2017 Award Winners of the Aerospace Medical Association

Honors Night Ceremonies of the 88th Annual Scientific Meeting of the Aerospace Medical Association were held May 4, 2017 at the Sheraton Denver Downtown Hotel, Denver, CO. Twenty awards for outstanding contributions in aviation and space medicine were presented. The presentations were made by Dr. David Gradwell, 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, M.D. The winners were recommended by the Awards Committee and approved by the Executive Committee of the Aerospace Medical Association.

LOUIS H. BAUER FOUNDERS AWARD

Estrella Forster, 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.

Estrella de María Forster y Cornejo, M.S., Ph.D., was the recipient of the 2017 Louis H. Bauer Founders Award. She was honored for her lifetime contributions and dedication to Aerospace Medicine and operations for over 30 years, both in the United States and internationally. Her accomplishments include leadership in civilian, academic, corporate, and military roles, and pioneering scientific research in many areas, with over 200 publications. She developed and demonstrated SAILSS, the only intelligent Aircrew Integrated Life Support System, and developed metrics to assess adaptive function allocation, fatigue, and human performance in the acceleration environment. She also developed acceleration taxonomy and has contributed extensive epidemiology research for the Federal Aviation Administration (FAA).

Dr. Forster's experience encompasses 31 years of aerospace medicine RDT&E efforts. Her technical and program management accomplishments in the USAF and NAVAIR focused on aircrew systems, specifically life support equipment addressing acceleration, altitude, thermal, and chemical-biological environments. She introduced and delivered USN Aircrew Integrated Life Support Systems for high performance rotor and fixed-winged aircraft. She also conceived, developed, and delivered the Collaborative Operations and Responsive Technology Experimentation (CORTEX) facility, Third Fleet's Command Center with over 60 C4ISR systems and the latest advances in knowledge management technology. She secured the replacement of old and obsolete research equipment and facilities at CAMI through the Aerospace Medical Equipment Needs (AMEN) program, a multi-million dollar effort that involved aircraft simulators, horizontal sled, biochemistry equipment, and high performance computing technology. Her aeromedical research efforts at CAMI have included epidemiologic studies of disqualifying pathologies in civil aviation.

Born in Mexico, Dr. Forster's family moved to San Antonio, TX, in 1977. She graduated from the University of Houston, TX, with a B.S. in 1981, and earned her M.S. and Ph.D. at Drexel University in Philadelphia, PA, in 1993 and 1998, respectively. Her professional career has included serving at the USAF School of Aerospace Medicine, Brooks AFB, in Texas as Research Associate (1984–1989); USN NAVAIR in Pennsylvania and Maryland as Scientist, Branch Manager, and Program Manager (1989–2002); and USN Third Fleet in California (2002–2004) as Science Advisor. She was adjunct professor of applied statistics and operations research at the graduate departments of Drexel University and the Florida Institute of Technology from 1994–2002. She joined the FAA Civil Aerospace Medical Institute (CAMI) in Oklahoma City, OK, in November 2004, where she currently serves as the Manager of the Aerospace Medical Research Division.

Dr. Forster is a Fellow of the Aerospace Medical Association (AsMA) and currently serves on the AsMA Science & Technology, Membership, and Scientific Program Committees. She also serves as chair of the AsMA Fellows Nomination Committee. Honors include NAVAIR Fellow, U.S. National Research Council Adviser, and member of the FAA Acquisition Systems Advisory Group. She is a member of other professional organizations, including the International Academy of Aviation and Space Medicine, the SAFE Association, the MOVES Institute Science Board, the Iberoamerican Association of Aerospace Medicine (IAAM, past president), the International Association of Aerospace Dentistry (founding member), and the AsMA Life Sciences and Biomedical Engineering Branch (LSBEB, past president). Her most recent honors are the Naval Collaboration Award, by the U.S. Chief of Naval Research, the Outstanding Leadership Award, by the FAA's Federal Air Surgeon (FAS), the A. Howard Hasbrook Award by the LSBEB, the Eric Liljencrantz Award by AsMA, Employee of the Year Award by both the OK Federal Executive Board and CAMI, the Excellence Award by IAAM, the Outstanding Team Award by the FAS, and the Professional Excellence Award by the LSBEB.

ADMIRAL JOHN C. ADAMS AWARD

RADM Daniel B. Lestage, USN(Ret.)

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.

RADM Daniel B. Lestage, MC, USN(Ret.), was the recipient of the first annual Admiral John C. Adams Award for his influence on the aeromedical operational forces of the U.S. Navy.

Born in Louisiana, Rear Admiral Lestage completed his undergraduate studies at Louisiana State University (LSU) in Baton Rouge and then earned an M.D. at LSU's School of Medicine in New Orleans. He was commissioned there as an Ensign in the Naval reserve. After completing an internship at Charity Hospital, New Orleans, he reported to the Naval School of Aviation Medicine in Pensacola, and became a Naval Flight Surgeon in 1964. He later earned an M.P.H. degree from Tulane University and completed an Aerospace Medicine residency at the Naval Aerospace Medical Institute in Pensacola.

RADM Lestage's initial operational tour (1965–1967) was with Attack Squadron 163 of Carrier Air Wing 16 on the USS *Oriskany* deployed to Southeast Asia for 8 months in 1965 in support of the growing tensions in Vietnam, carrying out over 12,000 combat sorties and delivering nearly 10,000 tons of ordnance. After a 5-month break, the *Oriskany* returned in June 1966 to launch nearly 8,000 more combat sorties. On October 26, 1966 a magnesium flare accidentally ignited, creating pressure that blew out the dogged hatch, ignited a helicopter on the hangar deck, then exploded the flare locker resulting in a fireball and additional aircraft fires. Although 44 died of burns and smoke inhalation, 156 were saved in large part due to Dr. Lestage's efforts. Among the dead were the ship's Senior Medical Officer and the other Carrier Air Wing Surgeon. Dr. Lestage and the ship's surgeon, with some assistance from medical personnel from the USS *Constellation* and USS *Franklin D. Roosevelt*, managed this major mass casualty.

Dr. Lestage ultimately influenced the aeromedical operational forces for 35 years of Naval service. During that time he continued to support aeromedical operations as a Senior Medical Officer for NAS New Orleans, as Senior Medical Officer for NAS Jacksonville and Chief of Preventive Medicine at the Naval Regional Medical Center in Jacksonville, as Head of the Operational Medicine Branch at OPNAV, and as Executive Officer of Naval Regional Medical Center Portsmouth. His service also included operational support assignments such as Special Assistant for Operational Medical Support and Director of Aerospace Medicine, Bureau of Medicine and Surgery, and, concomitantly, as Head of the Operational Medicine Branch, Aeromedical Coordinator, Deputy Chief of Naval Operations (Air Warfare). Upon retirement from the Navy, Dr. Lestage took a position with Blue Cross/Blue Shield of Florida and served in several leadership positions, retiring as a Vice President in 2006.

Rear Admiral Lestage's military awards include the Legion of Merit, the Meritorious Service Medal, the Air Medal, the Navy Commendation Medal, the National Defense Service Medal, the Vietnam Service Medal, and the Republic of Vietnam Presidential Gallantry Cross with Palm Citation. Personal awards include the Captain Robert E. Mitchell Lifetime Contributions in Naval Aerospace Medicine award from the Society of U.S. Naval Flight Surgeons and a President's Citation from the Aerospace Medical Association in 2011. He is certified by the American Board of Preventive Medicine, where he has also served as a Trustee. He is a Fellow of the American College of Physicians, the American College of Preventive Medicine, the American Academy of Family Physicians, and the Aerospace Medical Association. He is a Past President of the Aerospace Medical Association and the International Academy of Aviation and Space Medicine, and served as an AMA Delegate from 1994–2004. Quay Snyder, M.D., MSPH, President and CEO of the Aviation Medicine Advisory Service (AMAS), was the winner of the 2016 Boothby-Edwards Award. Dr. Snyder was honored for his tireless work towards policy, regulatory, and legislative health and safety improvements. He has been a passionate educator, advocate, and clinician who has promoted health, prevention of disease, and medical certification of airline pilots internationally. He regularly contributes to Air Line Pilot Magazine, writing many articles on pilot health and disease prevention and has given numerous safety presentations at national pilot forums. His research efforts and advocacy led to changes in certification of HIV+ pilots and recommendations to national aviation groups on laser eye hazards, cabin air quality, radiation exposure, and tropical disease prophylaxis. He has also given over 25 seminar presentations at the FAA-ALPA HIMS Program. He created the AMAS website, which has provided aviation professionals worldwide with accurate, timely, and free information on over 50 health conditions and their implications for aviation safety and aeromedical certification.

