



NGA NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY

Dr. Cynthia Daniell Director, Research

Dr. Cindy Daniell became Director of the Research Directorate for the National Geospatial-Intelligence Agency in June 2018. She leads a research and development (R&D) portfolio to advance NGA's Strategic Intent. Dr. Daniell brings over 30 years of experience in the Department of Defense (DoD) community from both government service and private industry. This prior experience focused largely on technology development of image processing, computer vision, AI, and the integration of these technologies.



In her most recent position as Program Director for the Advanced Technology and Systems Division at SRI International, she developed strategic frameworks spanning the division's broad portfolio and determined internal R&D priorities to address and align with key customer interests. She also led the technical direction for the governments of Japan and Poland to launch their own versions of the U.S. Defense Advanced Research Projects Agency (DARPA) and advised on similar programs in Singapore. These efforts established an entrepreneurial R&D paradigm adapted for each of the respective government's cultures and their science and technology (S&T) ecosystems.

From 2012 to 2013, Dr. Daniell was a Chief Scientist in the Explosives Division of the Homeland Security Advanced Research Projects Agency (HSARPA), providing expertise on imaging sensors; video surveillance; chemical, radiological, and explosives sensors; robotics; and biometrics. She co-chaired the Office of Science and Technology Policy Committee for Domestic IED (Improvised Explosive Device) R&D Activities and led authorship of key strategy documents supporting Presidential Policy Directive 17 ("Countering Improvised Explosive Devices") across all counter-IED activities across the U.S. government.

Dr. Daniell also brings to NGA experience and understanding that she gained in the Defense Sciences Office of DARPA. She was a Program Manager from 2006 to 2012, leading a portfolio of 15 R&D programs worth more than \$240 million that had national scope in areas such as surveillance, signal processing, chemical sensing, clean energy, clean water, and other technologies of interest to the DoD, intelligence community, State Department, DHS, and DoE. Successful transitions were accomplished for a geo-referenced threat recognition program, portable water desalination and decontamination program, and geo-referenced chemical reconnaissance program.

She began her career on the technical staff at Hughes Aircraft Company and then HRL Laboratories, where she developed systems in the areas of signal processing, pattern recognition, learning algorithms, and cognitive models for both the defense sector and automobile industry. Her team's neural network-based advanced target recognition (ATR) system won the competition in a DARPA ATR contest. For this work, she was awarded both the Hughes' High Performance Team Award and the Hughes' Individual Achievement Award.

Dr. Daniell graduated summa cum laude from the University of South Alabama with a BS in electrical engineering. Her MS and PhD degrees, also in electrical engineering, are from the

California Institute of Technology. She holds three patents and has authored or co-authored 12 peer-reviewed publications.