

President's Page

A personal note to start with: I am honored and humbled to have been elected to serve as your President for the coming year. I will work to insure that issues are addressed, and the Association remains vital and strong in the coming year. The goal will be to improve the organization, and leave it in better shape for AsMA leaders of the future.

We have an excellent Leadership team in place. This year's Council, Executive Committee, and committee chairs are a very strong team. I thank all of them for their volunteer service, and look forward to working with them.

Message to all: Dr. Andy Bellenkes was an outstanding President, and I personally thank him for the good he has done. He accomplished much during his very active year in office, including increased International involvement (notably the European Society of Aerospace Medicine, with whom we are now mutually affiliated), reenergizing the AsMA Strategic Planning Process, and moving the executive director search forward.

Andy has assured me that he will remain involved in AsMA, from his and Suzi's retirement home in Austria. I'm sure we all look forward to seeing them at future meetings.

Will you forgive me for using my crystal ball and reporting that the Los Angeles meeting was great? Actually, I am writing this in April (print deadlines, you know) so the meeting still lies in my future. Having followed the preparations carefully, though, I am certain that things went well. Friendships were made and renewed, much scientific information was exchanged, and ideas were planted which will flower in coming years.

I think we should begin looking forward to another outstanding meeting, this time in Phoenix, May 9-13, 2010. More about that as the time approaches, but block off those dates now.

Be certain of one thing – AsMA is in a time of transition. All of us need to be aware of this, and those in leadership positions, either of the Association or of its Constituent and Affiliate Organizations, should participate fully in making the transitions as smooth as possible.

To what transitions am I referring?

First, all of you should know by now that Dr. Russ Rayman will be retiring soon as Executive Director. A



Robert W. Weien, M.D., M.P.H.

search has been underway for about 18 months, and, so far, hasn't produced the ideal candidate. I hope that significant progress was made during the various meetings in Los Angeles. The Executive Committee will continue to work ED succession, and we hope to let Russ retire soon. In the meantime, thanks to him for graciously agreeing to stay on during this lengthy process.

Second, our journal will be changing editors. Dr. Sally Nunneley, the Editor in Chief of Aviation Space and Environmental Medicine, has announced her intent to retire from that position at the end of this year. A search committee (under the able leadership of Dr. Jim Webb) has been soliciting nominees and reviewing applications. Interviews of candidates took place last month in Los Angeles. This issue may be resolved by the time you read this, and an orderly transition could get underway shortly.

There may be an additional major transition on the horizon, but without knowing the outcome of the proposed Bylaws changes in LA, it's best to not yet discuss it in this column. I'll present more next month if those changes are approved.

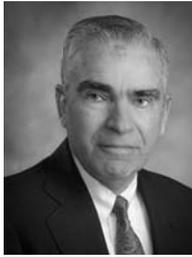
Here is a final important bit of information. Communications by members with the AsMA leadership should be easy. I believe we are better able to serve our mutual needs if we're talking to one another, so let's talk. Toward that end I'd like to give anyone reading this an email address to contact me:

president@asma.org.

If I can't address your issue personally, I'll refer it to the officer, committee chair, or employee who can. I look forward to hearing from you.

Association News

Executive Director's Column



Rayman

At the Table

You have probably heard me tell this before but it is worth repeating. Some years ago, the American Medical Association (AMA) called together a committee to review the then Federal Aviation Administration (FAA) medical certification requirements. The Working Group consisted of a number of physicians, some with aviation medicine experience and others with none. The stark reality of this meeting was the fact that the Aerospace Medical Association (AsMA) was not invited. I don't believe that this was a snub. Rather, we were not considered that important.

Things have changed for us since those days. AsMA is important and is very frequently consulted whenever an aerospace medicine issue surfaces. As a result, we have been invited to provide representatives to a number of professional bodies that are concerned with the many issues of aerospace medicine. Space does not permit me to list everybody's name, but let it suffice to inform you what bodies have deemed our presence essential at the table.

1. The National Academy of Sciences. Participation has been on two committees: the Airliner Cabin Environment and the Health of Passengers and Crew; and, Committee on Aerospace Medicine and the Medicine of Extreme Environments. (This dealt mainly with the space program.)

2. The Air Transport Association of America Medical Committee. This committee meets quarterly and discusses all medical issues concerned with commercial aviation (crew and passengers).

3. International Civil Aviation Organization (ICAO). Its medical working group addresses all aviation medicine issues from a global perspective.

4. Residency Advisory Committees for the USAF Residency in Aerospace Medicine and the University of Texas Medical Branch Residency in Aerospace Medicine.

5. Commission on Accreditation of Medical Transport Systems (CAMTS). This committee focuses on air medical transport, fixed and rotary wing. The committee also inspects hospital-based and private air medical transport services for compliance with CAMTS standards.

6. We occasionally serve on FAA and NASA special working groups as issues arise.

7. Editorial Board of *Aerosafety World*. This is a premier safety journal with world-

wide distribution.

8. JAMA and Lancet depend upon AsMA to review articles on aerospace medicine submitted to these journals.

9. An AsMA member sits on the governing body of the American College of Preventive Medicine.

As you can see, our voice is heard in every quarter of our specialty. AsMA is at the table.

The Aeromed-list Turns 13 in June

By Pam Day (with excerpts from the *Aerospace Medicine Home page* and the *Aeromed-list*)

The Aeromed-list is celebrating its "lucky" 13th birthday on June 12, 2009. The list was started back in June 1996 by Dougal Watson and some like-minded aeromedical practitioners. The list is part of a website called the *Aerospace Medicine Home page*, created and maintained by Dr. Watson. This is a very valuable web resource for those with an interest in the human side of aviation: <http://aeromedical.org> (the site can also be accessed via the AsMA page "Related Organizations").

What's in this Website:

- **Mailing Lists:** The Aeromed-List mailing list fosters discussion on topics of aerospace medical and human factors interest. The list comprises, at last count, 674 members from 64 different nations. Many of the world's renowned aerospace medical experts are members of this list. The aeromed-list also includes an archive and archive-search facility which is regularly updated and contains over 10,000 past aeromed-list postings.
- **Articles:** A wide variety of aerospace medical, and related, articles. There are formal publications, student essays, conference presentations, post-graduate dissertations, and general interest magazine articles.
- **Publications:** Access to a database of over 10,000 aeromedical, and related, publications ... most not available through PUBMED and similar facilities. Also access to a suite of pages concerning books, journals, and magazines with direct, and peripheral, aerospace medical interest.
- **Accidents:** A searchable database of accidents and incidents of aeromedical interest. Where source material is available a link, or reference, is provided.
- **Practitioners:** A searchable database of aerospace medical practitioners from around the world. Includes forms to submit for inclusion in this database.
- **Organisations:** A list, with links, of associations, societies, and other organisations with aerospace medical relevance.
- **Links:** A large collection of links to sites of certain, and potential, interest to aeromedical folk. Includes links to a list of aviation medical courses maintained by ICAO.

I asked Aeromed-list members what benefits they perceived from their participation in the list. The overwhelming response was great enthusiasm and kudos to Dr. Watson for his

efforts in maintaining this wonderful resource. Having monitored the exchanges now for a few months, I can see that there is indeed a true sense of community and willingness to share knowledge and expertise. Even some contentious issues are handled with courtesy (for the most part!).

Some examples of the comments follow: "Dougal's list (the aeromed list) is of great service to the world's aerospace medicine community. The list offers global communication and exchange of information relevant to our specialty, and it does so instantly and continuously. It reaches everyone; it reaches everywhere. It connects us all, from the professor to the isolated practitioner. It provides global perspective and alternative views. In doing that, it provides growth. Kudos to Dougal's fine distant vision and hard work."

"One thing I am pleased to tell my classes...is that after they graduate, they can contact me at any time. I can promise them that no matter where they are in the world, I can get them in touch with an experienced professional in Aerospace Medicine who is an expert in their area of need. Numerous people have done just this, some up to ten years later. As many list members know, I have put them in contact with pilots and other aviation professionals and no member has ever hesitated to help. [I'm] proud to be among you."

"The List is a vital link to exchange ideas and air your thoughts. Well done. One need not have an expertise, in a specific topic discussed, to benefit from the discourse. As always, people are the focus."

