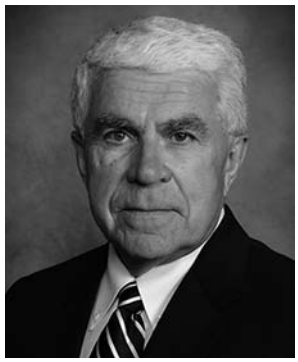
President's Page

In March we held the last Executive Committee meeting prior to the Boston Annual Scientific meeting. This year has passed quickly, and soon the gavel will be passed to the capable hands of President Elect Andy Bellenkes.

I want to acknowledge what a difficult year this has been for our Executive Director of nearly seventeen years, Dr. Russell Rayman. Russell lost his wife of 38 years, Ludy after a difficult illness, a sad moment for all of us who have always seen Russell and Ludy together. Also, Russell has made the difficult decision to depart as Executive Director in January, 2009. It is my wish that Russell will look upon AsMA as an organization filled with colleagues and friends who offer him our love and support.

We busied ourselves with a packed agenda at the meeting and dealt with several issues in depth. At the end we allotted time for stratetgic planning. We asked ourselves why an individual would want to join AsMA, and all agreed that the blue journal and annual scientific meetings were high on the list for most. I have since given some more thought to this, and the top reason on my list was an item not the journal, not the meeting. Rather it was you, the members. For me it is the fellowship, the camaraderie, the depth and breadth of knowledge, the broad global perspective, the respectful airing of alternative views—it is all these things that characterize the members of AsMA that ranks first on my list. Yes, I love the annual meeting, which offers so much to so many. But that is where I see all of you in a gathering that is unparalleled. I read your work in the journal. I work with you on the Executive Committee, the Council, and the committees. Together we discuss, address, and hope to solve some of the issues facing the field we love,



John D. Hastings, M.D.

aerospace medicine. It is the fellowship that I enjoy. What is fellowship? Fellowship is:

- the condition of sharing similar interests, ideals, or experiences
- the companionship of individuals in a congenial atmosphere and on equal terms
- a close association of friend or equals sharing similar interests
- friendship, comradeship

Yes, upon reflection it is fellowship that most draws me to AsMA.

I have had the wonderful honor of serving as president of this diverse and yet unified organization. Being a member of AsMA has enriched my life greatly, and I am grateful for that. I hope that we—your Executive Committee, your Council, your committees, your Executive Director, your home office staff, and all who work hard throughout the year for AsMA—have served you well.

I look forward to many happy years as of a member of AsMA. I look forward to spirited dialogue about the challenges facing aerospace medicine. I look forward to fellowship.

Association News

The Aerospace Medical Association CME 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, implementation strategy, and expected results for the provision of CME to its membership and its role in the cosponsoring of CME with other organizations.

The purpose of the Continuing Medical Education Mission of the Association is to provide a comprehensive educational program for physicians to maintain currency in aerospace medicine clinical practices, to ensure quality patient care and appropriate aeromedical disposition, and to foster related research.

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:

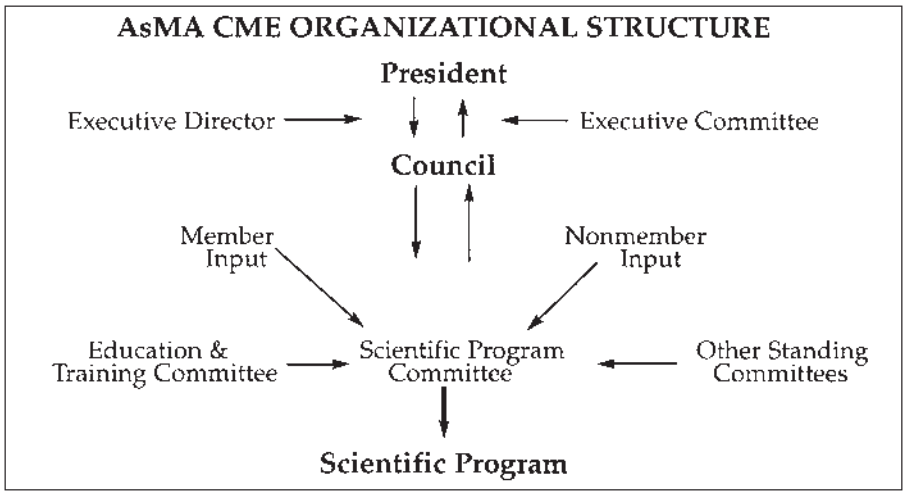
1. By the convening of scientific meetings – primarily the annual scientific program, supplemented with smaller area-specific meetings, when possible;
2. By the publication of a monthly, peer-reviewed scientific journal, including self-assessment materials; and
3. By the cosponsorship of scientific meetings convened by other allied organizations. Cosponsorship is offered to outside organizations only if the activity is relevant to aerospace medicine.
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 Aviation Medical Examiners (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 including self assessment.

Expected results of the CME Program are: changes in practice by the aerospace medicine practitioners; decreased error rates on aviation medical examiner medical examinations; decreased aircraft/spacecraft accident/incident rates due to medical factors; changes in organizational policy (the military services, National Aeronautics and Space Administration and the Federal Aviation Administration); changes in residency training. These metrics will be followed by the Home Office.

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 Federal Aviation Administration 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" for CME. These include this Mission Statement and those activities related to the assessment of CME needs, setting CME objectives, designing and implementing CME activities, evaluation of programs, expected results, standards for commercial support, conflict of interest procedures, cosponsorship, and all the management resources and activities needed to fulfill these requirements.



AsMA VOLUNTEER DAY 2008
Saturday, May 10

The AsMA service project this year will be conducted to support **The Greater Boston Food Bank (www.gbfb.org).** We will work in two shifts to assist the GBFB at their distribution center; inspecting, sorting, and packaging food.

Shift 1: 8:45am - 12 noon
Shift 2: 12:45pm- 4pm

Sign up for the event by emailing Dr. Matt Hoefer at *usbatory@hotmail.com* and signifying your preference for a morning or afternoon shift.

Thank you for volunteering your time and continuing this great tradition of service to our communities. For more information please visit: **www.asmavolunteers.org**.

Volunteers must be 16 years old. Please bring work clothes and closed-toed footwear (Open-toed shoes are not permitted in the warehouse).

