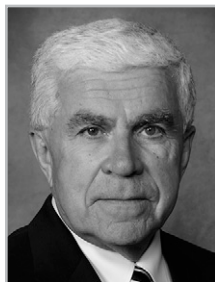


## 2016 Award Winners of the Aerospace Medical Association

Honors Night Ceremonies of the 87th Annual Scientific Meeting of the Aerospace Medical Association were held April 28, 2016, at Harrah's Resort Hotel, Atlantic City, NJ. Nineteen awards for outstanding contributions in aviation and space medicine were presented. The presentations were made by CAPT Kris M. Belland, MC, USN, President of the Aerospace Medical Association, assisted by the chair of the Awards Committee, Jeff Myers, M.D., Cathy DiBiase, R.N., and Al Parmet, 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**

**John D. Hastings, M.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.*

John D. Hastings, M.D., was the recipient of the 2016 Louis H. Bauer Founders Award for his dedication to aerospace medicine. Recognized internationally as the undisputed leader in aviation neurology, Dr. Hastings is a Fellow and Past President of the Aerospace Medical Association, and has been a leader in many other professional organizations.

Dr. Hastings' significant contributions to aerospace medicine have been sustained over a more than 30-year period. Throughout his career, he has served numerous governmental regulatory authorities, has participated in innumerable aerospace medicine scientific meetings, and has authored numerous book chapters and journal articles. He is an icon within the international aerospace medicine community. Specifically, being board certified in neurology and aerospace medicine, he has served as a senior neurology consultant to the Federal Air Surgeon since 1992, having written over 3,000 opinions regarding pilot aeromedical dispositions. Many airmen's careers have been salvaged by his recommendations. In addition to his consultation to the Federal Aviation Administration (FAA), many pilots have sought his consultations privately.

Dr. Hastings has been a lecturer for the FAA for 32 years, giving presentations to aviation medical examiners (AMEs) for initial and recurrent certification.

Furthermore, he developed theme seminars on neurology, psychiatry, and neuropsychology. He also serves as an Adjunct Clinical Assistant Professor for the aerospace medicine residency at the University of Texas Medical Branch, Galveston. He has been a Clinical Assistant Professor in Neurology at Oklahoma University College of Medicine in Tulsa since 1992. From 2013-2016, he was also Clinical Associate Professor at the Department of Community Health, Wright State University Boonschoft School of Medicine, Dayton, OH.

In addition to clinical aviation medicine and teaching, Dr. Hastings has written the neurology chapters in "Clinical Aviation Medicine," 4th and 5th editions, and for the most recent editions of "Fundamentals of Aerospace Medicine." Furthermore, he coauthored the neurology chapter in the International Civil Aviation Organization (ICAO) Civil Aviation Manual, Standards and Recommended Procedures.

Dr. Hastings earned his M.D. degree at St. Louis University School of Medicine, St. Louis, MO, in 1965. He served an internship at Los Angeles County General Hospital in California from 1965-1966, and then a residency in Neurology at the Mayo School of Graduate Medical Education in Rochester, MN, from 1966-1969. Later in his career, he attended MPH Core Courses for Aerospace Medicine Certification at the Medical College of Wisconsin Graduate School of Biomedical Sciences in Milwaukee, WI, from 1996-1997.

From 1969 until 1971, he served in the U.S. Army at the 95th Evacuation Hospital in Danang, South Vietnam. After completing his military service, Dr. Hastings went into private practice, first at Diagnostic Neurology Ltd., in Park Ridge, IL, and later with Neurology PLLC, Tulsa, OK, and then Neurologic Medicine PLLC in Tulsa. He is now the Medical Director of Synaptic Resources, LLC, in Tulsa, and owner of Aerospace Neurology, LLC. He also performs professional supervision for intra-operative neurophysiological monitoring for Neurologic Services of Oklahoma, LLC, in Tulsa, Hill Country Monitoring in Austin, TX, Neurology Services of Florida in Jacksonville, as well as for Southwest Neurodiagnostic Services, LLC, and Hill Country Monitoring, LLC, in Mississippi.

Dr. Hastings' awards include the Bronze Star from the U.S. Army, Airman of the Year from the Flying Physicians Association, the Forrest Bird and Harris Awards from the Civil Aviation Medical Association, the President's Award from the Experimental Aircraft Association, and the John A. Tamisiea and Theodore Lyster Awards from the Aerospace Medical Association. He is a member of the American Academy of Neurology, the American Medical Association, the American Society of Neurophysiologic Monitoring, the International Academy of Aviation and Space Medicine, the Airline Medical Directors Association, and is a Past President of the Civil Aviation Medical Association.



## BOOTHBY-EDWARDS AWARD

### Quay Snyder, M.D., M.S.P.H.

*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.*

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.

Dr. Snyder graduated from the U.S. Air Force Academy in 1977 with a B.S. in Biological Sciences. He earned his M.D. at Duke University School of Medicine, Durham, NC, in 1981, and served a Residency in Family Practice at Malcolm Grow U.S. Air Force Medical Center at Andrews AFB, MD, in 1984. He graduated from the University of Colorado Health Sciences Center, Denver, CO, in 1992 with an MSPH, and then served a residency in Aerospace Medicine at the U.S. Air Force School of Aerospace Medicine, Brooks AFB, TX. Dr. Snyder is board certified in aerospace medicine, addiction medicine, occupational medicine, and family practice. He served for 25 years in the U.S. Air Force, Air Force Reserve, and Air National Guard as a flight surgeon, instructor pilot, and in leadership positions. He was an aerobatics and spin instructor at the USAF Academy's 94th FTS, receiving the squadron's Attached Instructor Pilot of the Year award in 2000 and retired in 2002. He currently serves as an FAA Safety Team representative and has been a Master Certified Flight Instructor since 2003.

Dr. Snyder is currently the FAA/ALPA HIMS Program Manager, a member of the Flight Safety Foundation's

Corporate Advisory Committee, and the NBAA Safety Committee, chairing the Fitness for Duty Working Group. He also serves on the National Aviation Hall of Fame Board of Trustees and is a Fellow and member of the Council of the Aerospace Medical Association. He is the Aeromedical Advisor to the Airline Pilots Association, International (ALPA), a position he was appointed to in January 2010 after serving 16 years as an Associate Aeromedical Advisor to ALPA. He also serves on the FAA Pilot Fitness Aviation Rulemaking Committee Medical Expert Working Group.

Dr. Snyder is the author of more than 90 scientific papers and articles on aviation medical issues in various professional pilot journals. He has been twice a finalist for the Malcolm Grow Award, a recipient of the Howard R. Unger Literary Award, and the General George E. Schafer Award from the Society of USAF Flight Surgeons. He has also received the Marie Marvingt Award from the Aerospace Medical Association, as well as the NBAA Safety Committee's inaugural Meritorious Service Award in 2014.



## JOHN ERNSTING AWARD

### Anthony Evans, B.Sc., M.Sc., M.B.Ch.B., D.Av.Med.

*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.*

Anthony Evans, B.Sc., M.Sc., M.B.Ch.B., D.Av.Med., was the 2016 recipient of the John Ernsting Award for his leadership in international civil aviation medicine policy development and implementation. He assumed responsibility for preventing transmission of pandemics by air and has developed a program of training for the competence of medical examiners. In 2006, he developed the Collaborative Arrangement for the Prevention and Management of Public Health Events (CAPSCA) from a single regional project into five regional multi-sector, multi-stakeholder programmes spanning the globe, providing training and assistance to over 100 member states. CAPSCA mitigates the adverse health and financial effects from transmission, by air travel, of communicable diseases such as pandemic influenza. The programme has been instrumental in mitigating the adverse effects on health of populations and to the aviation sector of a number of significant public health events, such as the H1N1 flu pandemic, the Fukushima radionuclear power-plant accident, the Ebola outbreak, and, still ongoing, the Zika outbreak.