Nominate a Colleague for an AsMA Award!

The nomination form and rules are on our website at: www.asma.org, under "About AsMA" under Informational Documents. For more information, you can contact the Chair, at: awards@asma.org. Deadline for submissions is January 15.

BOOTHBY-EDWARDS AWARD

AsMA Pilot Mental Health Working Group and Philip J. Scarpa, Jr., M.D., M.S.

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.

The 2017 Boothby-Edwards Award was presented to the AsMA Pilot Mental Health Working Group (PMHWG) and Philip J. Scarpa, Jr., M.D., M.S., chair of the working group. In 2012 and again in 2015, the AsMA PMHWG drafted and updated recommendations on the need for improved awareness and identification of pilot mental health issues. The group's recommendations were distributed globally and significantly improved pilot health and aviation safety worldwide.

Following a March 2012 mental incapacitation of a Jet Blue airline pilot while in flight, the Aerospace Medical Association PMHWG was formed by AsMA and chaired by Dr. Philip Scarpa to study the current status and issues related to pilot mental health. The Working Group consisted of experts in aerospace medicine and mental health. The group met several times and produced a list of recommendations to improve awareness and identification of pilot mental health issues. The recommendations were sent to the U.S. Federal Aviation Administration and other organizations worldwide interested in medical standards, and presented in several key conferences and meetings.

After the crash of Germanwings Flight 9525 in March 2015, with pilot suicide as the probable cause and extreme world-wide interest, the PMHWG re-posted its recommendations which were reported worldwide. In September 2015, the Working Group revised their recommendations. The Working Group continued to emphasize the importance of assessing and optimizing pilot mental health, while providing additional recommendations on building trust and rapport between the aeromedical examiner and the pilot, on utilizing aviation mental health and aeromedical specialists, and on the balance between medical confidentiality and risk to public safety. The Working Group encouraged all organizations involved in flight safety to review and consider implementing these recommendations within their usual operations. These recommendations were endorsed by the European Society of Aerospace Medicine, the European Association for Aviation Psychology, and the European Cockpit Association, and cited as important guidance in the Germanwings Flight 9525 mishap investigation report. As a result, medical standards are being rewritten and the recommendations put into practice by pilot health and aviation safety organizations around the world.

Dr. Philip J. Scarpa, Jr., is the Deputy Chief Medical Officer at the NASA-Kennedy Space Center FL. Dr. Scarpa oversees all aerospace medical operations, ground systems development, biomedical research, and medical education at the spaceport. Over his career he has supported approximately 60 Space Shuttle missions. Dr. Scarpa is also an Associate Professor at the University of Texas Medical Branch in Galveston, TX, and at the Wright State University School of Medicine in Dayton, OH.

A native of New Jersey, Dr. Scarpa obtained a Bachelor of Science degree from Rutgers University in 1983 and a Medical Doctorate from the University of Medicine and Dentistry of New Jersey in 1988. He also obtained a Masters of Science from the Wright State University in 1993.

Originally trained in Internal Medicine, he is now board certified in Aerospace Medicine and Occupational Medicine. Dr. Scarpa has several published articles on space medicine and physiology and holds a U.S. provisional patent for a small portable device for the production of water for injection. His recent publications are in the fields of medical device testing, space radiation, and EMS support operations. He has also recently authored chapters in two books, one on space toxicology and the other on the Shuttle Columbia accident.

A Past President of AsMA, Dr. Scarpa became a member in 1986 and a Fellow in 2002. He is also a past-President of the Space Medicine Association and the Society of NASA Flight Surgeons. He has served on several AsMA committees, been the Chair of the Arrangements Committee and of the Scientific Program Committee, and reviewer for the AsMA journal.

JOHN ERNSTING AWARD

David McLouglin, OBE, M.B.B.Ch.

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.

Air Commodore David McLoughlin, RAF, OBE, M.B.B.Ch., is the 2017 recipient of the John Ernsting Award. He received the award for his outstanding and enduring contributions to Aerospace Medicine in the United Kingdom. His experience in the UK Royal Air Force has given him insight into the contributions aerospace medicine can make to the successful and efficient delivery of air power, enabling aviators to fully benefit from the

value that aerospace medicine can bring to military aviation. He reduced risk to the life of the aviator through his tireless promotion of aerospace medicine to senior aviation risk holders. His innovative leadership as President of the RAF Medical Board overcame bureaucratic and organizational obstacles in the establishment of an aircrew rapid access clinic, an achievement publicly recognized with the Health Service Journal Efficiency Award.

Air Commodore McLoughlin joined the Royal Air Force in 1988 as a medical cadet. After qualifying in medicine from Queens University, Belfast, in 1990, he trained as a General Practitioner at RAF Gatow, HQ AFCENT, RAF Marham, and Hinchingbrooke NHS Hospital Trust. This was followed by postings to RAF Ascension Island, to RAF Aldergrove, and to RAF Henlow as an aviation medicine instructor. Between 2001 and 2005 he completed higher professional training in occupational medicine at the RAF Centre of Aviation Medicine and at University Hospital Birmingham. He was made Officer Commanding Aviation Medicine Training Wing and promoted to Wing Commander in 2004. He completed the Advanced Command and Staff Course with distinction in 2008. From 2008 to 2010 he was SO1 Medical Operations at HQ Air Command. He was appointed as President of the RAF Medical Board and promoted to Group Captain in 2010. From 2012 to 2015 he was DACOS AvMed, the tri-service lead for aviation medicine. He took up the post of Inspector General upon promotion to Air Commodore at the end of March 2017.

Air Commodore McLoughlin is a Member of the Royal College of General Practitioners, a Fellow of the Faculty of Occupational Medicine, and a Fellow of the Royal College of Physicians. He won the Stewart Memorial prize in 1999 and the Royal Society of Medicine United Services section research prize in 2000. His operational experience includes Northern Ireland (a home tour), the Falkland Islands, OP Telic, and OP Herrick (three tours). He was awarded the Order of St. John in 2005 and the Order of the British Empire in 2014. He has been the RAF Taylor Professor of Occupational Medicine and the Director of Assessment for the National Faculty of Occupational Medicine.

KENT K. GILLINGHAM AWARD

Stephen Veronneau, M.D., M.S.

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.

Stephen Véronneau, M.D., M.S., received the 2017 Kent K. Gillingham Award for his instrumental role establishing high computing technology at the FAA for studies addressing medically disqualifying pathologies focusing on human safety and spatial disorientation.

Dr. Véronneau has been an outstanding member of the aeromedical community since 1988. He has served as a reviewer for the AsMA journal and has authored textbook chapters in accident investigation and spatial disorientation. His spirit of collaboration is unequaled and his knowledge of aerospace medicine is sought after by national and international colleagues.

