

# President's Page

## Space Exploration

Forty years ago American astronauts landed on the Moon, the first time in history that mankind set foot on another celestial body. Since that time, space exploration has continued to fascinate scientists and laypeople alike. Why space exploration? How do we justify spending money in space when we have so many needs right here on Earth? What are the benefits of space research? These are questions frequently asked by common, ordinary citizens, and even by our own members. I wish to address two key roles of AsMA in response to these questions. The first role is to be an advocate for the benefits of space exploration and the second is to conduct research and provide education to advance the cause.

One of the strategic goals of AsMA is to promote advocacy in the various dimensions of aerospace medicine. In the context of space exploration, it is a responsibility of our members to reach out to our fellow citizens and educate them on its many benefits. We also have the responsibility to educate ourselves on these benefits. How many of us can knowledgeably discuss the spin offs and benefits of space exploration to life here on Earth?

Throughout history, the space program set goals that required innovation and technology, yet to be developed, that resulted in unintended and amazing breakthroughs to life on planet Earth. Satellite technology has helped us predict hazardous weather patterns such as hurricanes and tsunamis. Pacemakers and defibrillators have saved lives and improved the quality of life for many citizens. Water filtration systems have turned waste water into drinkable water.

Other miscellaneous spinoffs, including transistor radios, wireless light switches, and improvements in sunglasses, plastics, batteries, and tennis shoes, all derived from NASA research, continue to enhance the lifestyle of Earth's citizens and strengthen the world economy. Because of space research we have the convenience of just switching on the television and checking to see if it's a good day to go fishing or play golf. In all, more than 30,000 secondary applications of space technology provide daily benefits to hospitals, offices, and homes. Without space exploration, life on Earth would be very inconvenient. Space exploration is the place to turn for colonization. In the future, planet Earth may no longer be able to accommodate the human race, but maybe Mars might. If we humans want to survive for hundreds of thousands or millions of years, says former NASA Administrator Michael D. Griffin, we must ultimately populate other planets, colonize the solar system, and one day go beyond. **HEREIN LIES OUR CRUSADE!** We need to embrace it and share it with others to enhance global understanding and continued support for space exploration. Having captured the crusade, we turn to another goal of the AsMA strategic plan, which is to promote research and education in aerospace medicine. It is our responsibility to contribute to space medicine research essential to support our astronauts' health and safety in missions beyond Earth's orbit. Although no specific mission has yet been defined to further pave the pathway to open space, it is certain that a better understanding of human performance in space, including measures to mitigate risk to health and life in outer space, are critical to any forward movement.

So, while government agencies debate the alternative avenues for the most cost efficient and effective technology



**Marian B. Sides, Ph.D.**

for long-term exploration of the "Far Frontier," we need leading edge medical research to aid in the quest for the safety and health of those who travel in challenging environments. This is clearly part of the mission of AsMA. So, what can we do?

We can start with Scientific Program development. Historically, AsMA has taken an eclectic approach to scientific program development on its defined tracts. Topics of individual choice are submitted, reviewed, approved, and presented. While this approach provides value, it offers a fragmented contribution to the science. I suggest for consideration a long range plan that will model a proactive approach to research design. From this design, we identify topical areas that represent gaps in knowledge and will serve to frame the platform for solicitation of scientific study and subsequently presentation at the scientific meeting.

To this end, I challenge the Space Medicine Association, the Scientific Program Committee, and the Long Range Planning ad hoc Committee to work collaboratively on defining such a space medicine research platform.

AsMA's preeminence in the global community regarding the advancement of space medicine research rests on the relevance and magnitude of our contribution to the knowledge base, so critical to human safety and health in long-duration spaceflight. Whether it's about radiation exposure, fluid shifts, musculoskeletal issues, or crewmember mental health, the research role of AsMA in space exploration is multifaceted. As we build a knowledge base in scientific exploration, we are also contributing to the multitude of spinoffs that enhance the quality of life for humankind here on Earth.

A true visionary anticipates the unknown, prepares for the possibility and tackles an uncertain future. Let's envision a "Manned Mission to Mars" after year 2035; we have only 25 years or so to design countermeasures that will ensure safety in human performance for our astronaut crews. When the vehicle is ready, the mission defined, and the money is appropriated, will our medical science dictate safe travel for the men and women whose lives are at risk in the pursuit of the Far Frontier?

*"Only in a universe of unlimited resources can all men be brothers."*

*Robert Zubrin, The Case for Mars, 1996*

# Association News

## Executive Director's Column: December 2010

Well, here it is December already. Here in the United States, we've just enjoyed the Thanksgiving season with all of the family celebrations, football games, and shopping activities that are associated with that holiday. December is a time that offers many around the world the opportunity to celebrate important holidays. December also represents the end of another calendar year and a time to reflect. For me, it's been an exciting and rewarding 2010. Let me quickly review.

