William J. Layton ("Bill"), PhD, DISL

CURRENT POSITION: Dr. Layton is the Technical Director for the Cryptographic Solutions office at the National Security Agency, responsible for providing technical guidance to the majority of secure communications developments in the US National Security space. He also works in the areas of biometric and PKI authentication and contributes to research in general hardware and software security.

EDUCATION: Dr. Layton completed the IAD Development and Education program (IDEP) in 2003, following a track integrated with training for the broader NSA mathematics community. He earned his PhD in Mathematics from the University of Missouri. His MS and BS degrees in Mathematics are from Brigham Young University, where he also did post-doctoral work while finalizing his initial position at NSA.

PRIOR POSITIONS: Dr. Layton previously served as Senior Subject Matter Expert for Quantum Resistant Cryptography. In this role he guided efforts in a broad range of technical areas related to cybersecurity and cryptography, to include cryptographic strategy and algorithm assessment, risk assessment of security solutions, and efforts in government and commercial security standards, all with the primary aim of smoothly migrating the US Government to solutions resistant to the cryptanalytic potential of quantum computing. Dr. Layton completed a Joint Duty Assignment with the Defense Intelligence Agency in 2017. Prior to that he served as a Technical Director/Technical leader in the System and Network Analysis Center, an organization covering the complete space of technical security topics ranging from abstract mathematical cryptography through software security to hardware requirements and assessment. He previously worked as a cryptographic vulnerability analyst, where he became technical director of the organization responsible for evaluating cryptographic algorithms for national security system use. While in the IDEP he competed a wide variety of tours across NSA missions and related technologies.

PROFESSIONAL BACKGROUND: Dr. Layton came to NSA from academia, where he studied analysis and dynamical systems theory. He serves on committees for conferences and technical awards. He is the sole inventor on a patent issued to NSA for a cryptographic method of biometric authentication.