Dr. Véronneau championed the development of risk measurements for the FAA's Safety Management System and the introduction of probabilistic risk assessment methodologies into aeromedical certification decision making processes. He has been very active in supporting the FAA's aeromedical education programs, including the Space Medicine chapter of the current Clinical Aerospace Physiology Review materials for Aviation Medical Examiners (AMEs). He has taught accident investigation to FAA Accident Investigators, AMEs, and visiting scientists for the last 25 years, and manages the CAMI Advanced Aerospace Medicine Course for International Medical Officers which is coordinated with the USAF. His involvement in academia is extensive and he participated for a decade in the Interagency Committee on Aviation Policy on the Safety and Standards subcommittee providing medical and human factors inputs to the effort to improve safety in public use aircraft. Specific research contributions to the general aviation community addressed the following topics: spatial disorientation, human factors, flying under the influence of alcohol, controlled flight into terrain, incapacitation, atrial fibrillation, and diabetes.

Dr. Véronneau received his B.S. in 1979 and his M.D. in 1983 from University of Manitoba, Winnipeg, Manitoba, Canada. He became Board Certified in Aerospace Medicine by American Board of Preventive Medicine January 1990 and completed his Aerospace Medicine Residency as well as receiving his M.S. from Wright State University later that year.

He has been Manager of the Aerospace Medicine Education Division at the Civil Aerospace Medical Institute since 2015. Prior to that he was a Research Medical Officer with FAA-CAMI from 1990–2014. He is also currently a Clinical Assistant Professor of Community Health at Wright State University, Dayton, OH, as well as Clinical Assistant Professor, Department of Preventive Medicine and Community Health, University of Texas Medical Branch, and a Member of the Residency Advisory Committee, Mayo Clinic. He has been a Senior AME since 1990 and held a Private Pilot license since 1988. Dr. Véronneau is qualified in Federal court as an expert witness in aeromedical certification, aerospace medicine, and spatial disorientation in General Aviation operations. He has also published innumerable peer review papers and reports and presented at over 200 national and international meetings, seminars, and short courses.

WALTER AND SYLVIA GOLDENRATH AWARD

Jeffrey C. Sventek, 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.

Jeffrey C. Sventek, M.S., CAsP, was this year's recipient of the Walter and Sylvia Goldenrath Award for his outstanding aerospace physiology and human performance research, teaching, program development, and leadership in the U.S. Air Force. His efforts as Chief of Human Performance at the 4444th Operations Squadron at Luke AFB, AZ, including writing and implementing Crew Resource Management courses for all TAC fighter systems, significantly reduced the number of human factors accidents in TAC. He also coordinated the development of the first Reduced Oxygen Breathing Device with the Navy Aeromedical Research Laboratory while assigned to Bolling AFB, DC. While at Ramstein AB, Germany, he was instrumental in gaining approval and coordinating medical support of High Altitude-Low Opening humanitarian airlift operations in Afghanistan.

Jeff is the Executive Director of the Aerospace Medical Association. He assumed his Executive Director role in January 2010 following 34 years of service to our nation as a scientist and officer in the U.S. Air Force, retiring as a Colonel. He holds a B.S. in Biology (magna cum laude) from the University of Nebraska at Omaha and an M.S. in Physiology from Rutgers University. He is board-certified in Aerospace Physiology and is a Fellow of the Aerospace Medical Association. Jeff is also a Fellow of the Royal Aeronautical Society.

During his Air Force career, Jeff served as an AF Aerospace Physiologist and was selected by the Air Force Surgeon General as the first-ever Lieutenant Colonel to serve as the Chief of AF Aerospace Physiology. He held a number of command and leadership positions from 1999 until he retired from the Air Force as the Deputy Command Surgeon for the Air Force Materiel Command at Wright-Patterson AFB, OH, and as 14th Chief of the AF Biomedical Sciences Corps.

As Executive Director of the Aerospace Medical Association, Jeff serves as the Chief Operating Officer of a 2000-member professional association. He is a member of the Aerospace Physiology Society, the Aerospace Human Factors Association, the Virginia Society of Association Executives, and the American Society of Association Executives. His awards and honors include the Legion of Merit with one oak leaf cluster, the Meritorious Service Medal with six oak leaf clusters, the Air Force Commendation Medal, Air Force Research Laboratory Excellence Award, the AsPS Wiley Post Award, AsPS President's Award, and AsPS Award for Sustained Excellence, and the President's Citation from AsMA.

WON CHUEL KAY AWARD

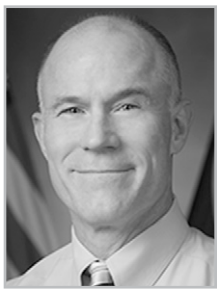
Francisco Rios Tejada, M.D., Ph.D.

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.

Francisco Rios Tejada, M.D., Ph.D., is the 2017 recipient of the Won Chuel Kay Award. He was honored for his dedication in realizing aviation safety goals and his numerous accomplishments over 39 years of service as a flight surgeon, accident investigator, scientist, and educator. 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 concerns such as hyper/hypobaria, spatial disorientation, night vision, acceleration, and human factors are represented by over 135 publications. His significant support of the military, civilian, and academic communities includes a comprehensive program of aircrew physiological and physical training and an aerospace medicine graduate-level course designed for medical students in two major universities. He also defined the technical requirements of the Spatial Disorientation and Night Vision Laboratories while Director of the Spanish Air Force Medical Center (CIMA).

Dr. Rios Tejada is a native of Malaga, Spain. He studied medicine at the Medical School of the Complutense University of Madrid. He then completed the residency program in Respiratory Medicine. In 1979 he joined the Spanish Air Force Medical Corps and was stationed at the Helicopter School (Granada) and 31st Wing (Transport Squadron, Zaragoza). In 1982, he started the Residency program in Aerospace Medicine. He took the AAMIMO Course at the U.S. Air Force School of Aerospace Medicine at Brooks AFB, TX, and later served a 1-year Fellowship in Hyperbaric Medicine at Brooks AFB. From 1982 until his retirement as full Colonel, he was stationed at the SPAF Aeromedical Center in Madrid, where he took the positions of Head of Education, Head of the Department of Aerospace Medicine, and Commander of the Center. After his retirement (reserve), he took a position at the Spanish Civil Aviation Authority, where he currently is the Chief Medical Officer and Head of the Medical Division.

Dr. Rios Tejada is a Fellow of the Aerospace Medical Association and an Academician of the International Academy of Aviation and Space Medicine. He is a Past President of the Iberoamerican Association of Aerospace Medicine, Past President of the Spanish Society of Aerospace Medicine, and a member of the Undersea and Hyperbaric Medicine Society. He 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 Baleares Academy of Medicine Award, and the Flight Safety Award from the Flight Armed Forces for best publication.



JOE KERWIN AWARD

Richard Scheuring, D.O., M.S.

Established and sponsored by KBRwyle in honor of Joseph P. Kerwin, the first physicain/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.

Richard Scheuring, D.O., M.S., is the 2017 recipient of the Joe Kerwin Award. He was honored for his service to the astronaut program in providing recommendations for preventing shoulder injuries occurring in astronauts working in spacesuits at the Neutral Buoyancy Lab NBL) at the Johnson Space Center. To accomplish this, he studied the injuries and the biomechanics of the suits, and became proficient in musculoskeletal ultrasound in order to perform in-depth exams of crewmembers. His recommendations included changes to the spacesuits, changes to requirements for future suits, and strength training protocols. This led to a reduction in the number of shoulder injuries in astronauts. Dr. Scheuring is a NASA flight surgeon at the Johnson Space Center in Houston, TX, a position he has held since 2007, and is currently the Team Lead for Musculoskeletal Medicine and Rehabilitation, Crew surgeon for the ISS Expedition 52/53 mission, and the NASA exercise countermeasure lead surgeon. He also serves as a Colonel in the U.S. Army Reserves. He is stationed at the Uniformed Services University of the Health Sciences at Bethesda, MD, where he is an associate professor in military and emergency medicine. He has had the privilege to support combat missions as battalion flight surgeon in Iraq and Kosovo.

Dr. Scheuring's current research interests include investigations into spine changes that occur during microgravity exposures and mechanisms for shoulder injuries incurred during NBL EMU training. He has published several papers on musculoskeletal conditions in U.S. astronauts and works at NASA with the ASCR team in injury prevention and rehabilitation.

