



Ever Upward: August 2016

Roland Vermeiren is President-Elect of AsMA; Martindale Installed as President

Roland Vermeiren, M.D., has been elected President-Elect of the Aerospace Medical Association (AsMA). The election was held at the Annual Business Meeting during the 88th Annual Scientific Meeting of AsMA, May 2, 2017, at the Sheraton Denver Downtown Hotel, Denver, CO.



Dr. Vermeiren is a native of Belgium. He attended the University of Leuven, receiving his M.D. in 1978. From 1978-1983 he studied at the Universities of Leuven, Ghent, Brussels, and Antwerp to receive specializations in family

medicine, occupational medicine, radiation protection, and certificates in insurance medicine and aerospace medicine. In 1978, Dr. Vermeiren served as a doctor for Flemish medical air transport services, and in 1981 was a medical officer at Büren NATO Base, Germany. He was a general medicine practitioner from 1983-1995 in Rijkevorsel, Belgium. He chaired the local Family Medicine Physician Peer Group and was a member of the executive committee of the Regional Family Medicine Association, Tournhout, Belgium from 1983-88 and was an elected Board Member of the Belgian Deontological Board from 1988-1994. From 1983-1993 he was also an Aeromedical Examiner, occupational medicine specialist, radiation protection officer and the person responsible for medical emergencies in the Medical Service of Brussels airport, Aeromedical Centre of SABENA (former Belgian national airline) at Zaventem Airport, Brussels.

Since 1995 he has been Chair of the EUROCONTROL Medical Board and Head of Medical Services, Principal Medical Advisor (European Organisation for the Safety of Air Navigation), Brussels. In 2006 he became a member of the Chief Medical Officers of the EU Civil Aviation Authorities. He served three 2-yr terms as President of the ESAM. From 2010-2016 he was Representative for the aeromedical sector on the EASA full Safety Standards Consultation Committee and its ATM and Flight Standards Subcommittees, and from 2012-2016 he was liaison officer to EASA for ESAM. In 2015 he was re-elected as Vice President of Inter-Institutional Medical Board of the Medical Services of the European Union Institutions and Agencies (IMB) and Chair of the IMB RPMS Committee. In 2016 he was Chair of their Advisory and Scientific Committee.

Meeting Photo Galleries

For more photos from the annual meeting in Atlantic City, please visit our Photo Gallery page at <https://www.asma.org/annual-meetings/photo-gallery>. All photos by Pamela C. Day unless otherwise stated.

A 2017 Fellow of AsMA, Roland is a member of many international organizations including the IMB, the EASA, IASM, AMDA, and the Belgian, Dutch, French, German, and Austrian Societies of Aerospace Medicine. He has presented at various congresses of the Belgian, Dutch, Emirates, German, Swedish, Latvian, Austrian, Spanish, Russian, Ukrainian, Slovenian, Greek, Italian, Moldavian, and Swiss aerospace medicine associations and at ICASM, ECAM, and AsMA congresses.

Valerie Martindale, Ph.D., CAsP, FAsMA, was installed as President during the annual meeting. Currently, Valerie lives and works in Tokyo, where she is a Research Program Manager for the Army Research Office. She manages a portfolio of basic research in biology that seeks to make use of the rapidly developing tools of synthetic biology to investigate areas from medicine to materials, and from cognition to energy production. Valerie will work to see AsMA recognized for its unique role as a multidisciplinary problem solving organization, tackling the future challenges for humans in aerospace and other extraordinary environments, and to develop its ability to serve as a vibrant, active center for career placement and development for professionals in the many areas that make up Aerospace Medicine and Human Performance. [For a full biography of Dr. Martindale, please see *Aerosp Med Hum Perform* 2016; 86(8): 755.]

Other elected officers are: **Vice Presidents:** Volker Damann, M.D., and Alex Garbino, M.D., Ph.D.; **Secretary:** Brian Pinkston, M.D., M.P.H.; **Council Members at Large:** Richard Bachmann, M.D., M.P.H., Nicholas Green, M.B.B.S., Ph.D., D.Av.Med., Jeffrey Jones, M.D., and Allen Parmet, M.D.

Passing the Gavel



David Gradwell, B.Sc., Ph.D., M.B.Ch.B. (left), passes the gavel to incoming President Valerie Martindale, Ph.D., CAsP, FAsMA, at the joint Council meeting that took place Thursday morning, May 4, 2017.

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President's pin (above): Rob and Chris Gradwell, Dr. Gradwell's sons, pin David with the Past President's pin.
President's gift (right): Jeff Sventek, AsMA Executive Director, presents outgoing President Gradwell with a clock for his service to AsMA.



President's wine (above left): Valerie Martindale gives David Gradwell a set of wine glasses and a bottle of wine.
President's patch (above): Joe Dervay, standing in for Michael Barratt, presents David Gradwell with a mission patch flown onboard Discovery Flight STS 133, the final mission of Discovery. Dr. Barratt flew aboard that mission and was the Bauer lecturer at this year's meeting.
President's slippers (left): Valerie Martindale presents David Gradwell with a pair of (ex-)parrot slippers in honor of his liking for Monty Python.



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Visit the AsMA, Industry, & Member News pages online. They're updated monthly and as we receive news. Been promoted, changed jobs, been honored with an award? Use the form for members on the Members Only page to send us your news or simply email us at the journal (rtrigg@asma.org)!



President's Song: The AsMA Council Singers give their rendition of the lovely "Lumberjack Song" from Monty Python while David Gradwell listens.



50-Year pin: Sally Nunneley, AsMA Past President and former Editor-in-Chief of *Aviation, Space, and Environmental Medicine*, was presented with a pin commemorating her 50 years of membership in AsMA by President David Gradwell. Ethel Nelson and John Jurist also received 50-year pins, but could not be present at the meeting.

MEMBERS

Are you seeking a new position? As a benefit of your membership, you can log onto the Members Only page to view the **Job Fair**. New positions are posted monthly and there are positions open now!



AsMA Staff: The Home Office staff attended Honors Night. From left to right are Pam Day, Gloria Carter, Sheryl Kildall, Gisselle Vargas, and Rachel Trigg.

Upcoming FAA AME Seminars

Please note: AsMA only takes registrations for the seminar held in conjunction with the annual meeting.