"The beauty of the list [is] the ability to connect with more experienced avmed team for advice no matter where you are. Personally I have been in the most remote parts of the world ... and no matter at what time one writes there is always a response. The team never lets you down. I remember at the beginning of my joining the list membership there was a humorous discussion regarding viagra that many joined in "Gear up to Gear up time". I learn incredible amounts to make me a better aviation medicine advisor and teacher to my more ground-bound colleagues and patients. The discussions are wide and varied."

"Being Ex-Service and still consulting to EMS within Aus and elsewhere, much of interest is re-disseminated to other rotary wing pilots and medical crews, sanitised of course. Additionally because of the list I have had the pleasure of meeting some of you and your families. We have always been improved personally and professionally because of this list and the wonderful people within it. Long may it grow and prosper."

"In today's new globalised world, this aeromed-list allows us to share international best aeromed practices and brain storm with each other, yet allows each to determine what's best in our own local context. That in a sense is what ICAO seeks to do for other aspects of aviationThanks to Dougal's efforts, we have our own informal 24/7 channels of

See *AEROMED-LIST*, p. 591.

Presidents of AsMA Constituent Organizations

Essex to Lead Physiologists

CDR Joseph B. Essex, MSC, USN, CaSP is the incoming president of the Aerospace Physiology Society (AsPS). CDR Essex is currently assigned as the Military Deputy,



Aviation Directorate, Naval Air Warfare Center Training Systems Division, Orlando, FL. He received his Bachelor of Science Degree from Cook College, Rutgers University in 1987, a Master of Science Degree from the University of Kentucky in 1991, and an

Executive Master of Business Administration from the Naval Post Graduate School in March 2007.

CDR Essex was commissioned in the U.S. Navy in May 1991 and reported to Naval Aerospace Medicine Institute where he received his wings in April 1992. He reported to Aviation Physiology Training Department, Naval Hospital San Diego, where he served as the Admin and Training Officer. Following this tour, he reported to Naval Hospital Oak Harbor, where he served as Department Head of the Aviation Survival Training Center, providing survival training and aeromedical support for aviators assigned to the Pacific Northwest. In 1998 he reported to Commander Training Air Wing Six where he served as the aeromedical safety officer. During this tour, he was selected for promotion to LCDR. For his next assignment, LCDR Essex reported to NAS Patuxent River in March 2001, serving as the Crew Systems Department Head, Air Test and Evaluation Squadron Two Zero, with additional responsibilities as the Navy's FAILSAFE coordinator. As the FAILSAFE Coordinator, he coordinated fleet assessments, the development of training materials, as well as the introduction of new and modified Aviation Life Support Systems for NAVAIRSYSCOM.

In April, 2004, LCDR Essex reported to PMA205 as the Assistant Program Manager, Training Systems, where he coordinated training device procurement and support as well as development of new training technology for the Navy's Aviation Survival Training Program and the Night Imaging and Threat Evaluation (NITE Lab) Program. While at PMA205, he was accepted as a member of the Navy's Acquisition Professional Community and was selected for promotion to CDR. In August 2006 he reported to the Human Systems Department, AIR 4.6, serving as the Deputy Program Manager, Fleet Support for NAVAIRSYSCOM PMA202, where he managed the Navy's Aviation Life Support, Oxygen, Night Vision, Egress and Fleet Introduction Fleet Support teams. While assigned to AIR 4.6, he also served as the Assistant Operations Officer.

CDR Essex has been very active in the Aerospace Physiology Society, receiving the Presidents award in 1998. He has served on the Awards Committee, chaired the Partnership in Education Committee, and served as the AsPS journal editor for 2 years.

He was the recipient of the Space Medicine Association's Young Investigator Award (1991), attained Board Certification in Aerospace Physiology in May 1998, and is an Associate Fellow of ASMA.

Heil is Incoming SUSNFS President

CAPT John R. Heil, MC, USN, is the incoming president of the Society of U.S. Naval Flight Surgeons (SUSNFS). He currently serves as Director of Training, Naval Aerospace Medical Institute, NAS Pensacola, FL. CAPT Heil received a B.A. in Cell & Molecular Biology from the State University of New York at Buffalo in 1977, an M.D. from Louisiana State University School of Medicine, New



Orleans in 1982, and an M.P.H. from the Uniformed Services University of the Health Sciences in 1990. He completed an internship in Family Medicine at Naval Hospital Jacksonville, FL, his Aerospace Medicine residency at the Naval Aerospace Medical Institute in 1992, and is certified by the American Board of Preventive Medicine in aerospace medicine and occupational medicine. He has served as a Naval Flight Surgeon at the squadron, Marine aircraft group, training air wing, type wing, Marine aircraft wing, and type command level. He has also served as the Senior Medical Officer on USS LEXINGTON (AVT-16) and USS SARATOGA (CV-60). CAPT Heil served in Operation IRAQI FREEDOM in Al Anbar province, Iraq in 2004 and 2006. CAPT Heil is an Associate Fellow and life member of AsMA, and a life member of the Society of U.S. Naval Flight Surgeons.

Matarese Incoming SUSAFFS President

Col. Margaret B. Matarese, USAF, MC, is the incoming 2009-2010 president of the Society of U.S. Air Force Flight Surgeons. She is currently the Command Surgeon, Headquarters Air Education Training Command, Randolph AFB, TX. She graduated cum laude from the University of California at San Diego with a B.A. in biochemistry and cellular biology in 1982. She was awarded a Medical Doctorate degree from the University of California at San Diego School of Medicine in 1986 and was commissioned a Captain in the U.S. Air Force under the Health Professions Scholarship Program in June 1986. Dr. Matarese completed a residency in Family Practice at David Grant USAF Medical Center, Travis AFB, CA, in



1989. Following this residency, she served as Chief, Family Practice Clinic for the 50th Tactical Fighter Wing Hospital at Hahn Air Base, Germany, and then as a Squadron Medical Element Flight Surgeon for the 512th Fighter Squadron, Ramstein Air Base, Germany. During this assignment, she supported missions in Turkey, Angola, Morocco, Tunisia, Slovenia, and Bosnia.

In 1997, Col. Matarese completed a dual residency in Aerospace Medicine and Occupational Medicine at Brooks AFB, TX, and then served as Commander, 89th Aerospace Medicine Squadron, Andrews AFB, MD. She went on to serve as commander of the 56th Medical Operations Squadron at Luke AFB, AZ, as commander of the 8th Medical Group at Kunsan AB, Korea, and as commander of the 374th Medical Group at Yokota AB, Japan. She subsequently served as command flight surgeon, Air Mobility Command at Scott AFB, IL, and as Chief, Aerospace Operations for the Air Force Surgeon General. Most recently, Col. Matarese was assigned as the Deputy Assistant Surgeon General for Health Care Operations and the Commander of the Air Force Medical Operations Agency. She is a Chief Flight Surgeon with over 800 flying hours.

Col. Matarese's awards include the Legion of Merit, the Air Force Meritorious Service Medal, the Air Force Commendation Medal, the Malcolm C. Grow Award/Air Force Flight Surgeon of the Year, U.S. Air Forces Europe Flight Surgeon of the Year, and 50th Tactical Fighter Wing Company Grade Officer of the Year. She is an Associate Fellow of the Aerospace Medical Association.

Col. Matarese's awards include the Legion of Merit, the Air Force Meritorious Service Medal, the Air Force Commendation Medal, the Malcolm C. Grow Award/Air Force Flight Surgeon of the Year, U.S. Air Forces Europe Flight Surgeon of the Year, and 50th Tactical Fighter Wing Company Grade Officer of the Year. She is an Associate Fellow of the Aerospace Medical Association.

Park leads IAMFSP

CAPT Edwin Y. Park, MC, USN, is the incoming president of the International Association of Military Flight Surgeon Pilots for 2009-2011. CAPT is currently Head, Neurology Dept., Naval Hospital Pensacola, FL. He is board certified in Neurology and Aerospace Medicine and is an Aeromedical Dual Designator with 4500 flight hours. CAPT Park was on active duty from 1978-86 and then



became a Selected Active Reservist from 1986-93. In 1993 he joined the medical corps. His qualifications and duties have included Maritime Patrol Aircraft Commander, Mission Commander, Instructor Pilot, Safety Department Head, Aviation Safety Officer, Training Officer, Personnel Officer, Operations Schedules Officer.

