics Applied Physical Sciences Corporation (APS).

He is a member of the American Society of Mechanical Engineers and an associate member of the Acoustical Society of America. Recently he joined the Advisory Board of the National Institute for Underwater Vehicle Technology (NIUVT). He has a background in acoustics, hydro-acoustics, structural acoustics, transducer design, hydrodynamics, and multi-sensor test and evaluation systems largely applied to U.S. Navy manned and unmanned future systems.

While working at the Naval Undersea Warfare Center (NUWC) he earned his M.S. and Ph.D. from the University of Connecticut in Mechanical Engineering to complement his Mechanical/Materials B.S., also from UConn. His recent work involved developing a special submarine towed array to measure in-situ forces, moments and components strains to help inform reliability predictions. He managed a high-energy, high-powered lithium-ion battery development effort for DARPA as well as an actuated underwater hydrodynamic drag reduction system. Abraham helped develop high-performance, low-cost single crystal vector sensors for large acoustic array systems as well as other specialized sensors. He also helped develop a large Marine Vibrator acoustic source system that is currently undergoing reliability testing. This system will eventually replace air gun arrays and is deemed more environmentally friendly due to the lower sound pressure levels and coherent nature of the output signals.

His education at UConn included a balance of theoretical and practical instruction that contributed to his career development and technical successes.
Kelly Azeredo is currently a Research and Development Director for Medtronic. She is responsible for driving engagement and alignment across R&D throughout enterprise-wide initiatives.

Throughout her 11 years at Medtronic, Azeredo has held various positions in R&D, specifically working on new product development of surgical instrumentation. Most recently, she built the systems engineering infrastructure and capability for Medtronic’s North Haven, CT site. Her experiences include both the advancement of technology for medical devices, as well as implementing business systems, processes, and tools to improve overall organizational performance.

In addition to her strong technical leadership at Medtronic, Azeredo has been an advocate and partner for diversity and inclusion. She has led site-wide initiatives for women in science and engineering, R&D diversity and inclusion councils, and co-founded a R&D professional development program facilitated through educational courses provided to employees taught by their colleagues.

Azeredo graduated from the University of Connecticut in 2009 with a B.S. in Biomedical Engineering. She holds an MBA from Western New England University. She is a Design for Six Sigma Black Belt and has been named an inventor on ten U.S. patents. In 2017, she was a Connecticut Technology Council Women of Innovation® finalist for Research Innovation and Leadership.

Born and raised in Connecticut, Azeredo continues to reside in the great state with her husband. She stays active with her alma mater as a member of the UConn School of Engineering Professional Education Advisory Board. She is an avid reader and enjoys boating and traveling with her family.
Mark DiZio is a retired senior executive at ExxonMobil where he held leadership roles of increasing responsibility in areas of commercial, supply, marketing, and mergers & acquisitions over a 34-year period.

DiZio joined Mobil Corporation in 1981 and served in various supply roles in NYC until being transferred to London in 1985 as a commercial trader. After two years in London, he moved back to NYC as planning manager for Asia, and in 1989 moved to Singapore to become Mobil Asia's Commercial Manager. In 1995, DiZio became the West Coast Commercial and Logistics Director, located in Los Angeles and in 1987 he was transferred to Mobil headquarters in Virginia as Manager of Commercial and Pipeline Operations. In 1988, he became Chairman of Mobil Southeast Asia in Kuala Lumpur, Malaysia and when Exxon merged with Mobil in 1999, he was transferred back to Virginia to become the Global Commercial and Supply Manager, responsible for ExxonMobil's worldwide product supply and commercial activity. He served in this capacity for 12 years before becoming an executive involved in ExxonMobil's Merger and Acquisition activity until retirement.

A native of Washington, D.C., DiZio holds a B.S. in Mechanical Engineering from UConn (‘78), summa cum laude, and a MBA from the University of Chicago (‘81) with concentrations in finance and accounting.

He and his wife Ellen reside in Sarasota, Florida where they spend time volunteering, playing golf and traveling to visit children and grandchildren who live throughout the U.S. and Europe.
Andrew Gere is the President and COO for San Jose Water Company (SJW), an investor-owned water utility serving one million people in California’s Silicon Valley. The company is the largest subsidiary of SJW Group, which also owns Connecticut Water, the utility that provides water to the Storrs campus. He is a 25-year veteran of the company, and he began his career as a public health regulator with the California Division of Drinking Water.

