



Ever Upward: April 2020

AsMA Reschedules Annual Meeting

The Aerospace Medical Association leadership has been closely monitoring the rapidly changing COVID-19 pandemic situation. As a result of increased corporate and national travel restrictions and recommendations regarding limiting mass gatherings, AsMA's Executive Committee's has postponed the 91st Annual Scientific Meeting and associated activities. **The Atlanta meeting scheduled for May 17-22, 2020, is now rescheduled to October 10-15, 2020.** (Please note that the Opening Ceremony for the October meeting will start on Sunday instead of the usual Monday). This decision was made to ensure the health and safety of our attendees, presenters, staff, and exhibitors. *The ability to postpone the meeting to October is truly remarkable and was only accomplished with the full support and collaboration of the Hyatt Regency staff and AIM Meetings and Events.*

Meeting Registration

We hope those of you who have already registered for the May meeting will be able to join us in October. **If you decide to attend the October meeting and already have a meeting registration, you do not need to do anything.** Your meeting registration and all related meeting fees will remain active in our system and will be applied to the October meeting. **If you have already registered for the May meeting and decide you cannot attend the meeting in October, you should con-**

tact our staff at (703) 739-2240 x106 (Gloria Carter) or x107 (Sheryl Kildall) and request a refund. As a 501(c)(3) tax exempt organization, AsMA can also accept donations from those who cannot attend the October meeting. Should you decide to donate all or part of your registration fees, please contact our staff.

Hyatt Regency Hotel Room Reservations

If you already have a room reservation at the Hyatt Regency Atlanta, that reservation will be canceled automatically for you. The cancellation process will be accomplished by the hotel after a new contract with AsMA has been signed. You should receive an e-mail from the Hyatt Regency Atlanta when your room reservation has been canceled. If you wish to confirm cancellation of your Hyatt Regency room reservation, please call the hotel at (404) 577-1234. A new reservation process for the October meeting will open later this spring.

The AsMA leadership thanks you for your understanding and patience during these unusual times. We hope many of you will join us for the 91st Annual Scientific Meeting of the Aerospace Medical Association now scheduled for October 10-15, 2020, at the Hyatt Regency Hotel in Atlanta, Georgia!

For more information and a FAQ, please see the full announcement at <https://www.asma.org/news-events/announcements>.

Scholarship Winners Announced

Anita Mantri Memorial Travel Scholarship

Ben Johnson was selected to receive the 2020 Anita Mantri Memorial Travel Scholarship. He holds an M.Sc. from the University of Edinburgh School of Philosophy, Psychology, and Language Sciences, Edinburgh, United Kingdom and a B.S. in Human Science from Georgetown University School of Nursing and Health Studies, Washington, DC. He is currently working on another M.Sc. at King's College London, Faculty of Life Sciences and Medicine, in London, United Kingdom. He is also attending Johns Hopkins University School of Medicine, Baltimore, MD, and expects to graduate with an M.D. in May 2023. He has served as a Laboratory Assistant at Van Gelder Lab, University of Washington, in 2014 and 2015, as an Astrobiology Lab Assistant at Johnson Biosignatures Lab, Georgetown University, from 2016-2017, and in 2017 he also spent the summer as a volunteer Emergency Medical Technician for the Clear Lake Emergency Medical Corps in Houston. That same summer, he was a Behavioral and Performance Intern at NASA's Johnson Space Center. In 2018, he served as a Psychiatry and Behavioral Sciences Lab Assistant, Davis-Takacs lab, John Hopkins School of Medicine. His honors include being cho-



sen for the Georgetown Undergraduate Research Opportunities Program, a GUROP Summer Fellowship, a Sally Ride Internship, Honorable Mention in the Space Medicine Association's Jeff Myers Young Investigator Award, and the William Walker Award for Psychiatric Research. He is a member of the Aerospace Medical Association, the Space Medicine Association, and the Aerospace Medicine Student and Resident Organization. He is also a member of the American College of Physicians, the American Medical Association, the Wilderness Medical Society, and the American College of Preventive Medicine.

Stanley R. Mohler, M.D., Aerospace Medicine Endowed Scholarship

Stefan McAllister completed a B.S. degree in psychology and a M.S. degree in biology with a concentration in molecular genetics and biochemistry at Georgia State University. He also completed an M.S.P.H. degree (honors) at Meharry Medical College. After graduating, he interned at the NASA Ames Research Center in the Psychophysiological Research Laboratory and the Vision Science and Technology Group. He was also a certified trainer for the



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Send information for publication in this newsletter to: Journal Department, AsMA; rtrigg@asma.org

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NASA sponsored Global Learning and Observations to Benefit the Environment (GLOBE) Soil Moisture Active Passive program. His involvement in the Aerospace Medical Association (AsMA) includes serving as one of the pioneer organizers of the first and second AsMA Speed Mentoring Sessions, which took place during the 87th and 88th Annual AsMA Scientific Meetings. Additionally, his participation in AsMA includes serving as Deputy Chair of the AsMA Ad Hoc Committee on Career Development and Co-Chair/Moderator of an AsMA Scientific Meeting Session titled "Operative Performance in Aerospace Interface Operations." In addition, he held the office of Treasurer-Membership Coordinator of AsMA's Aerospace Medicine Student and Resident Organization (AMSRO) from 2017 through 2019. His other contributions to AMSRO include serving as Chair/Co-Chair of the AMSRO Scientific Paper Award Committee (co-designed the current system of scoring scientific abstracts and selecting awardees) and being a member of the AMSRO International Outreach Committee, the AMSRO Mentorship Committee, and the AMSRO Outstanding Mentorship Award Committee. He served as the founder and Chair of the AMSRO Chapter Establishment and Coordinating Committee and championed the establishment of the first AMSRO chapter located at a university, along with seven other chapters. Currently, he is a member of the National Stuttering Association Research Committee and aspires to become a research scientist within the field of aerospace medicine.

