

# 87th AsMA Annual Scientific Meeting: "Human Performance and the Year of the Aerospace Medicine Professional"



Harrah's Resort, Atlantic City, NJ  
April 24 - 28, 2016

## Call for Papers

**Deadline: October 31, 2015**  
**No Exceptions!**

The Aerospace Medical Association's 2016 Annual Scientific Meeting will be held in Atlantic City, NJ. This year's theme is "Human Performance and the Year of the Aerospace Medicine Professional."

Based upon the responses to a survey provided at the end of the 86th Annual Scientific Meeting in Orlando, FL, our members requested more information in six major categories: 1) Human Performance/Human Factors; 2) Aerospace Medicine; 3) Travel Medicine; 4) Space Medicine; 5) Operational Medicine; and 6) Accident Investigation. We plan to focus the 87th Annual Scientific Meeting program in these six major categories.

This is AsMA's "Year of the Aerospace Medicine Professional." This aerospace medicine theme is partially represented by cutting edge areas of Human Performance, Human Systems Integration, Human Space Flight, Unmanned Aerial Systems, Commercial Aviation, Mishap / Injury Avoidance, Pilot Mental Health, G-Induced Loss of Consciousness (G-LOC), Hypoxia, Sensory Protection / Optimization, Spatial Disorientation (SD) and Controlled Flight into Terrain (CFIT) Mitigations and Decompression Sickness (DCS) Treatment. Prevention and, if need be, treatment of Aerospace related injury and illness is the single unifying thread that ties all Aerospace medicine specialists together.

The sessions for our 87th Annual Scientific Meeting will cover the latest findings in the fields of aerospace medicine and human performance, and related fields such as aerospace nursing, and aerospace physiology. The meeting objectives are aligned with the theme and abstracts addressing these objectives are encouraged. The participant will:

1. Discover evolving trends and best practices in aerospace medicine;
2. Apply principles of evidence-based medicine, operational risk management, and aeromedical decision-making in aircrew selection and clinical aerospace medicine practice;
3. Analyze mechanical and human performance and systems integration factors in aviation mishaps and safety programs;
4. Identify mechanical, biological, social, cognitive, and systems factors that impact optimal human performance and decision making in the full spectrum of aerospace operations;
5. 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.

Aerospace medicine is truly multi-disciplinary and international. Our annual scientific meeting is an opportunity to learn about the work of our colleagues from around the world, and to share the knowledge and wisdom which we gain in our day-to-day work and practice. It is a great way to learn from and expand the overall community of aerospace medicine.

### AsMA Abstract Submission Process

All abstracts must be submitted via the electronic submission system linked to the association's web site: [www.asma.org](http://www.asma.org).

### ***New this year!***

#### ***Abstract Templates, Examples, and Panel Guidance***

In response to the goals outlined by AsMA President Kris Belland and feedback from the membership to enhance the scientific and educational value and rigor of the Annual Scientific Meeting, the Scientific Program Committee has developed the following guidelines for abstracts and panels. Abstracts will fall under two categories: (1) Original Research and (2) Education. The Education category is further subdivided into (a) Program / Process Review, (b) Education / Tutorial, and (c) Case Study: Clinical or Human Performance. Templates and examples (previously published in the AsMA journal) are provided for each type. These detail section headings, e.g., Introduction, Methods, etc., and the specific type of information that should be included under each heading. How well authors abide by these guidelines will be one of the criteria used to determine acceptance of abstracts.

#### **Individual Abstract Templates and Examples**

In the submission website, authors will have a single field to enter their abstract. Authors will be asked to include the sections headings listed for each abstract type. In the templates below, specific instructions for each heading (listed in bold font) are given in italics.