Gere is a seasoned utility executive with over 29 years of experience across all facets of the industry, including operations, engineering, asset management, rate regulation, water resources, sustainability, public health, government affairs, regulatory compliance, organizational development, and emergency management.

Gere led the SJW team on the $62 million Montevina Water Treatment Plant project, which upgraded an aging direct filtration plant to a state-of-the-art ultrafiltration facility.

He has authored papers and articles on a broad range of topics related to the water utility industry including water treatment, workforce development, treatment plant construction and water quality.

Gere earned his B.S. in Civil Engineering from UConn in 1992 and an MBA from Santa Clara University in 2002. He holds a P.E and a T4 Water Treatment Plant Operator license. He served as Chairman of the National Association of Water Companies in 2020, currently chairs the Valley Water District Retailers’ Association, and was recently appointed co-chair of the Water and Energy Committee for The Silicon Valley Organization. He is also active with the American Water Works Association and the California Water Association.
Dipayan Ghosh is Co-Director of the Digital Platforms & Democracy Project at the Harvard Kennedy School, where he conducts economic and technology policy research on matters concerning the internet. He is also Lecturer on Law at Harvard Law School, where he teaches on the economics of internet monopolization.


Ghosh previously worked on global privacy and public policy issues at Facebook, where he led strategic efforts to address privacy and security. Prior, Ghosh was a technology and economic policy advisor at the White House during the Obama Administration. He served across the Office of Science & Technology Policy and the National Economic Council, where he worked on issues concerning big data’s impact on consumer privacy and the digital economy. He has also served as a fellow at New America and the Center for Democracy and Technology.

Ghosh received a Ph.D. in electrical engineering & computer science at Cornell University, an MBA from the Massachusetts Institute of Technology, and a B.S.E. from the University of Connecticut. His doctoral thesis examines the economic conditions under which corporates and consumers can be encouraged to adopt strong privacy standards. In 2016, *Forbes Magazine* recognized Ghosh as one of the “30 Under 30” leaders in Law & Policy.
Danyel Racenet has an 18-plus years tenure with Medtronic and 24-plus years in the industry of biomedical engineering, contributing on all levels of engineering from research and technology development to product development.

She is currently responsible for leading all R&D functions inclusive of research & technology, new product development and released product management to support the growth and strategy of Medtronic’s ENT operating unit. Her team of highly skilled scientists and engineers design complex hardware, precision instrumentation and drive therapy innovations that set the standard for ENT care with an emphasis on minimizing complications, reducing surgical variability and increasing efficiency to improve patient outcomes. She ensures technical employees are valued and lead in their domain and leverages the scale and breadth of capabilities and talent at Medtronic to create new technologies to solve customers’ clinical and economic challenges.

Racenet has launched numerous medical devices during her tenure at Medtronic and holds several patents in medical device technology. She has a B.S. in Engineering and Math from Hofstra University and an M.S. in Biomedical Engineering from the University of Connecticut and is Design for Six Sigma Black Belt certified. She is a Medtronic certified coach and works with senior leadership to create an inclusive R&D culture in which female scientists and engineers are inspired to join, thrive, and reach their full potential. Additionally, she dedicates her time outside of work mentoring and getting involved in STEM programs in her community.
David Racenet is currently the Vice President of Research and Development for the Enabling Technologies operating unit within the Neuroscience portfolio at Medtronic. Enabling Technologies specializes in the development of advanced imaging, navigation and robotic solutions for cranial and spine surgery applications. Racenet previously served as Vice President, R&D-Surgical Innovations, part of the Medtronic Minimally Invasive Therapies Group.

Racenet is a proven R&D leader with over 25 years’ experience in developing innovative surgical devices, he holds over 150 medical device patents filed for global commercial use in Medtronic’s core product lines. He began his career in 1993 as a mechanical design engineer where his work contributed to the development of numerous laparoscopic surgical products that helped revolutionize minimally invasive surgery.

In 2016, he was inducted into the Bakken Society, where today he is the current chair, for his innovation and original work throughout his career. Named after Medtronic’s founder, former CEO and inventor of the pacemaker, Earl Bakken, induction into the Bakken Society is the highest technical honor given at Medtronic.