During his career Dr. Evans' main priorities in regulatory aviation medicine were to improve aviation safety by increasing the attention given to mental health, and to emphasize health education as a method for reducing ill health in licence holders. During his 10-year tenure with ICAO Dr. Evans helped develop and implement new global international medical Standards and Recommended Practices (SARPs) and guidance material in both these areas. In addition, SARPs were introduced by Dr Evans concerning the use of medical cause accident data as a way to more effectively determine the content of periodic regulatory medical examinations. SARPs were also written to introduce safety management principles into a State's aeromedical system, forming the basis for an ICAO requirement of health promotion in licence holders. Other work resulted in the relaxation of the upper age limit for commercial pilots from 60 to 65 years. He also edited a new edition of the International Civil Aviation Organization's (ICAO's) Manual of Civil Aviation Medicine, which was published online in 2012 and made freely available for use by medical examiners in developing member states.

Born in the United Kingdom, Dr. Evans has a first class honors B.Sc. in Sports Science from Liverpool Polytechnic, an M.Sc. in Human and Applied Physiology from King's College, London, and an M.B.Ch.B. from Glasgow University. He has an honorary doctorate for services to flight safety and optometry for work on color vision testing from City University, London. He is a consultant in Occupational Medicine and holds a Diploma in Aviation Medicine from the Royal College of Physicians of London. Prior to studying medicine, he trained as a commercial pilot with British Airways and holds an Airline Transport Pilot Licence.

In September 2015 Dr. Evans retired from the post of Chief, Aviation Medicine Section, ICAO, based in Montreal, Canada, after 28 years working in regulatory aviation medicine, initially with the UK Civil Aviation Authority (CAA) and then with ICAO. Last year he was appointed as Secretary General of the International Academy of Aviation and Space Medicine. He originally joined the UK CAA as a Medical Officer in 1987 and from 1989 to 2000, he was a part-time First Officer for a number of UK airlines. He became Head of the Aeromedical Section of the UK CAA in 1993 and was an Examiner for the Diploma in Aviation Medicine at the Royal College of Physicians of London from 2003-2005. From 2000-2005, he was also Deputy Chief Medical Officer at the UK CAA. In 2005 he became the Chief Medical Officer at the UK CAA, and then joined ICAO.

Dr. Evans has been a member of AsMA for 20 years. He has published 9 of his 20 peer-reviewed publications in *Aviation, Space, and Environmental Medicine* and given many presentations at AsMA's annual scientific meetings. He is an active member of the Air Transport Committee and, since he joined ICAO in 2005, has organized an

ICAO session during the AsMA scientific meeting each year to discuss contemporary topics and to bring participants up to date with ICAO activities. He has contributed a chapter on "International Regulation of Medical Standards" to the current edition of Ernsting's "Aviation Medicine" and has been asked to contribute two further chapters for the next edition.



#### KENT K. GILLINGHAM AWARD

##### David G. Schall, M.D., M.P.H.

*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.*

David G. Schall, M.D., M.P.H., FACS, was the recipient of the 2016 Kent K. Gillingham Award for his expertise in spatial disorientation and vestibular disease. Dr. Schall provided nearly half the illustrations in "Spatial Orientation in Flight" by Drs. Gillingham and Wolfe; these illustrations have been instrumental in educating countless pilots and are still in use 30 years later. Dr. Schall has lectured and consulted all over the country to both military and civilian airmen and physicians on spatial disorientation and is one of only two Aerospace Neurotologists in the world. He has also been a frequent and popular speaker on spatial disorientation in the Instrument Refresher Course at Luke AFB, AZ, and is regularly requested to teach about spatial disorientation in the civilian sector. His passion for educating pilots about the dangers of spatial disorientation has made a positive difference in aviation safety.

Dr. Schall completed a Residency in Aerospace-Preventive Medicine with the USAF at the School of Aerospace Medicine, Brooks AFB, TX, followed by a second Residency in Otolaryngology Head & Neck Surgery at the University of Nebraska, Omaha, NE. He then did an additional Fellowship with Dr. Michael E. Glasscock in Otolaryngology Skull Base Surgery at the Ear Foundation, which is affiliated with Vanderbilt University in Nashville, TN. He currently serves as the Regional Flight Surgeon for the FAA's Great Lakes Regional Office and also as a Consultant to the Federal Air Surgeon in Otolaryngology Head & Neck Surgery/Neurotology Skull Base Surgery. He is a retired Air Force Colonel, having served 37 years in Active/Guard/Reserve capacities. He also served as the ENT Consultant to the Air Force Surgeon General and was a Chief Flight Surgeon with over 1600 hours of flying time. He has flown as a Flight Surgeon, in over 42 different military aircraft types from the F-4 Phantom, F-15 Eagle, and F-16 Falcon, to C-130's,



Blackhawk Helicopters, and Cobra Gunships. He is also a private pilot.

Dr. Schall is a Fellow of the American College of Surgeons, the American College of Preventive Medicine, the American Academy of Otolaryngology-Head and Neck Surgery, the Society of Military Otolaryngologists, and the Aerospace Medical Association. He is an Associate Fellow of the American Neurotology Society and a Senior Member of the Society of Air Force Clinical Surgeons. He is also a member of the Society of Military Consultants to the Armed Forces, an Emeritus Member of the Society of USAF Flight Surgeons, a member of the Space Medicine Association, and a Life Member of the Association of Military Flight Surgeons of the United States. His awards and honors include the Howard R. Unger Award for Literary Excellence from the Society of USAF Flight Surgeons, the USAF Air Medal, the U.S. Army Military Order of Medical Merit, the USAF Legion of Merit with two oak leaf clusters, the Military History Essay Award from the Association of Military Surgeons of the United States, the Defense Superior Service Medal, and the Federal Aviation Administration's Great Lakes Region Professional Excellence Award.



#### **WALTER AND SYLVIA GOLDENRATH AWARD**

##### **Maj. Jaime R. Harvey, USAF**

*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.*

Maj. Jaime R. Harvey, USAF, was the 2016 recipient of the Walter and Sylvia Goldenrath Award for her contributions to the field of Aerospace Physiology. Maj. Harvey and a co-worker have investigated the evidence base for the human performance consequences of shift work, carefully selecting and evaluating 26 peer-reviewed research papers and over 80 abstracts, and, working with a small team, derived evidence-based recommendations for shift length, shift change speed and direction, and worker performance. These recommendations became part of the initial proof of concept for "Evidence-Based Human Performance," which was presented at the 2015 Annual Scientific Meeting of the Aerospace Medical Association (AsMA). The recommendations were also included in the initial Human Performance Sustainment Electronic Topic Guide, meant to assist aerospace physiologists and other human performance professionals when faced with questions on how to sustain, manage, and optimize performance under adverse circumstances.

Maj. Harvey was commissioned in 2000, Detachment 310 in the Biomedical Sciences Corps, after earning a B.S. at Louisiana State University in Baton Rouge. She graduated from the Aerospace Basic Course at Maxwell AFB, AL, in 2001 and attended Squadron Officer School and Flight Safety Officer School by correspondence in 2007. She earned an M.S. in Aeronautical Science (Human Factors and Aviation Safety) at Embry Riddle Aeronautical University in 2012. She is board certified (CAsP) by AsMA in aerospace physiology.

