

Ever Upward: May 2018

Scholarship Winners Announced

Anita Mantri Memorial Travel Scholarship

Ilaria Cinelli received the Anita Mantri Memorial Travel Scholarship from AMSRO. A native of Italy, sheearned a



B.Eng. and an M.Eng. in biomedical engineering from the University of Pisa, Italy, in 2012. She is currently a final year Ph.D. student at the National University of Ireland, Galway, Ireland. She was research assistant at CHAPS (King's College London), where she worked on a computational model regarding Visual Impairment Intracranial Pressure and on the Gravity Loading Countermeasure Skinsuit.

Ilaria was a finalist for the Jeff Myers Space Medicine Association Young Investigator Award in 2013. She was a winner of the 2014 Research and Development Innovation Award and Certificate (sponsored by David Clark Company) given by the Life Sciences and Biomedical Enginerring Branch of AsMA. In 2015, she completed the Commercial Space Executive Leadership Training and the Intensive Training-Astronaut Training to Weightlessness. In 2016, she was elected Secretary of the Aerospace Human Factors Association, a Constituent group of AsMA. She is also national contact point of the Student European Low Gravity Research (SELGRA).

After her first mission with Crew 158, Ilaria was selected as Commander of Crew 172 and 185 and Emerging Space Leader by the Mars Society. Ilaria also joined the Poland Mars Analogue Simulation by Space Generation as Mission Support member and back-up astronaut, and the Mars Academy USA as Executive Officer. She has been featured on HBO, French TV, in the *Irish Times*, Engineers Ireland, Rai TV, *La Repubblica, Le Monde*, and many others. She was also featured on the IEEE Pulse and was Invited Speaker at the IEEE EMBC EMBS 2017 and 2018, University of Southamp-ton, University of Pisa, and TEDxPadova. She is active in space medicine research for translation to terrestrial applications. Her favorite motto is "*Life in Space is for Life on Earth!*"

Jennifer Fleischer, BSE, is the second winner of the Anita Mantri Scholarship. She graduated with a BSE in Bioengi-



Pennsylvania in 2006. For the next 7 years she played professional basketball for teams in Belgium, Russia, Ukraine, Poland, Israel, Slovakia, France, and Italy, as well as for the Israeli Women's National Basketball Team. She is currently completing her medical degree at Dartmouth College and also working on a project with Dartmouth's Space Medicine Innovations Lab.

Her interest in aerospace medicine led her to participate in the 2016 International Space University's Space Studies Program, UTMB's Short Course, and NASA's Aerospace Medicine Clerkship. She will begin an Emergency Medicine Residency at Duke in July.

Ms. Fleischer is a member of the Aerospace Medicine Student and Resident Organization and the Aerospace Medical Association. She is the first author of a presentation to be given at the 2018 Annual Scientific Meeting and a coauthor of an article to be published in *Current Urology Reports*. She has conducted research at the University of Pennsylvania and the Masonic Medical Research Lab and has been involved with the International Space University Space Studies Program in Haifa, Israel, and the Virtual Space Station in Hanover, NH.

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

Moriah S. Thompson, M.D., is currently a resident in Aerospace Medicine at the University of Texas Medical



Branch in Galveston. She completed her initial residency training in Emergency Medicine at the Mayo Clinic, where she served as chief resident. Prior to that she graduated from Texas A&M University with a degree in Biomedical Engineering. She has participated in the Pathways Internship program at NASA Johnson Space Center since 2012. She has also been involved in a

number of research projects in the field of aerospace medicine ranging from hypobaric hypoxia exposure to spacesuit glove-related injury.

Dr. Thompson is a member of the Society of Women Engineers and the Aerospace Medical Association. Her honors and awards include being a NASA Student Ambassador, an Outstanding Student Award from the Society of NASA Flight Surgeons, Outstanding Resident Research Innovation from Mayo Clinic Emergency Medicine, and Gold Quality Fellow from the Mayo Clinic Quality Academy. She is lead or co-author on eight publications.