CAPT Park received his B.S. in Anthropology, June 1977, from Michigan State University, E. Lansing, MI. He received his J.D. in December 1990 from the University of Wisconsin Law School, Madison, WI. He attended The George Washington University School of Medicine / School of Public Health and Health Services, Washington, DC, receiving his M.D. in May 1996 and his M.P.H. in

See *PARK*, p. 588.

PARK, from p. 587.

December 1998. He completed his residency in aerospace medicine at Naval Aerospace Medical Institute, Pensacola, FL, in June 1999. He recently completed the National Capital Consortium Neurology Residency Program, Washington, DC.

While studying at the University of Wisconsin Medical School, Madison, WI, he became a research specialist in the Department of Anatomy from 1991-92. He managed biomedical research laboratory and performed experiments designed to investigate skeletal muscle development and regeneration under ongoing grants from the National Aviation and Space Administration (NASA) and the Muscular Dystrophy Association (MDA). He applied methods including small animal surgery, tissue culture, immuno-histo/cytochemistry, electron microscopy, retrovirus DNA vectors, autoradiography and other biochemical assays. At George Washington University he partnered in the design of a Windows-based Neuroanatomy tutoring program for GWU medical students, and tutored in gross anatomy and neuroanatomy.

He is a member of the American Academy of Neurology, Aerospace Medical Association, International Association of Military Flight Surgeon Pilots, Society of US Naval Flight Surgeons, and the American Medical Association.

White Becomes LSBEB President

The incoming 2009-10 president of the Life Sciences and Biomedical Engineering Branch (LSBEB) of AsMA is LCDR Deborah White, USN. LCDR White is currently assigned to U.S. Fleet Forces Command as Deputy Director, Fleet Safety, Virginia Beach, VA. She provides human factor expertise to Fleet Leadership on Safety Issues and provides recommendations on changes to Naval Policy to improve Fleet



Readiness. She is responsible for maintaining and analyzing the Command's Mishap Database, focusing on root causes of both on- and off-duty mishaps. She is also one of the primary leaders behind the Chief Naval Officer's (CNO's) Operational Risk Management (ORM) Revitalization Program, providing Human Factors oversight to the development of new ORM training programs.

LCDR White received her undergraduate degree in Biology from California Polytechnic State University, San Luis Obispo, CA. She then attended Wright State University, Dayton, OH, for the initial start of her doctorate degree, and completed her Ph.D. in Cardiovascular Physiology at Colorado State University in Ft. Collins. During her summer months she conducted research studies at USAF Armstrong Laboratory, both at Brooks AFB, TX, and Wright-Patterson AFB, OH. Prior to entering the Navy, she worked as an Aeromedical Business Advisor to ML Lifeguard, a UK company that designed and developed safety and survival clothing for

both aviation and submarine international services.

In 1997, LCDR White was commissioned as a Research Physiologist in the U.S. Navy and served as a research scientist at the Naval Submarine Medical Research Laboratory until 2000. She then transferred to the Aerospace Experimental Psychology community and went to the Naval Aerospace Medical Institute's Aerospace and Flight Training Program. Upon graduation from the program, she went to the Naval Air Warfare Center as Head of the Human Performance Technology Branch until transferring to the Naval Safety Center in 2003. Prior to arriving at the Naval Safety Center, she attended the Naval Postgraduate School's Naval Aviation Safety Officer Program. She then worked at the Naval Safety Center as Head, Human Factors Analysis Branch for 4 yr. In October 2007, she was requested by Fleet Forces Staff to take a special duty assignment and provide Human Factors Analysis and Aviation Mishap Expertise to the Safety Directorate (N4S).

LCDR White's awards include Medical Service Corps Director's Award - 2001, Navy and Marine Corps Commendation Medal (two awards), Navy Achievement Medal, National Defense Service Medal, Military Outstanding Volunteer Service Medal, and Pistol Marksmanship (Sharpshooter).

In addition to AsMA and LSBEB, LCDR White is a member of the Aerospace Physiology Society. She has authored abstracts for AsMA meetings since the early 1990s and has also authored several journal articles and tech reports including: 1) White DD, Gotshall RW, Tucker A. Women have decreased tolerance to lower body negative pressure. *J Appl Physio* 1996; 80:1138-43; 2) White DD, Montgomery LD. Pelvic blood pooling of men and women during lower body negative pressure. *Aviat Space Environ Med* 1996; 67:555-9; and 3) Jackman RP, Willette PN, White D, Krizek SM. Minimizing exposure to passive smoke in the enclosed environment of U.S. submarines. *Aviat Space Environ Med* 2004; 75:60 - 4.

Hackworth to lead AsHFA

Carla Hackworth, Ph.D., is the new president of the Aerospace Human Factors Association (AsHFA) for 2009-2010. Currently,



Dr. Hackworth works at the Federal Aviation Administration (FAA) Civil Aerospace Medical Institute (CAMI). She began working for the FAA in 2001 as a research psychologist. As the AAM-510 branch manager, she supervises the Flight Deck Program of research. This requires working with R & D sponsors to ensure that the branch is responsive to their needs and that it fulfills its obligation as outlined in its program of research. In addition, she works with branch personnel to ensure they accomplish their performance objectives. She has led assessments of organizational effectiveness, general aviation testing issues, weather-related general aviation incidents, and human factors in aviation maintenance.

Dr. Hackworth attended Central State

University, Edmond, OK, receiving her B.A. in psychology in 1991. She went on to the University of Central Oklahoma, Edmond, OK, earning her M.A. in psychology in 1993. In 2001 Dr. Hackworth received her Ph.D. from the University of Oklahoma in Norman, OK. From September 2000-May 2001 Dr. Hackworth was a faculty member within the Psychology Department, Cedar Crest College, Allentown, PA, where she taught Cognitive Psychology, Psychological Statistics, Introduction to Psychology, and a Research Capstone course.

Among her honors and awards, she received the William E. Collins Publication Award, 2008; Superior Accomplishment Award, Designated Pilot Examiners System Safety Program, 2006; Group Special Act Award, HFACS Project, 2005; and Group Special Act Award, FAA Employee Attitude Survey Project, 2004.

To date, she has authored and co-authored over 20 publications examining aviation human factors. In December 2008, she became the branch manager for the Human Factors Research Laboratory (AAM-510).

Johnson Incoming ASAMS President

Robert Johnson, M.D., M.P.H., MBA, FACPM, is the incoming president of the American Society for Aerospace Medicine Specialists (ASAMS). He is the Deputy Director, FAA Civil Aerospace Medical Institute (CAMI), Oklahoma City, OK. He received his B.A. in Anthropology from Colorado College in 1978. He received his M.D. degree from Uniformed Services University of the Health Sciences (USUHS), School of Medicine, Bethesda, MD, in 1984.

Dr. Johnson went on to an internship in general surgery at Wilford Hall USAF Medical Center, San Antonio, TX, from July 1984 to June 1985. From 1988-1989, he was Adjunct Faculty at Embry Riddle Aeronautical University. He then served a Residency in Aerospace Medicine, Brooks AFB, from June 1990 to June 1991, when he became Chief of Evaluation, Armstrong Laboratory, Brooks AFB, TX. In 1993 he took a position as Chief, Clinical Research Coordination Center at Armstrong Laboratory.

Dr. Johnson earned a Master of Public Health (with Distinction) at Yale University in May 1994. From 1995 to 1997, he served as Senior Medical Inspector at Headquarters Air Force Inspection Agency, Kirtland AFB, NM. In 1997, he became Physician Epidemiologist for the Office of Prevention and Health Services Assessment at Brooks. In 1998, he transferred to become Vice Chair of the Department of Graduate Medical Education at the USAF School of Aerospace Medicine (US-AFSAM), where he remained until 2001. From 1998-2001, he also served as Director of the Global Medicine Course at USAFSAM and from 1998-2002, in addition, he was Residency Program Director of the General Preventive Medicine Residency in the Department of

See JOHNSON, p. 589

JOHNSON, from p. 588.

