



AFRL: Building the Science & Technology Foundation of the Air Force

Air Force Research Laboratory (AFRL) is the sole U.S. laboratory dedicated to providing technological solutions focused on U.S. Air Force needs in the areas of air, space and cyber space. With a workforce of more than 6,000 (3,500 scientists and engineers) located at five major facility locations across the country, AFRL's science and technology portfolio is budgeted at more than \$2 billion annually with another almost \$2.5 billion provided annually by Air Force customers for specific research projects. From in-house and academic collaborative basic research to applied research and advanced technological development, AFRL covers a broad spectrum of research in materials and manufacturing, sensors, aerospace systems, human performance, directed energy, space vehicles, munitions and information technologies. Early advancements in these areas by AFRL assisted the Department of Defense in being able to first employ multiple "offset" strategies based on technological dominance over adversaries. These "offsets" have received significant recent attention and today, AFRL is squarely focused on foundations of the next offset, namely Human-Machine Teaming. Coupling AFRL-developed technologies with commercial advancements for the consumer market, AFRL is already providing technologies to help effect the Third Offset and is performing foundational science for technologies that will eventually lead to follow-on off-set strategies to prevent technological surprise and keep the fight unfair for any adversary that wants to force its will against American interests around the world.



MORLEY STONE
Air Force Research Lab

Wright Patterson AFB, OH

Dr. Stone, a member of the U.S. Air Force's scientific and technical cadre of senior executives, is the Chief Technology Officer for Air Force Research Laboratory (AFRL) headquartered at Wright-Patterson Air Force Base near Dayton, Ohio. As the primary adviser to the AFRL commander, he is responsible for assisting with the planning and execution of the Air Force's \$2.1 billion science and technology program and an additional \$2.3 billion of customer funded research and development. He also serves as the corporate-level science and technology interface for a government workforce of nearly 6,000 in the laboratory's nine technology directorates and the 711th Human Performance Wing (711 HPW).

Prior to assuming his present position, Dr. Stone served as the Chief Scientist of AFRL's 711 HPW 2008-2014. There he was responsible for the technical direction of a broad, multi-disciplinary research and development portfolio focused on understanding and improving human performance. He also served as the Chair of the Department of Defense's Autonomy Community of Interest 2011-2014. He was the Senior Scientist of Molecular Systems Biotechnology for AFRL 2007-2008, and 2003-2006 he was a Program Manager with the Defense Advanced Research Projects Agency (DARPA).

He earned his Ph.D. in biochemistry from Carnegie Mellon University in 1997 and has 24 years research experience in the areas of biotechnology, materials science and human performance. He is a recipient of the Presidential Rank Award for Meritorious Service, the Office of the Secretary of Defense Medal for Exceptional Civilian Service, the Fed100 Award and Carnegie Mellon University's Alumni Merit Award. Dr. Stone is a Fellow of Air Force Research Laboratory and of the International Society of Optical Engineering.

Social Period outside of Bowen Rm 222, following the seminar

ALL VISITORS ARE WELCOME