

# Seth A. Faith PhD

Dr. Seth A. Faith, a member of the scientific and professional cadre of senior executives, is the Senior Scientist (ST) for Biotechnology and Biomedical Sciences at the Air Force Research Laboratory, 711th Human Performance Wing (HPW) at Wright-Patterson AFB. He serves as the principal scientific authority and independent investigator in the research, development, and application of biomedical and biotechnological innovations for Airmen and Guardians. Dr. Faith is also the chair of the AFRL Biotechnology Community of Practice, and represents Air Force in the Triservice Communities of Interest for Biotechnology and Human Systems.

Dr. Faith began his career with the Air Force in 2022 as the Core Technical Competency (CTC) Lead at the Air Force Research Laboratory, 711 HPW/Air and Space Biosciences Division. Prior to his Air Force career, Dr. Faith gained over 20 years' civilian experience in industrial, academic, and government biotech RDT/E. He directed projects for bioterrorism risk assessment and managed a large portfolio of genomics R&D programs for private industry, the U.S. DoD, and U.S. Intel communities. Notably, he directed paradigm changing research that yielded the first demonstration of the use of Next-generation sequencing (NGS) and bioinformatics to perform forensic DNA genotyping (2012), leading to the delivery of a first-in-class DNA analysis system. He also managed tech-transfer and method validations for state and federal laboratories adopting NGS bioanalytical technologies. As an assistant professor, Dr. Faith guided interdisciplinary research programs for national security and bioforensics sponsored by the U.S. DoJ and DoD. He served as a biotechnology advisor for The Federal Bureau of Investigation (FBI) Scientific Working Group on DNA Analysis and Methods (SWGDAM), the National Institute of Standards and Technology (NIST) Organization of Scientific Area Committees, and the American Academy of Forensic Sciences Standards Board. Dr. Faith held an executive academic administrative position at a Tier 1 research University where he co-founded and directed the Center of Microbiome Science, and established and managed a CLIA-compliant laboratory to enable clinical diagnostics and environmental surveillance during the COVID-19 pandemic.

Dr. Faith is a member of the American Society of Microbiology (ASM) and American Academy of Forensic Sciences (AAFS), has authored over 40 primary research articles, presented 48 conference abstracts, holds two patents, and has been an invited speaker to over 40 scientific meetings in the scope of genomics, forensics, and infectious diseases.

# **EDUCATION**

2001 Bachelor of Science (B.S.), Biology-Microbiology, Minor - Chemistry, The University of Akron, Akron, Ohio 2006 Doctorate (Ph.D.), Biomedical Sciences, Cell and Molecular Biology, Kent State University & Northeast Ohio Medical University, Kent, Ohio

2010 Postdoctoral Fellow - Biodefense, University of Pittsburgh Center for Vaccine Research/Regional Biocontainment Facility, Pittsburgh, Pa.

#### **CAREER CHRONOLOGY**

- 1. August 2002 May 2006, Graduate Research Assistant, Kent State University & Northeast Ohio Medical University, Rootstown, Ohio
- 2. May 2006 January 2008, Postdoctoral Associate, Vaccine development, University of Pittsburgh Medical Center, Center for Vaccine Research and Regional Biocontainment Laboratory, Pittsburgh, Pa.

- 3. January 2008 February 2010, Postdoctoral Associate, Biodefense and aerobiology, University of Pittsburgh Medical Center, Center for Vaccine Research and Regional Biocontainment Laboratory, Pittsburgh, Pa.
- 4. February 2010 December 2010, Principal Research Scientist, biodefense and risk assessment, Battelle Memorial Institute, Columbus, Ohio
- 5. December 2010 November 2014, Genomics Technical Leader, biosecurity and forensics, Battelle Memorial Institute, Washington, D.C.
- 6. November 2014 January 2018, Assistant Professor, Department of Molecular Biomedical Sciences and the Chancellor's Faculty Excellence Program, North Carolina State University, Raleigh, N.C.
- 7. January 2018 May 2019, Research Leader, biosecurity and biotechnology, Battelle Memorial Institute, Columbus, Ohio
- 8. May 2019 December 2022, Director of Strategic Alliances, Infectious Diseases Institute, The Ohio State University, Columbus, Ohio
- 9. November 2020 December 2022, Executive Director, Center for Microbiome Sciences, The Ohio State University, Columbus, Ohio
- 10. March 2020 December 2022, Adjunct Associate Professor, Department of Microbiology, The Ohio State University, Columbus, Ohio
- 11. July 2020 August 2022, Technical Supervisor, CLIA Diagnostic lab, SARS-CoV-2 surveillance, The Ohio State University, Columbus, Ohio
- 12. July 2020 December 2022, Technical Director, Microbial Genomic Analysis Laboratory, The Ohio State University, Columbus, Ohio
- 13. January 2021 December 2022, President, Faith Analytical Intelligence LLC, Columbus, Ohio
- 14. December 2022 October 2023, Medical and Operational Biosciences Core Technical Competency (CTC) Lead, 711th Human Performance Wing, Air Force Research Laboratory, Wright Patterson AFB, Dayton, Ohio
- 15. October 2023 Present, Senior Scientist (ST), Biotechnology and Biomedical Sciences, Air Force Research Laboratory, Wright Patterson AFB, Dayton, Ohio

### **AWARDS AND HONORS**

2000 Phi Sigma Alpha, Arts & Sciences Honor Society, The University of Akron

2001 Beta Beta Beta, Biological Honors Society, The University of Akron

2001 Magna cum laude

2008 Keystone Symposia Scholarship, Keystone Symposia HIV Vaccines

2012-2014 Outstanding Performance Awards, Battelle Memorial Institute (4)

2012 Battelle FY11 Emerging Scientist Award

2012 Battelle FY11 Collaboration Team Award

2023 US Air Force, Special Act or Service Award (SASA)

# PROFESSIONAL MEMBERSHIPS AND ASSOCIATIONS

Associate Member, American Academy of Forensic Sciences (AAFS) Full Member, American Society of Microbiology (ASM)

# **PUBLICATIONS**

https://scholar.google.com/citations?user=tCOPU4QAAAAJ

(Current as of Feb 2023)