He is a member of a variety of organizations, including the National Space Biomedical Research Institute User Panel, the Society of U.S. Army Flight Surgeons, the Aerospace Human Factors Association, and the American Academy of Family Physicians. Dr. Scheuring is also a member of the Society of NASA Flight Surgeons, where he has served as Secretary-Treasurer, Vice President, and President; and the Space Medicine Association, where he has been a Member-at-Large. He is a Fellow of the American Academy of Family Practice and the Aerospace Medical Association, where he has served as the Chair of the Resolutions Committee and been a scientific reviewer for the Blue Journal. His awards include the Space Medicine Association's Most Outstanding Journal Article Published in *Aviation, Space, and Environmental Medicine*; a NASA-JSC Lifesaver Award; the NASA, Donnell, and Brown Scholarships for Aerospace Medicine Residents; and the Finley Hospital-Illuminator Award for Outstanding Educator of the Year.

MARY T. KLINKER AWARD

J. Karen Klingenberger, B.S.N., M.D., M.P.H.

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.

J. Karen Klingenberger, BSN, MD, MPH, Col. (Ret.), USAF, was this year's recipient of the Mary T. Klinker Award. She was honored for her first-hand experiences of aerospace physiology and her support of recruitment and training of Critical Care Air Transport Teams. She focused on aerospace medicine issues and emerging operational medicine issues for the Air National Guard and influenced the oversight and intervention of the safe transport of deployed service members.

Dr. Klingenberger received a Bachelor of Science degree in Nursing from Loma Linda University, CA, in 1974. She entered active duty as an Air Force nurse in 1977 after working as a public health nurse for the City of Long

Beach, CA. Dr. Klingenberger's first active duty nursing assignment was at Mt. Home AFB, ID. During that assignment, she was a Distinguished Graduate of the Air Force Flight Nursing Course and was subsequently selected to attend Undergraduate Pilot Training (UPT). After UPT she was a distinguished graduate of KC-135 copilot training prior to her assignment to Plattsburgh AFB, NY. At Plattsburgh, she was a Stan-Eval Copilot and upgraded to aircraft commander before her selection to the Air Staff Training (ASTRA) Internship. During her ASTRA tour, she worked in Doctrine, Joint Affairs supporting CSAF and was the ASTRA executive officer for the Deputy Chief of Staff for Operations and Plans. After ASTRA she was a T-41 instructor pilot and Associate Air Officer Commanding and was the Commandant's Chief of Operations and Plans at the Air Force Academy. She has over 2000 flight hours with senior pilot, flight surgeon, and flight nurse ratings and has flown T-37, T-38, KC-135, and T-41 as a pilot, and C-5, T-1, T-6, T-38, C-40, and C-38 as a flight surgeon.

Dr. Klingenberger resigned her active duty commission in 1988, but continued to serve in the Air Force Reserves as the executive officer and acting squadron commander for the 302 Consolidated Aircraft Maintenance Squadron (CAMS), Peterson Air Force Base, while completing her pre-medical course requirements. She attended Colorado University's School of Medicine and received her Doctor of Medicine degree in 1996, which she followed with an Internal Medicine residency at the Washington Hospital Center in Washington, DC. After completing her residency, she returned to active duty and served for 2 years as the Chief of Internal Medicine with the 5th Medical Group, Minot AFB. She attended the Aerospace Medicine Primary Course in 2003 and was assigned as the Chief of Clinic Services (Element Chief) at Lajes Field, Azores, Portugal, before becoming the Chief of Aerospace Medicine at Bolling in 2004. She was awarded a Masters of Public Health degree from the Uniformed Services University for the Health Sciences at Bethesda, MD, in June 2009 and completed her residency in aerospace medicine (RAM) in June 2010. She retired as a Contract Flight Surgeon at Columbus AFB, MS, in 2014. She was formerly the Chief Total Force Enterprise, Headquarters USAF, Defense Health Headquarters, Falls Church, VA, from which she retired in July 2013.

Dr. Klingenberger's awards and decorations include the Legion of Merit, the Air Force Meritorious Service Medal with four oak leaf clusters, the Air Force Commendation Medal, the Air Force Achievement Medal, the Air Force Outstanding Unit Award with oak leaf cluster, and both the Global War on Terrorism Expeditionary Service Medals. She is a member of the Aerospace Medical Association, the Society of U.S. Air Force Flight Surgeons, and the Association of Military Surgeons of the United States. She is currently President of the Aerospace Nursing Society. She is also Board Certified in Internal Medicine.

SIDNEY D. LEVERETT, JR. ENVIRONMENTAL SCIENCE AWARD

Richard DeWeese, B.Sc.

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.*

Richard DeWeese, B.Sc., was this year's recipient of the Sidney D. Leverett, Jr., Environmental Science Award for his leadership in the application of his biodynamics expertise in the aerospace safety systems operations environment of civil aviation. Mr. DeWeese has been a member of the aeromedical community since 1982 and is responsible for the development of regulatory language and injury criteria to optimize human protective systems in civil aviation operations. His expertise is invariably sought relative to the certification requirements of various seat configurations; review of engineering technical proposals; assessment of seat cushions, restraints systems, air bags, and other aircraft equipment aimed to protect the human passengers and optimize their survival from aircraft accidents; and development of criteria to minimize injury from said accidents. The results of his research have improved aviation safety in many areas.

Mr. DeWeese is a native of Wyandotte, OK, and graduated from the University of Oklahoma in 1982 with a B.Sc. in Mechanical Engineering. He worked as a civilian for the Air Force at Tinker AFB in Oklahoma City developing modifications, repairs, and maintenance plans for military versions of commercial aircraft such as the E-3 AWACS radar plane and several types of special air mission aircraft, including Air Force One. He joined the Biodynamics Research Team at the FAA Civil Aerospace Medical Institute in 1990 and became the Team Lead in 2004. In 2016 he became Supervisor of the Aeromedical Engineering Sciences Section, which consists of the Biodynamics and Cabin Safety Research Teams.

Mr. DeWeese has been a member of the SAE Aircraft Seat Committee since its inception, and has helped them develop the current safety standards for aircraft seats and restraints. He has assisted with aircraft crash investigations, provided instruction to crash safety investigators, and was called on by the NTSB to speak at their forum on child safety in autos and aircraft. He has also, most recently, been asked to serve on NASA advisory panels addressing spacecraft occupant safety.

Mr. DeWeese is a member of the Aerospace Medical Association and the Society of Automotive Engineers. His awards include Outstanding Innovator from the Office of

Aviation Medicine, the William E. Collins Publication Award, Employee of the Year from the Civil Aviation Medical Institute, Employee of the Year from the Oklahoma Federal Executives Board, and the AsMA 2016 John Paul Stapp Award .

ERIC LILJENCRANTZ AWARD

Richard A. Allnutt, M.D.

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.

Richard A. Allnutt, M.D., M.P.H., was this year's winner of the Eric Liljencrantz Award. He received the award for his education and research efforts. He has cultivated a network of experts co-located at the Air Force Research Laboratory as senior scientist mentors for RAM research projects and has conducted world-class research in the fields of sustained and impact acceleration both as an investigator and as a subject.

As Deputy Program Director for the RAM Program at Wright-Patterson AFB, OH, Dr. Allnutt created a 2-year curriculum that doubled RAM throughput and turned the new Accreditation Council requirements into an opportunity to improve graduate medical education. He also developed a novel light aircraft flying program that allows residents from ground school to initial solo flight while gaining hands-on experience in instrument flying. He petitioned for and obtained an FAA-approved flight simulator to support his flying program and conduct research. His research accomplishments are highly regarded; in fact, he was the first to propose a more effective anti-G straining maneuver with the potential to allow more demanding aerial combat maneuvers while also saving multiple lives per year.