Graduate Medical Education at Brooks. From 2002-2004 he served as Chief, Preventive Medicine and Population Health, Associate Director (Clinical) of the USAF Residency of Aerospace Medicine at Wilford Hall USAF Medical Center, Lackland AFB, TX. He was Chief Information Officer, Chief of Clinical Informatics, and Member of the Board of Directors at Wilford Hall USAF Medical Center from 2004-2005.

In May 2005, Dr. Johnson was awarded a Master of Business Administration (with Honors) from the University of Texas at San Antonio. From August of 2005 until August 2008, he served variously as Associate Professor of Preventive Medicine and Community Health; Associate Professor of Family Medicine, Director, UTMB Aviation Medical Center; Program Director, UTMB General Preventive Medicine Residency; and Associate Program Director, UTMB/NASA Aerospace Medicine Residency, at the University of Texas Medical Branch, Galveston, TX. His awards include being a finalist for the Parker J. Palmer "Courage to Teach" award; "Teacher of the Year" in General Preventive Medicine Residency, USAF School of Aerospace Medicine; the USAF Meritorious Service Medal with three oak leaf clusters, the USAF Achievement Medal, and winner of Most Outstanding Educational Video in the U.S. Air Force ("The Aerospace Athlete"). Dr. Johnson is a Fellow of the American College of Preventive Medicine and a member of the American Medical Association and the Association of Teachers of Preventive Medicine. He is an Associate Fellow of the Aerospace Medical Association (AsMA) and was Event Chair for AsMA's 2007 Annual Scientific Meeting. He has also been a member of AsMA's Aviation Safety Committee and the Scientific Program Committee. He has been active in ASAMS as well, twice as a member of its American College of Preventive Medicine Advisory Committee, as a member of its Board of Governors, and as its Vice President.

Waring Elected by AMDA

William M. Waring, M.D., M.P.H., is the newly elected president of the Airlines Medical Directors Association. After graduating from his Ohio small-town high school in 1963, Dr. Waring attended the University of Cincinnati, earning a B.A. Magna cum Laude in History, a Phi Beta Kappa key, and a Regular Commission as a second lieutenant in the U.S. Air Force as a Distinguished Military Graduate of UC's AFROTC program. Selected for an Air Force medical education program, he attended the Medical



College of Virginia School of Medicine and received an M.D. degree in 1971. Completing a rotating internship at David Grant USAF Medical Center in 1972, he was assigned as flight surgeon to Lockbourne AFB, OH. In 1973 he entered the USAF Residency in Aerospace Medicine (RAM) program, obtaining an M.P.H. from the Johns Hopkins University and completing a residency at the USAF School of Aerospace Medicine in 1975.

Dr. Waring then had assignments commanding USAF medical facilities in Washington, Korea, and England, followed by three assignments in the Education Division of the USAF School of Aerospace Medicine. He retired from the Air Force in 1988 with the rank of Colonel, having overseen the training of more than 13,000 USAF, U.S. Army, and international military students in aerospace and preventive medicine subjects.

He then practiced occupational medicine as plant chief physician for two Amoco Chemical Company plants in Texas before moving to Atlanta as the Amoco Chemical Company Medical Director. He moved to Seattle in 1993 as Medical Director of Highline Community Hospital's Work Clinic and in 1994 was named Regional Flight Surgeon (Regional Medical Director) for United Airlines for the Northwest and Pacific Divisions of United at SeaTac International Airport. Dr. Waring retired from United in 2007 when the company closed the Seattle position and office.

A Fellow and Life Member of AsMA, he joined the Airlines Medical Directors Association in 1995 after joining United Airlines. He served as AMDA Treasurer from 2001 to 2007 and in 2008 was awarded AMDA's George Kidera Award. He is a Fellow of the American College of Preventive Medicine and the American College of Occupational and Environmental Medicine and is a member of the Northwest Association of Occupational and Environmental Medicine, the International Academy of Aviation and Space Medicine, and the American Medical Association. His awards include a Joint Services Commendation Medal, a Meritorious Service Medal with two oak leaf clusters, and a Legion of Merit.

Taylor to Lead ANS

Lt. Col. Nora Taylor, USAFR, NC, is the incoming president of the Aerospace Nursing Society. She is currently the Functional Trainer for the Joint Patient Movement Team of the Joint Transportation Reserve Unit. She was born Nora Reimers in Condon, OR, and graduated from Ben Eielson High School on Eielson Air Force Base, AK. She received her Bachelor of Science in Nursing from California State University Hayward, CA.

Lt. Col. Taylor was commissioned on April 6, 1986, and proceeded to do an internship at Luke AFB, AZ. Her first permanent assignment was Holloman AFB, NM, where she worked on the multi-service medical/surgical unit of the 35-bed hospital. From there, then Capt. Reimers was deployed with the 833d Air Division Hospital to Taif, Saudi Arabia, from August 1990 to March 1991 for Desert Shield/Storm. She returned to the United States and began flying missions at Scott AFB, IL, with the 57th Aeromedical Evacuation Squadron.

In 1993, Lt. Col. Taylor transitioned to the Air Force Reserve in the 73rd Aeromedical Evacuation Squadron. In 2001 she moved into the joint environment at the 954th Reserve Support Squadron within the U.S. Transportation Command. She was deployed as the Deputy Director, Joint Patient



Movement Requirements Center—CENTCOM from January to June 2003.

Since 1995 Lt. Col. Taylor has been working in St. Louis in the insurance industry. Her civilian positions within Blue Cross/Blue Shield of Missouri and its parent companies have been many. She has worked in medical management certification, training, and behavioral health utilization management.

Lt. Col. Taylor has long been a member of the Reserve Officer's Association, Veterans of Foreign Wars, and the Aerospace Medicine Association, where she is involved in the Registration Committee.

McGinnis to Serve as SMA President

Patrick J. McGinnis, M.D., M.S., M.B.A., will serve as President of the Space Medicine Association (SMA) for 2009-2010. Dr. McGinnis first became aware of the specialty of Aerospace Medicine during his pre-med studies. During medical school, he joined the Kentucky Air National Guard and earned his USAF flight surgeon wings while a senior medical student. Following residencies in Aerospace Medicine and Internal Medicine, he joined NASA as a Flight Surgeon at the Johnson Space Center in Houston, in 1994. There, he provided primary care to NASA Astronauts, their families, and aviation medicine expertise to NASA test pilots and engineers. He was Crew Surgeon or Deputy Crew Surgeon for several space missions: NASA/Mir 3, NASA/Mir 7, ISS 2, and STS-81. Other duties included participation in various medical, research, technical, and international working groups. During his tenure, he also served on Capitol Hill as a Congressional Fellow for Senator Conrad Burns. For AsMA, he has previously served as the President of the Society of NASA Flight Surgeons.

When NASA embarked upon an Electronic Medical Record for the Astronauts, Dr. McGinnis provided clinical leadership throughout the design, build, and implementation phases. Eventually, that experience led him to seek a second career in the Healthcare Information Technology (HIT) industry. Thus, he left NASA in 2004 to join the Cerner Corporation. Like Aerospace Medicine, HIT offers the challenge of integrating medical care with a technologic environment.

Dr. McGinnis is board-certified in Aerospace Medicine. He is a graduate of Xavier University and the University of Kentucky College of Medicine. He trained in Internal Medicine at the University of Texas Medical Branch and in Aerospace Medicine at Wright State University. His academic credentials include an MBA from the Georgetown University McDonough School of Business and an MS in Health Informatics from the University of Texas Houston Health Science Center. Finally, he is a Colonel in the USAF Reserve, having over 23 years of service as a military physician and flight surgeon.

Bernstein Continues as USAAMA President

COL Stephen A. Bernstein will continue the role of President of the U.S. Army Aviation Medical Association (USAAMA) for another

See BERNSTEIN, p.591.

U.S. Space Medicine Operations-Overview Part I

Scott Parazynski, M.D., Karin Gast, and Rick Scheuring, D.O., M.S.

