## Ever Upward October 2024

#### AsMA's Blue Journal Has Changed Platforms

To all subscribers, members, and readers of the AMHP journal: Our hosting provider has changed. Starting on September 19, 2024, the official journal of the <u>Aerospace Medical Associa-</u> <u>tion</u> — Aerospace Medicine and Human Performance (AMHP), formerly Aviation, Space, and Environmental Medicine — is now hosted by KGL PubFactory. This site hosts both the current journal and the archives, giving members, researchers, subscribers, and others one single place to access the journal. Journal content is now posted to the new platform starting with the October 2024 issue. Journal content will remain available on IngentaConnect until Dec. 31, 2024, but is also available on the KGL PubFactory site.

AsMA Members can log into the Members Only section of the AsMA website (<u>www.asma.org</u>) as usual. In the left-hand column, there is a link for "AsMA Journal Online". You must click on this to access PubFactory already logged in. You can browse, save content, sign up for alerts, and share content as you did before.

Non-members can use the following URL to access content: <u>https://asma.kglmeridian.com</u>. Pay-per-view will be available for those articles that are not Open Access or free. While your existing user profile remains intact with the email address previously used to access the journal online, when our new site went live, you should have received an email and been guided to reset your password before your first login to the site.

Any questions can be directed to <u>rtrigg@asma.org</u>.

#### Bonato Named Interim President of Manhattan University

Frederick Bonato, Ph.D., former Editor-in-Chief of the Aerospace Medical Association's journal, *Aerospace Medicine and* 



Human Performance, and current AsMA Vice President, was recently appointed Interim President of Manhattan University by its Board of Trustees. Dr. Bonato joined Manhattan University in 2024. Previously, he served at St. Peter's University from 2017–2024 in various roles, eventually becoming Executive Vice President and Provost. Before that, he served at Montclair State University, where he was Associate Provost for

Academic Affairs and then Interim Dean of the College of Community Health.

During his tenure at Montclair State University, Dr. Bonato had numerous accomplishments, including co-leading a project for the creation of the School of Nursing. He also provided leadership for the development of the 25,000-square-foot Center for Clinical Services that opened in January 2016. In addition, Dr. Bonato oversaw the modernization of electronic systems for the Institutional Review Board, Office of Research and Sponsored Programs, and Career Services. He also chaired the task force that resulted in the Carnegie Foundation classification as a Community Engaged Institution in 2015 as well as initiated the transition of the Office of Service Learning to the Center for Community Engagement, which now receives approximately 1 million dollars a year in external funding.

During his time at St. Peter's, Dr. Bonato served as Chair of the Psychology Department, Director of Faculty Research and Sponsored Programs, and President of the Faculty Senate. Prior to that, he was an assistant professor at Upsala College.

Dr. Bonato is a past president of the Eastern Psychological Association. He has published widely on aeromedical topics such as motion sickness, space motion sickness, and commercial spaceflight. Dr. Bonato is a Fellow of the Eastern Psychological Association and the Aerospace Medical Association and in 2015 was nominated and elected to the International Academy for Aviation and Space Medicine. He earned his B.A., M.A., and Ph.D. from Rutgers University.

To read the article, please visit <u>https://manhattan.edu/news/</u> <u>archive/2024/09/interim-president-frederick-bonato.php</u>.

### Strengthening Aerospace Medicine Through Scientific Communication

Diego M. Garcia, M.D., Chair, AsMA Communications Committee

It is an honor, as Chair of the Communications Committee, to inaugurate the Aeromedical Science Communication Column in this month's newsletter. The AsMA Communications Committee plays a vital role in promoting the visibility and engagement of aerospace medicine within the scientific community and beyond, ensuring that our efforts at AsMA are communicated effectively across our digital platforms.

Scientific communication (SciComm) is the practice of effectively sharing scientific findings, insights, and innovations with both professional and public audiences. It is vital to scientific development and advancement because it bridges the gap between researchers and the broader community, fostering collaboration, promoting transparency, and enabling informed decision-making. By communicating complex ideas in an accessible way, SciComm accelerates the spread of aeromedical knowledge and drives innovation across disciplines.

