

# 92nd AsMA Annual Scientific Meeting: "Scientia ex Machina"

Peppermill Resort Hotel, Reno, NV, USA May 22 - 26, 2022

# **Call for Abstracts**

# Deadline: November 1, 2021 No Exceptions!

The Aerospace Medical Association's 2022 Annual Scientific Meeting will be held in Reno, NV, USA. The theme for this year's Annual Scientific Meeting is "Scientia ex Machina" and its impact during the next 10 years. Countless movies, books and stories have addressed the specter of a dystopic future due to the rise of autonomous computer/machine devices. In the last decade, the real world has seen an explosion of information technology (IT) and artificial intelligence (AI) in ways that were unanticipated affecting how we develop and share information, and there is no indication this will abate during the next decade. In short, we are becoming dependent on "knowledge from the machine!" So, our guestion is how this will affect AsMA's mission to "apply and advance scientific knowledge to promote and enhance health, safety, and performance of those involved in aerospace and related activities?" We cannot predict where we will be in 2032. But we can start asking questions about the impact of technology on the role of humans in aviation and space, the field of aerospace medicine, the meaning of human performance, and how this will alter the aerospace medicine community, practice, and research.

The 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 92nd Annual Scientific Meeting welcomes abstracts in the many areas related to Aerospace Medicine. For a complete list see the box on p. 2 of this form.

# ASMA ABSTRACT SUBMISSION PROCESS (LIMIT: 350 words/2500 characters including spaces)

All abstracts must be submitted via the electronic submission system linked to the association's web site: https://www.asma.org.

**ATTENTION:** You <u>MUST</u> use personal email addresses when entering your abstracts and those of your co-authors.

# **ABSTRACT TYPES AND CATEGORIES**

The Annual Scientific Meeting highlights several types of presentation formats. Posters are on display for two full conference days, each in its assigned space. Authors will be asked to present their poster for a single designated 120-min period on one of these days. PowerPoint presentations will be organized by topic area and presented during 90-minute blocks of time, 6 periods of 15 minutes each. Individual PowerPoint presentations are limited to 15 minutes, including 3 to 5 minutes for questions and discussion. Panels also have 90 minutes.: ideally 5 presentations of 15 minutes each, followed by a 15-minute discussion period.

There are four **TYPES** of submissions, all of which will require MOC questions to be provided by the author(s):

- **1. Poster:** Standalone Poster presentation that will be integrated into a session, grouped by topic.
- **2. PowerPoint:** Standalone 15-minute slide presentation with questions/discussion that will be integrated into a session, grouped by topic.
- **3. Individual Invited Panel:** Invited Presentation that will link to support a Panel Overview containing five (non-case study) or

six (case study) abstracts presented as a cohesive whole.

**4. Individual Invited Workshop:** Invited Presentation that will link to and support a Workshop Overview.

## **CATEGORIES**

There are two categories based on the topic to be presented. Templates and examples (previously published in the AsMA journal) are provided for each type and will be available at the abstract submission website. Authors will be required to enter abstract text under the headings as described below.

- **1. Original Research:** Material that is original in nature and has not been previously presented. Original analysis of a hypothesis involving data collection and analysis. Headings include Introduction, Methods, Results and Discussion.
- **2. Education:** Typically, a discussion of information that is already available.
- **a. Program / Process Review:** Description of a program or process that is used to solve a problem or accomplish a task. Headings include Background, Description, and Discussion.
- **b. Tutorial /Review:** An educational session intended as a review of established material. Headings include Introduction, Topic, and Application.
- *c. Case Study:* A single clinical or human performance event. Headings include Introduction, Case Description, and Discussion.

## **PANEL GUIDANCE**

**Panels** must be composed of a coordinated sequence of 4-5 abstracts that flow logically from one to another supporting the central theme. Panels must contain abstracts that allow 15 minutes of structured discussion during the sixth period.

**Case Study Panels:** Case Study Panels can have 6 abstracts, and are intended to highlight a particular institution, community or aeromedical issue, usually presented from the same institution or aeromedical community.

It is the responsibility of the Panel Chairs to ensure that the abstract authors describe in each abstract how it relates to the Panel theme. If the Panel theme is not clearly identified and/or the abstracts do not support a central theme, the Scientific Programming Committee may unbundle individual abstracts and evaluate them as separate slide or poster abstracts. Unrelated abstracts from a laboratory or organization do not constitute a Panel (unless they are Case Studies). Panel Chairs are also responsible for preparing questions and discussion points to facilitate a moderated discussion with the audience during the sixth period. Each Panel speaker should cite or link directly to the Panel theme, and at the end of their talk should provide a logical segue to the next abstract.