Maj. Harvey is currently the Branch Chief, Human Factors and Operational Safety Issues, Air Force Chief of Safety, Headquarters U.S. Air Force, Washington, DC. She is the Air Force Chief of Safety's Air Staff focal point for all headquarters-level human factors, human performance, and operational safety issues. She acts as the lead liaison between the Air Force Safety Center located at Kirtland AFB, NM, and the Air Staff, Joint Staff, Office of the Secretary of Defense, Air Force Medical Service, and other outside federal agencies. She has served as an aerospace and operational physiologist for nearly 15 years. She was previously the Flight Commander, Flight Medicine, 96th Medical Group, Eglin AFB, FL, and the Flight Commander, Health Promotions, 5th Medical Group, Minot AFB, ND.

Maj. Harvey's awards and honors include the Nuclear Deterrence Operations Service Medal, the Humanitarian Service Medal, the National Defense Service Medal, the Air Force Achievement Medal, the Meritorious Service Medal, USAF Company Grade Aerospace Physiologist of the Year, AFMC Human Performance Training Officer of the Year, the AFGSC Safety Excellence Award, and AFGSC Biomedical Sciences Corps Cat I Field Grade Officer of the Year. She is an Associate Fellow of AsMA and has participated in the Scientific Program Committee.



#### **WON CHUEL KAY AWARD**

##### **Michael A. Berry, M.D., M.S.**

*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.*

Michael A. Berry, M.D., M.S., FAA Deputy Federal Air Surgeon, is the 2016 recipient of the Won Chuel Kay Award for outstanding contributions to international aerospace medicine. Throughout his 43-year Aerospace Medicine career, Dr. Berry has contributed significantly to international aerospace medicine in numerous ways and in a variety of settings. His contributions began in 1973

while in the U.S. Air Force, continued while a NASA flight surgeon, as an independent Aerospace Medicine Consultant, and in the FAA where he is now a voice of FAA policy, philosophy, and rationale, on medical standards, presenting regularly at numerous international forums.

Michael A. Berry received his M.D. degree from the University of Texas Southwestern Medical School in Dallas in 1971. After a general surgery internship in the United States Air Force, he spent 4 years as a fighter squadron flight surgeon in Spain and England. As the Commander of the 401st Air Transportable Hospital in 1975, during deployment to Sardinia, he coordinated hospital functions with the local Italian medical authorities, contributing to the superior achievements of the hospital during the NATO Operation Flaming Lance.

In 1976, he entered his residency in Aerospace Medicine at Ohio State University in Columbus, OH, and received his Master's Degree in Preventive Medicine in 1977. In 1978, he was certified by the American Board of Preventive Medicine in Aerospace Medicine. Following his residency, he became the Chief of the Flight Medicine Clinic at the NASA Johnson Space Center in Houston, TX, where he was responsible for the screening and selection of new astronauts and participated in the certification and training of astronauts for spaceflight. In addition to participating in the extensive medical preparations for the first flight of the Space Shuttle, he served as a member of the Flight Control Team for the first two flights of the Shuttle Columbia.

On leaving NASA in 1981, he entered the private practice of Aerospace Medicine with Preventive & Aerospace Medicine Consultants, in Houston, TX, where he was a consultant and FAA Aviation Medical Examiner for 25 years. During this time, he also served as an FAA Human Intervention Motivation Study (HIMS) trained AME monitoring many airline and corporate pilots during their recovery from substance use disorders. In 2006, Dr. Berry accepted a Senior Executive position with the Federal Aviation Administration in Washington, D.C., as the Manager, Medical Specialties Division at FAA Headquarters, where he was responsible for aerospace medicine policy and procedures. In March 2014, Dr. Berry was selected as the FAA Deputy Federal Air Surgeon. Dr. Berry has been a Senior Aviation Medical Examiner for the FAA since 1979, and an Aviation Medical Examiner for Transport Canada.

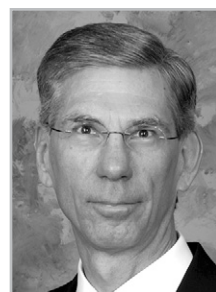
Dr. Berry attended his first International Congress of Aviation and Space Medicine in Munich, Germany, in 1973. He was elected an Academician of the International Academy of Aviation and Space Medicine in 1978, and has been extremely active in the leadership as a Selector, Director, Web Master, and most recently Academy President in 2010 and 2011. He has attended and participated in 25 International Congresses, and presented 12 papers at these international meetings, reporting on unique

medical cases, medical decisions contrasting U.S. medical standards and ICAO standards, and U.S. FAA special issuance medical certification statistics.

Dr. Berry is a member of the ICAO, Medical Problems Working Group, 2014-present, most recently addressing the subject of emphasizing preventive medicine principles as part of all medical certification evaluations. As manager of the FAA Human Intervention and Motivation Study, a program addressing substance abuse/dependence in pilots, Dr. Berry has also actively participated in educational outreach efforts to the Australian CASA in 2009 and 2015, presenting the unique regulatory aspects of this program. He was the U.S. representative at the European Panel on Pilots and ATCOs with Insulin Treated Diabetes in 2014, presenting the U.S. FAA medical standards and position on the important subject of insulin treatment for diabetes in commercial airline pilots.

A Past President of the Aerospace Medical Association, he is also a Fellow of AsMA, and of the American College of Preventive Medicine. He is a past Vice-President of the Civil Aviation Medical Association. He served as a Board Member and Trustee of the American Board of Preventive Medicine and as the Vice-Chair for Aerospace Medicine from 1990-1998.

Dr. Berry is the recipient of numerous national awards, including AsMA's Julian Ward, John A. Tamiseia, and Kent K. Gillingham Awards; the AMA Physician's Recognition Award; the USAF National Defense Service and Outstanding Unit Medals; and numerous NASA service and group achievement awards, including First Shuttle Flight Achievement Award presented in appreciation of the contributions to the success of the First Manned Orbital Flight of the Space Shuttle. He has several academic appointments, and has authored many scientific papers and book chapters.



#### JOE KERWIN AWARD

**James M. Vanderploeg, M.D., M.P.H.**

*Established and sponsored by Wyle 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.*

James M. Vanderploeg, M.D., M.P.H., was the 2016 recipient of the Joe Kerwin Award for his groundbreaking work evaluating individuals with chronic medical conditions undergoing a simulated commercial spaceflight experience. This work will enhance the understanding of the physiological effects of G exposure in spaceflight participants and enhance the safety of commercial suborbital flight. He has also been active in aerospace medical

research as a principle investigator for the Federal Aviation Administration Center of Excellence for Commercial Space Transportation at the University of Texas Medical Branch.

Born in Upland, CA, Dr. Vanderploeg earned a B.S. in Letters and Medicine at Calvin College, Grand Rapids, MI, in 1972. He then earned an M.D. at the University of Iowa College of Medicine, Iowa City, IA, in 1975. From 1975-1976, he served a surgical internship at the University of California at San Diego's University and Veterans Administration Hospitals in San Diego, CA. Between 1976 and 1978, Dr. Vanderploeg served as General Medical Officer in the U.S. Navy in Keflavik, Iceland. He was a Resident in Otolaryngology at the University of Iowa Hospitals and Clinics, Iowa City, IA, from 1978 to 1979 and a Resident in Occupational Medicine at the University of Texas School of Public Health in Houston, TX, from 1980 to 1981, where he received an M.P.H.