I walked into the Aerospace Medical Association Home Office early in the morning of January 11, 2010, to begin my new role as your Executive Director. Waiting for me that morning was my friend, Dr. Russell Rayman. He and the staff showed me around and laid out a list of important issues to attack in preparation for my first Annual Scientific Meeting in Phoenix, AZ. I must admit, it was a little overwhelming at first, but the incredible staff was always there to hold my hand and help me through. Dr. Rayman was also a phone call away to quickly answer my questions and provide me sage advice. I want to publicly thank Dr. Russell Rayman, Pam Day, Gloria Carter, Sheryl Kildall, Rachel Trigg, and Gisselle Vargas for guiding me through this first year as Executive Director.

During those first few months, we worked through computer and website/database hosting issues (thanks to Gisselle Vargas and

Rachel Trigg), Association database programming problems (thanks to Gisselle Vargas, Gloria Carter, and Sheryl Kildall), Continuing Medical Education issues (thanks to Eilis Boudreau, Susan Northrup, and Yvette DeBois), scientific program presentation processes (thanks to Dr. John Crowley, Dr. Arleen Saenger, Pam Day, and Eric Forthman), and Annual Scientific Meeting planning concerns (thanks to Walt Galanty, Phillip Galanty, Donnell Chandler, Trellis Woods, and Debra Hugo). All of these efforts led to a highly successful Annual Scientific Meeting in Phoenix, AZ. I received numerous positive comments about my first meeting and I want to be sure the people most responsible for the meeting's success are recognized. I would be remiss if I did not mention the many sponsors for our annual meeting. Their continued financial support of our annual scientific meeting is critical to our meeting's success.

Following the meeting in Phoenix, the Executive Committee and I, at the direction of the Council, began working on several important issues for the Association. During the August Executive Committee meeting, decisions were made to improve the Association's financial posture, membership, and annual meeting events. Those decisions were discussed during the November Council meeting

and will have a positive impact on our Association. I'm finding that change in an organization this large and diverse must occur incrementally to ensure any changes are thoroughly investigated and discussed. The Association must continue to embrace new ideas, new processes, and new technologies to be relevant in a dynamic world.

Finally, I want to thank the AsMA Council, Executive Committee, and membership for placing your confidence and trust in me as your Executive Director. It is a privilege and honor for me to serve in this capacity. After 30+ years on active duty with the U.S. Air Force, I can think of no better way to continue working within the Aerospace Medicine communities than as the AsMA Executive Director. This first year has been challenging, educational, and rewarding. The years to come will likely continue to offer more challenges for me, but the strength of AsMA is its members and I know you will always be there to provide me expert analysis, guidance, and recommendations. Thank you all for that support.

I would like to close this column by offering my sincere best wishes to all of you for a safe and happy holiday season. I look forward to 2011 and the possibilities for the Aerospace Medical Association in the new year.

## Aerospace Physiology Board Certification Announcement 2011

By Maj. Jaime R. Harvey, USAF, BSC, CAsP

The Council of the Aerospace Medical Association (AsMA), acting upon recommendations of the Aerospace Physiology Certification Board, grants certification in aerospace physiology. Board certification in aerospace physiology was established by AsMA to encourage the study, improve the practice, and elevate the standards of excellence in aerospace physiology. Formal Board Certification provides an avenue for professional and peer recognition in aerospace medicine, and is a worthy goal for members to attain.

This year's certification examination will be offered at the 82nd Annual Scientific Meeting of the Aerospace Medical Association on Sunday, 8 May 2011, in Anchorage, AK.

Board certification is for professionals with an abiding interest and demonstrated productivity in the field of aerospace physiology. Applicants must possess, as a minimum, a baccalaureate degree either in physiology or a closely related science. A history of significant contributions to aerospace physiology is also required. Applicants should have 5 yr of active professional experience in an aeromedical field.

The 5-hr exam contains questions covering various areas relevant to aerospace physiology including, but not limited to, general human physiology, acceleration physiology, decompression physiology, impact, hypoxia,

vibration and noise, operational aspects, space physiology, and spatial orientation.

