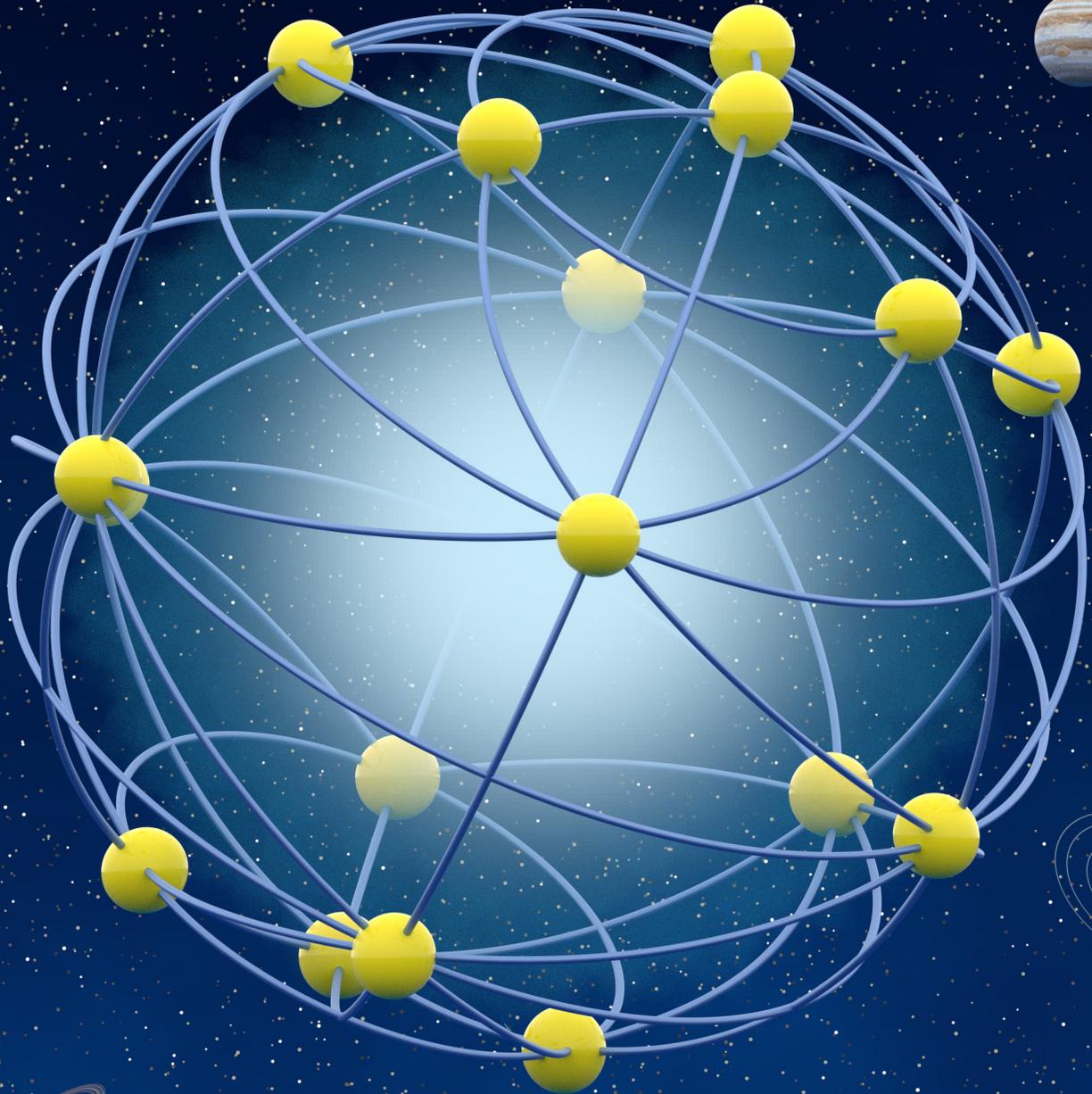


# Aerospace Medicine sans Frontières



**Aerospace Medical Association  
90th Annual Scientific Meeting  
Rio All Suite Hotel, Las Vegas, NV  
May 5 - 9, 2019**



# Aerospace Medicine sans Frontières

The Aerospace Medical Association's 90th Annual Scientific Meeting will be held in Las Vegas, NV, USA. This year's theme is "Aerospace Medicine sans Frontières."

Our aerospace medicine and human performance field is not immune to the need for global connection and collaboration, just like other sectors in aviation! AsMA has an important role to play by creating and stimulating scientific exchange, experiences, and contacts with our members and colleagues of aerospace medicine and related associations around the world, and with other partners in aviation, such as professional and leisure pilots and air traffic controllers. We hope to see many friends from different sectors and from different parts of our world at the largest existing scientific meeting in our field!

The AsMA Annual Scientific Meeting is the premier international forum to learn and discuss evolving trends and multidisciplinary best practices in research, clinical applications, human performance, and flight safety. The Program Committee, chaired by Walter W. Dalitsch III, M.D., has organized the program with a balance of sessions related to Aerospace Medicine, including Clinical and Operational Aerospace Medicine, Human Performance, Travel and Transport Medicine, Safety and Survivability, Space Medicine, History, and many other related topics.