The NASA-JSC space medicine operations concept for in-flight medical care is based upon a robust preventative medicine program. Using current patient care guidelines, this approach best serves astronauts in space by reducing the likelihood of certain medical events occurring, for example myocardial infarction or stroke. Historically, no U.S. crewmembers have suffered a serious medical injury while in-orbit. However, despite the best preventative medical care practices, a few minor medical events have transpired requiring diagnosis and prompt treatment to minimize any potential impacts to the mission.

Some medical conditions are anticipated to occur in most crewmembers based on normal physiological adaptation to spaceflight, such as space motion sickness and back pain. Other instances, such as urinary retention, have been observed in both male and female crewmembers as a side effect of medications used to treat unrelated medical issues.

Table I lists the most common medical conditions and incidence that have occurred in the U.S. Space Program. The incidence rate entered into this table for musculoskeletal injuries is based on data recently published (2). Space adaptation conditions such as space motion sickness and back pain are incidence proportions (% or events per person). Non-space adaptation conditions, such as skin abrasions and musculoskeletal injuries, are incidence rates (events per person-year ,PPY) based on data generated in the Integrated Medical Model (1).

So, who delivers on-orbit medical care? Currently, medical care for U.S. astronauts on the Space Shuttle and International Space Station (ISS) is delivered by the astronaut crew medical officer (CMO).

Trained physicians are not flown on every mission to space. Thus, medically layman crewmembers are trained to perform a wide variety of medical procedures as CMOs. Approximately 40 hours of medical training are provided, beginning with a simple introduction to the medical kits (Fig. 1) and treatment hardware available within their respective vehicles. Additionally, they are familiarized with the medical checklist document which outlines a symptom-based ap-

TABLE I. INFLIGHT MEDICAL CONDITIONS AND INCIDENCE IN THE U.S. SPACE PROGRAM

Medical Condition	Incidence
Space Motion Sickness	56.0 (%)
Space Adaptation Back Pain	53.0 (%)
Musculoskeletal Injuries	8.28 (PPY)*
Urinary Retention	1.67 (%)
Skin Rashes	3.29 (PPY)
Headache	57.0 (PPY)
Eye Injury	2.58 (PPY)
Early insomnia	35.0 (PPY)

*PPY = Per Person-Year.

proach to diagnosis and intervention.

Next, they are presented with diagnostic tools to quickly recognize symptoms of their fellow crewmembers. After determining the main medical issue, the CMO is given methods to obtain relevant information for relay to the ground support personnel and provide remedial actions including, but not limited to, phlebotomy, intubation, CPR, catheterizations and suturing. These techniques are primarily practiced in a classroom setting using high-fidelity mannequins for hands-on experience. Further enhancement involves the CMOs observing and engaging in these same activities within an actual hospital environment. With permission, CMOs practice a number of these newly learned medical skills on willing hospital patients. Since the majority of their training might be performed several months prior to a crewmember's launch date, these hands-on experiences provide the most efficient way to gain and retain the required knowledge (Fig. 2).

On-orbit Care

Once the crew is on-orbit, the CMO is remotely supported medical personnel within the Mission Control Center (MCC). There is a wide range of support available, but the two main contributors are the flight surgeon (SURGEON) and biomedical engineer (BME). The SURGEON is a trained and licensed physician, while the BME brings engineering knowledge for medical hardware support.

A collaborative, team-based approach to medical care is employed for both short duration Space Shuttle and long duration ISS missions. Ground support schedules vary based



FIG. 3. Author (Dr. Rick Scheuring) at the SURGEON console in Mission Control with Dr. JD Polk.

on vehicle and mission length. For Shuttle missions, a SURGEON is present on console whenever the onboard crew is awake (Fig. 3), while BME supports 24 hours a day in case of emergencies during crew sleep periods. The ISS support is similar, but slightly more liberal due to the length of the missions. The SURGEON will sustain console for one shift as BME still maintains the 24 hour schedule on weekdays. Both parties reduce console coverage to on-call status over the weekends; however the BME will aid in supporting the crew family conferences when necessary.

Regardless of the support schedules, Private Medical Conferences (PMCs) are regularly scheduled between the SURGEON and the onboard CMO. These conferences are held daily for Shuttle crew and weekly for ISS crews. In case of an emergency, PMCs can be called at any time by the crew or those in MCC. The PMCs are conducted over a two-way private Space-To-Ground audio link. If conditions warrant, electrocardiographic tracings or high resolution video may be down-linked for medical case management. Depending on the experience level of the CMO, varying degrees of real-time consultation may be required to manage an onboard clinical issue. Routine intervention of intramuscular Phenergan for space adaptation syndrome or dispensing of Motrin for back discomfort would most likely be accomplished without SURGEON consultation. Instead, the CMO would simply report these events within the daily PMC. A more significant intervention, such as treatment of urinary retention, would be discussed with the SURGEON via a special request PMC.



FIG. 1. Shuttle Medical Kit.



FIG. 2. Medical procedure training.



FIG. 4. Author (Dr. Scott Parazynski) dispensing medications on orbit.

See *SPACE MED*, p. 591.

SPACE MED, from p. 590.

A detailed log of administered medications is kept onboard and tracked by the CMO, with periodic reporting to the SURGEON. Some crews insist that the CMO be responsible for all medication distribution, while others simply ask that common medications be verbally reported, leaving medication logging to the CMO (Fig. 4).

Major Medical Scenarios

Regardless of the preventative medicine and screening, major medical emergencies related to the space craft environment need to be considered in addition to the more common conditions described above. Although the likelihood is low, these events would have significant impact to crew health and the mission. Examples include decompression sickness (DCS), toxic exposures, blunt trauma, burns, and electrical shock.

Historically, the U.S. Space Program has never aborted a mission prematurely due to a major medical emergency. An ailing crewmember aboard the Shuttle or ISS would be treated in place prior to exposing the patient to the rigors of elevated gravitational forces during entry. If definitive treatment in place were not an option, i.e. a surgical emergency, efforts would be made to stabilize the patient (intravenous fluids, oxygen, pain medications, antibiotics) prior to return to Earth.

In an emergency, returning an incapacitated crewmember can be accomplished within several hours using the U.S. Space Shuttle when docked to the ISS or the Russian Soyuz spacecraft. Delivery of continuing medical care during entry would be very challenging for two reasons: first, bulky spacesuits that must be worn for crew protection, and second, tending to a patient while under forces of deceleration would complicate matters further.

Thinking ahead to future Lunar and Mars exploration, where relatively rapid "medevac" from Low Earth Orbit is no longer an option, greater autonomy and capability to treat in place will become necessary. In addition to more extensive medical and surgical gear for these lengthy voyages, thought is being given to "telementoring" and "telepresence" to aid remote crews in more advanced interventions.

REFERENCES

1. Kerstman EL. The Integrated Medical Model. NASA/Wyle Integrated Science and Engineering Group, 2009.
2. Scheuring RA, Mather CH, Jones JA, Wear ML. Musculoskeletal injuries and minor trauma in space: incidence and injury mechanisms in U.S. Astronauts. *Aviat Space Environ Med* 2009; 80:117-24.

BERNSTEIN, from p. 589.

year. He is double-boarded in Family Medicine and Aerospace Medicine. Through his 19+ years of service, he has been a medical chief, department chief, flight surgeon, and a commander of three small and medium clinics. He is currently Director of the Office of Aeromedical Propensity and Consultant to the Surgeon General for Aerospace Medicine. COL Bernstein is an FAA Aviation Medical Examiner (since June 1994), a Fellow of the American Academy of Family Physicians, a Member of the American Medical Association, the American Academy and Uniformed Services Academy of Family Physicians,

AMSUS, AUSA, Society of Army Flight Surgeons, and Aerospace Medical Association.

AEROMED-LIST, from p. 586.

communication without UN bureaucracy ...That is the greatest benefit to me.....Vive le Dougal!"

"Over the years, the List has provided insights and counter-arguments and a different approach to the conventional Av Med practices. And I for one can vouch, that whenever an Indian av med resident is stumped for an answer, s-/he rushes to the List, for they know for sure that they would surely benefit from the collective wisdom of so many....In addition, the threads discussed on the List may not directly be of interest of the List-member, being not of direct relevance in their current practice/situation, yet the valuable and more importantly, practical aspects that get highlighted are worth pondering, and may be put to application later. On a personal note, the List has provided a valuable platform to interact with individuals on topics/ideas of mutual interest (while not cluttering the members mail-box), which may sometimes transform into a more personal friendship too. So, what has the List given me? It is: Ideas, Wisdom from others experiences, and Friends. 'Insha Allah' (God Willing) - May this tribe flourish."