<u>Dates:</u>	<u>Location:</u>	<u>Seminar</u>
Aug. 11-13, 2017	Washington, DC	Refresher
Sept. 14-16, 2017	Greensboro, NC	CAMA
Sept. 22-24, 2017	Denver, CO	Refresher
Oct. 23-27, 2017	Oklahoma City, OK	Basic
Dec. 1-3, 2017	Portland, OR	Refresher

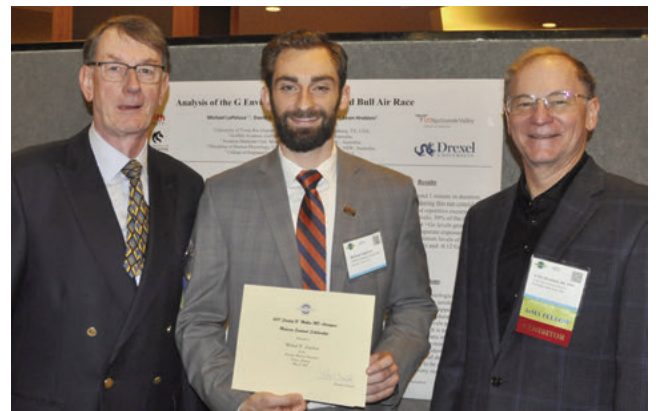
For more info or to register, please visit the FAA's AME Seminar page: http://www.faa.gov/other_visit/aviation_industry/designees_delegations/designee_types/ame/seminar_schedule/.



Plenary Lectures: Above: Astronaut Dr. Michael Barratt (center) receives a memento as the 63rd Louis H. Bauer Lecturer. The lecture is sponsored by KBRwyle, represented by Vernon MacDonald (right) as AsMA President David Gradwell (left) looks on. **Above right:** Dr. Michael Berry, the 4th Reinhartz lecturer, receives a memento from Dr. David Gradwell, AsMA President. The award is sponsored by the Eugen G. Reinartz Endowed Fund. **Right:** Kevin Fong (center), the 52nd Armstrong Lecturer, receives a memento from AsMA President David Gradwell (left) and Bob Laurent (right), representing the sponsor, ETC.



Scholarship Winners



Top left: Rahul Suresh (center) receives the Anita Mantra Memorial Travel Scholarship from AsMA President David Gradwell and Craig Kutz (right) representing the sponsor, AMSRO. **Bottom left:** Anthony Schiemer receives the Jeff Davis International Scholarship from President David Gradwell. **Top right:** James Pavela receives the Jeff Davis Aerospace Medicine Endowed Scholarship from President David Gradwell. **Bottom right:** Michael Lapelusa receives the Stanley Mohler Aerospace Medicine Endowed Scholarship from the Fellows Group represented by Kim Broadwell as President David Gradwell looks on.

Abridged Minutes of the Aerospace Medical Association 88th Annual Business Meeting
Tuesday, May 2, 2017, Sheraton Denver Downtown Hotel, Denver, CO



Gradwell



Sventek

Call to Order (Gradwell): A quorum for the meeting was established at 12:00 p.m. on Tuesday, May 2, 2017. Dr. David Gradwell, President, called the meeting to order.

In Memoriam (Gradwell): The president asked attendees to pause to remember those members who passed away this year.

Recognition of Past Presidents (Gradwell): Dr. Gradwell invited the Past Presidents of AsMA to rise.

Report of the President (Gradwell): Dr. Gradwell thanked Kris Belland, who could not be present, for his help. He reviewed the year's activities: "The Executive Committee met in August at the hotel in Denver and we will meet in Dallas in planning for next year's meeting. I was able to attend the 5th European Congress of Aerospace Medicine in Oslo. AsMA helped this year for its registration. Jeff and Deb Sventek made it possible. I also attended ICASM in Delhi this year. AsMA was represented at SpaceCOM in November. We had observations about this meeting regarding how to make it more scientific for aerospace medicine topics. SpaceCom Executive Committee wants to work with us to improve the agenda for future meetings. The next AsMA Council meeting in November will be in Alexandria, VA. We had a great number of abstracts this year at Scientific Program Committee. We are working on the systematic review of Aerospace Medicine through either a Cochrane or Gap Analysis methodology. We have been working on the future of the AsMA 501c3 status. The Executive Committee had its first meeting outside the U.S. this year. They did it at their own expense. The Aerospace Nursing Society will expand membership to allied health professionals. This will result in a name change to the Aerospace Nursing and Allied Health Society."

Report of the Executive Director (Sventek): "Mr. President, officers, and members of the Aerospace Medical Association, it is my pleasure to report that this past year was extremely active and highly successful. I especially want to recognize all who volunteered this past year to help move the Association forward. Thank you for your continued strong support of the Aerospace Medical Association. I'd also like to recognize the Headquarters Office staff and our journal independent contractors. They work hard every day to provide a high quality scientific journal as well as outstanding customer service and administrative support to our 2,000 members. This past year was an especially difficult one for the AsMA Headquarters Staff. We migrated away from our old and trusted Association Management System, IMPak, to a new and more capable system, Impexium. The June 2016 migra-

tion presented the AsMA Headquarters Staff with some unexpected and difficult challenges. They worked with the vendor's programmers and persevered. The new Association Management System is working better for us now, but we plan to continue working with the Impexium team to get the new system to work for us rather than the Staff working for the Impexium system. You will find the online registration process in 2018 to be more intuitive and facile.

As many of you know, attendance at our Annual Scientific Meetings is affected by the ability of those attending to garner continuing education credits for their participation. This year's meeting is accredited for 22.5 *AMA PRA Category 1 Credits*TM as well as 22.5 Prescribed Credits by the American Academy of Family Physicians, and 22.5 Category 1-B Credits by the American Osteopathic Association. AsMA relinquished our Accreditation Council for Continuing Medical Education (ACCME) provider status at the end of 2016. We established a formal agreement with the Undersea and Hyperbaric Medical Society (UHMS) to jointly sponsor all AsMA Continuing Medical Education activities. The four Sunday, April 30 workshops and the 88th Annual Scientific Meeting are all jointly sponsored CME activities with the UHMS. Working with the UHMS this year proved to be a professional and well-organized process. I look forward to working with the UHMS in future years.

Nurses attend our Annual Scientific Meeting for numerous reasons, and their ability to earn Nurse Contact Hours is one of the main reasons nurses attend. This year's Annual Scientific Meeting was once again accredited by the Montana Nurses Association. The Aerospace Nursing Society accepted the challenge to submit the necessary documentation to the Montana Nurses Association for accreditation. This is no small task and Nora Johnson, RN, BSN, CCM, led the effort to organize and submit the required documents for review. Her efforts resulted in the 88th Annual Scientific Meeting being approved for 22.5 Nursing Contact Hours. Congratulations on this significant achievement.

