

2018 Award Winners of the Aerospace Medical Association

Honors Night Ceremonies of the 89th Annual Scientific Meeting of the Aerospace Medical Association were held May 10, 2018 at the Hilton Anatole Hotel, Dallas, TX. Twenty-one awards for outstanding contributions in aerospace medicine and human performance were presented. The presentations were made by Dr. Valerie Martindale, President of the Aerospace Medical Association, assisted by the chair of the Awards Committee, Jeff Myers, M.D., Cathy DiBiase, R.N., Al Parmet, M.D., and Tracy Dillinger, D.O. The winners were recommended by the Awards Committee and approved by the Executive Committee of the Aerospace Medical Association.



LOUIS H. BAUER FOUNDERS AWARD

James T. Webb, Ph.D.

This award was established to honor Louis H. Bauer, M.D., founder of the Aerospace Medical Association. It is given annually for the most significant contribution in aerospace medicine. It is sponsored by the Mayo Clinic.

James T. Webb, Ph.D., is the 2018 Louis H. Bauer Founders Award recipient. Dr. Webb is recognized for his dedication and accomplishments in Aerospace Medicine and Human Performance. As a retired USAF Command Pilot, Aerospace Physiology expert, and outstanding researcher, Dr. Webb's work on decompression sickness (DCS) is a benchmark for our industry and has served to better protect aviators and astronauts.

He entered U.S. Air Force Pilot Training in 1965 and completed F-4D fighter pilot advanced training in 1967. He accumulated more than 1,000 flight hours in the F-4D including a year at Phu Cat AB, Vietnam, earning a Distinguished Flying Cross and 9 Air Medals. He left active duty and joined the USAF Reserves in 1971 as a C-141A pilot while completing graduate work at the University of Washington. He accumulated over 2,800 flight hours in the C-141 from 1971–1979 with the 446th Military Airlift Wing (Reserve Associate). Dr. Webb completed his Ph.D. in 1979 and was selected to become a USAF Academy faculty member where he taught Biology and Aerospace Physiology and served as a T-41A instructor pilot. Beginning in 1984, Jim served as a research scientist at Brooks AFB, TX, where he studied fluid shifts during onset of weightlessness and factors affecting altitude DCS.

Dr. Webb retired as a Major from the USAF in 1992 after 20 years of extended active duty and reserve service. He then remained at Brooks AFB, TX, as Senior Scientist, Life Sciences Group, Wyle Laboratories. Since 1987, Dr. Webb has focused his research efforts on oxygen toxicity, acceleration effects on fighter pilots, and DCS. His efforts led to a greater understanding of DCS risk factors and how denitrogenation combined with exercise could reduce the risk of DCS for high altitude aviators. This was incorporated in the U-2 high altitude reconnaissance program and, after further testing by NASA, it was used prior to extravehicular activity from the Space Shuttle and International Space Station. His recent research quantified the relationship between oxygen consumption while decompressed and DCS incidence. Dr. Webb has received five awards from AsMA constituent organizations, the Sidney D. Leverett Environmental Science and John Ernsting Awards from AsMA, and the NASA astronauts' Silver Snoopy award.

Dr. Webb has been very active in his professional career. He is a life member of the Reserve Officers Association and the Order of Daedalians (Fraternity of Military Aviators). He has served on many committees and elected to the AsMA Executive Committee, AsMA Council, as a Vice President for 4 years, President-Elect, and President for 2013–2014. He has attended every AsMA scientific meeting since he joined in 1984.

Jim was born in Yakima, Washington, graduated from Naches Valley High School in 1960 and the University of Washington in 1965. His son, Mike lives in Yakima and attended his father's Bauer award ceremony. His brother Ray lives in East Wenatchee, Washington. Dr. Webb lives in Bandera County, TX with his wife, Dr. Fran Laue, in a very efficient home they had built to their specifications. It is totally off-the-grid for water and very close to off-the-grid for electricity.



DAVID M. CLARK AWARD

Environmental Tectonics Corporation, represented by Robert L. Laurent, Jr.

This award was established by the Aerospace Medical Association to honor an AsMA corporate member who has made significant contributions to the advancement of aerospace medicine. The award is given for contributions in a single year or over a defined period.

The first Clark award was presented to Environmental Tectonics Corporation (ETC). This company has been dedicated to the advancement of aeromedical technology since 1969, creating learning solutions for humans engaged in activities in extreme environments in 90 countries worldwide. ETC is also active in operational research with the establishment of ETC's NASTAR Center in 2007 and membership in two FAA Centers of Excellence. ETC has actively supported AsMA's mission as a corporate

member for 45 years. ETC's innovation and dedication to human performance and safety have resulted in leading edge training equipment and courseware for high G, spatial disorientation, altitude exposure, ejection, and night flying operations. ETC's technical accomplishments include interactive spatial disorientation training devices with more than 80 fielded worldwide. In the area of high G training, ETC provided the Holloman AFB centrifuge that trained nearly 35,000 pilots over a 20-year period. ETC continued to advance high performance human centrifuge technology with the development and fielding of the Authentic Tactical Flight Simulator-400, a sustained G flight simulator. ETC developed the Advance Disaster Management System, a virtual reality training system that supports Incident Commander and Response Team training, realistically and economically. ETC established the Aeromedical Training Institute to provide quality aviation physiology courseware and instructor training to aeromedical professionals worldwide. ETC is active in operational research and established the National AeroSpace Training and Research (NASTAR) Center in 2007. Since its inception, ETC's NASTAR Center has trained more than 500 spaceflight participants and several astronauts, has collaborated with numerous universities in cutting edge research, including MIT, St. Peters, UTMB, Drexel, and Embry Riddle, and has conducted research projects for the USAF, USN, FAA and NASA. NASTAR Center also provides commercial civilian pilot training, offering the world's only Upset Recovery Training program in an advanced sustained G simulator.

Robert (Bob) L. Laurent, Jr., is the Chief Executive Officer, President and Director of ETC. He is an accomplished executive with over 30 years of corporate experience. Mr. Laurent obtained his B.S. in Accounting from Villanova University. After a 27-year career in the HVAC industry, Bob became Chief Financial Officer of ETC in 2011, and in 2014, was promoted by ETC's Board of Directors to his current position.

Since becoming ETC's CEO, Bob has driven a number of accomplishments of note that benefit the aerospace medical community, including: spearheading the completion of the world's most advanced Spatial Disorientation Research device currently operational at NAMRU-D, a.k.a. "the Kraken"; driving Spatial Disorientation, or SD training to more affordable levels by introducing targeted fidelity/targeted capability to ETC's Integrated Physiology Training family of products; leading ETC to invest in human factors and vestibular system related research; and implementing initiatives to introduce SD training to Rotary Wing markets. In addition, ETC's NASTAR Center was selected as a team member in the Federal Aviation Administration Center of Excellence for training technology and human performance, its second Center of Excellence.

In addition to his executive career, Bob serves on the Aerospace Medical Association Foundation Board. He encourages ETC's talented employees with experience as aerospace physiologists, flight surgeons, and research scientist to actively participate in the Aerospace Medical Association and ICASM activities.



ADMIRAL JOHN C. ADAMS AWARD

John S. Crowley, M.D., M.P.H.

This award was established by the Society of US Naval Flight Surgeons in honor of Admiral John C. Adams the award is given annually for the most significant contributions to operational Aerospace Medicine, either during a single defined period (e.g., deployment), or over a career.

John S. Crowley, M.D., M.P.H., is the recipient of the Admiral John C. Adams Award for his stellar 26-year history as an international leader in operational aeromedical research. Rising from physician researcher in 1992, Dr. Crowley performed and directed research that directly led to lives being saved on the battlefield. He has served as an operational aeromedical researcher, directing both the Aircrew Protection Division and the Aeromedical Factors Branch at the U.S. Army Aeromedical Research Laboratory (USAARL) before rising to be the Science Program Director in 2004. Serving in that position for the past 14 years, Dr. Crowley was further selected in 2014 to serve as the Injury Prevention and Reduction Research Program Area steering committee chair for the Military Operational Medicine Research Program (MOMRP); the largest and most important of the Army's medical research programs, where he oversees injury prevention research for the entire U.S. Army, unquestionably resulting in thousands of lives saved in the operational environment.

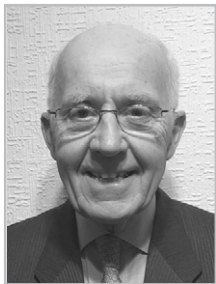
Dr. Crowley is recognized by the international community for his expertise in aerospace medicine. With that expertise, he has authored a chapter in a NATO report on aircrew neck pain, authored more than 50 peer-reviewed journal articles and technical reports, extensively contributed to multinational/NATO collaborations, provided recommendations to numerous aerospace medicine programs and working groups and served as the Chair of the Scientific Committee of the International Academy of Aviation and Space Medicine.