"Coming from a remote part of the world as a third world country where we have only one or two qualified aviation medicine docs—it has been so helpful and at same time to interact with people of same interest....I am sure some of you will recall my cases of Criiggler Najjar syndrome and post-op pheochromocytoma. As a result the Najjar syndrome is the first male or female to fly as a pilot....thanks to the LIST, I am confident of handling any aero-medical case. I have also been able to chip in with my knowledge of high altitude scenarios and of course cardiology...."

"The list really meant to live oneself "real globalization" applied to the aerospace medicine area. Being connected to the aeromed world with a single click was a blow of fresh air and made me believe starring of this new scientific revolution that makes our job: easier, funnier and more interesting. I want thank to all of you who have shared your knowledge and hope we will Keep on touch and enjoy this world without borders..."

"I am currently writing a text book on the Forensic Medical and Pathological Aspects of Fatal Aviation Accident Investigation and I find the list postings of enormous use in identifying issues which may be of relevance and also often a starting point in researching these issues."

"Besides feeling like I am a part of a community that spans the globe, which is a huge deal, I get the benefit of occasionally erudite and occasionally amusing and oftentimes wonderfully humorous and historically important discussions about topics of significant aeromedical interest. By collecting some of the more experienced and well-connected members into a single meeting place like this list, I learn incredible amounts to make me a better flight surgeon and advisor to my more ground-bound colleagues and patients. I am deeply appreciative of what Dougal and all the list members provide to our collective community."

The site is unobtrusively sponsored by the Australasian Society of Aerospace Medicine,

which sponsored many of the upgrades and features on the site; and by the Environmental Tectonics Corporation which provides the sponsorship that keeps the aeromed-list mailing list running.

Aviation Medicine Scholarship

The International Academy of Aviation and Space Medicine has a well-established Scholarship Program, the aims of which are to enable young physicians who are starting on a career in aerospace medicine to either attend a formal course of instruction in aerospace medicine or to work in a recognized aerospace medicine training or research institute for instruction, and for research experience in the discipline. This scholarship is for \$15,000 US. The deadline for application for the current scholarship is June 30, 2009.

Scholarship Application Form - Individuals wishing to apply for this Scholarship may print a copy of the Scholarship Application Form in English or French from the IAASM website at <http://www.iaasm.org>

MEETINGS CALENDAR 2009

June 2-4, 2009; 4th International Conference on Whole-Body Vibration Injuries; Montreal, PQ, Canada. Info: Institut de recherche /Robert-Sauvé en santé et en sécurité du travail (IRSST); www.irsst.qc.ca/en/home-vibrations-2009.html

June 11-12, 2009; XX1st Annual International Occupational Ergonomics and Safety Conference 2009; Dallas, TX. International Society for occupational Ergonomics & Safety; <http://www.iso.es.info/conference.htm>

June 25-27, 2009; Undersea & Hyperbaric Medical Society Annual Scientific Meeting; Los Cabos, Mexico. Info: www.uhms.org

June 29-July 2, 2009; 8th USA/Europe Air Traffic Management Research & Development Seminar; Napa, CA. FAA and EUROCONTROL; www.atmseminar.org/

July 19-24, 2009; HCI International 2009—13th International Conference on Human-Computer Interaction, San Diego, CA. <http://www.hcii2009.org/>

August 9-14, 2009; IEA 2009—17th World Congress on Ergonomics; Beijing, China. International Ergonomics Association, <http://www.iea2009.org/>

October 4-9, 2009; 38th World Congress on Military Medicine; Kuala Lumpur, Malaysia. Info: www.wcmmkl2009.com

October 18-19, 2009; Seventh Annual Meeting of the Society for Human Performance in Extreme Environments; San Antonio, TX. <http://www.hpee.org/>

October 19-23, 2009; 53rd Annual Meeting of the Human Factors and Ergonomics Society; San Antonio, TX. <http://hfes.org/web/HFESMeetings/09annualmeeting.html>

October 19-21, 2009; SAFE Association 47th Annual Symposium; San Francisco, CA. Info: Jeani Benton (541)895-3012; safe@peak.org; www.safeassociation.com

Send information for publication on this page to:
Dale Orford
 15516 E. Acacia Way
 Fountain Hills, AZ 85268
 dorford@cox.net

From the President's Desk

By Dale Orford

It seems only yesterday that I joined the Wing, and now here I am the new President, preparing to lead you all into the actual if not metaphorical desert. Fortunately, my predecessors have left me with a very detailed guidebook so I trust that we will not be wandering for 40 years! It has been, in fact, approximately 10 years since I became a member of this terrific group, and I have had the privilege of serving on the Board in several capacities. I first became involved when then President Paula Landry asked if I would handle the tours for our Montreal meeting as that is my hometown. It was quite a learning experience coordinating buses, tours, lunches etc. but working with Paula and her committee was truly a joy. It was a pleasure I was to repeat with each new President and Board throughout the past several years. Under Mary Baird's Presidency, I was entrusted with organizing the Favors – a truly fun job. I got to meet all of the new members as well as refamiliarize myself with the names and faces of the rest of the membership. But it was not until I became the Publicity Chair under President Harriet Hodgson, that I had the opportunity to really get to know not only many of our members "up close and personal", but also how the Wing actually works. During my stint writing the Wing's page for the AsMA Journal, I discovered what the Parliamentarian did (April 2006), the purpose of by-laws (Business of By-laws, by Harriet Hodgson – Aug. 2004), and the history of the Wing (Forty Years of Friendships, by Lois Moser – Feb. 2006). And now it is time to turn the journalistic lens on myself.

As I mentioned above, I grew up in



GREETINGS FROM THE SONORAN DESERT-
 Dale Orford at the Desert Botanical Garden,
 Phoenix, AZ.

Montreal, Canada. Before marrying I worked as the assistant to the Director of Research & Statistics for the Montreal Stock Exchange. It was a really exciting time and I developed an appreciation of how capital markets work – or not! In 1972 Bob and I married and moved for the first time to the United States and Mayo Clinic for Bob's residency in Internal Medicine and Aerospace Medicine before heading to Seattle for his MPH. Upon completion we returned to settle in Ontario, and later in Alberta. In 1988, we moved from Edmonton, Alberta where we had spent 11 long, cold years to Rochester, Minnesota where Bob joined the Mayo Clinic Executive Health and Aerospace Medicine practice. The years in Minnesota were great – though also cold! – so once our kids, the twins Andrew and Tiffany and our younger son Brent, graduated from high school we quickly took advantage of the opportunity to move south to Mayo Clinic Scottsdale and the Valley of the Sun. This summer will be a milestone in our family – both Andrew and Tiffany will wed – and, even though they are twins, they could not possibly marry in the same city. Andrew will wed in August in Seattle, and Tiffany in New York in June. As you can imagine, we are very excited. As well, Bob is just finishing up his term as President of the American College of Occupational and Environmental Medicine which has kept him traveling just about everywhere this past year. As for me, I am taking a long, deep breath before plunging into the details of organizing our meeting here in Phoenix for 2010.

For those of you who have not visited Arizona before, let me give you a little taste of what we have to offer. May is an absolutely beautiful month here in the Sonoran Desert with daytime temperatures not yet in the 100's and cool evenings. Various types of cactus as well as flowering bushes such as bottlebrush, desert mallow, Texas sage, and bougainvillea join with that most interesting of trees, the Jacaranda, to paint the landscape a myriad of colors. Add to that, our vibrant night life, excellent dining and shopping and you have the perfect recipe for a terrific time in our city. And, if you have a little extra time, Sedona is only two hours away, and the Grand Canyon about three and half. Our planning for the Phoenix meeting is still in its early stages and we will have more details for you in the coming months. In the meantime, we hope that you will "pencil us in" and join us next May for a wonderful week in the Valley of the Sun.