This Month in Aerospace Medicine History-- May 2008

By Walter Dalitsch III, M.D., M.P.H.

Seventy-five Years Ago

The future of aviation in National Defense (National Commander, The American Legion): "To one who has spent most of the last seven months traveling back and forth over the length and breadth of this great Country of ours, it is a distinct pleasure to be permitted to sit in the company of the nation's aviation élite, and to be invited to make a few remarks, brief as they must be, is indeed an honor. I say this because in my travels as National Commander I have come to realize fully how important, how much of an absolute necessity, aerial transportation has become to this fast-moving age. For myself, I can honestly say that I could not have gotten along without it, and I am not what you might call altogether one of the younger generation…

"Last night I spoke in New York. Tonight I have the privilege of saying a few words to you [in Indianapolis]. Only a few short years ago it would have been unthinkable, the mere suggestion would have been laughed down as crazy. Yet, in so brief a time, how small has become the distance between these two great cities. After a restful night's sleep, a leisurely breakfast, I step into my airship in New York and on its broad wings I am whisked, safely and comfortably, to your meeting here in Indianapolis in the space of a few hours. A miracle that in our hurrying age has become the commonplace.

"It was only twenty-eight years ago, that the first sustained airplane flight was made – here in America and by an American. The world was thrilled but it took the supercharged demands of World War activities to bring aviation to the place it holds today – that, probably, of the principal mode of transportation and travel of the future. The strides your leaders made after the signing of the Armistice probably are unrivaled by any industry in the history of the World…

"How the world has shrunk in the 400 years since Magellan set sail with his little fleet to make the first circumnavigation of the world. One ship and a handful of mariners made the circuit in three years. All of the other ships and sailors, including the leader himself, were lost at sea or died. Yet, two fearless young men in our day circle our worldly sphere in a little over eight days, without mishap and without serious discomfort, though I would not say that they were without dangers.

"And the end is not yet in sight. Our generation may have laid the foundation for the great sky armadas of the future but the ships that seem comfortable and safe enough to us today will look puny and dangerous alongside the airliners of tomorrow. In a conversation with a distinguished aviation officer of one of our services in Washington recently, I asked what the immediate future was likely to witness in the advance of aviation. He replied that experienced aviators were loath to make predictions lest their conservative beliefs should be considered wild dreams…

"The late President Coolidge once said: 'Our National Defense must be supplemented, if not dominated, by aviation'" (3).

Fifty Years Ago

Open-water helicopter rescue of survivors (U.S. Naval Air Facility, Elizabeth City, NC): "The unparalleled expansion of the use of rotary wing type aircraft in the military services, and most recently in civil aviation, has fired the imagination of the air minded public. The helicopter has become the modern day magic carpet which can hover at human command and from which seemingly all tasks can be accomplished at the operator's whim. This enthusiasm is the life blood supporting the technical progress in rotary wing engineering and is vital to its growth. However, this same widespread interest among the non-technical, although aviation-conscious, general population has had an inevitable effect which has become a matter of increasing concern to those thoroughly familiar with the limitations of the helicopter. This is the general over-optimism among the nontechnical public as to the capabilities of this aircraft. Unwarranted expectations concerning the ability of the helicopter to accomplish dramatic rescue of people in distress is encountered with increasing frequency. This constitutes a handicap occasionally for those responsible for the design and operation of the helicopter who, all too often, are dependent upon the intelligent and understanding support of the public to utilize effectively this type aircraft.

"One of the many proven uses for the helicopter – rescue from relatively inaccessible places – has become so comprehensive it is now a specialty in flight operation made unique by the aircraft itself. It is not the intent of this report to define that major role in even general terms but rather to present a detailed study of a single but highly important aspect of rescue work, specifically: The problem of helicopter recovery of survivors in the water, particularly in open seas. This aspect of rescue work imposed on the helicopter has become a matter of primary concern to the aviation-oriented medical officer because of excessive dangers involved with an associated mortality causally related to the rescue procedure itself. In this area widespread misinformation exists, some of it dangerous to the survivor himself if he is misinformed…

"The increasing use of the helicopter as a rescue aircraft is accompanied by a public overestimation of its capabilities for such work. Attempted rescue of survivors from the water by helicopter is a specialized and hazardous operation influenced by environmental conditions, techniques and effectiveness of aircraft plus accessory equipment, and the physiologic stamina of the survivor. Rescue failures are sometimes disastrous to both survivor and rescuer..." (2).

Twenty-five Years Ago

Current Naval Aviation mishap rates (U.S. Naval Safety Center, Naval Air Station, Norfolk, VA): "Approximately 50% of all class A flight/flight-related naval aviation mishaps (involves intent for flight with destroyed aircraft, fatalities, permanent total disabilities, or at least $500,000 of property damage and injury costs) continue to involve pilot error as a contributing factor as determined by the mishap boards, endorsers in the chain of command, and the Naval Safety Center. These pilot factor mishap rates, i.e., number of mishaps per 100,000 flight hours, during the calendar year 1977-1981 time period for attack, fighter, and helicopter aircraft (excluding trainers) were 3.90, 7.14, and 3.09, respectively.

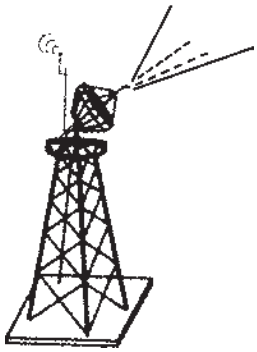
"It is imperative, therefore, that all personnel involved in aviation safety, either directly or indirectly, including those involved in the budgetary processes, development of training criteria, commanding officers, and pilots, be provided the factors associated with the unsuccessful accomplishment of the aviation missions.

