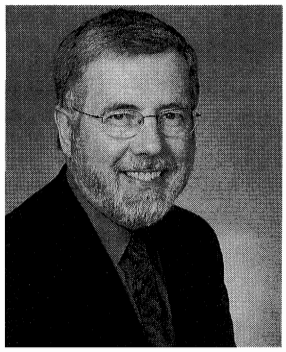
President's Page



David J. Schroeder, Ph.D.

I know it is hard to believe, but this is my sixth column and nearing the halfway point in my presidency. How time flies! Given some of my thoughts and objectives regarding this year, there seems to be too little time to accomplish all of what I set out to do.

To bring you up to date, our AsMA Executive Committee meeting met recently. In addition to our usual review of the business of the association, we spent a day reviewing our strengths, weaknesses, and identifying potential challenges for the near future, along with developing activities that should be incorporated into our 3-year strategic plan. Input was solicited from the Council and the limited response was disappointing. The Executive Committee agreed that the vision is still relevant – "The international leader in aviation, space, and environmental medicine." We also support the current mission statement and the multidisciplinary definition of aerospace medicine. We identified potential strategic initiatives associated with each of the four goals identified in our by-laws: governance, education and research, professional growth and development, and advocacy. Efforts to revise and expand on the strategic plan are likely to continue throughout the rest of the year. If you have any ideas you would like to see included in this iniative, please feel free to contact me.

One highlight of the Executive Committee meeting was the emphasis on the use of our website and the efforts to improve the quality and responsiveness of AsMA to our membership and others. We reviewed proposals from three contractors, provided Dr. Ron Hoffman, regarding revision and upgrading our website to permit more rapid and efficient updating of information. As part of this effort we want to ask what you, the membership, feel should be included on the Association's website. The Communications Committee will be gathering your input in the very near future. So please take the time to provide the team with your thoughts and comments.

We also identified several other issues associated with a sustained growth in our membership, development of a financial policies and procedures manual, delineation of the roles and responsibilities for the vice presidents and president-elect, fostering interdisciplinary approaches to resolving aerospace medicine issues and concerns, optimizing our educational activities, improving networking and committee activities, and enhancing our responsiveness to emerging aerospace medical issues/concerns. Obviously, we won't be able to address all of these issues overnight, but rest assured we are working hard. In fact, we will be addressing some of these issues during the council meeting in this month.

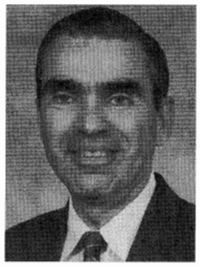
On a different topic, some of you may be aware that media and scientific attention in the U.S. has been recently focused on efforts to ensure free public access to research reports from government-funded studies. The concern, according to Rick Weiss, a staff writer at the Washington Post is that "...the vast majority of the 50,000 to 60,000 research articles published each year as a result of federally funded science end up in the hands of for-profit publishers – the largest of them based overseas – some of which charge as much as $50 to view the results of a single study online." The Public Library of Science (PLoS) was established to change this system by creating journals that allow anyone free access to the information. Articles that appear in peer-reviewed PLoS journals for example would be funded by the scientist or government agencies that supported the research (a charge of around $1,500 per article) and a grant from the Gordon and Betty Moore Foundation. According to PLoS, the free availability of articles on the Internet would dramatically change the availability of information to the general public. If this change does occur it could have a dramatic impact on how we and other non-profit scientific organizations manage our finances and publications.

Our charges for an institutional subscription to the journal ($195 for 2004) pale in comparison to *Brain Research* that, according to the Washington Post, can cost $20,000 a year (combined subscription for 6 journals). With the new online version of *Aviation, Space, and Environmental Medicine*, the fee for someone who wants a copy of an article will be $15.00. According to Ms. Pam Day, for articles published prior to the availability of the online version, the home office will fax a copy of an article for $7.50.

Along these lines, Congressman Martin Sabo has introduced a measure in Congress (Public Access to Science Act, HR2613) that concerns patients' access to the latest medical research. The Federation of American Societies for Experimental Biology, in a July letter to Congressman Sabo, indicated that the proposed legislation threatens the field of scientific publishing. The impact of the legislation on non-profit scientific societies who are reliant on subscription revenues to support the work of their associations would be significant. What should be our position regarding the balance between our interest in providing public access to scientific information versus revenues involved in fostering the professional interests of our membership? Dr. Samuel Trosow from the University of Western Ontario discusses these and other issues involving the proposed legislation in his internet article "Copyright Protection for Federally Funded Research: Necessary Incentive or Double Subsidy." To date, there has been little discussion of alternative approaches to making federally-funded scientific information more available to the general public.

In closing, a bit of information regarding Alaska and Anchorage. Look Hood is the largest and busiest seaplane base in the world, with an average of 234 takeoffs and landings a day. On a peak summer day takeoffs and landings will reach 1,000. By the 1930's the airplane had replaced the dog sled as the means of delivering mail to many villages.

Executive Director's Column



Rayman

Maintenance of Certification

This month's column will be devoted to a new credentialing program in the U.S. that applies to our physicians who are either board certified or board eligible in the specialty of aerospace medicine. I would ask other members to excuse me this time for being a bit parochial, but the new Maintenance of Certification (MOC) Program will be of great importance to U.S. physicians. Although the new program was alluded to in a recent issue of our journal by our President, Dr. David Schroeder, and our VP for Education and Research, Dr. Richard Jennings, I thought it might be worthwhile to expand just a bit on their comments.

To recapitulate what was written by Dr. Jennings (Aviat Space Environ Med 2003; 74:1113), the new MOC Program has been created by the American Board of Medical Specialties (ABMS) with compliance to eventually become a requirement for every U.S. physician. Once the program is fully implemented, the days of lifetime certification will be over for all physicians regardless of specialty, age or expertise. The four elements of the new program as Dr. Jennings mentioned are as follows:

1) Evidence of professionalism - This will be measured by the status of one's medical license(s), and possibly by a system of scored patient satisfaction.

2) Evidence of self-assessment and lifelong learning - This will require attending courses or sessions that are approved for lifelong learning in one's specialty. It is the same as today's CME requirements.

3) Evidence of cognitive expertise - This will be measured by an examination given periodically, possibly every 6-7 years.

4) Evidence of assessment of performance and practice - This will require an audit of one's ability to practice, as well as the use of evidence-based indicators.

All this may seem daunting at first, but one must remember that the program is in its early phases of development. Hence, it will take some years to determine precise procedures to follow in meeting these requirements. For example, in aerospace medicine, a test would have to be developed to score one's cognitive expertise and some method would also have to be developed to score one's practice skills. And finally, a system of record keeping will be necessary, as well as occasional inspections, presumably by the American Board of Preventive Medicine, to ensure compliance with the MOC Program.

At this time, your Association is working on self-assessment and lifelong learning (item 2 above). We are required to provide at least 20 hours of accepted modules to run nonconcurrently at our Alaska meeting. This we will do. The hours will be credited possibly to our workshops and a number of panels. We will have a better idea once the peer review process is completed by the Science Program Committee at its November meeting in Alexandria.