AsMA International Scholarship

Bonnie Posselt, B.Sc., M.B.Ch.B. (E), D.Av.Med., MRCP (UK), ARAeS RAF, is the first winner of the AsMA International Scholarship. A native of the United Kingdom, she earned a B.Sc. in Aerospace Physiology at King's College in London in 2008, then an M.B.Ch.B. at Manchester University in 2009. She also holds a Post-Graduate Certificate in Aviation Medicine from King's College and a Diploma in Aviation Medicine from the Faculty of Operational Medicine. She joined the Royal Air Force (RAF) as a General Duties Doctor in 2011 and then took Officer Training. Upon completion of this training, she was commissioned as a Flight

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Lieutenant. She then served in a variety of positions, including as a CT1 doctor in both an Acute Assessment Unit and



an Intensive Care unit at Chelsea and Westminster and Royal Brompton Hospitals; a CT2 doctor in Emergency Medicine, Anesthetics, Cardiology, and Respiratory Medicine at St. George's and Chelsea and Westminster Hospitals; and Acting Registrar of Acute Medicine at Chelsea and Westminster Hospital. She is currently Field Medical officer, AMADEE-18, Austrian Space

Forum; Specialty Registrar in Aviation and Space Medicine at the Centre of Aviation Medicine, RAF Henlow; and an RAF Medical Officer.

Dr. Posselt was the Space Medicine Association's Jeff Myers Young Investigator Award winner in 2011. She is a member of the Royal College of Physicians, the General Medical Council, the Medical Defence Union, the Royal Society of Medicine, the Royal Aeronautical Society, UK Space Life and Biomedical Sciences, and the British Interplanetary Society. She is an Associate Fellow of the Aerospace Medical Association and a trainee representative on the Specialty Advisory Committee for Aviation and Space Medicine as well as a STEM outreach ambassador.

Beth A. Healey, M.B.Ch.B. (Hons.), B.Sc. (Hons.), Dip.MCC, FRGS, is the second winner of one of the 2018 AsMA International Scholarships. She earned a B.S. in



Physiological Science and then an M.B.Ch.B. at the University of Bristol. She then received a Diploma in Conflict and Catastrophe Medicine in 2014 from the Worshipful Society of Apothecaries in London. She has served in a variety of positions, including as a support team member for Extreme World Races, Lake Baikal, Siberia; an assistant doctor for the North Pole Marathon; a

doctor at Ealing Hospital and then Chelsea and Westminster Hospital in London; as a research coordinator and part of the medical team for the European Space Agency at Concordia Station in Antarctica; and was involved as Project Lead for 'Whitespace', a grant-funded outreach educational tour. She is currently a Senior House Officer in Accident and Emergency and is serving an Accident and Emergency internship at Hôpitaux du Pays du Mont Blanc in France. She also shares her research experience in Antarctica through public speaking at conferences, seminars, podcasts, online media, universities, and occasional television and radio appearances.

Dr. Healey is a Fellow of the Royal Geographical Society and a member of the Aerospace Medical Association, the Space Medicine Association, the Wilderness Medicine Society, the Space Generation and Advisory Council, the Aerospace Medicine Student and Resident Organization, and Medical Leadership and Management. Her awards and honors include the Association of Space Explorers Award, Space

Exploration Education UK Space Agency Grant for 'White-Space', winning the 'I'm an astronaut get me out of here' Scholarship for International Space University's 2017 Summer Program, Poster Presentation Prize London Trauma Conference, National Physiological Society Conference Bursary, ESA Workshop for Medical Students Attendance Bursary, Royal United Hospital Bath's Elective Prize, and Bristol University's Evidence-Based Medicine Poster Winner.

Matthew R. Wilkes, M.B.Ch.B., M.Sc., MRCEM, FRCA, FAWM, FRGS, received the third AsMA International



Scholarship. Dr. Wilkes qualified in medicine from the University of Edinburgh in 2007. Since then he has worked predominantly in anesthesiology, critical care, and remote medicine in the United Kingdom and around the world. He is passionate about paragliding and founded the Free Flight Physiology Project to improve paraglider pilot safety, performance, and accident management. The project is sup-

ported by the Royal Aeronautical Society's GP Olley Award.

Dr. Wilkes completed the Master of Clinical Sciences (Mountain Medicine) in 2016, investigating cerebral altitude illness in the Bolivian Andes. He has been the Lead Doctor on several large international expeditions, practiced anesthesia in New Zealand and Nepal, and flown all over East Africa with the AMREF Flying Doctor Service. In 2017, he returned to Nepal as a volunteer physician at the IPPG(UK) high altitude clinics at Machermo and Gokyo for the post-monsoon season. He is currently a doctoral student in the Extreme Environmental Medicine and Science Group, Department of Sport and Exercise Science, University of Portsmouth.

Dr. Wilkes is a Fellow of the Royal Geographical Society, The Royal College of Anaesthetists, and the Academy of Wilderness Medicine. He is a member of the Royal College of Emergency Medicine, and a Diplomate in Mountain Medicine. His awards and honors include the Nick Gordon medal from the Edinburgh & East Scotland Society of Anaesthetists, an Excellence in Remote Medicine Award, and the Myre Sim Fund Research Grant from the Royal College of Physicians. He has also received the James Munro Memorial Prize in Psychiatry and the Dorothea Walpole Prize in General Practice.

