2021 Annual Lecturers

66th Louis H. Bauer Lecture Brig. Gen. (Dr.) Paul Friedrichs "The Urgency of Doing"

Brig. Gen. Friedrichs is Joint Staff Surgeon at the Pentagon in Arlington, VA, USA. He received his commission in the Reserve Officer



Training Corps in 1986 and earned a B.S. from Tulane University in New Orleans, LA, that same year. He received an M.D. from the Uniformed Services University in 1990 and served a urologic surgery residency at Wilford Hall and Brooke Army Medical Centers in San Antonio, TX, in 1997. He completed the Aerospace Medicine Primary Course at the U.S. Air Force School of Aerospace Medicine, Brooks AFB, TX, in 2001 and the Space Operations Executive Course at National Space Security Institute, Col-

orado Springs, CO, in 2006. He also attended the Air War College, the Interagency Institute for Healthcare Executives, the National War College, the Medical Capstone Program, and the U.S. Air Force Executive Development Program.

Brig. Gen. Friedrichs began his career in 1991 serving as General Medical Officer at Wilford Hall Medical Center, Lackland AFB, TX. In 1992, he became a Urological Surgery Resident at Wilford Hall. In 1997 he was promoted to Assistant Chief of Urology at the 89th Medical Group, Andrews AFB, MD. Later in 1997, he became Chief of Urology. From 1999 to 2016, he held a variety of positions including Chief of Population Health Management at the 89th Medical Group; Chief of the Operations Branch, Office of the Surgeon General, Bolling AFB, Washington, DC; Commander of the 56th Medical Operations Squadron, Luke AFB, AZ; Chief of the Aeromedical and Clinical Services Branches and then Chief of the Medical Operations Division, HQ Air Force Space Command, Peterson AFB, CO; Commander of the 3rd Medical Group, 3rd Wing, Elmendorf AFB and then Commander of the 673rd Medical Group, 673rd Air Base Wing, Joint Base Elmendorf-Richardson, AK; Command Surgeon, HQ Pacific Air Forces, Joint Base Pearl Harbor-Hickam, HI; and Vice Commander, Air Force Medical Operations Agency, Joint Base San Antonio, Lackland, TX. In 2016, he became Command Surgeon, U.S. Transportation Command, Scott AFB, IL, and in 2018 was Command Surgeon, Air Combat Command, Joint Base Langley-Eustis, VA. He took his present position in 2019.

Brig. Gen. Friedrichs' awards and honors include the Defense Superior Service Medal, the Legion of Merit with three oak leaf clusters, the Bronze Star, the Air Force Meritorious Service Medal with three oak leaf clusters, the Joint Service Commendation Medal with oak leaf cluster, the Army Achievement Medal, and the Air Force Achievement Medal with oak leaf cluster. He also holds a President's Writing Award from the National Defense University and a Presidential citation from the American Urological Association. He is a Diplomat of the American Board of Urology, a Fellow of the American College of Surgeons, and an Associate Fellow of the Aerospace Medical Association.

7th Memorial Reinartz Lecture Anthony S. Wagstaff, Dr. Med., EMBA "The Feedback Loop of Aerospace Medicine and Human Performance

Dr. Wagstaff is currently Adjunct Professor, Institute of Health and Society, University of Oslo, Norway, and a Principal Advisor in Aerospace Medicine for the Norwegian Armed Forces. He graduated in 1985 from the Royal College of Surgeon in Ireland with LRCPI, LRCSI, M.B. B.Ch., and BAO (medical) degrees and then earned a Diploma in Medicine from the Royal College of Physicians in London, UK, in 1997. In 2001 he was awarded a Dr. Med. (Ph.D.) from the University of Oslo



and then an Executive Master of Business Administration in 2005 from ESCP/EAP in Paris, France. He completed the Command Course at the Norwegian Defence College in 2013.

