



Stephen Welby

*Deputy Director of Research
Sensors and Intelligent Systems (SISD)*



Stephen Welby is the GTRI Deputy Director of Research, leading the Sensors and Intelligent Systems Directorate (SISD). He manages operations across four research areas: the Advanced Concepts Laboratory (ACL), the Aerospace, Transportation and Advanced Systems Laboratory (ATAS), the Cybersecurity, Information Protection and Hardware Evaluation Research Laboratory (CIPHER) and the Sensors and Electromagnetic Applications Laboratory (SEAL).

Welby most recently served as Special Assistant to the President for Science and Technology Policy and as Deputy Director for National Security in the White House Office of Science and Technology Policy (OSTP). He led an OSTP team focused on strengthening the nation's long-term global competitiveness and reducing risk through the assessment, development, deployment, and governance of current and emerging technologies. Welby oversaw efforts to develop long-term national science and technology (S&T) strategies, shape new investments in foundational technologies, modernize national security systems, ensure supply chain security, cultivate an agile innovation base, enhance export and investment controls, manage emergent risks, and build the world's best STEM workforce. His focus areas included biotechnology and biosecurity, artificial intelligence, semiconductors, space systems, quantum information science, nuclear matters, and economic security.

Prior to joining the White House, Welby was the Executive Director and Chief Operating Officer of the Institute of Electrical and Electronics Engineers (IEEE), the world's largest not-for-profit organization of technology professionals.

In 2015, Welby was confirmed by the U.S. Senate as the Assistant Secretary of Defense for Research and Engineering. In this role, he served as the Chief Technology Officer for the U.S. Department of Defense, leading one of the largest and most complex research, development, and engineering organizations in the world. Welby previously was the Deputy Assistant Secretary of Defense for Systems Engineering, and was responsible for establishing and executing engineering policy and oversight across the Department.

Welby has extensive government and private sector experience leading nationally recognized teams in technology and product development, including holding senior leadership positions at the Defense Advanced Research Projects Agency (DARPA). His technical experience includes the development of leading edge aeronautical and space systems, robotics, machine learning, high performance software, advanced sensors and complex systems engineering.

Welby holds a bachelor of science degree in chemical engineering from The Cooper Union for the Advancement of Science and Art, a master's degree in business administration from the Texas A&M University, and master's degrees in computer science and applied mathematics from The Johns Hopkins University. He is a Fellow of the Institute of Electrical and Electronics Engineers.