Jeffrey R. Davis, M.D., Aerospace Medicine Endowed Scholarship

Kseniya Masterova was the recipient of the 2020 Jeffrey R. Davis, M.D., Aerospace Endowed Scholarship. She graduated



from Loyola University Chicago in 2016 with a B.S. in physics, biology, and biophysics. During her undergraduate studies, she interned at NASA Johnson Space Center in the Lifetime of Surveillance of Astronaut Health Department, through the National Space Biomedical Research Institute (NSBRI) NASA Apprenticeship Program. After graduating, she spent her gap year working as a research assistant in

the Space Medicine Innovations Lab at the Geisel School of Medicine at Dartmouth. She is now a third year M.D./Ph.D. student on the Aerospace Medicine track at the University of Texas Medical Branch (UTMB), pursuing her Ph.D. in Rehabilitation Science. Since beginning her education at UTMB, she has completed two research rotations at NASA JSC in the divisions of Exploration Medical Capability and Exercise Physiology. For her Ph.D. thesis she hopes to study the impact of spaceflight bone microenvironment on breast and prostate cancer metastasis to bone. She is a member and currently President of AsMA's Aerospace Medicine Student and Resident Organization (AMSRO) and is also a student member of the Space Medicine Association (SMA), and the American Society of Aerospace Medicine Specialists. Her honors and awards include the Damen Scholarship from Loyola University of Chicago, the Jeffrey R. Davis Space

Medicine Scholarship from SMA, the AsMA Fellows Scholarship, the Texas Space Grant Consortium Graduate Fellowship, and the Arthur V. Simmang Scholarship.

AsMA International Aerospace Medicine Scholarship

Katie Harris received the 2020 AsMA International Aerospace Medicine Scholarship. She is an aspiring flight surgeon and aeromedical technology researcher who is currently a first year medical student at the Memorial University of Newfoundland, Canada. She holds degrees in Astrophysics (Undergraduate) from the University of Toronto and in Space Studies (Masters) from the International Space University. She first became interested in the development of space technology while



building a proof-of-concept multi-object spectrograph during her research fellowship at the Dunlap Institute. She combined that interest with her intention to pursue medicine and became inspired by how the development of physiological countermeasures and monitoring technologies for space, as well as telemedicine practices, can be adapted to improve healthcare on the ground. In that vein, she is currently pursuing two countermeasure and monitoring research projects focused on lower body negative pressure (with researchers at the European Astronaut Centre and University of California San Diego) and near-infrared cerebral monitoring (Neural Systems Group, Massachusetts General Hospital/Harvard Medical School) concurrently with her medical studies. In order to build operational experience, Katie also has earned a private pilot license and an open water diver certification. She has received a variety of scholarships, including Dr. Mike Bautista Scholarship, St. Bonaventure's College; Chancellor's Scholarship, Ashbaugh Fund, Trinity College; John Pounder Scholarship in Astronomy and Astrophysics; European Space Agency Masters of Space Studies Scholarship; and Moblitwin Twin Cities Scholarship. Other honors she has received include an Honorable Mention, Abstract Competition, Psychiatry Department, Massachusetts General Hospital; Manx Precision Optics Prize; Gordon Cressy Student Leadership Award; and was a Canadian Space Agency International Space Education Board Sponsored Student for the International Astronautical Congress.

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Blue Journal Still in Top 100

Ingenta has examined the data for all the titles on Ingenta Connect, and AsMA's publications rank in the top 100 out of more than 11,000 titles for number of full-text downloads.

For December 2019: *Aerospace Medicine and Human Performance* ranks 8th with 2,362 downloads; *Aviation, Space, and Environmental Medicine* ranks 19th with 1,429 downloads.

For January 2020: *Aerospace Medicine and Human Performance* ranks 19th with 1,790 downloads; *Aviation, Space, and Environmental Medicine* ranks 23rd with 1,536 downloads.

News of Members

Dr. Rowena Christiansen, an Associate Fellow of the Aerospace Medical Association (AsMA) and Chair of the AsMA Associate Fellows Group, was the 2019-2020 recipient of the Professional Development Scholarship offered by the Aeromedical Society of Australasia. This scholarship can be used to attend a relevant conference or undertake a professional development program. Additionally, Dr. Christiansen has also been shortlisted in the “Academic of the Year” category for the inaugural 2020 Australian Space Awards (winners will be announced March 26th).

New Members

AsMA welcomes 23 new members in April.

- Batchelor, Alexandra; Wellington, New Zealand
- Batty, Andrew; Preston, Lancashire, United Kingdom
- Cantley, Michael; Grosse Ile, MI, United States
- Gilder, Thomas; Sierra Vista, AZ, United States
- Hellein, Jessica; Orlando, FL, United States
- Hofstetter, Lorne; Salt Lake City, UT, United States
- Kelly, Christopher; Grosse Point Park, MI, United States
- Koban, Zakery; Wexford, PA, United States
- Krishnegowda, Avinash; Bengaluru, India
- Lakshminarayanan, Sneha; Fullerton, CA, United States
- Loizou, Richard; Paddington, New South Wales, Australia
- Mazur, John; Port Orange, FL, United States
- Ng, Ka Tsun; Hong Kong, Hong Kong
- Pischulti, Patrick; Boulder, CO, United States
- Polpakkara, Promod; Mumbai, India
- Purushothaman, Sanjay; Chennai, India
- Rosenberg, Mark; Charleston, SC, United States
- Roxo, Keith; Yuma, AZ, United States
- Salazar Martinez, Hector; New York, NY, United States
- Schenk, Adrian; Lakewood, CO, United States
- Stafford, Frank; Enterprise, AL, United States
- Wallace, Robert; Baton Rouge, LA, United States
- Zervas, Kate; Columbia, SC, United States

In Memoriam: Charles A. Berry, M.D.

AsMA HQ staff were very saddened to hear of the passing of Charles A. Berry, M.D., who was a pioneer in aviation medicine. He began his career at the University of California, Berkeley, in 1941. Four months later, after the attack on Pearl Harbor, he enlisted in the Navy, but remained at the University of California to finish college and then attend medical school at the University of California, San Francisco. Before he finished, he was discharged from the Navy with no further obligation and received his medical degree in 1947. After Internship at the San Francisco General Hospital, he went into the private practice of medicine in Indio, California.