Throughout his distinguished 26-year research career, Dr. Crowley has touched the lives of virtually every U.S. Army aviator and thousands of other military and civilian aviators. From constantly improving medical standards to the introduction of life saving techniques and equipment, defense aviation has been forever changed by his scientific contributions.

Dr. Crowley received his Bachelor's degree in Biology in 1981 from the University of Missouri-Kansas City, and his Medical Doctorate in 1982. He joined the Army and from 1983-1986 served as Flight Surgeon, 503rd Aviation Battalion. He received his Masters of Public Health degree from Harvard School of Public Health in 1987. From 1988-1990 he was Flight Surgeon, Systems Engineering Division, at the U.S. Army Safety Center. He was Board Certified in Aerospace Medicine in 1990. From 1992-1995

he was Chief, Aeromedical Factors Branch at the U.S. Army Aviation Research Laboratory (USAARL), Ft. Rucker, AL. In 1995 he was assigned as Exchange Officer to DERA Farnborough, UK. Upon his return in 1998, he became Director of the Aircrew Protection Division at USAARL. Since 2004 he has been the Science Program Director at USAARL.

A Fellow of the Aerospace Medical Association, Dr. Crowley has served as Scientific Program Chair and as president of the U.S. Army Aviation Medicine Society. He served as Vice-Chair, Aerospace Medicine, for the American Board of Preventive Medicine from 2003–2009, and has been Chair of the Scientific Committee for the International Academy of Aviation and Space Medicine since 2013.



BOOTHBY-EDWARDS AWARD

**Martin F. Hudson, MBBS,
MRCP(UK), FRCP(Edin)**

Established in memory of Walter M. Boothby, M.D., pioneer aviation medicine researcher, and Howard K. Edwards, M.D., clinical practitioner of aviation medicine, this award is presented annually for outstanding research and/or clinical practice directed at the promotion of health and prevention of disease in professional airline pilots. (The separate Boothby and Edwards Awards were given annually 1961–73, and then alternately until 1985.) Sponsored by Harvey W. Watt and Company.

Martin F. Hudson, MBBS, MRCP(UK), FRCP Edin., is the 2018 recipient of the AsMA Boothby-Edwards Award. Dr. Hudson is cognized for many accomplishments in the promotion of health of professional pilots. He has been an Aviation Medical Examiner for the European Aviation Safety Agency (EASA) since 1999. Until very recently he was the medical consultant for Thomas Cook Airlines, UK, and is currently vice president of the UK Association of Aviation Medical Examiners, having served for 12 years as its Treasurer and then for 3 years as Chairman. Dr. Hudson was the Chairperson of AsMA's Air Transport Medicine Committee for 4 years and continues to be a very active member. He is now incoming President for the Airline Medical Director's Association.

Dr. Hudson qualified from St. Bartholomew's Hospital, London, in 1965. After obtaining a Private Pilot's Licence he joined the Medical Branch of the Royal Air Force on a short service commission and gained his UK Membership in the Royal College of Physicians (MRCP UK) in 1971. From 1972–1999 he was a principal in General Practice in the United Kingdom and became a UK CAA authorized Aviation Medical Examiner in 1977 and has now completed 40 years in this capacity. He was awarded the Fellowship of the Royal College of Physicians of Edinburgh (FRCP Edin) in 1998 in recognition of his research and teaching in the field of hypertension. This is a very rare honor to be awarded to a general practitioner.

Leaving General Practice in 1999, Dr. Hudson set up an Aviation Medicine Consultancy as an approved aviation medical examiner for EASA, UK Civil Aviation Authority, U.S. Federal Aviation Administration, Transport Canada, and the Civil Aviation Safety Authority of Australia (CASA). He was appointed as the Consultant Aviation Medicine Adviser to Thomas Cook Airlines (UK) in 2000 and continued in this role until October 2017. He has been a member of AsMA since 2000 and was elected as a Fellow of the AsMA in 2013. For the past 3 years, he has been a member of the AsMA Aerospace Mental Health Working Group.

In 2017 Dr. Hudson co-authored a chapter in Professor Robert Bor's latest book on 'Pilot Mental Health'. He has also been much involved in recent years with the development of peer support groups both for airline pilots and for aviation medical examiners. He has given many presentations on a variety of subjects, at AsMA, for EASA, and for the European Society of Aerospace Medicine (ESAM). He has chaired several Panel Sessions at AsMA. He is also a member of the ESAM Advisory Board and serves as the ESAM liaison representative with ICAO.



JOHN ERNSTING AWARD

Christy Hileman, MBA, RHIA, CCS

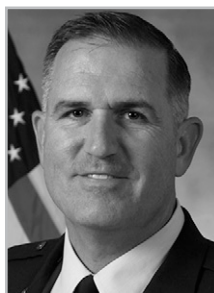
Established and sponsored by Environmental Tectonics Corporation in memory of Professor Ernsting. It is given for outstanding research in altitude physiology, and/or longstanding exceptional performance in the education, development, and administration of Aerospace Medicine and related specialties.

Christy Hileman, M.B.A., RHIA, CCS, is the 2018 recipient of the John Ernsting Award. She is honored for her outstanding contributions to aviation safety. She is the team lead for the FAA Autopsy Program that processes the collection and maintenance of all U.S. aviation accidents' aeromedical records. She also serves as a key member of the FAA's Institutional Review Board and the White House Working Group for Medical Death Investigation System. She is exceptional in her performance in support of aerospace medicine efforts in education, research, and information systems administration. Since 2009 she has served as a mentor for CAMI, Southwestern Oklahoma State University, Rose State College, and Tulsa Community College to student interns seeking experience in the administration of medical records and aircraft accident investigation practices. She was instrumental in the development of the FAA's Office of Aerospace Medicine Aviation Accident Review Program and its associated data registry.

Ms. Hileman obtained a Bachelor of Science in Health Information Management from Southwestern Oklahoma State University in 1998 and a Masters in Business Administration from Southern Nazarene

University in 2013. From 1998 to 1999, she was an Inpatient/Outpatient Coder at Comanche Memorial Hospital in Lawton, OK. She then became a Contract Coder at Forum in Oklahoma City until 2001. From 1999 to 2000, she was also Cancer Registrar at OU Medical Center, Oklahoma City. From 2000 to 2001, she worked as an Inpatient/Outpatient Coder at OU Medical Center. From 2000 to 2002, she also served as part-time Contract Cancer Registry at Coding Associates and Consultants, Oklahoma Surgery and Urology Center, Oklahoma City. In 2002, she then became a Consultant, Cancer Registry Services, also at Oklahoma Surgery and Urology Center. From 2001 to 2008, she was also Inpatient/Outpatient Coder at Deaconess Hospital, Oklahoma City. From 2008 to 2012, she became Autopsy Records Administrator for the FAA and then became Adjunct Instructional Specialist for the Transportation Safety Institute in Oklahoma City, a position she still holds. In 2012, she also took her current assignment as Team Coordinator, Autopsy Records Administrator.

Ms. Hileman is a member of the Office of Justice/Health and Human Services Medicolegal Death Investigation Working Group, the American Health Information Management Association, the Oklahoma Health Information Management Association, and the Aerospace Medical Association. Her awards and honors include being nominated for Outstanding Team of the Year by the FAA Office of Aerospace Medicine in 2008, CAMI Rising Star Award in 2009, Superior Accomplishment Team Award in 2010, being named an Outstanding Member by the Oklahoma Health Information Management Association in 2011, a Superior Accomplishment Award in 2012, the Vi Lipski Award for Integration for Rotorcraft Post-Crash Fire Investigation in 2014, Outstanding Support from the Transportation Safety Institute in 2015, FAA Significantly Exceeds Rating award in 2016, and was nominated for both CAMI and AAM Team of the Year (Autopsy Program Team) in 2017. She has authored or co-authored over 16 publications and news articles, has been interviewed several times for publications, and has over 20 presentations to her name.



KENT K. GILLINGHAM AWARD

Lt. Col. Brian Musselman, USAF

This award was established and sponsored by the AMST Group of Companies in Austria and the United Kingdom to honor the memory of Kent K. Gillingham, M.D., Ph.D. The award is presented annually to an individual who has made a significant contribution in the field of spatial disorientation and situational awareness related to flight.