AMHP Article Featured

An article in January's issue of *Aerospace Medicine and Human Performance* (AMHP) is being featured on the Texas Advanced Computing Center's (TACC's) web site. The article, "Medical Implications of Space Radiation Exposure Due to Low-Altitude Polar Orbits" by Chancellor et al., discusses research on radiation in a low Earth orbit and how it might affect the health of crewmembers and the integrity of a mission. The authors used data from the Manned Orbiting Laboratory, which was conceived in 1963 and underwent planning, but never actually flew. The authors also used data from a historical solar radiation event to estimate potential radiation dosages. To read the article on the website, please

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visit https://www.tacc.utexas.edu/-/anticipating-the-dangers-of-space. In addition, the research has been highlighted in the National Science Foundation's (NSF's) Picture of the Day: https://news.science360.gov/obj/pic-day/7063e47e-e73a-460d-9783-870a161bf871/anticipating-dangers-space.

Orford Appointed to 3-Year Assignment

Robert Orford, M.D., former director of the Executive Health Program at Mayo Clinic's Arizona Campus and an AsMA Fellow, has been appointed by the Executive Committee of Mayo Clinic Healthcare to a 3-year assignment at Mayo Clinic Healthcare/Oxford University Clinic. His appointment is a collaborative effort between the Mayo Clinic, Oxford University, and Oxford University Hospitals NHS Trust designed to explore all areas of innovation in medical research, education, and patient care. Within AsMA, he has served on the Bylaws Committee and serves on the Air Transport, Global Liaison and Outreach, and Scientific Program Committees, as well as Parliamentarian on the Council. He has also received the Boothby-Edwards Award and a President's Citation.

News of Members

BG (**Dr.**) **Abdulrazzaq Najm Abed** earned a Masters degree in Aerospace Medicine from the Egyptian Aeromedical Center in 2017. He is currently Chief of Iraqi Aerospace Medicine in the Iraqi Ministry of Defense Surgeon General's Office.

Humans to Mars Summit 2018

May 8-10, 2018; Lisner Auditorium, The George Washington University, Washington, DC.

Welcome to the largest gathering of professionals dedicated to achieving Human Exploration of Mars by 2033! The 2018 Humans to Mars Summit will expand on its impressive programming of previous years with increased visibility for STEAM (Science, Technology, Engineering, Art, Math) initiatives and our supporters. For more information or to register, please visit the summit web site at https://h2m.exploremars.org.

Save the Date!

The Civil Aviation Medical Association (CAMA) will be holding its 2018 Annual Scientific Meeting September 27-29, 2018, at the Captain Cook Hotel in Anchorage, AK. The theme will be "Aviation Medicine Under Extreme Conditions." The meeting has been approved for FAA recertification credit and rated for CME and MOC credit. Registration will open in early May 2018. For more information, see the Schedule of Events or contact CAMA at at civilavmed@aol.com or by telephone at 770-487-0100.

Read Current News Online!

News pages are updated regularly as we get news. Members: check the Job Fair; new jobs are posted monthly!

New Members

Abd Rashid, Amei Farina; Shah Alam, Malaysia Al-nsour, Mohammad; Amman, Jordan Cravens, Matthew; Tucson, AZ, United States Duratinsky, Joseph; Ann Arbor, MI, United States Frijters, Erik; Soesterberg, Netherlands Inada, Makoto; Tokorozawa-Shi, Japan Kennon, Caleb; Saint Joseph, MO, United States Khan, Syeeda Uzma; Karachi, Pakistan Knight, William; Candler, NC, United States Marquinez, Frederick; Hudson, OH, United States Maruani, Patricia; Charenton-Le-Pont, France McBride, Jeffrey; Houston, TX, United States Ontiveros Ramirez, Jorge; Los Angeles, CA, United States Patel, Harnish; Chicago, IL, United States Purvis, Nina; Ashington, Northumbland, United Kingdom Reddis, Erin; Hurlburt Field, FL, United States Reed, James; Albany, GA, United States Schmidt, Frank; Branson West, MO, United States Sestito, Mariateresa; Dayton, OH, United States So, Ryung; Palm Bay, FL, United States Van Zanten, Veldhuijzen; Heemstede, Netherlands Vu, Paul; Wright-Patterson AFB, OH, United States Warkander, Dan; Wright-Patterson AFB, OH, United States Whalen, Stefanie; Pittsfield, MA, United States Wittenberg, Hans; Arnhem, Netherlands Zike, Lauri; El Paso, TX, United States

MEETINGS CALENDAR

May 18-23, 2018; American Thoracic Society International Conference (ATS 2018); San Diego, CA. For more info, please visit http://conference.thoracic.org/.

