

Ever Upward: June 2023

2023 Constituent Presidents

Benincasa Heads Army Flight Surgeons

LTC Jennifer A. Benincasa is the incoming President for the Society of U.S. Army Flight Surgeons. She hails from the City of Brotherly Love, Philadelphia, PA, and graduated from



LaSalle University with a dual Bachelor of Arts in Biology and Psychology with a Premedical Concentration. She was commissioned as an Army Officer through the Health Professions Scholarship Program as a Second Lieutenant and attended the Philadelphia College of Osteopathic Medicine, where she was awarded her Doctor of Osteopathy medical degree in 2009. She completed her Transitional Year Internship at Madigan

Army Medical Center at Joint Base Lewis-McChord in 2010 and General Surgery Internship at Tripler Army Medical Center on the island of Oahu in 2011. Afterward, she served a General Medical Officer tour in an aviation unit, where she developed her interest in and passion for operational, aviation, and aerospace medicine.

LTC Benincasa then completed her Occupational Medicine residency training with the U.S. Army School of Aviation Medicine in 2016 and Aerospace Medicine residency training with the Naval Aerospace Medical Institute in 2017. During her residency training, she earned both her Master of Science in Healthcare Administration from University of Maryland University College and her Master of Public Health from the University of West Florida in 2016. She is board-certified in both Occupational and Aerospace Medicine with both the American Board of Preventive Medicine and American Osteopathic Board of Preventive Medicine. She is a member of many professional societies, including the American Osteopathic Society, American Association of Public Health Physicians, American Public Health Association, American Society of Aerospace Medicine Specialists, Space Medicine Association, Society of Critical Care Medicine, and the Society of Federal Health Professionals. She is also a member of the Aerospace Medical Association, where she serves on the Council, Nominating Committee, and Scientific Program Committee.

LTC Benincasa's military experience includes serving as Battalion Flight Surgeon in Germany with the 412th Aviation Support Battalion in the 12th Combat Aviation Brigade from 2011–2014, Brigade Flight Surgeon in Hawaii with the 25th CAB in the 25th Infantry Division from 2017–2019, Command Surgeon for Army Sustainment Command at Rock Island Arsenal from 2019–2021, and deploying as a Battalion Flight Surgeon in Afghanistan in support of Operation Enduring Freedom from 2012–2013. She is currently stationed at Fort Rucker, AL, where she served as the Program Director of the Residency in Aerospace Medicine at the U.S. Army School of Aviation Medicine from 2021–2023 and currently serves as the Chief Aeromedical Reviewer/Flight Surgeon/Aerospace Medicine Specialist at U.S. Army Aeromedical Activity. Her awards include the NATO Medal, Overseas Service Ribbon, Humanitarian Service Medal, National Defense Service Medal, Army Achievement Medal, Army Commendation Medal, Air Medal, and the Meritorious Service Medal. She also holds a Bronze Medal, Order of St. Michael Award.

Berry to Lead ASAMS

Dr. Daniel K. Berry is the incoming President for the American Society of Aerospace Medicine Specialists (ASAM). He is a graduate of Southern Adventist University in Collegedale,



TN, with a Bachelor's degree with a Mathematics major and a Chemistry minor. He earned a Master of Science in Biomathematics from Loma Linda University in California with his research in 3-dimensional modeling of cardiac electrical activity using Aitoff projections, and a Ph.D. in Biomedical Engineering from the California Coastal University in California with his research in statistical analysis of cardiac dis-

orders using the angiogram as the gold standard. He graduated from Kansas City University of Medicine and Biosciences and completed his post-graduate training at the Tulsa Regional Medical Center, which is now the Oklahoma State University Hospital. He completed the RAM requirements for a Master of Public Health at the University of Oklahoma, School of Public Health, in Oklahoma City, OK. He is boardcertified in Aerospace Medicine by the American Osteopathic Board of Preventive Medicine and in Family Practice by the American Osteopathic Board of Family Practice.

Dr. Berry served in the U.S. Air Force for 28-1/2 years as a physician. He started his career as a Flight Surgeon at Tinker AFB in Oklahoma City, OK. Within 1 year he was promoted to the chair of the 10-physician department. His next assignment was at McGuire Air Force Base in New Jersey, where he was the Director of Preventive Health Services and directed the offices of Flight Medicine, Public Health, Bioengineering, Infectious Diseases, and the Immunizations Clinic. He was then assigned as the Aerospace Medicine Squadron Commander at Tyndall Air Force Base in Panama City, FL. Then he was selected to be the Command Chief of Aerospace Medicine, the Chief of Clinical Medicine, and the Medical Director of the Personnel Reliability Program for headquarters Space Command at Peterson Air Force Base in Colorado Springs, CO. He then became the Aerospace Medicine and Aeromedical Information Systems Director for the Human Systems Program Office at Brooks City Base in San Antonio, TX, where he directed the departments for 17 medical device and medical information systems development. He went on to become the Human Systems Office Deputy Group Commander. His last assignment with the U.S. Department of Defense was as the Joint Project Manager for Biological Defense. He retired from the U.S. Air Force but continued to practice Aerospace Medicine in the Federal Aviation Admini-See 'Berry,' p. N21

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stration first as the Deputy Regional Flight Surgeon, and then as the Regional Flight Surgeon for the Central Region of the United States. He is also the acting Senior Regional Flight Surgeon for the Federal Aviation Administration.