I doubt if anybody knows how long it will take to fully implement MOC for aerospace medicine, but we must assuredly move in that direction or we will be left behind. Undoubtedly, the American Board of Preventive Medicine will be issuing guidelines and policies over the coming years regarding these 4 components of the MOC Program.

I will keep everyone informed most likely via our journal as more information becomes available and decisions finalized. Those of our physicians who are board certified or eligible in other specialties will be receiving similar information from these sister boards in the coming months.

Associate Fellows Class of 2004

The following AsMA members achieved Asociate Fellow status and were approved by Executive Committee at their meeting in September 2003:

Capt. Michelle Bryce, USAF; William P. Butler, M.D.; Jay A. Danforth, M.D.; LCDR Joseph B. Essex, MSC, USN; Lt. Richard V. Folga, MSC, USNR; William M. Gilbirds, M.D.; Eric H. Hanson, M.D.; Franz H. Hauer, M.D.; Kathryn G. Hughes; LCDR Richard J. Jehue, MSC, USN;

Tomaz F. Kozelj, M.D.; Mark D. Livingston, M.D.; Pooshan D. Navathe, M.D.; Hugh J. O'Neil, M.D.; William S. Riggins, Jr., M.D., MPH; Richard A. Scheuing, D.O.; Maj. Carolyn M. Shaw, CAF; Daniel A. Shoor, M.D.; Thomas M. Slyter, M.D.; Lawrence W. Steinkraus, M.D.; Osamu Tokumaru, M.D., Ph.D., MPH; and LCDR Marva L. Wheeler, MSC, USN.

Remember!

Council Meetings are open to all members of the AsMA. Your input and attendance are always welcome. Our next meeting will be on November 19, 2003, in Alexandria, VA.

AsMA's Mission Statement for the Conduct of CME

The following Continuing Medical Education (CME) Mission Statement was approved by the AsMA Council May 8, 1994, and last reviewed in September 2003.

Mission Statement

The Aerospace Medical Association is a group of diversified professionals dedicated to the field and practice of aerospace medicine. The largest component of the Association is that of the physician members. CME is an important aspect of the Association's service to this segment of the membership. The following document outlines the Association's goals, objectives and implementation strategy for the provision of CME to its membership and its role in the cosponsoring of CME with other organizations.

The Continuing Medical Education Mission of the Association is to provide a comprehensive education program for the purposes of maintaining physician currency in clinical and research areas of aerospace medicine and to enhance flight safety by fostering the highest quality of patient care.

The Association's mission provides the basis for the following CME goals:

1. To advance the science, art, and professionalism of aerospace medicine by stimulating investigation and study and by disseminating knowledge;

2. To establish and maintain cooperation between medical, biological, engineering, and other sciences concerned with aeronautics, astronautics, and undersea exploration; and

3. To promote, protect, and maintain health and safety in aeronautics, astronautics, and undersea operations.

4. To encourage, develop. and actively participate in educational efforts for certification and Maintenance of Certification.

The CME objectives matched to the above goals are as follows:

1. To update the knowledge base of association members in the field of aerospace medicine as well as the pertinent areas of the cross related fields of aeronautics, astronautics, and undersea medicine;

2. To increase the professional cooperation of the association's members in their ability to provide services to their patients, the public or the profession; and

3. To increase health and safety awareness, attitudes and activities of association members.

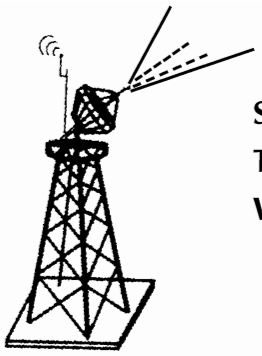
4. To ensure compliance with the Maintenance of Certification Program.

Strategies utilized to attain the CME objectives are as follows:

1. By the convening of scientific meetings--primarily the annual scientific program, supplemented with smaller area-specific meetings, when possible;

2. By the publication of a monthly, peer-reviewed scientific journal, including self-assess

See CME, p. 1216.



Science & Technology Watch

Keeping You Informed Of The Latest Advances In Science And Technology

This month's edition of the Watch describes the development and testing of a new sensor for non-intrusive and noninvasive physiological monitoring. It uses light as a medium and a new optical chip technology to detect changes in electrical potential to monitor ECG and EEG.

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Photrode™ Optical Sensor For Electrophysiological Monitoring

Stuart A. Kingsley, S. Sriram, Andrea Pollick, and John Marsh
SRICO, Inc, Columbus, OH

Description of Photrode™ Technology

The Photrode™ is a chip-size optical, or photonic, electrode sensor high performance optical integrated circuit technology that has been implemented in military and commercial aerospace, missile, and communications applications for sensing and signal transmission has been applied in the development of the Photrode™. The integrated optic voltage sensor technology, which serves as the platform for the Photrode™, was originally developed for voltage monitoring in NASA space power systems.

The key operational component of the Photrode™ sensor device is a miniature, optical chip that consists of a specially designed integrated optical circuit (IOC). An IOC is similar to an integrated electronic circuit (electronic chip), except that the optical circuit uses light, or photons, instead of electricity to process and transmit the signals. Thus, the Photrode™ device uses photons to detect and measure the body's bioelectric voltages, such as brain waves and cardiac signals. Using the theory of optical modulation, the Photrode™ detects the electrical activity of the brain or the heart and impresses the electrical signal on the specially designed sensor chip where the signal is translated to the optical regime through modulation.

The optical sensor device is actually a miniature electro-optic crystal-based intensity modulator that is similar to those used in today's optical communication networks (7). The IOC, referred to as a Mach-Zehnder Interferometer (MZI), is fabricated on a lithium niobate crystal substrate. Thin-film gold electrodes are deposited on the optical circuit to which is applied the biopotential voltage.

A continuous wave (CW) laser beam is directed into the PhotrodeTM through the input optical fiber. The biopotential signal, applied to the electro-optic crystal via the thin gold film surface electrodes, changes the phase of the light propagating in the Mach-Zehnder Interferometer and converts it to intensity modulation of the laser beam. The modulated light is conveyed by optical fiber to an optical receiver, where the EEG (electroencephalogram) or ECG (electrocardiogram) signal is converted back to the electronic regime, and then it is interpreted using conventional signal processing techniques. Simultaneous EEG and ECG data obtained using conventional electrodes and the Photrode™ show that its performance is comparable to that of conventional electrodes.

Low Impedance Electrode vs. High Impedance Photrode™

A principal motivation for investigating the use of optical voltage sensing technology was to facilitate biopotential measurement for physiological studies without the need for skin preparation. The voltage sensing technology not only offers the well-known technical advantages of fiber optics, such as electrical isolation, passive nature, and wide bandwidth, but it also offers certain unique "electrical" attributes that make it possible to do dry-contact sensing of low-level EEG signals and non-contact sensing of high-level ECG signals. This approach is also insensitive to electromagnetic interference.

Conventional electrode technology relies on lowering the skin contact impedance to a few thousand ohms. This necessitates meticulous skin preparation, including light abrasion, coupled with the use of electrolyte gels.