When the Korean War broke out, Dr. Berry joined the Air Force, and was assigned as the Chief of Internal Medicine at a base hospital in northern California. After 3 months, he was

invited to participate in additional medical training in a new field, aviation medicine. He later came to learn that this was actually a Residency in Aviation Medicine. Thus, as one of the first to attend this new aviation medicine Residency, he moved to San Antonio, TX, to the U.S. Air Force School of Aviation Medicine (USAFSAM). After a year of training at USAFSAM, he was sent to Panama, where he served for 3 years as a Flight Surgeon, assisting Central and South American countries to set up their own aviation medicine programs, and flying rescue missions. When he returned to the United States, he completed his Residency by receiving his Masters Degree in Public Health from Harvard University's School of Public Health. He came back to San Antonio in 1956 and became Chief of the Department of Flight Medicine at USAFSAM. During that time, he sent pilots in balloons and aircraft, to various high altitudes, including to the edge of the atmosphere, to see how their bodies would react physiologically.

NASA was created 2 years later and, in 1957, Dr. Berry was one of the physicians selected to fly to Washington to help select test pilots to “fly”, ride in, a military rocket into outer space. These pilots were later referred to as ‘astronauts’. Dr. Berry was later chosen to participate in the selection of the first seven NASA astronauts. He and his fellow physicians devised ways to test these pilots to see which ones would best meet the demands of space as then understood. They were also responsible for finding ways to monitor these astronauts while in space.

Dr. Berry then left the Air Force after 16 years, to begin his NASA Career. Dr. Berry worked for NASA (from 1959-1974), selecting subsequent classes of United States’ astronauts to follow the Original Seven. In all, he helped send 42 individuals into space over 30 missions, including the Apollo 11 mission during which Neil Armstrong walked on the Moon. On that mission, he monitored the crew. He retired from NASA as the Director of Life Sciences. In 1974, he became the first President of the University of Texas Health Science Center Houston, in Houston, TX. In 1977, he took an additional position as House Physician at KPRC, Channel 2 News, in Houston, where he did on-air health segments. He became President of Preventive and Aerospace Medicine Consultants, P.A., in 1982. He was nominated for the Nobel Prize in Medicine and Physiology in 1979 and 1980. Within AsMA, he was the recipient of the Louis H. Bauer Founders Award, the Won Chuel Kay Award, the Theodore C. Lyster Award, the John A. Tamisiea Award, the Arnold D. Tuttle Award, and two President’s Citations. He was also AsMA President from 1969-1970, and the President of the International Academy of Aviation and Space Medicine from 1973 to 1975. Dr. Berry was a teacher, mentor, example, and friend to Aerospace Medicine specialists the world over.

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Visit Us on Social Media!

Twitter: https://twitter.com/aero_med

FB: www.facebook.com/AerospaceMedicalAssociation

LinkedIn: [https://www.linkedin.com/company/2718542?trk=tyah&trkInfo=tarId:1404740611720,tag:Aerospace Medical,idx:1-1-1](https://www.linkedin.com/company/2718542?trk=tyah&trkInfo=tarId:1404740611720,tag:Aerospace%20Medical,idx:1-1-1)

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For more on Dr. Berry's life, please see NASA's oral history interview with him (https://historycollection.jsc.nasa.gov/JSCHistoryPortal/history/oral_histories/BerryCA/BerryCA_4-29-99.htm), UTMB's Moody Medical Library papers (<https://utmb-ir.tdl.org/handle/2152.3/7440>), and the *Houston Chronicle's* article (<http://digital.olivesoftware.com/olive/ODN/HoustonChronicle/shared/ShowArticle.aspx?doc=HHC%2F2020%2F03%2F06&entity=Ar00204&sk=D8568D23&mode=text>).

For those of you who wish to make a donation in memory of Dr. Charles A. Berry may do so using the information below.

Mail a check to:

UTMB Development Office
301 University Boulevard
Galveston, TX 77555-0148

In the Memo field of the check or in a cover letter please state that the donation is to be used for the Charles A. Berry, M.D., Space Medicine Library Fund.

Alternatively, if you wish to give by credit card, please go to <https://development.utmb.edu/give>. On that web page either select an amount or enter your own amount. For Designation, please select 'Other' and enter "Charles A. Berry, M.D., Space Medicine Library Fund" in the 'Other' field.

In Memoriam: Ronald K. Ohslund, M.D., AsMA Past President

AsMA recently learned that former AsMA President for 1984–1985, Ronald K. Ohslund, M.D., CAPT, MC, USN,



passed away late last year. He was also the 1983–1984 President of the Space Medicine Association (nee Branch) of AsMA and the 1987–1988 President of the Society of U.S. Naval Flight Surgeons. He was Board Certified in Aerospace Medicine by ABPM and was a Fellow of AsMA.

A native of Connecticut, CAPT Ohslund received his M.D. degree in 1961 from the University of

Virginia. He also earned an M.P.H. from UCLA and went on to complete his residency in aerospace medicine at the Naval Aerospace Medical Institute in Pensacola, FL.

After a year at the Marine Corps Air Station, El Toro, CA, his first assignment as a flight surgeon was at Da Nang Naval Air Station in Vietnam in 1964–1965. He took part in 56 medevac missions there. He also served extensively with the NATO/AGARD Aeromedical Working Party, the NATO Military Air Standards Committee, the ASCC Working Party, and the Tri-Service Aeromedical Working Panel in the 1970s and early 1980s.

Read Current News Online!

The AsMA, Member, & Industry News are updated as we get news. Visit AsMA's website to see what's new! Members: check the Job Fair each month.

CAPT Ohslund served in Washington, DC, for 10 years: from 1972–1974 as Head of the Physical Qualifications and Medical Records Branch of the Navy's Bureau of Medicine; from 1974–1978 he was Program Manager for Aircrew Systems Biomedical Research, Naval Medical Research and Development Command; in 1978–1982 he was Acting Director of the Biological Sciences Division in the Office of Naval Research. He later served as Wing Surgeon, Third Marine Aircraft Wing at El Toro, and then Force Medical Officer for the Commander, U.S. Naval Air Force, Pacific Fleet, Coronado, CA. He retired in June 1990 after 30 years of active duty.

