

# **OPENING THE DOORS TO AEROSPACE MEDICINE**

**APRIL 30–MAY 4, 2017  
SHERATON DENVER  
DOWNTOWN HOTEL  
DENVER, CO**



# Opening the Doors to Aerospace Medicine

In **OPENING THE DOORS TO AEROSPACE MEDICINE** an objective is to encourage contributions from individuals and groups new to aerospace medicine and who are beginning to see how the ubiquitous nature of the flight environment is affecting their work. With an aging and more infirm population represented among the billions flying annually and the advance of commercial human spaceflight, there are new areas of scientific and medical research conducted away from the more established aerospace medical facilities. We are keen that everyone engaged in such research considers the advantages of bringing the results of their work to a scientific meeting where they have the chance to interact with many hundreds of aerospace medical specialists.

Aerospace medicine is truly multi-disciplinary and international. Our presentations come from diverse experts who will enhance the world's knowledge and understanding of the current challenges in Aerospace Medicine and demonstrate an impact on improving the health, safety, and human performance of those involved in aviation, space, and extreme environments. Our annual scientific meeting presents an opportunity to learn about the work of our colleagues from around the world, to share the knowledge and wisdom which we gain in our day-to-day work and practice, and is a great way to expand the overall community of aerospace medicine.

AsMA 2017 is opening the doors to health, safety, and human performance in aerospace environments.

The Program Committee, chaired by Patricia MacSparran, M.D., has organized a balanced program of sessions on human performance, aerospace medicine, travel medicine, space medicine, civil and military aviation medicine, and safety.

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.

## Educational Objectives

Based upon responses to a survey provided at the end of the 87th Annual Scientific Meeting in Atlantic City, NJ, the top 6 categories our members indicated a need for more information in were: 1) Human Performance/ Human Factors; 2) Aerospace Medicine; 3) Travel Medicine; 4) Space Medicine; 5) Operational Medicine; and 6) Accident Investigation. The 88th 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

- Aerospace Medicine Board Review, Aeromedical Grand Rounds, and "RAM Bowl"
- Special Panel on developing a research topic and preparing it for presentation
- Emerging Technologies
- Hypoxia, acceleration, and high altitude medical issues
- Unmanned aircraft systems
- Spatial disorientation
- Aerospace dentistry
- 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
- German and Spanish language aeromedical panels
- FAA Seminars for AMEs

## Educational Benefits

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

- This live activity is designated for a maximum of 22.5 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
- Nurses may receive CEUs from the Montana Nursing Association. Sessions available for credit will be identified in the program.
- MOC Available! Maintenance of Certification modules: Workshops, Panels, and Slide Sessions have 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 in three sections each year 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, and the panel on Aeromedical Ethics.

## Speed Mentoring

A special session on Tuesday afternoon is set up for a Speed Mentoring program. 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!

## 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

**\*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 providence of 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™*. 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.

## Special Sunday Workshops

### 1. Injury Analysis in Aerospace Accident Investigation

**Sunday 8:00 A.M. – 5:30 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)

New this year!!! The purpose of this workshop is to provide the basis for: 1) the appropriate methods of forensic evidence collection in the investigation of the biomechanics and biodynamics of aircraft accident injuries along with determination of the mechanism of injuries; 2) the role of forensic pathology in aircraft mishap investigations; and 3) the investigation of injury outcome in crashes to better understand the mechanism of injury and to formulate strategies to improve vehicles' occupant protection. Coordinated by Dr. Eduard Ricaurte, the workshop will be divided in two sessions.

### 2. Introduction to Aerospace Epidemiology

**Sunday 8:00 A.M. – 5:30 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 h of classroom lecture by IAMFSP members, and 2 h of guided practice with problems taken from real life analyses. Learners must bring a portable computer with the appropriate EpilInfo™ program for the operating system loaded. Please note that EpilInfo™ does not have a Macintosh compatible option. WiFi access is not required. The EpilInfo™ program can be downloaded from the CDCP web site for free.

### 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. 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 Col. Mark Coakwell and Dr. Richard Allnut 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 and are invited to attend. Continuing Medical Education and Maintenance of Certification credit will be available for completion of this workshop.