Dr. Allnutt graduated from the University of Cincinnati in Ohio with a B.A. in Sociology in 1975. He then earned his M.D. in 1979 from the same institution. He served a residency in Family Practice in Covington, KY, from 1979–1982. From 1982–1985, he was in private family practice. He then became Squadron Medical Element at Langley Air Force Base, VA, until 1986. From 1986–1988, he completed a residency in Aerospace Medicine. During that time, he also earned an M.P.H. at the Houston School of Public Health in San Antonio, TX, graduating in 1987. In 1988, he was Chief of Aerospace Medicine at Hahn AB, Germany, and in 1991 returned to Langley AFB to become Chief of Aeromedical Requirements at HQ Air Combat Command. He earned an M.S. in Electrical Engineering from the Air Force Institute of Technology in Dayton, OH, in 2002.

Dr. Allnutt transferred to Dayton, OH, in 1994 to serve as Chief of the Aerospace Medicine Branch at HQ Air Force Material Command and then, in 1997, became Chief of Aerospace Medicine at the Air Force Research Laboratory. In 2005, he took a position as a Consultant for Biodynamic Research Corporation in San Antonio, TX. In 2011, he accepted his current position as Deputy Director of Residency in Aerospace Medicine at Wright-Patterson AFB, OH. He also served as Clinical Faculty at the U.S. Air Force School of Aerospace Medicine at Wright-Patterson AFB from 2008–2011. He is also currently a Clinical Assistant Professor of Community Medicine at Wright State University School of Medicine and Core Faculty at the U.S. Air Force School of Aerospace Medicine.

Dr. Allnutt holds a patent on a dual band satellite communications antenna system with circular polarization. He is a Fellow of AsMA and has served on the History & Archives, Aerospace Safety, and Scientific Program Committees. He has over 20 publications and 20 presentations at both national and international meetings.

RAYMOND F. LONGACRE AWARD

Vivianne Fonne, M.S.

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.

Vivianne Fonne, M.S., is the recipient of the 2017 Raymond F. Longacre Award for her dedication and support for aircrew and flight safety. Ms. Fonne has gained the trust of the Norwegian Air Force from leadership down to squadron aircrew due not only to her knowledge and understanding of aircrew and the aviation culture, but also due to her sincerity, interpersonal skills, values, and attitude. She has also inspired the European Society of Aerospace Medicine (ESAM) on how to gain the trust of and interact with pilots.

Though born in New York, Ms. Fonne moved to Norway at the age of 5 and has lived and practiced there ever since. A graduate of the University of Oslo in 1993 with a Master's degree in psychology, Ms. Fonne is a licensed clinical psychologist in Norway. During her studies, she became interested in aviation psychology and her Master's thesis concerned human factors aspects of air ambulance operations. She has been in the field of aviation psychology and human factors ever since, working at the Institute of Aviation Medicine (IAM), which is a part of the Norwegian Armed Forces Medical Service. Since 1996 she has been Senior Advisor in Aviation Psychology at the IAM and as such is the principal advisor in aviation psychology to the Norwegian Armed Forces. She has also

served as Assistant Director for Research, Training and Operational HSE (Health Safety and Environment) at the Institute.

An extensive part of her work over the years has involved the continuous education of operational aircrew at all levels in the Norwegian Air Force, ranging from student pilots to squadron commanders, on a wide range of topics within the human factors domain. In addition, she has been involved in Crew Resource Management training for aircrew in civil aviation. She has also evaluated the working environment for Royal Norwegian Air Force (RNoAF) Aircrew, and has participated in numerous flight operations, exercises, flight safety inspections and visits to deployed RNoAF units in different parts of the world. She has been responsible for human factors requirements for several new aircraft acquisitions in the RNoAF, including the Nordic Standard Helicopter Programme and the Norwegian New Combat Aircraft Programme.

In recent years, Vivianne has been involved in developing mental health support for aircrew, including developing better mental health screening at annual aircrew medicals, implementing the current peer support system for all operational aircrew, serving as advisor for the Inspectorate of Air Operations on personnel issues, and serving as a member of air investigations boards on behalf of the Inspectorate of Flight Safety. Her work has been the topic of presentations and workshops for Aircrew and Aerospace Medical professionals on the concern for better understanding and acceptance of the topic of mental health for safe air operations. She participated recently in the AsMA Pilot Mental Health Working Group Revised Recommendations in 2015.

THEODORE C. LYSTER AWARD

James R. Fraser, M.D.

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.

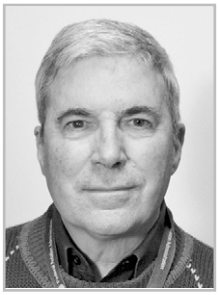
James R. Fraser, M.D., was the 2017 winner of the Theodore C. Lyster Award for his outstanding professional merit and contributions to the field of Aerospace Medicine that have had a significant impact on the health and safety of aerospace personnel and passengers.

Dr. Fraser is a recognized leader who is committed to Aerospace Medicine in the military and civilian sectors for the last 28 years. His leadership has resulted in significant advances and improvements in many areas such as the development, implementation, and evaluation of medical certification policies, rules, regulations, and procedures; development of regulations for and oversight of the aviation industry's Federal Aviation Administration (FAA)-regulated drug and alcohol testing programs; administration of aviation medical education programs for Aviation Medical Examiners and pilots; and medical review and toxicology testing services in support of the National Transportation Safety Board (NTSB) and the FAA Office of Accident Investigation.

Dr. Fraser earned a B.A. from the University of Oklahoma and then an M.P.H. from the University of Oklahoma College of Health in 1973. He graduated from the University of Oklahoma College of Medicine in 1977 with an M.D. He then served a 1-year internship in Family Practice at the Naval Regional Medical Center in Charleston, SC. His military career spanned a variety of positions, including Squadron Medical Officer for Destroyer Squadron Twenty, a Residency in Family Practice at the Naval Regional Medical Center Charleston, Senior Medical Officer and Officer in Charge for the U.S. Naval Branch Medical Clinic in the Philippines and then Scotland, Naval Flight Surgeon Training at the Naval Aerospace Medicine Institute (NAMI) in Pensacola, FL, a Residency in Preventive Medicine at NAMI, Senior Medical Officer on the USS Theodore Roosevelt, Force Medical Officer for the Commander of the Naval Air Force, Atlantic Fleet, and Command Surgeon at the Naval Safety Center.

Dr. Fraser completed a 30-year Navy career and retired as a Captain in January 2004. In January 2004, he was selected for the Federal Aviation Administration (FAA) Executive Service and served as the Manager, Medical Specialties, in the Office of Aerospace Medicine at FAA Headquarters in Washington, DC. In April 2006, he was appointed the Deputy Federal Air Surgeon. In February 2014, he was appointed the Federal Air Surgeon and retired from that position in January 2017.

Dr. Fraser is certified in the specialties of Preventive Medicine (Aerospace Medicine) and Family Practice. He is a Fellow of the Aerospace Medical Association and the American Academy of Family Practice, and a Past President of the Society of U.S. Naval Flight Surgeons. His awards include the Forest M. and Pamela Bird Award from the Civil Aviation Medical Association, the Robert E. Mitchell Lifetime Achievement Award from the Society of U.S. Naval Flight Surgeons, a Joint Meritorious Unit Commendation from the Colombia (STS-107) Accident Investigation Board, a Navy Commendation Medal, two Meritorious Service Medals, and two Legions of Merit.



MARIE MARVINGT AWARD

Charles "Chuck" DeJohn, M.S., D.O., M.P.H.

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.

Charles "Chuck" DeJohn, M.S., D.O., M.P.H., is the recipient of the 2017 Marie Marvingt Award for his service to the aeromedical community since 1984. Dr. DeJohn serves as a medical consultant to the Federal Aviation Administration (FAA) and is frequently called on as a medical/human factors consultant by the National Transportation Safety Board (NTSB), Department of Justice, the aviation industry, and academia. His achievements over the years include 114 publications and presentations, serving as a mentor to multiple students, and continuing to serve the Aerospace Medical Association through being Chair of the Aerospace Safety and Resolutions Committees, and a member of the Air Transport Medicine and Scientific Program Committees.