As of this morning, total registration for this meeting is 1,506, compared to 1,482 at the same time for the 2016 meeting. Of that total, 1,365 were registered in advance of the meeting and 141 attendees registered here on site. This represents an increase of 24 attendees or 2% above the 2016 meeting in Atlantic City. Registration this year was affected by the potential for the U.S. federal government to shut down as the result of an expiring federal budget Continuing Resolution. Many U.S. federal agencies delayed funding approval decisions and others restricted travel after April 28 until legislation was passed by the U.S. Congress to keep the U.S. federal government funded and operating. Every year seems to bring unexpected events into our meeting preparations and execution efforts. I thank all for working with the AsMA Headquarters Staff to ensure proper registration.

We also worked closely with Mr. Walt Galanty of AIM Meetings and Events and the Sheraton Denver Downtown Hotel to provide all attendees per diem room rates. The Sheraton Denver Downtown Hotel sold out of rooms in early March 2017 so AIM Meetings & Events negotiated a contract with the Holiday Inn Express Hotel to provide a large block

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of rooms to serve as overflow. The Holiday Inn Express room block sold out by early April and we turned to the Warwick Denver Hotel. They provided us with a small courtesy block of rooms. That room block also sold out. We do everything we can to estimate the number of rooms required for an event.

There are 33 companies exhibiting with us this year using 40 exhibit booth spaces. We very much appreciate our exhibitors and corporate members. They provide our attendees with great insight into the latest technologies and processes to improve the delivery of Aerospace Medicine. We held the AsMA Welcome Reception in the Exhibit Hall again this year and we will continue this practice in 2018.

For the third year, we are offering AsMA Committees, Constituent Organizations, and Affiliated Organizations the opportunity to provide poster presentations on their activities. The poster session for these groups is today, Tuesday, May 2, 2017, in the Governor's Square 17 from 10:00 AM to 2:00 PM. If you haven't visited these posters, please take a few minutes following the Annual Business Meeting to visit the poster session and see all of the excellent work accomplished by our AsMA Committees, Constituent Organizations, and Affiliated Organizations. You may consider joining one or more of these groups to help them in their mission.

The 2016 Speed Mentoring session was so successful, we decided to offer it again this year. In fact, two Speed Mentoring sessions were built into this year's program. The first was held Monday, May 1, and proved to be a success again. The second Speed Mentoring session is scheduled for Wednesday, May 3, 2017, 10:00 AM–12:00 PM in the Tower Court A room. This initiative was developed by Dr. Valerie Martindale and an active group of volunteers. Thanks to all involved for making this effort so successful, educational, and fun.

Finally, I am required to report the Aerospace Medical Association financial status for 2016. I will leave the details to our Treasurer to explain but on December 31, 2016 the Aerospace Medical Association reported excess revenues of \$168,935.

Report of the AsMA Foundation (Broadwell): The Foundation manages donations to provide grants and scholarships. Thanks to outgoing Secy/treasurer Peach Taylor. Genie Bopp is the incoming Secy/treasurer. Our investment funds had a 9% growth this year. This combined with donations made it possible for two new awards: the Anita Mantri Memorial Scholarship was established last year and we provided a 2nd Fellow's Award for \$1K for young investigators submitting papers to the Journal. We provided a budget for the annual Trumbo Run/Walk. For the first time we were able to have a voluntary donation line on the meeting registration form.

GOVERNANCE (Martindale):

Nominating Committee (Scarpa): Philip Scarpa provided the slate of officers for vote: President-Elect, Roland Vermeiren; Vice Presidents, Volker Damann and Alex Garbino; Secretary: Brian Pinkston; and Members at Large: Richard Bachmann, Nicholas Green, Jeffrey Jones, and Allen Parmet. The slate of officers was accepted unanimously.

Bylaws Committee (Baisden): No Bylaws changes this year!

Treasurer's Report (DeVoll): Jim DeVoll reported that we had \$169K in excess profits for 2016 in net income. Annual Meetings are key to our profitability for the year. We have done well for the last 3 years. 2016 was our most profitable year. UBS Investments have seen an overall 24.2% increase in portfolio since 2010. We have \$102K in cash, \$43K in equities, \$215K in fixed income and \$410 K in other investments. In summary, Net Income was \$169K for 2016, Ordinary Income (operating budget) was \$156K positive last year. For 2015 we were \$144K positive, and 2014 \$97K positive. Our building and property are worth about \$1.8M.

REPRESENTATION AND ADVOCACY (Ortega):

Thanks to Douglas Boyd who helped the Resolutions Committee to respond to comments on the following resolution: "Reporting of Medically Disqualifying Conditions for Aircrew and Aviation Related Support Personnel." Resolved: That the Aerospace Medical Association advocates a uniform international policy on mandatory reporting of aircrew and aviation-related support personnel with psychiatric, psychological, behavioral and/or medical issues that pose a significant risk to public safety." This will be sent to the AMA and various other agencies. It will help us with the Judicial Committee at AMA and it has helped us draft letters to the American College of Internal Medicine and AAFP. The resolution passed unanimously.

EDUCATION AND RESEARCH (DeJohn): There is a meeting planned for Bellagio II—Terrestrial Applications of Space Medicine, to be held in Moltrasio, Italy, September 5-8, 2017. Interested members should contact Marian Sides for further information. The Science and Technology Committee is sponsoring scientific panels on the organization and conducting research in aerospace medicine and human performance. If they are successful they may be offered annually. They also provided a presentation on conducting a scientific Gap analysis. It introduced the aerospace medicine review group for literature review. The Education and Training Committee will work with Communications Committee to produce information for the AsMA website including new tabs for physicians, general public, and pilots. This new information has become important with Basic Med laws.

MEMBER SERVICES (Dalitsch): We are working on a postcard to send to members whose memberships lapse. We would like to add "Faces of AsMA" on our website. This will be profiles of "poster children" for communities within aerospace medicine family – including all areas. Brief bios regarding a day in the life of a member from this community. The Corporate Membership Committee is working on the trend of reducing numbers of corporate members. The Awards Committee has added two new awards: the David Clarke award for Corporate members and the Admiral John C. Adams in Operational Aerospace Medicine.