Dr. Berry has also been extensively involved in professional activities with the American Osteopathic Association. He has held nearly every office in the American Osteopathic College of Occupational and Preventive Medicine (AOCOPM), including President of the College. He developed and founded the Osteopathic Specialty of Undersea and Hyperbaric Medicine and established the Undersea and Hyperbaric Medicine Conjoint Committee. He is currently the Chair of the American Osteopathic Board of Preventive Medicine (AOBPM), has served in this position for 14 years, and was just re-elected for a 15th year. He is a distinguished Fellow of the American Osteopathic College of Occupational and Preventive Medicine and a fellow of the Aerospace Medical Association.

Dr. Berry is one of the authors of the *Aerospace Medicine Board Essentials* textbook. He is also a frequent lecturer on topics in Aerospace Medicine and has written articles on Aerospace Medicine. He is a trained item writer for Board questions and is trained in Anghoff psychometric procedures. He developed the first Undersea and Hyperbaric Medicine Table of Specifications (TOS) and Joint Task Analysis (JTA), and has participated in updating the previous Aerospace Medicine TOS and JTA. He holds five medical patents and is the president and owner of Obtronics, Inc., which is a medical device development company.

Ruskin Is Incoming AsHFA President

Keith J. Ruskin, M.D., is the incoming President for the Aerospace Human Factors Association (AsHFA). He is a Professor of Anesthesia and Critical Care and Director of Aerospace Medicine at the University of Chicago. His clinical practice focuses on neurosurgical anesthesia. His major aca-



demic interests include neurosurgical anesthesia, human performance, and aerospace medicine. His career has focused on teaching these disciplines to practicing physicians. He has worked as part of a team to develop guidelines for screening morbidly obese pilots for obstructive sleep apnea and for the management of in-flight cardiac arrest. He has developed a fatigue risk management program for physicians

who must work overnight shifts and participated in a NASA workshop on space torpor. Keith is also interested in the terrestrial applications for this work, writing articles on the role of automation in the operating room and how personal protective equipment affects human performance. His funded research involves developing guidance for the next generation of alarms, alerts, and warnings in Air Traffic Control.

Dr. Ruskin received a Bachelor of Science in Biology and Biotechnology from Worcester Polytechnic Institute. He then attended medical school at the University of Miami School of Medicine and completed his residency at New York University Medical Center. He spent 20 years on the faculty of Yale University before being recruited to the University of Chicago. He has had a lifelong interest in aviation and currently holds a Commercial Pilot certificate with Airplane Single-Engine Land and Sea, Multi-Engine Land, and Instrument Airplane ratings. He holds a Second in Command type rating for the DC-3. He currently flies a Cessna Skylane out of Chicago Executive Airport (KPWK), but would love to would fly a jet.

Dr. Ruskin has published original research, review articles, and textbooks on a variety of topics, including willingness to fly during the COVID-19 pandemic, management of critical events, and other topics related to safety and human performance. He also teaches two undergraduate classes at the University of Chicago: "Conquest of Pain," which covers pain physiology, and "Physiology in Extreme Environments." He serves on the American Society of Anesthesiologists' Patient Safety Editorial Board and Committee on Patient Safety Education and is Chair of the Aerospace Medical Association's Aerospace Human Performance Committee. He is a Fellow of the Aerospace Medical Association, the Royal Aeronautical Society, and the American Society of Anesthesiologists. He is also a senior member of the Institute of Electrical and Electronics Engineers.

Welsh to Lead AsPS

CDR Welsh is the incoming President for the Aerospace Physiology Society (AsPS). A native of Ambridge, PA, he earned a Bachelor of Science and Master of Science in Exercise Physiology from Slippery Rock State University, PA. He also graduated from George Washington University with a



certificate in Medical Laboratory Technology and is a board-certified Aerospace Physiologist.

CDR Welsh enlisted in the Army in May 2002, attending Basic Combat Training at Ft. Benning Infantry Training Center, GA. He was promoted to Sergeant in April 2005 and commissioned through the Navy's Direct Commissioning Program in September 2005. In 2006, he completed his initial Navy

training at Naval Air Station (NAS), Pensacola, FL, and NAS Whiting Field, FL. His training included Officer Development School, Aviation Preflight Indoctrination, Primary Naval Flight Training, and the Naval Aerospace Physiology Course. As a Naval Officer, his past assignments include Division Officer, Aviation Survival Training Center (ASTC), NAS Patuxent River, MD; Aeromedical Safety Officer, Training Wing Six, NAS Pensacola, FL; Aeromedical Safety Officer, Marine Aircraft Group 26, Marine Corps Air Station, New River, NC; Assistant Professor, Uniformed Services University of the Health Sciences School of Medicine, Bethesda, MD; Director of Aeromedical Safety, 1st Marine Aircraft Wing, Camp Foster, Okinawa, Japan; and Director ASTC Pensacola, NAS Pensacola, FL. He is currently the Deputy Surgeon at the 2nd Marine Aircraft Wing, Cherry Point, NC.