The optical approach shifts to the opposite end of the impedance scale. If an ultra-high impedance device is used, the quality of the contact is irrelevant. The ultra-high impedance Photrode™ device has the intrinsic voltage sensitivity to detect micro-volt level physiological signals using a dry contact. As it requires no surface preparation or conductive gel, the optical-based technology has the potential to reduce setup time and subject discomfort, especially for ambulatory EEG's, where as many as 24 electrodes are attached to the scalp with collodion adhesive.

Use of EEG Photrodes™ in Alertness Monitoring

Perhaps of greatest interest to aeromedical professionals is the application of Photrode™ technology for alertness monitoring of pilots and astronauts. The EEG Photrode™ monitoring system was initially developed to assess the physiological status and flight-readiness of Army pilots prior to mission departure. These research and development efforts were extended by the Army to include continuous, real-time monitoring of alertness level of its personnel to assess on-going cognitive performance and sleep/wake status in sustained operational settings.

Previous research at the Walter Reed Army Institute of Research (WRAIR) has demonstrated that soldiers who have been awake for 48 to 72 hours rapidly lose their ability to make correct judgments (2). Lack of sleep has been suggested as a possible cause of friendly fire casualties and loss of expensive equipment (6). Data acquired from continuous, real-time monitoring in battlefield scenarios would enable a commander to make timely, judicious decisions on the potential impact of individual alertness level on overall group performance and on the need to enforce sleep discipline when required to prevent deadly accidents and maintain a high level of battlefield performance.

Several studies have shown that an individual's state of alertness can be determined by analyzing his/her EEG (1,3). Kaplan (4,5) showed, however, that the low-frequency EEG signals, although an accurate indicator of sleep status, are not a good measure of alertness. Indeed, for some subjects, the Power Spectral Densities for Delta (1-4 Hz), Alpha (8-12 Hz) and Beta (13-30 Hz) change in opposite directions as a function of alertness. Only the Theta (4-7 Hz) band showed a high correlation with the state of alertness, which is consistent from subject to subject. However, Kaplan showed that the high frequency EEG is a far more reliable indicator of alertness independent of the subject being monitored. Both alertness (high frequency EEG) and sleep (low frequency EEG) measurements are critical in determining a soldier's level of performance and in averting deadly incidents that are due to a decline in cognitive function.

Development work to date, specifically focused on EEG measurement using Photrode™ technology, has demonstrated that it is now possible to mesh the low frequency domain of sleep with the high frequency domain of active brain function into one compact, pocket-size ambulatory system. The Photrode™ System introduces the potential to acquire the full range of EEG signals from 0.1 to 500 Hz thereby enabling the possibility of creating an Alertness/Drowsiness Index for assessing performance capability in both military and civilian operational settings where alertness is critical, such as in the air transport industry.

Hence, optical technology marks a paradigm shift both in the use of optical chip technology to detect low amplitude electrophysiological signals and in the interpretation of high frequency EEG signals that had previously been ignored as a source of useful data. This would enable a unique monitoring device for airline pilots, unmanned aerial vehicle control station operators, truck drivers, and others working in around-the-clock occupations that demand high levels of alertness and performance over long duration.

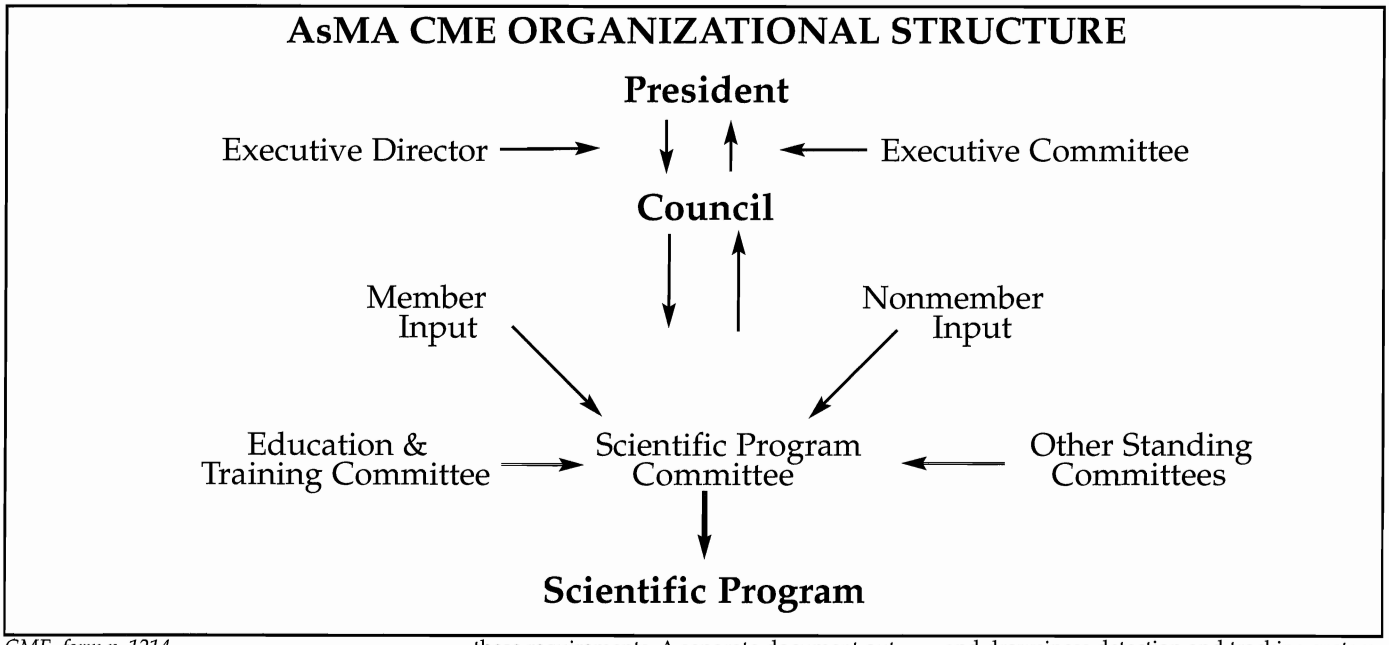
General Application Areas of Photrodes™

Although they have the potential to be used in any application in which electrode-based monitoring equipment is used, Photrodes™ are initially envisioned for cardiac monitoring and neuro-monitoring applications in which electrode attachment is either quite inconvenient or potentially hazardous, such as functional magnetic resonance imaging (fMRI). This technology could be beneficial, for example, at scenes of mass trauma for rapid triage to determine those with or without viable brain function. It may also be used in the same way to rapidly determine those with or without cardiac function. An ECG may be taken through the shirt without requiring any skin contact. This would enable medics to make better decisions regarding early identification, location, triage priority, and treatment of casualties.

REFERENCES

1. Akerstedt T, Gillberg M. Subjective and objective sleepiness in the active individual. Intl J of Neurosci 1990; 52:29-37.
2. Belenky G, Penetar DM, Thorne D, et al. The effects of sleep deprivation on performance during continuous combat operations. In: Marriott BM, ed. Food components to enhance performance. Washington, DC: National Academy Press; 1994.
3. Dingus TA, Hardee HL, Wierwille WW.

See SCITECH WATCH, p. 1216



CME, form p. 1214.
ment materials; and

3. By the cosponsorship of scientific meetings convened by other allied organizations.

4. By organizing workshops and panels in order to provide educational materials commensurate with Maintenance of Certification objectives.