Applications and letters of reference are due to the Admissions Committee no later than the close of business, Friday, 04 March 2011. Applicants should contact the Admissions Chair for an application form (available in English only). Applicants must also submit a suitable digital portrait photograph (5x7), a short professional biography of less than 300 words, two professional letters of recommendation submitted directly to the Board, and a one-time, nonrefundable Application Fee of \$25 (U.S.). A nonrefundable \$75 Examination Fee is due prior to the exam. Make checks payable to the Aerospace Physiology Certification Board. Applicants must submit documents to the Admissions Chair in a digital format; MS-Word compatible for text documents, and high-resolution JPEG for graphics/photos.

Applications for Aerospace Physiology Board Certification are available from the Admissions Committee Chairman:

Jaime R. Harvey, Maj, USAF, BSC, CAsP  
712 Mars St.  
Destin, FL 32541

E-mail: jaime.rivas@eglin.af.mil (professional), or jaime\_leigh@mac.com (personal)

**Deadline for Application: 4 March 2011.**

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### Donate to the Foundation

The AsMA Foundation supports the field of Aerospace Medicine through financing educational & scientific programs, providing scholarships, supporting grants for research, etc. Please visit: [www.asma.org/asma\\_foundation/foundation-index.php](http://www.asma.org/asma_foundation/foundation-index.php). Send checks to: AsMA Foundation, 700 Gemini St., Suite 110, Houston, TX 77058. Donations are tax deductible.



## European School of Aviation Medicine

### Training courses 2010/2011 for JAA/FAA- Aero Medical Examiners

**AME class 1**  
Advanced course 19      4 – 12 December 2010

**Aviation Medicine/  
Travel Medicine**  
Diploma course 19      19 – 27 March 2011

**AME class 2**  
Basic course 20      3 – 11 September 2011

**AME class 1**  
Advanced course 20      3 – 11 December 2011

**Venue: Lufthansa Aeromedical Center  
Frankfurt Airport**

Application forms and further details under  
[www.flugmed.org](http://www.flugmed.org) or [www.eusam.org](http://www.eusam.org)

### Meetings Calendar

**February 16-19, 2011; Preventive Medicine 2011; San Antonio, TX.** American College of Preventive Medicine's Meeting. Info: [www.preventivemedicine2011.org](http://www.preventivemedicine2011.org).

**May 2-5, 2011; 16th International Symposium on Aviation Psychology; Dayton, OH.** Wright State University, Dayton, OH. Info: [www.wright.edu/isap](http://www.wright.edu/isap)

**May 8-12, 2011; 82nd AsMA Annual Scientific Meeting; Anchorage, AK.** Denai'na Convention Center. Info: [www.lasma.org](http://www.lasma.org)

**June 15-18, 2011; 44th UHMS Annual Scientific Meeting; Fort Worth TX.** Renaissance Worthington. Info: [www.uhms.org](http://www.uhms.org)

**September 11-15, 2011; International Congress of Aviation and Space Medicine; Bucharest, Romania.** Info: [www.iaasm.org/congresses.cfm](http://www.iaasm.org/congresses.cfm)

### Future AsMA Meetings

May 8-12, 2011; Denai'na Convention Center  
Anchorage, AK

May 13-17, 2012; Atlanta Hilton  
Atlanta, GA

May 12-16, 2013; Chicago Sheraton  
Chicago, IL

May 11-15, 2014; San Diego Hilton  
San Diego, CA



# TEXAS

## 44th UHMS Annual Scientific Meeting

### June 15-18, 2011

**Undersea & Hyperbaric Medical Society  
Office of Naval Research  
NAVSEA**



[www.uhms.org](http://www.uhms.org)



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## The Undersea and Space Medicine Research Lab at Dartmouth

Jay C. Buckley, Jr., M.D., Dartmouth-Hitchcock Medical Center, Lebanon, NH

Work at our lab at Dartmouth began in 1998 with the goal of addressing physiological and medical challenges presented by long-duration spaceflight. Early on, we established a collaboration with Creare, Inc., an engineering research and development firm in Hanover, NH. Many of our projects have been collaborations with Creare. Over the years, we have performed research for the space program in areas ranging from motion sickness to bone loss. Some of this research has been important for the Navy, and now most of our projects are focused on Navy-relevant problems. Currently, research in our lab runs along three main lines: decompression sickness, hearing assessment, and computer-based psychological training and treatment. Although these topics may seem diverse, they all share a common origin in the space program.

### Decompression Sickness

When astronauts go on an EVA, they leave the sea-level pressure in the International Space Station (ISS) and go to spacesuit pressure, which is equivalent to atmospheric pressure at an altitude of 9140 m (30,000 ft). Ordinarily, a pressure change this large would cause decompression sickness. But spacewalkers breathe pure oxygen before EVA to reduce nitrogen in the body and thereby lower that risk. Nitrogen levels, however, are not the only factor affecting decompression sickness risk. Researchers have known for decades that blood samples brought from sea level to 9140 meters won't bubble; yet people who experience this pressure change do de-

velop bubbles in their blood. This led to the hypothesis that there must be small bubbles (micronuclei) in the body that serve as places where bubbles form during decompression. If these micronuclei could be detected and altered in some way, this could be a new approach to modifying the risk of decompression sickness.