At Medtronic, Racenet has provided product development leadership, portfolio and investment management guidance as well as leading a 200+ person organizations across numerous global R&D centers of excellence. In addition, while at Medtronic, he co-authored several publications in the Journal for Surgical Research (JSR).

Racenet received his BS in Mechanical Engineering from the University of Connecticut and holds executive certificates in strategy and innovation management and leadership from MIT Sloan.
Paul C. Stuart has 30 years of experience in the health care industry at Pfizer, Inc. and Procter and Gamble Company, Inc. Stuart’s professional background includes leadership roles in research and development, engineering, manufacturing, outsourcing, licensing and development, finance, and supply chain management.

As Vice President of the Drug Product Supply organization at Pfizer Worldwide Research and Development, Mr. Stuart has global responsibility for drug product development and manufacturing, materials management, and sourcing activities in support of clinical trials conducted globally by Pfizer, Inc. He also serves as the executive sponsor for the Digital Acceleration strategy for the Pharmaceutical Sciences organization. Stuart currently oversees all R&D drug product manufacturing assets and inventory facilities as well as a global network of external contract service providers. His group supports clinical supplies needs across all phases of development, including pre-registration programs in Phase I-III, technology transfer and commercialization, and post-marketing Phase IV studies.

He earned his B.S. in Chemical Engineering from the University of Connecticut and his MBA degree from the Lally School of Management at Rensselaer Polytechnic Institute. He is a member of the American Institute of Chemical Engineers and the International Society for Pharmaceutical Engineering and sits on several academic and professional advisory boards. He is a recipient of the Pfizer Global Research & Development Achievement Award.
Michelle Tomasko has over 20 years of technical leadership in the silicon industry and a proven track record for propelling engineering teams to success on ambitious programs with aggressive schedules. She has a passion for data parallel computation, microprocessor architecture and low-power designs. Michelle is currently co-founder and Vice President of Software at photonics-based machine learning chip startup, Celestial AI.

Prior to founding Celestial AI, Tomasko was VP of Engineering at Particle, an IoT startup, and VP of Engineering at Groq, a machine learning silicon startup. In the past, she worked for leading technology companies including NVIDIA, Google Robotics, Google Consumer HW Silicon, and Transmeta. At NVIDIA, she drove all aspects of software for new GPU architectures, from inception to first production. Tomasko also led the SW effort for NVIDIA’s first consumer Android device, Shield. She delivered Google’s first machine learning/image processing accelerator system on a chip, the Pixel Visual Core for the Pixel 2 phone.

Tomasko graduated from UConn in 1995 with a B.S. in Computer Science and Engineering and received her M.S. in Computer Science in 1997 from Colorado State University.
Dr. Robert Tomastik is the Technical Fellow of Operations Research at Pratt & Whitney. Through his role, he provides technical leadership in developing and applying operations research and analytics methods in supply chain management functions including demand forecasting, sales and operations planning, inventory management, and manufacturing scheduling.

He made outstanding technical contributions to enable Pratt & Whitney to consistently achieve benchmarked world-class performance in spare parts on-time delivery and inventory. He also helped elevate the performance of manufacturing at the company by developing and deploying the following: optimization-based sales and operations planning, a pull replenishment system, performance metrics, and strategic inventory buffering. He previously worked at United Technologies Research Center (now Raytheon Technologies Research Center), where he created and led an operations research group that successfully developed and deployed results in supply chain management decision support technologies that has significantly benefited the company. UTRC’s accomplishments include deploying factory scheduling software at five factories, using discrete-event simulation to re-design the layout of two factories, re-designing a company transportation network, and working various collaborations with government and academia that led to research publications and patents. He started his career at General Electric in the Edison Engineering Program developing control systems for various military products. Tomastik has published seven journal papers, 11 conference papers, and two book chapters, and he has eight patents and two trade secrets.

He earned a B.S. and Ph.D. in electrical & systems engineering from UConn and a MEng degree in electrical and computer engineering from Rensselaer Polytechnic Institute.
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Ronald Jacoby
(Front) Hannah Leonard, and Sarshad Rommel, both Graduate Student in Materials Science and Engineering using an electron microscope at the Innovation Partnership Building (IPB).
We welcome your insight!

To nominate an individual for the Academy of Distinguished Engineers, please email engr-academy@uconn.edu.

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