Lt. Col. Brian T. Musselman, USAF, was named the 2018 recipient of the Kent K. Gillingham Award. He is being honored for his positive impacts on every aspect of aerospace physiology. A board-certified expert in aerospace physiology Lt. Col. Musselman has led U-2 full

pressure suit operations; investigated five Class A mishaps and numerous physiological events; and directed physiology, spatial disorientation, and fatigue research. The Air Combat Command Director of Operations hand selected Brian to assist with the USAF reply to the DoD Inspector General for a fatal F-22A mishap. His aerospace physiology experience was paramount to the team's analysis, which he eventually briefed to the Chief of Staff of the Air Force. Brian analyzed U.S. Air Force spatial disorientation accidents, briefing the results at a 711 Human Performance Wing research symposium. His research was instrumental to the procurement of spatial disorientation trainers for the aerospace physiology portion of undergraduate flying training and was published in Air Force Pamphlet 11-417, Orientation in Aviation. Brian's fatigue research statistics were also published in the 2nd Edition of "Fatigue in Aviation" by John and Lynn Caldwell. Brian directly investigated 5 Class A Aviation mishaps and provided aerospace physiology consultation to unexplained physiological events spanning from 2012 to 2017. He led a team to integrate a universal physiological event worksheet into the Air Force Safety Automated System. Brian also provided expertise to five organizational safety assessments providing senior leaders with actionable data to increase aeromedical, life support, and organizational performance. Finally, Brian taught aerospace physiology and crew resource management to the first 10 cadets in the new Iraqi Air Force. Brian has made a positive impact on every aspect of USAF Aerospace Physiology.

Lt. Col. Musselman is currently the Deputy Chief of the U.S. Air Force Human Factors Safety Division at the U.S. Air Force Safety Center, Kirtland AFB, NM. He has also served as an Aircraft Maintenance and Munitions Officer; an Air Force Reserve Officer Training Corps instructor; an Aerospace Physiology flight commander; a human factors specialist and mishap investigator at the Air Force Safety Center; a Pentagon staff officer; Executive Officer to the USAF Chief of Safety and Executive Secretary for a DOD Task Force; and Air Mobility Command Aerospace Physiology Training Program Manager, and human performance consultant to the Operations Risk Assessment and Management System. He was the 9th Physiological Support Squadron Commander, where he was responsible for specialized support and training for U-2S aviators, the USAF Full Pressure Suit Depot, and mission-specific physiological training for DoD and NASA. In 2007, he served as an advisor to the Iraqi Air Force and established the new Iraqi Air Force Technical Training School. He served as air mobility command aerospace physiologist and high-altitude airdrop mission support (HAAMS) program manager and will lead transition of HAAMS from Little Rock AFB to Charleston AFB as the 628th Medical Group Commander.

Lt. Col. Musselman earned a B.S. in Biology in 1994 from the U.S. Air Force Academy in Colorado Springs, CO, and an M.S. in Aerospace Sciences (Aviation Safety) from Embry-Riddle Aeronautical University, Daytona Beach, FL, in 2004. He completed Squadron Officers School in 1999 at Maxwell AFB, AL, and Air Command

and Staff College in 2006 by correspondence. He earned a Certificate in Advanced Graduate Studies (Industrial/Organizational Psychology) at Northcentral University, Prescott, AZ, in 2010, and completed Air War College by correspondence in 2012 and in residence in 2016.

Lt. Col. Musselman's awards and decorations include the Defense Meritorious Service Medal; the USAF Meritorious Service Medal with five oak leaf clusters; the USAF Commendation Medal with two oak leaf clusters; the USAF Achievement Medal with two oak leaf clusters; the Air Force Recognition Ribbon; the National Defense Service Medal; the Iraq Campaign Medal; the Global War on Terrorism Medal; the Humanitarian Service Medal; and the Nuclear Deterrence Operations Service Medal. He has also been a recipient of the Harry G. Mosely Award in 2015, the Aerospace Physiology Society's Paul Bert Award, and the Life Sciences and Biomedical Engineering Board Professional Excellence Award in 2014. He is a Fellow of the Aerospace Medical Association, the Royal Aeronautical Society, and the Aerospace Human Factors Association, a member of the U.S. Air Force Safety Human Factors Fellowship, and AFROTC Commandant of Cadets of the Year.



**WALTER AND SYLVIA
GOLDENRATH AWARD**

Troy P. Faaborg, M.S., CAsP

Established in memory of CAPT Walter L. Goldenrath, MSC, USN(Ret.), this award is presented for the most significant contribution in the field of aerospace physiology. It was created at the bequest of CAPT

Goldenrath and is funded by the Walter and Sylvia Goldenrath Endowed Fund.

Troy P. Faaborg, M.S., CAsP, FAsMA, received the 2018 Walter and Sylvia Goldenrath Award for his impressive history of contributions to aerospace physiology. He developed a continuing education program for Air Force physiologists, the first of its kind to identify, evaluate, and certify Aerospace Physiology-specific continuing education opportunities. He is also a subject matter expert instructor for the Air Force Medical Incident Investigation training workshop, a groundbreaking patient safety process. He has also developed counter-fatigue plans for 4,000 hours of long-duration B-2 bomber missions. As the U.S. Air Force operational fatigue expert, he traveled to Hungary in 2010 to brief the 12-nation Heavy Airlift Wing on counter-fatigue strategies during sustained operations; he won over senior officials, resulting in 24-hour operations saving \$30 million annually. As the first chief of an Air Force Major Command's Human Factors Safety division, he developed an evidence-based approach to mitigate 99% of physiological/human factors-related mishaps. Aggressive marketing of the program resulted in a reduction of \$10 million in mishap-related losses in just 1 year.

Lt. Col. Faaborg earned a B.S. in Exercise Physiology at Iowa State University in 1998 and then an M.S. in Aeronautical Science from Embry-Riddle Aeronautical University and an M.S. in Applied Human Factors Engineering from the University of Illinois at Urbana-Champaign, both in 2003. He was board certified in Aerospace Physiology in 2007. From 1988 to 1999, he was an Aerospace Physiologist at Wright-Patterson AFB, OH, and then transferred to Vance AFB, OK, until 2001, when he started at the Air Force Institute of Technology at the University of Illinois at Urbana-Champaign. From 2003 until 2006, he served as Human Performance Training Flight Commander at Aviano AB, Italy, and then became Chief of Human Performance Enhancement at Whiteman AFB, MO. From 2008–2010, he served as Aerospace Medicine Flight Commander at Whiteman AFB. He then took the position of Chief of the Human Factors Division at HQ AFGSC Safety Directorate at Barksdale AFB, LA, from 2010 to 2014. From 2014 to 2015, he was Principal Deputy, Air Force Human Systems Integration Office, Washington, DC, and then became Chief of Air Force Human System Integration. In 2016, he took his current position of Chief of the Aerospace and Operational Physiology Branch, Air Force Medical Support Agency, in Falls Church, VA.

Lt. Col. Faaborg's awards and decorations include the Meritorious Service Medical with two oak leaf clusters, the Air Force Commendation Medal with oak leaf cluster, the Air Force Achievement Medal with two oak leaf clusters, the National Defense Service Medal, the Global War on Terrorism Service Medal, and the Military Outstanding Volunteer Service Medal with two oak leaf clusters. An AsMA Fellow, he has previously served as the chair of the Association's Aerospace Physiology Certification Board and as the President of the Aerospace Physiology Society, a constituent organization of AsMA.



WON CHUEL KAY AWARD

Carlos Staff, M.D.

Established and sponsored by the Korean Aerospace Medical Association in honor of Won Chuel Kay, M.D., the former Surgeon General of the Korean Air Force, founder and first Medical Director of Korean Airlines and first President of the Korean Aerospace Medical Association. This Award is presented annually to a member who has made outstanding contributions to international aerospace medicine.

Carlos Staff, M.D., FAsMA, is the 2018 winner of the Won Chuel Kay Award for his contributions to the international aviation medicine community. Dr. Staff has been actively participating in the world program of the International Civil Aviation Organization (ICAO) known as the Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA). He supports this effort by

evaluating airport medical operations, developing core capacities, and providing guidance to States and Territories. Through his outstanding support, CAPSCA continues to succeed in ensuring public safety and establishing National Aviation pandemic preparedness plans. He has been participating in annual executive committee and other CAPSCA meetings since 2009 in the United States, Mexico, Colombia, Singapore, Spain, Chile, Panama, and Barbados. He has also presented several lectures as an invited speaker supporting the goals of CAPSCA and is world recognized by his peers and other associations such as the Spanish Airports and the Spanish International Cooperation Agencies (ICAO-AENA and AECI).

Originally from the Republic of Panama, where Dr. Staff completed his primary and secondary studies, he obtained the title of Medical Surgeon from the Faculty of Medicine of the National Autonomous University of Mexico (UNAM) in 1970. In 1979, he specialized in orthopedics and traumatology at the Military School of Health Graduates, University of the Army and Mexican Air Force. In 1980, he specialized in hand surgery at the UNAM Division of Higher Studies. In 1973, he completed the aviation medicine basic course at the International Civil Aviation Training Center (CIAAC) in Mexico, under the auspices of ICAO and subsequently completed continuing medical education courses in aeronautical medicine organized by ICAO and annually by the Federal Aviation Administration's (FAA) Civil Aerospace Medical Institute (CAMI).