"Research and theory indicate that mishap rates tend to decrease as experience increases. This is well illustrated in attack aircraft. The pilot factor mishap rate significantly (α=0.53) decreased as time in model increased. The rates were particularly high for pilots with less than 100 h in model and also for pilots having 1000-1500 total hours who had less than 500 h in model (e.g., transition pilots). Uncontrolled flight and mishaps during offensive maneuvers were major problem areas for these aviators… Recent flight experience, as measured by hours in the past 30 d, showed little statistical relationship with mishap rate (α=0.555) though pilots flying less than 10 h in 30 d possessed the highest rate, particularly if lifetime hours in model were less than 300. Violation of regulations was the top error for this group…

"Fighter aircraft mishap rates do not appear to conform to the hypothesis of decreasing rates with increasing experience. Though the pilot factor mishap rate in fighter aircraft was highest for aviators with less than 300 h in model (uncontrolled flight and poor landing techniques being major problems), particularly if total hours were between 1000 and 1500 – the transition pilots – the result was not statistically significant (α=0.364). Moreover, the rates tended to decrease as experience increased to 500 h in model but the rates then increased with further experience… The reasons for this increase appear to be partially related to increased judgment error rates. Flight hours in 30 d were significantly (α=0.001) associated with mishap rate. Aviators who accumulated 20-30 h in 30-d periods had the highest rate, particularly if lifetime hours in model were less than 300. Failure to maintain flying speed and poor landing techniques were the top contributors to the mishaps in this group… A high rate of judgment errors in this group – which did not exist in attack aircraft – was a factor in causing this peak.

"Pilot factor mishap rate in the helicopter community significantly (α=0.083) increased as lifetime hours in model increased. Pilots with over 1000 h, in fact, possessed the highest rate. Inadequate flight preparation was the top pilot causal factor for this group… Furthermore, the mishap rate was significantly (α=0.0001) related to hours in 30 d. Aviators who flew more than 40 h had the highest rate, particularly if lifetime hours in model were greater than 1000. Again, inadequate flight preparation was the top contributor… These 'trends' contrast sharply with the 'expected' decreases associated with increased experience. High mishap rates associated with failure to maintain flying speed, misjudgment of distance, altitude or position, violation of regulations, inadequate flight preparation, and physical/mental condition of pilot (stress, fatigue, vertigo, etc.) for the pilots with the greater experience – lifetime or 30 d – were factors in these 'trend reversals'" (1).

See HISTORY REFERENCES, p. 551.



Science & Technology Watch

Keeping You Informed Of The Latest Advances In Science And Technology

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Drs. Kupfer and Burian present a summary of micro-RNAs and the methodologies in which it is employed in physiology studies. MiRNA and protein transcription factors provide powerful tools used to understand gene expression regulation.

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MicroRNA: The Newest Player in Gene Expression Regulation

Doris M. Kupfer, Ph.D. and Dennis Burian, Ph.D.
Functional Genomics Group, Civil Aerospace Medical Institute, Oklahoma City, OK

Most gene expression studies have focused on changes in transcript levels as a reflection of the response of the cell to stress or disease. DNA microarrays and quantitative polymerase chain reaction (qPCR) are popular, well-validated technologies for monitoring regulation of gene expression at the transcription level. Microarrays can screen large numbers of genes—including the complete transcriptome for sequenced organisms, humans as well—for relative levels of expression. qPCR is an exquisitely sensitive method of determining the precise relative or absolute levels of mRNA present in a sample. Even recognition of the role of alternative splicing has been taken into account with the newest generation of commercially available exon microarrays and probes to account for this additional complexity in regulation. MicroRNAs (miRNA), an exciting and newly discovered gene expression paradigm and the methods to assay their levels, are opening up a new world of gene expression level discovery that will be added to our arsenal of tools to discover markers important in aerospace medicine.

It was proposed as early as 1969 that RNAs might regulate which genes were turned on or off (2). This theory languished due to the discovery of protein transcription factors. However, in 1993 a group at Dartmouth Medical School published the first animal RNA silencing report ushering in recognition of post-transcriptional regulation through non-coding RNAs (6). The study showed that a C. elegans non-coding small RNA from the gene lin-4 was responsible for negative regulation of a second gene, lin-14 and that the regulation was through binding of the Lin-4 small RNA molecule via an anti-sense sequence to the lin-14 3' UTR. Over the next few years RNA silencing pathways were discovered in a broad array of organisms including plants, fungi, insects and mammals. A common feature of all, a dsRNA intermediate, was determined by Nobel Prize winners Fire and Mello (4). The observation that introduction of an artificial dsRNA complementary to a gene of interest can result in artificially activating a silencing pathway and lead to the destruction of the targeted mRNA has led to research on developing RNA interference tools in mammals.

Lin-4, mentioned above, was the first characterized micro-RNA (miRNA). These are a large class of endogenous RNA silencing molecules found in plants and animals which are evolutionarily conserved, non-protein-coding RNAs. miRNAs are involved in post-transcriptional gene silencing by inhibition of protein translation or targeting transcripts for degradation if there is perfect homology with their mRNA. These small RNAs (19-30nt) are processed from much larger stem-loop precursor transcripts from genes which are not their targets (see Fig. 1 for steps in miRNA biogenesis). Roughly 25% are from intronic regions, with the remainder from clustered intergenic or antisense transcribed regions.

miRNAs have been found in all tissues examined, including blood, and have been shown to be involved with a surprisingly wide range of functions including early development, cell proliferation and death, apoptosis, fat metabolism, cell differentiation, organogenesis, and hematopoietic lineage differentiation. Cancer, viral disease, and neural development have also been connected with the activities of miRNAs (1,8). Target prediction algorithms indicate that each miRNA potentially regulates multiple genes and there appears to be multiple miRNA binding sites in many target genes. It appears that at least 30% of human genes may be targets for regulation by miRNAs. miRBase (http://microrna.sanger.ac.uk/), (5) is a public access database registry of all published miRNA sequences and their predicted gene targets. Release 10.1 lists 5,395 entries, with 541 human miRNA sequences. Greater than 230 of these have been experimentally verified in human. The remaining sequences have been verified in zebrafish or are obvious homologs to verified mouse and rat miRNAs. All of these findings suggest an enormous post-transcriptional regulatory circuitry controlled by miRNA acting in a combinatorial fashion, which is in addition to the well-known protein transcription factor regulation tapped by current technology. The extent of gene expression controlled by miRNA appears to have the potential to be at least as global as that regulated by protein transcription factors and seems likely to be interwoven with it. It makes sense then, to address the role of miRNAs in any new study of gene expression regulation.