Aligning with these needs, our Committee has undertaken several projects aimed at enhancing AsMA's digital presence. These include the production of diverse digital content such as news updates, journal clubs, corporate updates, and visual abstracts, all designed to highlight critical advancements in aerospace medicine and human performance. We have teamed up with AsMA headquarters and journal staff to ensure that the digital platforms consistently deliver high-quality aeromedical content.

See "SciComm", p. N82

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

#### From "SciComm", p. N81

Moving forward, the Communications Committee seeks to expand these collaborative efforts with additional AsMA Constituent, Affiliate, and peer organizations. We'd like to invite AsMA members to engage with us through AsMA's various digital platforms, including X (formerly Twitter), Facebook, LinkedIn, and Instagram. By participating in discussions and sharing our content, you contribute to the growth and vitality of aerospace medicine. Your input is invaluable in helping us create a more informed and connected community.

If you are interested in getting involved or have ideas for how we can improve, we encourage you to reach out or participate in the conversation on our digital platforms. Let's continue to strengthen our communication efforts to support the scientific mission of AsMA!

Join the AsMA Communications Committee: asmasocialmediacomm@gmail.com.

#### **New Members**

AsMA welcomed 19 new members in the past month.

- Boyek, Gregory; Newtown Square, PA, United States
- Brattain, Natalie; Daytona Beach, FL, United States
- Cossyleon, Gabriela; Elmwood Park, IL, United States
- Gamage, Nimantha; Dublin, Ireland
- Hernandez, Joannes Paulus; Kew Gardens, NY, United States
- Holevinski, Sarah; San Antonio, TX, United States
- Hoo, Nicholas; Hanford, CA, United States
- Hughes, Kristin; Warner Robins, GA, United States
- Jenkins, Brock; Hilliard, OH, United States
- Majors, Madeline; Whitney, TX, United States
- Mowrey, Rachel; Seabrook, TX, United States
- Murugesan, Abhijay; Tucson, AZ, United States
- Nakamura, Erika; Chiyodaku, Japan
- Pichelmann, Sadie; West Des Moines, IA, United States
- Ridgway, William; Houston, TX, United States
- Sallinger, Eric; Denver, CO, United States
- Smith, Stephanie; Loretto, MN, United States
- Thomason, Maura; Sidney, AR, United States
- Trevino, Terry; San Francisco, CA, United States

*AsMA also welcomed back a returning member:* 

• Keller, Ryan; San Antonio, TX, United States

#### AsMA-UHMS Annual Scientific Meeting June 1-6, 2024; Atlanta, GA



Abstract submission for AsMA is now open! The deadline is November 1, 2024, 11:59 PM, NO exceptions! Submit early and avoid the rush: https://asma-abstracts.secure-platform.com/a/

solicitations/48/home.

NEW this year: videos to assist you in submitting are available on AsMA's YouTube channel: <u>https://www.youtube.</u> <u>com/@Aero\_Med</u>.

UHMS's abstract submission deadline is March 2, 2025, 11:59 PM. Visit www.uhms.org for more information.

#### **Aerospace News Highlights**

Every Friday, the Journal Department posts highlights of aerospace medical & research headlines to the <u>AsMA News</u> page and to AsMA's social media accounts.

#### ABPM Offers Early-Payment Discount

The American Board of Preventive Medicine (ABPM) announced it will launch a new annual fee structure for its diplomates beginning on January 1, 2025.

The annual fee will increase to \$200 for each ABPM certificate. However, ABPM will apply a \$50 discount to fees paid on or before March 31, 2025, and a \$25 discount to those paid between April 1 and June 30, 2025. Diplomates will be charged the full price of \$200\* for 2025 annual fees paid on or after July 1, 2025.