Events fall primarily into two principle areas: the annual scientific program and the publishing of a monthly journal. The annual meeting combines a mixture of oral presentations with poster sessions, debates and interactive panel sessions, and workshops. Content areas of the Annual Scientific Meeting include aviation and space medicine, aerospace human factors, aircraft accident investigation, psychology, air medical transport, medical standards, health promotion, hyperbaric medicine, and passenger health. It is anticipated that this material will stimulate new aerospace medicine research initiatives, assist AMEs/ flight surgeons in determining aeromedical disposition decisions, improve clinical care, and advise patients who are traveling as airline passengers or who require air medical transport. The results of the CME Program should improve flying safety by ensuring wellness and enhancing crew performance. The journal is peer-reviewed and, thus, contains articles of current importance and relevancy.

Aerospace medicine has a highly diversified group of practitioners. Some are civilian aviation medical examiners (AMES) and others are military flight surgeons and flight surgeons in the space program. Their common thread is their practice in the field of aerospace medicine, thus they all qualify for CME credits related to aerospace medicine sponsored activities. Some members, such as the flight nurses and those who attend the FAA seminars, are eligible for CEU & CME credits, respectively, directly from those organizations.

The Association's CME activities can be subdivided according to the ACCME's "Essential Areas and Elements" for CME. These include this Mission Statement and those activities related to the assessment of CME needs, setting CME objectives, designing and implementing CME events, evaluation of programs, cosponsorship, and all the management resources and activities needed to fulfill these requirements. A separate document outlines the Association's activities in these areas and a copy is retained by the Executive Director and the Chair of the Education and Training Committee.

Resolutions Policy Process

In accordance with AsMA Bylaws, all resolutions brought forward must be presented to the membership at the Annual Business Meeting held on Tuesday during the Annual Scientific Meeting with business conducted under Robert's Rules of Order. In order to ensure that the process is understood, the following information is provided to you by your Executive Committee. All resolutions usually consist of several "Whereas" clauses (As noted in Robert's Rules, a resolution may not require "Whereas" statements) followed by the resolution, "Therefore be it Resolved". Although in most cases there is only one "Therefore be it Resolved", it is possible that there could be two or more. The purpose of the "Whereas" portion is to demonstrate the logic employed by the author in reaching the resolution itself. Since the "Whereas" portion is not put to a vote nor part of the resolution, nor published, it is our of order to comment on it at the Business Meeting. Rather, all discussion must focus on the "Therefore be it Resolved" portion(s), i.e., the resolution itself. When discussion of the resolution is exhausted, a vote will be taken with the majority ruling. If the resolution passes, it will become AsMA policy and the Executive Director will forward only the resolution, the "Therefore be it Resolved" part, to interested organizations and agencies worldwide.

SCITECH WATCH, from p. 1215.
Development of models for on-board detection of driver impairment. Accident Anal Prevent 1987; 19: 271-83.
4. Kaplan RF. An innovative EEG-based approach to drowsiness detection. [Dissertation]. Cleveland, OH: Case Western Reserve University, Dept. of Systems and Control Engineering; 1996.
5. Kaplan RF, Loparo KA, inventors. Alertness and drowsiness detection and tracking system. US patent 5,813,993. 1998 Sept 29.
6. Sabo E. Combat leaves soldiers 'drunk' with fatigue. Retrieved April 9, 2003 from www.NewScientist.com.
7. Wooten EL, et al. A review of lithium niobate modulators for fiber-optic communications systems. IEEE J of Selected Topics in Quantum Elect 2000; 6: 69-82.

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The AsMA Science and Technology Committee provides this Science and Technology Watch Column as a forum to introduce and discuss a variety of topics involving all aspects of civil and military aerospace medicine. The Watch can accommodate up to three columns of text, which may include a figure or picture to illustrate your concept.

Please send your submissions via e-mail to: len.goodman@drdc-rddc.gc.ca

Meetings Calendar

November 20-22, 2003, Bangalore, India. 44th Annual Meeting of the Indian Society of Aerospace Medicine. Institute of Aerospace Medicine. Info: Secretary, Indian Society of Aerospace Medicine (ISAM), Directorate General Medical Services, Air HQ (RK Puram), West Block 6, RK Puram, New Delhi 110066, India; Phone 11-26190645; Fax 11-26168098; email: isam@vsnl.in; www.isamindia.org

February 17-20, 2004, Galveston, TX. The University of Texas Medical Branch, Department of Preventive Medicine Residency and the U.S. Army School of Aviation Medicine will host "Pushing the Envelope V—Medicine in Challenging Environments", at the Moody Gardens Hotel in Galveston. For information see the website at www.utmb.edu/pte.

March 22-25, 2004, Daytona Beach, FL. Human Performance, Situation Awareness, and Automation Technology Conference II. Info: Dennis A. Vincenzi: (386)226-7035; dennis.vincenzi@erau.edu; http://faculty.erau.edu/vincenzd/hpsaa.

UTMB

PUSHING THE ENVELOPE

"Medicine in Challenging Environments"

Conference Directors:
Richard T. Jennings, M.D.
Aerospace Medicine Residency
&
John Campbell, LTC, MC
US Army School of Aviation Medicine

February 17 – 20, 2004

Moody Gardens Hotel
Galveston, Texas
(Official conference hotel)

Conference objectives cover the medical knowledge, research and practical skills of a variety of challenging environments including:

- **Space**
- **Aviation**
- **Motorsports**
- **Undersea**
- **Polar**
- **Mountaineering**
- **Travel medicine**

Conference information and registration may be viewed at:

www.utmb.edu/pte

Registration fee:
$350/$400 late

Resident physicians and other health professionals
$250/$300 late

Early registration deadline:
January 15, 2004
(409) 772-9311

CME Accreditation
The University of Texas Medical Branch at Galveston (UTMB) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

UTMB designates this continuing medical education activity for up to 13 hours in Category 1 of the Physician's Recognition Award of the American Medical Association. Each physician should claim only those hours of credit that he/she actually spent in the educational activitv.

Undersea and Hyperbaric Medical Society Annual Scientific Meeting 2004

Four Seasons Hotel, Sydney, Australia
25 – 29 May, 2004

This conference attracts International and National researchers and practitioners from a variety of organisations. UHMS is an International, not for profit organisation serving over 2500 members worldwide.

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- Year in Review
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ICE Australia
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Accommodation and Travel available through the conference website

Send information for publication on this page to: **LCDR Joe Essex, MSC, USN**
48110 Shaw Rd
Bldg 2187, Rm 1240-G3
Patuxent River, MD 20670
essexjb@navair.navy.mil

Certification in Aerospace Physiology

Board Certification in Aerospace Physiology will be offered in May 2004 in Anchorage, AK, during the 75th Scientific Meeting of the Aerospace Medical Association. For qualified applicants who meet the prerequisites for candidacy and successfully complete the examination, board certification is among the most rewarding professional achievements in a scientist's career.