Detection of miRNAs is complicated by their small size and sequence conservation, i.e., miRNAs may differ by a single nucleotide. Recently, modified RNA isolation protocols which retain molecules <500nt have been developed and are available commercially. At least one method has been used successfully to isolate total RNA containing miRNAs from blood, a key point since this is the most available tissue for human physiological studies. A variety of methods now have been adapted for use to profile the expression of miRNAs. These include Northern blots, oligonucleotide macroarrays, qPCR-based amplification, bead-based arrays, and spotted DNA microarrays (3). Commercial products which include specific probes based primarily on miRBase for characterized miRNAs as well as additional predicted small RNAs are now commercially available for all of these methods. Innovative approaches have been used to optimize array and qPCR techniques for miRNA. There are available several oligo-based microarrays opti-

See SCI-TECH WATCH, p. 551.

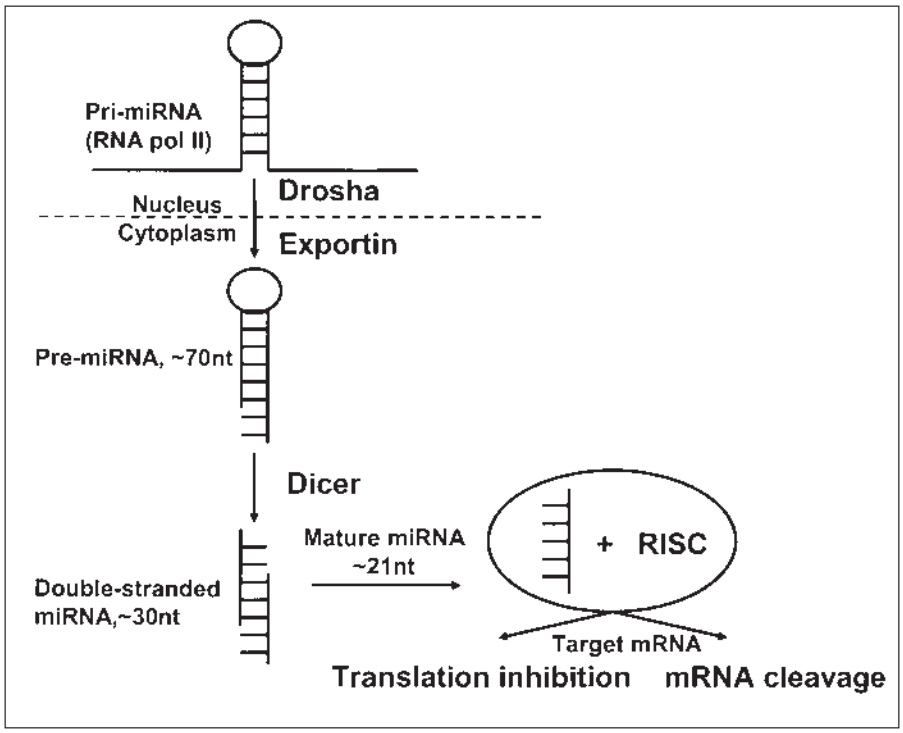

Fig. 1. Main features of miRNA biogenesis. RNA pol II transcripts containing miRNAs,primary (pri)-miRNAs are cleaved by the nuclear RNaseIII, Drosha, to release the stem loop pre-miRNA. Exportin moves the pre-miRNA to the cytoplasm. The cytoplasmic RNaseIII, Dicer, cleaves the loop leaving a dsRNA with 3 overhangs at each end. 5 terminus stability determines the active strand which separates and associates with the RNA-induced silencing complex (RISC) to form the active miRNA. The level of miRNA homology to the target mRNA determines the transcript fate. Adapted from Sontheimer and Carthew (7).

SCI-TECH WATCH, from p. 550.
mized for miRNA binding. Techniques used for the arrays include using primer extension methodology for increased specificity or primers containing oligos with optimized amounts of linked nucleic acids (LNAs) which increase the Tm and stability of hybridization products. Panels of LNA or standard primers are available for custom spotting, in commercial spotted arrays or coupled to fluorescently labeled beads. Optimized approaches to qPCR include polyadenylation to increase yield of reverse transcriptase (RT) products and stem-loop primers to optimize RT and specificity for mature miRNAs. Macroarrays based on successful qPCR technology are or will soon be available in a 96-well format. Most commercial applications access miRBase and use additional sequences generated by prediction algorithms. Complete mouse, rat, and human panels are available and often can be found in a combined prearrayed format as well as individually for qPCR application. A search of the web will show these and other technologies are accessible now and that new techniques are under development for application to research and potential diagnostics.

miRNA regulation of post-transcriptional gene expression promises to be as significant as the well-studied transcriptional regulatory pathways. Two factors make study of miRNA regulation on a relatively large scale possible now; the improvement of RNA isolation technology to allow unbiased isolation of total RNA including miRNA and the adaptation of the powerful microarray and qPCR technologies for use with miRNA. These techniques, along with the establishment of a well-regarded public database, have facilitated the rapid development of readily available, reliable commercial arrays and kits which are accessible and affordable. The over 1,000 miRNA publications that can be found in the PubMed database for 2007 suggest that this is an active area of research ready for application in human physiological studies.

REFERENCES

1. Bartel DP. MicroRNAs: genomics, biogenesis, mechanism, and function. Cell 2004; 116: 281-97.
2. Britten RJ, Davidson EH. Gene regulation for higher cells: a theory. Science 1969; 165:349-57.
3. Castoldi M, Schmidt S, Benes V, et al., A sensitive array for microRNA expression profiling (miChip) based on locked nucleic acids (LNA). RNA 2006; 12:913-20.
4. Fire A, Xu S, Montgomery MK, et al. Potent and specific genetic interference by double-stranded RNA in Caenorhabditis elegans. Nature 1998; 391:806-11.
5. Griffiths-Jones S, Grocock RJ, van Dongen S, et al. miRBase: microRNA sequences, targets and gene nomenclature. Nucleic Acids Res 2006; 34 (Database issue):D140-4.
6. Lee RD, Feinbaum RL, Ambros V. The C. elegans heterochronic gene lin-4 encodes small RNAs with antisense complementarity to lin-14. Cell 1993; 75:843-54.
7. Sontheimer EJ, Carthew RW. Silence from within: endogenous siRNAs and miRNAs. Cell 2005; 122:9-12.
8. Zamore PD, Haley B. Ribo-gnome: the big world of small RNAs. Science 2005; 309: 1519-24.