In a team project with Creare, we studied a new approach to detecting small bubbles—dual frequency ultrasound. After we demonstrated the ability to detect and size small bubbles (< 10 microns) with this technique, we used it to answer a long-standing question in the decompression field—does exercise produce small bubbles in exercising tissue? Our recent work has shown that it does. We were able to detect signals consistent with small bubbles in exercising tissue after exercise—signals that rapidly disappeared during rest [3]. We are currently expanding on these findings. These results are relevant to NASA, but they are particularly important for the Navy. The Office of Naval Research supports these studies.

### Hearing Assessment

Astronauts and cosmonauts returning from long-duration spaceflights have had temporary, and in some cases, permanent hearing loss. The reasons for this are not fully understood, since while the noise levels on the International Space Station (ISS) often exceed desired levels, they are not at levels that typically cause hearing loss [1]. We proposed using distortion product otoacoustic emissions (DPOAEs) (and other standard audiological tests) to monitor astronauts in space. In a team effort with Creare we developed a hearing testing system for use on the ISS that included threshold audiometry, DPOAEs, and other tests that astronauts could self-administer.

Although the system did not fly on the ISS, the efforts led to new research opportunities. We developed an upgraded version of the system and are currently using it to assess auditory changes in individuals with HIV. As patients with HIV live longer, other problems related to HIV are becoming apparent. One of these problems is hearing loss. The incidence, prevalence, and nature of this loss are not well understood. In our National Institute on Deafness and Other Communication Disorders (NIH) funded project, we are measuring auditory parameters in a large cohort of HIV positive individuals in Tanzania. Our goal is to determine the nature of the hearing loss seen in HIV positive patients and determine what factors correlate with the hearing changes.

Another key area of interest in the lab is noise-induced hearing loss. In a project for the U.S. Navy through the Office of Naval Research, we are advancing hearing testing technology and developing a field-deployable system to assess noise-induced hearing loss. This project examines usefulness and repeatability of DPOAEs for assessing noise-induced

hearing loss. It also develops new technology to perform DPOAE maps and provide repeatable probe positioning in the ear. The ultimate goal of this study is to allow for the early detection of noise damage to minimize hearing loss in operational environments.

### Computer-Based Psychological Training and Treatment

The isolated and confined environment of space presents several psychological challenges, particularly interpersonal conflict, stress, and depression. As anyone who has worked in a group knows, interpersonal conflict can destroy a group's effectiveness. Also, excessive stress can lead to health problems and fuel interpersonal conflicts. Chronic stress and conflict can also lead to depression. So, managing stress and interpersonal conflict well is critically important for mission success.

In an operational environment (like spaceflight, military aviation, etc.), however, seeking psychological help or training can be viewed as a sign of weakness. So training and treatment options that can be done autonomously and confidentially are desirable for these settings. Computer-based, multimedia training and treatment offers a flexible, autonomous, and confidential solution to this problem [2].

The Undersea and Space Medicine Lab at Dartmouth has been supporting efforts in the emerging area of computer-based psychological interventions. Development of programs that address conflict and depression is led by James Cartreine, Ph.D., at Harvard Medical School. Raphael Rose, Ph.D., at UCLA leads the efforts on stress. The National Space Biomedical Research Institute (NSBRI) funds these projects. To date, we have developed a training program for conflict and a depression treatment program based on problem-solving treatment. A stress management project is underway.

### Summary

The Undersea and Space Medicine Lab at Dartmouth has a diverse set of facilities and several productive collaborations focused on solving problems for the U.S. Navy, National Institutes of Health, and NASA. Additionally, this research has relevance to clinical medicine, and the lab is working to transition its projects into clinical use.

### REFERENCES

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2. Carter JA, Buckley JC, Greenhalgh L, Holland AW, Hegel MT. An interactive media program for managing psychosocial problems on long-duration spaceflights. *Aviat Space Environ Med* 2005; 76(6, Suppl.):B213-23.
3. Wilbur JC, Phillips SD, Donoghue TG, Alvarenga DL, Knaus DA, Magari PJ, Buckley JC. Signals consistent with microbubbles detected in legs of normal human subjects after exercise. *J Appl Physiol* 2010; 108:238-9.