Obituary Listing

AsMA staff were saddened to learn of the death of **H. Jack Baghdassarian, M.D., Col., USAF(Ret.)**, in early January. He was a Fellow and Life Member of the Aerospace Medical Association and an Emeritus Member of the Society of U.S. Air Force Flight Surgeons. He was a graduate of New York University Medical School and served 30 years in the U.S. Air Force.

MEETINGS CALENDAR

Due to the coronavirus, please check the websites of meetings listed here to see if they have been postponed.

April 7-9, 2020; FAA Colloquium: Arvind Chaturvedi Colloquium on Postmortem Forensic Toxicology in Aviation. **This meeting has been postponed;** please see <https://cami-colloquium.eventbrite.com/> for more info.

May 4-5, 2020; 18th EuroSciCon Conference on Immunology; Stockholm, Sweden. For more info, please visit <https://immunology.euroscicon.com/>.

May 15-20, 2020; American Thoracic Society (ATS) 2020 Annual Scientific Meeting: **CANCELLED.** For more info, please visit <https://conference.thoracic.org/>.

May 22-26, 2020; FPA's 66th Annual Meeting; Richmond, VA. For more information or to register, visit <https://www.fpadrs.org/event-3683086>.

May 27-28, 2020; Helicopter Air Medical Safety Conference; Westin Alexandria Old Town, Alexandria, VA, USA. This conference will offer safety, operations, and maintenance presentations from air medical industry professionals and the FAA. For more information, please visit <https://www.rotor.org/events/events-detail?ArtMID=1236&ArticleID=862>.

June 9-11, 2020; Global Space Exploration Conference; St. Petersburg, Russian Federation. Co-organized by the International Astronautical Federation and ROSCOSMOS. Please visit <http://www.iafastro.org/evenements/global-space-exploration-conference-glex-2020/> for more info.

August 9-11, 2020, Australasian Society of Aerospace Medicine - Humans in Space: Challenges for Exploration; short course; University of Tasmania, Hobart. Visit <https://www.asam.org.au/> for more info.

September 17-20, 2020; Australasian Society of Aerospace Medicine Conference, Hobart Grand Chancellor, Tasmania. Visit <https://event.icebergevents.com.au/asam2020> for more info.

NEWS OF CORPORATE MEMBERS

AsMA Welcomes New Corporate Member

The Aerospace Medical Association (AsMA) has welcomed another Corporate Member: Callington Haven. They are a specialty manufacturer for global aviation, industrial manufacturing, and maintenance. They develop, make, and market innovative specialty chemical solutions for the aviation field and others. Their products include aircraft insecticides, cabin cleaning, maintenance chemicals, and hygiene products. Callington believes in building and maintaining partnerships and are committed to the safety and development of the communities they operate in. They also invest in research and development to extend their capabilities and range of chemical products. They have offices located on six continents and their products and services are provided to customers in over 60 countries.

—For more on this company, please visit their website at <https://www.callingtonhaven.com/index.php>.

ALPA Applauds Cargo Flight Deck Doors Legislation

The Air Line Pilots Association, Int'l (ALPA), applauded Rep. Brian Fitzpatrick (R-PA) and Rep. Jesus G. "Chuy" Garcia (D-IL) for introducing legislation (H.R. 6190) that would require the installation of intrusion-resistant cockpit doors (IRCD) in all-cargo airline operations. The Cargo Flight Deck Security Act of 2020 is an important step toward the establishment of one level of security for both passenger and all-cargo flight operations. After 9/11, Congress mandated hardened cockpit doors on commercial airliners. Unfortunately, the only all-cargo aircraft included were those that had cockpit doors at that time. The majority of all-cargo aircraft were not equipped with doors and virtually all cargo aircraft manufactured since are not equipped with the hardened cockpit door. One example of a threat that an IRCD would help mitigate is found on all-cargo flights that transport large animals. During these operations, animal handlers are often on board and equipped with potentially lethal animal tranquilizers in case of emergency. These individuals, who are not airline employees and some of whom may not be U.S. citizens, are seated directly behind the pilots and are not required to meet the same security background checks as any other individual with access to an aircraft flight deck. Without a door separating them, these unvetted individuals continue to have access to the flight deck and pilots during flight. ALPA is encouraging Congress to pass H.R. 6190 to close the gap in aviation safety for cargo pilots.

—Please see <http://www.alpa.org/news-and-events/news-room/2020-03-11-alpa-applauds-legislation-requiring-flight-deck-doors-all-cargo-operations> to read more about this.

Want to see your company's news here?

Corporate Members get meeting, exhibitor, and journal discounts. If your company is not a member, become a one! Visit www.asma.org/for-corporations to learn more about membership and its benefits.

NIOSH Announces AI Programmers Competition Results

Results from the National Institute for Occupational Safety and Health (NIOSH) crowdsourcing competition for AI programmers are in, exploring ways to automatically read injury records and classify them in occupational safety and health surveillance systems. The 1st place winner, Raymond van Venetië, is a doctoral student in Numerical Mathematics at the University of Amsterdam whose submission improves NIOSH's ability to classify worker injuries from the NIOSH baseline of 82% accuracy to nearly 90% accuracy. Currently, whenever an employee is injured at work, humans write explanations of how the injury occurred, read all narratives, and assign codes to classify injuries. This takes time, has costs associated with it, and risks the potential for human error. A NIOSH research team, nicknamed "BrainGineers," decided to crowdsource an AI solution and, through an interagency agreement with the National Aeronautics and Space Administration (NASA)'s Tournament Lab, worked with vendor Topcoder to host the online competition. Programmers competed to develop an algorithm that would best employ the use of AI in reading and classifying injury records. The international reach of this competition showcased highly-skilled individuals who are interested in helping advance and improve the field of public health. Those participating self-identified as having degrees in computer science and engineering, chemistry, computer engineering, computer science, data science, and economics to name a few. As a result of this competition, NIOSH will be working with the 1st place solution to make an easy-to-use web tool for occupational safety and health professionals who have an interest in the classification of injury narratives.