In this our 90th year we will celebrate the 50th Anniversary of the Apollo 11 mission and the first steps taken by Man on the Moon. A special plenary session and a history panel will pay tribute to this monumental achievement in our history.

**Register Online Now at <https://www.asma.org/scientific-meetings/asma-annual-scientific-meeting/registration> to learn about current trends in the aerospace medicine and human performance arena and meet with your colleagues. We hope to see YOU there. The 'early bird' discount is good through January 31.**

## Educational Objectives

Based upon responses to a survey provided at the end of the 89th Annual Scientific Meeting in Dallas, TX, the top 6 categories our members indicated a need for more information in were: 1) Human Performance/Human Factors; 2) Aerospace Medicine; 3) Operational Medicine; 4) Medical Standards; 5) Space Medicine; and 6) Travel Medicine. The 90th Annual Scientific Meeting program will be focused on these six major categories. Sessions will cover the latest findings in the fields of aviation and space

medicine, human performance, and related fields such as aerospace nursing, aerospace physiology, and human systems integration.

Abstracts are centered on the meeting objectives, which are aligned with the theme. The participant will:

- Learn about evolving trends and best practices in aerospace medicine;
- Apply principles of evidence-based medicine, operational risk management, and aeromedical decision-making in aircrew selection and clinical aerospace medicine practice;
- Analyze mechanical, human performance, and systems integration factors in aviation mishaps and safety programs;
- Identify mechanical, biological, social, cognitive, environmental stress, and systems factors that impact on optimal human performance and decision making in the full spectrum of aerospace operations;
- Apply ethical principles to aerospace medicine decision-making and foster competency in professionalism and systems-based practice in the application of aerospace medicine skills, teamwork, and interoperability in a multi-discipline professional environment.

## Key Topics

- Special Plenary Session Commemorating the 50th Anniversary of the Apollo 11 Moon Landing
- Emerging Technologies
- Hypoxia, acceleration, and high-altitude medical issues
- Unmanned aircraft systems
- Spatial disorientation
- Crashworthy systems
- Neurophysiology
- Injury mitigation
- Patient safety and air transport medicine issues
- In-flight medical events
- Human systems integration
- Human performance in aviation
- Aviation safety in civil and military settings
- Aviation medicine case studies
- Aerospace Medicine Board Review, Aeromedical Grand Rounds, and "RAM Bowl"
- FAA Seminars for AMEs

## Educational Benefits\*

- CME credits—AsMA's scientific program is accredited through the Undersea and Hyperbaric Medical Society to provide continuing medical education for physicians. The Undersea and

Hyperbaric Medical Society is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

- This live activity is designated for a maximum of 22.5 *AMA PRA Category 1 Credits*<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
- This activity has been submitted to the Montana Nurses Association for approval to award Nurse Contact Hours. The Montana Nurses Association is an accredited approver with distinction of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.
- **MOC Available! Maintenance of Certification modules: Workshops, Panels, Slide and Poster Sessions have all been designated for MOC. At least 20 non-concurrent hours of MOC training will be available.**
- The Aerospace Medicine Board Review series will review core topics in Aerospace Medicine and is designed to prepare Aerospace Medicine specialists for the ABPM re-certification exam. Topics are presented by specialists in the field and adhere to the ABPM Study Guide outline, which will be covered in its entirety over the course of three consecutive years. Combined with the annual RAM Bowl and Aerospace Medicine Grand Rounds sessions, these board review sessions will address the preventive medicine core topic areas and the four required knowledge areas of Human Factors, Egress, and Disaster; Epidemiology and Biostatistics, Review of Respiratory and Metabolic Diseases; Pilot Selection and Retention, Evaluation, and Risk Assessment; and Civil Aviation Regulations.

## Professional Development

Several sessions highlight professional development, one of the core competencies for maintenance of certification, including the Epidemiology Workshop, the MOC sessions, Aerospace Medicine Board Review, and the panel on Aeromedical Ethics.

## Speed Mentoring

Back by popular demand! This year two special sessions on Monday and Wednesday are set up for Speed Mentoring. Students and residents will have a chance to interview seasoned professionals in Aerospace Medicine and Human Performance during 10-min bursts. It's fun, it's fast, and it's fascinating!

**\*Accreditation Statement:** This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the Undersea and Hyperbaric Medical Society and the Aerospace Medical Association. The Undersea and Hyperbaric Medical Society is accredited by the ACCME to provide continuing medical education for physicians.

**Designation Statement:** The Undersea and Hyperbaric Medical Society designates this live activity for a maximum of 22.5 *AMA PRA Category 1 Credits*<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Full Disclosure Statement:** All faculty members and planners participating in continuing medical education activities sponsored by the Aerospace Medical Association are expected to disclose to the participants any relevant financial relationships with commercial interests.