**Open the Doors 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 are available for participants.

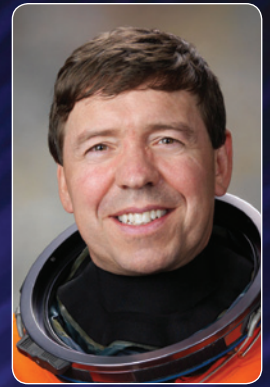
**Open the Doors to Opportunities**—to learn about the latest products and services from our many technical and scientific exhibitors; to experience three plenary lectures; to govern during the business luncheon, where you have the opportunity to help guide our association; to honor the best and the 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.

**Open the Doors to 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 open the door and come on in!**

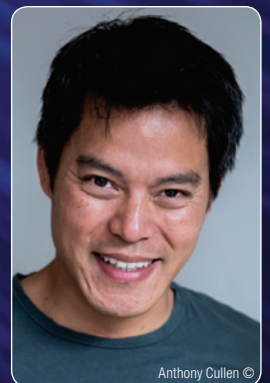
## Key Speakers



**63rd Bauer Lecturer**  
**Monday, May 1 (Wyle, sponsor)**  
**Michael R. Barratt,**  
**Astronaut/Physician, NASA**



**4th Reinartz Lecturer**  
**Tuesday, May 2**  
**(Reinartz Fund, sponsor)**  
**Michael A. Berry, M.D.,**  
**US Federal Air Surgeon**



**52nd Armstrong Lecturer**  
**Thursday, May 4**  
**(Environmental Tectonics Corporation, sponsor)**  
**Kevin Fong, M.B.S.**  
**UK physician and Futurist**  
**"Extremes; The Fastest Century"**

# Open the doors to Denver!

Contribute to your Association and meet your fellow Aerospace Professionals.



## 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 1, and a Luncheon on Wednesday, May 3.

Two tours are planned this year. Tuesday's Walking Tour will transport us on a journey through time of Denver History. We will experience the city from its Wild West past as a mining camp during the Gold Rush, and the "Gateway to the Rockies" to more recent history and influences in the current metropolis it has become. Thursday's Tour will be a 4-hour scenic bus tour through the Foothills of the Rocky Mountains, including Red Rocks Amphitheatre, Bear Creek Canyon, and Lariat Loop, with lunch on your own in Golden, CO.

## The Richard B. "Dick" Trumbo Preventive Medicine 5K Fun Run/Walk Monday, May 1

The start time is 6 a.m. The fee is \$10 and tickets must be purchased in advance. 5K will occur at an altitude in excess of 5,200 ft (1,600 m). Please be prepared for effects of altitude on your performance.

## Climate for May

Average highs are between 67 and 74° (19–23°C) and lows fall between 42 and 46°F (5–8 °C). May (mud season) has more precipitation than any other month, but only gets new snow about 25% of the time. The relative humidity usually peaks at 70% in the morning dropping to 35% by early afternoon.



## Altitude

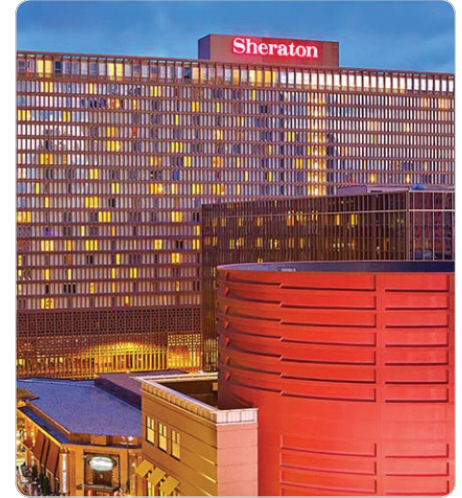
<http://guide.denverpost.com/lists/8-tips-avoid-mile-high-altitude-sickness/>

The Mile High City has 17% less oxygen pressure than cities at sea level, so don't be surprised if you come to town and become breathless over more than the scenery. Shortness of breath, throbbing headaches, and fatigue are just a few symptoms of altitude sickness. Fortunately, many people come and go symptom free. But if the elevation gets to you, here are 8 non-prescription tips you can try:

1. A slow ascent;
2. Hydrate (Gatorade™ is helpful);
3. Eat carbs;
4. Garlic soup;
5. Pranayama yoga breathing;
6. Plenty of sleep;
7. Extra iron;
8. Ginko.