—Please visit <https://www.cdc.gov/niosh/updates/upd-02-26-20.html> for more on this.

Environics Named Family-Owned Business of the Year

Environics has been named the 2020 recipient of the Small Business Administration's Jeffrey Butland Family-Owned Business of the Year according to an announcement made by John Xu, a District International Trade Officer from the Connecticut District Office of SBA. The Jeffrey Butland Family Owned Business of the Year award, named after a past SBA Regional Administrator, recognizes a small business with at least a 15-year track record that has passed ownership from one generation to another. The slate of leading small business owners in Connecticut will be honored at the Small Business Week Awards Luncheon at Anthony's Ocean View in New Haven in early May.

—Please see <https://www.environics.com/news-events/environicssbaaward2020> for the announcement.

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Future AsMA Annual Scientific Meetings

Oct. 10-15, 2020: Hyatt Regency Atlanta; Atlanta, GA
May 23-27, 2021: Peppermill Resort Hotel; Reno, NV

KBR Signs MOA with INCOSE

KBR has signed a new memorandum of agreement (MOA) with the International Council on Systems Engineering (INCOSE), the world's largest organization dedicated to the advancement of systems engineering. This agreement promotes a collaborative relationship in granting qualified KBR systems engineers a certification at the level of Associate Systems Engineering Professional, Certified Systems Engineering Professional, or Expert Systems Engineering Professional. The MOA provides a streamlined path for KBR employees to seek these highly valued systems engineering certifications. The signing ceremony took place in late January at the INCOSE International Workshop 2020 in Torrance, CA. KBR's new partnership with INCOSE and the memorandum's signing signifies a positive step forward to enhance both organizations' contributions to engineering. KBR is a member of INCOSE's Corporate Advisory Board, an organization of 119 companies who serve as the voice of the customer to the INCOSE leadership.

—Please visit <https://www.kbr.com/en/insights-events/stories/kbr-and-international-council-systems-engineering-sign-partnership> for more about this.

Mayo Clinic Releases Study on Homeless and Hospital Outcomes

A new study published in *Mayo Clinic Proceedings* examined in-hospital outcomes and 30-day readmission rates of 3,937 homeless patients from more than 1.5 million people admitted for a heart attack. Researchers used 2 years of data (2015–2016) from the National Readmission Database. The findings show that homeless patients often receive less treatment and are more likely to end up readmitted to the hospital within a month. Compared to those with stable housing, homeless patients admitted with a heart attack tended to be male, about 10 years younger, and had fewer traditional risk factors for heart disease. Homeless patients in the study had a higher incidence of congestive heart failure, anemia, chronic kidney disease, and liver and lung diseases. Anxiety, depression, substance abuse and HIV infections were substantially higher for this group, as well. Homeless patients received less treatment in the hospital, as shown through a lower rate of angiography and revascularization. Other differences also emerged: homeless patients were in the hospital longer. Yet they were more likely to leave against medical advice or be discharged to an intermediate care facility. They were also more likely to be readmitted. According to the senior author of the study, a holistic approach is needed to address both the clinical and social needs of homeless patients.

—Please see <https://newsnetwork.mayoclinic.org/discussion/homeless-people-receive-less-treatment-in-hospitals-for-heart-attacks-have-higher-readmission-rates/> to read more about this.

Serco Asia Pacific Signs Contract with Western Australia

Serco Group plc, the international service company, through its Australian subsidiary, announced it has signed a 6-year contract extension with the Government of Western Australia to continue delivering support services at Fiona Stanley Hospital in Perth, Western Australia. The 6-year extension will commence in August 2021, at the completion of the first 10-year term of the contract. The first term incorporated the transition and commissioning of the 783-bed public hospital and the first 7 years of operation. The original contract also allows for a further extension of up to 4 years. In securing the extension, Serco and the Government of Western Australia have agreed that three service lines currently delivered by Serco—cleaning, catering, and internal logistics—will be delivered by the State from August 2021, with the financial scale of Serco's contract reducing from that point to reflect this. Preparation for the transition of these services will commence immediately, in readiness for the start of the contract extension period. Serco will continue to deliver 21 service lines, including facilities and asset management, electronic records management and ICT management across the hospital estate.

—Please visit <https://www.serco.com/media-and-news/2020/serco-signs-au730m-370m-contract-extension-to-provide-support-services-at-fiona-stanley-hospital> for more on this.

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Corporate News Bites

UTMB: University of Texas Medical Branch congratulated NP Andrea Wirt on winning the Way To Go Award from President Raimier. The award recognized service excellence and professionalism, and was presented in mid-February. For photos, please visit <https://www.utmb.edu/president/town-hall/article/2020/02/14/default-calendar/town-hall-meeting-february-14-2020>.

AOPA: The Aircraft Owners and Pilots Association (AOPA) has been active in the state legislatures. In Maryland, they are supporting bills that would make aircraft maintenance and repairs more competitively priced by exempting parts from sales tax. These bills are advancing in Maryland's legislature. In Hawaii, bill that would have prohibited tour aircraft operations from conducting commercial flights on Sundays was opposed by AOPA and has been rejected by two legislative committees. In New York, they are fighting the repeal of a sales tax exemption. Please see <https://www.aopa.org/news-and-media/all-news/2020/april/pilot/aopa-action-april-2020> for more on this.

SAA Joins Fight Against Wildlife Trafficking

As the world commemorated World Wildlife Day on March 3, South African Airways said it would help intensify the fight against the global illegal wildlife trafficking. As a new member of the USAID Reducing Opportunities for Unlawful Transport of Endangered Species (ROUTES), the national carrier said it would work hard to reduce the trafficking seizure of 42% of wildlife animals checked in luggage, 4% hidden in passenger clothing, 23% in air flight, 4% in mail and 27% recorded as unknown. SAA employees are being trained in methods to detect wildlife smugglers and their activities and to report these to the relevant authorities. USAID ROUTES said Africa is a significant source of smuggled live animals and wildlife products. For example, in 2019 more than 103 wildlife animals were seized in three countries across the African continent. SAA has joined the fight against illegal wildlife trade by adopting the Illegal Wildlife Trade Module of the IATA Environmental Assessment (IEnvA) Programme. IEnvA is an equivalent of the IATA Operational Safety Audit (IOSA), but in terms of the environment rather than safety. SAA is audited, much like IOSA, and certified as IEnvA compliant.