INTERNATIONAL SERVICES (Vermeiren): The Oslo AsMA-ESAM meeting was a success! Our second joint AsMA-ESAM meeting will be in Czechoslovakia, September 20-23, 2018. We are working with EASA and continue to help them in rulemaking. The newly reorganized GLOC Committee is working to become a global committee. They have a chair and co-chairs of the 7 regions so far.

Adjourn: The meeting adjourned at 1:12 p.m.

Jeffrey C. Sventek, M.S., CAsP, Executive Director
Brian Pinkston, M.D., Secretary

Richard "Dick" Trumbo 5K Preventive Medicine Run/Walk

The Trumbo 5K Run was held the morning of Monday, May 1. The winners were: 1st place women's, Monika Rausch (top left); 1st place men's, Richard Kipp (top right); 3rd place women's, Katherine Lee (bottom left); 2nd place men's, Alex Wolbrink (bottom center); and 3rd place men's, Steven Guyton (bottom right). Not shown is 2nd place women's winner Karen Ong. The awards were given out by David Gradwell on Tuesday, May 2, just before the Reinartz Lecture.



Speed Mentoring and the RAM Bowl



Two speed mentoring sessions were held: Monday, May 1, and Wednesday, May 3. During these sessions, younger members could talk to older members and get advice about their careers.



The RAM Bowl was held Wednesday, May 3, in the afternoon in Denver, CO, at the Sheraton Denver Downtown Hotel. The winning team, students from UTMB, is pictured here with the trophy.

Space Medicine Association Jeff Myers Young Investigators Award

The Space Medicine Association (SMA) Jeff Myers (JM) Young Investigators Award (YIA) is a competition intended for those making their first major efforts into Aerospace Medicine Research. To compete for this award, contestants must be making their first presentation of a scientific paper or poster at an AsMA meeting (excluding cases presented at Grand Rounds as a student resident); they must appear as first author on the paper; and they must prepare and submit a manuscript for judging. Finalists compete in a second phase of competition at the AsMA Meeting involving further evaluation of their presentation and interviews.

The potential applicability of the findings to Space Medicine and the degree of involvement of the student in the project are major considerations. I would like to thank the members of the YIA committee: John Darwood, Lloyd Tripp, Cathy Dibiase, Smith Johnston, Dan Woodard, and Jeff Jones. The finalists in this year's competition, selected from 189 potential contestants, are richly talented and diversified.

The winner of the 2017 SMA JM YIA is John M. Suffredini, D.O. His paper is entitled "Carotid Intima Thickness in the Astronaut Corps: Association to Spaceflight." There does appear to be a difference with potential implications for those in long-term space missions. John has grown up in the Space Program: his parents are both NASA engineers at the Johnson Space Center (JSC) in Houston and he has had a lifelong interest in aviation, being a radio control model aircraft pilot himself. It is of note that John's mentor for the project was Kat Garcia, an ultrasound specialist and scientist at KRBwyle/JSC who is a previous YIA winner. Dr. Suffredini is currently a resident in Internal Medicine at the University of Kentucky and plans to return home to work in the space program at JSC, where he will specialize in Space Cardiology!

The first runner up is Sherrie A. Hall, Ph.D., an Aerospace Engineer from MIT. She presented a paper entitled: "The Effect of Human-Machine Interface Degrees of Freedom on Performance in Space Telerobotics." The second runner up is Shane C. Walker, M.D., Ph.D., who just completed his M.D. at UCFS, working with UTMB and NASA JSC. His paper is titled: "Oxygen Exposures in NASA's Neutral Buoyancy Lab, a 20 Year Experience with Comparison to NOAA oxygen toxicity limit." Honorable Mention went to Christopher Haas, M.D., from the Center for Space Medicine at Baylor



SMA JM YIA Award: Jeff Myers (left) presents the Young Investigators Award to Dr. Suffredini (right).

College of Medicine. Chris is an incoming UTMB resident.

Additional Finalists include: Eric Friedman, M.D., an NIH Fellow from Eastern Virginia Medical School; Robert Filler, M.D., a general surgeon and Navy Flight Surgeon from SC; Waddaa Redha, M.D., from George Washington University in DC; Wing Commander Ashu Chandra, M.B.B.S., M.D., from the Indian Air Force; Diederik de Rooy, LL.M., M.D., Ph.D., a lawyer and psychiatrist from the Netherlands; Danyal M. Fer, M.D., a surgeon from UCSF, in collaboration with KBRwyle at JSC; and Captain Brooke Organ, D.O., USAF, Laughlin AFB, TX.

While another memorable meeting drew to a close, former Young Investigator Alex Garbino won the Ward Award and became an AsMA Vice President, former Young investigators Chuck Mathers and Cathy Dibiase were elected AsMA Fellows, and a new generation of Young Investigators continues to make their mark toward the challenges of space exploration. Remember, if you want to do more than just exist, you must have a dream. Dream well and make a difference.

K. Jeffrey Myers, M.D.



President's Lifetime Achievement: Michelle Frieling (right), President of SMA, presents Dr. Myers (left) with a President's award for lifetime achievement.



SMA Lifetime Achievement: Terrance Taddeo (left) accepts an SMA lifetime achievement award from Michelle Frieling (right) for Jeffrey Davis, who could not be there.

Space Medicine Association 2017 Awards and Scholarships



Jeffrey P. Sutton Scientific Achievement Award: Jeffrey Sutton (center) accepts the award from Charles Mathers (left) and Michelle Frieling (right) for Prof. Dr. med. Rupert Gerzer, who could not be there.



Journal Publication Award: Alejandro Garbino, M.D., Ph.D., received the journal publication award for “the most outstanding space medicine article published in the *Aerospace Medicine and Human Performance* journal.”



Jeffrey R. Davis Scholarship: Ksenia Masterova (right) accepts the plaque from Charles Mathers (left) and Michelle Frieling (center).



Wyle Scholarship: Wilfredo Rodriguez-Jimenez (center) accepts the plaque from Charles Mathers (left) and Michelle Frieling (right).

Aerospace Physiology Society 2017 Awards

The Aerospace Physiology Society is proud to announce the 2017 winners of the Society’s annual awards for excellence in operational aerospace physiology, aerospace physiology research, and aerospace physiology leadership. The award recipients were announced at the Aerospace Medical Association’s 88th Annual Scientific Meeting in Denver, CO, during the AsPS business luncheon. The Society would also like to acknowledge each of its award sponsors. Because of their generosity, each recipient is presented with a plaque and an honorarium. Additionally, the winner of the Fred A. Hitchcock Award is presented with a hardbound copy of “Barometric Pressure.” This perpetual trophy is passed down to all Fred A. Hitchcock Award winners.