- I. Four types of submissions
  - a. Slide (includes 3 MOC questions)
  - b. Poster
  - c. Panel (includes 3 MOC questions; linked to panel overview)
  - d. Workshop (includes 3 MOC questions per hour of presentation)
- II. Two categories
  - A. Original Research
  - B. Education
    1. Program / Process Review
    2. Education / Tutorial
    3. Case Study: Clinical or Human Performance
- III. Templates

**A. ORIGINAL RESEARCH**—This type of abstract describes the results and significance of new research undertaken to address gaps in the current knowledge of aerospace medicine or human performance. [Example: Abstract 146. *Aerosp. Med. Human. Perform.* 2015; 86(3):204.]

i. **INTRODUCTION:** *This section includes the background including a statement of the problem and why it is important, the status of the current research, and the hypothesis to be tested.*

ii. **METHODS:** *This section includes a brief description of how the study was conducted, the number, type and gender*

of the subjects and how they were selected and grouped. It should also include the metrics collected, how they were measured and how frequently they were recorded. The types of scales or questionnaires administered should be identified. Environmental conditions and administered medications should be described. In addition, a summary of the statistical methods should be provided. A statement concerning ethics approval for studies using human or animal subjects is also required.

iii. **RESULTS:** This section includes a summary of the data and metrics of operational and/or statistical significance. "Results will be discussed" are not acceptable.

iv. **DISCUSSION:** This section interprets the meaning of the results in terms of their application to the operational/clinical/scientific community and suggests areas for future research.

## **B. EDUCATION**

**1. Program / Process**--This type of abstract can describe a new Service thrust, e.g., identifying capability gaps, or reviews of critical areas (safety). [Example: Abstract 228. *Aerosp. Med. Human. Perform.* 2015; 86(3):230.]

i. **MOTIVATION:** This section describes why this is important to AsMA attendees, and why this needs to be addressed now.

ii. **OVERVIEW:** This section concisely describes the effort and how it applies to current or future gaps.

iii. **SIGNIFICANCE:** This section describes (1) the operational or clinical significance, (2) how it will advance aeromedicine / human performance, and (3) address whether it supports cross Service / International / Military – Civilian spheres.

**2. Tutorial**--This type of abstract describes new tools, models, techniques, methodologies pertinent to civilian and military aerospace medicine and human performance. [Example: Abstract 059. *Aviat. Space Environ. Med.* 2013; 84(4):296.]

i. **PROBLEM STATEMENT:** This section summarizes what will be covered, e.g., list of topics or syllabus.

ii. **TOPIC:** Description of new technology, procedure, methodology.

iii. **APPLICATIONS:** This section details how the new material will be implemented and how broadly it applies to aerospace medicine and human performance.

iv. **RESOURCES:** This is an optional section to provide citations where additional information can be found.

**3. Case Study**--Clinical or Human Performance--This type of abstract describes the analysis of an individual clinical or operational case that is not a research study but provides pertinent information directly applicable to aeromedical practices, safety or human performance. [Example: Abstract 153. *Aerosp. Med. Human. Perform.* 2015 (3):206.]

i. **PROBLEM STATEMENT:** This section concisely summarizes the case.

ii. **BACKGROUND / LITERATURE REVIEW:** This section describes the importance of the case and provides supporting evidence.

iii. **CASE PRESENTATION:** This section describes the event.

iv. **OPERATIONAL / CLINICAL RELEVANCE:** This section explains the applicability to civilian and military operations.

## **PANEL GUIDANCE**

Feedback the Program Committee has received concerning panels is that they contain too many presentations and there is little time for discussion. Also, that some abstracts within panels are not well coordinated and it is difficult for meeting attendees to schedule time appropriately to view presentations.

To address this, the following guidelines will be instituted.

1. Panels should be structured using the Original Research or Education categories provided for individual abstracts.

2. Panels must be composed of a coordinated sequence of abstracts (maximum of 5) that follow a theme and flow logically from one to another supporting the central theme. See the template below.

a. It is the responsibility of the Panel Chairs to ensure that the abstract authors include in the opening section (e.g., INTRODUCTION) or closing sections (e.g., DISCUSSION) how the abstract relates to the Panel theme.

b. Unrelated abstracts from a laboratory or organization do not constitute a Panel. [If the Panel theme is not clearly identified and/or the abstracts do not support a central theme, the individual abstracts may be unbundled and evaluated as separate slide or poster abstracts.]