CDR Welsh is authorized to wear the Fleet Marine Force Officer Warfare Device and his current personal awards in-

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clude the Defense Meritorious Service Medal, Navy and Marine Corps Commendation Medal (4 awards), Army Commendation Medal, Navy and Marine Corps Achievement Medal, and Army Good Conduct Medal.

Feuillie Is Incoming IAMA President

Vincent Feuillie, M.D. is the incoming President of the International Airline Medical Association (IAMA). Since 2016, he has held the position of Air France Medical Advisor. He joined Air France in 1998 and served in a variety of positions



and served in a variety of positions such as Deputy Medical Director and Medical Officer in the Occupational Health Department; he then served in Air France's International Travel Clinic, Paris Invalides, until taking his current position. From 1989-1999, he was also Day Hospital Head at the Institute Pasteur in Paris, where he also served in the Infectious and Tropical Diseases Department. Dr. Feuillie is a member of the

International Air Transport Association Medical Advisory Group, an International Academy of Aviation and Space Medicine academician, President of the French-speaking Society of Aerospace Medicine (SOFRAMAS), and a member of the Medical Council French Civil Aviation Authority (DGAC). He was Chair of the Organization Committee for the International Conference of Aerospace Medicine in Paris in 2022. He has been a member of the Airlines Medical Directors Association since 2009, and is a member of the European Society of Aerospace Medicine and Member at Large of their Executive Council, as well as a member of IAMA. He is a European Union Aviation Safety Agency representative at the Flight Standards Technical Committee, and a member of the Aerospace Medical Association since 2009. Within AsMA, he is a member of the Air Transport Medicine Committee.

Bates Continues as IAMFSP President

Col. Christopher W. Bates is starting his second year as President of the International Association of Military Flight Surgeon Pilots. He is currently the sole tanker Pilot-Physician for



the U.S. Air Force and is actively engaged in human system integration issues for the KC-46. As a KC-46 instructor pilot, he works with the 22nd Operations Group in the execution of KC-46 Initial Operational Test and Evaluation and training of KC-46 aircrew. Prior to this assignment, he was the Commander of the 22nd Operational Medical Readiness Squadron, 22d Medical Group, 22d Air Refueling

Wing, McConnell AFB, KS.

Col. Bates was commissioned through the U.S. Air Force Academy in 2001 and earned his Doctor of Medicine in 2005 from the Uniformed Services University of the Health Sciences (USU). He is a Pilot-Physician with over 2000 pilot flight hours in the T-6, T-1, KC-135, and KC-46. He has deployed as a pilot, flight surgeon, and critical care air transport team (CCATT) physician in support of Operation Enduring Freedom and Operation Iraqi Freedom. He is also a boardcertified emergency medicine physician and a Fellow of the American College of Emergency Physicians. A full bio is available at <u>https://www.asma.org/asma/media/AsMA/pdfjournal/pdf-news-2022/oct-2022 news final.pdf</u> in the October 2022 newsletter.

Auñón-Chancellor Is NASA Flight Surgeons President

Dr. Auñón-Chancellor is the incoming President of the Society of NASA Flight Surgeons. She received a B.S. in Electrical Engineering in 1997 from George Washington University,



Washington, DC, and an M.D. from the University of Texas Health Science Center at Houston in 2001. She completed a 3-year residency in internal medicine at the University of Texas Medical Branch (UTMB) in Galveston, TX, in 2004 and then completed an additional year as Chief Resident in the Internal Medicine Department in 2005. She also completed an aerospace medicine residency at

UTMB and an M.P.H. in 2007.

Dr. Auñón-Chancellor was selected by the National Aeronautics and Space Administration (NASA) in 2009. Boardcertified in Internal and Aerospace Medicine, she recently served as Flight Engineer on the International Space Station (ISS) for Expeditions 56 and 57. During her time on orbit, the crews contributed to hundreds of experiments in biology, biotechnology, physical science, and Earth science aboard the International Space Station. Investigations were led into new cancer treatment methods and algae growth in space. The crew also installed a new Life Sciences Glovebox, a sealed work area for life science and technology investigations that can accommodate two astronauts. During her first flight, she logged in 197 d in space. She currently covers medical issues and on-orbit support in the Astronaut Office. In addition, she serves as the Program Director for UTMB's Aerospace Medicine Residency Program and as academic faculty for LSU Health's Internal Medicine Residency Program in Baton Rouge, LA.