Wiley Post Award for Operational Physiology

The award is presented annually for exceptional service and achievements in operational physiology, including education and physiological support. It is sponsored by Gentex Corp.



This year the Wiley Post Award for Operational Physiology is awarded to **Maj. Maggie Coppini, USAF, BSC, CA sP**. Maj. Coppini is an Operational Aerospace Physiologist for the 412 Test Wing at Edwards AFB. During the past 12 months, she assisted with and implemented NASA’s Reduced Oxygen Breathing Device (ROBD) beddown, securing AF release of training scenarios and saving \$240K in recurring training for 119 aircrew. Additionally, Maj. Coppini secured Operations Group funding for Edwards’ first-ever ROBD, establishing a robust training program for 10 different airframes, high altitude parachutists, and flight test engineers, and is projected to save \$70K annually.

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Paul Bert Award for Physiological Research

The award is presented annually for outstanding research contributions in the field of aerospace physiology. It is sponsored by KBRWyle. This year the Paul Bert Award for Physiological Research is awarded to **Lieutenant Colonel Tom “Vito” Massa, USAF, BSC**. Lt. Col. Massa is an invaluable member of the research team for his expertise and oversight of studies directly impacting Air Force policy. As an operational researcher, he was called upon for Medical Investigation Root Cause Analysis in support of the F-22 safety task force investigation, and in the research and development of the Multiple Attributable Task Battery for hypoxia training recognition. His work has been internationally recognized at the Aerospace Medical Association Scientific Conference and is a credit to the Aerospace Physiology Society.



Fred A. Hitchcock Award for Excellence in Aerospace Physiology

The award is presented annually for excellence in either operational physiology or physiological research. This award is sponsored by International ATMO Inc. This year the Fred A. Hitchcock Award for excellence in Aerospace Physiology is awarded to **Lieutenant Colonel Troy “Bender” Faaborg, USAF, BSC, CASp, FAsMA**. Lt. Col. Faaborg has proven himself a gifted academic, master instructor, and operational physiology expert. He protected the nation’s \$44 billion B-2 bomber fleet through counter-fatigue plans for over 4,000 hours of long-duration missions and briefed a 12-nation NATO alliance on operational fatigue countermea-



asures. He serves as an associate adjunct professor, teaching over 100 graduate and undergraduate courses in his off-duty time since 2003. He is board certified in Aerospace Physiology and is an AsMA Fellow.

2017 Partnership in Education Award

The Partnership in Education Award is awarded to a teacher in a school district of the host city for the current year’s AsMA Annual Scientific Meeting. The winner is recognized as an individual who has brought a unique approach to teaching science in the classroom and has inspired his or her students to an interest in science. This year’s winner is **Mr. Joe Santambrogio**.

Three years ago, with the support of the Principal and Site Technology Representative, Mr. Santambrogio launched a highly successful STEM program at the Hill Campus of Arts and Sciences. Hill’s STEM program offers students five semesters or year-long courses: Flight and Space, Automation and Robotics, Introduction to Computer Science, Medical Detectives, and Design and Modeling. This year Hill expanded from one to two state-of-the-art STEM labs and two STEM teachers. Mr. Santambrogio trains and collaborates with the new STEM teacher each day to ensure consistency and quality in both labs.



Mr. Joe Santambrogio accepts the AsPS Partnership in Education Award from Maj. Wes Davis.

Life Sciences and Biomedical Engineering Branch 2017 Awards

A. Howard Hasbrook Award

This award, presented to **Tracy Dillinger, PsyD**, recognizes an individual who has provided noteworthy data or design with respect to safety, survivability or crashworthiness relevant to aircraft or space vehicles. It is sponsored by Infoscitex and was presented by Lindsey McIntire.

One of Dr. Dillinger’s most notable accomplishments is the development of the Organizational Safety Assessment (OSA) process, which began in 1998. Dr. Dillinger created and refined the OSA process that has been credited with saving lives and resources throughout the Air Force. After incorporating the OSA process into USAF guidance, mishap reductions occurred in over 90 OSA units from 1998-2008 by 75% for Class A, 38% for Class B, and 34% for Class C mishaps.

These tools, which focus on the identification and mitigation of Human Factors issues, and the development of strategic processes to strengthen and sustain a robust safety culture, captured the attention of NASA while Dr. Dillinger served on the Columbia Accident Investigation Board in

2002. Most recently, Dr. Dillinger led an OSA of five NASA human spaceflight programs in 2016.

After 8 years of program development, assessment, education, outreach, a rigorous Safety Culture program with HF as a center piece is now in place. This includes charter, formal guidance, definition, education and training courses, communication materials, handbook, survey tools, OSAs, HFACs analysis, reports, with hundreds of cultural outbriefs, presentations nationally within federal government agencies, and internationally.

Professional Excellence Award

This award, presented **Dwight Holland, M.D., Ph.D.**, recognizes an individual who has produced outstanding research accomplishments or technical and/or research management achievements important to life sciences and/or biomedical engineering of a number of years. It is sponsored by the LSBEB and presented by Brian Self, LSBEB president.

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Dr. Holland has been a leader for promoting better Human Systems Integration (HSI) practices in the Department of Defense and other governmental agencies and academic/business organizations for over 20 years in a variety of roles from Program Manager at the USAF Office for Scientific Research to NASA/Stanford Faculty Fellow, as an on/off USAF active duty USAF Officer, and as an elected leader of several S&T organizations. A few highlights include Dr. Holland's "outstanding" work and Professional Excellence per his supervisors for over a decade regarding redesigning and teaching various materials at the USN/USAF Test Pilot Schools. He was invited as moderator for a USAF Acquisition Systems Engineering Process Improvement initiative and as co-leader for testing the "full coverage" anti-G suit flights in first-ever prescribed test profiles with physiologic, flight, and workload measures.

Dr. Holland is a Fellow of AsMA, AsHFA, and the Royal Aeronautical Society. He served as President of the International Association of Military Flight Surgeon Pilots and the Space Medicine Association. Dwight also helped Pete Mapes get the Ground-Collision Avoidance System (Auto GCAS) resolution approved by AsMA, which went onto become part of a safety directive from Office of Sec of Defense. His award nomination concluded with the following: There is no other individual who can offer the multiple examples of dedication to aerospace medicine, the life sciences, biomedical engineering, and human factors disciplines.