In 1981, he became Chief of the Flight Medicine Clinic, Medical Operations Branch, Medical Sciences Division, at NASA Johnson Space Center, and in 1982, he took the position of Chief of the Medical Operations Branch, Medical Sciences Division, Space and Life Sciences Directorate. In 1984, he became the Director of the NASA Space Biomedical Research Institute, Space and Life Sciences Directorate. In 1986, he became Chairman of the Occupational and Preventive Medicine Department at Kelsey-Seybold Clinic in Houston, TX, until 1989, when he took the position of Executive Vice President and General Manager of KRUG Life Sciences Inc. in Houston. In 1995, he became President of the Center for Aerospace and Occupational Medicine, also in Houston. In the same year, he accepted a position as Medical Director of Interactive Medical Connections, Inc., which he still holds. Between 1998 and 2010, he served as Executive Director of the American Board of Preventive Medicine in Chicago, IL, and from 2005-2007, he was Chief Medical Officer and Program Manager at Wyle Laboratories Life Sciences Group in Houston. In 2006, he took his current position as Chief Medical Officer for Virgin Galactic and is responsible for developing and implementing the medical programs for spaceflight participants, Virgin Galactic pilots, and other employees. Since 2011 he has also served as Medical Director at Wyle Science, Technology and Engineering Group, and since 2007 as Associate Professor, Preventive Medicine and Community Health, at the University of Texas Medical Branch.

He has numerous publications, the most recent being the medical results from research projects using centrifuge exposure to simulate the G forces of a Virgin Galactic spaceflight.

Dr. Vanderploeg is Board Certified in Occupational Medicine and in Aerospace Medicine by the American Board of Preventive Medicine and is also certified by the Medical Review Officer Certification Council. He is a Past President of the Aerospace Medical Association and

current Chair of the Fellows Group. In addition, he is a member of the American Astronautical Society, where he was Secretary/Treasurer (1990), Vice Chairman (1991), and Chairman (1992); a member of the American Board of Medical Specialties, a member of their Board of Directors and chair of several committees; a member of the American Board of Preventive Medicine, where he served as a Trustee, Secretary Treasurer, Secretary, and Executive Director; and a Fellow of the American College of Preventive Medicine. He is an FAA Senior Aviation Medical Examiner, serves on the Selectors Committee of the International Academy of Aviation and Space Medicine, was Secretary Treasurer and a Past President of the Society of NASA Flight Surgeons, and was Secretary-Treasurer and a Past President of the Space Medicine Association. He serves on the Editorial Board of *New Space* and is a journal reviewer for *Aerospace Medicine and Human Performance*. He has been honored with the NASA Space Shuttle Medical Operations Team Group Achievement Award and the NASA Outstanding Performance Award. In 2014 he received AsMA's Louis H. Bauer Award for lifetime achievements in Aerospace Medicine.



#### MARY T. KLINKER AWARD

##### Mary Foley, B.S., R.N.

*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.*

Mary F. "Bunny" Foley, B.S., R.N., is the 2016 recipient of the AsMA Mary T. Klinker Award. Ms. Foley has provided outstanding service to the Aerospace Medical Association (AsMA) for over 50 years. She has advanced aerospace nursing, aerospace medicine and physiology, clinical health care, and industrial safety with her research and service.

Her contributions to aerospace nursing and air evacuation began early in her career. In 1955, she was introduced to the field of aviation medicine upon hearing about the air transport of patients. Intrigued, she travelled around the world in 1956, meeting with airline medical directors and discussing air transport. She has been working toward improving aeromedical evacuation and aviation medicine ever since.

Ms. Foley earned a B.S. in Nursing in 1950 at St. Xavier College in Chicago, IL. From 1951-1952, she served as an Operating Room Nurse at the Mayo Clinic program at St. Mary's Hospital in Rochester, MN. From 1952-1958, she



taught Operating Room Techniques first at Madison General Hospital in Wisconsin, then at Mercy Hospital/St. Xavier College. From 1953-1958, she also taught Medical and Surgical Nursing at Mercy Hospital/St. Xavier College. In 1957, she attended the Transportation Geography course at the University of Chicago, attained a private pilot license, and joined the North Central Section of the Ninety-Nines (the International Association of Women Pilots). She went on to earn commercial and instrument ratings. She has flown Piper Cub, Aeronca 7AC, Cessna 120, 150, 152, 170, and 172, Beech Musketeer and Beech T-34, Navion, and Stinson Voyager aircraft.

Ms. Foley attended her first AsMA meeting in 1957 and joined AsMA in 1958, was elected a Fellow in 1977, and earned certification as an Aerospace Physiologist, also in 1977. She has been a member of the Aerospace Physiology Society (ASPS) since its inception and was its President from 1981-1982. She has served on AsMA's History and Archives Committee, the International Activities Committee, the Membership Committee, and, for more than 25 years, the Scientific Program Committee.

From 1958-1960, Ms. Foley served in the USAF Nursing Corp, Active Duty, and was in the USAF Reserves from 1960-1985, retiring with the rank of Colonel. She served at the Aviation Medicine Research Laboratory at Ohio State University in Columbus, and conducted research with Dr. Charles Billings on pulmonary function testing in an altitude chamber, effects of pressure changes on disease processes, and in-flight studies of professional pilot performance in response to oxygen/air mixtures. She was also a Mobilization Augmentee at Wright Patterson AFB in Dayton, OH.

In 1966, Ms. Foley joined the Cardiopulmonary Laboratory at Ohio State University, where she conducted research until 1969. Also during that time, from 1963-1968, she served in the USAF Space Program in her spare time, volunteering as a subject in Navy motion sickness studies on zero gravity flights, Bárány chair rotation at 0 G, and stomach awareness. From 1969-1971, she pursued Ph.D. studies in physiology at Pennsylvania State University. From 1973-1984, she worked on the Medical Monitoring Team at Springs Textiles in Fort Mill, SC, where she conducted pulmonary function testing of mill workers, smoking cessation efforts, a hypertension survey, and studies of genetic factors in hypertension. In 1984, she began serving as an Agency Nurse at Manpower and Assured Health in Gurnee, IL. More recently, she has been researching women in aviation and has presented papers at numerous national and international meetings, and has 14 journal publications to her credit.

Her nickname is "Bunny," which comes from her love of rabbits and she worked tirelessly for many years to rescue unwanted house rabbits and find them loving homes (often her own!). Until very recently she was very active in the Ninety-Nines. She is also a member of Silver Wings, AsMA, ASPS, Space Medicine Association, International

Women's Air and Space Museum, AOPA, and National Space Society. Mary was the recipient of the AsMA Marie Marvingt Award in 2009, for her contributions in aerospace physiology research.



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

**Peter A. Hancock, D.Sc., 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.*

Peter A. Hancock, D.Sc., Ph.D., was the 2016 recipient of the Sidney D. Leverett, Jr., Environmental Science Award for his consistent and influential contributions concerning the effects of thermal environmental conditions on cognitive working capacity. He has worked to explain the manner in which differing expressions of thermal stress affect operator attention capabilities and working memory, applied those theoretical concepts to pilot and astronaut operations, and has specified thermal performance limits for military personnel in all facets of mission completion. His work on stress and performance has been applied to a large spectrum of operational challenges, but especially to aviation. His more recent work in the field of thermal environmental conditions has been used extensively by modelers and climate scientists to project the impact of increasing terrestrial temperatures on individual and social cognition. He has also made many contributions to the understanding of differing sources of environmental stress on human mental performance, including noise, vibration, and the effects of differential profiles of ambient gas composition.