Full disclosure of faculty and planner relevant financial relationships will be made at the activity.

**UHMS Disclaimer:** The information provided at this CME activity is for Continuing Medical Education purposes only. The lecture content, statements or opinions expressed however, do not necessarily represent those of the Undersea and Hyperbaric Medical Society (UHMS), its affiliates or its employees.

## Other Benefits

- Networking with Peers
- Scientific and Technical Exhibits
- Special Poster Session for Committees and Constituent organizations
- Constituent and Affiliate Organization Luncheons and Awards
- Spouses Program

## Special Sunday Workshops

### 1. Introduction to Epidemiology

Sunday 8:00 a.m. – 5:00 p.m.

8 AMA PRA Category 1 Credits™.

(Designation Statement: The Undersea and Hyperbaric Medical Society designates this live activity for a maximum of 8.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity)

This course is oriented to professionals in aerospace medicine, mishap analysis, aerospace psychology, aerospace physiology, flight medicine, aviation medicine, aviation safety analyses, aerospace engineering, human factors engineering, and anyone else involved in the analyses of aviation mishaps or rare events. It will be taught from an aerospace mishap analyses perspective. There will be 6 hours of classroom lecture by IAMFSP members, and 2 hours of guided practice with problems taken from real life analyses. Learners must bring a portable computer with the appropriate EpiInfo™ program for the operating system loaded. Please note that EpiInfo™ does not have a Macintosh compatible option. WiFi access is not required. The EpiInfo™ program can be downloaded from the CDC website for free: <https://www.cdc.gov/epiinfo/support/downloads.html>

### 2. NASA CMO Primer on Human Spaceflight

Sunday 8:00 a.m. – 5:00 p.m.

8 AMA PRA Category 1 Credits™.

(Designation Statement: The Undersea and Hyperbaric Medical Society designates this live activity for a maximum of 8.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity)

This workshop will provide participants with a general overview of the many facets of human spaceflight that a space medicine practitioner should be concerned about. Specific areas of discussion will include hazards of spaceflight; physiological changes; psychological considerations; selection and duty standards; medical care, pre-, during, and post-flight; and long-term medical care. Participants will participate in short class participation events to help emphasize the intellectual challenges of protecting humans in space. This class is intended for those who are new to the role of Chief Medical Officer for human spaceflight.

### 3. Aircrew Fatigue: Causes, Consequences, and Countermeasures

Sunday 9:00 a.m. – 4:00 p.m.

6 AMA PRA Category 1 Credits™.

(Designation Statement: The Undersea and Hyperbaric Medical Society designates this live activity for a maximum of 6.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity)

This workshop will outline the importance of addressing fatigue as a danger in aviation, the basic

physiological mechanism underlying fatigue, and the most common causes of fatigue in air transport and other settings. Ways to recognize fatigue in operational environments and information about the efficacy of various countermeasures, including specific information about countermeasure techniques such as proper work/rest schedules, adequate sleep, napping strategies, rest breaks, circadian entrainment, stimulants, and others, will be provided. Presented by Dr. John Caldwell and Dr. Lynn Caldwell.

### 4. Aircrew Selection Methods, Part 1: Select In

Sunday 8:00 a.m. – 12:00 p.m.

4 AMA PRA Category 1 Credits™.

(Designation Statement: The Undersea and Hyperbaric Medical Society designates this live activity for a maximum of 4.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity)

This workshop focuses on the selection of aircrew based on measurement of Knowledge, Skills, Abilities, and Other characteristics (KSAOs - which includes the non-pathological domains of personality).

### 5. Aircrew Selection Methods, Part 2: Select Out

Sunday 1:00 – 5:00 p.m.

4 AMA PRA Category 1 Credits™.

(Designation Statement: The Undersea and Hyperbaric Medical Society designates this live activity for a maximum of 4.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity)

This workshop focuses on the valid mental health screening of aviation candidates. Areas considered include depression, anxiety, substance abuse/dependence as well as personality disorders and maladaptive traits, and other conditions incompatible with flight safety.

[These two workshops will employ slide presentations, case vignettes, discussion, questions and answers, and video and/or live demonstrations of applicant interviews. These workshops require separate registration. Participants can register for one or both.]

### 6. Aerospace Medicine Faculty Development Workshop

Sunday, 12:00 – 3:00 p.m.

3 AMA PRA Category 1 Credits™.

(Designation Statement: The Undersea and Hyperbaric Medical Society designates this live activity for a maximum of 3.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity)

This workshop, chaired by Drs. Mark Coakwell and Richard Allnutt of the USAF School of Aerospace Medicine, will provide presentations on current topics of interest to the international faculty of aerospace medicine residencies and fellowships. These presentations may also be of interest to faculty of other preventive medicine residencies, including general preventive medicine and occupational medicine. The presenters are current faculty of aerospace medicine programs within and outside of the United States. They will present topics aimed at improving teaching skills and providing proven methods for evaluating residents and will address international considerations in aerospace medicine residency training. Current and future faculty members may benefit from these presentations.

