



Ever Upward: November 2023

Nationwide Survey Regarding Aerospace Medicine Published

AsMA Member Is Co-Author

An article recently published in *NPJ Microgravity*, entitled “Nationwide survey of medical student interest in and exposure to aerospace medicine”, found there is a strong interest among medical students in the field of aerospace medicine. However, exposure to aerospace medicine during medical school is only occasional. This is important because the interest in the field suggests that the projected increase in demand for aerospace medical physicians could be met. However, the projected shortage of physicians by 2034, which will probably disproportionately affect primary care, a common pathway to aerospace medicine training, could negatively affect already planned space missions in the next couple of decades. Thus, increased exposure and access to aerospace medicine opportunities could further increase interest in aerospace medicine careers, which may in turn help address the need for physicians trained in this field.

One of the co-authors of this paper is Jay C. Buckey, Jr., an AsMA member and a past recipient of the Joe Kerwin Award. He holds a B.S. in electrical engineering from Cornell University, and an M.D. from Cornell University Medical School. He has more than 35 years of research and clinical experience in aerospace/undersea physiology and medicine. He has been involved in the design and flight certification of several pieces of spaceflight hardware, including the device used to make the first human invasive measurement in space (the system for the measurement of central venous pressure) and a flight micro-neurography system. He also served as an alternate payload specialist astronaut for the dedicated life sciences research mission, Spacelab Life Sciences 2, and flew on the STS-90 Neurolab mission as a payload specialist. He has published a book, “Space Physiology”, which won the Luigi Napolitano book award. He currently serves on the editorial board of *Aerospace Medicine and Human Performance*.

To read the full article, please visit <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10267131/>.

New Members

AsMA welcomes 30 new members who joined in the last month.

- Abdulber, Anas; Istanbul, Türkiye
- Achuonjei, Joy; Westbury, NY, United States
- Bao, Tra-Mi; Hawthorne, CA, United States
- Buesking, Samuel; Springfield, MO, United States
- Decanio, Raymond; Lima, OH, United States
- DeOliveira, Edson; Omaha, NE, United States
- Dills, Chantelle; Hot Springs, AR, United States
- Foster, Paul; Loma Linda, CA, United States
- Fredricks, Todd; Amesville, OH, United States
- Hiestand, David; Louisville, KY, United States
- Kenyon, Kyle; Buffalo, NY, United States

- Kielbasa, Matthew; Leander, TX, United States
- Leiker, Cole; Glendale, AZ, United States
- Lindfield, Robert; Woodbridge, Suffolk, United Kingdom
- Long, William; Elliot Lake, Ontario, Canada
- Magya-Ng, Matthew; Saco, ME, United States
- Martinez, Marysol; Litchfield Park, AZ, United States
- Mathy, Nicole; Mequon, WI, United States
- McGown, Amanda; Four Marks, Hampshire, United Kingdom
- Muller, Imelda; Panama City, FL, United States
- Nguyen, Hoang; Houston, TX, United States
- O'Neill, John; London, United Kingdom
- Razack, Aadil; Plano, TX, United States
- Shyamsundar, Siddharth; Preston, Lancashire, United Kingdom
- Sullivan, Ryan; Worcester, MA, United States
- Szeto, Jonathan; Cherry Hill, NJ, United States
- Takle, Nathaniel; Mart, TX, United States
- Tracz, Iovanna; Norfolk, VA, United States
- Ulysse, Comte; Marignier, France
- Zarrinbakhsh, Arya; North York, Ontario, Canada

AsMA also welcomed back a returning member.