Professor Hancock is currently Provost Distinguished Research Professor in the Department of Psychology and the Institute for Simulation and Training, as well as in the Department of Civil and Environmental Engineering at the University of Central Florida. In his previous appointment, he founded and was the Director of the Human Factors Research Laboratory at the University of Minnesota, where he held appointments as Professor in the Departments of Computer Science and Electrical Engineering, Mechanical Engineering, Psychology, and Kinesiology, as well as at the Cognitive Science Center and the Center on Aging Research. He continues to hold an appointment as a Clinical Adjunct Professor in the Department of Psychology at Minnesota. He is also an Adjunct Senior Research Scientist at the Transportation Institute of the University of Michigan and an affiliated

Scientist for the Humans and Automation Laboratory at MIT.

Prof. Hancock attended Loughborough University, Loughborough, England, receiving his Certificate of Education in 1975, his B.Ed. (Honors) in Anatomy and Physiology in 1976, his M.Sc. in Human Biology in 1978, and his D.Sc. in Human-Machine Systems in 2001. He also received a Ph.D. in Human Performance from the University of Illinois, Champaign, IL in 1983.

Prof. Hancock is the author of over 800 refereed scientific articles and publications and has written and edited 20 books, including "Human Performance and Ergonomics" in the "Handbook of Perception and Cognition" series; "Stress, Workload, and Fatigue"; and the forthcoming "Performance Under Stress."

Dr. Hancock has received countless awards and recognition, including the Sir Frederic Bartlett Medal of the Ergonomics Society of Great Britain for lifetime scientific achievement; the Franklin V. Taylor Award of the American Psychological Association; and the Liberty Mutual Prize for Occupational Safety and Ergonomics from the International Ergonomics Association. In association with his colleagues Raja Parasuraman and Anthony Masalonis, he was the winner of the Jerome Hirsch Ely Award of the Human Factors and Ergonomics Society for 2001, the same year in which he was elected a Fellow of the International Ergonomics Association. In 2007 he was the recipient of the John C. Flanagan Award for of the Society of Military Psychologists of the American Psychological Association for lifetime achievement and he was also the 2007 recipient of the A.R. Lauer Award of the Human Factors and Ergonomics Society for lifetime contributions to safety.

A Fellow of the Aerospace Medical Association, in 2008, Dr. Hancock was the recipient of the AsMA Raymond F. Longacre Award for outstanding accomplishments in the psychological and psychiatric aspects of aerospace medicine. He is also the recipient of the Aerospace Human Factors Association's Henry L. Taylor Award Founders Award and William E. Collins Award. He also won the Admiral Leland Kollmorgen Spirit of Innovation Award of the Augmented Cognition Society. In 2015 he was presented with the William Floyd Award of the Institute for Ergonomics and Human Factors of Great Britain in which he is a Chartered Fellow and most recently he was made Fellow of the Royal Aeronautical Society of Great Britain.

Prof. Hancock is a multiple-term Member of the National Academy of Sciences, National Research Council's Committee on Human Factors, and in that capacity has served as Chair and Organizer for a number of sub-committees. He is a Fellow and past President of the Human Factors and Ergonomics Society.



## ERIC LILJENCRANTZ AWARD

### J. Lynn Caldwell, Ph.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.*

J. Lynn Caldwell, B.S., M.A., Ph.D., was the recipient of the 2016 Eric Liljencrantz Award in recognition of her sustained excellence in aerospace medicine education. For many years Dr. Caldwell has been a leading light in the education of aviation and aeromedical professionals on the topic of fatigue management and countermeasures.

Dr. Caldwell has established an eminent record of research in the field of aviation fatigue management with 190 published articles, book chapters, and presentations. She is most-known for her recurring workshop with John Caldwell, "Aircrew fatigue: Causes, consequences, and countermeasures: Understanding and managing fatigue in operational aviation contexts." It has been offered at every AsMA annual meeting since 2003.

Dr. Caldwell's educational outreach extends far beyond the annual AsMA meeting. For the past 20 years she has frequently been invited to provide fatigue management lectures and workshops in aerospace and aeromedical training contexts, both domestic and international. Her numerous lectures and workshops have enhanced the professional knowledge of many aerospace medicine practitioners. She also has an eminent record of research into aviation fatigue management and has frequently served as a research project mentor to U.S. Air Force School of Aerospace Medicine residents and AAMIMO students. Her work in educating aerospace and aeromedical professionals on fatigue constitutes a critically important contribution to the collective understanding of the problems surrounding fatigue in aviation.

Dr. Caldwell obtained her Ph.D. in Experimental Psychology from the University of Southern Mississippi in 1988. In 1998, she was certified by the American Academy of Sleep Medicine as a Board-Certified Sleep Specialist.

During her 11 years with the U.S. Army's Aeromedical Research Laboratory, Ft. Rucker, AL, she performed human-factors research, conducting numerous simulator and in-flight investigations on fatigue countermeasures and circadian rhythms in rated military pilots. In 2002, she became a Senior Research Psychologist for the U.S. Air Force's Warfighter Fatigue Countermeasures Program

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with the Human Performance Wing, first at Brooks AFB, TX, and then at Wright-Patterson AFB, OH. From 2005-2007, she was a Distinguished Visiting Scholar at the U.S. Air Force Academy. Since 2012 she has working for the Naval Medical Research Unit-Dayton, where she is the director of the Naval Medical Research Unit Fatigue Assessment and Mitigation Laboratory.

Dr. Caldwell is a Fellow of the American Academy of Sleep Medicine, the Aerospace Medical Association, and the Aerospace Human Factors Association. She serves as a fatigue consultant for a variety of military and civilian groups. Her research interests include assessment of the impact of long periods of wakefulness and/or circadian desynchronization on performance. In addition to research, she frequently provides fatigue management workshops, safety briefings, and training courses to aviation personnel, flight surgeons, commanders, and safety officers.



#### RAYMOND F. LONGACRE AWARD

##### Arlene Saitzyk, Ph.D.

*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.*

Arlene Saitzyk, Ph.D., was the 2016 recipient of the Raymond F. Longacre Award for her outstanding clinical services, instruction, and leadership. Dr. Saitzyk has completed over 750 aeromedical psychiatric evaluations for aviation personnel worldwide, taught aeromedical officers, residents, and flight instructors, published work on multiservice psychiatric standards in a seminal aerospace psychology textbook, and organized all aspects of the successful 2015 U.S. Naval Aeromedical Conference. She has directly supported the U.S. Navy, the Marine Corps, the Air Force, and the Coast Guard, ensuring aeromedical safety worldwide through the evaluation of psychiatric issues and aeronautical adaptability for student and designated aviators, flight officers, air traffic controllers, and aircrew. She has also evaluated astronaut candidates' suitability for long-duration space missions.

A native of New York, Dr. Saitzyk received her B.A. degree in Psychology from Cornell University in 1989. In 1995, she completed her Ph.D. at Michigan State University, specializing in Child/Family Clinical Psychology, and did her internship at the University of New Mexico School of Medicine, Department of Psychiatry, Child/Adolescent Division. She was licensed in New Mexico and worked with youth in residential treatment for the State of New Mexico for the next 5

years. However, her desire to "see the world" propelled her to join the Navy, and she was commissioned as a Lieutenant in June 2000.

Now CDR Saitzyk, her first assignment was as Staff Psychologist at the U.S. Naval Hospital in Naples, Italy. Upon return to the United States for her next tour at Naval Medical Center San Diego, she served as Senior Clinical Manager for the Child/Adolescent Mental Health Clinic, Staff Psychologist, aboard the USNS *Mercy* (T-AH-19), and Faculty for the Clinical Psychology Predoctoral Internship program. Next, she applied for and was accepted for Duty Under Instruction, and completed a 1-year postdoctoral fellowship in early childhood (ages 0-5) at the Children's Health Council in Palo Alto, CA. During her next tour in Okinawa, Japan, she served as the Assistant Department Head for the largest Educational and Developmental Intervention Services (EDIS) program worldwide, overseeing multidisciplinary services in 13 schools and child development centers on the island.