To simply say that it is important for an aerospace physiologist to obtain professional certification is not a complete statement. Board certification is a prerequisite for several Naval Aerospace Physiologists billets, some USAF assignments, although not currently for many civilian positions. To fully appreciate the value of the designation, one needs to understand why the Aerospace Medical Association established board certification in Aerospace Physiology in the first place.

As with most fields of advanced professional endeavor, the primary reason was to encourage the study, improve the practice, and elevate the standards of excellence in Aerospace Physiology. Preparing for an examination as broad as the board examination in aerospace physiology requires discipline, dedication and commitment. In the process, it takes many candidates back to their roots as scientists and reminds them why they committed themselves to pursue an aeromedical specialty to start with. It causes many candidates to review knowledge areas they do not employ on a daily basis, and in some cases to engage in study in areas they may have never pursued before. In such cases, preparing for board certification can actually expand the knowledge base and foundation of understanding of a scientist, and ultimately make the candidate a better aerospace physiologist.

A secondary reason to seek board certification is more obvious; to provide an avenue for professional and peer recognition. As an aerospace physiologist, the associated professional organizations are AsMA, the Aerospace Physiology Society (AsPS), and service-specific collectives such as the Society of US Naval Aerospace Physiologists (SUSNAP). AsMA is the certifying body in aerospace physiology, and successful completion is recognized every year at the AsPS luncheon during the AsMA annual scientific meeting. As of May 2003, 117 specialists successfully achieved board certification since it was first conferred in 1977. Being awarded the gold pO2 pin and certificate of board certification says that a scientist has met significant academic challenges and is a true professional in a select field. In essence, board certification declares that an individual has formally earned the respect of his or her professional peers and their governing organizations.

Finally, board certification serves as a goal that members can strive to attain through dedicated self-study and personal and professional contributions to the AsMA and AsPS. However, eligibility is not simply limited to individuals who posses the necessary academic backgrounds. Perhaps the most significant prerequisite is demonstrated interest, participation, and contribution to the field of aerospace physiology over a period of at least 5 years. Relevant education, experience, and professional contributions are each fundamental elements leading to board certification. Board certification in aerospace physiology says that a scientist takes the aeromedical profession seriously.

When a candidate successfully completes the certification exam, the Executive Council of the Aerospace Medicine Association, acting upon the recommendation of the Certification Board, grants certification in Aerospace Physiology. The Board consists of nine members plus a chairperson (all of whom are board certified), as well as a representative from the AsMA Executive Council. The Chair of the 2004 Certification Board is Lt. Col. Tim Byrne,USAF, BSC. Activities of the Board are governed by the Board by-laws as approved by the AsMA Council in November 1989, (published in the February 1991 issue of Aviation, Space, and Environmental Medicine, Aerospace Physiology Report).

Eligibility to sit for the examination requires a minimum of a baccalaureate degree in physiology, or a closely related life science with significant study in human physiology. The requirement for professional productivity stipulates a minimum of 5 years of professional experience and training in aerospace physiology following awarding of the degree. Other factors considered by the admissions committee include relevant positions held, research, flying experience, academic and military awards, and membership in associated organizations (e.g., AsMA and AsPS). A minimum of two letters of recommendation is also required for each applicant.

Applicants who satisfy all of the eligibility requirements will be subsequently confirmed as candidates by the Admissions Committee to sit for the certification examination. For the 2004 exam, the Chairperson of the Admissions Committee will notify eligible candidates not later than March of their admission to the examination and provide them with information on the examination process. Included in that communiqué will be current references, subject test areas, and sample questions. Based on the comprehensive nature of the examination, preparation by applicants should begin early irrespective of the date of notification.

The Aerospace Physiology Certification Board will administer the certification examination on Sunday, 2 May 2004, during the 75th AsMA Annual Scientific Meeting in Anchorage, AK. The examination, which is offered in English only, will contain questions covering various areas relevant to aerospace physiology including, but not limited to, general human physiology, space physiology, exercise physiology, spatial orientation, acceleration physiology, hyperbaric physiology, decompression sickness, human factors engineering, night vision, LASERs, and operational problems, (e.g., sustained operations, altitude/hypoxia, oxygen requirements, sensory illusions, low pressure operations, parachutes and escape systems, and survival). Also covered will be relevant areas of basic physics and atmospheric science. The weighting of these subject areas is not equal and the distribution of the emphasis is reviewed periodically. As of 2002, all examination questions are of the objective type, i.e., multiple choice, true/false, and answer matching.

Individuals interested in taking the examination should first establish their eligibility by obtaining an application form and more complete information about certification requirements from the Chairman of the Admissions Committee. Applications from candidates who wish to take the examination in 2004 must be received by 1 March 2004. Applications received after that date cannot be guaranteed consideration for the 2004 examination.

Application packages and questions pertaining to the certification process may be directed to the Chairman of the Admissions Committee, CDR David Service, MSC, USN. He may be contacted by email at ServiceDB@miramar.usmc.mil. For individuals who do not have access to e-mail, the following mailing address may be used:

CDR D. B. Service
4881 East Alder Drive
San Diego, CA 92116

AEROSPACE NURSING SOCIETY NEWS

Send information for publication on this page to: **Eileen Hadbavny**
1266 Merton Rd,
Charleston SC, 29407-3317
e-mail: hadbavny@usit.net

A Note from the Editor

As we look forward to the Meeting in Anchorage, the ANS will be commemorating 40 years as a constituent organization of AsMA. We aren't going to do up it as BIG as the 25th Anniversary was in Washington, DC, but would enjoy seeing as many people at the meeting as possible. This will give you an excuse to visit Alaska, if you haven't been there yet. I wish to thank Joy Grant for researching some of the following facts from the past. If you have any other items that you can contribute please send them to the page editor, so they can be included in future submissions.

Now is also the time to be thinking of nomination submissions for the annual awards. It is never to early to start recognizing our members and their outstanding accomplishments.

The Past 40 Years of Nursing in AsMA

Flight nurses have been a part of the AsMA membership for many years; it was in the 1960's that nurse members decided to organize as a group. On 19 Aug 1963, AsMA Executive Council approved the establishment of the Flight Nurses Section (FNS). All military and civilian nurses interested in flight nursing were encouraged to become members. Col. Ethel R. Kovach (USAF Chief Nurse 1963-1968) served as the Chair Pro Tem until 1964 when Lt. Col. Agnes M. Arrington was elected the first Chair of the FNS. The first meeting of the FNS was held in 1964.

The first treasurer of FNS, Maj. Lee Collava, was selected in 1965. By 1968 there were over 300 members of the FNS and Maj. Virginia M. Alena was presented with the first Flight Nurse of the Year Award. In 1969 the original constitution was amended to include a Vice President and Historian.
In the spring of 1971 only 5 years after forming, the FNS became a constituent and attained full privileges with AsMA. Membership was limited to military active duty and reserve flight nurses starting in 1971 and this restrictive membership status continued until it was changed in 1977 to once again include all flight nurses.

Continuing Education Units (CEUs) were first awarded at the meeting in 1972. This is one of the benefits of membership that has continued to the present, with CEUs being offered for other than nursing presentations during the past few meetings. In 1975 the Brigadier General E. Ann Hoefly Award was established to honor a section member who has made an outstanding contribution to the field of nursing excluding aeromedical evacuation. This award honored the first USAF Chief of the Nurse Corps to be promoted to general. BGen Hoefly USAF Chief Nurse from 1968 to 1974, was a member of AsMA and the Nursing Society until her recent death in the summer of 2003. Major Bettie J Vierra, USAF, NC was the first recipient of the E. A Hoefly Award in 1976.