Hanover - May 25, 2010 11:41

**CYCLE ERGOMETER**--Jacob Swan, Ph.D. rides a bicycle ergometer during an oxygen prebreathe study at the Dartmouth Undersea and Space Medicine Research Lab.

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# WING NEWS & NOTES

## Anchorage, Here We Come!

As winter comes, daylight goes and we all look forward to winter solstice, the 21st of December. Hoses are emptied, RV's are winterized, and leaves are removed from driveways before they are frozen into place. In our household, we get the ice prongs on the crutches. By December, we will have sunrise around 10:00 a.m. and sunset around 3:30 p.m. We look forward to the solstice because on the 21st of December our days start to get longer again. June 21st is the summer solstice. So, as many of you have already experienced, by the time our AsMA conference starts 9 May, we will be seeing daylight most of the day. We are hoping for another Chamber of Commerce week of bright sunshine for the conference.

We have a beautiful new convention center. It is called the Dena'ina center. The Dena'ina (also Tanaina) are an Alaska Native people, an extended tribe of American Indian lineage. They are the original inhabitants of the south-central Alaska region ranging from Seldovia in the south to Chickaloon in the northeast, Talkeetna in the north, Lime Village in the Northwest, and Pedro Bay in the Southwest. AsMA made the local newspaper, the *Anchorage Daily News*, by having the distinction of being the first group to book our new convention center before ground was even broken. The rooms in the center are all difficult to say because they all have native names. We have our reception room in what is referred to as the K'enakatnu (Knik) or the Executive Board Room. It is located on the second floor near the back of the center. Although it is in the back of the building, it has many open windows that reveal a large portion of the city. Across the street from the center is McGinley's Pub, if you're feeling "Irish."

The hotels we will be using are all close to our activities. If you are coming for the FAA AME seminar, the best place for you to stay would be the Marriott. The Marriott is two doors down from the convention center and the seminar is scheduled to be held in the



**DENA'INA CENTER** (photo by J. Sventek)

hotel. The Captain Cook hotel is one of our oldest hotels. After the earthquake of 1964, when people were ready to all pack up and leave, Wally Hickel (who later became our governor), announced he would build a hotel. He is largely credited for keeping Anchorage together at that time. Although the hotel is one of our oldest in the town, it has been kept up to modern standards and is a beautiful hotel complete with a spa, indoor swimming pool, and masseuses for your relaxation. Any appointment with a masseuse will entitle you to full use of the spa for the entire day/evening. The Crows Nest presents some of the finest dining you will find anywhere. The Hilton Hotel is located nearest to the railroad and ship creek. You can count on the Hilton for Hilton quality. The Hilton is closest to our tours and our luncheon. The Westmark is the smallest of the hotels. The Westmark is a part of a small chain of full service hotels and inns throughout Alaska and the Ukon. It is clean and very comfortable. The Westmark is the most centrally located of the hotels we are using and the most economic.

I am looking forward to the summer and welcoming all of you to Alaska, The Last Frontier. Where when you step out your door, you become part of the food chain and it is not always the top. We are planning an extra tour for Friday so try to save a few extra days to travel Alaska if you can.

## Tours, Tours, Tours

### Tuesday Tour: "A Bit Of Anchorage"

We will take the Trolley to the Ulu Factory where we will see how they make and use the Ulu. The next trolley stop is the "Alaskan Experience" where you will be able to watch artisans making native wares, see an exhibit of paintings by one of Alaska's most famous artists, Fred Mecatanze, and learn about the "Earthquake of 1964" and our famous auroras. After lunch at Halibut Olympia we will tour the Alaskan Mint before heading over to ""The Bear and Raven," where we will learn about the Gold Rush and the Iditarod. Our last stop will be at David Green furrriers.

**Wednesday Annual Meeting and Business Luncheon** will be held at Sullivan's Steak House with its comfortable library-like setting located in the Anchorage 5th Avenue Shopping Mall, a short distance from the hotels.

### Thursday Tour: Anchorage Museum at Rasmuson Center

The newly renovated museum provides space to collect and exhibit Alaska's cultural treasures: the art, history, and science of Alaska. The tour includes a basic docent guided viewing of Alaskan heritage and admission to the Woolly Mammoth exhibit. Lunch will be in the Muse Café.

### Friday Tour: 26 Glacier Cruise – Out of Whittier

On the 26 Glacier Cruise you will explore the calm waters and wild sights of Prince William Sound through beautiful Esther Passage. We depart from the Marriott and Cook Hotels aboard the Majic Buss. We sail out of Whittier Alaska on a high-speed catamaran—with plenty of windows for viewing regardless of weather. A U. S. Forest Service Ranger will narrate the cruise. The glaciers are majestic. You may see Eagles, Bear, Whales, Otters, and other wild life on this cruise. A complimentary hot lunch is included and a cash bar available onboard.