3. Panels will be structured to include time for a focused moderated discussion by the Chairs. Panel Chairs will be asked to prepare questions prior to the Scientific Meeting to facilitate a discussion with the audience. Individual presentations within Panels should be timed to allow for at least a 15 minute moderated discussion.

4. During the Meeting, each Panel speaker should cite or link directly to the panel theme in their introduction and discussion and at the end of their talk should provide segues to the next abstract in the panel.

Example outline of an individual Original Research abstract supporting a Panel:

**INTRODUCTION:** This section cites or links directly to the panel theme and describes how this talk contributes to panel focus; includes the background including a statement of the problem and why it is important, the status of the current research, and the hypothesis to be tested.

**METHODS:** This section includes a brief description of how the study was conducted, the number, type and gender of the subjects and how they were selected and grouped. It should also include the metrics collected, how they were measured and how frequently they were recorded. The types of scales or questionnaires administered should be identified. Environmental conditions and administered medications should be described. In addition, a summary of the statistical methods should be provided. A statement concerning ethics approval for studies using human or animal subjects is also required.

**RESULTS:** This section includes a summary of the data and metrics of operational and/or statistical significance. "Results will be discussed" are not acceptable.

**DISCUSSION:** This section interprets the meaning of the results in terms of their application to the operational/clinical/scientific community and suggests areas for future research. It ends with a link back to overall panel goals or theme to provide segues to next abstract in the panel.

(Example: Panel Overview XCV. *Aerosp. Med. Human Perform.* 2015; 86(3):311.)

**Accepted abstracts will be published in *Aerospace Medicine and Human Performance*.**

## Sunday Workshops

Sunday Workshops generally run from 9:00 a.m. to 3:00 p.m. Rules for workshops are similar to those for Panels (above). Overview abstracts should reflect the material to be presented in this long format for up to 5 hours of CME credit. Three MOC questions per hour of presentation will be required. Individual abstracts must be entered for each presenter and all necessary information must be entered in the same manner as all other abstracts, including conflict of interest statements. Course materials should be made available for registrants. A separate fee is charged for Workshops registration. For additional information contact Jeff Svntek, Executive Director, at [jsvntek@asma.org](mailto:jsvntek@asma.org).

## SUBMITTING YOUR ABSTRACT

Click on the link to the abstract submission site--available on the AsMA home page and Meetings page on or about **September 1, 2015. You will need to create a new account on this site.** Authors with questions regarding the abstract submission process should contact AsMA directly at (703) 739-2240, x101 (Ms. Pam Day); or e-mail [pday@asma.org](mailto:pday@asma.org).

**Please note:** The following information is required during the submission process: Abstract title, presenting author information (including complete mailing and e-mail addresses), topic area (from list provided on back of form), contributing authors and their e-mails and institutions, abstract (**LIMIT: 325 words**) and learning objectives (the Accreditation Council for Continuing Medical Education-ACCME requires a brief sentence on the speaker's learning objectives for the audience). In addition, three (3) multiple choice questions and answers will be required for each presentation for Maintenance of Certification (MOC). Read instructions online for further details.

## Financial Disclosure/Conflict of Interest/Ethics

Abstracts will not be accepted without a financial disclosure/conflict of interest form. The form is part of the submission website. The presenting author must agree to comply. Scientific presentations at AsMA-sponsored events will adhere to the highest standards of scientific ethics, including appropriate acknowledgment or reference to scientific and/or financial sources. Presenters must avoid the endorsement of commercial products in their abstracts and during their presentations. There must be no advertisements on Posters, AV, or handout materials.

## Presentation Retention Policy

AsMA will use live capture to make presentations from the Meeting available to members / attendees after the meeting. Authors are required to provide permission for live capture and a nonexclusive license to repurpose the content. An electronic copy of the presentation suitable for release at the time of the presentation must be provided. Details will be provided in the abstract submission process.