Future AsMA Meeting Sites

May 9-13, 2010
Phoenix, AZ

May 8-12, 2011
Anchorage, AK

May 13-17, 2012
Atlanta, GA

Remembering Bean Arthur

Beverly K. "Bean" Arthur, wife of former AsMA president VADM Donald C. Arthur, USN(Ret.), died on March 26, 2009. Bean succumbed to injuries sustained in a fall at home. In addition to her husband, Don, Bean had three daughters and her dog Bailey as her constant companion. A former nurse, Bean loved animals and nature. She had recently become involved as a board member with the Wing of AsMA. According to her husband, "There are four things Bean wanted. First she wanted people to celebrate life and how her relationship with us contributed to its beauty. Second, she wanted to eschew the inherent sadness of wearing black but, instead, to wear colorful clothes to her memorial service. Third, in lieu of flowers, she wanted donations sent to the ASPCA and any charity which benefits the fight against breast cancer. And, fourth, she wished to be cremated and her ashes spread where she enjoyed being – to nourish the flowers of the wooded walking paths where she and Bailey walked as partners each day." Don Arthur and family have made a web site to honor Bean:
<http://members.cox.net/beanarthur/memorial.mht>



Join the Wing!

The Wing of the Aerospace Medical Association was formed in 1952 "to support the specialty of aviation, aerospace, and environmental medicine by facilitating cooperation among its practitioners and by increasing public understanding and appreciation of its importance." A second purpose of the Wing is "to promote sociability among its members and their families." Each year at the scientific meeting, AsMA spouses meet new friends from every corner of the world, sharing in the many cultural experiences and educational opportunities of the host city. Dues are \$40 per year.

For further information, contact:
 Jackie Bohnker
 2253 Riverside Dr. S.
 Clearwater, FL 33764
 727-812-4868
 e-mail: jpbohnker@juno.com

Send information for publication on this page to: **Corporate News**
Aerospace Medical Association
320 S. Henry Street
Alexandria, VA 22314-3579

NEWS OF CORPORATE MEMBERS

Mondial Assistance Becomes Newest AsMA Corporate

Mondial Assistance, one of the world's largest assistance organizations, became the most recent Corporate Member of the Aerospace Medical Association (AsMA). Mondial is a provider of travel insurance, health coverage, and roadside and property assistance. They specialize in providing high-quality, customer-based services, "whatever it takes," and are located in Australia. They also have sister companies all across the world.

Mondial was originally founded as a company called Worldcare and has been assisting Australians who run into trouble overseas for more than 10 years. They joined the Mondial Assistance Group in 2001 and have grown dramatically to become the most prominent travel insurer and assistance provider within Australia. Their goal is to provide a consistently high standard of customer service across all their business activities, no matter how big or small.

— To learn more about this company, please visit their site at www.mondial-assistance.com.au/en/aboutus/homepage.htm.

Baxter Partners with World Federation of Hemophilia

In recognition of the 20th anniversary of World Hemophilia Day (April 17), Baxter International Inc., in its continuing partnership with the World Federation of Hemophilia, recently announced the availability of the "Together, We Care" video podcast (available at www.wfh.org/wfd) to help raise awareness of the vital role of comprehensive care in hemophilia management and to call attention to disparities in care around the world.

The video podcast provides a forum for the World Federation of Hemophilia's National Member Organizations, Baxter employees, and community members worldwide to help advocate for local care of people living with hemophilia. The video podcast also builds on Baxter's long-standing commitment to initiatives aimed at improving access for bleeding disorder patients.

To help raise the standard of and provide access to care for the global hemophilia community, Baxter makes available a number of resources, including education, advocacy programs and support, clinician support, and factor replacement therapies, an integral component of the comprehensive care approach. In particular, the company has donated \$1.5 million and nearly 3 million IUs of its hemophilia products to the World Federation of Hemophilia's Global Alliance for Progress (GAP) program since its inception, of which the company is founding member and leading sponsor. GAP was launched to improve the diagnosis and treatment of people with hemophilia in up to 30 developing countries.

— From a press release found at www.baxter.com/about_baxter/news_room/news_releases/2009/04_15_09_world_hemophilia_day.html.

Mayo Shows Simple Finger Device May Predict Future Heart Events

Results of a Mayo Clinic study show that a simple, noninvasive finger sensor test is "highly predictive" of a major cardiac event, such as a heart attack or stroke, for people who are considered at low or moderate risk, according to researchers. The study was presented in March at the American College of Cardiology Annual Scientific Session. The non-invasive finger test device, called the EndoPAT by Itamar Medical, measures the health of endothelial cells by measuring blood flow. Endothelial cells line the blood vessels and regulate normal blood flow. Research has shown that if the cells don't function properly—a condition called endothelial dysfunction—it can set the stage for atherosclerosis (hardening of the arteries) and lead to major cardiovascular health problems. Previously, there was no simple test for endothelium function.

EndoPAT, which received U.S. Food and Drug Administration approval in 2003, consists of digital recording equipment and two finger probes that look like large thumbtacks. For the test, which takes 15 minutes, probes are placed on each index finger and hooked up to a small machine to measure blood flow. A standard blood pressure cuff is placed on one arm; the arm without the cuff is the control. A reading of the fingers' blood flow rate begins, and then the blood pressure cuff on one arm is inflated for a few minutes and then deflated, allowing for three timed readings. The role of the inflated blood pressure cuff is to occlude and then release blood flow to assess reactive hyperemia (RH), the normal blood flow response that occurs when occlusion is released. A low RH signal—indicating a lower blood flow response—is consistent with endothelial dysfunction and potentially impaired vascular health that may lead to or serve as a marker for future events.

— For more information, please see www.mayoclinic.org/news2009-rst/5222.html.

ETC to Provide Space Education Training Courses

Environmental Tectonics Corporation's (ETC's) National AeroSpace Training and Research (NASTAR) Center and International Space University (ISU) announced recently that they have partnered to create a series of unique space education and training courses aimed to motivate, inspire, and educate people from a range of backgrounds and age groups. Each course will be taught by world-renowned space industry experts and include hands-on activities in a state-of-the-art aerospace training facility environment.

The ISU/NASTAR partnership will unveil its first course, Rocket Science 101, on June 24, 2009. Taught by ISU faculty member, five-time Space Shuttle crew, and former NASA astronaut Dr. Jeffrey Hoffman, this half-day course will include a comprehensive introduction on how rockets work, propulsion, preparing for

spaceflight (government and private), how to enjoy your time in space, the impact of space tourism, and more.

While the topic and duration of each course will vary, each course will provide a truly unique and rewarding education for all those that attend. Courses will be managed by ISU expert staff and professors and be held at the NASTAR Center facility located just outside Philadelphia, PA, in the United States.

— For more information, please see the press releases at www.etcusa.com/corp/pressreleases/NR032609.html.

Archinoetics Wins 2 Awards and Appears on Virginia Radio

Archinoetics was named by Pacific Business News as one of Hawaii's 'Top 35 Women-owned Businesses' in April. At the awards ceremony, held at the Hawaii Convention Center, it was announced that Archinoetics is now the 16th ranked woman-owned business in Hawaii in terms of revenue. This ranking for 2008 represents a tremendous jump for the company, which was not listed in the top 35 for 2007.

Archinoetics also won the 'Hawaii SmallBiz Success Award' in February. The company was recognized by Hawaii Business Magazine as a statewide leader in small business success. Additionally, one of Archinoetics' long-time collaborators was recently on Virginia radio's 'With Good Reason' to discuss brain-computer interfaces for creative expression. The work, being done through a National Science Foundation grant, is providing interfaces for severely disabled people to communicate and create artwork.

— To read more about Archinoetics, please see www.archinoetics.com/news.php.

Infoscitex Awarded U.S. Air Force Contract

Infoscitex Corporation (IST) was recently awarded a new Department of Defense (DoD) contract from the Air Force Research Laboratory (WPAFB, OH). Under this \$13,000,000, 7-Year contract, IST provides research and engineering services to the Air Force Research Laboratory (AFRL) by creating physical and cognitive sanctuaries to enhance combat survivability, ensuring human performance, and protecting the force. IST applies a unifying approach for planning, managing, and executing research focused on understanding human performance in extreme operational environments and developing interventions, technologies, and equipment that can sustain, enhance, and optimize human effectiveness. IST has also entered into a Cooperative Research and Development Agreement with AFRL to generate revenue for AFRL and IST by performing related commercial efforts.