Research and Development Innovation Award

This award, presented to **CAPT Joseph V. Cohn, MSC, USN**, is given to an individual who has demonstrated innovative life sciences and/or biomedical engineering research as related to the design or development of aerospace medical equipment or systems. This award is sponsored by the David Clark Company, Inc., and was presented by Shane E. Jacobs, Ph.D.

Captain Cohn is an Aerospace Experimental Psychologist and is currently assigned as the Director for Advanced Biomedical Technology Development, in the Defense Health Agency's Research, Development and Acquisition

Directorate, responsible for the oversight and management of the \$1.7 billion Defense Health Program RDT&E program and ensuring that resultant technologies successfully transition across the Military Health System, including industry partners. He has directly managed a wide range of innovative research and development activities that push the boundaries of human performance and biomedical sciences, delivering these technologies to Army, Navy, Air Force and Marine Corps as well as to commercial industry partners.

Throughout his career CAPT Cohn has maintained a strong thread of innovation in aviation and aerospace medical and human performance research and development. For example, early in his career he developed a portable helicopter flight simulator / mission rehearsal system that leveraged emerging augmented reality technologies, transitioning this technology to the NAVAIR, Program Manager for Aviation Training. He also conceived, developed and oversaw the U.S. Navy's only human performance-focused unmanned aerial systems (UAS) research and development effort.

CAPT Cohn is an internationally recognized human per-

See LSBEB, p. N57



Professional Excellence: Dwight Holland (left) accepts the plaque from Brian Self (right).



Howard Hasbrook Award: Tracy Dillinger (center) accepts the award from Brian Self (right) and Lindsey McIntire (right).



Research and Development: Captain Cohn (center) accepts the award from Brian Self (right) and Shane Jacobs (left).

From LSBEB, p. N56

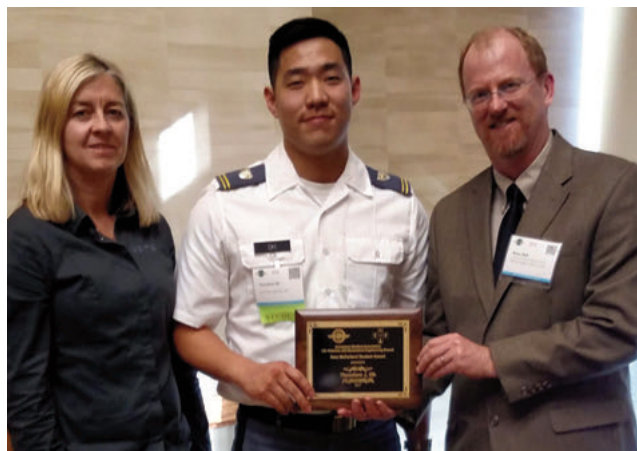
formance biomedical research and development expert. He has co-authored over 80 Human Performance and Biomedical related publications, chaired numerous panels and workshops and been invited to speak at national and international conferences. He co-edited a 3-volume book series focusing on developing, implementing and assessing training systems, a book on enhancing human performance in high risk environments and a book focusing on modeling individual and group decision making processes.

Ross McFarland Student Award

This award is given to the author of the best student research paper accepted by the AsMA Scientific Program Committee that reports on a significant achievement in biomedical engineering. There are no nominations for this award. The best abstract from those submitted by students each year is selected by a committee who rate the scientific merit, clarity of presentation, application of the findings, and scope of interest in research outcome. The McFarland Award is sponsored by Gentex Corporation and was presented by Michelle Collier.

The 2017 winner is **Mr. Thomas Oh**, of West Point for "Antistaphylococcal Effectiveness of Surface Treatments in a Simulated Aircraft Environment." His abstract described a method to reduce the risk of infection from contact to commercial aircraft interior surfaces that are rarely, if ever, disinfected. Studies have shown viral and bacterial survival for days to weeks. He used samples of aircraft metal, leather, and

plastic and tested a variety of antimicrobial surface treatments. His results indicated that *S. aureus*-contaminated test material made of stainless steel with embedded copper showed significant reductions at 1h and 8h. These data suggest a role for imbedding copper into stainless steel and possibly aluminum for applications such as seat belt buckles and latches. However, it is unclear how best to safely and effectively prevent contamination of leather and plastic aircraft components. Further studies with other human pathogens, including viruses and fungi, are needed.



McFarland Student Award: Mr. Oh (center) accepts the award from Brian Self (right) and Michelle Collier (left).

U.S. Army Aviation Medicine Association 2017 Awards



Haley Award: In the top photo, John Smyrski (right) formally presents the 2015 Haley Award to LTC (Dr.) Nicole Powell-Dunford (left) for the article: Powell-Dunford N, Quesada JF, Malsby RF, Chou V, Gerhardt RT, GrossKR, Shackelford SA. Risk management analysis of air ambulance



U.S.-UK Exchange: Pictured are 5 Army RAMS who have all been U.S. Army UK Exchange officers: Dr. Nicole Powell-Dunford; Dr. Stephen Gaydos; Dr. John Crowley; Dr. Robert Weien; and Dr. Jonathan Barson.

blood product administration in combat operations. [Aviat Space Environ Med. 2014; 85(11):1130-1125].

In the bottom photo, John Smyrski (right) presents the 2017 Haley Award to Douglas Boyd for: Boyd DD, Macchiarella ND. "Occupant Injury Severity and Accident Causes in Helicopter Emergency Services (1983-2014)" [Aerosp Med Hum Perform. 2016; 87(1):26-31].

The U.S. Army Aviation Medicine Association (USAAMA) Awards were presented Monday, May 1, 2017, during their luncheon. During the lunch, John Smyrski provided an update on USAAMA, including that they sponsored AsMA's Theodore C. Lyster Award for the second year in a row.

Society of U.S. Air Force Flight Surgeons 2017 Awards

The Society of Air Force Flight Surgeons (SOUSAFFS) held their luncheon on Monday, May 1, 2017. Award winners were as follows:

- Malcolm Grow Award: Maj. Phillip Flatau, AFSOC
- OFSSA: Capt. Bryan G. Anderson, AETC
- Team Aerospace: RAF Lakenheath AB, UK, USAFE
- Unger Award: Maj. Eric M. Chumbley, AFMC
- Schafer Award: Col. Paul A. Young, AF ISR/SG
- Gavel: Col. Robert York, AFSPC
- O-W SNCO: M.Sgt. Paula Mounghsiharat, AFSOC
- O-W NCO: T.Sgt. William McBride, USAFE
- O-W Amn: Sr.A. Joshua Stumpf, AFSOC

New Members

AsMA welcomes 20 new members in August.