"The ABPM is working hard to incorporate the suggestions made by our diplomates to produce a quality and meaningful Continuing Certification Program, which includes the Longitudinal Assessment Program. While there is a modest increase in the annual fee, we are happy to provide discounts as an incentive to diplomates who pay the annual fee early with the intention of ensuring this program remains sustainable for many years in the future," said ABPM Chair, Heather O'Hara, M.D., MSPH, FACOEM, FACPM. "We truly hope our diplomates find the updated structure convenient and are able to take advantage of the early-bird discount."

Diplomates can check their compliance with current Continuing Certification requirements and pay outstanding fees by logging into the ABPM's online <u>Physician Portal</u>. Diplomates may direct questions to ABPM staff at <u>abpm@theabpm.org</u>.

The ABPM is an ABMS Member Board. Founded in 1948, ABPM works with the ABMS in the development of standards for the ongoing assessment and certification of over 12,000 physicians certified by the ABPM in the specialties of Aerospace Medicine, Occupational and Environmental Medicine, and Public Health and General Preventive Medicine; and in the subspecialties of Addiction Medicine; Clinical Informatics; Health Care Administration, Leadership, and Management; Medical Toxicology; and Undersea and Hyperbaric Medicine.

\*2025 annual fees paid after December 31, 2025, will be subject to the then-applicable late fees; Over time, unpaid annual fees may result in suspension or revocation of a diplomate's ABPM certification.

#### **Read Current News Online!**

Visit the AsMA & Industry News to see what's new! Members: log in on the home page to read Member News. News is also available in pdf format on the Newsletters page.

#### Visit Us on Social Media!

X: https://twitter.com/aero\_med FB: www.facebook.com/AerospaceMedicalAssociation LinkedIn: https://www.linkedin.com/company/aerospace-medical-association-asma Instagram: https://www.instagram.com/aerospacemedicalassociation?igsh=YXpkMzA0cmtvOThm Youtube: https://www.youtube.com/@Aero Med

#### Save These Meeting-Related Dates!

Nov. 1, 2024: deadline to register as a reviewer (must be a current AsMA member)
Nov. 5, 2024: deadline to register at the hotel for in-person
Nov. 5–14, 2024: abstract reviewing period
Nov. 20, 2024: AsMA Council meeting
Nov. 21, 2024: Scientific program development



#### ACROSS

- 3. In a NVG is the amount of energy the intensification produces relative to the amount of energy that entered the intensification process. (4)
- 6. By increasing the partial pressure of oxygen, the quantity of \_ form of oxygen increases. (9)
- 8. The three binocular cues for judgement of depth and distance are convergence, accommodation and \_\_\_\_\_. (10)
- 10. The Brightness Source Protection circuit limits the number of \_\_\_\_\_ leaving the photocathode by reducing voltage between the photocathode and the input side of the Micro Channel Plate. (9)
- 11. \_\_\_\_\_ is the fraction of light that a surface reflects. (6)
- 13. During positive pressure breathing inspiration becomes \_\_\_\_.(7)
- 15. ISS is located in the \_\_\_\_\_. (12)
- 18. NVGs work on the principle on light \_\_\_\_\_ (15)
- 19. \_\_\_\_ \_\_\_\_ Arsenide photocathode is used in Gen 3 NVGs. (7)
- 19. \_\_\_\_\_\_ Arsenide photocathode is used in Control

   20. \_\_\_\_\_\_ Filter allows a specific wavelength of light to enter the

   intensification process in a NVG. (5)
- 21. ABC in a NVG stands for Automatic \_\_\_\_\_ Control. (10)
- 22. The primary flight control surfaces are the ailerons, rudder and \_\_\_\_\_. (8)

#### DOWN

- photocathode was commonly used in Gen 1 1. NVGs. (10)
- 2. The ratio of the tension of the inert gas in the tissue to the ambient pressure is called as \_\_\_\_\_ ratio. (15)
- \_ navigation is a self-contained navigation technique 4. \_ in which measurements provided by accelerometers and gyroscopes are used to track the position and orientation of an object relative to a known starting point, orientation and velocity. (8)
- 5. Crouching forward G-tolerance. (9)
- 7. Fliegner's equation gives us the time for \_\_\_\_\_ \_\_\_\_. (13)
- 9. TUC can also be called as Effective \_\_\_\_\_ Time. (11)
- 12. Dead is the process of calculating the current position of a moving object by using a previously determined position, or fix, and incorporating estimates of speed, heading (or direction or course), and elapsed time. (9)
- 14. Static anthropometry is also called as \_\_\_\_\_\_ anthropometry. (10)
- 16. HEED stands for \_\_\_\_\_ Emergency Egress Device. (10)
- 17. Stage of Hypoxia in which consciousness is lost. (8)

The solution can be found on p. N85.