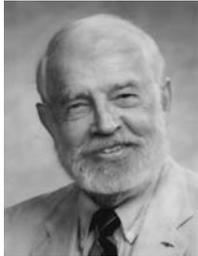
— Adapted from a news release found at http://www.infoscitex.com/index.php?option=com_content&view=category&id=47&Itemid=59.

NEWS OF MEMBERS

Send information for publication on this page to: **News of Members**
Aerospace Medical Association
320 S. Henry Street
Alexandria, VA 22314-3579
pday@asma.org

Focus on Members: Halford R. Conwell, M.D.

Halford Conwell, M.D., Huntsville, TX, was honored by the Air Line Pilots Association



International in December 2008. The commendation reads: "Air Line Pilots Association Intl. honors Halford 'Doc' Conwell, M.D., A.T.P. For more than four decades, the men and women of ALPA around the globe have been making the yearly sojourn to

Huntsville, Texas, to be tested against Doc's rigorous aviation medical standards. The quick-witted doctor and his outstanding office staff transform the mundane task of compliance with FAR Part 67 medical Certification into a rite of passage for professional aviators.

"His patients leave his office-turned-aviation-museum with a medical, a smile and one unanswered question: How in the world did he ever talk the lovely Maggie into marriage?"

"Dr. Conwell's tireless efforts within the aviation medical community in the U.S., UK, and Australia have helped to ensure common-sense medical standards for all airmen.

"With love and gratitude, the pilots of ALPA say thank you."

Dr. Conwell is also the recipient of AsMA's 2000 John A. Tamisiea Award. He is a past president of the Civil Aviation Medical Association and a member of the Airline Medical Directors' Association.

LT(SG) Teofredo T. Esguerra, MC, PCG, who is currently serving as Flight Surgeon for the Philippine Coast Guard in Manila, has taken additional training and is now also the Dive Medical Officer.

Anthony S. Wagstaff, M.D., D.Av.Med., Ph.D., MBA, was appointed in March to be the Director of the Institute of Aviation Medicine in Oslo, Norway. The institute is part of the Norwegian Armed Forces Medical Services and the Director serves as Chief Flight Surgeon for the Royal Norwegian Air Force and as head of the Norwegian National Civil Aeromedical Center.

Lt.Col. Norman S. "Wild" West, USAF, BSC, originally serving as Director of Staff at the 18th Wing in Okinawa, Japan, was selected for a position at 374 AMDS/CC in Yokota, Japan.

Col. Yi-Chang Wu, ROCAF, formerly the Commander of Armed Forces Gangshan Hospital, Kaohsiung, Taiwan, has been promoted to Director of the Medical Readiness Division, Medical Affairs Bureau, Ministry of National Defense, Taipei, Taiwan. He recently received an award from the Ministry of National Defense for his outstanding performance while he was the hospital commander.

Dr. Benton P. Zwart, currently of Mustang, OK, is now working for the FAA. He is an Associate Fellow of the Aerospace Medical Association.

In Memoriam Aristide Scano, M.D., Ph.D.

Aristide Scano, M.D., Ph.D., died recently. A native of Italy, Dr. Scano received his M.D. with honors at Rome University in 1939 and an honorary qualification from the University of Pisa in 1940. He earned a Ph.D. in Human Physiology in 1951 and another in Aviation and Space Medicine in 1966. From 1952-1987, he was an Assistant Professor with the Postgraduate Schools of Anesthesiology and Resuscitation and of Aviation and Space Medicine; he then became a full professor of Human Physiology at ISEF in Rome from 1969-1985. At the Postgraduate School of Aviation and Space Medicine, Rome University, he served as Deputy Director from 1974-79, and Director from 1980-85.

Dr. Scano served in the I.A.F. Medical Corps as an SPE Officer starting in 1948 at the Rome Research and Study Center of Aviation Medicine. In 1955, he was appointed department chief and then served as Director from 1959-1968. In 1968, he became Health Director of the II R. A. Air Region and from 1971-1974, he served as Director of the Aviation Medicine Military School. He was a Major General when he retired.

Dr. Scano published over 200 monographs, book chapters, and articles in the Italian Medical Encyclopedia and was the co-author of a 3-volume aviation medicine treatise, "Physiology of Man," and other publications on aviation medicine. He organized research on cardiology and hemodynamics during the Spacelab I mission. His awards included the Gold Medal of Merit in Public Health, the Silver Medal of Merit in Aviation, two merit crosses and medals earned during World War II, certificates of merit awarded by NASA, and the ELGRA medal in 1999 for his work in space medicine from the European Low Gravity Research Association. He was a member of the Groupe de Travail de Médecine Aérospatiale of Europe, vice-chairman of the AGARD-NATO Aeromedical Panel, Chairman of the Italian Association of Aviation and Space Medicine, Director of the *Minerva Aeronautica* journal, President of the Italian Aerospace Association (AIMAS), and a member of the Aerospace Medical Association.

New Members

Acosta, Rigoberto, M.D., Vancouver, WA
 Anderson, Warren, M.D., Brooks City-Base, TX

INDEX TO ADVERTISERS	
Aerospace Medical Association	
Corporate Members	iii
Information for Authors	Cover III
Membership Application	ii
ETC	Cover IV
Wyle/UTMB	iv

- Ash, Carol E., Dr., North Brunswick, NJ
- Atmajian, Timothy K., CDR, USN, MC, Fresno, CA
- Blauch, Corey M., M.S., B.S., Simpson, PA
- Boutros, Antoine, Dr., Waterloo, Belgium
- Castleberry, Tarah L., D.O., M.P.H., Scottsdale, AZ
- Chan, Kim, M.D., Dayton, OH
- Garand, Linda, Lt.Col., CF, M.D., Ottawa, ON, Canada
- Hodapp, Michael H., D.D.S., Houston, TX
- Hostler, David P., Ph.D., Pittsburgh, PA
- Lemming, Dag R., M.D., Ph.D., Linköping, Sweden
- McArthur, Lucas, A.A., B.S., Summit, NJ
- Mollicone, Daniel, Ph.D., Philadelphia, PA
- Mott, Christopher, BA.Sc., M.A.Sc., Philadelphia, PA
- Okushi, Jun, Ibaraki, Japan
- Pape, Aruthur M., M.B., B.S., Lovely Banks, Australia
- Pauwels, Linda L., Mission Viejo, CA
- Pellosie, John C., Jr., D.O., M.P.H., Davie, FL
- Peterson, Mark, Langhorne, PA
- Pickerrill, Grey, LT, USN, BSC, Lemoore, CA
- Price, Christine, Capt., USAF, Tucson, AZ
- Sumter, Jeffrey, B.S., M.A., Ellenwood, GA
- Swiger, Jonathan L., LT, USN, MSC, Pensacola, FL
- Thibert, Mark R., M.D., Thunder Bay, ON, Canada
- Thornton, William E., M.D., Boerne, TX
- Washak, Ronald V., Lt.Col., USAF, MC, Random Lake, WI

CLASSIFIED AD

M.Sc. in Aviation Medicine

A new 12-month M.Sc. taught program in Aviation Medicine will commence at King's College London (KCL) on 21st September 2009. The program will provide physicians with comprehensive theoretical and practical instruction in advanced aviation physiology, psychology, clinical and operational (military and civil) aviation medicine, and the knowledge and skills required to conduct research in aviation medicine.

The didactic instruction in advanced aviation medicine which occupies 6 months of the program is identical to that provided by the KCL course for the Diploma in Aviation Medicine of the Royal College of Physicians London. It also qualifies students to sit the examination for this Diploma. The program includes training in research and a 3-month research project conducted either in the laboratory or as a field study.

Physicians who have previously successfully completed the KCL course for the Diploma in Aviation Medicine will be credited with having passed the advanced aviation medicine modules of the M.Sc. program.

For further information please contact: Professor John Ernsting, School of Biomedical and Health Sciences, Guy's Campus, King's College London, London SE1 1UL, United Kingdom; Email: john.ernsting@kcl.ac.uk; Tel: +44 (0)20 7848 6313.