- Altamimi, Ali; Broadmeadows, Victoria, Australia
- Barbera, Robert; North Bethesda, MD, United States
- Bergeron, Bryce; Ponce Inlet, FL, United States
- Bevington, Daniel; Cincinnati, OH, United States
- DeLuca, Michael; Cambridge, MA, United States
- Fernandez, William; Baltimore, MD, United States
- Gawronski, Karissa; Ann Arbor, MI, United States
- Hahn, Kayla; Goldsboro, NC, United States
- Haight, Sean; Milton, FL, United States
- Healey, Beth; Hereford, United Kingdom
- Houston, Kiyoshi; Los Angeles, CA, United States



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- Johnson, Benjamin; Baltimore, MD, United States
- L'Orsa, Rachael; Calgary, Alberta, Canada
- McGinniss, Elicia; Honolulu, HI, United States
- Muffett, Joshua; Pensacola, FL, United States
- Navarro, Carlos; Pensacola, FL, United States
- Navel, David; Dayton, OH, United States
- Propst, Steven; Indianapolis, IN, United States
- Smyth, Melanie; Stockton, New South Wales, Australia
- Venus, Marion; Forch, Switzerland

Please report any corrections to rtrigg@asma.org.

In Memoriam: Col. Donald C. Choisser

AsMA was saddened to learn of the death of Col. Donald C. Choisser, USAF(Ret.), in late June. Born in Chicago, IL, he graduated with a B.S. in Pharmacy from the University of Arizona in 1954. After briefly working in his father's drug store, he joined the Air Force in 1955, becoming an aerospace physiologist. He received an M.S. in pharmacology from the University of Arizona in 1962. During his career, he served as Chief of the Aerospace Physiology Branch at the U.S. Air Force School of Aerospace Medicine at Brooks AFB, TX. He also participated in NASA's Project Mercury, worked on the design of a pressurized suit for high altitude flying, and directed and participated in the beginning stages of the Man in Space program at the Aero-Med Lab at Wright-Patterson AFB. He served in the Air Force for 30 years and was Command Physiologist at Randolph AFB when he retired.

Col. Choisser received many awards, including the Air Force Commendation Medal with two oak leaf clusters and the Meritorious Service Medal with two oak leaf clusters. He published articles in a number of scientific journals and U.S. Air Force publications and was a visiting lecturer many times. After retirement, he remained active in the Texas Pharmacy Association and taught pharmacy classes. He was a long-time member and Fellow of the Aerospace Medical Association and a Past President of the Aerospace Physiology Society (AsPS). As a charter member of AsPS, he served on their Long-Range Planning Committee and helped contribute to preparing for the certification tests, which were given for the first time at the annual scientific meeting in Las Vegas in 1977. He was also the winner of the AsPS's Wiley Post Award in 1978.

Col. Choisser was board certified in aerospace medicine by the Aerospace Medical Association and in Pharmacy by California, Illinois, Arizona, and Ohio. He was also a member of the American Association for the Advancement of Science and the SAFE Association. His obituary can be read online at <http://www.legacy.com/obituaries/sanantonio/obituary.aspx?n=donald-c-choisser&pid=185969776&fhid=26701>.

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NEWS OF CORPORATE MEMBERS

AOPA Debuts New App

AOPA has released a new app that is available for free that will let users stay up to date on the latest aviation news, watch videos, listen to podcasts, and search events. News stories and features are from AOPA Pilot and Flight Training magazines and offer photos and slideshows. AOPA Live[®] video segments can be watched in date order or searched and there are four different podcast series available. Events can be searched in the aviation calendar using event type, location, and date range. Members can manage their membership through the app and nonmembers can access the content as a guest or sign up to become a member. All users can easily connect with AOPA staff through the app using the chat functionality or by calling or emailing. The app is available through iTunes and the GooglePlay stores.

—Please visit <https://www.aopa.org/news-and-media/all-news/2017/july/24/aopa-app-debuts-for-ios-android> for more.

NIOSH Reports on Safe Administration of Liquid Antineoplastic Drugs

A web-based survey conducted by the National Institute for Occupational Safety & Health (NIOSH) looked at how organizational factors and perceived safety climate might affect use of personal protective equipment (PPE) and engineering controls as well as the likelihood of spills, leaks, or skin contact during administration of liquid antineoplastic drugs (AD), which are used to treat cancer and arthritis, multiple sclerosis, and other non-cancer medical conditions. This study was published in the July issue of the *Journal of Occupational and Environmental Hygiene* and is currently available as an e-pub. Results are derived from the 2011 Health and Safety Practices Survey of Healthcare Workers, the largest federally sponsored survey of U.S. healthcare workers that addresses safety and health practices around hazardous drugs and other chemicals. Survey responses were analyzed from 1,814 nurses who had administered liquid AD in the 7 days prior to the survey and whose employer was either a hospital or an ambulatory healthcare center. Although not generalizable to all nurses who administer AD, the results

Corporate News Bites

IFALPA: The Aerospace Medical Association (AsMA) welcomes back the International Federation of Air Line Pilots Association (IFALPA) as a Corporate & Sustaining Member. Their mission is to promote the highest level of aviation safety worldwide and to be the global advocate of the piloting profession, providing representation, services, and support to both their members and the aviation industry. *To find out more about them, please visit their site at <http://www.ifalpa.org/>.*

AFBA: The Armed Forces Benefit Association (AFBA) is celebrating their 70th anniversary. AFBA was originally created in 1947 and has remained one of the oldest and largest associations of its kind. *To read more about AFBA, visit their newsletter at <http://www.afba.com/media-blog/newsletters/afba-spring-2017-newsletter>.*

of this survey showed that safety climate perceptions, particularly those where management commitment to safety was higher: 1) contribute to the use of engineering controls and PPE, and 2) reduce spills/leaks and skin contact to ADs. The results also pointed to the value of implementing a comprehensive health and safety program that uses available hazard controls and effectively communicates the importance of safe handling practices, and such actions also contribute to creating a positive safety climate.

—Please see <https://www.cdc.gov/niosh/updates/upd-07-18-17b.html> to read more on this.