From 1985-1922, Dr. Wagstaff served as an Occupational Health Physician at the Government Ministries, Oslo. He then became a Ph.D. student and physician at the Institute of Aviation Medicine in Oslo until 1996 when he was promoted to Assistant Director at the Institute. In 2005 he became a physician at the

National Institute for Occupational Health, Oslo, and then in 2006, transferred back to the Institute of Aviation Medicine to take the position of Director. In 2019, he became Principal Advisor, Aerospace Medicine, for the Norwegian Armed Forces. From 2013-2018, he served as Associate Professor at the Institute of Health and Society at the University of Oslo. He took the position of Adjunct Professor at the University of Oslo in 2018.

Dr. Wagstaff's awards and honors include the U.S. Army award for best article in helicopter aviation medicine as a co-author and being chosen as Patterson Trust Lecturer at the 2017 Australasian Conference of Aerospace Medicine. He is member of the International Academy of Aviation and Space Medicine and the European Society of Aerospace Medicine, where he was Vice-President from 2012–2016 and then President from 2016-present. He was a board member of the Norwegian Society of Aviation medicine from 1996–2006 and Chair of the Norwegian Board of Specialist Training in Occupational Medicine from 2013-2018. He is Director and Chancellor of the International Academy of Aviation and Space Medicine, and a board member of the Aerospace Medical Association Foundation. He is a Fellow of the Aerospace Medical Association.

55th Harry G. Armstrong Lecture Serena M. Auñón-Chancellor, M.D., M.P.H. "The Future of Science in Low Earth Orbit"

Dr. Auñón-Chancellor is currently an astronaut and was selected by NASA in 2009. She recently served as Flight Engineer for Expeditions



56 and 57 on the International Space Station (ISS). Born in Indianapolis, IN, she received a B.S. from The George Washington University, Washington, D.C., in 1997. She earned her M.D. in 2001 from the University of Texas Health Science Center in Houston. She then served a 3year residency in internal medicine at the University of Texas Medical Branch (UTMB) in Galveston and then completed a year as Chief Resident in the Internal Medicine Department. She then served a 1-year residency in aerospace

medicine in 2007 at UTMB.

Dr. Auñón-Chancellor started at Johnson Space Center in 2006 as a Flight Surgeon and spent more than 9 months in Russia supporting medical operations for ISS crewmembers in Star City. She also held the position of Deputy Crew Surgeon for STS-127 and as Deputy Lead for Orion Medical Operations. She was selected in July 2009 as an astronaut and graduated in 2011 from Astronaut Candidate Training. From 2010–2011, she spent 2 months in the Antarctic searching for meteorites as part of the ANSMET Expedition. In 2012, as part of the NEEMO 16 mission, she operated the Deep Worker submersible and

subsequently served as an Aquanaut during the NEEMO 20 mission $\,$ on the Aquarius underwater laboratory. She currently handles medical issues for the ISS Operations and Commercial Crew branches.

Dr. Auñón-Chancellor's awards and honors include the U.S. Air Force Flight Surgeons' Julian Ward Award, an Outstanding UTMB Resident Award, the William K. Douglas Award, and the Thomas N. and Gleaves James Award for Excellent Performance by a third-Year Resident in Internal Medicine. She is a member of the American College of Physicians, the American College of Preventive medicine, and the National Engineering Honor Society, and is an Associate Fellow of the Aerospace Medical Association.

The Bauer Lecture will be held on Monday, August 30, 2021, at 8:00 a.m. during Opening Ceremonies in the Plaza Blallroom. Educational Support is provided by KBR.

The Reinartz Lecture will be given on Tuesday, August 31, 2021, at 8:30 a.m. in the Grand Ballroom. Support is provided by the Eugen Reinartz Memorial Fund.

The Armstrong Lecture will be held on Thursday, September 2, 2021, at 8:15 a.m. in the Grand Ballroom. Eductional support is provided by Environmental Tectonics Corp.