After that, CDR Saitzyk accepted another overseas assignment, this time serving as the sole Psychologist for service members in Manama, Bahrain, and 5th Fleet assets transiting the area. She then accepted orders to the USS *Nimitz* (CVN-68), serving as the Ship's Psychologist. During her time on *Nimitz*, CDR Saitzyk qualified as a Surface Warfare Medical Department Officer and Assistant Command Duty Officer Inport, and successfully completed the Joint Professional Military Education course through the Air War College. She was selected as Command Psychologist for the Naval Aerospace Medical Institute (NAMI), where she received her "wings of gold" as an Aerospace Experimental Psychologist in February 2012. She is only the second military clinical psychologist to do so. She has received the Meritorious Service Medal, the Navy-Marine Corps Commendation Medal (five awards), and the Navy Achievement Medal.

In May 2013, a chapter CDR Saitzyk wrote, "Military Standards and Aeromedical Waivers for Psychiatric Conditions and Treatments," was published in the book "Aeromedical Psychology." She is an active contributing member of Military Psychology, Division 19 of the American Psychological Association (APA), and served as an invited reviewer for the Division's peer-reviewed journal, *Military Psychology*, and for submissions for the 2014 and 2015 annual national conferences. As Chair of the Clinical Practice Committee for Division 19, she launched a writing program to generate timely and practical white papers to foster dissemination of critical information regarding suicide assessment and intervention, "normal" combat stress reactions, and resilience. She is also an active contributing member of the Aerospace Human Factors Association, served as an editor for the AsHFA quarterly newsletter, and was selected as their Communications Chair.



## THEODORE C. LYSTER AWARD

**Andrew C. Marchiando, 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.*

Andrew C. Marchiando, M.D., M.P.H., was the recipient of the 2016 Theodore C. Lyster Award for his outstanding achievements during his more than three decades long career in aerospace medicine. His contributions have spanned accomplishments at the unit level to transformational aerospace medicine successes across the U.S. Air Force, joint services, U.S. interagency, and international communities. He established benchmark programs at Whiteman AFB, MO, twice earning recognition as Air Rescue Service Helicopter Aircrew of the Year, and integrated Tactical Air Command to form the new Air Combat Command, where he was responsible for all flight/missile medicine, aeromedical standards, and occupational health programs. He also conducted groundbreaking work on hypoxia and night-vision goggles and concept development for the Critical Care Aeromedical Transport Team. Additionally, he has been at the forefront of solutions for B-2 fatigue management, U-2 decompression illness, and F-22 hypoxia issues.

Dr. Marchiando is a native of Laurium, MI. He pursued undergraduate studies at the University of Illinois at Champaign-Urbana and graduated in 1981 with a B.Sc. in Biology. He was commissioned a Second Lieutenant in the Air Force and attended medical school at the Uniformed Services University of the Health Sciences in Bethesda, MD. He graduated from medical school in 1985 and completed a surgery internship at Travis AFB, CA. From 1986 to 1991, he was a flight surgeon at Whiteman AFB, MO. He was then selected to the Strategic Air Command Surgeon General's staff for 1 year at Offutt AFB, NE, as the Chief of Operational Medical Standards. With the formation of Air Combat Command, he was transferred to Langley AFB, VA, and was on the Command Surgeon's Staff as the Deputy Chief of Flight Medicine, where he initially handled aircrew standards, missile, and rescue issues. He later became the Chief of Flight Medicine for Air Combat Command. He began the Residency in Aerospace/Occupational Medicine in 1995, at Harvard University, earning an M.P.H., and completed his residency in 1998 at the School of Aerospace Medicine, Brooks AFB, TX. He was the Aeromedical Services Flight commander at Kunsan Air Base, Republic of Korea, from 1998 to 1999. He then became the Commander of the 509th Aeromedical-Dental Squadron at Whiteman AFB,

MO, from 1999 to June 2001. He was the 96th Aerospace Medicine Squadron Commander at Eglin AFB, FL, from 2001 until 2004. From 2004 to 2008, he was assigned to the Air Force Surgeon General's staff at the Air Force Medical Operations Agency at Bolling AFB, Washington, DC, as Chief of the Aerospace Operations Directorate and Consultant to the Surgeon General for Flight Medicine. In 2008, he assumed command of the 56th Aerospace Medicine Squadron at Luke AFB, AZ. In 2010, he transferred to Headquarters Air Combat Command at Langley AFB, VA, to become Chief of Flight Medicine and later Chief of Aerospace Medicine. During his military career, he had major deployments to Saudi Arabia, Diego Garcia, Kuwait, and Iraq.

Dr. Marchiando retired from the Air Force in 2015 with the rank of Colonel, after 34 years of service. Board certified in Aerospace Medicine and Occupational Medicine, he is currently a Red Cross volunteer physician in the flight surgeon's office at Langley Air Force Base. His awards and decorations include the Legion of Merit, the Bronze Star, the Global War on Terrorism Expeditionary and Service Medals, the Meritorious Service Medal with five oak leaf clusters, the Three Air Rescue Service Lightlift Aircrew of the Quarter Award, the Air Rescue Service Lightlift Helicopter Aircrew of the Year Award, Company Grade Officer of the Year, and the George E. Schafer Award from the Society of USAF Flight Surgeons. He is a member of the Warbirds of America, the Experimental Aircraft Association, the Society of Aerospace Medicine Specialists, a Life Member of the Society of Air Force Flight Surgeons, and a Fellow of the Aerospace Medical Association.



## MARIE MARVINGT AWARD

**Daniel Buckland, M.D., Ph.D.**

*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.*

Daniel Buckland, M.D., Ph.D., was the recipient of the 2016 Marie Marvingt Award. He received the award for his development and implementation of a social media strategy for the AsMA. Dr. Buckland is the first social media chair and due to his efforts, AsMA has hundreds of followers on social media and is a leading presence in the worldwide online conversation regarding aerospace medicine. He was also an integral member of the medical support staff for the StratEx stratospheric skydive by Alan Eustace, helping to design recovery, testing, and emergency protocols.

Dr. Buckland is a resident in Emergency Medicine at George Washington University Hospital. He is a graduate of Harvard Medical School and completed a Ph.D. in Aeronautics and Astronautics at the Massachusetts Institute of Technology. His Ph.D. thesis focused on developing a portable ultrasound system to perform real-time, in-flight imaging of neck and back injury in high-performance jet pilots and astronauts in collaboration with the U.S. Army Aeromedical Research Lab and NASA. This work was awarded a Whitaker Foundation International Scholarship and an NIH National Research Service Awards M.D./Ph.D. Fellowship. Prior to his Ph.D. work, he did research in the Man Vehicle Lab at MIT on intra-vehicular visual orientation, navigation, and spatial memory countermeasure training for spaceflight, supported by NSBRI and NASA. He also did post-doctoral research at the University Hospital of Basel in Switzerland, focused on applying engineering approaches to problems encountered in the clinical care of shoulder, knee, and hip injuries.

Dr. Buckland has received the National Space Biomedical Research Institute Bioastronautics Fellowship, the Society of NASA Flight Surgeons Outstanding Student Award, and the Space Medicine Association Jeffery R. Davis Award. He is an Associate Member of the Center for Space Medicine at Baylor Medical College, a member of the Space Medicine Association, and the American Institute of Aeronautics and Astronautics. As a member of AsMA he has been active on the Education and Training and Science and Technology Committees.