In the field of aeronautical medicine, he has been an advisor and head of the Department of Aviation Medicine of the Civil Aeronautics Authority (CAA) of Panama for 14 years, which he organized following international guidelines for its operation. He serves as Medical Advisor of COPA Airlines, Aeronautical Medicine Facilitator for ICAO seminars, and Lecturer the physiology of flight offered at various aviation institutions and airlines to airmen, technical crews, cabin crews, and Aviation Medical Examiners (AMEs). He is also an instructor and researcher in human factors. He earned a master's degree in higher education from the University of the Americas and the Open and Distance Learning University of Panama (2008). Additionally, he is a Senior AME for the FAA, Transport Canada, and the CAA of Panama.

Dr. Staff is a Founding Member of the Iberoamerican Association of Aerospace Medicine (IAAM), Fellow of the Aerospace Medical Association, and member academician of the International Academy of Aviation and Space Medicine. In March 2018, he participated as an invited guest of the Airport Roles in Reducing Transmission of Communicable Diseases event organized by the Transport Research Board/Airport Cooperative Research Program at the National Academy of Sciences, Engineering, and Medicine in Washington, DC. He represents IAAM in the ICAO CAPSCA program as Technical Advisor member of the Aviation Medicine and Public Health Team (AMPH). He was the 2013 recipient of AsMA's John A. Tamisiea Award for his exemplary service to aerospace medicine education.



JOE KERWIN AWARD

**Erik L. Antonsen, M.D., Ph.D.,
M.S., FAAEM, FACEP,**

Established and sponsored by KBRwyle in honor of Joseph P. Kerwin, the first physician/astronaut. It is presented for advances in the understanding of human physiology during spaceflight and innovation in the practice of space medicine to support optimal human health and performance in space.

Erik L. Antonsen, M.D., Ph.D., M.S., FAAEM, FACEP, is the 2018 winner of the Joe Kerwin Award for his advances in the understanding of human physiology during spaceflight. Since beginning his tenure as Element Scientist for the Exploration Medical Capability at the NASA Johnson Space Center in 2015, Dr. Antonsen has restructured NASA's approach to exploration medicine, creating an evidence- and risk-based approach for developing the medical system and data architecture that will enable NASA's human Gateway, Lunar, and Mars Missions. He has reshaped the way that medical systems are designed and implemented for space exploration, bridging the disciplines of engineering and medicine to create an evolvable model optimized for risk and capability. He built a multi-disciplinary, multi-center team of clinicians, systems engineers, computer and data scientists, risk modelers, space pharmacists, and researchers and led this team to create a roadmap for designing and implementing a new model of medical care for exploration which allows NASA to develop, select, and implement medical capabilities that are most likely to preserve human health and performance on extended missions without return capability.

Dr. Antonsen received his B.S. in 1997, M.S. in 2001, and Ph.D. in 2004 in Aerospace Engineering from the University of Illinois at Urbana-Champaign and later his M.D. in 2009 from the University of Illinois at Chicago. He completed an Emergency Medicine Residency in 2013 at Massachusetts General Hospital and Brigham and Women's Hospital in Boston and is Board Certified in Emergency Medicine. Clinically he works as an attending Emergency Physician at Ben Taub General Hospital in Houston, TX. He has worked in a variety of fields as an engineer and doctor, including spacecraft electric rocket propulsion, plasma light sources and extreme ultraviolet lithography, HIV/AIDS research in Zambia, and providing emergency medical support for the Red Bull Stratos and StratEx high altitude skydive missions. At NASA he is responsible for the vision and technical direction for the Exploration Medical Capabilities Element. In addition to being the Element Scientist for Exploration Medical Capabilities at NASA Johnson Space Center, Dr. Antonsen is an Assistant Professor of Emergency Medicine with a co-appointment as an Assistant Professor of Space Medicine at the Center for Space Medicine, both at Baylor College of Medicine in Houston, TX.

Dr. Antonsen is a member of the American Institute of Aeronautics and Astronautics, the American College of Emergency Physicians, the American Academy of Emergency Medicine, the Society of NASA Flight Surgeons, and the Aerospace Medical Association. His awards and honors include an Early Career Achievement Medal from NASA in 2017, a Special Commendation Award from the NASA Human Research Program in 2017, an Outstanding Mentor Award from the Aerospace Medicine Student and Resident Organization in 2016, a SURGE Fellowship from the University of Illinois at Urbana-Champaign in 1997, an Aerospace Illinois Fellowship from NASA in 2001, a University Fellowship in the University of Illinois at Urbana-Champaign's Medical Scholars Program in 2006, Excellence in Medicine at the University of Illinois at Urbana-Champaign's College of Medicine in 2008, Senior Student Clinical Research Award from University of Illinois at Urbana-Champaign's College of Medicine in 2009, and a Senior Resident Teaching Award from Harvard Emergency Medicine Residency in 2013.



MARY T. KLINKER AWARD

Tamara Averett-Brauer, MN, RN, Col., USAF(Ret.)

Established by the Flight Nurse Section in 1968, this award became an official AsMA award in 1972. In 1978 it was renamed in memory of Mary T. Klinker, who was killed in a C-5A crash while performing a humanitarian mission. The award is given annually to recognize significant contributions to, or achievements in, the field of aeromedical evacuation. Sponsored by ZOLL Medical Corporation.

Tamara "AB" Averett-Brauer, MN, RN, Col., USAF(Ret.), has received the 2018 Mary T. Klinker Award. She was honored for her efforts to meet emerging en-route care/aeromedical evacuation and expeditionary medicine challenges. A Flight Nurse Instructor- Examiner, she recovered survivors of the Khobar Towers bombing in 1996 as well as a subsequent terrorist attack in Pakistan. In 2001, she tasked aeromedical evacuation crews/aircraft for the post-9/11 response. She assisted in the deployment/laydown of aeromedical evacuation forces around the world for Operation Enduring Freedom in 2003. She also briefed NATO's aeromedical evacuation conference in Switzerland in 2010. She commanded the largest U.S. Central Command Aeromedical Evacuation squadron (124 personnel), melding aeromedical evacuation/patient staging personnel into a cohesive team to deliver higher levels of medical care in combat environments.

Ms. Averett-Brauer served 29 years in the U.S. Air Force as Pacific Air Forces Command Nurse, Squadron Commander, Chief Nurse, Flight Nurse, and Tanker Airlift Control Center Barrel Master. She is a Chief Flight Nurse with over 1200 flight hours, including 96 combat hours. Her operational and deployed experiences include two tours in Afghanistan supporting Operation Enduring

Freedom, first as Chief Nurse, Craig Joint Theater Hospital/JTF-MED, and then as 451st Expeditionary Aeromedical Evacuation Squadron Commander; additionally, she was the 775th Expeditionary Aeromedical Evacuation Squadron Director of Operations for the standup of U.S. redistribution of patients from Operation Iraqi Freedom. Her operational Flight Nurse tours included 2nd Aeromedical Evacuation Squadron (AES) & 86 AES Ramstein AB, Germany, where she was a Flight Nurse Instructor and Flight Nurse Examiner, and then flew again when she returned as the 86 AE Squadron Commander. She served as the Military Consultant to the Air Force Surgeon General for Aeromedical Evacuation and Flight Nursing from 2010–2015.

Ms. Averett-Brauer completed a distinguished Air Force career as senior nursing executive leader with extensive Aeromedical Evacuation, hospital, and regional health system headquarters expertise. After retiring from active duty, she returned to service as a civilian to become the Core Research Competency (CRC) & Research Thrust Area Leader at the USAF School of Aerospace Medicine (USAFSAM), 711th Human Performance Wing (HPW), Air Force Research Laboratory, Wright-Patterson AFB, OH. She is a senior health scientist and thought leader for Defense Health Program and Air Force Medical Service research efforts addressing identified research gaps in en-route care/aeromedical evacuation and expeditionary medicine. She guides research teams conducting over 80 active projects.

Ms. Averett-Brauer is a Board Member-at-Large of the Aerospace Nursing and Allied Health Professions Society (ANAHPs), a Life Member of the Society of Federal Health Care Professionals, and a member of the American Nurses Association, the Nebraska Nurses Association, and the Air and Surface Transport Nurses Association. Within AsMA, she has served on the Scientific Program Committee. Her honors and awards include the Legion of Merit, the Bronze Star, the Meritorious Service Medal with six oak leaf clusters, the Barbara C. Brannon Nursing Leadership Award from the Pacific Air Forces, Aeromedical Evacuation Excellence in Management Award from Mobility Air Forces, and Field Grade Nurse of the Year from the 81st Medical Group at Keesler AFB, MS. She has presented at AsMA's Annual Scientific Meeting as well as at meetings of the Asia Pacific Military Nurse Exchange, the Society of Federal Health Professionals, and the Military Health System Research Symposium.

Nominate a Colleague for an AsMA Award!