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

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Suresh to Head Space Medicine Association

Dr. Rahul Suresh is the incoming President of the Space Medicine Association (SMA). He is an operational Flight



Surgeon at the NASA Johnson Space Center (JSC). He has served as the deputy crew surgeon for Expeditions 61-62 and as the prime crew surgeon for Expeditions 66-67 (SpaceX Crew 3). He currently serves as the Program Medical Officer for NASA's Low Earth Orbit Commercial Destination Program. His duties in this role include providing physician leadership for the Agency in its development of future

commercial LEO destinations and to serve as the prime physician interface to commercial Providers building LEO stations. His other roles include supporting SpaceX Crew Dragon launches and landings as a certified SpaceX Hawthorne Mission Control Specialist and as the Co-Lead of the Exploration Medical Integrated Product Team, where he helps identify and fund development of medical capabilities for future exploration missions. He is a longstanding SMA member and has served as the chair of the SMA Awards Committee for the past 2 years.

Dr. Suresh earned his Bachelor of Arts degree in Biochemistry and Cell Biology from Rice University in Houston, TX. He returned to his hometown of Rochester, MN, where he received his Doctor of Medicine degree and a Master of Clinical and Translational Research degree from the Mayo Clinic College of Medicine and Science. He completed residency training at the University Texas Medical Branch (UTMB) in Galveston, TX, and earned a Master of Public Health degree. He is currently board-certified in Internal Medicine and Aerospace Medicine. He is also a practicing hospitalist and sees patients at hospitals in Houston.

Incoming SUSAFFS President Is Andrus

John R. Andrus, B.Sc., M.D., M.P.H., M.Sc., Brig. Gen., USAF, is the incoming President for the Society of U.S. Air Force Flight Surgeons (SUSAFFS). He is the Commander,



711th Human Performance Wing (HPW), Air Force Research Laboratory, Wright-Patterson Air Force Base, OH. He entered the U.S. Air Force in 1988 through the Uniformed Services University and earned his B.Sc. at the University of California, Irvine, CA, and his M.D. at the Uniformed Services University, then completed a family practice residency in 1996. He graduated from the Aerospace Medicine

Primary Course in 1997 and the Squadron Officer School Correspondence Program in 1998. He received his M.P.H. in 2002 from the University of California, Berkeley, and also completed the Air Command and Staff College Distance Learning Program. He served an Aerospace Medicine Residency in 2003 and a General Preventive Medicine Residency in 2004 at the U.S. Air Force School of Aerospace Medicine, Brooks City Base, TX. He completed the Air War College Distance Learning Program in 2007 and earned a Master of Science in National Resource Strategy at the Eisenhower School of National Security and Resource Strategy, National Defense University, Fort McNair, Washington, DC. He also holds a Project Management Professional Certification.

Dr. Andrus was a Family Physician, 65th Medical Group, Lajes Field, Azores, Portugal, from 1996-1998, when he be-came Flight Surgeon at the 86th Medical Group and then at the 37th Airlift Squadron, both at Ramstein AB, Germany. In 2001, he attended the Air Force Institute of Technology to study for his M.P.H. He became Chief of Aerospace Medicine, 62nd Medical Group and then Commander of the 62nd Medical Operations Squadron, both at McChord AFB, WA, in 2004. He was assigned as Commander, 62nd Medical Squadron, JBSA Lewis-McChord, WA, in 2008 and became Deputy Command Surgeon, HQ U.S. Africa Command, Kelley Barracks, Stuttgart, Germany, in 2009. From 2012-2015, he served as Commander, 59th Medical Operations Group, JBSA Lackland, TX, before attending the National Defense University to earn his Masters. From 2016-2021, he served as Command Surgeon, HQ Air Force Space Command, Peterson AFB, CO, and then Command Surgeon and Director, Global Patient Movement Operations at U.S. Transportation Command before taking his current position.

Dr. Andrus deployed to support Atlas Response airlift operations and was the lead flight surgeon in the evacuation of injured USS *Cole* sailors from Yemen. He is the recipient of the Emma L. Bockman Memorial Award for outstanding scholarly activity, the Mackay Trophy, the Malcolm C. Grow Award, and the Life Cycle Logistics Field Award. His other awards include the Nuclear Deterrence Operations Service Medal with two oak leaf clusters, Humanitarian Service Medal with one oak leaf cluster, Air Force Recognition Ribbon, Air Force Achievement Medal, Air force Commendation Medal, Meritorious Service Medal with one oak leaf cluster, Legion of Merit, and Defense Superior Service Medal with one oak leaf cluster.

Krause Is the New SUSNFS President

Robert J. Krause, M.D., M.P.H., CIME, is the incoming President for the Society of U.S. Naval Flight Surgeons (SUS-NFS). He is a physician and Captain in the U.S. Navy, dual



board-certified in Occupational Medicine and Aerospace Medicine. He obtained a Bachelor of Science in Biomedical Engineering from Rensselaer Polytechnic Institute in 1996, his M.D. from the Uniformed Services University of the Health Sciences in 2008, and his Master of Public Health from the University of West Florida in 2014. Between 2012 and 2014, he served and Aerospace Medicine Residency at

the Naval Aerospace Medical Institute in Pensacola, FL.