—Please see <https://www.flysaa.com/about-us/leading-carrier/media-center/media-releases/newsroom> to read more about this.

FAA AME Seminars

June 22-26, 2020	Oklahoma City, OK	Basic
Aug. 7-9, 2020	Washington, DC	Refresher
Sept. 11-13, 2020	Denver, CO	Refresher
Sept. 24-26, 2020	Albuquerque, NM	CAMA
Oct. 19-23, 2020	Oklahoma City, OK	Basic
Nov. 20-22, 2020	Oklahoma City, OK	Refresher
January 29–31, 2021	Raleigh, NC	Refresher
March 22–26, 2021	Oklahoma City, OK	Basic
May 24–27, 2021	Reno, NV	AsMA
June 21–25, 2021	Oklahoma City, OK	Basic
August 6–8, 2021	Washington, DC	Refresher
To be determined	Denver, CO	Refresher
Sept. 23–25, 2021	San Antonio, TX	CAMA
Oct. 18–22, 2021	Oklahoma City, OK	Basic
Nov. 19–21, 2021	Albuquerque, NM	Refresher

Please check the [FAA website](#) for more information. **PLEASE NOTE:** The only FAA seminar AsMA takes registrations for is the one held in conjunction with our annual meeting (postponed until October).

Check AsMA's Website for Updates!

Events move fast. AsMA is keeping its website updated regarding the annual meeting. Please check www.asma.org for the latest.

AsMA Corporate Forum 2020 e-News

Members of the Aerospace Medical Association:

It is my privilege to write the President's letter for the AsMA Corporate Forum. From a business perspective, it is an exciting and challenging time to be involved in the aerospace sector. More and more people from more and more countries from around the world are traveling by aircraft to experience places they have never been before. Additionally, we are on the verge of a new era of space exploration with companies like SpaceX planning to launch astronauts from U.S. soil once again.

One of our past Presidents, Dick Leland of Environmental Tectonics Corporation (ETC), expressed how AsMA has served as a brain trust of aerospace medicine knowledge for him and his company over many years. As international travel continues to expand over the long term and new people and companies operate in that most difficult frontier of space, this repository of knowledge will become more important than ever.

We thank our corporate members for their generous financial support and salute the work they do. We congratulate the University of Texas Medical Branch's Aerospace Medicine Residency program on graduating 55 people since it began in 1993. 46 of these stellar individuals have worked with NASA. 5 have become astronauts. Nyla Medlock continues to do outstanding work finding positions in industry and academia for physicians through her company, Medlock Consulting. The Mayo Clinic is pioneering a unique approach to aviation medicine with its web-based service, Mayo Clinic Clear Approach to Medical Certification™, which allows pilots to ask experts questions about medical conditions and medications. Pilot Medical Solutions, Inc. continues its important work offering precertification screening for FAA medicals. Last but not least, Adams Advanced Aero Technology recently got awarded a contract to provide a new generation spatial disorientation training device to the Saudi military. Read more about their work in the pages that follow.

Over my eight years as a member of AsMA, I feel privileged to have worked with all of you. What an inspiring, energetic, and innovative group of people you are! I look forward to building the future of the aerospace industry with you over the next eight years.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Michael Gallagher', with a stylized flourish at the end.

Michael Gallagher M.D. C.C.F.P.
President
AsMA Corporate Forum

Welcome new members

Welcome to Omni Medical Systems from Cochester, Vermont, who recently joined the AsMA Corporates.

Omni Medical Systems is a research, development and production company located in Colchester, Vermont. Omni has been involved in research, design and development of mechanical and electromechanical systems for the past 25 years. Omni has successfully commercialized 35 products.

Omni has developed safe, self-powered, automatic bladder relief systems that increase the safety of aircrew members and groundcrew members to preserve the integrity of their multi-million dollar, high-performance aircraft and equipment. These systems permit aircrew and groundcrew to concentrate on mission objectives without distractions or interruption.

Omni's future developments include: a Pulmonary Cooling Apparatus, a personal cooling device providing war fighters in Chem-Bio suits a feasible way to combat heat stress, extreme cold weather and flame retardant clothing ensembles for aircrew and Warfighter use, as well as a new light weight Personal Ballistic Protection System.





Successes:

AAAT comprises a talented workforce of both Saudi Nationals and Expatriate personnel. All have long standing experience working in Saudi Arabia and the Middle East.

We are contracted to support the Saudi Military at their principal aircrew medical facility in the Eastern province of Saudi Arabia as part of a five year agreement. This partnership arrangement has been ongoing since 2007.

The Company have recently secured a new equipment contract to provide the latest generation Spatial Disorientation training device.

Adams Advanced Aero Technology Company (AAAT) have been working with our Saudi partner since 2007.

From our very beginnings we have procured, installed and continue to maintain a multitude of aircrew training devices in use by the Saudi military. The long standing partnership with our Customers and our understanding of their needs has been instrumental in enabling us to develop our business. We have modelled our future growth on the projects we have delivered to date and are looking to expand further in the region. We continue to look for international partners who can provide aeromedical and aircrew training equipment that may be offered to other regional Clients. Of course the full support of our Suppliers and Contractors ensures we can provide the best possible solutions and services.

Spatial Disorientation

Following a protracted negotiation period Adams Advanced Aero Technology have been awarded a contract to supply an bespoke spatial disorientation training device (plus facility) to a branch of the Saudi Military. This equipment will be delivered and installed in May 2021. Following commissioning AAAT will continue to maintain this device on behalf of our Customer.

Spatial disorientation is the cause of an ever increasing number of avoidable military and civil fixed and rotary wing flying accidents. Statistics show that around 20% of military (USAF class A mishaps) and around 10% of all general aviation accidents are due to spatial disorientation, and 90% of these accidents are fatal.