## Transportation

From the airport you can take RTD Light Rail (<http://www.rtd-denver.com/GoogleTripPlanner.shtml>) with over 30 stations, including near the Sheraton. You can find out more about transportation in and around Denver at <http://www.denver.org/about-denver/transportation/>.



## Sheraton Denver Downtown Hotel

1550 Court Place, Denver, CO 80202, USA

Reservations 888-627-8405; 303-893-3333

All the standard amenities are available, including In-Room High Speed Internet Access, Multilingual Staff, Fully ADA Equipped rooms, Safe Deposit Boxes, Outdoor Heated Pool, Sheraton Fitness, Link@ Sheraton, Sheraton Club Lounge, Laundry/Dry Cleaning, and Pet Friendly Rooms. **For more information visit:** <http://www.sheratondenver-downtown.com/hotel-features>.

## Special AsMA Room Rates:

All attendees are offered the U.S. government employee per diem rate of \$178.00/night + taxes.

Please use the hotel reservation link found on the AsMA Registration webpage: <https://www.starwoodmeeting.com/book/AsMA2017>. Hotel room block is good through 5:00 p.m. Mountain time on April 05, 2017. Book early to ensure a room.

## 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.

## Advance Registration Form

88th Annual Scientific Meeting

DENVER, Colorado, APRIL 30 - May 4, 2017

Information for our records			
Name:	Degree/Credentials:		<p><b>Early Bird Registration</b> runs January 1 – 31 (Mail registrations must be postmarked with a January date)</p> <p><b>We strongly encourage online registration</b> at <a href="http://www.asma.org/scientific-meetings/asma-annual-scientific-meeting/registration">www.asma.org/scientific-meetings/asma-annual-scientific-meeting/registration</a></p> <p><b>Advance Registration Closes April 25.</b> A \$50 administrative fee is applied to all cancellations. No cancellations or refunds after April 25.</p> <p>Spouses who have registered with the Wing and require CME credits may do so at the AsMA member fee.</p>
Organization:	Title:		
Street Address			
City:	State/Country:	Zip Code:	
E-mail:			
Telephone Number:	Fax Number:		

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

Online registration is available at [www.asma.org/annual-meetings/registration](http://www.asma.org/annual-meetings/registration)

You must 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

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

Registration Fee	Early Bird <sup>†</sup> 1/1 – 1/31	Advance 2/1 – 4/25	At-The-Door 4/30 – 5/4	Registration Fee Remitted
<input type="checkbox"/> Member	\$375 <sup>†</sup>	\$450	\$550	
<input type="checkbox"/> Non-Member	\$650 <sup>†*</sup>	\$725 <sup>*</sup>	\$825 <sup>*</sup>	
<input type="checkbox"/> Non-Member Presenter	\$550 <sup>†*</sup>	\$625 <sup>*</sup>	\$725 <sup>*</sup>	
<input type="checkbox"/> Residents	\$275 <sup>†</sup>	\$350	\$350	
<input type="checkbox"/> Students	\$50 <sup>†</sup>	\$100	\$100	
FAA-AME Seminar §	\$250 <sup>†</sup>	\$310	\$310	

\*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.

§Fee Covers AsMA overhead costs. CME credit for the FAA Seminar and AsMA Sessions attended is included.

Add CME and MOC Credits				
<input type="checkbox"/> Add Member CME Credits	\$150	\$150	\$150	
<input type="checkbox"/> Add Member CME and MOC Credits	\$200	\$200	\$200	
<input type="checkbox"/> Add Non-Member CME Credits	\$200	\$200	\$200	
<input type="checkbox"/> Add Non-Member CME and MOC Credits	\$250	\$250	\$250	
Subtotal for Registration Fee ►				

Fax registration form with credit card information to: 703-739-9652.  
(see reverse for workshops and events).