**ANCHORAGE MEETING HOTELS---**(left to right) Marriott, Cook, Hilton and Westmark. Each has unique features and is within walking distance of the Dena'ina Center.

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## NEWS OF CORPORATE MEMBERS

### Eagle Announces Multiple Awards

#### *CDC Award*

In September 2010, Eagle Applied Sciences, LLC, was awarded a \$50M Indefinite Delivery/Indefinite Quantity (IDIQ) task order contract from the Centers for Disease Control (CDC). Eagle as the prime, in conjunction with their teaming partner Lovelace Respiratory Research Institute (LRRRI), will provide medical, scientific, and technical support on this global health effort.

The CDC provides national and global leadership to improve the health of people in all stages of life and in all settings by monitoring health, developing health improvement strategies, and using financial and technical assistance with a variety of domestic and international partners as well as other activities. The CDC has over 200 staff in 45 countries, requiring outside assistance to meet its responsibilities—this is the role Eagle and LRRRI will assist with, providing the technical and professional expertise to fulfill the mission. Eagle's staff will provide subject matter experts for the design, management, and implementation of the CDC's global health programs and initiatives. Some of the programs Eagle and LRRRI will support are the programs directly related to the CDC's Global Aids Program (GAP), Global Disease Detection (GDD), and Coordinating Office for Global Health (COGH). This award was won in the competitive market and is one of Eagle's biggest awards in the company's short tenure as a contractor.

#### *2010 Contractor of the Year Award*

In October 2010, Eagle Applied Sciences, LLC, was also recognized by the U.S. Army Medical Command for their dual efforts on the Warriors in Transition (WT) and the Soldier Transfer and Regulating Tracking Center (STARTC) program. This flagship program is administrated by Eagle's Program Manager and his very dedicated staff. Currently, there are 25 U.S. and 2 international locations, which are Landstuhl and Vilseck, Germany. The

program provides wounded soldiers and their families an independent advocate to assist in resolving complex, often overwhelming issues such as healthcare, finance, and physical disability processing. Additionally, the ombudsmen work closely with health care providers and administrative support staff throughout the local medical treatment facility to promptly resolve and if necessary elevate soldier or family member issues to the appropriate command or medical treatment agency. To date Eagle's support personnel have handled over 22,000 cases to ensure the best care possible. In some cases, the ombudsmen reunite family members at the bedside of the wounded warrior for additional support and care.

The MEDCOM STARTC program supports the Warrior in Transition Command and Warrior Transition Units with the timely transfer of recovering warriors closer to home. The STARTC is responsible for clinically and administratively validating a WT transfer patient movement request within 3 business days. The STARTC contractor nurse case managers and transfer coordinators review, validate, and/or provide a range of recommendations that enables the government to employ appropriate solutions for the requirement to pro-actively reduce WT transfer issues and, in turn, expedite the effort to centralize the WT transfer process within MEDCOM's STARTC.

### Baxter Launches Glassia™ in the United States

Baxter International Inc. recently announced the commercial launch of Glassia™ [Alpha1-Proteinase Inhibitor (Human)] in the United States. Glassia™ is the first available ready-to-use liquid alpha1-proteinase inhibitor (Alpha1-PI) and is indicated as a chronic augmentation and maintenance therapy in adults with emphysema due to congenital deficiency of alpha-1 antitrypsin (AAT), an under-diagnosed hereditary condition characterized by a low level of alpha-1 protein in the blood.

Glassia™, which was approved by the FDA on July 9, 2010, is administered once a week and works by augmenting the levels of AAT in the blood and lungs. Through a definitive agreement with Kamada Ltd., Baxter is the exclusive distributor for Glassia™ in the United States and other select markets.

In addition to providing biological therapeutics for the disorder, Baxter is also working to improve awareness and early diagnosis of AAT deficiency. The company sponsors the AlphaTest® kit to make it easy for physicians to test patients through a simple finger stick. To date, Baxter has helped screen more than 85,000 people for AAT deficiency.

### Mayo Clinic Responds in Flood Relief Effort

Mayo Clinic recently pledged \$300,000 to the clean up and recovery efforts for recent flood damage in southeast Minnesota. Mayo Clinic is working closely with the American Red Cross, The Salvation Army, and the United Way in response efforts. Mayo's response includes: an immediate donation of \$300,000 distributed equally to the SE Minnesota Chapter of the American Red Cross, The Salvation Army Rochester, and the United Way of Olmsted County for flood relief efforts; a call for Mayo employees to volunteer for clean up and recovery efforts; and grants and employee assistance programs to help employees affected by the flooding.