In 1976, Brig. Gen. Claire M. Garrecht, USAF, Chief Nurse 1974-1978 and President of the FNS 1970-71 along with Colonel Sarah E. Beard, President of the FNS 1968-1970 were selected as Fellows of AsMA and were the first Fellows selected from the FNS. Well after their retirement they continued to attend annual meetings and served as role models for many nurses in AsMA.

In 1977 the FNS changed the membership criteria back to the original requirements allowing any nurse interested in Flight Nursing, who was a member of the AsMA to join. Mail ballots were first used to elect officers, and the Flight Nurse of the Year Award was renamed "Mary T. Klinker Award" in recognition of the flight nurse who was killed in a C-5 crash while on a humanitarian mission. This award has become an AsMA award and is presented at the annual Honor Night banquet.

The 1980s saw evolution of the FNS, when in 1984, Lt. Col. Margaret V. Hargett became the first USAF Reserve nurse to be elected president. She was instrumental in establishing the Col. Sarah Beard Award. This award is presented to the distinguished graduate of each Flight Nurse Class at Brooks AFB, TX. This award includes a certificate and a 1-year sponsored membership in AsMA and the FNS (the recipient must submit his/her application through the FNS treasurer). This is one way of mentoring new flight nurses by getting them involved professionally in AsMA. Flight Nurse Section members make voluntary donations to the FNS treasury to fund this award

The FNS also began encouraging nursing research and, in 1988, established the Brigadier General Claire E. Garrecht Award for the best scientific paper presented by a member of the nursing section at the annual meeting. The first recipient of the this award was Major Michele M. Brady.

The 1990s saw more change when Lt. Col. Constance Alger was elected President. Lt. Col. Alger was not a flight nurse, but was interested in learning as much as she could about the patients in her care who were transported by the aeromedical evacuation system. She said one did not have to wear wings to be interested in flight nursing and the effects on the patients. She is to be commended, because many nurses do not see the relevance of continuing membership once their flying assignments are over. I say, "once a flight nurse always a flight nurse"-one can always be a advocate and help educate patients about the stresses of flight, even as a passenger on a commercial aircraft.

In 1992 the name of the Flight Nurse Section was changed to Aerospace Nursing Section (ANS) to reflect the future vision of our nurse leadership. Not only did they want to include flight nurses, but also those nurses who worked in aerospace medicine, whether with an airline medical department, in occupational nursing working with aerospace workers, or coordinating space medicine from a nursing prospective.

In the 1990s another award was established and presented at the Nursing Luncheon. Dr. Hans Krakauer, President of the International Passenger Association, initiated an award for junior flight nurses in recognition of Brig. Gen. Harold F. Funsch. BG Funsch was associated with aerial evacuation of patients during WW II, Korea, and Vietnam. He served as the Command Surgeon, Military Airlift Command in the late 1960's, and was referred to by many as 'Mr. Air Evac.' Dr. Krakauer, having seen the dedication of young flight nurses, wanted this award to be for and about junior nurses, and therefore stipulated that the recipient should be nominated and selected by peers, thus encouraging more involvement of the junior officers or staff nurse civilian equivalents. The Dr. Hans Krakauer Junior Nurse Award honors a junior nurse for outstanding professional accomplishment in aerospace, clinical practice, education, management, and/or research. This award war first presented to Capt. Angela Whinnery, USAFR, NC in 1991.

Major Julia Read, Canadian Forces, was the first international nurse to be elected president of the ANS in 1996-1997. However, she was not the only international member to achieve that position. Jillian Barclay Newlands held the office in 2002-2003. Originally, a civilian nurse educator when she became an AsMA and ANS member, she is now a Squadron Leader in Royal Australian Air Force.

With the millennium came change. When AsMA added a technician category of membership, the ANS also changed bylaws to include Allied Health Professional as a category of membership to the ANS. Major Dona Iversen, then president of the ANS initiated the Edward R. Iversen Sr. Allied Health Professional of the Year Award, in honor of her father who had many positive experiences with EMS personnel. SMSgt James McCormick, USAF received the Iversen Award in 2001 and SrA Doran Kalasa, USAF was presented with the award in 2002. In 2002, the name of the organization was changed again to Aerospace Nursing Society. In 2003 the first Air National Guard nurse Col Ginny Schneider assumed presidency of the ANS and the ANS elected as Vice President Elect Colleen Morrisette who will assume the President office in 2004 as the first civilian flight nurse to lead our organization.

Join the Aerospace Nurses Society!

Dedicated to the advancement of aerospace nursing....
Dues are just $10. Membership is open to allied health professionals for $5 a year.
For further information, contact:
Nora Taylor
301 Radcliff
Belleville IL 62221
noralsaka@yahoo.com
Nora.Taylor@hq.transcom.mil

Send information for publication on this page to:
Dale Orford
15516 E Acacia Way,
Fountain Hills, AZ 85268
480-837-7919; dorford@cox.net

Message from Lady Mary

REMEMBRANCE SERVICE IN THE UNITED KINGDOM

Homage for the Fallen

"They shall grow not old, as we that are
left grow old,
Age shall not weary them, nor the years
condemn,
At the going down of the sun, and in the
morning
We will remember them."

At the 11th hour of the 11th day of the 11th month following the end of World War I, people stood still and silent for 2 minutes, traffic stopped to pay homage to friends and families who had died during that war. Church services were held on the nearest Sunday to that date with members of the armed forces, local dignitaries and townspeople taking part. The Royal Family paid its tribute and led the nation in a prayer of Remembrance.

This service and tribute continues today, now remembering the men and women who have died in subsequent conflicts.

My husband, John, is regularly given the privilege and honour to represent Her Majesty the Queen as Deputy Lord Lieutenant of the County of Cambridgeshire at Ely Cathedral. He also lays a wreath of poppies on behalf of RAF Bomber Command and takes the Salute at the march past in the City of Ely following the religious service.

Although the 2-minute silence on the 11th hour of the 11th day of the 11th month went "out of fashion" some years ago it has pleased the majority of people in Britain to see it reintroduced and once again this year supermarkets will halt business and local people will continue to gather at war memorials throughout the country in recognition of the lives that have been lost since 1914.

Kohima Prayer

When you go home, tell them of us and say,
"For your tomorrow we gave our today."

The Story of the Poppy and Remembrance Day

The story of the poppy and John McCrae's poem, " In Flanders Fields", are inexorably linked, and the voices of those who have died in war continue to be heard each Remembrance Day around the world.

In 1915, Dr. John McCrae, a Canadian brigade-surgeon was serving with the First Brigade of the Canadian Forces Artillery at Ypres, Belgium, or as it was more commonly known,"Flanders". Some of the heaviest fighting of the First World War occurred there, and in the trenches Dr. McCrae tended hundreds of wounded soldiers every day. He was surrounded by the dead and dying, and in a letter to his mother, he wrote, "The general impression in my mind is of a nightmare. We have been in the most bitter of fights. For seventeen days and seventeen nights none of us have had our clothes off, nor our boots even, except occasionally. In all that time while I was awake, gunfire and rifle fire never ceased for sixty seconds.... And behind it all was the constant background of the sights of the dead, the wounded, the maimed, and a terrible anxiety lest the line should give way."