Dr. DeJohn graduated from the University of Oklahoma with a B.S. in Engineering in 1968. He then earned an M.S. in Aero-Systems Engineering from the University of West Florida in 1972 and an M.P.H. from the University of Alabama in 1990. He served a medical internship at Metropolitan General Hospital in Pinellas Park, FL, from 1983–1984 and completed the Aerospace Medicine Primary Course at the U.S. Air Force School of Aerospace Medicine, Brooks AFB, TX, in 1999. He was an Emergency Room Physician at Metropolitan General Hospital in 1984 and became a Medical Quality Assurance Coordinator at the Naval Aerospace Medical Research Laboratory (NAMRL) in Pensacola, FL, from 1987–1992. From 1988 to 1990, he served as Clinical Medical Officer at the Navy Regional Medical Center in Pensacola and from 1984 until 1992, he was also Medical Officer at NAMRL. He became a Clinic Physician for the FAA CAMI Clinic in 2000, a position he currently still holds. Dr. DeJohn is also now in charge of the Medical Research Team at FAA CAMI.

After joining the FAA, Dr. DeJohn developed a unique data registry to track in-flight medical incapacitations of pilots, used to answer many critical questions about in-flight medical events. More recently, when the data needed to compare the accident risk of medically uncertified pilots to certified pilots was not available, he co-authored a paper that took a novel approach to solve the problem. The published paper compared accident rates in light sport aircraft to accident rates in general aviation aircraft, challenging the commonly reported assertion that sport pilot flying had as good a safety record as general aviation.

Dr. DeJohn is a member of the American College of Preventive Medicine, the International Academy of Aviation and Space Medicine, the Airline Medical Director's Association, the Aerospace Human Factors Association, and the American Society of Aerospace Medicine Specialists. He is a Fellow of the Aerospace Medical Association, where he serves on the AsMA Fellows Scholarship, Air Transport Medical, Aerospace Safety, and Scientific Program Committees. He is also Vice President of AsMA Education and Training, a former Chair of the of Resolutions Committee, as well as of the Aviation Safety Committee and its Civil Aviation sub-committee. His awards and honors include three performance awards from NAMRL, Outstanding Scientific and Technical Innovator Award from the FAA Office of Aviation Medicine, multiple Group and Special Act Awards from the FAA, and two Outstanding Support Awards from the Transportation Safety Institute at the Department of Transportation. He has been a presenter or co-author of 89 presentations and a lead or co-author of 33 publications.

HARRY G. MOSELEY AWARD

Guillermo "Bill" J. Salazar, M.D., M.P.H.

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 the International Association of Military Flight Surgeon Pilots.

Guillermo J. Salazar, M.D., M.P.H., was this year's winner of the Harry G. Moseley Award for enhancing aviation safety as a researcher, educator, flight surgeon, manager, pilot and accident investigator in the civilian and military sectors for both the US and the international communities. The award was presented during AsMA Honors Night Ceremonies, May 4, 2017, at the Sheraton Denver Downtown Hotel, Denver, CO.

Dr. Salazar's achievements include conducting aerospace medical review and hazard analysis of Federal Aviation Administration (FAA) medical certification records, toxicology, autopsy results, and other information to generate an unprecedented number of medical case review summaries for fatal and high-profile aircraft accidents over the last year. He also provided recommendations for improving the data from the FAA-CAMI Aeromedical Review of Aircraft Accidents Program (ARAAP, including its management, and instituted quality control/assurance measures. He is continuously sought

out both nationally and internationally for his knowledge of medical certification, human factors, rotorcraft safety, and accident investigation processes.

Dr. Salazar received a Bachelor of Science degree from the University of Puerto Rico in 1975 and completed his medical education at the University of Puerto Rico's School of Medicine in San Juan, Puerto Rico, in 1979. Following his internship at Georgetown University Hospital in Washington, DC, he was commissioned in the U.S. Navy in February of 1981. He trained as a Flight Surgeon at the Naval Aerospace Medicine Institute (NAMI) in Pensacola, FL, and did primary flight training at Naval Air Station (NAS) Whiting Field, FL. He retired from the U.S. Navy Reserve in 2004.

In 1989, Dr. Salazar received an M.P.H. degree from the Uniformed Services University for the Health Sciences (USUHS) in Bethesda, MD, and became Board certified in Aerospace Medicine in 1991. He joined the FAA as the Deputy Regional Flight Surgeon, Southern Region, in Atlanta, GA. In 1992, he was selected as the Regional Flight Surgeon, Southwest Region, in Fort Worth, TX, and served in that capacity until 2014. He currently is the Lead Medical Officer for the FAA's Aeromedical Review of Aircraft Accidents Program.

Dr. Salazar is licensed to practice medicine in Texas. He is a Fellow of the Aerospace Medical Association (AsMA); an Academician of the International Academy of Aviation and Space Medicine; a past member of the Aerospace Medicine Examination Committee of the American Board of Preventive Medicine; former chair of the AsMA Education and Training Committee, former Council Member-At-Large for AsMA; and past President of the Iberoamerican Association of Aerospace Medicine. He has numerous professional publications and articles to his credit, including chapters in Aerospace Medicine textbooks, and is a regular speaker at aviation and medical events. His awards and honors include an FAA Performance Award, FAA Superior Service Award, FAA Flight Surgeon of the Year, "Good Friend" and "Friend of Air Traffic" Awards from the FAA, a Civil Proclamation of Recognition from the Congress of the Republic of Colombia, multiple Superior Accomplishment Awards from the FAA, Flight Surgeon of the Year from the FAA Office of Aerospace Medicine, and AsMA's John A. Tamisiea Award.

Future AsMA Annual Scientific Meetings

May 6–10, 2018
Hilton Anatole Hotel
Dallas, TX

May 5–9, 2019
Rio All Suites
Las Vegas, NV

JOHN PAUL STAPP AWARD

Eduard Ricaurte, M.D., M.S.

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.

Eduard Ricaurte, M.D., M.S., is the recipient of the John Paul Stapp Award which recognizes outstanding contributions in the field of aerospace biomechanics and to promote progress in protection from injury resulting from ejection, vibration, or impact.

Dr. Ricaurte has been a member of the FAA's Civil Aerospace Medical Institute's (CAMI) Medical Research Team since 2004. He is responsible for the development and successful deployment of the Aerospace Accident - Injury and Autopsy Data System (AA-IADS), a tool that provides researchers with the ability to efficiently analyze injuries within the broad context of the accident or event that caused the injury. The AA-IADS aids in the: 1) investigation of the injury and death patterns in civilian accidents along with meticulous analysis to determine cause(s) and prevention strategies; 2) development of recommendations for protective equipment and procedures; 3) evaluation of options, addressing all aircraft cabin occupants; and 4) analysis of medical conditions identified on autopsy or treatment records but not necessarily causal to the accident. The system is the first of its kind; it interfaces with the CAMI Forensic Toxicology database, the Aviation Safety Information Analysis and Sharing (ASIAS), and the CAMI Document Imaging and Workflow System (DIWS).

Dr. Ricaurte also led the coordination of the second CAMI Workshop on "Injury Mechanism Analysis in Aerospace Accident Investigation," held November 3–5, 2015 at CAMI. This workshop provided an opportunity for the CAMI accident investigation research staff, National Transportation Safety Board (NTSB), National Aeronautics Space Administration (NASA), Armed Forces Medical Examiner System (AFMES) representatives, and members of the international aerospace medical and human factors community to come together to discuss the best methods of forensic evidence collection in the investigation of the biomechanics, biodynamics, and biophysics of non-lethal and lethal injuries; assess current approaches to determine the mechanisms of injuries resulting from aerospace accidents; and identify current trends in the development and implementation of advanced injury databases and analytical systems.

