



**Resilience through Data-Driven, Intelligently
Designed Control (RD2C) Initiative
Advisory Committee**



Anuradha Annaswamy

Dr. Anuradha Annaswamy is founder and director of the Active-Adaptive Control Laboratory in the Department of Mechanical Engineering at the Massachusetts Institute of Technology (MIT). Her research interests span adaptive control theory and its applications to several engineering systems—including aerospace, automotive, propulsion, and energy systems—cyber-enabled energy grids, and urban mobility. She has received best paper awards (Axelby; CSM), Distinguished Member and Distinguished Lecturer awards from the IEEE Control Systems Society (CSS) and a Presidential Young Investigator award from NSF. She is a Fellow of IEEE and IFAC. She is the recipient of the Distinguished Alumni

award from Indian Institute of Science for 2021.

Anu Annaswamy is the author of a graduate textbook on adaptive control and several journal and conference publications, and coeditor of two vision documents on smart grids, two editions of the *Impact of Control Technology* report, and the 2023 CSS report *Control for Societal-scale Challenges: Road Map 2030*. She is also a coauthor of a 2021 National Academy of Sciences, Engineering, and Medicine (NASEM) Committee report on the Future of Electric Power in the United States, and a 2023 NASEM report on the *Role of Net-metering in the Evolving Electricity System*. She served as the president of CSS in 2020. She has been serving as a faculty lead in the Electric Power Systems workstream in the MIT Future Energy Systems Center since September 2021.



Jean Bélanger

Jean Bélanger is the cofounder, CEO, and CTO of OPAL-RT Technologies. Under his direction and technological leadership, OPAL-RT has become a well-known developer of state-of-the-art, real-time simulators capable of simulating all types of mechanical and electrical systems, including the fastest power electronic converters used in a wide range of industries—from hybrid vehicles to electrical-driven aircraft, and from microgrids to large AC/DC power systems.

Mr. Bélanger has over 52 years of professional experience. He began his career at Hydro-Quebec's System Planning Division for the design of several aspects of the James Bay 735 kV transmission systems. He also worked at the IREQ where he contributed to the design and construction of Hydro-Quebec real-time simulators.

Mr. Bélanger is a member of the Ordre des ingénieurs du Québec, the Institute of Electrical and Electronics Engineers, CIGRE, and the Canadian Academy of Engineering. He received his electrical engineering degree in 1971 at Laval University in Quebec City, and his master's degree from the École Polytechnique in Montreal.



Christopher Butera

Chris Butera is the senior technical director for the Cybersecurity Division of the Cybersecurity and Infrastructure Security Agency (CISA). In this role, he focuses on advancing CISA's cyber capabilities and services, leading CISA's zero trust efforts, prioritization of cyber research and development, and strategic work in the industrial control systems and operational technology space.

Mr. Butera has over 20 years of experience serving in various cybersecurity and information technology leadership positions in federal and local government, as well as the private sector. Throughout his federal career, he has led much of CISA's cyber defense operations, including the federal government's response to significant cybersecurity incidents.

Previously, Mr. Butera briefly served as the acting deputy executive assistant director for the Cybersecurity Division during the 2021 presidential administration transition. Prior roles at CISA include associate director of threat hunting, deputy director of the National Cybersecurity and Communications Integration Center (NCCIC), and chief of the NCCIC Hunt and Incident Response Team.

Mr. Butera's interests lie in analyzing new forensic artifacts, developing new analytical tools, vulnerability research, and emerging technologies. He holds a bachelor's degree in computer science from the University of Notre Dame and a master's degree in computer science from the University of Chicago. He also holds several industry technical certifications.



Jerry Dixon

Jerry Dixon has held multiple security leadership positions at top-tier organizations such as CrowdStrike, American Express, Cisco, U.S. Government, and Marriott. In his most recent role as chief information security officer at CrowdStrike he led the information security program and risk reduction efforts. He has a wide range of cybersecurity experience from his time on the front lines of incident response, cyber crisis management, national

cybersecurity policy and critical infrastructure protection. He holds a master of science degree from Norwich University in information assurance.

Sandra Finan

Major General Sandra Finan retired from the United States Air Force in 2017 after 34 years of service. She enlisted in 1982 and was commissioned in 1985. She earned her Intercontinental Ballistic Missile Certification (ICBM) in 1987 and has over 4,000 hours of ICBM alert duty.



Major General Finan's last duty assignment was as the Office of the Secretary of Defense's deputy chief information officer for Command, Control, Communications, Computers, and Information Infrastructure Capabilities. Previously, she was the commander of the Air Force Nuclear Weapons Center.

Additionally, she has served as the principal deputy assistant administrator for Military Application at the Department of Energy's National Nuclear Security Administration and as the inspector general for Air Force Global Strike Command. Major General Finan has also

commanded an intercontinental ballistic missile wing and a Space Operations squadron. She deployed to the combat zone for IRAQI and ENDURING FREEDOM as the director of Space Forces. Prior to accepting a position at Pacific Northwest National Laboratory as an advisor, she was an independent consultant for several companies and national laboratories.