## 7. Introduction to Desert and Extreme Medicine

Friday, May 10, 8:00 a.m. - 5:00 p.m. Offsite

8 AMA PRA Category 1 Credits™.

(Designation Statement: The Undersea and Hyperbaric Medical Society designates this live activity for a maximum of 8.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity)

This is intended to be an introductory workshop focused on medicine and expedition support in an extreme (desert) environment. Extreme environments are increasingly used by NASA and other researchers as analogs to long-duration missions. Additionally, adventure travel is becoming increasingly popular. AsMA members may either support or participate in research expeditions and adventure travel.



## Aerospace Medicine Without Borders to...

**Education**—the primary objective of the Aerospace Medical Association's Annual Scientific Meeting. Designed from meeting evaluation forms, periodic surveys, and abstracts submitted, our meeting provides the latest results in sessions designed for aerospace medicine professionals under one roof. The scientific program will benefit residents, medical and graduate students, and advanced undergraduates who have an interest in aerospace medicine. Professional development and the other core competencies as outlined by the American Board of Preventive Medicine will be highlighted throughout the meeting. Continuing education credits AND Maintenance of Certification are provided for all participants.

**Opportunities**—to learn about the latest products and services from our many technical and scientific exhibitors; experience four plenary lectures; govern during the business luncheon, where you have the opportunity to help guide our association; honor the best and the brightest among your fellow professionals during awards luncheons and the Honors Night banquet; to socialize through the spouses' program, which is open to all spouses and friends of AsMA members.

**Networking**—Perhaps the greatest benefit of our meeting because we bring together the international experts from all aspects of the aerospace community in one place. Ideas for research, careers, projects, and presentations are forged during our meeting. And the friendships made will last a lifetime.

The AsMA is international in both membership and scope of interest, providing opportunities to connect and exchange ideas with some of the world's foremost medical specialists and internationally renowned scientists in the field of Aerospace Medicine and Human Performance. If you are interested in the multi-disciplinary approach to working with humans in flight and challenging environments, whether as a physician, physiologist, researcher, engineer, technician, nurse, student, or pilot—YOU should attend!

# Key Speakers



65th Bauer Lecturer  
Monday, May 6 (KBRwyle, sponsor)  
Jan Wörner

Director General of the European Space Agency  
Topic: "Human exploration... And its consequences"



6th Reinartz Lecturer  
Tuesday, May 7 (Reinartz Fund, sponsor)  
Prof. dr. Floris Wuyts, Ph.D.  
Faculty of Sciences, Antwerp University  
Research Institute for Equilibrium and  
Aerospace, Antwerp, Belgium

Topic: "The Impact of Microgravity and Hypergravity on the Human Brain Studied with Advanced MRI Methods"



54th Armstrong Lecturer  
Thursday, May 9 (Environmental Tectonics  
Corporation, sponsor)  
Adriaan Heerbaart

European Organisation for the  
Safety of Air Navigation (Eurocontrol)  
Topic: "Navigating the European Skies:  
Money Makes the World Fly Safer!"



**Attention AsMA Members!** If you receive a paper copy of the journal in your mailbox each month, **please bring your March Program Issue** with you to the meeting this year. If you don't want to bring the Program issue, that's okay! You can pay \$10 to pick up a copy with your registration. The program will be available for free online and through the mobile app at the meeting. Note: Nonmembers and those who receive only the electronic version of the journal will be entitled to one copy of the program without charge.

**PLEASE NOTE: Event tickets must be purchased in advance. The hotel requires us to cut off tickets sales 72 hours before each event.**

## Rio All Suite Hotel

**Please use the hotel reservation link found on the AsMA Registration webpage to make your reservation.**

### Book early to ensure a room.

The Rio All-Suite Hotel & Casino brings the exotic to you. Here every room is a suite with expansive floor-to-ceiling windows showcasing views of Las Vegas. Stay at the Rio Las Vegas and you can enjoy worldwide flavors from the Asian inspired cuisine of KJ Dim Sum & Seafood and Pho Da Nang Vietnamese Kitchen to the tastes of India at Royal India Bistro. The Carnival World Buffet offers an array of options and don't miss Guy Fieri's El Burro Borracho serving authentic Mexican dishes with Fieri flair. With free parking and a convenient location near the Strip, the Rio is the hotel to stay at and explore all Las Vegas has to offer. Fans and devotees of poker will be pleased to find that the Rio is home to the legendary World Series of Poker and its championship tournament.

## Spouses Program

The **WING of AsMA**, a volunteer spouse organization, sponsors a program to share the cultural and educational experiences of the host city with old and new friends. There is a Hospitality Room, a Welcoming Reception on Monday, May 6, and a Luncheon on Wednesday, May 8.