Dr. Ricaurte is currently supporting the FAA CAMI Safety Risk Management for projects assigned through the

Operational Analysis Program Directive to CAMI. He is also the coordinator of the first AsMA Injury Workshop conducted in Denver, CO, during the 2017 Aerospace Medical Association's Annual Scientific Meeting.

A native of Cartagena, Colombia, Dr. Ricaurte earned an M.D. at the University of Cartagena School of Medicine in 1989 and served a 1-year internship at Colombia Navy Hospital in Cartagena from 1988–1989. He completed the primary course in Aviation Medicine at the National University of Colombia in Bogota in 1992. He served in a Fellowship in Aviation Medicine and Aircraft Accident Investigation at FAA Civil Aerospace Medical Institute (CAMI) from 1996–1997. During his training in aerospace medicine and human factors engineering at Wright State University from 2001–2004, he was involved in research projects to determine the usefulness of electro-tactors embedded in a vest as a countermeasure to spatial disorientation.

He joined the Colombian Civil Aviation Authority as the Manager of the Aviation Medicine Division, where he had the opportunity to lead essential activities related to aeromedical certification, airport health services, human performance, and medical aspects of aircraft accident investigation. He was also involved in the medical investigation of three major commercial aircraft accidents in Colombia and dozens of general aviation accidents.

Dr. Ricaurte is the co-author of an accident investigation chapter in the fourth edition of the guide text book: "Fundamentals of Aerospace Medicine." He has also conducted studies on aviation related safety issues, published scientific manuscripts, made recommendations, delivered reports, briefings, and presentations to technical groups and organizations, and provided research-project leadership for highly complex and challenging activities

As a member of the Aerospace Medical Association (AsMA) since 1993 and Fellow since 2010, Dr. Ricaurte has been Chair of the AsMA's Aerospace Safety Committee (ASC); member of the AsMA's Scientific Program Committee (SPC) for the last 12 years and is currently serving as a Member-at-Large for the AsMA's Council (Term expires 2018). He has also been a presenter at the AsMA's Annual Scientific Meeting since 2000. He is also a member of the International Academy of Aviation and Space Medicine; the Aerospace Human Factors Association, where he has been Newsletter Editor and Member-at-Large; the Iberoamerican Aerospace Medicine Association, where he has been President; the Colombian Aviation Medicine Association, where he has been Vice President; and the Colombian Aviation Safety Council.

His awards include an Outstanding Service Award from the Colombian Civil Air Patrol, and Outstanding Service Award from the Colombian National Police, a Certificate of Recognition for Aeromedical Education Accomplishments from the Colombian Congress's House of Representatives, an Academic Scholarship from the International Academy of Aviation and Space Medicine, and the 2007 John A. Tamisiea Award.

ARNOLD D. TUTTLE AWARD

Eduard Ricaurte, M.D., M.S.

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.*

Eduard Ricaurte, M.D., M.S., was also the 2017 recipient of the Arnold D. Tuttle Award for his role as lead author of "Aeromedical Hazard Comparison of FAA Medically Certified Third-Class and Medically Uncertified Pilots" [Aerosp Med Hum Perform. 2016; 87(7):618–621]. The other authors were William D. Mills, Charles A. DeJohn, Maria C. Laverde-Lopez, and Daniel F. Porras-Sanchez. Their manuscript compared hazards to flight safety identified in fatally injured pilots possessing a valid FAA third-class medical certificate with pilots who were not required to possess a valid medical certificate. All fatal U.S. aircraft accidents were searched for in the Federal Aviation Administration's (FAA's) MANTRA registry between January 2011 to April 2014, from which 467 pilots were found, of which 403 were medically certified and 64 were uncertified, after a review of medical, autopsy, and toxicological data. The study's results suggested that the risk of an adverse medical event is reduced in pilots required to possess a valid medical certificate, and showed the need for further studies to provide evidence-based decisions involving the role of aeromedical certification requirements.

JOHN A. TAMISIEA AWARD

Mark C. Eidson, M.D.

This award was established and sponsored by the Civil Aviation Medical Association in memory of John A. Tamisiea, 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.

Mark C. Eidson, M.D., was this year's winner of the John A. Tamisiea Award. He received the award for his 35 years of devotion to all aspects of aviation medicine, especially in general aviation. As an Aviation Medical Examiner, Dr. Eidson is considered the "Gold Standard" in a large region of North Texas. He supports the aviation community by attending safety seminars and is trusted by aviators for advice and evaluation of medical issues. He also has the respect of other Aviation Medical Examiners, as demonstrated by his selection as President of the Civil Aviation

Medical Association. Additionally, he is very supportive of his community, serving in a variety of public organizations such as the Texas Academy of Family Practice and in the Southwest Region Flying Physicians Association.

Dr. Eidson graduated with a B.A. in 1974 from Texas Christian University and earned his M.D. in 1979 from the University of Texas Medical School at San Antonio. He then served a 3-year residency in Family Practice at John Peter Smith Hospital in Fort Worth, TX. He is board certified in Family Practice and is a Senior Aviation Medical Examiner for the Federal Aviation Administration (FAA). He is also a member of the active staff of Weatherford Regional Medical Center and has a special interest in preventive medicine.

Dr. Eidson is a Past President of the 3-Rivers Chapter of the Texas Academy of Family Practice, the Southwest Region Flying Physicians Association, and the Civil Aviation Medical Association. He is a member of the Aerospace Medical Association and the Weatherford Chamber of Commerce and is a past member of the Weatherford Rotary Club. He is also a recipient of the Eagle Award from the Boy Scouts of America.

THOMAS J. AND MARGARET D. TREDICI AWARD

Derek M. Nusbaum, M.D., Ph.D., M.P.H.

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.

Derek M. Nusbaum, M.D., Ph.D., M.P.H., is the 2017 recipient of the Thomas and Margaret Tredici Award. He was honored for his development of animal models of spaceflight-related visual dysfunction to help the space medicine community address this issue. The award was presented during AsMA Honors Night Ceremonies, May 4, 2017, at the Sheraton Denver Downtown Hotel, Denver, CO. Many of Dr. Nusbaum's discoveries have been translated to clinic and hospital settings, helping to diagnose and manage medical problems such as glaucoma, traumatic brain injury, multiple sclerosis, and Alzheimer's disease.

The animal models Dr. Nusbaum developed have been used to demonstrate a link between intracranial pressure changes and both physiologic and functional decrements in visual function. These models are now enabling the study of space-related visual dysfunction on not just a functional level, but on a cellular and biochemical level as well, using genetic engineering to help develop new, targeted, pharmacologic interventions for this problem. Dr. Nusbaum's research has also helped to establish and characterize the link between space-related visual dysfunction, space-related cognitive impairment (space fog), and space-related orthostatic intolerance through a common mechanism of cerebrovascular autoregulation dysfunction caused by changes in intracranial pressure, cerebrovenous pressure, and carbon dioxide levels. These discoveries have been used not only for the benefit of the space medicine community, but have also been incorporated clinically to help optimize the management of certain patient populations, such as pediatric cardiac surgery patients to prevent brain damage and long term cognitive impairment from cerebrovenous hypertension during and following surgery, as well as helping to modify ventilation management in traumatic brain injury patients to optimize cerebrovascular autoregulation function in these patients and optimize their neuroprotection.

Dr. Nusbaum continues to enhance the field of space-related visual dysfunction and is currently working on research into the operational safety of implanted intracranial pressure catheters in the space environment, with the hope that they may be used to definitively demonstrate elevated intracranial pressure during long-duration spaceflight and correlate these elevations with visual impairment and various potential risk factors.