The nomination form and rules are on our website at: <https://www.asma.org/members-only/award-nominations>. There is an online submission form linked on this page. For more information, you can contact the Chair, at: awards@asma.org

For all but the Leverett Award, the nominee MUST be an AsMA member.

Deadline for submissions is January 15.



**SIDNEY D. LEVERETT, JR.
ENVIRONMENTAL SCIENCE
AWARD**

Duane Pierson, Ph.D.

Established in memory of Sidney D. Leverett, Jr., Ph.D., this Environmental Science Award is presented annually to an individual who has made a significant contribution in the field of environmental medicine through a publication in Aerospace Medicine and Human Performance, or by activities conducted in support of aerospace systems operation. Sponsored by Environmental Tectonics Corporation.

Duane Pierson, Ph.D., is the recipient of the 2018 Sidney D. Leverett, Jr., Environmental Science Award. He was honored for significantly furthering the field of environmental medicine through his work with latent viral reactivation in response to spaceflight. His scientific research has led to innovative advancements in the biomonitoring of reduced immunity, both in spaceflight and on Earth. He is world renowned for his expertise in spaceflight microbiology at NASA Johnson Space Center (JSC). He and his team support both biomedical research and spaceflight operations in the context of identifying and mitigating environmental challenges. One particular area has been the study of latent herpes viruses in astronauts for over 20 years (Shuttle, Soyuz, Mir, and ISS) and in ground analogues (Antarctica, NASA NEEMO undersea habitat, bed rest, and closed chambers). Dr. Pierson has given numerous invited presentations on this topic at key scientific meetings. This innovative work is now leading to the pursuit of spaceflight countermeasures against these mission-threatening viral pathogens.

A Fellow in the American Academy of Microbiology, Dr. Pierson served as NASA's Chief Microbiologist for human spaceflight and expert on the many microbiological aspects of spaceflight for more than 36 years. After graduation from NWOSU with a B.S. in Chemistry and Biology, he earned his Ph.D. in Biochemistry from Oklahoma State University and was on the faculty of the Microbiology and Immunology Department at Baylor College of Medicine for 10 years before joining NASA in 1980. He and his team were responsible for formulating, developing, and implementing NASA's microbiology program for current and future human exploration of space. His focus was on identification of microbiological risks of the spacecraft environment to the crew and his goal was to prevent or mitigate these risks to acceptable levels. He created and chaired the NASA Biosafety Review Board and served as the chairman of the Institutional Review Board for NASA's Human Spaceflight Program. In addition to his spaceflight operational responsibilities, he directed a highly productive research program with strong collaborations with many U.S. and international scientists.

Dr. Pierson has published approximately 200 manuscripts in a wide variety of peer-reviewed journals. He also has 30 book chapters, 34 NASA Technical Briefs, and 2 patents. His leadership in space microbiology has

made him a well-recognized figure throughout NASA, the academic community, and the aerospace industry. He maintains academic appointments at the University of Texas Medical Branch and the University of Houston. NASA has recognized Dr. Pierson's accomplishments through many awards such as: The Medal for Exceptional Scientific Achievement, Exceptional Service Medal, the Certificate of Commendation, the Innovation Award, and the Director's Achievement Award. The astronauts recognized his contributions in environmental health with the highly-coveted Silver Snoopy Award.

Dr. Pierson retired with more than 36 years of service on July 1, 2016; he now serves as Senior Microbiologist, Emeritus at the NASA Johnson Space Center in Houston and continues research. He is a member of the American Society for Microbiology, the National Academy of Microbiology, the Society of Industrial Microbiology, the American Association for Biological Safety, and the Aerospace Medical Association. He is a Fellow of the American Academy of Microbiology.



ERIC LILJENCRAINTZ AWARD

Tarah Castleberry, D.O., M.P.H.,

The Eric Liljencrantz award was established in memory of CDR Eric Liljencrantz, MC, USN, whose brilliant career in aviation medicine was cut short by his death in an airplane accident in 1942. It is given annually to honor excellence as an educator in aerospace medicine, or basic research into the problems of acceleration, altitude, or weightlessness. Sponsored by the Aerospace Medical PLC.

Tarah Castleberry, D.O., M.P.H., has been honored with the 2018 Eric Liljencrantz Award. She was chosen for her outstanding service as Program Director for the University of Texas Medical Branch's (UTMB's) Aerospace Medicine Residency Program. During her years there, she has expanded opportunities for aerospace medicine residents, including rotations with the U.S. Antarctic Program, commercial space companies, and the U.S. military. Under her leadership, UTMB aerospace medicine residents published 30 peer-reviewed studies in aerospace medicine, received 19 AsMA and other awards, and had a 100% American Board of Preventive Medicine board pass rate.

Dr. Castleberry received a B.S. in Biology from Grand Canyon University in 1994 and then earned a D.O. from Kirksville College of Osteopathic Medicine in 1998. She served an internship in Family Medicine at the University of Alabama at Birmingham from 1998 to 1999 and then earned an M.P.H. at Johns Hopkins Bloomberg School of Public Health in 2000. She served a Residency in Aerospace Medicine from 2000 to 2002 at the Naval Aerospace Medical Institute and then a Residency in Family Medicine at the Mayo Clinic in Scottsdale, AZ, from 2007 to 2009.

Dr. Castleberry has been the Flight Surgeon for Virgin Galactic since August 2015. She is board certified in

Aerospace Medicine, Family Medicine, and General Preventive Medicine. She served as a contracted NASA Flight Surgeon through the UTMB-Wyle Bioastronautics contract from 2009–2012, providing support for International Space Station missions as well as support of U.S. and International Partner astronaut operations in Russia and Kazakhstan. Following her work at NASA, she became the program director for the UTMB-NASA/JSC Aerospace Medicine Residency as well as the program director for the UTMB General Preventive Medicine Residency, serving in that capacity until 2017. She is an associate professor in the departments of Preventive Medicine and Community Health and Family Medicine at UTMB and Senior Faculty at Baylor College of Medicine Center for Space Medicine. Prior to her work at UTMB and NASA, she served as a flight surgeon and aerospace medicine specialist in the U.S. Navy for 7 years. She is currently Principal Investigator for a project funded by the FAA Center of Excellence for Commercial Space Transportation studying physiological effects of acceleration in the suborbital space environment.

Dr. Castleberry is a member of the Society of U.S. Naval Flight Surgeons, the Society of NASA Flight Surgeons, the American Academy of Family Practice, the Space Medicine Association, and the Aerospace Medical Association. Her honors and awards include U.S. Navy Flight Surgeon of the Year Nominee, NASA Life Saver Award, NASA Space Life Sciences Division Director's Commendation Award, an Honorary Doctor of Science in Osteopathy degree from Kirksville College of Osteopathic Medicine, the Aerospace Medicine Student and Resident Organization Mentor Award, and being co-recipient of the Arnold D. Tuttle Award from the Aerospace Medical Association. She has 10 published papers and 10 invited lectures to her name, as well as a patent submission.



RAYMOND F. LONGACRE AWARD

Johnene Vardiman-Ditmanson, MS, LCDC, SAP

Established to honor the memory of MAJ Raymond F. Longacre, MC, USA. It is given annually for outstanding accomplishment in the psychological and psychiatric aspects of aerospace medicine. Sponsored by the Aerospace Human Factors Association.

Johnene Vardiman-Ditmanson, MS, LCDC, SAP, is the 2018 recipient of the Raymond F. Longacre Award. She was honored for her 20 years of outstanding service to pilots. She is well-known and highly-regarded in the Human Intervention and Motivation Study (HIMS) program as a compassionate champion of pilots in recovery. She speaks at national HIMS meetings and provides council to several major airline HIMS programs. In addition, she has conducted research on the psychological aspects of commercial spaceflight, having co-authored two papers on the subject.

Ms. Vardiman-Ditmanson is a graduate of the University of North Dakota with an undergraduate degree in Aviation Administration and Management and a graduate degree in Aviation Safety, with additional graduate-level study in counseling psychology. She is a private, instrument, and commercially-rated pilot, and has worked for several companies in the aviation industry. Prior to joining the team at UTMB Aerospace Medicine, she worked as a Licensed Chemical Dependency Counselor treating pilots in an inpatient treatment setting. Currently, Ms. Vardiman-Ditmanson serves as the Senior Counseling Specialist and Manager of the UTMB Aerospace Medical Clinic in Galveston, TX. She manages all aspects of clinical operations and development of pilot certification packages while additionally serving as a licensed chemical dependency counselor and Department of Transportation substance abuse professional, providing screening, assessment, treatment planning, and follow-up monitoring of aviation professionals. Further, she serves as a co-investigator in UTMB's ongoing investigation of layperson physiological and psychological tolerance of acceleration forces in preparation for suborbital spaceflight, research funded by the FAA's Center of Excellence for Commercial Space Transportation.

