International Aerospace Medicine Meetings in Lisbon, Portugal, October 2024

Robert Orford, M.D., CM, MS, MPH, FACP, FRCPC, FRSM, FAsMA

The Second International Congress of Aerospace Medicine (ICAM 2024) was held in the Aula Magna, part of the University of Lisbon, from 3–5 October 2024. The Congress was well attended, with over 800 registrants and 74 countries represented. For the AsMA members who were able to attend, thank you for coming and making our Congress a success!

Many of the abstracts are available on the ICAM 2024 app, which is open to anyone to download at https://icam2024.com/ index.php/general-information/app. Don't forget to claim your CME/CPD credits. ICAM 2024 is accredited for 17.5 CME/ CPD credit hours by the EACCME. For details, see the app or website: https://www.icam2024.com/index.php/program/ accreditation.

The Lisbon Congress was a cooperative venture of the International Academy of Aviation and Space Medicine, the Aerospace Medical Association, the European Society of Aerospace Medicine, and the Portuguese Society of Aerospace Medicine (SMAPor). Through these collaborations, the Congress was also the 70th international Congress of Aviation and Space Medicine (ICASM 2024), the 8th European Congress of Aerospace Medicine (ECAM 2024), the 7th Scientific Meeting of the Portuguese Aerospace Medicine Society, the 10th Aerospace Medicine Conference of the Portuguese Air Force, the 3rd Joint Portugal/Brazil Aerospace Medicine Societies Conference, and the Iberian Aerospace Medicine Societies Conference of the Portuguese and Spanish Aerospace Medicine Societies.



The Allard lecture by Dr. Duncan Hughes.

The program began with a welcome by Dr. Rui Pombal. He introduced the Allard lecture speaker, Dr. Duncan Hughes,



Medical Director of Virgin Galactic (VG), who described the company's missions and plans. There will be several new and more powerful VG Delta rockets built to replace the original VG Unity rocket, several of which will be deployed in other countries. This will significantly increase the number of astronaut passengers reaching space each year. Dr. Hughes spoke of the challenges of flying people without the arduous screening done on NASA pilots. Those who have paid to fly to space with VG are mostly older and different from NASA astronauts, who are much younger and selected for excellent physical and mental health. In some cases, VG enrollees paid for their flights 20 years ago and have developed significant illnesses since then. Some have already flown, including one with Parkinson's disease, without incident. An early concern was the risk of nausea and vomiting from space adaptation syndrome since this commonly occurs among NASA astronauts shortly after their arrival on the International Space Station. However, to date, there have been no cases among the VG commercial astronaut passengers who have flown. The G forces associated with launch and landing have also been well tolerated.



From left to right: Drs. Kris Belland, Dan LeStage, Bob Orford, and Joe Dervay at ICAM 2024.

Reprint and copyright © by the Aerospace Medical Association, Alexandria, VA. DOI: https://doi.org/10.3357/AMHP9512PP.2024

CONTACT DETAILS: Email: President@asma.org • Web site: www.asma.org • Facebook: Aerospace Medical Association • Twitter: @Aero_Med

PRESIDENT'S PAGE, continued



The Gala dinner at Mafra Palace.

Several speakers of note presented the Ernsting Panel, which this year addressed the topic "Public Health Emergencies," including infectious diseases, radiation, and bioterrorism. As demonstrated during the recent COVID-19 pandemic, any major public health emergency can significantly disrupt air travel. Two other keynotes were provided, the first by Mission Commander João Lousada, who described the simulated 1-month, 6-astronaut Amadee-20 Mars Mission in October 2021 at Ramon Crater in the Negev Desert. He described the differences between simulation and reality, such as the stronger Earth gravity and the need to check for scorpions in boots. The second was by Lieutenant General Rafael Martins, who described the first flight between Lisbon and Macau in 1925. The flight took 22 days to complete in an unpressurized aircraft, with several near-accidents, and an accident in India requiring replacement of their starting plane by another. The second plane also crashed on arrival in Macau. The same flight today takes 22 hours in a pressurized jet aircraft.

The ICAM Scientific Committee was chaired by Dr. Sophia Almada. There were 30 Scientific Sessions, with topics ranging from aeromedical certification and occupational health to artificial intelligence and outer space. One program I particularly enjoyed was a panel on medical aspects of space travel by leading experts in the field, Drs. Jim Vanderploeg, Melchor Antuñano, Jeff Myers, and Joe Dervay. There were also many poster presentations in electronic format on large screens with "rapidfire" poster presentations by the authors, and a photographic astronomical digital exhibition. Educational visits included a workshop on aircraft accidents at Beja Air Base, daily visits to the Lisbon University Aerospace Medicine Studies Laboratory, and more. The food was also excellent, with sumptuous lunches



The ICASM 2025 team.

and coffee breaks. It was great to see such lively networking exchanges during the breaks between international colleagues. The International Academy of Aviation and Space Medicine Academicians' Dinner was held at the Portuguese Geographic Society and the Gala dinner to end the conference was held at UNESCO World Heritage Monument Mafra Palace and Convent.

ICAM 2024 was followed by a 2-day Aviation Health Conference managed by Quaynote Communications. Dr. Rui Pombal, International Airline Medical Association President and Medical Advisor to the International Air Transport Association, was the principal organizer for this event as well as for ICAM 2024. The role of aviation in major public health events and pilot mental health, in particular the European Union Aviation Safety Agency program MESAFE and pilot support networks, were prominent themes for this year's meeting. The meeting ended with a fascinating presentation by Dr. Vincent Feuille, Medical Director of Air France, concerning the first trans-Atlantic air transport of a heart for transplant from Paris to a recipient in Guadeloupe, a French Department in the Caribbean. The operation was a success.

Planning for ICAM 2026 is underway, with the location to be announced soon. The Annual Scientific Meeting of the Aerospace Medical Association and the Underwater Hyperbaric Medical Society will occur in Atlanta, GA, USA, from 1–6 June 2025, preceded by a 1-day meeting of the International Airline Medical Association on 31 May 2025. The next International Congress on Aviation and Space Medicine, which last met in Abu Dhabi in 2023, is scheduled for Singapore from 27–30 October 2025. Everyone is welcome to present at and to attend these meetings. Please mark your diary or calendar.

AsMA is a family. No one belongs there more than you!