## Advance Registration Form

88th Annual Scientific Meeting

DENVER, Colorado, APRIL 30 - May 4, 2017

Note: Workshops are Limited. Only one per day, per attendee. Register Early.

Date	Workshop Name	Fee	Amount Paid	
Sunday, April 30, 8:00 a.m.-5:30 p.m.	<input type="checkbox"/> Workshop #1 "Injury Analysis in Aerospace Accident Investigation" (MAX 50)	\$200		
Sunday, April 30, 8:00 a.m.-5:30 p.m.	<input type="checkbox"/> Workshop #2 "Introduction to Aerospace Epidemiology" (MAX 75)	\$200		
Sunday, April 30, 9:00 a.m.-4:00 p.m.	<input type="checkbox"/> Workshop #3 "Aircrew Fatigue" (MAX 75)	\$150		
Sunday, April 30, 12:00 p.m.-3:00 p.m.	<input type="checkbox"/> Workshop #4 "Aerospace Medicine Faculty Development" (MAX 50)	\$75		
Date	Events	No. of Tickets	Fee Per Ticket	Total Fee
	<input type="checkbox"/> Additional Meeting Program (ONLY for AsMA Members who receive their journal by mail)		\$10	
Sunday, April 30	<input type="checkbox"/> AsMA Welcome to Denver (NOTE: All Attending Event Must Have Tickets)		\$10	
Monday, May 1, 6:00 a.m.	<input type="checkbox"/> Richard B. "Dick" Trumbo 5k Fun Run (advance purchase only)		\$10	
Monday, May 1	<input type="checkbox"/> Civil Aviation Medical Association Luncheon (advance purchase only)		\$45	
Monday, May 1	<input type="checkbox"/> Society of USAF Flight Surgeons Luncheon (advance purchase only)		\$45	
Monday, May 1	<input type="checkbox"/> U.S. Navy Luncheon (advance purchase only)		\$45	
Monday, May 1	<input type="checkbox"/> U.S. Army Aviation Medical Association Luncheon (advance purchase only)		\$45	
Monday, May 1	<input type="checkbox"/> Aerospace Human Factors Association Luncheon (advance purchase only)		\$45	
Monday, May 1	<input type="checkbox"/> Corporate Forum Luncheon (Advance purchase only) (MUST BE A CORPORATE MEMBER, EXHIBITOR, OR CORPORATE SPONSOR)		\$0	
Monday, May 1	<input type="checkbox"/> Fellows Dinner (advance purchase only) (must be a fellow or guest of AsMA fellow)		\$85	
Tuesday, May 2	<input type="checkbox"/> Associate Fellows Breakfast (advance purchase only)		\$45	
Tuesday, May 2	<input type="checkbox"/> AsMA Annual Business Meeting (Free Attendance; Ticket required for meal) (advance purchase only)		\$45	
Tuesday, May 2	<input type="checkbox"/> Access to Both Events: Reception to Honor International Members and Associate Fellows/Fellows Reception		\$45	
Wednesday, May 3	<input type="checkbox"/> Aerospace Physiology Society Luncheon		\$45	
Wednesday, May 3	<input type="checkbox"/> Society of NASA Flight Surgeons Luncheon		\$45	
Wednesday, May 3	<input type="checkbox"/> Aerospace Nursing Society Luncheon		\$45	
Wednesday, May 3	<input type="checkbox"/> Iberoamerican Association of Aerospace Medicine Luncheon		\$45	
Thursday, May 4	<input type="checkbox"/> Space Medicine Association Luncheon		\$45	
Thursday, May 4	<input type="checkbox"/> AsMA Honors Night Banquet (Black Tie Optional)		\$85	
	<b>Charitable Donation to the AsMA Foundation</b> (Enter Amount in the "Total Fee" Column)			
			Subtotal of Events ▶	
			Total Amount Due (Registration Subtotal + Workshop + Subtotal of Events) ▶	

Method of Payment			
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		
Name as it appears on card: (Please Print)			
Credit Card No:	Expiration Date:	Security Code:	
Street:	City:	Mail Code:	
Signature:	Country:		
<p><b>Fax with credit card information to:</b> 703-739-9652</p> <p><b>Or mail with payment to:</b> Aerospace Medical Association 320 S. Henry Street Alexandria, VA 22314-3579.</p>			

Payment must accompany form. All payments are in U.S. funds. Registrants submitting via fax must include credit card information.