### Wyle Wins Contract to Support Department of Transportation

Wyle has been awarded a multi-year contract by the U.S. Department of Transportation to support transportation agencies in developing tools and strategies for the environmental sustainability of transportation systems. Wyle will support the Volpe National Transportation Systems Center with the Measurement, Modeling, and Assessment of Transportation's Environmental and Psychological Effects. Potential tasks include technical support to comprehensive environmental tools; technology development initiatives such as Green vehicle concepts and alternative fuels; providing technical expertise to the Volpe Center and its partner agencies to assess and mitigate the environmental and community effects of transportation operations and facilities; and assisting with the characterization of soundscapes and visitor experience in National Parks.

Wyle has provided advanced environmental research and analysis to the transportation industry for more than 3 decades and has been a key developer of various environmental models and industry guidance for both air and ground transportation. Wyle also provides critical environmental research to vehicle and concept development for aviation NextGen initiatives and programs. The Volpe Center award is a key vehicle for the Department of Transportation to meet its environmental goals for a transportation system that is better integrated and more efficient in its operation.



**SBO Award Dinner**---From left to right: Russell Nelson, Pete Andrew, Elizabeth Hewins, Guy Banta, Walter Hankins, and Deborah Lickteig.

# NEWS OF MEMBERS

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**Lt. Col. Juergen Knueppel, GEAF**, of Schwalmstadt, Germany, recently retired from Active Duty. He continues as an ASMA member, glider instructor, and advisor to the Mountain Wave project – an attempt to set a world record for altitude in a glider. He is President and the German Delegate to the Commission Internationale Medico-Physiologique (of the Federation



Aeronautique Internationale, the air sports' governing body.

**William H. Sneider, M.D., M.P.H.**, of Dayton, OH, has been selected as Commander of the 178th Medical Group of the 178th Fighter Wing, Air National Guard, Springfield, OH. He has also been designated a Senior FAA AME in Warren County, OH.

**John C. Pellosie, Jr., DO, MPH**, Davie, FL, Chair Department of Preventive Medicine at Nova Southeastern University College of Osteopathic Medicine has recently been appointed oversight of the College's Bio-informatics, Master in Public Health and EMS Training Programs.

## New Members

Jessica C. Campbell, Capt., RAA, MBBS, Stafford Heights, Queensland, Australia  
 Danita N. Koehler, M.D., Fairbanks, AK  
 Stephen M. Mitchell, Maj., USAF, Palm Harbor, FL  
 Craig R. Pack, Lt.Col., USAF/MC, San Antonio, TX  
 Jacques Von Speyer, Beverly Hills, CA

### Updated News of Member Form Online!

A new online pdf form is available on the Members Only page so you can update your fellow Members on what you're up to. Send us news of awards, promotions, etc. Please remember to send us your e-mail address!

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## Nominations Sought for 2011 AsMA Awards

The Awards Committee of AsMA, which is responsible for selecting the annual winners of the awards, has set a **January 20** deadline for receiving nominations for awards to be presented at the 2011 Annual Scientific Meeting in Anchorage, AK. Names of prospective award winners should be submitted as far in advance of the deadline as possible. To view the complete list of awards and the award form online, please go to: [www.asma.org/pdf/award-form.pdf](http://www.asma.org/pdf/award-form.pdf).

Nominations can be made by any member of AsMA.

### Rules:

1. The nominee must be a current member of the Association by Feb 1 in the year in which the award may be given, with the sole exception that the Sidney D. Leverett, Jr., Environmental Science Award is open to non-members.
2. Employees of a company sponsoring an award are eligible to receive the award. Self nomination is not allowed. Deceased members may be nominated.
3. Nominations for the Tuttle and Leverett Awards must cite a specific paper printed in *Aviation, Space, and Environmental Medicine*. The award will be given to the first author, with co-authors that are AsMA members receiving co-author recognition.
4. An individual can only receive one award in any one year. The same individual may receive an award more than once, so long as five years have elapsed between the last time that award was won by that same awardee. The exception is the Bauer Award, as this award is only given once to an individual.
5. Nominations are good for 3 yr from the original award nomination. They may be updated. If substantial material has changed for the same award within that three year cycle-- a new nomination should be submitted.
6. The form is available on the AsMA website. You may either submit the nomination directly from the website or you may download the nomination form into your computer for e-mailing as a Word document attachment. Nomination forms sent via e-mail should be addressed to the Awards Committee Chair, Dwight Holland, at [awards@asma.org](mailto:awards@asma.org); and Ms. Gisselle Vargas at AsMA Headquarters ([gvargas@asma.org](mailto:gvargas@asma.org)). If e-mail is not available, you can send a hard copy of the form via normal mail to:

Dwight Holland; 4874 Glenbrooke Dr.; Roanoke, VA 24081; Phone: 540-761-1576; AsMA Home Office fax: 703-739-9652

Any auxiliary biographical material in electronic or hard copy attachments must be limited to 3 typed pages and will be retained in Association files.