#### **HARRY G. MOSELEY AWARD**

**Paulo Magalhães Alves, M.D., M.Sc.**

*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.*

Paulo Magalhães Alves, M.D., M.Sc., FAsMA, was the 2016 recipient of the Harry G. Moseley Award for his contributions to flight safety from different operational aviation medicine perspectives, including crew and passenger health, in-flight medical emergencies, crew fatigue management, flight crew immunization, cosmic radiation, bioterrorism, DVT, SARS, and pandemics. Dr. Alves was also recognized for his constant efforts in educating, mentoring, and advising the aeromedical community on traveler's health issues and remote medicine, and for the application of his clinical experience as an aviation cardiologist in the management of in-flight cardiac events. Additionally, he has been an advisor on traveler's health

issues, including the review of the International Health Regulations and the National Preparedness Plan for the Risk of Influenza Pandemics, for the National Union of Airlines with the Brazilian Health Authorities.

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 a CAME for Transport Canada until 2007, a BLS 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 and the current President of the Brazilian Society of Aerospace Medicine, Past President of the Airlines Medical Directors Association, a member of the IATA Medical Advisory Group and the International Academy of Aerospace Medicine, a Fellow of the Civil Aviation Medical Association, a member of the American Telemedicine Association, and a Fellow of the Aerospace Medical Association. His awards include the George Kidera Award from the Airlines Medical Directors Association, the MedAire CEO Award, the Boothby-Edwards Award from AsMA, and the Annual Scientific Award from the Society of Critical Care Medicine for his role as a co-author on the paper "Pediatric fatalities at 30,000 feet: characterizing pediatric deaths on commercial air flights".

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<http://www.asma.org/news-events/asma-news-archive/newsletters>





## JOHN PAUL STAPP AWARD

### Richard DeWeese, B.Sc.

*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 biomechan-*

*ics and to promote progress in protection from injury resulting from ejection, vibration, or impact.*

Richard DeWeese, B.Sc., was the recipient of the 2016 John Paul Stapp Award. He was honored for his leadership in all biodynamic aspects of crash survival from aircraft accidents. The award was presented during AsMA Honors Night Ceremonies, April 28, 2016, at the Harrah's Resort Hotel in Atlantic City, NJ. 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 in at the FAA Civil Aerospace Medical Institute in 1990. After 14 years of working with mentors, who themselves were pioneers in the field of aircraft crashworthiness, he became the Team Lead in 2004. During his time at the FAA, he has conducted hundreds of dynamic seat tests for all types of aircraft, including, general and commercial aviation, military and civilian helicopters, and even the Space Shuttle. He and his team have evaluated and helped develop safety improvements for a wide range of seat and restraint designs including energy absorbing seats, side-facing and obliquely oriented seats, sport parachutist restraints, and all types of child restraint systems.

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. He is also a member of the Aerospace Medical Association. His awards include Outstanding Innovator from the Office of Aviation Medicine, the William E. Collins Publication Award, and Employee of the Year from the Civil Aviation Medical Institute.



## JOHN A. TAMISIEA AWARD

### Kevin Herbert, M.B.Ch.B., D.Av.Med.

*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.*

Kevin Herbert, M.B.Ch.B., D.Av.Med., was the 2016 recipient of the John A. Tamisiea Award for his outstanding leadership and inspiration in all fields of aviation medicine. Dr. Herbert started the European 'Fly Safe, Fly Well' project, which highlighted the importance of mental health and preventive aspects in the daily work of all AMEs. He also led the European Society of Aviation Medicine (ESAM) and consolidated ESAM organizationally, helping to strengthen the voice of European AMEs and other aerospace medicine professionals in Europe. Additionally, he organized the 34th European Conference on Aerospace Medicine in London. He has continued and deepened the relationship between the Aerospace Medical Association (AsMA) and ESAM with his leadership of the ESAM at AsMA meetings during AsMA's annual scientific meeting, the bilateral strategic talks between the leaders of the two organizations, and as chair of the scientific committee of the first ever joint AsMA-ESAM scientific meeting to be held in Oslo later this year.

Dr. Herbert was born in the United Kingdom and currently practices as an Aviation Medical Examiner in Daventry, Northamptonshire. After qualification in 1977 and specialist training, he was a General Practitioner in the National Health Service for 25 years. He was managing partner of a large medical practice for 22 of those years and the practice was an 'early adopter' of the many changes to primary care in the United Kingdom during that period, including fund holding and Primary Care Trust formation. He then spent 5 years as an NHS chief executive. During this time he built an innovative new community hospital in Daventry. He gained his private pilot licence in 1995 and began to pursue his interest in aviation medicine. He gained a Diploma in Aviation Medicine in 1999 and was appointed as an AME the same year.

After some years as Hon. Secretary of the Association of Aviation Medical Examiners in the UK, Dr. Herbert was elected as Chairman in 2010. He has been President of the European Society of Aerospace Medicine since 2012, being re-elected for a second term in 2014. He is also a member of the Society of Occupational Medicine and the International Academy of Aviation and Space Medicine, and an affiliate member of the Faculty of Occupational Medicine.



#### **THOMAS J. AND MARGARET D. TREDICI AWARD**

##### **C. Robert Gibson, O.D.**

*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.*

C. Robert Gibson, O.D., was the 2016 recipient of the Thomas J. and Margaret D. Tredici Award. Dr. Gibson was honored for being among the first to note changes to astronaut eye exams after long-duration spaceflight. He and his teammates published findings of disc edema, choroidal folds, globe shortening, and hyperopic shifts. They conducted pre-, in-, and postflight studies and noted the findings in peer-reviewed articles, multiple presentations at the annual scientific meeting, and helped develop clinical options to treat vision decrements in orbit. Dr. Gibson has also guided equipment in real time from Mission Control, such as retinal imaging systems, optical coherence tomography, and ocular ultrasound, helping to confirm the vision changes found.

In 2011, Dr. Gibson was the leader of the NASA clinical team that described the history, clinical findings, and possible etiologies of the findings regarding vision changes in seven astronauts during and after long-duration space flight. This spectrum of clinical findings is currently known as the Visual Impairment and Intracranial Pressure (VIIP) syndrome. Due to its great potential impact on future manned space missions, to include a mission to Mars, this unique syndrome is the focus of several ongoing research projects. Dr. Gibson is a co-investigator in the NASA Ocular Health study: The Prospective Observational Study of Ocular Health in ISS Crews. In 2012, he led the NASA research group that documented the stability of Photorefractive Keratectomy (PRK) during spaceflight, leading to PRK and LASIK no longer being considered disqualifying for astronauts.

While these studies are important to NASA, Dr. Gibson and the team have assured that the community at large is able to understand these finding through multiple publications, book chapters, symposia, and presentation of the findings. Dr. Gibson has co-authored chapters for three

books to be published this year: "Space Physiology and Medicine"; "Vision Impairment: Fluid Shifts in Microgravity, Intracranial Pressure and Its Effect on Vision in Space and on Earth"; and "Principles of Clinical Medicine for Space Flight, 2nd ed."

Dr. Gibson was born and raised in the Panama Canal Zone and is a 4th generation "Zonian." He earned his B.A. in Zoology from the University of South Florida in 1982. He worked at the NASA Johnson Space Center researching space adaptation syndrome from 1983-1986 and then went on to earn a Doctorate of Optometry degree from the University of Houston College of Optometry in 1989. He has been affiliated with Coastal Eye Associates, a group optometry/ophthalmology practice located in Webster, TX, since 1996, and is a co-founder of South Shore Eye Center in League City, TX. He was the clinical director for Advanced Laser Vision and Surgical Institute in Houston, TX, from 2000-2008. He has been a senior vision consultant and staff optometrist for the NASA flight medicine clinic for the past 10 years.