Dr. Nusbaum earned a B.A. in Biological Sciences in 2005 from Northwestern University in Evanston, IL, and then an M.D. from Michigan State University College of Human Medicine in East Lansing, MI, in 2009. He then attended Baylor College of Medicine in Houston, TX, for post-graduate medical training in Internal Medicine. During that time, he also worked on earning a Ph.D. in Neuroscience and Space Physiology, graduating in 2014. In 2015, he started his current post-graduate medical training in Aerospace Medicine at the University of Texas Medical Branch (UTMB) in Galveston, where he also earned his M.P.H. in 2016.

In 2009, Dr. Nusbaum was a Resident Physician in the Department of Medicine at Baylor College of Medicine, a position he held until 2014. In 2012, he founded A.D.E. Aerospace Consulting P.L.L.C. (later A.D.E. Medical) in Houston, where he was Chief Operating Officer and later a Consultant until early 2017. Since 2015, he has been a Hospitalist Physician at Sound Physicians in Lufkin, TX, Founder and Chief Operating Officer of Data MedEx, Inc. in Houston, and a Resident Physician in Aerospace Medicine, Department of Preventive Medicine at UTMB. In 2016, he also became a Hospitalist Physician at TeamHealth in Pearland, TX, the Founder and President of The MugWump Foundation in Houston, and the Founder and President of The Foundation for Aerospace Safety and Training, also in Houston.

Dr. Nusbaum is an Associate Member of the Center for Space Medicine of the Baylor College of Medicine and a member of the American College of Physicians; the Aerospace Medicine Student and Residents Organization, where he served as Treasurer from 2008–2010; and the American Medical Student Association, where he was

Fundraising Coordinator from 2006–2007. He is also a Student Member of the Space Medicine Association and the American Medical Association. He is an Associate Fellow of the Aerospace Medical Association, where he serves on the Science & Technology, Corporate & Sustaining Membership, and Long Range Planning Committees, and is Deputy Chair of the Education Committee. His awards and honors include receiving the AMSRO Travel Scholarship (now the Anita Mantri Memorial Travel Scholarship), the International Association of Military Flight Surgeon Pilots Scholarship, the Space Medicine Association Wyle Scholarship, and the Jeffrey R. Davis, M.D., Aerospace Medicine Endowed Scholarship. He also received the 2013 Space Medicine Association Jeffrey R. Davis Scholarship, was a NASA 64th International Astronautical Congress Travel Sponsorship Award recipient, and received a NASA Student Ambassadorship.

JULIAN E. WARD MEMORIAL AWARD

Alejandro "Alex" Garbino, M.D., Ph.D.

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.

Alejandro Garbino, M.D., Ph.D. is the 2017 recipient of the Julian E. Ward Memorial Award for his outstanding leadership during his residency at the University of Texas Medical Branch (UTMB), Galveston. TDr. Garbino came to UTMB with excellent credentials and has had outstanding achievements before and throughout his residency. His interests and achievements are broad and include operational aerospace medicine, emergency medical support of high risk and large crowd events, suit design, diving, sailing, and flying. In 2016 alone he was co-author of the article "Crew Recovery and Contingency Planning for a Manned Stratospheric Balloon Flight—the StratEx Progam," and the lead author on "Emergency Medical Considerations in a Space-Suited Patient," as well as completing a valuable research project at NASA.

Dr. Garbino earned a Bachelor of Science degree in physics, Summa Cum Laude with Honors from University of Houston in 2005. He then joined the Baylor College of Medicine M.D./Ph.D. program, earning a Ph.D. in Translational Biology and Molecular Medicine in 2010 and finished his M.D. in 2012 with completion of the International Health Track and was the first student in the Space Medicine Track at Baylor. He completed an Emergency Medicine Residency at Baylor in 2015, and served as Chief Resident his final year. Just prior to starting aerospace medicine residency, Dr. Garbino served as the Medical Team Lead and Lead Physiological Monitoring for the StratEx Space Dive, about which he presented at the 2015 AsMA conference.

Alex has been and continues to be very productive in research, has added multiple publications to the literature, and made multiple presentations at national and international conferences. Prior to residency, he worked with the UTMB team on centrifuge studies simulating suborbital spaceflight, and was co-author on two publications in 2014. His work for the MPH Public Health Practice Experience resulted in valuable research completed at NASA, as well as the paper "Hypertension Screening of Commercial Divers from an Occupational Medicine Perspective," which was submitted to *Undersea and Hyperbaric Medicine*, on which he is lead author. He taught at an Emergency Skills Workshop at the Undersea and Hyperbaric Medical Society Gulf Coast Chapter meeting in 2016, and spoke about experiences from the StratEx and Red Bull Stratos project at the UTMB Principles of Aerospace Medicine course in 2015 and 2016 as well to the Indianapolis 500 medical support team in 2016 and the 45th International Conference on Environmental Systems in 2015.

Dr. Garbino is a service-oriented leader. He coordinated with NASA and UTMB physicians for training in Prehospital Trauma and Life Support and was an integral part of the Wings Over Houston Airshow medical team support in 2015. He is past President of the Aerospace Medicine Student and Resident Organization (2008–2013) and served as Member at Large and representative to the AsMA Executive Committee (2013–2016). He continues to serve as chair of the AsMA Education and Train Committee, and is an Associate Member of the International Academy of Aviation and Space Medicine. He has been the recipient of multiple awards, including Tuttle Award Co-Author from AsMA in 2015 and the Ellington Award from the AsMA Associate Fellows Group in 2015.

Nominate a Colleague for an AsMA Award!

The nomination form and rules are on our website at: www.asma.org, under "About AsMA" under Informational Documents.

For more information, you can contact the Chair, at: awards@asma.org

Deadline for submissions is January 15. For all but the Leverett Award, the nominee MUST be an AsMA member.

New President of SoUSAFFS is Cheryl Lowry

The Society of USAF Flight Surgeons held a special election in May to elect Cheryl Lowry as their President for 2017–18. The Vice President, Walter "Sparky" Matthews, was slated to become president, but due to his impending deployment, it was decided that an interim President should be elected. Sparky will take the reins next year instead.

Col. Cheryl Lowry is the Director of Healthcare Operations for the Air Force Medical Support Agency. She is responsible for developing healthcare policy in support of 41,000 personnel and 76 medical treatment facilities with a budget of over $6.5 billion. Col. Lowry ensures quality, cost-effective healthcare for 2.6 million beneficiaries worldwide.

Col. Lowry enlisted in the Air Force in 1985 as a Law Enforcement Specialist. She received her B.S. in Industrial Technology from the Southern Illinois University, Carbondale, as well as a B.S. in Biology from California State University, Stanislaus, in 1992. She received her medical degree from the Uniformed Services University in 1997, and subsequently completed residencies in Family Medicine, Aerospace Medicine and Preventive Medicine. Her previous assignments include Bolling Air Force Base where she led elements of response and recovery operations following the Pentagon attack in 2001, Squadron Medical Element flight surgeon, the Surgeon General's Chief of Physical Standards, Associate Program Director for the US Air Force School of Aerospace Medicine's Aerospace Medicine residency, and squadron command. Immediately prior to her current assignment, she was Commander of the 1st Special Operations Medical Group, Hurlburt Field, FL. Col. Lowry has co-authored three textbook chapters and numerous professional society medical presentations.

A Fellow of AsMA, Col. Lowry is a member of the AMA, the American Board of Preventive Medicine, The Wilderness Medial Society, and AMSUS. She has received numerous decorations including the Legion of Merit, Outstanding Airman of the Year Ribbon, Meritorious Service Medal with five oak leaf clusters, the Air Force Commendation Medal, Reserve Meritorious Service Medal and the Antarctic Service Medal. Her awards include the AsMA 2001 Julian E. Ward Memorial Award and the 2014 Wright Brothers Officership Award from the Air War College. She was the US Air Force Academy Falcon Heritage Foundation speaker in 2011.

Check out the Meeting photos on our SmugMug page: https://aeromed.smugmug.com/Meetings/