Dr. Krause began as a Student Naval Flight Officer at Aviation Training Command and CTW-6, Pensacola, FL, in 1996. From 1997-1998, he was a Naval Flight Officer at Sea Control Squadron Four One, San Diego, CA, and then Sea Control Squadron Two Four, Jacksonville, FL. He then became Officer in Charge, NROTC Unit, at the University of North Carolina, Chapel Hill. After he earned his M.D., he served in a *See 'Krause,' p. N24*

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variety of positions, including General Surgery Intern, Battalion Medical Officer, and Flight Surgeon, before becoming a Resident in Aerospace Medicine in 2012. Following his residency, he was assigned as Senior Medical Officer on the USS Theodore Roosevelt (CVN 71) and the USS George Washington (CVN 73). Starting in 2017, he was a Senior Regional Flight Surgeon at Branch Health Clinic Oceana in Virginia Beach, VA, and then was an Independent Contractor from 2018-2022 for American Analytical Medical Services, San Diego, CA; Maximus, McLean, VA; and MLS Group, Southfield, MI. He then became the Department Head of Operational and Aerospace Medicine, Branch Health Clinic Oceana, in 2018. That year, he also became Medical Director/ Senior Medical Officer at Oceana Triad in Virginia Beach. In 2020, he left those positions to serve as an Aeromedical Analyst, Code 14 Branch Head, at Naval Safety Center, Norfolk, VA, a position he holds today. Additionally, from 2019-2022, he was Navy Specialty Leader, Aerospace Medicine and Flight Surgery, Bureau of Medicine and Surgery, in Falls Church, VA.

Dr. Krause is a member of the American College of Occupational and Environmental Medicine, and a member, previous Secretary, and past Vice President of the Society of U.S. Naval Flight Surgeons. He is an Associate Fellow of the Aerospace Medical Association (AsMA). His honors include the Air Medal (First Strike/Flight Award), Navy Achievement Medal, Navy Commendation Medal (three awards), Army Commendation Medal, and the Meritorious Service Medal (two awards). He is an author or co-author on six publications and presentations, and is a Certified Independent Medical Examiner (CIME) of the American Board of Independent Medical Examiners.

Sobel Continues as ANAHPS President

Annette L. Sobel, M.D., M.S., FAAFP, FASMA, FAAN, is beginning her second year as president of the Aerospace Nursing and Allied Health Professionals Society (ANAHPS). Dr.



Sobel is currently Adjunct Professor, School of Nursing, at Texas Tech School of Health Sciences, and Adjunct Professor, Electrical and Computer Engineering, Texas Tech. She received her Bachelor of Science degree in Chemistry and Computer Science from Rutgers University in 1979 and her M.D. from Case Western Reserve in 1983. She did her Family Medicine Internship and Residency at Duke

University. She received a Master of Science degree in Aerospace Medicine/Human Factors Engineering from Wright State University. She also attended Air Command and General Staff College, Air War College, the NASA Flight Surgeon Course, the U.S. Navy Hyperbaric Medicine course, and the JFK school of Government National Security Program at Harvard University.

Dr. Sobel is a former President of the Space Medicine Association and the Aerospace Human Factors Association, recipient of the AsMA Julian E. Ward and AsHFA Henry F. Taylor Awards, and the Anti-Defamation League's Award for Superior Public Service. During her military career, and a civilian career as a Distinguished Member of the Technical Staff at Sandia National Laboratories, NM, she served during 9/11 and Hurricane Katrina responses, and worked on a number of forward-leaning partnerships for peace and nonproliferation. She led DoD development of public health/ counter WMD initiatives in Thailand, Vietnam, Qatar, and across the CENTCOM (pre-AFRICOM) areas of responsibility for the Office of the Secretary of Defense. She worked for USAID/NGOs in Africa on medical education and training and developed an interprofessional pre-hospital care and innovation initiative in Lubbock for medical, nursing, business, and engineering students. A full biography is available in the June 2022 journal [AMHP 2022; 93(6):540-541 and in the newsletter [June 2022:N22].

Lee to Head LSBEB

Peter H. U. Lee, M.D., Ph.D., M.P.H., M.S., FACS, FACC, FAsMA, Lt.Col., USANG, is the incoming President of the Life Sciences and Biomedical Engineering Branch (LSBEB).



He is an Assistant Professor of Pathology and Laboratory Medicine at Brown University and a cardiothoracic surgeon at Southcoast Health in Massachusetts. He received a B.S. in neuroscience, Ph.D. in pathobiology, and M.D. degrees, all from Brown University. He received an M.S. in Space Studies from the International Space University in France and an M.P.H. from

Harvard University. He completed his surgical training at Tufts University, UCLA, and Stanford University.