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Khobar
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Kingdom of Saudi Arabia
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Aeromedical Case Management Solutions

Pilot Medical Solutions, Inc.

January 2020



Board Certified Aerospace Medicine Physicians & Aeromedical Specialists collaborate with treating physicians and the Federal Aviation Administration to reduce bureaucratic delays.

Aeromedical Case Management - A Precision Approach

Every year thousands of pilots lose their medical certification because they fail to seek readily available aeromedical advice. Many more are grounded because incomplete or incorrect information is sent to the FAA.

Pilots and their employers often rely on basic medical exams to discover potentially jeopardizing health issues. When issues are discovered, FAA medical certification becomes a labor-intensive, bureaucratic process. Even the simplest issue can ground a pilot increasing operational and healthcare expenditures.

In 1995 Pilot Medical Solutions introduced proactive aeromedical management which employs pre-certification screening and supplies preventive vs reactive solutions. This approach provides a confidential FAA medical certification forecast to establish a pilot's eligibility before their official FAA exam and makes it possible to anticipate and prevent the temporary or even the permanent loss of valuable pilots.

Pilot Medical Solutions, Inc. | 5901 Philip J. Rhoades | Bethany, Oklahoma

CUSTOM SOLUTIONS

Pilot Medical Solutions' aeromedical management is pragmatic aeromedical support customized to address risk and eliminate bureaucratic obstacles.

TIMELY ASSISTANCE

Pilot Medical Solution's aeromedical hotline and web portal provide practical real-time assistance yielding expeditious FAA medical case management.

www.leftseat.com
800-699-4457



Mayo Clinic Aerospace Medicine

A long history in aeromedical research, product development and pilot healthcare delivery

Mayo Clinic was founded in 1864 and accomplished numerous medical innovations throughout its long history. Hypoxia and physiological research on aviators began more than 80 years ago when it became obvious that aircraft performance began to outpace the capabilities of the pilots that were operating them. Pilots began experiencing hypoxia and decompression sickness from operating aircraft at higher altitudes, and high performance aircraft were able to maneuver and subject pilots to G-force induced loss of consciousness or G-LOC. These factors led to the development of the first 5-bladder G-suit as well as oxygen delivery systems for pilots using tight-fitting masks. This technology allowed for the evolution of oxygen therapy for patients using an oxygen tent to the paradigm of compressed oxygen in tanks with masks and tubing that could deliver higher flows of supplemental oxygen directly to a patient within a medical setting.

Today, Aerospace Medicine at Mayo Clinic continues that research, development and healthcare delivery on many levels. The team at Mayo Clinic created a service to help keep career and recreational pilots in top health through the **Mayo Clinic ProPilot Program™** (<https://www.mayoclinic.org/propilot>). By merging preventive health strategies with the routine flight physical, much like preventive maintenance on an aircraft, the team at Mayo Clinic customizes health screenings for pilots to identify warning signs before they become a medical certification issue. There is significant expense in owning an aircraft or operating a flight department, and when a pilot must stand down for medical reasons, those operating costs can skyrocket quickly. Many medical conditions can be prevented if identified early, leading to improved health, career longevity and enhance safety.

Mayo Clinic Aerospace Medicine recently launched a new program for pilots to access medical and administrative information related to aeromedical certification. **Mayo Clinic Clear Approach to Medical Certification™** allows pilots to ask Mayo Clinic flight physicians questions regarding how medical conditions affect medical certification, what medications are allowable for FAA purposes, and how to interpret correspondence coming from the FAA. Pilots are now able to upload medical records, images and FAA correspondence securely for the team at Mayo Clinic to review and quickly respond with customized recommendations so the pilot may make informed decisions regarding the next steps in the aeromedical certification process and how to pursue diagnostic studies in the most efficient way available. Whether the pilot is at home, on a trip, FBO, hotel, or on the flight deck, they can reach out to Mayo Clinic's team through a secure

website and access information quickly. If an airman is not able to visit Mayo Clinic, then Mayo Clinic comes to the aviator-online. Visit <https://clearapproach.mayoclinic.org/> for more information.

Mayo Clinic Aerospace Medicine also provides traditional FAA medical certification exams at all three main Mayo Clinic locations in Minnesota, Florida and Arizona, ranging from routine flight physicals through complex fitness-for-duty evaluations. Approximately 60% of the pilots that seek medical care at Mayo Clinic have a medical condition they wish to address. The Aerospace Medicine team specializes in rapid assessment of medical conditions and addresses medical conditions quickly, regardless of complexity. Mayo Clinic AMEs anticipate testing needed by the FAA, potentially reducing the time a pilot is waiting for FAA certification decisions.

For more information about Mayo Clinic Aerospace Medicine at any of the Mayo Clinic locations, contact: 507-266-2080 or email aeromed@mayo.edu.



Medlock Consulting



Nyla Medlock has a favorite quote from Winston Churchill: “We make a living by what we get, but we make a life by what we give.” That sentiment exemplifies how Nyla prefers to live her life. She has created a thriving business, Medlock Consulting, a worldwide organization that places physicians in industry and academia, and is a partner in three other global companies. Nyla’s commitment to pursuing knowledge and encouraging leadership are recognized within the industry and major Universities.

Named as one of the nation’s fifty Most Influential People in Worker’s Compensation and Occupational Medicine, Nyla Medlock and her company enjoy a 96 percent placement completion rate, and place 80 percent of their leaders in Fortune 500 companies, prominent medical health systems and top universities around the globe! Nyla’s commitment to pursuing knowledge and encouraging leadership are recognized within the industry such as the American College of Occupational and Environmental Medicine who awarded Nyla the prestigious Presidential Award, and Universities such as Harvard, who named the Harvard School of Public Health “Nyla Medlock Occupational and Environmental Medicine Fellowship Fund”, The Catholic University of New Spain, who awarded Nyla with an honorary doctorate, and the Institute of Brain Chemistry and Human Nutrition in London, England, who named Nyla as an honorary research professor. Nyla also holds the titles of Grand Office Dame- Order of Prince Danilo I, Grand Officer-Order of the Million Elephants and White Parasol, and Grand Cross, Order of the Crown.