# News of Corporate Members

#### Mayo Clinic Awarded Grant to Study ALS Drug

Mayo Clinic in Florida has received a grant from the National Institute of Neurological Disorders and Stroke (NINDS) to begin an innovative study that will provide hundreds of patients with amyotrophic lateral sclerosis (ALS) access to the experimental drug ibudilast over 6 months. Mayo Clinic will receive a certain amount and will manage the distribution of the remainder to its collaborators. The U.S. Food and Drug Administration has granted Expanded Access Program (EAP) status to the study. This program offers a pathway for patients with a serious or life-threatening disease or condition to gain access to an investigational medical product (drug, biologic, or medical device) for treatment outside of a clinical trial when no effective therapy options are available. Björn Oskarsson, M.D., lead investigator for the project and director of Mayo Clinic's ALS Center of Excellence, says the primary measure of the drug's effect on ALS progression will be a blood test that shows whether neurofilament protein levels have changed in patients with ALS. High levels of neurofilament proteins may indicate damage in neurons. About 200 patients in the program, drawn from all three Mayo Clinic sites and other institutions, will be able to see their own neurofilament light levels to determine if the drug is right for them. This marks the first time that neurofilament light will be used in this way to guide patients and physicians to make decisions together.

*—Please visit <u>https://newsnetwork.mayoclinic.org/discussion/</u> mayo-clinic-awarded-federal-grant-to-study-experimental-als-<u>drug/</u> to read more.* 

#### **ETC Units Awarded Five Contracts**

Environmental Tectonic Corporation's (ETC's) Aerospace Solutions Segment announced it has been awarded contracts from three international customers in the Aeromedical Training Solutions (ATS) business unit for mid-life upgrades of various aerospace products as well as a contract for an Airfield Driver Training Simulator System at a large international airport located in the United States by its simulation business unit (ADMS). In addition, ETC's Commercial/Industrial Systems Segment was awarded contracts from two domestic customers. The contracts include four steam sterilizer system chambers from the Sterilization Systems Group as well as the design, supply, and installation of a 300-kW air-to-water heat pump Psychometric Test Room by ETC's Environmental Testing and Simulation Systems (ETSS) unit.

—Please visit <u>https://www.etcusa.com/etcs-aerospace-</u> and-commercial-industrial-units-awarded-contracts-totaling-<u>13-4-million/</u> to read more.

#### **AOPA Names New President**

The Aircraft Owners and Pilots Association (AOPA) has named Darren Pleasance to become the association's sixth president and chief executive. He will assume this position in January 2025. He has flown over 8000 hours in more than 50 different types of aircraft from simple trainers to business jets to vintage warbirds, including a North American P–51 Mustang. Early in his career he flew as a corporate pilot, working for celebrities such as John Travolta before going on to fly charters in the Alaskan bush. He left professional aviation to pursue a career in business, but he never stopped flying and maintains currency as a certificated flight instructor. He succeeds Mark Baker, who has served more than 11 years in the top spot at AOPA. Baker announced his intention to retire earlier this year but committed to remain in the job and assist in the search until the right leader could be found. AOPA's Board of Trustees then conducted a wide-ranging search to find the right leader for the organization before selecting Pleasance.

—Please visit <u>https://www.aopa.org/news-and-media/all-news/2024/september/24/pilot-business-leader-to-command-aopa</u> to read more.