- Fox, Richard; San Tan Valley, AZ, United States

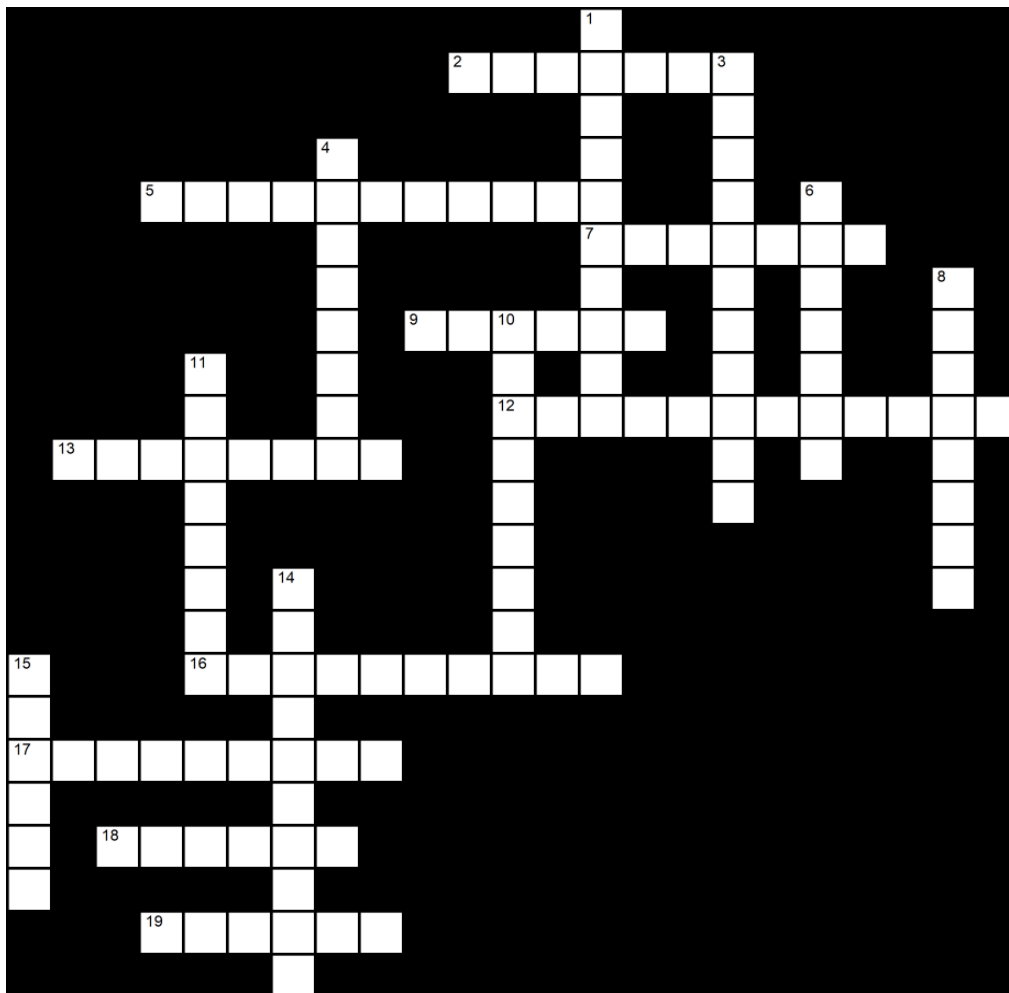
American Medical Association Survey

The American Medical Association (AMA) Physician Practice Information (PPI) Survey is underway, and they urgently need all selected physicians to actively engage in this effort. The intent of the survey, which has been endorsed by over 170 medical societies and other health care associations (see the full list at <https://www.ama-assn.org/system/files/support-letter-medicare-ppi-survey.pdf>), is to collect updated and accurate data on practice costs which are a key element of physician payment. These data have not been updated since last collected over 15 years ago and it is critically important to update these data to ensure accurate payment. See <https://www.ama-assn.org/practice-management/medicare-medicaid/physician-answers-survey-will-shape-future-medicare-pay> for more information about this survey.

Mathematica (<https://www.mathematica.org/>), a well-regarded consulting firm, is helping the AMA run this survey. Your practice may receive an email (from ppisurvey@mathematica-mpr.com) and an USPS priority mail packet from Mathematica that contained a link to the survey as well as supporting information. The AMA urges you to speak with your practice management colleagues to determine if they have received these communications and ask them to complete this important survey. In the coming weeks or months, your practice, or Mathematica, may ask you to complete a brief survey on the number of weekly hours spent on direct patient care. The AMA urges you to complete this 2-minute survey. Help the AMA help you to update Medicare physician payment.

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

November Crossword Puzzle



ACROSS

2. The “side saddle” or sideways-facing _____ was developed by John Stapp. (7)
5. The _____ Club is an informal association of people who have successfully used a parachute to bail out of a disabled aircraft. (11)
7. Stapp’s Ironic _____ states that “The universal aptitude for ineptitude makes any human accomplishment an incredible miracle.” (7)
9. _____ is a modified 50th percentile of EUROSID anthropomorphic test dummy. (6)
12. Kamov Ka-50 is the only helicopter to be fitted with an _____ (8,4)
13. The angle between the line of thrust and the long axis of the spine is called as _____ angle. (8)
16. The smaller drogue in a duplex drogue system stabilizes the ejection seat in the _____ position and prevents the main drogue from deploying till the seat is decelerated adequately. (10)
17. The first whole body ATD was called _____ Dummy. (6,3)
18. The first ejection during _____ occurred on 11 Apr 1944 from a Heinkel He-219 aircraft. (6)
19. Bismi Devassy was the first woman pilot to eject in the _____ Air Force. (6)