Three tours are planned this year. On Tuesday, May 7, there will be a 2-hour painting class at Pinot's Palette. Afterwards there will be time to buy lunch and browse in The District at Green Valley Ranch. On Tuesday evening, Liz and David Gradwell will renew their vows Las Vegas style with Elvis at the Little Wedding Chapel. A minibus will take you to the wedding and back to the hotel or to the Bellagio hotel. On Thursday, May 9, Goat Yoga and box lunch in the park. Baby goats make yoga fun no matter what your skill level!

The **Richard B. "Dick" Trumbo Preventive Medicine 5K Fun Run** will be held on Monday, May 6. The start time is 6 a.m. The fee is \$10 and tickets must be purchased in advance. Details to follow!

**Come to the Honors Night Afterparty.** No ticket is needed and it is a chance to congratulate the award winners and unwind at the end of the meeting. A DJ and dance floor and cash bar are provided.

Climate for May in Las Vegas is **Practically Perfect**. Warm days (average high about 88°F), cool evenings (average low 60°F), low humidity, and no rain.



**Advance Registration Form**  
**90th Annual Scientific Meeting**  
**May 5 – May 9, 2019**



Name:		Degree/Credentials:		Early Bird Registration runs January 1–31 (Mail registrations must be postmarked with a January date) Advance Registration runs February 1–April 30. No cancellations or refunds after April 28. A \$50 administrative fee is applied to all cancellations. We strongly encourage online registration: <a href="https://www.asma.org/scientific-meetings/asma-annual-scientific-meeting/registration">https://www.asma.org/scientific-meetings/asma-annual-scientific-meeting/registration</a> You <b>MUST</b> be an active member of AsMA in order to register at the member fee. Registration fee does not include membership dues. Fax registration form with credit card information to: (703) 739-9652
Organization:		Title:		
Street Address:				
City:		State/Country:	Zip Code:	
E-mail:		Telephone Number:		
Cell Phone Number:		Fax Number:		

Please indicate if this is an address change to your AsMA Membership Record

First time attendee, or new member? YES  NO  Special dietary requirement: \_\_\_\_\_

If you are being funded by the U.S. DoD please indicate Branch:  Army  Navy  Air Force  Coast Guard

By registering to attend an Aerospace Medical Association (AsMA) conference, you grant permission to AsMA to take and use your photo in AsMA marketing and promotional pieces for an indefinite period of time. Marketing and promotional pieces include, but are not limited to, printed brochures, reports, postcards, flyers, and materials, as well as online uses such as postings on the AsMA website, online newsletters, and e-mail blasts. AsMA shall own all rights, including copyrights in and to the photos.

You also grant permission to AsMA to use, encode, digitize, transmit, and display the video/audio of your session, presentation, or workshop given at the AsMA conference, singularly or in conjunction with other recordings, as well as to use your name, photograph, biographic information, and ancillary material in connection with such video/audio for commercial, promotional, advertising, and other business purposes. AsMA and its employees are released from any liability arising out of the use of your name, video, photographs, and/or organization name and location.

REGISTRATION FEE	EARLY BIRD <sup>†</sup> 1/1 – 1/31	ADVANCE 2/1 – 4/30	AT-THE-DOOR 5/5-5/9	REGISTRATION FEE REMITTED
<input type="checkbox"/> MEMBER	\$400 <sup>†</sup>	\$525	\$625	
<input type="checkbox"/> NON-MEMBER	\$675 <sup>†*</sup>	\$800 <sup>*</sup>	\$900 <sup>*</sup>	
<input type="checkbox"/> NON-MEMBER PRESENTER	\$575 <sup>†*</sup>	\$700 <sup>*</sup>	\$800 <sup>*</sup>	
<input type="checkbox"/> RESIDENTS	\$300 <sup>†</sup>	\$375	\$375	
<input type="checkbox"/> STUDENTS	\$75 <sup>†</sup>	\$125	\$125	
<input type="checkbox"/> FAA-AME SEMINAR <sup>§</sup>	\$300 <sup>†</sup>	\$350	\$350	
Registration Fee Subtotal ▶				

\*Go to [www.asma.org](http://www.asma.org) to become a member and take advantage of the reduced registration rates, receive the official Aerospace Medical Association journal, and other membership benefits.

<sup>†</sup>Early Bird Registration must be paid in full (including all events and meal functions) at the time of registration.

<sup>§</sup>Fee covers AsMA overhead costs. CME Credit for the FAA Seminar and AsMA Sessions attended is included.