## Permissions and Clearances

It is the author's responsibility to obtain all necessary permissions and clearances prior to submission of the abstract. AsMA assumes no liability or responsibility for the publication of any submitted material.

## Presentations

**Slide and Panel** presentations will be organized by topic area and presented during 90-minute blocks of time. Individual slide (PowerPoint) presentations are limited to 15 min (including 5 min for Q&A). **Poster** sessions are assigned a display space (4 x 8 ft boards) for 90 min. **Please note:** The Scientific Program Committee strives to honor the presenter's desired presentation

format, but for reasons such as space limitations or dissimilar content, an abstract may be changed to an alternative presentation format. Assignment of an abstract to either a poster or a slide presentation will be recommended by the Scientific Program Committee, but the final decision will be made by the Program Chair.

## Acceptance Process

Abstracts will be reviewed by a minimum of three members of the AsMA Scientific Program Committee. Acceptance will be based on the abstract's originality, relevance, and scientific quality, and adherence to the guidelines provided. Criteria for rejection include, but are not limited to, insufficient, inconsistent, or ambiguous data (NOTE: It is insufficient to state, "Results will be discussed"); commercialism; or reviews of previously published literature. Presenters are limited to one senior-authored presentation without prior permission of the Scientific Program Committee Chair, Barry Shender at: [sciprogram@asma.org](mailto:sciprogram@asma.org). Following review by the Scientific Program Committee in November, all contributors will receive a notification of acceptance or rejection by e-mail.

## Abstract Withdrawal

Withdrawing abstracts is strongly discouraged. However, if necessary, a request to withdraw an abstract should be sent to: Barry Shender, the Scientific Program Chair, at [sciprogram@asma.org](mailto:sciprogram@asma.org); and Pam Day at [pday@asma.org](mailto:pday@asma.org). The request for withdrawal must include the abstract title, authors, ID number, reason for withdrawal. Due to publishing deadlines, withdrawal notification should be received by **January 15, 2014**. As abstracts are published in *Aerospace Medicine and Human Performance* prior to the scientific meeting, a list of abstracts withdrawn or not presented will be printed in the journal following the annual meeting.

**PLEASE NOTE: Presenters (including panelists) are required to register for the meeting.** There is a discounted fee for non-member presenters. Registration limited to the day of presentation will be available onsite.

**TOPIC AREAS:** (These will be listed on a drop-down menu on the submission site. They are used to organize the abstracts into sessions.)

### 1: Human Performance

- 1.1 Aerospace Physiology
- 1.2 Exercise Physiology
- 1.3 Hyperbaric Physiology
- 1.4 Acceleration
- 1.5 Fatigue
- 1.6 Neurophysiology/Vision
- 1.7 Aerospace Human Factors

### 1.8 Aerospace Human Systems Integration

- 1.9 Psychology/Psychophysiology
- 2: Clinical Medicine**
- 2.1 Aviation Medicine (Aerospace Medicine)
- 2.2 Health Promotion and Wellness Programs

- 2.3 Medical Standards / Aircrew Health
- 2.4 Occupational / Environmental Medicine
- 2.5 Operational Medicine
- 2.6 Hyperbaric Medicine

### 3: Travel and Transport Medicine

- 3.1 Travel Medicine
- 3.2 Aeromedical Transport / Air Evacuation
- 3.3 Air Transport Medicine

### 4: Space Medicine

- 4.1 Space Medicine (Aerospace Medicine)
- 4.2 Space Operations

### 5: Safety and Survivability

- 5.1. Escape / Impact
- 5.2. Light Safety/Accident Investigation

### 6: Other

- 6.1 History of Aerospace Medicine
- 6.2 Other Related Topics

Follow the link to the abstract submission site on our home page: [www.asma.org](http://www.asma.org)  
**Site opens September 1 and closes October 31, 2015 (NO EXCEPTIONS!!!!!!!)**