



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



Jean Bélanger

Jean Bélanger is the co-founder, 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 48 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, 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 IT 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.



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.



Zhenyu (Henry) Huang

Dr. Zhenyu (Henry) Huang is a Laboratory Fellow at PNNL and holds a joint appointment as a research professor at Washington State University. From 2019 to 2020, he was a technical advisor at the DOE EERE Solar Energy Technologies Office (SETO), where he assisted SETO's Systems Integration Team in developing a research strategy for modeling, simulation, optimization, and control of solar generation for increasing its penetration in the power grid.

At PNNL, Dr. Huang leads the power electronics and grid integration portfolios. His research interests include high-performance computing, data analytics, and optimization and control for power and energy systems. He also served as manager of the Optimization and Control Group, focusing on developing and adapting math, computing, and data analytical techniques to understand and manage the emerging complexity in the power grid and other associated infrastructures.

Prior to joining PNNL in 2003, Dr. Huang conducted extensive research on power system stability and harmonics at the University of Alberta, McGill University, and the University of Hong Kong. Dr. Huang has over 190 peer-reviewed publications. He is a fellow of Institute of Electrical and Electronics Engineers (IEEE) and is active in several IEEE Power and Energy Society (PES) technical committees, including officer roles at the committee, subcommittee, and working group levels. Dr. Huang received his Bachelor of Engineering from Huazhong University of Science and Technology and PhD from Tsinghua University.



Jessica Inman

Dr. Jessica Inman is division chief of the Assured Software and Information Division and a senior research scientist in the Cybersecurity, Information Protection, and Hardware Evaluation Research Laboratory at the Georgia Tech Research Institute.

Dr. Inman was principal investigator 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 problems for the U.S. Department of Defense. She 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.



Douglas Maughan

Dr. Douglas Maughan is the inaugural office head for the National Science Foundation (NSF) Convergence Accelerator, a program that aims to accelerate use-inspired convergence research in areas of national importance, and to initiate convergence team-building capacity around exploratory, potentially high-risk proposals.

Dr. Maughan previously served within the Department of Homeland Security Science and Technology Directorate as director of the Industry Partnerships Division within the Office of Innovation and Collaboration. He was responsible for leading the formation and sustainment of internal and external partnerships across research and development communities. He also previously served for 15 years as director of the Cyber Security Division within the Science and Technology Directorate. During this time, he helped bring to market over 75 commercial and open-source information security products. His prior roles also include program manager at the Defense Advanced Research Projects Agency and computer scientist at the National Security Agency.

Dr. Maughan received bachelor's degrees in computer science and applied statistics from Utah State University, a master's degree in computer science from Johns Hopkins University, and a PhD in Computer Science from the University of Maryland, Baltimore County.



Philip Quade

Philip Quade is COO of Evolution Equity, an international venture capital investor, partnering with entrepreneurs to develop market-leading cybersecurity and enterprise software companies. He is also a member of several enterprises, start-up, and government Boards.

From 2017 to 2021, Mr. Quade served as chief information security officer 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, and formed coalitions to solve large problems. He also led Fortinet's critical infrastructure protection strategy.

Previously, Mr. Quade was with the National Security Agency (NSA) for over 30 years, 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. 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 a decade of experience working in both government and industry. At PNNL, Dr. Smith's research focuses on industrial control systems and supply chain cybersecurity. She has led research projects exploring state machine reverse engineering and defining resiliency in cyber systems.

She is currently leading PNNL's supply chain integrity efforts, which support multiple government agencies. Prior to joining PNNL, Dr. Smith worked in industry at Schweitzer Engineering Laboratories, Inc., and MITRE Corp.

After completing both an MS and a 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 the Institute of Electrical and Electronics Engineers.



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.