Dr. Lee is board-certified in both general surgery and thoracic surgery and is a Fellow of the American College of Surgeons (FACS), a Fellow of the American College of Cardiology (FACC), and a Fellow of the Aerospace Medical Association (FAsMA). He was also a heart and lung transplant surgeon while on faculty at Ohio State University. His research interests span the range of clinic, outcomes, translational, and basic science research. He has over 100 scientific publications, abstracts, and book chapters. He has his own basic science laboratory focusing on skeletal and cardiac muscle tissue engineering, gene therapy, and the use of stem cells. He has an interest in applying tissue-engineering technologies for use in regenerative medicine, as replacement tissue, as a biological pump, and an organ-on-a-chip type in vitro experimental model. He also has an interest in aerospace medical and space life sciences research. He has flown multiple microgravity and spaceflight experiments, including in parabolic zero gravity flights, aboard the space shuttle, and on the International Space Station (ISS).

Dr. Lee is a recipient of the Young Investigator's Award by the American Society for Gravitational and Space Research (ASGSR) as well as a Faculty Research Fellowship by the American College of Surgeons (ACS). He is an elected Academician of the International Academy of Aviation and Space Medicine (IAASM) and the International Academy of Astronautics, an Executive Council member of AsMA, a member of LSBEB, a past President of the Space Surgery Association (SSA), and a former Governing Board member of the ASGSR. He is also a member of the User Advisory *See 'Lee,' p. N25*

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Committee for the International Space Station National Laboratory. He serves as a Lt. Colonel in the U.S. Air National Guard, where he serves as a general surgeon and flight surgeon and was the Chief of Clinical Services for the 179th Medical Group. He is also the co-founder and Chief Executive Officer of the innovative medical device company Spiritus Medical, Inc., which has a license to manufacture and sell the NASA/JPL-designed VITAL ventilator. He has served as the medical officer on a 1-month Mars simulation mission in the Canadian Arctic as part of the Flashline Mars Arctic Research Station crew and was a finalist for the 2016 Canadian astronaut selection campaign. On a personal note, he is a 7th degree grandmaster in taekwondo, a certified master scuba diver, and a private pilot.

New Members

AsMA welcomes 46 new members in June.

Abokie, Sharon; Freetown, Sierra Leone Anderson, Christopher; Washington Township, OH, United States Angstmann, Tobias; Brighton, Victoria, Australia Bastman, Jill; Aurora, CO, United States Blaum, Louis; Port Orange, FL, United States Borgohain, Apratim; Sivasagar, India Bourdage, Jillian; Tamarac, FL, United States Bridenstine, Joseph; Ridgecrest, CA, United States Carlson, Scott; Vernon Hills, IL, United States Culbert, Gared; Lemoore, CA, United States Dragic-Ranisavljevic, Dragana; Dubai, United Arab Emirates Franco, Nathalia; Orlando, FL, United States Garzon, Pilar; Bogota, Colombia Girgla, Taania; Boston, MA, United States Haislip, Howard; San Antonio, TX, United States Henry, Sadie; Pensacola, FL, United States

Howard, William; Naples, FL, United States Jackson, Linda; Richmond, Ontario, Canada Johnson, Julian; Harper Woods, MI, United States Kahn, Brooke; Lansing, MI, United States Kelly, James; Grosse Point Woods, MI, United States Komarraju, Nageshwar; Bengaluru, Karnataka, India Lewkowicz, Rafal; Warszawa, Poland Lucas, Jim; Bryan, TX, United States Maney, Brent; Melbourne, FL, United States Marquez, Alexander Brian; Davis Monthan AFB, AZ, United States Martello (Hanselman), Megan Leigh; Sugar Land, TX, United States Masson, Athena; Saint Augustine, FL, United States McDaniel, Chandler; Starkville, MS, United States McIver, Ian; Pensacola, FL, United States Mieses, April; Walls, MS, United States Nguyen, Charlie; Selly Oak, Birmingham, United Kingdom Paletta, Mia; Chicago, IL, United States Powell, Thomas; Columbus, OH, United States Randall, Kristopher; Pensacola, FL, United States Rath, Raja; New Delhi, India Reilly, Clifford; Burlington, VT, United States Roney, Camille; Prince George, British Columbia, Canada Snyder, Sarah; Enterprise, AL, United States Solis, Ernesto; Springboro, OH, United States Tooker, McKenna; Rocklin, CA, United States Turner, Anthony; Dayton, OH, United States Van Der Horn, Tamryn; Rome, GA, United States Waegell, Devon; Colton, CA, United States Waheed, Zain; Sterling Heights, MI, United States Welker, Christopher; Kingwood, TX, United States AsMA welcomed back three returning members:

Masson, Angela; Saint Augustine, FL, United States Waterman, Bruce; San Diego, CA, United States Welsh, Timothy; Havelock, NC, United States





The Aerospace Medical Association Foundation is working to accelerate its efforts by empowering the next generation of Aerospace Medicine scientists who will take humans to deep space. In order to achieve these objectives, they are setting a goal in "The Need for Speed" campaign of \$5 million by AsMA's 100th Anniversary! Donations can be in cash or in stock and can be made by credit card or through Paypal's site. AsMA members: consider joining the Heritage Society and include the Foundation in your estate planning.