Please remember to include both sides when faxing. Use only one method to register.

# Meeting Schedule

88th Annual Scientific Meeting

DENVER, Colorado, APRIL 30 - May 4, 2017

Sunday								
8:00 a.m. - 5:30 p.m.	Sunday Workshops: S-001. INJURY MECHANISMS ANALYSIS IN AIRCRAFT & AUTOMOBILE ACCIDENT INVESTIGATIONS WORKSHOP							
8:00 a.m. - 5:00 p.m.	S-002. INTRODUCTION TO AEROSPACE EPIDEMIOLOGY							
9:00 a.m. - 4:00 p.m.	S-003. AIRCREW FATIGUE: CAUSES, CONSEQUENCES, AND COUNTERMEASURES							
12:00 noon - 3:00 p.m.	S-004. AEROSPACE MEDICINE FACULTY DEVELOPMENT WORKSHOP							
Monday								
FAA will be in IM Pei Tower, Majestic Ballroom								
8:00 a.m. - 9:30 a.m.	PLAZA BALLROOM OPENING CEREMONIES AND 63rd LOUIS H. BAUER LECTURE—Michael R. Barratt, M.D.							
	Plaza A/B 540	Plaza D/E 540	Plaza F 360	Gov. Square 14 183	Gov. Square 15 183	Gov. Square 12 107	Gov. Square 11 94	Gov. Square 10
10:30 a.m. - 12:00 noon	S-006 PANEL: CLINICAL Occupational Injuries in Cabin Crew	S-007 PANEL: HP Sleep Issues in Demanding Operational Contexts	S-008 PANEL: SPACE Spaceflight Decompression Sickness	S-009 SLIDE: CLINICAL Can I Fly with This?	S-010 PANEL HP Augmenting Performance with Transcranial DC	S-011 PANEL: ATM Flight Safety After the Germanwings Accident	S-012 PANEL: CLINICAL Brain Matters	S-013 PANEL: OTHER Aircraft Air Quality Measurements
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-014 PANEL: CLINICAL Premature or Traumatic Birth—Impact on Flight Certification	S-015 SLIDE: HP Fatigue	S-016 PANEL: SPACE Spaceflight Medical Support—Russia	S-017 PANEL: CLINICAL (In Spanish) Advances in Aerospace Medicine in IberoAmerica	S-018 PANEL: HP Battlefield Airmen Verification for Flight Surgeons	S-019 PANEL: ATM Prescribing Cabin Altitude Restriction for Patient Aeroevac	S-020 PANEL: CLINICAL Research in Aerospace Medicine, Pt. 1: Initiating the Research Effort	S-021 PANEL: CLINICAL Aeromedical Risk Analysis Practice Updates: Part 1
4:00 p.m. - 5:30 p.m.	S-022 PANEL: CLINICAL Eating Disorders in Military—Impact on Aerospace Medicine	S-023 PANEL: HP Psychological Readiness Eval. & Medical Standards for Battlefield Air Duty	S-024 SLIDE: SPACE Space Environment Countermeasures & Risks	S-025 PANEL: CLINICAL Advances in Diagnosis Impact Aviation Medicine	S-026 PANEL: HP Battlefield Airmen Systems in Support of HP Optimization	S-027 PANEL: ATM Airline Medical Support—Adapt or Perish	S-028 PANEL: CLINICAL Research in Aerospace Medicine, Pt. 2: Conducting Analyzing, Reporting	S-029 PANEL: CLINICAL Aeromedical Risk Analysis Practice Updates: Part 2
Tuesday								
8:30 a.m. - 10:00 a.m.	GRAND BALLROOM—4th MEMORIAL REINARTZ LECTURE—Michael A. Berry, M.D.							