May 23-26, 2018; Preventive Medicine 2018: Annual Meeting of ACPM; Chicago, IL. For more information, please see http://www.preventivemedicine2018.org/.

June 20-22, 2018; 7th International Conference of Neurology and Neuromuscular Diseases (ICNND 2018); Warsaw, Poland. For more information, please visit http://neuromuscular.cmesociety.com/.

June 28-30, 2018; UHMS Annual Scientific Meeting; Disney's Coronado Springs Resort, Lake Buena Vista, FL. For more information, please visit https://www.uhms.org/asm-new.html.

July 5-7, 2018; Immunology 2018; Vienna, Austria. The EuroSciCon is holding its CPD accredited for Immunology conference. The theme of this year's meeting is "Spreading the new trends in Immunology." Please visit http://immunology.euroscicon.com/ for more.

Sept. 20-23, 2018; 6th European Congress of Aerospace Medicine; Prague, Czech Republic. The theme will be "Trust and Care in Aviation Safety." For more, please visit https://www.asma.org/scientific-meetings/prague-czech-republic-6th-european-congress-of-aer.

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News of Corporate Members

Allied Pilots Association Is Newest Corporate

Allied Pilots Association (APA), the certified collective bargaining agent for pilots who fly American Airlines, has become the newest Aerospace Medicine Association's Corporate & Sustaining Member. Founded in 1963, APA is the largest independent pilots' union in the world. They provide a broad range of services to their members and support aviation safety. As part of this, they have a Government Affairs Committee in Washington, DC, that serves as the voice of professional pilots. Their principal interests include promoting and supporting regulations that enhance aviation safety, enhance pilot qualifications and training, encourage program improvements in the Federal Flight Deck Officer Program, and promote reform of federal aviation regulations on flight and duty time. APA recently applauded the Federal Aviation Administration for issuance of a Safety Alert for Operators (SAFO) regarding "Procedures for Addressing Odors, Smoke and/or Fumes in Flight," citing the serious health and safety threat posed by toxic air in the cockpit and cabin of an airliner. The FAA's recently released SAFO recommends that air carriers "review their company's odor, smoke and/or fumes procedures to ensure they address benign odor events as well as toxic odor, smoke and/or fumes, in an expeditious manner to limit exposure of passengers and crews." APA has developed and submitted detailed recommendations to American Airlines concerning procedures for ensuring that crewmembers are properly trained and aware of the threat posed by toxic cockpit and cabin air.

—To read more about APA, please visit their web site at https://www.alliedpilots.org/.

AOPA Launches New Travel Tools

The Aircraft Owners and Pilots Association (AOPA) has launched a new tool that will provide access to more general aviation travel information than ever before. With the theme of "explore the world from the airport out," pilots will soon be able to use AOPA's Destinations site as a comprehensive place to find more details on each airport across the country. The new part of AOPA.org will be a one-stop shop for pilots looking to find everything from restaurants and lodging to activities. Pilots will be able to read crowdsourced reviews from airport and fixed-base operation visitors and get first-hand feedback about each location. Tools and features will continue to be added as AOPA invests in inspiring current and future pilots to fly and fly more by showing them new places their aircraft can take them.

—Please visit https://www.aopa.org/news-and-media/all-news/2018/april/10/new-aopa-destinations-platform-meant-to-inspire-and-inform-pilots to read more about this.

KBRwyle Awarded U.S. Air Force Task Order

KBRwyle has been awarded a task order to assist the U.S. Air Force in enhancing the operational capability and efficiency of air and space systems. Under this contract, KBRwyle will support the Air Force's Tactical Exploitation of National Capabilities (TENCAP) Program, providing a full spectrum of systems engineering services for the rapid prototype development and integration of national-level space, intelligence,

and air and missile defense capabilities. KBRwyle will assist the Air Force with cost-effective research, development, and test and evaluation of emerging technologies, materials, and manufacturing processes. This work will significantly advance the functionality and capability of military systems while shortening the timeline from prototyping to fielding fully operational systems. KBRwyle will primarily perform this work at Schriever Air Force Base in Colorado as well as other locations around the world. The task order award period is 54 months.

—Please see https://kbr.com/about/newsroom/press-releases/2018/04/16/kbrwyle-awarded-\$32m-task-order-to-advance-us-air-force-air-and-space-systems for more on this.