**Fax to (703) 739-9652. Please remember to include both sides when faxing. Use only one method to register.**



**Advance Registration Form**  
**90th Annual Scientific Meeting**  
**May 5 – May 9, 2019**



Note: Workshops are Limited • Register Early

WORKSHOP DATE/NAME		FEE	TOTAL FEE	
Sunday, May 5, 8:00 am – 5:00 pm	Workshop #1 "Introduction to Epidemiology" (MAX 75)	\$200		
Sunday, May 5, 8:00 am – 5:00 pm	Workshop #2 "NASA Chief Medical Officer's Primer on Human Spaceflight" (MAX 30)	\$200		
Sunday, May 5, 9:00 am – 4:00 pm	Workshop #3 "Aircrew Fatigue" (MAX 75)	\$150		
Sunday, May 5, 8:00 am – 12:00 pm	Workshop #4 "Effective Aircrew Selection Methods - Part 1 - Select In" (MAX 75)	\$100		
Sunday, May 5, 1:00 pm – 5:00 pm	Workshop #5 "Effective Aircrew Selection Methods - Part 2 - Select Out" (MAX 75)	\$100		
Sunday, May 5, 12:00 pm – 3:00 pm	Workshop #6 "Aerospace Medicine Faculty Development" (MAX 50)	\$75		
Friday, May 10, 8:00 pm – 5:00 pm	Offsite Workshop #7 "Introduction to Desert and Extreme Medicine" (MAX 50)	\$200		
EVENTS		# OF TICKETS	FEE PER TICKET	TOTAL FEE
	Additional Meeting Program (ONLY for AsMA Members who receive their journal by mail)		\$10	
Sunday, May 5	AsMA Welcome to Las Vegas (NOTE: All Attending Event Must Have Tickets)		\$10	
Monday, May 6, 6:00 am	Richard B. "Dick" Trumbo 5K Fun Run/Walk (advance purchase only)		\$10	
Monday, May 6	Civil Aviation Medical Association Luncheon (advance purchase only)		\$45	
Monday, May 6	Society of USAF Flight Surgeons Luncheon (advance purchase only)		\$45	
Monday, May 6	U.S. Navy Luncheon (advance purchase only)		\$45	
Monday, May 6	U.S. Army Aviation Medical Association Luncheon (advance purchase only)		\$45	
Monday, May 6	Aerospace Human Factors Association Luncheon (advance purchase only)		\$45	
Monday, May 6	Corporate Forum Luncheon (Advance purchase only) (MUST BE A CORPORATE MEMBER, EXHIBITOR, OR CORPORATE SPONSOR)		\$0	
Monday, May 6	Fellows Dinner (advance purchase only) (MUST BE A FELLOW OR GUEST OF AsMA FELLOW)		\$85	
Tuesday, May 7	AsMA Annual Business Meeting (advance purchase only) (Free Attendance; Ticket required for meal)		\$45	
Tuesday, May 7	Reception to Honor International Members and Associate Fellows/Fellows Reception (Ticket includes access to BOTH events)		\$45	
Wednesday, May 8	Associate Fellows Breakfast (advance purchase only)		\$45	
Wednesday, May 8	Aerospace Physiology Society Luncheon		\$45	
Wednesday, May 8	Society of NASA Flight Surgeons Luncheon		\$45	
Wednesday, May 8	Aerospace Nursing Society Luncheon		\$45	
Wednesday, May 8	Iberoamerican Association of Aerospace Medicine Luncheon		\$45	
Thursday, May 9	Space Medicine Association Luncheon		\$45	
Thursday, May 9	AsMA Honors Night Banquet (Black Tie Optional)		\$85	
		SUBTOTAL OF EVENTS ▶		
TOTAL AMOUNT DUE (Registration Fee Subtotal + Workshop + Subtotal of Events) ▶				

PAYMENT METHOD			
Check Number	<input type="checkbox"/> CHECK <input type="checkbox"/> AMEX <input type="checkbox"/> DISCOVER <input type="checkbox"/> MASTERCARD <input type="checkbox"/> VISA <input type="checkbox"/> DINERS		Fax with credit card information to: (703) 739-9652  Or mail with payment to: Aerospace Medical Association 320 S Henry Street Alexandria, VA 22314-3579
Name as it appears on card: (PLEASE PRINT)			
Credit Card #	Exp. Date:	Security Code:	
Street	City	Zip/Mail Code:	
Signature		Country	

Payment must accompany form. All payments are in U.S. funds. Registrants submitting via fax must include credit card information. Fax to (703) 739-9652. Please remember to include both sides when faxing. Use only one method to register.



# Advance Registration Form

## 90th Annual Scientific Meeting

### May 5 – May 9, 2019



Sunday Workshops, May 5								
Pre-and Post-Meeting Workshops—See Brochure text and registration form.								
Plenary Sessions will be held in Amazon G-T or Amazon G.								
FAA AME Sessions will be in Miranda 1/3 all week.								