Ms. Vardiman-Ditmanson's awards and honors include the Alfred L. and Constance C. Wolf Aviation Fund Grant from the University of North Dakota, the Donald I. Smith Aerospace Young Scholar Endowment Award from the University of North Dakota, and the AsMA's Arnold D. Tuttle Award in 2015 as a co-author on the article "Tolerance of centrifuge-simulated suborbital spaceflight by medical condition" [Aviat Space Environ Med. 2014; 85(7):721–729]. She is a member of the Association for Addiction Professionals, the Aerospace Physiology Society, the Civil Aviation Medical Association, and the Aerospace Medical Association.



THEODORE C. LYSTER AWARD

Hernando J. Ortega, Jr., M.D., M.P.H.

This award was established to honor the memory of Brig. Gen. Theodore C. Lyster, the first Chief Surgeon, Aviation Section, United States Signal Corps. It is given annually for outstanding achievement in the general field of aerospace medicine. Sponsored by the Army Aviation Medical Association.

Hernando J. "Joe" Ortega, Jr., M.D., M.P.H., has been honored with the 2018 Theodore C. Lyster Award. He was chosen for his visionary work to develop and mold the future of aerospace medicine. He was one of a handful of flight surgeons who developed the "lineup card" of human factors concerns associated with the more powerful combat capable F-16 A/B/C/D models. His in-flight mitigation strategies, such as the "slap-shot" neck maneuver or the "slim-Jim" abdominal squeeze are still used today to limit neck or lower back strain and injuries in high-G high performance aircraft. His outstanding work

at Patrick AFB, FL, earned him selection as the Air Combat Command (ACC) Flight Surgeon of the Year. He was even requested to take a position at NASA's Johnson Space Center, Houston, TX. During his residency, he brought the USAF's well-studied concepts on fatigue and operations to the nation's medical residential 80 hour work week discussion. Now the lead AMA delegate for AsMA, he still brings the Air Force's and Aerospace Medicine perspective and needs to the American Medical Association (AMA) House of Medicine.

Dr. Ortega first earned a B.S. in Biology at the University of Georgia in Athens in 1981. He received his M.D. from the University of Tennessee Health Science Center in Memphis in 1986 and served an internship in General Surgery at Wilford Hall Medical Center, San Antonio, TX, from 1986–1987, then a Residency in Aerospace and Occupational Medicine from 1998–2001. He then earned an M.P.H. in 1999 at the Harvard School of Public Health in Boston, MA. From 1987 to 1998 and 2001 to 2003, he had multiple assignments as a USAF and NASA Flight Surgeon. In 2003, he became Squadron Commander at the 473rd Aerospace Medicine Squadron at Yokota AB, Japan. In 2005, he became Deputy Hospital Commander, 35th Medical Group, at Misawa AB, Japan. In 2006, he transferred to Kunsan AB, Korea, to serve as Commander of the 8th Medical Group. In 2007, he was assigned as Command Surgeon of Air Force Intelligence, Surveillance, and Reconnaissance Agency. Between 2007 and 2012, as the command surgeon for the AF ISR Agency, he coined the terms “telewarfare” and “telecombat” to describe the emerging environment of remotely piloted aircraft combat operations. He transferred in 2012 to become Chief of the Aerospace Medicine Division, Air Education and Training Command, which he held until 2016, when he retired as a full Colonel. In 2012 he also became Vice Chair, Aerospace Medicine, with the American Board of Preventive Medicine.

Dr. Ortega is the Founder and Managing Member of Flight Docs Unlimited, LLC, in San Antonio, where he is presently working on two U.S. Air Force contracts, as well as Consulting Director of Operational Flight Medicine for Neurostat Analytic Solutions. He is a member and Past President of the Society of USAF Flight Surgeons and the American Society of Aerospace Medicine Specialists. He is also a member of the International Academy of Aviation and Space Medicine, the Association of Military Surgeons of the United States, the American College of Occupational and Environmental Medicine, and the House of Delegates of the American Medical Association. He is a Fellow, Vice President, and Treasurer of the Aerospace Medical Association.

“Ever Upward”

For the latest AsMA News please read our Newsletter “Ever Upward” online at:
<http://www.asma.org/news-events/asma-news-archive/newsletters>



MARIE MARVINGT AWARD

Jeffery C. Chancellor, M.S.

Established and sponsored by the French Society of Aerospace Medicine in memory of Marie Marvingt (1875–1963), a pioneer French pilot and surgical nurse who, for more than 50 years, actively and untiringly involved herself

in the conception and development of air ambulance services and in the education of the general public regarding their use and benefits. The award is presented annually to honor excellence and innovation in aerospace medicine.

Jeffery C. Chancellor, M.S., is the 2018 winner of the Marie Marvingt Award. He was honored for his research efforts concerning space radiation and associated health risks to astronauts during long-duration spaceflight. His innovative work has directly addressed this complex problem to help expand our understanding of the space radiation environment and to better translate radiation risks to astronaut health. He has highlighted new areas of clinical concern, identified gaps in radiation understanding, and provided a path towards better emulating the space environment for terrestrial research. His new work presents a novel terrestrial research approach to emulating space radiation complexity and the intravehicular environment. This approach could allow more accurate analog recreation of the space radiation environment by allowing for continuous generation of ionizing radiation that more closely matches the ion distribution, energy spectrum, and dose-rate of galactic cosmic radiation than traditional study designs. His research has the potential to greatly improve upon our understanding of space radiation risks to health, providing the opportunity to prevent or mitigate future threats to astronaut crews.

Mr. Chancellor joined the U.S. Coast Guard in 1989 and became a Flight Mechanic. He served until 1996. He became an Operations and Quality Assurance Manager at Morton's Inc., in 1997. He attended the University of Houston in 1999 and earned a B.S. in Physics in 2003. He then earned an M.S., also in Physics, in 2005, also at the University of Houston. He then took a position as Senior Research Engineer at Lockheed Martin Space Operations, NASA Johnson Space Center, Space Radiation Analysis Group (SRAG). As part of SRAG, he served as a Flight Controller on the Radiation Console in Mission Control and as the Radiation Lead on the Mission Management team for Space Shuttle mission STS-118, STS-120, STS-122, and STS-125 (Hubble repair mission). In 2010, he became Radiation Effects Program Manager at the National Space Biomedical Research Institute until 2014 and held an academic appointment at the Center for Space Medicine at Baylor College of Medicine. In 2012, he also served as Radiation Health Officer and Space Weather Advisor to the Red Bull Stratos Medical Team. From 2013–2015, he served as Radiation Team Lead Scientist for the Inspiration Mars Mission. In 2015, he began a Ph.D. in Applied Physics, which he is currently working on, and took his current position of Research Scientist at the Computational Physics Group,

Department of Physics and Astronomy, Texas A&M University, College Station, TX.

His awards include the NASA Peer Award and the Hubble 25th Anniversary Commendation. His publications include 1 book chapter, 2 commissioned special reports, and 10 papers. He has given over 35 invited talks at conferences, seminars, colloquia, and special lectures. He is a member of the Institute of Physics, the Center for Space Medicine at Baylor College of Medicine, the American Physical Society, and the Aerospace Medical Association.



HARRY G. MOSELEY AWARD

Francisco Riso-Tejada, M.D.

Established in memory of Col. Harry G. Moseley, USAF, MC, in recognition of his material contributions to flight safety. It is given annually for the most outstanding contribution to flight safety. Sponsored by Lockheed-Martin Corporation.

Francisco Rios Tejada, M.D., Ph.D., was the 2018 winner of the Harry G. Moseley Award for enhancing aviation safety as a researcher, educator, flight surgeon, manager, and accident investigator in the civilian and military sector both in Spain and in the international communities. Dr. Rios Tejada's achievements include conducting research and instruction in the field of flight safety. He was a pioneer in the establishment of polymerase chain reaction assays for the identification of aircrew fatalities. His contributions to aircraft accident investigation and aeromedical related areas such hyper-/hypobaric, spatial disorientation, night vision, acceleration, and human factors are represented in over 135 publications and specifically 3 books devoted to Flight Safety and Aircraft Accident Investigation.

For 11 years, Dr. Rios Tejada has been a board member of the Military Aircraft Investigation Board of the Spanish MOD. He has been member of the NATO AGARD/RTO Human Factors and Medicine Panel for 25 years, where he accomplished a number of activities such as lecture series and workshops related to the field of aircraft accident analysis and related research. For 15 years, he coordinated a specific seminar as a part of the Flight Surgeon Course devoted to aircraft accident investigation, including not only the military approach, but also the civilian aspects of the civil investigation board. Nowadays in his position as Chief Medical Officer of the Spanish Civil Aviation Authority, he also participates in and reviews all the requests coming from the Civilian Investigation Board related to medical aspects, issues, and consequence of an accident.