Support the Foundation!

News of Corporate Members

Leidos Is Newest Corporate Member

Leidos is the Aerospace Medical Association's (AsMA's) newest Corporate Member. They are a company providing science and technology solutions for the civil, defense, health, and intelligence lines of business. The company was founded in 1969 as Science Applications Incorporated (SAI) and became a publicly traded company in 2006. The company split into two (Leidos and SAIC) in 2013. They recently joined a promotional partnership with NASCAR to design a lunar terrain vehicle. The company has also submitted a bid for the Human Landing System Sustaining Lunar Development contract, a critical component of NASA's efforts to establish a sustainable presence on the Moon, and is currently working on the Universal Stage Adapter (USA) for NASA, a crucial piece of equipment that will enable the transport of large payloads, including the rover unveiled by the company. That rover, while simple in design, incorporates modern innovations, prioritizes sustainability, and, most notably, supports male and female crewmembers across varying height and weight scales, promoting inclusivity in space exploration.

—Please visit www.leidos.com for more about the company and https://www.leidos.com/insights/leidos-nascar-speedlunar-rover-race to read more about the collaboration with NASCAR and the lunar rover.

MedAire's Assessment Kit Approved in Europe

European aircraft operators now have access to MedAire's Digital Assessment Kit (DAK) to quickly assess passengers who become unwell during flights. The equipment has earned the European Union's CE approval, certifying that it meets safety, health, and environmental requirements. The DAK consists of a blood pressure monitor cuff, 12-lead ECG recorder, digital glucometer, pulse oximeter, and contactless thermometer. MedAire President Bill Dolny says the equipment improves the way medical emergencies are dealt with by allowing flight crew to transmit critical data to the company's assistance centers immediately so that when crew place calls to doctors on the ground, they receive the right guidance as to how best to respond to the patient's needs. The DAK is operated via an app that guides crew through the process of collecting data. The equipment's features are designed to help non-medical staff get the best possible data in challenging circumstances, such as a large sticker pad for the ECG recorder to get the information needed by physicians even if it is not applied perfectly on the patient's chest. Additionally, MedAire announced it has expanded the business and general aviation desk at its London Assistance Center to provide the same level of support as it delivers from its Global Response Center in Phoenix.

—Please see https://www.ainonline.com/aviation-news/business-aviation/2023-05-23/europeans-get-access-medaires-digital-assessment-kit to read more.

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Visit all the news pages to read all about it! **Members:** please check the Job Fair each month.

Mayo Clinic Physician Honored

Abba Zubair, M.D., Ph.D., a Mayo Clinic physician and scientist, was recently honored by NASA with the Exceptional Scientific Achievement Medal for demonstrating that human-derived mesenchymal stem cells grown aboard the International Space Station (ISS) could be used for potential clinical applications. The award ceremony took place at the Lyndon B. Johnson Space Center in Houston. Dr. Zubair has been working on finding new therapies for stroke and is focused on using adult stem cells—known as mesenchymal stem cells—in future treatments for stroke. In 2017, several samples of donated stem cells from Dr. Zubair's lab were on a rocket launched from NASA's Kennedy Space Center in Cape Canaveral, FL, to the ISS. The goal was to find out if the cells could hold up in space and be more quickly mass-produced in microgravity for use in stroke treatment. He and his team learned not all stem cells are created equal and that their response to microgravity (weightlessness) varies. For example, mesenchymal stem cells do not significantly grow faster in space compared to Earth, but their biology—such as their ability to control immune cells-was significantly enhanced. However, hematopoietic stem cells appeared to grow much faster in space than on Earth. They also found that cells grown on the ISS had no evidence of DNA damage or chromosomal abnormalities, no signs of malignant transformation, and no signs suggesting cancer development.

—Please see https://newsnetwork.mayoclinic.org/discussion/ from-lift-off-to-splash-down-an-update-on-mayo-clinic-stemcells-in-space/ for more details.

AOPA Continues Work Toward Unleaded Avgas

Though leaded fuel once powered the aircraft that helped win World War II, the Airplane Owners and Pilots Assocation (AOPA) recognizes the environment has changed and leaded aviation fuel (avgas) no longer has a place. They are leading an industry effort with the establishment of EAGLE (Eliminate Aviation Gas Lead Emissions), an industry/FAA collaboration created in 2022 to help facilitate a safe and smart transition to an unleaded fuel solution for the general aviation (GA) fleet. Their top priority is a lead-free solution no later than 2030 with a safe transition that allows for production, distribution, and storage. In pursuit of that, AOPA established an AvGas Coalition in 2022 made up of more than 100 organizations to facilitate industry communications and understanding. Additionally, AOPA's President Mark *See 'Corporate News,' p. N27*

Authors!

The cost of color printing has dropped significantly. Please consider printing your Figures and Images in full color for the next issue of *Aerospace Medicine and Human Performance*. If interested, download the Agreement to Pay Extra Charges form from Editorial Manager for your next submission.