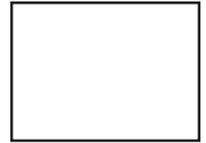
Monday, May 6								
	Brasilia 1	Brasilia 2	Brasilia 3	Brasilia 4	Brasilia 5	Brasilia 6	Brasilia 7	Miranda 5/7
8:00-9:30 A.M.	OPENING CEREMONIES AND 65th LOUIS H. BAUER LECTURE— Jan Wörner “Human exploration... and its consequences”							
10:30 A.M. – 12:00 NOON	Apollo 11 Lunar Landing – 50 Year Anniversary – A Reflection							
12:00 NOON – 2:00 P.M.	SPECIAL LUNCHEONS—CAMA, Navy, Air Force, Army, Aerospace Human Factors, Corporate Forum							
2:00 P.M. – 3:30 P.M.	S-007 CLINICAL PANEL: Current RPA Trends – Enlisted and Beyond	S-008 HP PANEL: Aircrew Neck Pain Prevention and Management – Recommendations from NATO HFM-252	S-009 SAFETY SLIDE: Safety in Civilian Aviation	S-010 CLINICAL SLIDE: Aviation Vision	S-011 TRAVEL/TRANSPORT PANEL: The Aging Pilot and the Aging Traveller		S-012 SPACE PANEL: Behavioral Health and Performance Options and Research in Human Spaceflight	S-013 HP PANEL: Perceptual Modeling to Explain and Reduce Spatial Disorientation
4:00 P.M. – 5:30 P.M.	S-014 CLINICAL PANEL: Advances in Aerospace Medicine in Iberoamerica	S-015 HP SLIDE: Hypoxia and Breathing	S-016 SAFETY SLIDE: Fatigue Monitoring	S-017 CLINICAL SLIDE: The “Eyes” Have It	S-018 TRAVEL/TRANSPORT PANEL: FAA Federal Air Surgeon’s Oncology Summit		S-019 SPACE PANEL: Advancing Future Space Exploration Medical System Design	S-020 HP SLIDE: Spatial Disorientation and Performance

Tuesday, May 7								
8:30 A.M. – 10:00 A.M.	6th MEMORIAL REINARTZ LECTURE—Floriz Wuyts “The Impact of Microgravity and Hypergravity on the Human Brain Studied with Advanced MRI Methods”							
10:30 A.M. – 12:00 NOON	S-021 CLINICAL PANEL: Aviation Dentistry	S-022 HP PANEL: Sharing Lessons from a Safety Investigation into DCS	S-023 SAFETY PANEL: Safety Centers Year-in-Review	S-024 CLINICAL PANEL: Cardiovascular Disease in Aircrew Consensus Guidelines	S-025 TRAVEL/TRANSPORT PANEL: Possible Effects of Aeromedical Evacuation in Preclinical Polytrauma Research Models		S-026 SPACE PANEL: Supplying a Pharmacy for Exploration Spaceflight: Challenges and Current Understanding	S-027 HP SLIDE: AE & Life Support Systems
12:00 NOON – 2:00 P.M.	AEROSPACE MEDICAL ASSOCIATION LUNCH AND BUSINESS MEETING							POSTERS: AsMA Committees, Constituents, and Affiliates
2:00 P.M. – 3:30 P.M.	S-028 CLINICAL PANEL: Adopting the Military for a Re-Parenting Experience	S-029 HP PANEL: This Is Your Brain	S-030 SAFETY SLIDE: Running on Fumes	S-031 CLINICAL PANEL: NAMI RAM Grand Rounds	S-032 TRAVEL/TRANSPORT PANEL: Moral & Ethical Issues for Healthcare Providers in Air Evacuation Transport		S-033 SPACE PANEL: ESAM Clinical Space Medicine	S-034 HP SLIDE: Brain Performance
4:00 P.M. – 5:30 P.M.	S-035 CLINICAL PANEL: Blue Forces: Complex Problems & Novel Solutions from Junior and Future Flight Surgeons	S-036 HP PANEL: 711th Human Performance Wing’s Response to the T-6A Unexplained Physiologic Episodes	S-037 SAFETY SLIDE: Safety in Military Aviation	S-038 CLINICAL PANEL: Nervous Gambling – Neurologic Disease Risks	S-039 TRAVEL/TRANSPORT SLIDE: Multinational Perspectives on Air Travel		S-040 SPACE PANEL: Medical Care for Analogue Space Missions	S-041 HP SLIDE: Human Performance and Pilot Assessment