Dr. Rios Tejada is a native of Malaga, Spain. He studied medicine at the medical school of the Complutense University of Madrid and joined the Spanish Air Force in 1979. From 1982 until his retirement he was stationed at the SPAF Aeromedical Center in Madrid, where he was Head of Education, Head of the Department of Aerospace

Medicine, and Commander of the Center. Upon retirement, he became Chief Medical Officer and Head of the Medical Division at the Spanish Civil Aviation Authority. He is a Fellow of the Aerospace Medical Association, Academician of IAASM, and past president of both the Iberoamerican Association of Aerospace Medicine and the Spanish Society of Aerospace Medicine.

Dr. Rios Tejada has been an Aviation Medical Examiner for the Federal Aviation Administration, Organización de Aviación Civil Internacional, the Joint Aviation Authorities, and the European Aviation Safety Agency. He is on the Editorial Board of *Military Medicine*. His awards include the Meritorious Cross (three times, Aeronautical, Distinctive, White), the Royal and Military Cross, Commendation, and Plaque of the Order of San Hermenegildo, an Award of Excellence from the Iberoamerican Association of Aerospace Medicine, the Balears Academy of Medicine Award, the Flight Safety Award from the Flight Armed Forces for best publication, and the Won Chuel Kay Award from the Aerospace Medical Association.



JOHN PAUL STAPP AWARD

Phillip Whitley, Ph.D.

This award was established and sponsored by Environmental Tectonics Corporation to honor Col. John Paul Stapp, USAF(Ret.). The award is given annually to recognize outstanding contributions in the field of aerospace biomechanics and to promote progress in protection from injury resulting from ejection, vibration, or impact.

Phillip Whitley, Ph.D., received the 2018 John Paul Stapp Award for his 35 years of experience primarily in developing requirements and protective means for humans in the extreme environments of sustained acceleration, pilot ejection, helicopter crashes, and aircraft vibration, including the assessment of injury risk and severity. His development of advanced manikins, comprehensive biodynamic models, and spine and neck injury criteria have helped predict and mitigate injuries during aircraft operations. Dr. Whitley was born and raised in North Carolina, attended North Carolina State University, where he earned his bachelor's and master's degrees in Biochemistry, and then received his Ph.D. in Bioengineering (Electrical and Computer Engineering minor) from Clemson University in 1983. From 1983 to 1995, he worked at the Naval Air Warfare Center Aircraft Division in Warminster, PA, in a variety of positions. In 1990, he became Adjunct Faculty, Aerospace Physiology and Psychology Course, at Embry-Riddle Aeronautical University, McGuire AFB, NJ. From 1984 to 1999, he was also Adjunct Assistant Professor, Biomedical and Electrical Computer Engineering Departments, at Drexel University in Philadelphia, PA. From 1995–1996, he was Associate Professor of the Bioengineering Division, Department of Neurosurgery, at the Medical College of Pennsylvania and Hahnemann University in Philadelphia.

From 1996 to 1999, he served as Senior Research Consultant and Principal Investigator at M. Technologies, Inc., Huntingdon Valley, PA. He then became Managing Engineer at Exponent-Failure Analysis Associates in Miami, FL, from 1999 to 2001. In 2002, he founded Criterion Analysis Inc. in Miami and in 2009 took his current position as Manager of Soldier Protection Programs, CFDRS Computational Medicine and Biology Division, CFD Research Corp., Huntsville, AL.

A Fellow of AsMA, Dr. Whitley is a Past President of the Life Science and Biomedical Engineering Branch (LSBEB) and a recipient of both the Professional Excellence Award in 2008 and the A. Howard Hasbrook Award for safety, survivability, and crashworthiness. He is a Senior Member of the IEEE. He has published several peer-review articles and book chapters, and made dozens of presentations including many at AsMA meetings.



JOHN A. TAMISIEA AWARD

Paulo Magalhães Alves, M.D., M.Sc.

This award was established and sponsored by the Civil Aviation Medical Association in memory of John A. Tamsiea, M.D. The award is given annually to an aviation medical examiner or

other individual who has made an outstanding contribution to the art and science of aviation medicine in its application to the general aviation field.

Paulo Magalhães Alves, M.D., M.Sc., FAsMA, received the 2018 John A. Tamsiea Award for his active involvement in aerospace medicine for more than three decades. Dr. Alves' experience as medical director of the biggest commercial airline in Brazil gave him an operational aspect of aviation medicine that concerned crew and passenger health, including flight crew immunization, cosmic radiation, in-flight medical emergencies, crew fatigue management, aircraft disinfection, bioterrorism, deep vein thrombosis, SARS, and pandemics. He has been actively involved in the aerospace medical scientific community as a member of the Aerospace Medical Association since 1993, where he has been distinguished as a Fellow and is currently the Chair of the Air Transport Medicine Committee. Currently, Dr. Alves is the Global Medical Director of Aviation Health, MedAire Inc. He is responsible for providing technical guidance and analysis for MedAire's medical advisory service. He also monitors trends in medicine and technology and authors papers, articles, and presentations on topics affecting remote medicine.

A native of Natal, Brazil, Dr. Alves graduated from the Federal University of Rio de Janeiro's School of Medicine in 1979 with an M.D., and then served a Residency in Cardiology at the Federal University of Rio de Janeiro's University Hospital. He earned an M.Sc. in Cardiology in 1988. From 1984-1987, he served as a Professor in Cardiology at Fluminense Federal University and then became a Cardiologist at Varig Brazilian Airlines from 1983-1989. In 1989, he became Head of Medical

Informatics and later Vice Director at the Division of Medical and Social Assistance at the Federal University of Rio de Janeiro. From 1992-1993, he was the Head of the Division of Research and Technology at Laranjeiras Cardiology Hospital; in 1993, he became Director of Human Resources there. In 1994, he became Regional Medical Manager at Varig Brazilian Airlines. From 1996-2006, he was the Medical Director at the Ruen Berta Foundation, Varig Brazilian Airlines. During that time, he was also an Aviation Medical Examiner for Transport Canada until 2007, a Basic Life Support Instructor Trainer, and a Cardiologist for the Intermediate Care Unit of Laranjeiras Cardiology Hospital and at the Coronary Care Unit of the Federal University of Rio de Janeiro's University Hospital, both until 2007. He began working for MedAire in 2007 and, since then, has researched and presented on many aeromedical topics impacting the commercial and business aviation industries.

Dr. Alves has served as Secretary-General and is a Past President of the Brazilian Society of Aerospace Medicine, Past President of the Airlines Medical Directors Association, a member of the IATA Medical Advisory Group, the International Academy of Aerospace Medicine, and the Ibero-American Society of Aerospace Medicine, a Fellow of the Civil Aviation Medical Association and the Aerospace Medical Association (AsMA), and a member of the American Telemedicine Association. His awards include the George Kidera Award from the Airlines Medical Directors Association, the MedAire CEO Award, the Boothby-Edwards Award and the Harry G. Moseley Award from AsMA, and the Annual Scientific Award for his role as a co-author on the paper "Pediatric fatalities at 30,000 feet: characterizing pediatric deaths on commercial air flights" from the Society of Critical Care Medicine.



THOMAS J. AND MARGARET D. TREDICI AWARD

Lt. Col. Christopher M. Putnam, USAF

This award was established by Thomas J. Tredici and sponsored by an endowment fund managed by the Aerospace Medical

Association Foundation. It is given for the most significant contribution to aerospace ophthalmology and vision science.

Lt. Col. Christopher M. Putnam, USAF, received the 2018 Thomas J. and Margaret D. Tredici Award for his contributions to vision standards, and flyer protection and performance. The award was presented during AsMA Honors Night Ceremonies, May 10, 2018, at the Hilton Anatole Hotel, in Dallas, TX. While serving as Chief of the Tri-Service Research Laboratory bioeffects and vision science section, he guided an aircrew laser eye protection program that mitigated emerging threats to over 628K US/UK civilian and military pilots. He also conducted a NASA laser protection effort for astronaut safety during

orbital docking and extra-vehicular activities. Additionally, he directed an evaluation of an Army laser eye protection prototype in collaboration with Natick Soldier Systems Center, verifying protection performance and assessed operational impact. He supported development of a directed energy lesion database of retinal injury imaging data relevant for DoD personnel, FAA personnel, clinicians, international partners and researchers. He provided a comprehensive review of USAF and ROKAF aircrew vision examination and standards with emphasis on waiver management.

Lt. Col. Putnam is Commander, Detachment 5, 711th Human Performance Wing and Deputy Chief, Bioeffects Division, Airman Systems Directorate, 711th Human Performance Wing, Air Force Research Laboratory (AFRL) at Joint Base San Antonio, TX. He leads the military for the Bioeffects Division and oversees readiness, discipline, and training in addition to ensuring standards and comprehension of the AFRL mission for 250 military, civilian, and contractors, and serves as the sole vision scientist on The Technical Cooperation Program (TTCP) international intelligence working group and was recently appointed as a regional chair of the American Academy of Optometry Admittance Committee.