The day before he wrote his famous poem, one of Dr. McCrae's closest friends was killed in the fighting and buried in a makeshift grave with a simple wooden cross. Wild poppies were already beginning to bloom between the crosses marking the many graves. Unable to help his friend or any of the others who had died, Dr. McCrae gave them a voice through his poem.

In Flanders Field

In Flanders' fields the poppies blow
Between the crosses, row on row,
That mark our place: and in the sky
The larks, still bravely singing, fly
Scarce heard amid the guns below.

We are the dead. Short days ago
We lived, felt dawn, saw sunset glow
Loved and were loved,
and now we lie in Flanders' fields.

Take up our quarrel with the foe;
To you from failing hands we throw
The torch; be yours to hold it high,
If ye break faith with us who die
We shall not sleep, though poppies grow
In Flanders' fields.

Moina Micheal, an American War Secretary with the YMCA and a writer, was so moved by McCrae's work that she wrote: "And now the torch and Poppy red, Wear in honour of our dead". She bought red poppies and began the tradition of selling them to the public to raise money to support Servicemen in need. In Britain, the cause was taken up by Major George Howson who formed the Disabled Society. He felt that the making of artificial poppies might offer opportunities for the disabled, and later approached the British Legion with his suggestion. Thus began the Royal British Legion poppy factory, employing many disabled people making poppies, wreaths and other items associated with the Servicemen's fund.

Today, the wearing of a red poppy on November the 11th, has become a tradition in many nations, honouring all those who have given their lives in the great conflicts of the past century.

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"...and "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 $20 per year. For further information, contact: Judy Waring, 4127 Kenyon St., Seattle, WA 98136; (206) 933-0884; e-mail: judymikewaring@msn.com

POPPY FACTORY--The Royal British Legion poppy factory, employing many disabled people making poppies, wreaths and other items associated with the Servicemen's fund.

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

Breast Cancer Survival Improved With Taxotere®

At the European Cancer Conference (ECCO) annual meeting, Aventis presented results from a randomized, Phase III study which demonstrated that women with metastatic breast cancer who were treated with Taxotere® (docetaxel) Injection Concentrate had a statistically significant improvement in overall survival. The multi-center study included 449 women who were randomized to either Taxotere® 100 mg/m2 (1 hour infusion) or paclitaxel 175 mg/m2 (3 hour infusion) every 3 weeks.

Taxotere®, a drug in the taxoid class of chemotherapeutic agents, inhibits cancer cell division by essentially "freezing" the cell's internal skeleton, which is comprised of microtubules. Microtubules assemble and disassemble during a cell cycle. Taxotere® promotes their assembly and blocks their disassembly, thereby preventing cancer cells from dividing and resulting in cancer cell death.

Taxotere® is currently approved in the United States to treat patients with locally advanced or metastatic breast cancer after failure of prior chemotherapy, and patients with unresectable locally advanced or metastatic non-small cell lung cancer (NSCLC) in combination with cisplatin, who had not received prior chemotherapy. It also is approved for patients with locally advanced or metastatic NSCLC after failure of prior platinum-based chemotherapy.

About Aventis

Aventis is dedicated to treating and preventing disease by discovering and developing innovative prescription drugs and human vaccines. Aventis corporate headquarters are in Strasbourg, France. The company's prescription drugs business is conducted in the U.S. by Aventis Pharmaceuticals Inc., which is headquartered in Bridgewater, New Jersey.

Study of Hepatitis C Therapies Initiated

Schering-Plough Corporation announced plans to initiate a major clinical study involving 2,880 patients that for the first time will directly compare the two approved forms of pegylated interferon therapy (1) for chronic hepatitis C virus (HCV) infection: PEG-INTRON® (peginterferon alfa-2b/Schering Corporation) versus PEGASYS (peginterferon alfa-2a/Hoffmann-La Roche, Inc.), both used in combination with ribavirin. Schering-Plough Research Institute (SPRI), in collaboration with leading medical centers, will conduct the comparative study in response to requests by the hepatitis C medical and patient communities, and to clear up misperceptions in the marketplace about these two treatments.

The IDEAL trial (Individualized Dosing Efficacy vs. flat dosing to Assess optimaL pegylated interferon therapy) will compare the efficacy and safety of individualized weight-based dosing with PEG-INTRON and REBETOL® (ribavirin, USP) versus PEGASYS, which is administered as a flat dose to all patients regardless of individual body weight, and COPEGUS (ribavirin, USP) dosed either at 1,000 mg or 1,200 mg, in U.S. patients with chronic hepatitis C, genotype 1. PEG-INTRON and REBETOL combination therapy is indicated for the treatment of chronic hepatitis C in patients with compensated liver disease who have not been previously treated with interferon alpha and are at least 18 years of age.

PEG-INTRON, the only interferon product for hepatitis C approved for dosing according to body weight, is a longer-acting form of Intron® A (interferon alfa-2b, recombinant) Injection that uses proprietary PEG technology developed by Enzon, Inc. of Bridgewater, N.J. PEG-INTRON, recombinant interferon alfa-2b linked to a 12,000 dalton polyethylene glycol (PEG) molecule, is a once-weekly therapy that is designed to achieve an effective balance between antiviral activity and elimination half-life. Schering-Plough holds an exclusive worldwide license to PEG-INTRON. REBETOL is an oral formulation of the antiviral agent ribavirin, a synthetic nucleoside analog.

About Schering-Plough

Schering-Plough Research Institute is the pharmaceutical research and development arm of Schering-Plough Corporation, a research-based company engaged in the discovery, development, manufacturing and marketing of pharmaceutical products worldwide.

REFERENCE:

1. National Institutes of Health. National Institutes of Health Consensus Development Conference Statement: Management of Hepatitis C: 2002 -- June 10-12, 2002. Hepatology 2002; 36(5) Suppl 1:S3-S20.

FDA Approves New Use of VALTREX(R) for Genital Herpes

GlaxoSmithKline (GSK) announced that the U.S. Food and Drug Administration (FDA) has approved a supplemental new drug application (sNDA) for VALTREX® (valacyclovir HCl) caplets for suppressive therapy in otherwise healthy adults with genital herpes in order to reduce the risk of heterosexual transmission of genital herpes (GH). The study of 1,484 couples conducted in support of the application showed that once-daily suppressive therapy with VALTREX, in addition to counseling on safer sex practices, reduced the risk of transmission of symptomatic genital herpes (signs or symptoms of GH) by 75% and reduced the risk of overall acquisition of the virus by 48%.

The approval follows a unanimous (13-0) recommendation by an FDA Advisory Committee on May 14, 2003, to approve suppressive therapy with VALTREX for reducing the risk of transmission of genital herpes in otherwise healthy, heterosexual individuals.