7. Nominations received after **January 20th** will be considered for awards to be presented at the next annual meeting.

## CLASSIFIED AD

**Assistant/Associate Professor**  
**Aerospace Medicine Residency Program**  
**Department of Community Health**  
**Wright State University**  
**Boonshoft School of Medicine**  
**Dayton, Ohio**

Wright State University Boonshoft School of Medicine is recruiting for a faculty position within the Division of Aerospace Medicine, in the Department of Community Health. This program is one of only two civilian aerospace medicine residency training programs in the country. Candidates must be a US citizen, have an MD or DO degree, have completed an ACGME approved aerospace medicine residency training program and be board certified by the American Board of Preventive Medicine at the time of initial appointment or within 3 years of appointment, and be able to obtain an unrestricted license in Ohio. Candidates holding a pilot's license and/or board certification in a primary care field are preferred. The successful candidate must be an outstanding clinician and have a strong interest and/or experience in aerospace medicine resident education. For appointment at the rank of Associate Professor, the candidate must have 4 years prior experience at the rank of Assistant Professor, or 6 years of experience working in the field with documented effectiveness/expertise in teaching, research or administration within aerospace medicine. Opportunities exist to conduct clinical research. The aerospace medicine program of the United State Air Force is relocating to Dayton. Dayton is a wonderful family oriented community with a new riverfront park, excellent schools, and a new performing arts center. Compensation and benefits are highly competitive for medical school affiliated positions. Interested candidates should send a letter of interest, and curriculum vitae to: <https://jobs.wright.edu/>.

Review of applications begins November 15, 2010. If the position is not filled with initial responses, applications will continue to be considered until the position is filled. For additional information about the Wright State University Boonshoft School of Medicine and its programs, please consult the Boonshoft School of Medicine website at: <http://www.med.wright.edu/>. Wright State University is an Affirmative Action/Equal Opportunity Employer.

### PRESENTATIONS FROM THE 2010 PHOENIX MEETING ARE NOW ONLINE IN PDF FORMAT!

**Log on to the AsMA website and go to the Meetings page. Follow the link to the presentations, converted from PowerPoint to PDF: [www.asma.org/asma2010\\_mp](http://www.asma.org/asma2010_mp)**

# Thank You!

## Corporate and Sustaining Members of the Aerospace Medical Association

*Now in Our 81st Year!*



*The financial resources of individual members alone cannot sustain the Association's pursuit of its broad international goals and objectives. Our 81-year history is documented by innumerable medical contributions toward flying health and safety that have become daily expectations by the world's entire flying population—commercial, military, and private aviation. However, support from private and industrial sources is essential. The following organizations, who share the Association's objectives or have benefitted from its past or current activities, have affirmed their support of the Association through Corporate Membership.*

AdviTech, Inc.	Gentex Corporation
Aerospace Medical, PLC	Harvey W. Watt & Company
Aerospace Medicine Residency Program, UTMB	Highbury Consulting, Ltd.
Air Canada	Infoscitex
Aircraft Owners and Pilots Association	InoMedic, Inc.
Air Line Pilots Association	International Federation of Air Line Pilots Associations
American Airlines	Japan Airlines International (JALI)
Aqua Lung/U.S. Divers	Lifepoint, Inc.
Armed Forces Benefit Association	Lockheed Martin
Autoflug GmbH	Martin-Baker Aircraft Company Ltd.
Aviation Medicine International (AMI) Inc.	Mayo Clinic
Baxter Healthcare Corporation	MedAire, Inc.
Carleton Life Support Systems, Inc.	Mondial Assistance
Centers for Disease Control and Prevention/National Institute of Occupational Safety and Health	NeuroKinetics Health Services (BC), Inc.
Cobham Life Support	Oregon Aero, Inc.
David Clark Company, Inc.	Pilot Medical Solutions, Inc.
Dowling College	Psoria-Shield, Inc.
Eagle Applied Sciences, LLC	South African Airways
Education Enterprises, Inc.	Spectrum Aeromed
Egyptian Aviation Academy	United Airlines
Environmental Tectonics Corporation	Universities Space Research Association
	Virtual Flight Surgeons, Inc.
	Wyle