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The AsMA Science and Technology Committee provides the Watch as a forum to introduce and discuss a variety of topics involving all aspects of civil and military aerospace medicine. Please send your submissions and comments via email to: barry.shender@navy.mil. Watch columns are available at www.asma.org in the AsMA News link under Publications.

HISTORY REFERENCES, from p. 549.

REFERENCES

1. Borowsky MS, Wall R. Flight experience and Naval aircraft mishaps. Aviat Space Environ Med, 1983; 54(5):440-6.
2. Ireland RG. A new device for helicopter rescue of survivors afloat. J Aviat Med, 1958; 29(5):358-65.
3. Johnson L. Aviation for national defense. J Aviat Med, 1933; 4(2):62-7.

Meetings Calendar 2008

June 22-28, 2008; Angers, France. Annual Meeting of the American Society of Gravitational and Space Biology. Visit http://asgsb.org/index.php for more info.

August 4-7, 2008; 27th Annual Cryogenic Engineering Training; Boulder, CO. Sponsored by the University of Colorado's Center for Advanced Engineering and Technology Education. CEUs are available. For more information, visit www.cryoco.com or e-mail thomasmflynn@comcast.net.

August 22-24, 2008; Wairekei Hotel, Taupo, New Zealand. Annual Conference of the Aviation Medical Society-New Zealand. Held in combination with ANZSOM. For more information, visit amsanz.org.nz/conference/confindex.htm.

August 20-23, 2008; EASST/4S Conference, "Acting with Science, Technology and Medicine"; Rotterdam. For more information, please visit http://www.easst.net/node/1646.

October 27-29, 2008; SAFE Association 2008 Annual Symposium; Reno, NV. For more information, please phone 541-895-3012, e-mail safe@peak.org, or visit safeassociation.com or safeassociation.org.

SAFE Call for Papers Deadline June 27, 2008!

The SAFE Association 2008 Annual Symposium will be held October 27-29 at the Grand Sierra Resort, Reno, NV.

The SAFE Symposium is the premier international showcase for professionals, inventors, equipment, and systems shaping safety in aviation, space, land, and military disciplines.

Please consider submitting papers, panels, workshops, briefings, demonstrations, and forums. All abstracts must be submitted electronically in MS Word to the SAFE Office at *safe@peak.org*. Please contact SAFE for a complete Call for Papers form so that your entry is properly formatted and contains the necessary information: SAFE, PO Box 130, Creswell, OR 97426-0130; (541) 895-3012; www.safeassociation.com

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 May 1, 2008.

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/English/Scholarship.cfm

For further information, please contact:
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Attention Members!

Council Meetings are open to all members of the AsMA. Your input and attendance are always welcome. Our next meeting will be in Boston, MA, on Sunday, May 11, 2008, 9:00 a.m. at the Sheraton Hotel, in Back Bay D. .

The Annual Business Meeting will be held Tuesday, May 13, 2008, Commonwealth Room. Your attendance is vital! Your vote is important! (Note: You don't have to buy lunch to attend the meeting!)

AsMA Future Meetings

May 3-7, 2009
Westin Bonaventure Hotel
Los Angeles, CA

May 9-13, 2010
Sheraton Hotel
Phoenix, AZ

Space Medicine Association News

Send information for publication on this page to: **Mark Campbell, M.D.**
420 N. Collegiate Dr., #300
Paris, TX 75460
mcamp@1starnet.com

President's Message

I continue to believe that space exploration, space medicine and the Space Medicine Association are at an important crossroads. We have a glorious past which many of our members were heavily involved in. We also have a glorious future which includes the finishing of the Shuttle program, continued participation in the International Space Station, the Constellation program and return to the Moon (and eventually on to Mars), and commercial space flight development. Many of our members are closely involved with all of these projects. Our organization also needs to be oriented in both directions.

We are constantly improving upon our historical archives and have deposited these on the web site (http://www.asma.org/Organization/smb/smb.htm). Please consider contributing to the web site any archival information that you have. We are very open to suggestions on how to improve the web site and add to its content. Also consider depositing any electronic information that you have (photos, videos, documents, Powerpoint presentations) into the Space Medicine Bulletin Board on the web site as we have unlimited memory space. We continue to present the Hubertus Strughold Award annually to a member of the Space Medicine Association for past accomplishments in space medicine and for their contributions to the organization. We have recently established an endowment account, currently over $15,500.00, which will be used to fund a yearly scholarship (the Jeff Davis Scholarship) beginning in May 2009 and to increase the yearly Jeff Myers Young Investigators Award to $500.00. We are very appreciative to the corporate and individual donors who have made this possible (Wyle Labs, Kelsey Seybold Diagnostic Clinic, Comprehensive Health Services, Jeff Davis, Jeff Myers, and Phil Scarpa). Please consider a donation to this endowment fund as it greatly encourages our younger future members.

We are expanding our number of student members (we now have ten) and would like to acknowledge our new life time members: Paul Antony, Genie Bopp, Mark Campbell, Jim Collier, Jeff Davis, John Darwood, Joe Dervay, Michael McGuire, Sangkun Park, Edward Powers, Sean Roden, Farhad Sahiar, Kazuhito Shimada, Jan Stepanek, Shepard Stone, and Sam Strauss.

We have produced two very important position papers which have been approved and passed by the AsMA Council this year. These can be accessed on the web site and will be published soon in the journal. The Long Duration Spaceflight paper is oriented towards the AsMA membership to increase their awareness of this rapidly developing project which is being followed with great interest. Another paper concerning the critical need to restore funding for Life Science Research on the International Space Station (Aviat. Space Environ. Med. 2008; 79:440-1) is directed towards the general public and Congressional funding.

We have also reintroduced the Space Medicine Association Reports on the back pages of the journal to highlight the multiple areas of space medicine in which our members are involved. In the near future, we will be supporting a supplement to the journal concentrating on space medicine research (acceleration studies, hypobaric studies) performed over the years at Brooks AFB.