The study was conducted in 1,484 healthy, heterosexual, monogamous couples. The primary endpoint of the study in support of the sNDA was to reduce the risk of transmission of symptomatic genital herpes (signs or symptoms of GH confirmed with a lab test) to the uninfected partner. The study showed that once-daily suppressive therapy with VALTREX 500 mg caplets reduced the risk of transmission of symptomatic genital herpes by 75% versus placebo (0.5% on VALTREX vs 2.2% on placebo). In addition, suppressive therapy with VALTREX reduced the risk of overall acquisition of the virus (with or without symptoms confirmed with a lab test) by 48% versus placebo (1.9% on VALTREX vs. 3.6% on placebo).

VALTREX is also indicated for the treatment or suppression of genital herpes in otherwise healthy individuals and for the suppression of recurrent genital herpes in HIV-infected adults with CD4+ counts greater than or equal to 100cells/uL.

About GlaxoSmithKline

GlaxoSmithKline is one of the world's leading research-based pharmaceutical and health care companies. GlaxoSmithKline is committed to improving the quality of human life by enabling people to do more, feel better and live longer.

News of Members

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pday@asma.org

LCDR Humphrey Minx, MSC, USN, Jacksonville, FL, formerly the Aeromedical Safety Officer, 4th Marine Aircraft Wing in New Orleans, LA has been transferred to serve as Department Head, Aviation Training Center in Jacksonville, FL. He recently received a meritorious service award from the Marine Forces Reserves for his service as 4th AMSO and for his work as the central regional coordinator for the Failsafe Program.

LTC Eric W. Olins, MC, USA, Fairbanks, AK, previously Regional Consultant for Aviation Medicine, Western Regional Medical Command in Fort Lewis, WA, has been promoted and is now Deputy Commander for Clinical Services, Bassett Army Community Hospital in Fort Wainwright, AK.

Lt. Col. Rudolph Cachuela, USAF, MC, formerly Commander, 2nd Medical Operations Squadron in Barksdale AFB, LA, recently became Commander, 86th Aerospace Medicine Squadron at Ramstein ABS, Germany.

Robert W. Elliott, Ph.D., ABPP, ABPN, Director, Aerospace Health Institute, was recently elected to the office of President of the National Academy of Neuropsychology, Los Angeles, CA. In addition, Dr. Elliott is Chairman of the American Psychological Association, Division of Clinical Neuropsychology, Annual Convention Program (Hawaii) for 2004.

David R. Jones, M.D., M.P.H., Montgomery, AL, was recently invited to speak in England and Norway. On 12 April 2003, he spoke on "SSRI use in Aviation Medicine" at the 23rd Annual Meeting of the Association of Aviation Medical Examiners in Telford, UK. He participated in the annual meeting of the Norwegian Association of Aviation Medical Examiners in Oslo, Norway, 5 September, 2003, with presentations on "Mental Health Evaluations of Pilots" and "Depression, SSRIs and Flying," as well as joining a panel discussion of aeromedical problem cases with his Norwegian hosts and colleagues.

Shepard B. Stone, M.P.S., P.A., LTC, CT-ARNG, New Haven, CT, has recently been appointed as State Aviation Medicine Officer in the Connecticut Army National Guard and was promoted to Lieutenant Colonel. He is also Associate Clinical Professor of Anesthesiology at Yale University School of Medicine and Physician Associate-Anesthesiologist at Yale-New Haven Hospital.

JOURNAL IS NOW ONLINE!
You must register via www.ingenta.com, AND pay AsMA an additional $20 fee.

Richard L. Newman, Ph.D., formerly Associate Professor, Dept. of Safety Science, Embry-Riddle Aeronautical University, Prescott, AZ, is now a Human Factors Specialist, FAA Tranport Airplane Directorate's Airplane and Crew Interface Branch, Renton, WA.

New Members

Akinola, Olayinka A., M.B., B.S., Boston, MA
Cantrell, James M., Maj., USAF, BSC, Fairchild AFB, WA
Carr, Darrell L., TSgt., USAF, Wichita Falls, TX
Critchley, Eric P., Capt., USAF, MC, FS, Albuquerque, NM
Dench, Edward H., M.D., State College, PA
Faaborg, Troy P., Capt., USAF, BSC, APO AE
Green, Jennifer Ann, M.D., M.P.H., Kalamazoo, MI
Hanfling, Dan, M.D., Falls Church, VA
Hankenson, Denise, Okemos, MI
Hankenson, Paul D., D.O., Okemos, MI
Hurwitz, Gary L., Lt. Col., USAF, MC, Albuquerque, NM
McCauley, James W. Capt., USA, MC, Boca Raton, FL
Qiang, Yandong, M.D., Baltimore, MD
Stoner, John C., Col., USAF, MC, Elmendorf AFB, AK
Strecker, Bradley, Maj., USAFR, NC, Olathe, KS

International New Members

Mabuza, Princess P., M.B.B.Ch., Rosslyn, Gauteng, South Africa

In Memoriam

Don Estes

Don Estes, M.D., former AsMA member, passed away in August 2003. He was a native of St. Joseph, MI, and was born in 1919. During World War II, he was a pilot with the Army Air Corps and served for a period as a test pilot at Wright Field in Dayton, OH. He received his M.D. and MPH from Harvard Medical School.

From 1951-52, he was an industrial medicine fellow with the AEC, and from 1952-54, he was medical director of the Arabian-American Oil Company in Saudi Arabia. During the years of 1955-59, he served as an Air Force flight surgeon and command pilot and was Chief of Aviation Medicine at HQ Air Defense Command in Colorado Springs, CO. He then joined the Lovelace Foundation in Albuquerque, NM, working on aerospace medicine with Dr. Lovelace.

In July 1960, he was brought in as Medical Director of the Civil Aeromedical Research Institute, Norman, OK, then in its formative stages, to work with the Research Director, Dr. Robert Clark. In the spring of 1961, Dr. Estes resigned his position and moved to FAA Headquarters Offices to become Acting Civil Air Surgeon. Subsequently, he joined NASA Headquarters, working in the area of occupational health. Following retirement, he resided in Vacaville, CA..

William R. Albers

William Richard "Doc" Albers, 82, a physician who practiced internal medicine, aviation and occupational medicine, and worked for the government and private industry, died in September.

Dr. Albers was born in Jersey City, NJ, where he graduated from Saint Peter's College. During World War II, he was a Marine Corps fighter pilot. He was a 1955 graduate of Georgetown University Medical School. He then went into private practice of internal medicine in Bloomfield, NJ, and becam an aviation medical examiner.

From 1961-62 he served as FAA Regional Flight Surgeon, Eastern Region. While working there, he developed the first FAA medical accident investigation manual. In 1962-64 he was Chief, Aeromedical Standards Division, Oklahoma City, OK, which then moved to FAA Headquarters in Washington, DC.

In 1965, he became the United Airlines medical director for the mid-eastern states at what is now Reagan National Airport. In 1968, he became medical director for the Atomic Energy Commission, then medical director for the Department of Energy in 1977 before retiring in the early 1990s.

He lived for many years in Fairfax county, where he practiced aviation medicine part time, conducting physical exams for pilots at his office in Fairfax City. He moved to Annapolis 6 yr ago, where he lived until his death. His hobbies included flying a World War II-era naval training plane.

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