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From 'Corporate News,' p. N26

Baker testified at a House Aviation Subcommittee hearing to discuss AOPA's priorities for the upcoming Federal Aviation Administration (FAA) reauthorization bill. His remarks were focused on aviation workforce development, designated pilot examiner reform, GA hanger shortage and construction, and the need for transient ramp space at public-use airports.

—Please visit https://www.aopa.org/news-and-media/allnews/2023/june/pilot/2022-annual-report for more on this.

ALPA Calls for Protection of U.S. Aviation Safety Record

Air Line Pilots Association, Int'l (ALPA) president Capt. Jason Ambrosi urged aviation leaders to work together to make the airline industry safer and stronger. At a speech before the Aero Club of Washington, he urged attendees to continue to prioritize safety as Congress reauthorizes the Federal Aviation Administration (FAA). During his remarks, Capt. Ambrosi decried attempts to exploit false claims of a pilot shortage in order to lower the safety standards that have made the U.S. the gold standard for aviation safety. He noted the steps that airlines, lawmakers, and pilots can take together to open doors to the next generation of aviators without sacrificing safety, including providing student loans for flight training programs, establishing grants to build flight training and education degree programs, increasing funding for the Workforce Development Grant Program, making the Women in Aviation Advisory Board a permanent body, and pass the Flight Education Access Act and AIR PUMP Act. Capt. Ambrosi stated AOPA feels Congress can build on the strength of America's aviation workforce, maintain safety, and break down the cost barriers for all those who aspire to fly.

—Please see https://www.alpa.org/news-and-events/newsroom/2023-05-24-renew-collaboration-to-make-airline-industry-safer-stronger to read more.

Corporate News Bites

ADDMAN: During Rapid+TCT 2023, the largest and most significant additive manufacturing event in North America, ADDMAN announced its entry into the Roboze 3D Parts Network with the goal of expanding its industrial manufacturing capabilities with additive manufacturing systems. *Please visit https://www.addmangroup.com/addman-expands-industrial-production-capabilities-by-joining-roboze-3d-parts-network/ to read more.*

Environics: Environics has announced a new option for its Model 6000 systems. The new option adds the ability to purge and flush the system, which will help protect the system, reduce wait times, and provide gas savings. This new feature can be retrofitted to existing units. *Please see https://www.environics.com/news-events/news-and-announcements/ for more.*

IFALPA: The International Federation of Airline Pilots Associations (IFALPA) release their election results from their 77th conference in Montreal, Canada. *The link to the pdf can be found at https://www.ifalpa.org/news/23prl03ifalpa-election-results/.*

KBR Recognized by USA Today

KBR has been recognized by USA Today as one of America's Climate Leaders for 2023. This data-driven recognition ranks U.S.-based companies that have cut their carbon footprint in recent years. The list of America's Climate Leaders was developed for USA Today by market research firm Statista. More than 2,000 U.S. companies were evaluated on metrics like emission intensity, annualized reductions in emission intensity, and carbon disclosure ratings. This recognition is the latest in a growing list of environmental, social, and governance (ESG) awards for KBR, including a recent AAA ranking by MSCI.

—Please visit https://www.kbr.com/en/insights-news/pressrelease/kbr-recognized-americas-climate-leaders-list-2023-usatoday for more.



- Join a project spearheaded by the History and Archives Committee as we prepare for the upcoming 100th anniversary of AsMA in 2029!
- ► The Committee is seeking **authors interested in contributing a chapter to a book** that examines the ways in which the fields of aviation and aerospace medicine have changed over the past century, as reflected by our Society through the years.
- Help us celebrate the history of our organization and the innovations in our field that many of you have not only witnessed but engineered.
- Please contact Committee Chair Walt Dalitsch at <u>walt3@dalitsch.com</u> if interested.

MEETINGS CALENDAR

Please check the websites of meetings listed to see updates.

Calls for Papers—Ongoing: IAF's Global Networking Forum Space Conversations Series, online. For more, visit <u>https://www.iafastro.org/events/iaf-gnf-space-conversa-</u> tions-series/.

HFACS Workshops: Workshops on HFACS are available. For more, visit <u>https://www.enrole.com/erau/jsp/</u> <u>course.jsp?categoryld=&courseld=HFAC</u> for in-person & <u>https://www.enrole.com/erau/jsp/course.jsp?categoryld=</u> <u>558570F8&courseld=OHFA</u> for online.

Aug. 13-17, 2023; 2023 AAS/AIAA Astrodynamics Specialist Conference; Big Sky Resort, Big Sky, MT. Visit <u>https://www.aiaa.org/events-learning/event/2023/08/13/</u> <u>default-calendar/2023-aas-aiaa-astrodynamics-specialistconference</u>.

Oct. 26-29, 2023; International Congress of Aviation and Space Medicine (ICASM 2023); Conrad at Etihad Towers, Abu Dhabi, UAE. For more, visit <u>https://www.iaasm.org/</u>