We are very excited about the upcoming annual meeting in Boston in May. We plan on having a very exciting speaker at the Space Medicine Association luncheon on Thursday May 15, where we will also present the Hubertus Strughold Award, the Jeff Myers Young Investigators Award, and a President's Lifetime Achievement Award. We are sponsoring (organized from conception) five panels and endorsing (recommending to our members) seven panels at this meeting.

Panels sponsored (initialized and organized by the Space Medicine Association Executive Committee):

Decision Support in Space Medicine and Health Care
ISS Research Results
Lunar Surface Operational Challenges
Lunar Surface EVA – Suit Confirmation Testing in the 1g Environment
History of Space Medicine – Formative Years at NASA

The Space Medicine Association Executive Committee is also endorsing (recommending that our membership would have an interest in attending) the following panels:

Keeping the Focus on Humans in Space
ESA Medical Operations
Sensorimotor Risks of Lunar Exploration Missions
Commercial Space Flight
Research in Space Medicine Hardware
Medical Challenges Related to the Space Flight Environment
Research in Analogue and Simulated Space Flight Environments
Posters – Space Pharmacology and Research Issues

We believe that the quality of the abstracts that we reviewed at the Program Committee meeting in November was exceptional and that this will prove to be a very exciting meeting! We hope to see you in Boston!

Mark R. Campbell, M.D.
President, Space Medicine Association

Aerospace Nursing Society News

Send information for publication on this page to: **Cathy DiBiase**
Mail code: BIO-1
Kennedy Space Center, FL 32899
email: Catherine.P.Dibiase@nasa.gov

Greetings to you all! In the hope of your reception of this message before the AsMA Annual Scientific meeting, I would like to highlight some information pertaining to it.

Wonderful scientific sessions have been planned by Dr. Susan Northrup and her committee. The sessions are a place where we can experience learning about new research and ideas from our colleagues in flight medicine, human factors, physiology, and space medicine.

Besides learning, the social aspects are important as well. You never know if someone you meet, from another specialty, may be a future employer or collaborator on a forthcoming project. At the Nursing section events you will have an opportunity to meet new nurses in the field and catch up with nurses who are already members. I would like to invite all nurses and allied health professionals who are members of AsMA and not the ANS to consider joining us at our reception Monday night, and luncheon/business meeting on Wednesday afternoon. I would hope that once you meet us, you will see that we are a good group and we would love to have you participate in our organization. Our dues are a lowly ten dollars, so please consider joining.

For those of us already members I would like to see you also at the meetings and events. If you have not already done so, please send in your dues. You will be seeing information on ballots and the like in preparation for the meeting. If any of you are interested in serving as an officer or to some capacity in the organization, please let us know. Event planning is in full swing and everything is coming together. We have procured our luncheon speaker and menus will highlight local cuisine.

Now I would like to switch tracks. This will be my last message, as this will appear in the May blue journal issue. At the Annual Scientific meeting, in May, I will be handing over the reigns to Kim Barber. I wish Kim the best. This position was more than I expected but I know she will do a great job representing our organization. It is hard to believe my time as President is almost up. I think all of us who serve in office hope to do great things but our private lives and work tend to get in the way and demands of this position sometimes exceed our vision. I have done my best to represent our organization's

See AEROSPACE NURSING, p. 553.

News from the International Association of Military Flight Surgeon Pilots

As Dave Brown (a founder and past president of IAMFSP) so elegantly said, "The IAMFSP is made up of a diverse group aviators with wide ranging skills and interests. In past gatherings I have found comfort in meeting my own kind; while the details of the battles are different, we all have had to work hard to continue as aviator-physicians. I return home challenged by the stories I hear and the descriptions of ideas, projects and achievements." Dave went on to say if IAMFSP only does two things well then the organization will continue to be a success. The two things are firstly and most importantly getting together as an organization to share stories/fellowship and secondly to provide quality panel presentations for others to learn from our experiences. By Dave's standards, I feel that we are well on our way to have an exceptional year. The 2007 AsMA Scientific program was by every measure exceptional and the panels were very well attended. Great job by Dwight Holland and Dave Agerton as co-chairs, as well as all the presenters! In the spirit of keeping a good thing going, IAMFSP is preparing two panels for the Boston scientific program coordinated again by Dwight Holland and Dave Agerton!

Topics include (Tuesday 13MAY2008, Constitution A room 1200-1800):

a. Aeromedical and Human-systems integration concerns (Dr Holland and Dr Agerton).

b. Experiences of an Aero medical Dual Designator in Combat (Dr Oeltmann).

c. Aviation Mishap Reduction at Naval Strike and Air Warfare Center / TOPGUN (Dr Belland).

d. Versatility in the Air: RAF Aviation Medicine Flight (Dr Hughes).

e. Advancements in NVG and HMD systems: Aero medical Concerns (Dr Antonio).

d. The Aero medical Challenges of Euro fighter Typhoon (Dr Gradwell).

f. Injury and Fatality Patterns in Navy Rotary Wing Mishaps (Dr Kent).

g. USAF HSI requirements generation-scientific involvement (Dr Mapes).

Pete Mapes (IAMFSP past president) is AsMA Panels chair this year and continues to be very active at all levels of AsMA and IAMFSP. Pete is doing an outstanding job for IAMFSP and AsMA! Thanks to Dwight Holland, IAMFSP is co-sponsoring two additional panels in Boston including Aerospace Physiology and Human Factors Associations.

Additionally, IAMFSP is embarking on a fund raising effort with a goal of $10,000 by 2010 and $100,000 dollars by 2020. Our IRS designation as a non-profit organization has made it significantly easier for donations to IAMFSP to support these two important areas:

a. The yearly educational membership meeting held in conjunction with the Aerospace Medical Association.

b. Creating a scholarship fund for medical students to attend Aerospace Medical conferences/meetings thus developing future aerospace medical leaders.

So if anyone wishes to chip in for the campaign goal, please contact Woody Simmons (IAMFSP Treasurer) for donations:

Mike Simmons IAMFSP Treasurer
906 Water Fowl Dr.
Yorktown, VA 23692-3178

IAMFSP Officers:

President	Kris Belland
Vice President/ President Elect	Ed Park
Treasurer	Mike Simmons
Webmaster	Ed Park
Secretary	Rod Borgie
Membership	Rod Borgie
Historian	Dwight Holland
Newsletter Editor	Darian Rice

Our Vice President/President Elect is CDR Ed Parks a Naval Aviator and Neurology resident at National Naval Medical Center (otherwise known as Bethesda). Ed is working membership, VP responsibilities as well as pulling triple duty as the association's web-master and doing a great job by the way! In Boston, we will be looking for individuals to run for Treasurer, Secretary, Newsletter Editor, and Membership chairs; if you are interested, please let us know. IAMFSP is scheduled to have its reception and business meeting Wednesday, MAY 14 at 1730 in the Back Bay A room. All are invited to join and attend our meeting! Looking forward to Boston, should be an excellent event!