His honors and recognition include the Heidelberg Engineering-Optical Coherence Tomography Xtreme Research Award, NASA Certificates of Recognition for his contributions, a U.S. Patent, and a NASA JSC Spacelab One Group Achievement Award.



#### **ARNOLD D. TUTTLE AWARD**

##### **Kathleen D. Van Benthem, 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 Wyle Laboratories.*

Kathleen D. Van Benthem, B.Sc.(Hons.), M.H.S., Ph.D., received the 2016 Arnold D. Tuttle Award for her role as lead author of "Prospective Memory Failures in Aviation: Effects of Cue Salience, Workload, and Individual Differences" [Aerosp Med Hum Perform. 2015; 86(4):366-373]. The other authors were: Chris M. Herdman, Rani G. Tolton, and J. A. LeFevre. This paper examined both individual and system factors in general aviation that contributed to failures of prospective memory for communication tasks in the cockpit. More than 100 pilots were recruited and completed extensive cognitive health testing and flight simulation tasks. The study found that older pilots, and those with lower levels of cognitive health, of any age, were more likely to commit prospective memory failures. This likelihood of forgetting to complete critical communication tasks was exacerbated by two systemic factors: namely low salience memory cues and the high mental workload associated with difficult ter-

rain and pattern traffic volume. These findings point specifically as to how the aviation industry might address the issue of pilot prospective memory by promoting the development and placement of memory cues in the cockpit, and targeting safety management activities towards pilots most at risk.

Dr. Van Benthem is a Canadian citizen and received a B.Sc. with honors in occupational therapy in 1985. She worked extensively with both younger and older adults, utilizing assistive technology to support her clients' engagement in meaningful activities. In 2003, she earned her master's degree in health studies from Athabasca University, Alberta, and went on to become the director of policy and standards for the Canadian Association of Occupational Therapists. In 2008, she began full-time Ph.D. studies at the Institute of Cognitive Science at Carleton University. She was the recipient of the J. James Mackie endowment scholarship, a graduate award for studies in dementia, and the Social Sciences and Humanities Research Council Bombardier Doctoral Fellowship Award. Her dissertation work was awarded the 2015 Senate medal by Carleton University. In 2015 she was awarded status as an HQP by the pan-Canadian AGEWELL National Centres of Excellence program. Over the past 8 years, she has used immersive flight simulation environments to isolate key cognitive and system determinants of pilot performance in situation awareness, basic aircraft control, and prospective memory. She is also a contributor to research pertaining to electroencephalographic signatures of vigilance. She is currently a postdoctoral fellow at the ACE Lab, Carleton University, where she is developing new research methods using virtual reality platforms to assess general aviation pilot cognitive health.

Dr. Van Benthem has been an Occupational Therapist, and a Professional Education Coordinator, Education Consultant, and Director of Policy and Standards for the Canadian Association of Occupational Therapists. She has also held a Teaching Assistantship and been a Contract Instructor at Carleton University.

### Nominate a Colleague for an AsMA Award!

The nomination form and rules are on our website at: [www.asma.org](http://www.asma.org), under "About AsMA" under Informational Documents.

For more information, you can contact the Chair, at: [awards@asma.org](mailto:awards@asma.org)

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



### JULIAN E. WARD MEMORIAL AWARD

**Lt. Col. Stephanie Davis, USAF**

*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.*

Lt. Col. Stephanie Davis, USAF, was the 2016 recipient of the Julian E. Ward Memorial Award for her commitment to excellence and leadership while a resident at the USAF School of Aerospace Medicine (USAFSAM). She has contributed to numerous products that benefit the clinical, operational and the global humanitarian/disaster response aspects of the aerospace medicine community. The outcomes of her research study validate the current USAF policy for valvular heart disease in aviators, and her disaster planning tools have been adopted and utilized by governments and private organizations at home and abroad.

Lt. Col. Davis earned a B.S. at Tuskegee University in 1994 and then a D.V.M. at the Tuskegee University School of Veterinary Medicine. In 2006, she graduated with an M.D. from Northwestern University Feinberg School of Medicine in Chicago, IL. She then completed a Family Medicine Residency at Eglin AFB, FL, in 2009, and was part of the inaugural set of family medicine residents to transition directly into a flight medicine billet. She earned an M.P.H. in 2012 from Yale School of Public Health in New Haven, CT. She began her military career in 1988, enlisting as a Marine Corps reservist supply clerk at the Marine Corps Logistics Base in Albany, GA. She transferred military service to the Air Force ROTC detachment at Tuskegee University after gaining early entry into veterinary school and earned her commission from the Air Force ROTC in 1994.

In 1996, Lt. Col. Davis was chosen as the National Veterinary Public Health Student of the Year and also became a Public Health Officer in the Air Force with an assignment as Deputy Flight Commander at Travis AFB, CA. Stephanie then went on to serve as Flight Commander of Public Health at Osan AB, Korea, and Tyndall AFB, FL, where she worked closely with flight surgeons and aerospace medicine specialists. She was awarded a Health Professions Scholarship and temporarily left active duty to attend medical school. As a medical student she was chosen as a Chicago Area Schweitzer Fellow and New York Academy of Medicine National Fellow. Following medical school, she re-entered active duty and began a family medicine residency at Eglin AFB. She was awarded the Residency Research Award for Eglin Family Medicine



Residency in 2009. Her first assignment as a flight surgeon was flight commander of Flight Medicine at Fairchild AFB, WA, and one year later also included flight commander of the Optometry flight. From 2011 to 2012, she began the USAF RAM program via the Air Force Institute of Technology and was an M.P.H. student at Yale University. In 2012, she began her aerospace medicine practicum where she has also served as the Business Editor for "Flightlines" and the Aerospace Medicine resident member of the Residency Advisory Committee.

Lt. Col. Davis has spent time working with the Centers for Disease Control and Prevention, Chicago Area Schweitzer Fellows as a fellow and mentor, the New York Academy of Medicine Fellows, and health officials in several countries during military assignments and medical humanitarian trips. Her awards and honors include the Air Force Meritorious Service Medal, the Air Medal, Air Force Commendation Medal with one oak leaf cluster, the National Defense Service Medal, the Air Force Expeditionary Service Ribbon, and the American Red Cross International Military Hometown Hero Award. She is a member of the Aerospace Medical Association, the Society of USAF Flight Surgeons, and the American Academy of Family Physicians.

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

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#### **Future AsMA Annual Scientific Meetings**

April 29 - May 4, 2017  
 Sheraton Denver Downtown Hotel  
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May 6-10, 2018  
 Hilton Anatole Hotel  
 Dallas, TX

## EDUCATION IN DEPTH: UHMS-STYLE

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September 15-18, 2016

Loews New Orleans Hotel  
 New Orleans  
 Louisiana

[www.ubms.org/index.php?option=com\\_civicrm&task=civicrm/event/info&reset=1&id=56](http://www.ubms.org/index.php?option=com_civicrm&task=civicrm/event/info&reset=1&id=56)

### UHMS/NOAA PHYSICIANS TRAINING IN DIVING MEDICINE

October 17-28, 2016

Silver Cloud Hotel-  
 Seattle Stadium  
 Seattle, Washington

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*The financial resources of individual members alone cannot sustain the Association's pursuit of its broad international goals and objectives. Our 87-year history is documented by innumerable medical contributions toward flying health and safety that have become daily expectations by the world's entire flying population—commercial, military, and private aviation. However, support from private and industrial sources is essential. The following organizations, who share the Association's objectives or have benefitted from its past or current activities, have affirmed their support of the Association through Corporate Membership.*

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Air Canada  
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