Mayo Study Finds Liver Transplants Defend Against Organ Rejection

Transplanted livers change the profile of blood cells in the recipients, reducing the potential for organ rejection, Mayo Clinic research shows. The findings are published in *Kidney* International. For decades, transplant experts have observed that liver transplant recipients often need less anti-rejection medication, known as immunosuppressive drugs, than recipients of other solid organs. Similarly, when patients receive a multiple-organ transplant that includes the liver along with any other organ, they need less immunosuppressive medication and have less incidence of rejection even if they are highly sensitive to cellular bad actors, known as antigens, from the donor organs. When patients undergo a dual kidney-liver transplant, the liver has a protective effect on the kidney, the study found. The study also found that patients who received a liver and kidney at the same time, or a liver alone, had fewer of the cells that leap into action to defend the body from an invader—known as killer cells or T See 'Corporate News', p. N20

Corporate News Bites

ALPA: The President of the Air Line Pilots Association, Capt. Tim Canoll, recently released a statement applauding the House of Representatives for promoting women in aviation. The Transportation and Infrastructure Committee unanimously approved the Promoting Women in the Aviation Workforce Act of 2017, sending it to the full House for further consideration. This legislation sends a strong message of encouragement to aviation enthusiasts who are looking to fulfill their dreams of becoming an airline pilot. Please visit https://www.alpa.org/news-and-events/news-room/2018-04-12-alpa-applauds-women-in-aviation-bill for more on this.

NKI: Neurokinetics, Inc., in collaboration with the University of Pittsburgh and the University of Miami Miller School of Medicine, presented a poster at the Association of Research Otolaryngologists 2018 Mid-Winter Meeting in San Diego, CA, in February. The poster was titled "A Disparity Fusion Test for Objective Diagnosis of Vergence Abnormalities After Mild Traumatic Brain Injury." *Please see http://www.neuro-kinetics.com/project/new-research-on-vergence-abnormalities-after-mtbi/ to read more on this.*

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cells—compared with people who had a kidney transplant alone. While the T cells of the liver transplant recipients reacted to the donor organ cells weakly, their reaction to other antigens was preserved. The research helps pave the way for ongoing studies on the transplanted livers' unique properties.

—Please visit https://newsnetwork.mayoclinic.org/discussion/transplanted-livers-helps-body-defend-against-organ-rejection-mayo-clinic-study-finds/ to read more about this.

Monash Vice-Chancellor Recognized for Leadership and Innovation

The remarkable leadership of Monash University President and Vice-Chancellor Professor Margaret Gardner AO has been recognized with a CASE Asia-Pacific Leadership Award. The award is bestowed by the Council for Advancement and Support of Education for outstanding efforts in promoting and supporting education and institutional advancement. At the award presentation in Hong Kong in April, President and CEO of CASE Sue Cunningham acknowledged Professor Gardner's transformative effect on Monash University. Since appointment to Monash University in 2014, Professor Gardner has amplified Monash's international reputation for excellence through her ambitious and collaborative five-year plan, *Focus Monash*.

—Please see https://www.monash.edu/news/articles/monash-vice-chancellor-recognised-for-leadership-and-innovation for more on this.

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SAA Maintains 4-Star Skytrax Ranking

South African Airways (SAA) has maintained a 4-Star Skytrax ranking, in both Business and Economy Class, for a 16th consecutive year. The SAA stations audited this year were South Africa: ORTIA, Durban, and Cape Town; regional – Mauritius and international: Hong Kong, UK, Perth, and São Paulo. The Skytrax 4-Star ranking is a seal of quality approval awarded to airlines supplying good quality performance across a range of product and service-delivery rating areas. Skytrax assessed the rating after detailed product and service standards audits for each featured airline and not connected to any customer ratings. Skytrax, an independent, global airline-rating organization, awarded the 4-Star rating placing the airline amongst other international and partner airlines. SAA has maintained quality levels throughout what has been another challenging year for the airline.

—Please visit https://www.flysaa.com/about-us/leading-carrier/media-center/media-releases/newsroom# to read more.

Upcoming FAA AME Seminars

Dates	Location	Seminar Type
May 7-10, 2018	Dallas, TX	AsMA
June 11-15, 2018	Oklahoma City, OK	Basic
Aug. 10-12, 2018	Washington, DC	Refresher
Sept. 21-23, 2018	Denver, CO	Refresher
Sept. 27-29, 2018	Anchorage, AK	CAMA

PLEASE NOTE: The only FAA seminar AsMA takes registrations for is the one held in conjunction with our annual meeting in May. For all others, please contact the FAA.

Visit: http://www.faa.gov/other_visit/aviation_industry/designees_delegations/designee_types/ame/seminar_schedule/ to learn more.

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