DOWN

1. Columbia and _____ were the only two Space Shuttle orbiters fitted with ejection seats. (10)
3. The term _____ describes the lower part of the body being pushed deep into the seat cushion and slip beneath the lap belt. (11)
4. q force in ejection was derived from quantity of rapid air movement _____. (8)
6. The facility in a twin crew cockpit aircraft to ensure automatic ejections of both seats when ejection is initiated by one pilot is termed as _____ ejection. (7)
8. The ejection gun is colloquially called _____. (8)
10. During ejection, any elastic material or cushion placed between the seat and the pilot may get compressed and store energy leading to acceleration _____. (9)
11. The _____ Club is a worldwide association of people who have escaped an aircraft by parachuting into the water, or whose aircraft crashed in the water, and whose lives were saved by a life jacket, inflatable dinghy, or similar device. (8)
14. B in BTRU. (10)
15. The only spacecraft ever flown with installed ejection seats were _____, Gemini, and the Space Shuttle. (6)

Solution is on p. N76.

News of Corporate Members

Mayo Clinic Collaborates with Oxford Nanopore

Mayo Clinic has unveiled a multi-year joint development collaboration with Oxford Nanopore, a company that develops nanopore-based technology, to develop new clinical tests for diseases and improve patient care. Mayo Clinic and Oxford Nanopore have identified several areas of development, spanning a wide breadth of applications from translational research in human genetics to detection of genetic predisposition to cancer. Nanopore sequencing is well positioned to serve Mayo Clinic's goals of improving testing in some of the hardest-to-characterize conditions. The ability to sequence any-length fragments of DNA—from short to long and ultra-long—and examine methylation in real time offers the potential to provide clinicians with a more complete picture of an evolving cancer genome quickly and accurately. The collaboration activities will take place on Mayo Clinic's campus in Rochester, MN.

—Please visit <https://newsnetwork.mayoclinic.org/discussion/mayo-clinic-and-oxford-nanopore-announce-collaboration-to-advance-precision-medicine-for-cancer-and-genetic-disorders/> to read more.

Axiom Space Signs Agreement with UK Space Agency

A new agreement between the UK Space Agency and Axiom Space has been signed that will allow astronauts from the United Kingdom to fly to space on a future Axiom Space mission. The agreement sets out plans for the two organizations to work together to pursue a commercially sponsored, UK astronaut mission. On this future flight, the UK astronauts would launch to space, spending up to 2 weeks on orbit to carry out scientific research, demonstrate new technologies, and participate in education and outreach activities. The UK Space Agency is calling on UK universities, research institutions, and industry to **share their ideas** for experiments and technology demonstrators which could be conducted by the crew on orbit over a 2-week period.

—Please see <https://www.axiomspace.com/news/ukspaceagency-agreement> for more on this.

UTMB Professor Receives Lifetime Achievement Award

Anne Hudson Jones, Ph.D., a Hobby Family Professor in Medical Humanities at the Institute of Bioethics and Health Humanities at UTMB-Galveston, has received a Lifetime Achievement Award from the American Society for Bioethics and Humanities (ASBH). The award is ASBH's highest honor and recognizes an individual for excellence in bioethics and/or the health humanities. It is given for longstanding achievement in bioethics and/or the health humanities. Dr. Jones was one of the first literature scholars in the country to hold a faculty position in a medical school. She was a founding editor of *Literature and Medicine*, the flagship journal for her field, and served

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as editor-in-chief for more than a decade. She has published widely in humanities and bioethics journal and has published two books. Last year, she was named a UTMB Living Legend and, this year, received the Rose Grundfest Schneider, Ph.D., Award for Excellence in Humanities.

—Please visit <https://www.utmb.edu/spph/about-us/news/article/news/2023/10/12/dr.-jones-receives-asbh-lifetime-achievement-award> to read more.

KBR Charity Golf Tournament Breaks Record

For the fourth year in a row, KBR's annual charity golf tournament broke the record from the previous year for the amount of money raised. Hundreds turned out to participate in the event, held on Monday, October 23 at Kingwood Country Club in Kingwood, TX, and organized by KBR's early career professionals' employee resource group, IMPACT. Each year, funds raised through the tournament go to organizations that align with KBR's vision and values. This year's recipients are: Angel Flight South Central; Buffalo Bayou Partnership; The Chester Pitts Charitable Foundation; Houston Fire Department; Houston Police Department; Houston Wilderness; Marine Corps Scholarship Foundation; PTSD Foundation of America; and St. Jude Children's Research Hospital.