#### ALPA Honors Crews with Superior Airmanship Award

At the Air Line Pilots Association's (ALPA's) 68th Air Safety Forum, ALPA honored the crews of Alaska Airlines Flight 1282 and FedEx Express Flight 1432 and recognized their heroic actions that saved the lives of hundreds of passengers. When faced with major in-flight challenges, these crews led by example and exemplified determination and courage. The crew of Alaska Airlines Flight 1282 was awarded the ALPA's Superior Airmanship Award in recognition of the skill and professionalism demonstrated when their aircraft experienced rapid depressurization caused by the left mid exit door plug blowing out. The captain and First Officer Emily Wiprud relied on their extensive training and experience, responded promptly to the in-flight emergency, and safely returned the damaged aircraft with all passengers and crew alive. Captain Hugo Carvajal and First Officer Robert Bradeen Jr. were awarded the Superior Airmanship Award for their extraordinary execution of a go-around that avoided a collision with another aircraft taking off on the same runway. The crew of FedEx Express Flight 1432 maintained vigilance and responded immediately to an extremely dangerous startle event, relying on their extensive training and experience to avert disaster.

—Please visit <u>https://www.alpa.org/news-and-events/meetings-</u> <u>training/air-safety-awardees</u> to read more about these and other awards given at the Forum.

#### IFALPA Welcomes New Technical Officer

The Executive Board of the International Federation of Air Line Pilots Associations (IFALPA) announced that Dragana Milosavljevic has accepted the role of Technical Officer. Beginning immediately, Milosavljevic will focus on supporting the activities of the Aircraft Design and Operation (ADO) Committee and Climate Working Group, the Aerodrome and Ground Environment (AGE) Committee, and the Air Traffic Services (ATS) Committee from IFALPA's Headquarters in Montreal, Canada. Milosavljevic's expertise spans regulatory compliance, aviation safety, quality assurance, and project management. With an engineering background and extensive experience in safety risk management, flight data and flight operations, she is a strong advocate for fostering a safety culture where transparency and accountability lead to safer aviation operations. She is also

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committed to leveraging her skills and experience to support the Federation's mission to promote the highest level of aviation safety worldwide and to be the global advocate of the piloting profession.

*—Please visit <u>https://www.ifalpa.org/news/ifalpa-welcomes-</u> <u>new-technical-officer-dragana-milosavljevic/</u> to read more.* 

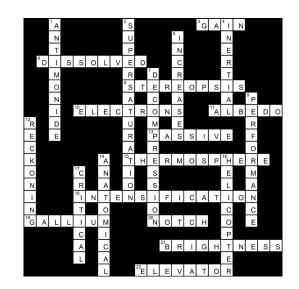
#### **KBR Celebrates 100 Years of Excellence**

This year, KBR marked one century of delivering refining and clean fuel technology solutions. Building on this legacy, they continue to remain a leader in innovation. One example is their PureSAF<sup>\*</sup> sustainable aviation fuel (SAF) technology. The recent selection of PureSAF by Avina Clean Hydrogen Inc. for a project in the United States is a testament to KBR's unwavering commitment to sustainability and commercialization of new technology. Launched in 2023, PureSAF was developed by Swedish Biofuels AB and is exclusively licensed by KBR. It provides a scalable SAF pathway that can use a wide variety of feedstocks at low cost. The turn of the 20th century saw the beginning of the refining industry, and KBR became instrumental in advancing many early refining technologies for major oil companies. This included everything from thermal and catalytic cracking to delayed coking, alkylation, catalytic reforming, and solvent de-asphalting.

—Please visit <u>https://www.kbr.com/en/insights-news/stories/</u> 100-years-kbr-refining-and-clean-fuels-technologies to read more.

#### **Corporate News Bites**

**InoMedic:** Two of InoMedic's staff attended the National Contract Management Association's World Congress last month. This was the 25<sup>th</sup> World Congress and InoMedic's staff attended the Chapter Leadership Summit there. *To read the LinkedIn post, please visit <u>https://www.linkedin.com/posts/ino-</u> <i>medic-health-applications\_last-week-two-of-our-procurementstaff-attended-activity-7226707567790415872-Y65s.* 



#### **Crossword Solution**