Lt. Col. Putnam earned a Bachelor of Science degree in Chemistry from South Dakota State University in 2001 and a Doctorate in Optometry from Pacific University in 2005. He was commissioned in March 2004 as part of the Health Professions Scholarship Program and entered active duty as a Captain in 2005 after graduation. He served as the Basic Military Training Element Chief at Lackland AFB, TX, until 2008 when he was selected for the USAF Optometry Residency program and was board certified in 2009. He served as a staff optometrist at Scott AFB until



ARNOLD D. TUTTLE AWARD

Douglas Boyd, Ph.D.

Established in memory of Col. Arnold D. Tuttle, USAF, MC. Awarded annually for original research that has made the most significant contribution toward the solution of a challenging problem in aerospace medicine and which was published in Aerospace Medicine and Human Performance. Sponsored by KBRwyle.

2011 when he was selected to the Air Force Institute of Technology (AFIT) Civilian Institution Program to pursue a Ph.D. in Physiologic Optics. He completed the accelerated Ph.D. program in 3 years, winning an unprecedented three Graduate Research Fellowship awards and two consecutive top abstract awards from the Heart of America Primary Care Congress. He was selected by the Optometry Consultant to the USAF Surgeon General to chair the AFIT Ph.D./Residency Committee within the USAF Optometry Corporate Board.

Lt. Col. Putnam's awards and honors include the Global War on Terrorism Expeditionary Medal (2006); the Air Force Outstanding Unit Award (2006, 2008, 2010); Company Grade Global Health Officer of the Year (2007); the Air Force Commendation Medal (2008); the Small Arms Expert Marksmanship Ribbon (2008); the Military Outstanding Volunteer Service Medal (2010); the Air Force Meritorious Service Medal (2011, 2015); the Korean Defense Service Medal (2014); the Humanitarian Service Medal (2015); the Nuclear Deterrence Operations Service Medal (2016); and the Air Force Achievement Medal (2017). He is a member of the American Optomet-



FELLOWS CLASS OF 2018--Dr. Nomy Ahmed, Col. Patrick T. Birchfield, Col. David E. Blocker, Dr. Tarah L. Castleberry, CAPT Frank A. Chapman, Col. Charles D. Clinton, John Darwood, Dr. Matthew F. Dumstorf, Dr. Cesario F. Ferrer, Jr., Dr. Chris M. Front, Dr. Alejandro Garbino, Lt. Col. Jaime R. Harvey, Col. Alden D. Hilton, Sr., LTC Matthew H. Hofer, Dr. Ewan J. Hutchison, LTC Mark L. Jacques, Dr. Ben Johnston, BG Christopher J. Knapp, Col. (Dr.) Christopher Kleinsmith, LTC Carla Ledderhos, Prof. Henri C. Marotte, Maj. Mari M. Metzler, Dr. Pierre J. Morissette, Col. Mark A. Nassir, Dr. Sean K. Roden, Dr. Keith J. Ruskin, Dr. Carlos Salicrup, Dr. Nereyda L. Sevilla, Col. Daniel Shoor, Col. Chaz A. Shurlow, CAPT Theron C. Toole, COL Lewis A. Van Osdel, Dr. Sharmila D. Watkins, Col. Johann S. Westphall, Dr. Elizabeth S. Wilkinson, BG Brett A. Wyrick. Those present at the Honors Night Ceremony, May 10, at the Hilton Anatole Hotel in Dallas, TX, are pictured here along with the Fellows, Chair, Dr. Warren Silberman (standing far right).

ric Association, the Armed Forces Optometric Society, and the Aerospace Medical Association and a Fellow of the American Academy of Optometry. He has 9 publications, 10 posters, and 7 invited lectures to his name.

Douglas Boyd, Ph.D., received the Arnold D. Tuttle Award for his manuscript "In-flight decision-making by general aviation pilots operating in areas of extreme thunderstorms" [Aerosp Med Hum Perform. 2017; 88(12):1066–1072]. In this article, he examines pilot decision-making regarding avoidance of thunderstorms. In his analysis he found that from 1996–2014, the thunderstorm accident rate was undiminished and that a majority of flights violate the FAA-recommended separation distance from thunderstorms and are more likely to do so for landings rather than en route operations. He recommends additional emphasis on thunderstorm hazards and safe practices during pilot training.

Dr. Boyd earned a B.Sc., in Pharmacology at Leeds University, Leeds, UK, in 1982 and a Ph.D. at Edinburgh University, Edinburgh, Scotland, in 1985. He was Assistant Professor at the University of Texas in Houston from 1991 to 1996, then became Associate Professor. In 2001, he was made a full Professor, and recently retired from this position. He has reviewed for 30+ journals, including *Aerospace Medicine and Human Performance*, and several funding agencies, including the NIH. He has mentored 29 graduate students/fellows, including a resident in aerospace medicine. He serves on both the Aerospace Medical Association's Aviation Safety Committee and Scientific Program Committee as a member, and as chair of the Resolutions Committee. He is also an FAA Safety Team representative co-organizing (and presenting) safety seminars for Houston-area general aviation pilots.

Dr. Boyd is a member of the University Aviation Association and Fellow of the Aerospace Medical Association (AsMA). His honors and awards include Outstanding Educator from the University of Texas, an Award of Appreciation for Mentoring of Residents in Aerospace Medicine from the USAF School of Aerospace Medicine, and the Joseph L. Haley Writing Award from the U.S. Army Aviation Medical Association. He has published numerous articles, both in peer-reviewed journals and non-peer-reviewed aviation magazines, and presented at many conferences and symposia.



JULIAN E. WARD MEMORIAL AWARD

Rahul Suresh, M.D., M.S., M.P.H.

Established and sponsored by the Society of U.S. Air Force Flight Surgeons in memory of its first member to lose his life in an aircraft accident, and to honor all flight surgeons whose

lives are lost in the pursuit of flying activities related to the practice of aerospace medicine. The award is given annually for superior performance and/or outstanding achievement in the art and science of aerospace medicine during residency training.

Rahul Suresh, M.D., M.S., M.P.H., was the 2018 winner of the Julian E. Ward Memorial Award for his work with time zone changes and their effect on diabetic pilots. The result of his study will help flight crew operations maintain the safety and efficiency of crewmembers. His work has gained the attention of academicians as well as biomedical monitoring equipment manufacturers. He has already participated in a press conference regarding this work and publications have been submitted. He has distinguished himself as a leader in all areas and has continued to receive the highest ratings in his aerospace medicine clinical rotations. He was appointed Chief Resident of the University of Texas Medical Branch's (UTMB's) Aerospace Medicine Residency Program due to his organizational skills, his broad knowledge base, and his ability to inspire others.

Dr. Suresh is in his last year of the aerospace medicine residency at UTMB in Galveston, TX. He received his B.A. from Rice University in Biochemistry and Cell Biology in 2008, following which he was an Indicorps service-leadership Fellow in rural India. In 2014, he received his M.D. and M.S. degrees from Mayo Medical School and Mayo Graduate School in Rochester, MN, and in 2017, his M.P.H. from UTMB. During his training, he had the opportunity to gain space medicine operational experiences at NASA Johnson Space Center (JSC) and served as a physician at McMurdo Station in Antarctica. He completed the U.S. Air Force aerospace medicine primary and Federal Aviation Administration Aviation Medical Examiner courses.

Dr. Suresh has presented lectures for UTMB's course, "Principles in Aviation and Space Medicine" on the subject of diabetes and air travel. His volunteer work includes the UTMB Quality Care Committee; medical support for the "Wings Over Houston" airshow; and working at St. Vincent's House, a free clinic run by residents in Galveston. At AsMA 2017, he gave three high-quality presentations. He also presented at the IAC in Mexico in 2016. He was first author on the paper, "Sustained Accelerated Idioventricular Rhythm in a Centrifuge-Simulated Suborbital Spaceflight," published in *Aerospace Medicine and Human Performance* in August 2017. He also authored the chapter on "Visual Impairment Intracranial Pressure in Spaceflight" for the "Handbook of Aerospace and Operational Physiology" by AsMA members A.D. Woodard and J. T. Webb. He has published nearly a dozen peer-reviewed articles and has been an invited speaker for many meetings and events.

Dr. Suresh's honors and awards include Second Place Research Poster Winner at Texas Regional ACP in Galveston, Internal Medicine Quality Forum First Place Oral Presentation Winner at UTMB, Internal Medicine Resident of the Month at UTMB, the 2016 Stanley R. Mohler, M.D., Aerospace Medicine Endowed Scholarship from the Aerospace Medical Association (AsMA), the Wyle Scholarship in honor of Robert Ellis from the Space Medicine Association, the Anita Mantri Memorial Travel Scholarship from AsMA, and second place for the AsMA Fellows Scholarship. He is a member of the Aerospace Medical Student and Resident Organization and the Space Medicine Association.