Wednesday, May 8									
8:30 A.M. – 10:00 A.M.	S-042 CLINICAL PANEL: USN Aeromedical Disposition—Challenging Cases from NAMI	S-043 HP PANEL: A Few Lessons Learned, Some Current Trends, and Evolving Technologies for Enhancing HP in Aerospace Systems & Exploration	S-044 OTHER/HISTORY PANEL: Aerospace Medicine Board Review Series, Part I	S-045 CLINICAL PANEL: Risk Assessment in Aviation Medicine: Place Your Bets!	S-046 TRAVEL/TRANSPORT PANEL: From Aviation to Space – Panel of the German Society of Aerospace Medicine	S-047 CLINICAL PANEL: Grand Rounds, and AAMIMO, Part I	S-048 SPACE PANEL: Detecting, Defining, & Diagnosing Spaceflight Associated Neuro-ocular Syndrome (SANS)	S-049 HP PANEL: Noninvasive Brain Stimulation for Cognitive Performance Enhancement	Exhibit Hall S-050 HP POSTERS: Physiology
10:30 A.M. – 12:00 NOON	S-051 CLINICAL PANEL: USN Aeromedical Disposition – Wilson Disease in a Navy Pilot	S-052 HP SLIDE: G-LOC: From Fuge to Flight	S-053 OTHER/HISTORY PANEL: Aerospace Medicine Board Review Series, Parts 2 & 3	S-054 CLINICAL SLIDE: Oh, Chit! I’ve Been DQ’ed	S-055 TRAVEL/TRANSPORT PANEL: “Train the Way You Fight”: Operational Applications of Training and Research in AE	S-056 CLINICAL PANEL: Grand Rounds and AAMIMO, Part II	S-057 SPACE SLIDE: Suit Up for Space	S-058 HP SLIDE: Occupational Health	
12:00 NOON – 2:00 P.M.	SPECIAL LUNCHEONS—Aerospace Nursing Society, Aerospace Physiology Society, Society of NASA Flight Surgeons, Ibero-American Association of Aerospace Medicine, Wing								
2:00 P.M. – 3:30 P.M.	S-059 HP PANEL: Asking the Right Questions: Aeromedical Research & Pilot-Physicians	S-060 HP PANEL: USAF Special Operations Remote Warriors	S-061 OTHER/HISTORY PANEL: A Look Back on the Evolution of the Human Visual System in Military Aviation	S-062 CLINICAL SLIDE: Pilot Screening for Success	S-063 TRAVEL/TRANSPORT SLIDE: Tech Advances in Travel Medicine	S-064 CLINICAL PANEL: Grand Rounds and AAMIMO, Part III	S-065 SPACE PANEL: The Biomedical Legacy of Apollo 11	S-066 HP SLIDE: Mental Health & Decision Making	S-067 SPACE POSTERS: Space
4:00 P.M. – 5:30 P.M.	<b>S-068 PANEL: CLINICAL Amazon G—11th Annual RAM Bowl</b>								

Thursday, May 9									
8:15 A.M. – 9:15 A.M.	54th HARRY G. ARMSTRONG LECTURE— Adriaan Heerbaart “Navigating the European Skies: Money Makes the World Fly Safer!”								
10:00 A.M. – 11:30 A.M.	S-069 CLINICAL PANEL: Contingency Comprehensive Medical Readiness Program for Flight Surgeons	S-070 HP PANEL: Adjustment Disorders in Air and Space Operations	S-071 SPACE SLIDE: The Over/Under on Space Medicine	S-072 CLINICAL PANEL: Resident Research & QI/PI Presentations	S-073 CLINICAL SLIDE: Mind Blown: Alternobaria		S-074 OTHER/HISTORY PANEL: Impact of Translation Science on Building New Multidisciplinary Fields in Research, Part I	S-075 SPACE SLIDE: Gases and Ultrasound	Exhibit Hall S-076 CLINICAL POSTERS: Clinical Aerospace Medicine
11:30 A.M. – 1:30 P.M.	SPECIAL LUNCHEONS—Space Medicine Association								
1:30 P.M. – 3:00 P.M.	S-077 CLINICAL PANEL: Prevention Comprehensive Medical Readiness Program for Flight	S-078 HP PANEL: Research to Advance Training Aviators for Hypoxia Symptom Recognition & Mitigation	S-079 OTHER/HISTORY PANEL: Processes to Manage Ethical Challenges in Aerospace Medicine	S-80 CLINICAL PANEL: Aeromedical Risk Analysis Practice Updates, Part I			S-081 OTHER/HISTORY PANEL: Impact of Translation Science on Building New Multidisciplinary Fields, Part II	S-082 SPACE SLIDE: Cells in Space	S-083 SAFETY POSTERS: Safety and Fatigue
3:30 P.M. – 5:00 P.M.	S-084 CLINICAL SLIDE: Clinical Aerospace Medicine Around the World	S-085 HP PANEL: Ultra Long-Range Flights: Implications for Crew Members	S-086 OTHER/HISTORY SLIDE: Aerospace Medicine Professionals	S-087 CLINICAL PANEL: Aeromedical Risk Analysis Practice Updates, Part II			S-088 OTHER/HISTORY PANEL: From Sea to Space: Aerospace Medicine w/o Borders	S-089 SPACE SLIDE: Space Medicine Technology & Future Ops	

COLOR CODE	1. HUMAN PERFORMANCE (HP)	2. CLINICAL MEDICINE	3. TRAVEL & AIR TRANSPORT MEDICINE (ATM)	4. SPACE MEDICINE	5. SAFETY	6. OTHER/HISTORY
------------	---------------------------	----------------------	--	-------------------	-----------	------------------



Aerospace Medical Association  
320 South Henry Street  
Alexandria, VA 22314-3579  
(703) 739-2240  
[www.asma.org](http://www.asma.org)

# Aerospace Medicine sans Frontières

**AsMA's 90th Annual Scientific Meeting**  
**May 5–9, 2019**  
**Rio All Suite Hotel**  
**Las Vegas, NV**

**Early Bird Registration Through  
January 31—Huge Savings!!! Huge!**

**Register by April 30, 2019,  
for Advance Registration Discount**

**Online registration will remain open until the  
meeting date, but higher rates may apply.**