Kris M. Belland
2007-09 President IAMFSP

Aerospace Physiology Social

The Aerospace Physiology Society annual social will again be held during the AsMA event in Boston. Please join us at the Irish Pub, Lir, about two blocks from the Sheraton Hotel, Wednesday evening, 14 May, starting at 1800. What better atmosphere to rekindle friendships and swap tales of blarney related to our business in aviation physiology and human factors? Cost for the evening will include traditional pub buffet while tickets for your favorite beverages will be sold on site. Check with the AsPS table during AsMA for tickets and directions.

Also, please mark your programs for the AsPS Luncheon that same day (14 May) where the program will include a keynote speaker to discuss contemporary issues in Aerospace Physiology, awards presentations, and a short business meeting to pass the gavel to our new Society President.

AEROSPACE NURSING, from p. 552.

interest at Council and have tried to keep you all informed. Looking back I feel I could have done better and if I have let any of you down in anyway I ask your forgiveness.

There are many people that have been helpful to me throughout this year that I would like to thank and recognize. My officers, especially Nora Taylor for all her correspondence, Charles Tupper for the obtainment of an award sponsor, to Eileen Habdavny for her devoted support at the meetings and to the arrangements. To the corporate office staff especially Pam Day for her enormous patience and guidance which I could not have done without. I would also like to thank my manager, Art Arnold who has been supportive in many ways; my coworkers Ken Cohen and Lou Moreno for editing my messages and being substantiative.

I bid you all farewell; at least from these messages but not from the organization. I hope to remain involved and contribute well into the future. Best of luck to the new officers!

Cathy DiBiase
President, ANS

Dont' forget to join us for our annual social! Monday, May 12, 6:30 p.m at the Sheraton Hotel, Commonwealth Room.

The Civil Aviation Medicine Association cordially Invites you to the 5th Annual CAMA Sunday May 11, 2008, 8:00 a.m. - Noon, Commonwealth Room, in the Sheraton-Boston

Hot Topics in Aviation Medicine:

1. SSRI use in pilots
A. Canada-- Dr Marvin Lange
B. Australia --Dr Ian Hosegood
C. USA --Speaker TBA

2. EEG as part of the screening exam for pilots- Medical evidence
A. JAA Speaker TBA-- "Why EEGS were used and abandoned in the JAA"
B. FAA perspective --Dr Jonathan Clark

3. Commercial Space Travel --Dr Antunano

4. Periodicity proposed changes/Expanded authorization for AME's
A. FAA -- Dr. Warren Silberman
B. JAA --Speaker to be announced
C. New Zealand-- Dr. Dougal Watson

5. Evidence Based Medicine-- Dr. Dougal Watson

Send information for publication on this page to:
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Some Final Words from Your President

by Susanna Bellenkes, President 2007-08

Yodluihi, my dear Wing sisters!

This year has flown by like a mighty wind. Now, as my Presidency quickly draws to a close, please permit me a few moments to reflect a bit upon what has transpired during this quite remarkable time.

I cannot possibly express to you just how honored I was during our meeting last May in New Orleans, to have been the recipient of the WING gavel of authority. Whilst very moved by your faith and trust in me, I was at the same time struck by the awesome and, frankly, rather daunting tasks facing me ahead, that of filling the shoes of those whom I have so long admired and who laid the highly professional foundation upon which I was now to trod.

The successes of the Wing program are and have always been the result of much hard work by a zealous and dedicated team of friends and colleagues. For example, everybody on the Board has worked very hard on preparations for our upcoming meeting in Boston. Many of you have been involved in arrangements for our venues, meals and social events. The fruits of these labors have become more apparent each day as we begin to realize just how very exciting holding a meeting in the cradle of America's history will be. In this regard, I wish herein to especially thank Susan Bassick and Paula Landry who so graciously represented the WING during the on-sight visit to Boston this past July. It is through their many efforts that the WING will be celebrating this year's festivities in some of the most splendid of Boston's venues.

As with our parent organization, the Aerospace Medical Association, the WING has likewise effectively combined the best of cherished traditions with the excitement of change...and indeed, throughout the years that I have been involved with the Wing I have been witness to much change. For instance, where in the past, we were limited by the unavoidable gaps in communication associated with employing the normal postal services, we now are afforded almost instantaneous communications via e-mail, teleconferences, and the internet. These marvelous technologies have certainly quickened the pace of our world, making many of us feel that the use of normal mails and even phone calls may be counter-productive. I do not regret these changes, as they are making life and business much easier. However, we must never forget that the comraderie that so characterizes our WING cannot be fostered and maintained only by these technologies, but more importantly, by our working together directly at our meetings and other events. ...and that leads me to yet another example of change.

Some of our members may remember WING events many years ago where the ladies would meet in elegant apparal, replete with gloves and hats! Then, at one meeting, we requested that non-U.S. members attend an event wearing original costumes characteristic of their homelands. Some of our members did this, and I remember being very taken by the beautiful Korean silk dresses, Indian saris, African dresses, and a leather trapper jacket with hat from Canada. Seeing this inspired me to proudly wear my Tyrolean Dirndl to our subsequent meetings. What a wealth of different cultures we have in this group! It was truly a splendid recognition of the international constituency of AsMA and its WING.

I earlier mentioned that we not only change with the times but also retain our beloved traditions; one of these being that as family, we foster and show great care and friendship for one another. Many AsMA members attending the annual meetings comment on this core value of our WING, and are especially impressed by the notion that for us, the pride we have in our WING family does not stop with the closing sessions of the meeting but they continue throughout the entire year. This manifests itself mostly in how we continue to communicate with one another. You should see my e-mail account; there is always someone from the Wing saying hello, asking a question, sharing good or sad news from their families.