10:30 a.m. - 12:00 noon	S-030 PANEL: CLINICAL Sex and the Naval Aviator: HPV Disease Burden	S-031 PANEL: HP Neurologic Effects of Hypobaric Exposure	S-032 PANEL: SPACE Centrifuge-Simulated Suborbital Spaceflight: Training and Anxiety	S-033 PANEL: SAFETY Characterizing the Naval Biodynamics Laboratory Legacy Impact Response Collection in the Biodynamics Data Resource	S-034 PANEL: HP Future of Aerospace Medicine with Leadership Development, Teaching and Learning Frameworks	S-035 SLIDE: ATM Design & Aircraft Considerations for Prevention	S-036 PANEL: OTHER (German) Research & Clinical Practice in Aerospace Medicine	S-005a PANEL: CLINICAL Board Review Pt. 1
12:00 noon - 2:00 p.m.	AEROSPACE MEDICAL ASSOCIATION LUNCH AND BUSINESS MEETING							
2:00 p.m. - 3:30 p.m.	S-037 PANEL: CLINICAL Motivation to Fly	S-038 PANEL: HP Risk Management: Biology, Psychology, and Training	S-039 SLIDE: SPACE Learning from Space	S-040 PANEL: SAFETY USAF Proactive Safety Programs—Education & Validation	S-041 PANEL: HP Hyperbaric Oxygen Toxicity: NASA Neutral Buoyancy Lab	S-042 SLIDE: ATM Guidelines & Processes for Inflight Medical Emergencies	S-043 PANEL: OTHER Penguins and Kiwis—Non-Flyers who Opened the Doors to Aerospace Medicine	S-005b PANEL: CLINICAL Board Review Pt. 2
4:00 p.m. - 5:30 p.m.	S-044 PANEL: CLINICAL Advanced Aerospace Medicine for International Medical Officers (AAMIMO) Case Reports	S-045 SLIDE: HP Aerospace Physiology in Action	S-046 SLIDE: SPACE Human System Integration in Exploration Habitats	S-047 SLIDE: SAFETY Challenges, Mitigation, and Investigations	S-048 PANEL: HP Everything Old is New Again	S-049 SLIDE: OTHER Health & Welfare of Aircrew Pt. 1	S-050 PANEL: OTHER Aerospace Dentistry	S-005c PANEL: CLINICAL Board Review Pt. 3
Wednesday								
8:30 a.m. - 10:00 a.m.	S-051 PANEL: CLINICAL Aerospace Medicine Resident Grand Rounds: Pt 1	S-052 PANEL: OTHER Rocky Mountain High: Civil Medical Operations in a Mountain Environment	S-053 SLIDE: SPACE Advances in Space Medicine	S-054 SLIDE: SAFETY Human Factors in Aviation Protection and Safety	S-055 PANEL: CLINICAL Complex Problems, Novel Solutions: Jr. USAF Flight Surgeons Leading Innovation	S-056 PANEL: ATM Harmonization of Aeromedical Assessments: European CMO Forum	S-057 PANEL: SPACE Lessons from MOL: How Manned Orbiting Laboratory Contributed to Aerospace Medicine	EXHIBIT HALL 10:00-12:00 S-058 POSTERS: HP Hypoxia & Hypo/Hyperbaria, Musculoskeletal Issues & Acceleration
10:30 a.m. - 12:00 noon	S-059 PANEL: CLINICAL Aerospace Medicine Resident Grand Rounds: Pt 2	S-060 PANEL: HP Operation Vision Research	S-061 SLIDE: SPACE Physiology of Spaceflight	S-062 PANEL: SAFETY Aerospace Safety Centers Year in Review: 2016	S-063 SLIDE: CLINICAL Brains, Blood, Breathing, and Worms	S-064 PANEL: ATM Evidence in En Route Care Simulation and Training Research	S-065 PANEL: OTHER Apollo 1 Mishap: Causes and Consequences from the Aeromedical Perspective	