—Please see <https://www.kbr.com/en/insights-news/press-release/kbr-charity-golf-tournament-breaks-fundraising-record-fourth-straight> for more.

Corporate News Bites

MedAire: MedAire's advancements in medical and security services was highlighted in an article in *Business Air News* in late October. The article talks about how MedAire developed security services in response to increased security challenges due to protests, political and military activities, and the impacts of climate change. They also now provide a medical concierge service, which provides a doctor to travel with someone. To read the article, please visit https://www.businessairnews.com/mag_story.html?ident=29119.

Leidos: For the third year in a row, Leidos is in the Washington Technology Top 100, which ranks federal contractors by revenue in the high-tech market. Leidos has expanded its lead with contract wins and acquisitions. Since last January, the company has completed four acquisitions and landed two contracts. Please see <https://www.leidos.com/insights/leidos-remains-atop-washington-technology-top-100> for more.

ALPA: the Air Line Pilots Association, Int'l (ALPA), issued a statement congratulating Michael Whitaker for his confirmation to lead the Federal Aviation Administration. They feel

See "Corporate News", p. N76

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LinkedIn: <https://www.linkedin.com/company/2718542?trk=tyah&trkInfo=tarId:1404740611720,tas:AerospaceMedical,idx:1-1-1>

From "Corporate News", p. N75

Mr. Whitaker displays a strong commitment to safety and the importance of having two trained pilots on the flight deck and look forward to working with him. Please visit <https://www.alpa.org/news-and-events/news-room/2023-10-24-alpa-applauds-whitaker-confirmation> to read the full statement.

IFALPA: The International Federation of Airline Pilots Associations (IFALPA) have released three new publications. The first is a briefing on mental health and the other two are a briefing and a position paper on cabin fumes. To read the briefing on mental health, please see <https://www.ifalpa.org/publications/library/mental-health--3895>. For the position paper on cabin fumes, see <https://www.ifalpa.org/publications/library/position-on-cabin-fumes--3898> and for the briefing, <https://www.ifalpa.org/publications/library/cabin-fumes--3900>.



CALL FOR AUTHORS

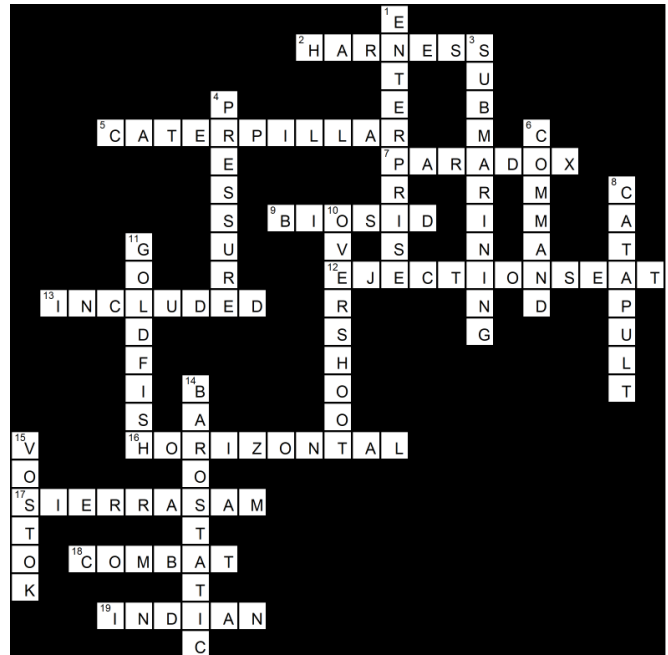
100
YEARS!

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

The staff of the Aerospace Medical Association wishes all their members and readers from the United States a happy and safe Thanksgiving.

We look forward to seeing some of you at the Council and Scientific Program Committee meetings Nov. 16-17 and hope many of you will be able to join us in Chicago in May 2024 for the 94th Annual Scientific Meeting.

Crossword Solution



The Need for
SPEED
Farther, faster, together.

The Aerospace Medical 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 PayPal through the AsMAFoundation.org website. AsMA Members: consider joining the Heritage Society and include the Foundation in your estate planning.

Support the Foundation!

With your help we can accelerate to Mach 10 by 2029!

SUBSONIC MACH < 1.0 \$680,000