ETC Awarded Multiple ADMS Contracts

Environmental Tectonics Corporation's (ETC's) Simulation business unit, located in Orlando, FL, announced the award of multiple contracts for customers in the United States, Asia, and Europe. The multiple contracts include orders for new ADMS™ systems, expansion of existing systems, and extended maintenance contracts. The new systems will be used for training Police Operations, Homeland Security, Disaster Management, Forest Firefighting, and Airport Rescue and Firefighting. ADMS™ is a high-fidelity Virtual Reality Simulation Training Platform that comprises multiple products including Incident Command training from technical to strategic level (ADMS-Command), emergency response and force protection specific to a military environment (ADMS-Airbase), firefighting techniques and tactics (ADMS-Fire), driver training and vehicle operation (ADMS-ARFF and ADMS-Drive) and police operations, crowd management and riot control (ADMS-Police).

—Please visit <https://www.etcusa.com/etc-simulation-awarded-multiple-contracts-for-their-advanced-disaster-management-simulator-adms-totaling-3-million/> for more.

KBRwyle Awarded Seat on NOAA Program

KBRwyle is one of the winning bidders on the National Oceanic and Atmospheric Administration's (NOAA) Professional and Technical (ProTech) Satellite Domain contract in support of NOAA's satellite activities worldwide. The contract has a 2-year base period and three 1-year options, and belongs to the ProTech program's suite of contracts. Under the ProTech contract, KBRwyle will have the opportunity to compete on task orders to support NOAA's satellite requirements and missions, including assisting in managing environmental data that result from those missions. KBRwyle has supported NOAA for more than two decades, including providing a broad spectrum of weather forecasting and tracking services, scientific computing, as well as engineering and operations support for satellite communications, ground systems, and data services.

—To read more about this, please see <http://ww2.wyle.com/content/NewsDescription.aspx?NewsItem95>.

Mayo Clinic Revamps Its Medical School

Mayo Clinic's School of Medicine began with its school originally established in Rochester, MN, in 1972. For almost 45 years, the 4-year M.D. training program purposefully kept its

See Corporates, p. N60

From Corporates, p. N59

class size to around 50 incoming students per year to ensure highly skilled, individualized instruction. The school then chose to expand its footprint nationally to Mayo Clinic's campuses in Scottsdale, AZ, and Jacksonville, FL. The school also chose to pursue one national medical school, centralized governance, and shared curriculum spanning all campuses. Students can travel among campuses for career exploration, research opportunities, clinical rotations, and clerkships across multiple specialties. Besides its original campus, in July the Mayo Clinic School of Medicine–Arizona Campus opened its doors to an inaugural class of 50 first-year students. The total student body in Arizona will mushroom to 200 when the full 4-year program finishes implementation in 2020. The school's Florida campus is launching third-year and fourth-year programs, with hopes of expanding its Florida campus to a full 4-year program in a few short years. Additionally, under the Mayo Clinic and Arizona State University (ASU) Alliance for Health Care, medical students across all Mayo Clinic campuses will be the first in the nation to receive a certificate in the science of health care delivery jointly conferred with ASU, along with their medical degree from Mayo Clinic.

—Please visit <http://newsnetwork.mayoclinic.org/discussion/mayo-clinic-school-of-medicine-gives-medical-education-a-new-twist/> for more on this.

SAA Awarded “Favorite Airline in Africa”

South African Airways (SAA) has been named “Favorite Airline in Africa” for the third consecutive year at the annual Trazee Awards. The award was presented to South African Airways at the annual event hosted by Global Traveler dur-

ing the 2017 Global Business Travel Association convention on mid-July at the iconic Lenox Hotel in Boston. Trazee Travel is a unique interactive web publication created by Global Traveler's parent company, FX Express Publications, Inc., for travelers ages 18–35. The Trazee Awards celebrates the best and brightest travel companies from around the world and include airlines, airports, hotels, destinations and other travel providers. Nominations for the Trazees are collected from an intrepid group of contributors, as well as via an online ballot completed by their subscribed readers. The nominations are compiled and a panel of Trazee and FXExpress Publications, Inc., management selects the final winners.

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

MEETINGS CALENDAR

August 25-26, 2017; Undersea & Hyperbaric Medical Society Gulf Coast Chapter Annual Meeting; Hilton Clearwater Beach, Clearwater, FL. For more, please visit <https://www.uhms.org/education/courses-meeting/directly-sponsored/gulf-coast-chapter.html>.

August 31-Sept. 3, 2017; AMSNZ & ASAM 2017 Conference; Crowne Plaza Queenstown, New Zealand. Visit <http://event.icebergevents.com.au/amsnz2017> for more information.

September 10-14, 2017; 65th International Congress of Aviation & Space Medicine; National Research Council (CNR), Rome, Italy. For more, please contact Lt.Col. (M.D.) Paola Verde, Phone: +39 06 91293471, or visit www.icasm2017.it.

UHMS Seeks New Director of Hyperbaric Facility Accreditation Program

After 16 years of dedicated service, Tom Workman, the current accreditation program director, has announced his intention to retire from the UHMS effective January 1, 2018. While he will be missed, his retirement creates an exciting opportunity for a replacement to take the foundation that he created and raise the program to an even higher level. Timing is right, as the entire accreditation process is in transition:

A revised manual is in the works, dedicated software to manage various aspects the accreditation program is under development and the geometric growth predicted in the early days is now happening.

There is no better way to have an impact on these changes than to be directly involved as they occur.

What will the position offer the new director? Too much to describe in this short announcement, but if you are looking for the opportunity to get directly involved in all aspects of hyperbaric medicine, this might be the right fit for the right person. The director will be engaged with organizations that span our field: the Joint Commission, Det Norske Veritas, the National Board of Diving & Hyperbaric Medical Technology, the American Society of Mechanical Engineers, the National Fire Protection Association, the Baromedical Nurses Association, International Certifications and various federal, state and local organizations that have an impact on our community. The new director will have the honor of getting to know some of the brightest minds in medicine and work directly with a growing pool of the most talented doctors, nurses and technologist in hyperbaric medicine who unselfishly serve as accreditation program surveyors – all of this while serving as an instrument to improve the quality of care and patient safety in hyperbaric facilities across the country.

Primary requirements for the position are a bachelor's degree or higher; previous health care management experience; hypo/hyperbaric technology experience; knowledge of industry codes and standards; and ever-present computer literacy. A detailed job description will be posted on the UHMS website at www.uhms.org, so if you are interested in learning more about this exciting opportunity, do not hesitate to review it. For additional details, please contact John Peters, UHMS Executive Director at jpeters@uhms.org or by calling 877-533-8467, ext 100.