Medlock Consulting was founded solely to address physician executive needs. Throughout the years, Nyla Medlock has developed one of the few search firms that focuses solely on physician searches. Medlock consulting has developed one of the largest physician networks and databases in the country and knows where physician executives and leaders are located and how to connect them with top clients around the globe.

Established in 1990, Nyla Medlock knows how and where to find the kinds of professionals who will meet and exceed her client’s expectations and needs. Because Medlock Consulting specializes only in physician searches, they are never distracted by the demands of other industries Physician executive/leaders search is their business.

Medlock Consulting has earned kudos from clients in every region of the country. Their open book of references verifies their exceptional track record of producing for clients. Medlock Consulting lives and breathes professional Physician placements. Nyla Medlock understand who physicians are, how they think, what they want, where to find them, and how to achieve the right “fit” between client and candidate. Medlock Consulting can tell the difference between a candidate who’s made a commitment to management and one who’s just running away from a bad situation. Nyla Medlock has worked globally and in every region of the nation. Medlock Consulting has a grip on such diverse markets as the UK, France, Canada, Philippines, Texas, Florida, and California.

As the number one head-hunter for corporate medical directors, global medical directors, physician executives, clinicians and preventive, lifestyle, aerospace, and occupational medicine professionals, Nyla’s professional background includes over thirty years in the recruiting industry, including twenty-five years specializing exclusively in the recruitment of the aforementioned physicians. She has successfully completed assignments for medical directors and physician executives with Fortune 500 corporations, medical health systems, hospitals and clinics.

In all that she does, Nyla Medlock strives to ensure her company is a trusted partner to both the physician and the client. Nyla Medlock understands that with her clients no search could ever reach a successful conclusion. That’s why she involves her company’s clients in every step of the process. From needs assessment and strategy development, to screening and presentation of candidates, on-site interviews, and contract negotiations Medlock Consulting ensures the client is an active participant in the placement process.

By Mitch Nelson

***“Complex Questions, Plane Answers”.* Mayo Clinic Aerospace Medicine launches new service for pilots with medical questions.**

January 6th, 2020

ROCHESTER, Minn. – In an effort to promote pilot health and safety, Mayo Clinic Aerospace Medicine in Rochester, Minn. has released a new service for pilots, unions, or flight departments who have medical questions that may affect pilot health and aeromedical certification. **Mayo Clinic Clear Approach to Medical Certification™** is an interactive web-based service designed for pilots to ask experts in Aerospace Medicine at Mayo Clinic questions about medical conditions and medications specifically pertinent to certification issues. Pilots may upload medical records, images, files, and FAA correspondence for the Mayo Clinic team to quickly review and provide the pilot with recommendations.

“Mayo Clinic has more than 80 years of research and development in Aerospace Medicine, and in providing medical care to pilots. Clear Approach brings that expertise to pilots no matter where they are and whenever they need help,” explained Clayton Cowl, MD, MS, Chair of Mayo Clinic’s Division of Preventive, Occupational and Aerospace Medicine. “Our aviation medical examiners have experience with some of the most complicated medical cases ever presented to the FAA. We know that every pilot can’t come to Mayo Clinic, so we are bringing it to them. And if a pilot needs to be seen or testing done, we can fast-track appointments to get them the assessments they need.”

Mayo Clinic Clear Approach to Medical Certification™ launched in October 2019 and provides advice daily to pilots from routine medication questions through complex recommendations for a small fee. Visit <https://clearapproach.mayoclinic.org/> for more information.

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Aerospace Medicine at the University of Texas Medical Branch (UTMB Health) has a long-standing history of education, clinical care, aviation, human space flight, research and community support. UTMB's participation with NASA's space program began in 1948 when Dr. William Douglas, flight surgeon for the original Mercury astronauts in the 1960s, graduated from the UTMB School of Medicine. This continued when Dr. Charles Berry was named the first Professor and Chairman of the Department of Aerospace Medicine. UTMB is honored to house the Charles Berry Space Medicine Library located at the Moody Medical Library on its main campus. The Aerospace Medicine Residency program began in 1993 in partnership with the NASA Johnson Space Center as a fellowship. In 1996 it became a fully accredited residency program.

The Aerospace Medicine Residency educates residents to become future leaders in aerospace medicine. Since its inception, there have been 55 graduates, 46 of whom have gone on to work for NASA or one of its contractors. Others have gone on to work for the FAA, Mayo Clinic, Virgin Galactic, SpaceX other academic institutions and private practice. Five graduates are or have been astronauts. UTMB offers a categorical two-year aerospace and combined four-year internal medicine/aerospace residency. Its curriculum includes a Master of Public Health degree, unique clinical and practicum experiences that help prepare graduates for the aviation and space environments.

In addition to the residency program, the "Principles of Aviation and Space Medicine" course is offered to senior medical students, residents/fellows and practicing physicians across the country as well as Internationally. Since ~ 1999, UTMB has provided this introductory course to over 300 students.

The quality of clinical work in the Aerospace Medicine Center has led to recognition with the FAA and Internationally. The patient population is largely composed of pilots with complex medical or mental health conditions that required extensive evaluation, management, and monitoring to enable safe return to commercial flying, and medical evaluations for future spaceflight participants who wish to undertake a trip to the ISS or suborbital spaceflight. Additionally, UTMB in partnership with NASA's prime contractor, KBR, provides physicians to the NASA space spaceflight program.

The research of UTMB Aerospace Medicine continues to primarily focus on the unique challenges of human space flight and is guided by the needs of NASA and the commercial spaceflight industry. The results from this research and the publication of results have won numerous awards for our faculty and residents from the Aerospace Medical Association and its constituent organizations.

The Aerospace Medicine faculty, residents, and students continue to excel. UTMB provides the volunteer medical support for the Wings Over Houston airshow at Ellington Field each year. UTMB residents volunteer regularly to provide medical support for the Houston Marathon and other major crowd events.