Jessica Inman

Dr. Jessica Inman is division chief of the Assured Software and Information Division and a senior research scientist within the Cybersecurity, Information Protection, and Hardware Evaluation Research laboratory of the Georgia Tech Research Institute (GTRI). Dr. Inman is currently leading the TROLLS GTRI SI IRAD, which focuses on trusted and resilient online learning systems, and is the principal investigator (PI) for the Trustworthy AI project, which focuses on the development, assessment, and validation of trustworthy AI models. Dr. Inman was PI for DARPA SHEATH, a microsystems exploration topic dedicated to the discovery of hardware trojans, and AFRL ECHIDNA, a research project exploring novel adversarial attacks against a machine learning system. Dr. Inman has experience with a wide variety of artificial intelligence and machine learning (AI/ML) topics, including adversarial machine learning, anomaly detection, and natural language processing. Dr. Inman has led diverse teams of data scientists and AI/ML researchers by providing technical thought leadership and material algorithm development to projects performing statistical analysis, modeling, visualization, and AI/ML implementation on a diverse set of Department of Defense problems. Dr. Inman has an extensive history of algorithm development and numerical analysis. Her PhD and related postdoctoral fellowship at the University of Florida focused on developing, evaluating, and analyzing novel algorithms and models for computational biology applications.



Stuart Laval

Dr. Stuart Laval is a global engineering director of the Distributed Energy Resource Management Systems Center of Excellence within the electrical sector at Eaton, a power management company. In this role, he is responsible for building and leading a global team of engineers to develop advanced control algorithms and embedded platforms that support Eaton's Distributed Energy Resources and microgrid product strategy.

Additionally, Dr. Laval is the board chair for the UCA International Users Group and serves as co-chair of its Open Field Message Bus (OpenFMB) users group.

Dr. Laval has nearly 20 years of technology development experience in electric utility power systems, telecommunications, and power electronics. He holds bachelor's and master's degrees in electrical engineering and computer science from MIT, an MBA from Rollins College, and a PhD in industrial engineering from the University of Central Florida. He is a certified professional engineer in the state of North Carolina.



Philip Quade

Phil Quade is COO of Evolution Equity Partners, an international venture capital firm with offices in New York, Palo Alto, London, and Zurich. He enables investors and exceptional entrepreneurs in Western-alliance countries to develop market-leading cybersecurity and enterprise software companies. He is also a member of several boards.

From 2017 to 2021, Mr. Quade served as CISO of Fortinet, a Silicon Valley S&P 500 cybersecurity company. As a senior executive and technologist with deep operational experience, he served as a strategic consultant to large enterprises, was a trusted advisor to governments worldwide, formed coalitions to solve large problems, and ran operational and product security. He also led Fortinet's critical infrastructure protection practice and chaired the board of Fortinet's Federal subsidiary.

Previously, Mr. Quade was a senior executive at the National Security Agency (NSA), most recently as the director's special assistant for cyber and chief of the Cyber Task Force. He represented NSA at the White House on national strategy, policy, budget, and intelligence and attack operations. Immediately prior, he was COO of the NSA directorate responsible for government classified information systems and nuclear command and control codes. Over his 30+ year career with NSA, he also previously served the United States Cyber Command, the United States Senate, the director of National Intelligence, and a special CIA/pentagon joint center.



Jess Smith

Dr. Jess Smith is a senior cybersecurity research scientist with experience working across both government and industry. At PNNL, Dr. Smith's research focuses on industrial control system and supply chain cybersecurity, and she has led research projects in everything from exploring state machine reverse engineering to defining resiliency mathematically in cyber systems. She is currently leading PNNL's supply chain integrity efforts, which support multiple government agencies.

Prior to PNNL, Dr. Smith worked in industry at Schweitzer Engineering Laboratories, Inc., MITRE Corp., and interned at NASA. After completing both an MS and BS in computer engineering at the University of Idaho, she earned her PhD in computer science from Washington State University. She has her CISSP and CSSLP certifications and is a member of IEEE.



Bobbie Stempfley

Bobbie Stempfley is a leader in the field of the security and use of technology to transform operations. She is currently serving in an executive leadership role at Dell Technologies, overseeing Dell's efforts to secure its products and services.

Ms. Stempfley has served in executive leadership roles in the Department of Homeland Security and the Department of Defense, where she led efforts to engage with critical infrastructure, the United States government department and agencies, and industry to raise awareness, reduce risks, and prepare and respond to cyber events as the assistant secretary for Cybersecurity and Communications. Previously, Ms. Stempfley served as the chief information officer of the Defense Information Systems Agency, with responsibility for the digital transformation of a major defense agency to improve the speed and efficacy of the capabilities put in the hands of war fighters and their mission support organizations.

She currently serves on the board of Center for Internet Security, an operating not-for-profit organization providing cybersecurity services for state, local, tribal, and territorial governments. She also serves on advisory boards at PNNL.



David Isaac Toledo

Isaac Toledo manages the Cyber-Physical Mission R&D Group, which performs research and development to assess and protect cyber-physical systems. The group maintains a wide variety of skill sets and capabilities, which enables it to analyze cyber-physical systems from a broad view down to individual components. The group provides innovative research and development in the cyber-physical domain for national security missions.

Mr. Toledo's career spans more than 20 years at Sandia National Laboratories, including 7 years in management. Isaac possesses a wealth of experience in a variety of technical domains. He has a deep devotion to the national security mission and a demonstrated ability of building trust-based collaborative relationships. Isaac possesses a BS and MS in computer science.