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-066 PANEL: CLINICAL Aerospace Medicine Resident Grand Rounds: Pt 3	S-067 SLIDE: HP Cognition & Performance	S-068 SLIDE: SPACE Future of Space Medicine I	S-069 SLIDE: SAFETY Medical Causes of Aircraft Accidents	S-070 PANEL: CLINICAL USN Aeromedical Disposition—Challenging Cases from NAMI	S-071 SLIDE: OTHER Application of Aeromedical Principles to Healthcare Practices	S-072 PANEL: CLINICAL Adaptability Rating for Military Aviation	EXHIBIT HALL 1:30-3:30 S-073 POSTERS: HP Displays, Performance, Fatigue & Vision
4:00 p.m. - 5:30 p.m.	GRAND BALLROOM S-074 PANEL: CLINICAL RAM Bowl	SLIDE: HP S-075 Dodging Disorientation	SLIDE: SPACE S-076 Future of Space Medicine II	SLIDE: SAFETY S-077 Eyes-On	SLIDE: OTHER S-078 Health & Welfare of Aircrew Pt. II			
Thursday								
8:15 a.m. - 9:15 a.m.	GRAND BALLROOM—52nd HARRY G. ARMSTRONG LECTURE—Kevin Fong, M.B.B.S.							
10:00 a.m. - 11:30 noon	S-079 SLIDE: HP Vision	S-080 SLIDE: HP Emerging Research on Acceleration	S-081 PANEL: SPACE Mars Habitat Analogs	S-082 PANEL: CLINICAL NATO & EACTS Aviation Cardiology Working Group: Cardiovascular Challenges for Flight Surgeons	S-083 PANEL: HP Cutting Edge Technology in Optimizing Human Performance	S-084 PANEL: OTHER Ethical Dilemmas in Aerospace Medicine	S-085 SLIDE: CLINICAL From the Neck Up	EXHIBIT HALL 9:30-11:30 S-086 POSTERS: CLINICAL Space Medicine and Other Aeromedical Interests
11:30 a.m. - 1:30 p.m.	SPECIAL LUNCHEONS—Space Medicine Association							
1:30 p.m. - 3:00 p.m.	S-087 SLIDE: HP Hypoxia: The Hangover Part Deux	S-088 PANEL: HP Remote Combat Stress Impact and Mitigation: ISR in the Kill Chain	S-089 PANEL: SPACE Surgical Care in Space—Future Innovations—Pt 1	S-090 PANEL: CLINICAL Resident Research Q/I/Pt: Pt. 1	Q/I/Pt: Pt 1 S-091 SLIDE: HP Operative Performance Interface in Aerospace Operations	S-092 PANEL: ATM Impact of Aeromedical Evacuation on Patients	S-093 SLIDE: CLINICAL Cardiovascular Disease and Risk Factors	EXHIBIT HALL 1:30-3:30 S-094 POSTERS: CLINICAL Clinical and Operational Aerospace Medicine
3:30 p.m. - 5:00 p.m.	S-095 SLIDE: CLINICAL Personality & Mental Health Screening & Support	S-096 PANEL: HP Overview for Hearing Risk and Protection in Military Aviators	S-097 PANEL: SPACE Surgical Care in Space—Future Innovations—Pt 2	S-098 PANEL: CLINICAL Resident Research Q/I/Pt: Pt 2	S-099 SLIDE: ATM Testing & Equipment in Aeromedical Environments	S-100 PANEL: OTHER AMHP Journal Seminar on Writing, Submitting and Reviewing	S-101 SLIDE: HP Musculoskeletal Injury, Pain and Gain	
COLOR CODE	HUMAN PERFORMANCE (HP)	CLINICAL MEDICINE	TRAVEL & AIR TRANSPORT MEDICINE (ATM)	SPACE MEDICINE	SAFETY	OTHER/HISTORY		



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



# Opening the Doors to Aerospace Medicine

AsMA's 88th Annual Scientific Meeting  
April 30–May 4, 2017  
Sheraton Denver Downtown Hotel, Denver, CO

Early Bird Registration until January 31  
Huge Savings!!! Huge!  
REGISTER BY APRIL 25, 2017, for Advance Registration Discount