# **WORKSHOPS**

Rules for workshops and the review process are similar to those for Panels (above). Overview abstracts should reflect the material to be presented in this long format for up to 8 hours of CME credit. Individual abstracts must be entered for each invited presenter and all necessary information must be entered in the same manner as all other abstracts, including conflict of interest state-

ments. Course materials should be made available for registrants. A separate fee is charged for Workshops registration. For additional information contact Jeff Sventek, Executive Director, at jsventek@asma.org.

### AsMA ABSTRACT SUBMISSION PROCESS

All abstracts must be submitted via the electronic submission system linked to the association's web site: https://www.asma.org. Click on the link to the abstract submission site--available on the AsMA home page and Meetings page on or about September 1, 2021. 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.

Abstracts previously submitted for ASMA 2021 Scientific Meeting: Due to the exceptional circumstances surrounding COVID-19, special consideration will be given during the review process to abstracts that were previously accepted for the 2021 meeting but were not presented due to ongoing travel restrictions. Please answer the questions and provide the abtract ID# with your submission.

The following information is required during the submission process: Abstract title, presenting author information (including complete mailing and e-mail addresses and telephone numbers), topic area (from list provided on back of form), contributing authors and their e-mails and institutions, abstract (LIMIT: 350 words/2500 characters including spaces), at least 2 Learning Objectives (the Accreditation Council for Continuing Medical Education-ACCME-requires brief statements on the speaker's learning objectives for the audience). Read instructions online for further details. Poster presenters are required to upload a pdf of their poster in advance of the 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.

# Financial Disclosure/Conflict of Interest/Ethics

Abstracts will not be accepted without a financial disclosure/conflict of interest form. The form is included in the website submission process. 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. PDF copies of Poster presentaions must be uploaded to the submission site.

# **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.

# **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, scientific quality, and adherence to the guidelines provided. Criteria for non-acceptance include, but are not limited to: insufficient, inconsistent, or ambiguous data; commercialism; or reviews of previously published literature. **Abstracts must be 100% complete upon sub-**

**mission, including all final data and results.** How well authors abide by submission and format guidelines will also be one of the criteria used to determine acceptance of abstracts.

Presenters are limited to **one** senior-authored presentation, unless given specific prior permission by the Scientific Program Committee Chair, Charles Reese, PhD., M.D., at: sciprog@asma.org. Following review by the Scientific Program Committee in November, all contributors will receive a notification of acceptance or non-acceptance by e-mail. Accepted abstracts will be published in *Aerospace Medicine and Human Performance*.

While the Scientific Program Committee strives to honor the presenter's desired presentation format, 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.

### **Abstract Withdrawal**

Withdrawing abstracts is strongly discouraged. However, if necessary, a request to withdraw an abstract should be sent to Dr. Charles Reese, the Scientific Program Chair, at sciprog@asma.org; and Pam Day at pday@asma.org. The request for withdrawal must include the abstract title, authors, ID number, and reason for withdrawal. Due to publishing deadlines, withdrawal notification should be received by January 15, 2021. 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.

### **MENTORSHIP!**

# Optional review / feedback for student and resident presenters at AsMA 2022

AsMA is continuing its mentorship initiative for student and resident authors for the 2022 Scientific Meeting. If you would like, you have the option to submit a draft of your abstract to a group of senior AsMA members for review and feedback. If you have questions about this opportunity, please e-mail sciprog@asma.org. E-mail your abstract to sciprog@asma.org no later than 1 October 2021. The Program Mentor Group will review provide feedback via e-mail by 20 October 2021.

**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 Personnel Selection
- 1.2 Training
- 1.3 Hypobaric & Hyperbaric Physiology
- 1.4 Thermal Physiology
- 1.5 Acceleration / Vibration/ Impact
- 1.6 Fatigue
- 1.7 Neurophysiology & Sensory (inc. Vision, Auditory, Vestibular, Spatial Disorientation)
- 1.8 Aerospace Human Factors & Psychology
- 1.9 Aerospace Human Systems Integration

# 2: Clinical Medicine

- 2.1 Aviation 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
- 3.4 Commercial
- 3.5 Pandemic Preparedness

## 4: Space Medicine

- 4.1 Space Medicine
- 4.2 Space Operations

# 5: Safety and Survivability

- 5.1. Escape / Survival
- 5.2. Flight Safety/Accident Investigation

## 6: Other

- 6.1 History of Aerospace Medicine
- 6.2 Ethics