No better example during this past year of this can be made other than how all of the WING came together in grief over the terrible loss of our dear friend, Ludy Rayman. We knew that she had been ill for some time, but no one realized just how grave her condition was. When the news of her passing came in February, we were all very very shaken. Yet, amidst our great loss, the WING family came together to support Ludy's beloved husband, Russ, and their own family. Phone calls and letters of condolence from around the world poured in for many days. I must tell you that amidst the sadness of this loss, I felt such comfort for Ludy's family in the strong response by all of you to her passing. I am unable to imagine a meeting without her at this moment. She was my mentor and had "put me to work" for the Wing right after meeting her. Now, she is gone, as are so many of our dear WING friends who have passed away in the years before. Let us never forget the contributions they have made, the mentoring they provided, the friendships and love they gave to us. I ask you to take a moment...to think of Ludy...to think of all these friends... and thank them for the gifts they have given to us all. Remember.

I am passing the gavel now to my dear friend, Peggy Trumbo. Her meeting in Los Angeles will be wonderful. I have already overheard whispers about the tours they are planning, and I can tell you that I wouldn't miss that meeting for anything!

Appreciation is the word I want to put at the end of this article. I wish to thank my Board from the bottom of my heart for all their time and very hard work. It's amazing what a group of dedicated women can "whip up" in just a few months! I also want so much to thank all of you loyal WING members who have kept (and keep) coming to these meetings over the years. Many of you take time off from work, household, or other critical duties to share your wealth of experience and talents during this one all-too-short and admittedly hectic week.

For me, being with you has been a wonderful way to see so many places on this beautiful continent. I walked on an Alaskan glacier, sailed soggily under the Niagara Falls, saw fearsome (hungry!) alligators, majestic grizzly bears, a grotto filled with bats and a volière overflowing with magnificent butterflies. I had lunches in high rise buildings, elegant clubs, and at a stately old plantation. I experienced wonder in our exploration of a sunken ship with all it's treasures. Most importantly, though, as a member of the WING, I have been blessed with the privilege of meeting and getting to know the finest goup of hard-working, hard-playing, and most gracious friends that one could ever imagine.

I plan to keep attending the AsMA meetings as long as possible, and when my hearing gets bad and I walk with a stick, you young girls just be sure to please help me into the tour bus...OK? In German, we do not say goodbyes; rather, we prefer to let you know that we will see you again. So, dear WING, I shout out my final ‚Yodluihi!' and bid you all Aufwiedersehen!

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 $20 per year. For further information, contact:

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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

Col. A. Felix Meyer, MHA, has been appointed Director of Wilson County Health Department in Wilson, NC. He is a Fellow and Life Member of AsMA, and these were a factor in his selection for the position.

John V. Barson, D.O., Peachtree City, GA, has been selected as the new Flight Surgeon in the Atlanta Regional Office of the FAA. He retired from the U.S. Army and was most recently a medical officer in the Division of Bioterrorism Preparedness and Response at the Centers for Disease Control and Prevention.

In Memoriam

William H. King

William H. King, M.D., died in February following an accident at home. He was 73 years old. A native of Irving, TX, he received his B.A. degree from the University of North Texas with honors in 1955. He earned his M.D. degree from the University of Texas Southwestern Medical School in 1959, and went on to earn his M.P.H. from Harvard University in 1964. Col. King served 20 years in the U.S. Air Force as a USAF Flight Surgeon including an internship in Hawaii and tours as Medical Advisor to the Vietnamese Air Force and as Hospital Commander at Dover AFB, DE. He also served as Chief, Flight Medicine Branch, Clinical Sciences Division, USAFSAM, Brooks AFB, TX from 1970-73 and as Deputy Chief, Clincial Sciences Division there from 1973-74. He retired from active duty in 1979 as a colonel. His military decorations included Meritorious Service Medal, Bronze Star, Air Medal and VNAF Honor Service Medal. Dr. King was board certified in aerospace medicine. He was a Fellow of the American College of Physicians, ACPM, and AsMA. A member of the International Academy of Aviation and Space Medicine, he attended many international meetings. In his civilian career, he was associated with medical departments of American Airlines, Exxon/Mobil, Cooper Clinic, and Concentra Health Services.

New Members

Baca, William F., LTJG, MSC, USN, Orange Park, FL
Davis, James W., Capt., USAF, APO, AE
Drudi, Laura M., D.E.C., Montreal, Quebec, Canada
Fiedler, Joyce P., Lt.Col., USAF, MC, Fayetteville, NC
Fiedler, William, Maj., USAF, Fayetteville, NC
Hannigan, Frank P., B.S., Port Orange, FL
Harmon, Glenn, Lt.Col., USAF, Daytona Beach, FL
Herve, Miguel A., Capt., CAF, MC, Santiago, Chile
Higgins, Robert P., LCDR, MSC, USN, Gulf Breeze, FL
Hurley, Peter R., Wg. Cdr., RNZAF, Palmerston North, New Zealand
Kelly, Timothy L., Maj., USAF, MC, Damascus, OR
Ledbetter, Bily R., LCDR, MC, USN, Oak Harbor, WA
Lim, Wei Ming Wilfred, M.B., B.S., Bahru City, Singapore
Moomaw, Ronald C., D.O., Powell, OH
Nowicki, T. Scott, B.S., Valhalla, NY
Pantalone, Desire, M.D., Sesto Fiorentino, Italy
Porter, Frank, M.D., M.P.H., Abu Dhabi, United Arab Emirates
Spurling, Kristofer J., B.Sc., Brentwood, United Kingdom
Stone, Jacqueline C., M.B.Ch.B., MRCP, Dubau, United Arab Emirates
Strangman, Gary E., Ph.D., Charlestown, MA
VonThesling, Genevieve H., Capt., USAF, MC, Sacramento, CA
Warren, Christopher G., M.A., Louisville, KY

AEROSPACE MEDICAL ASSOCIATION SEEKS EXECUTIVE DIRECTOR

The Aerospace Medical Association (AsMA) is seeking applicants for the position of Executive Director. The Executive Director serves as the chief operating officer responsible for all management, administration and professional activities of the Association. Applicants should possess a doctoral degree and be familiar with the AsMA. Major responsibilities include membership services, planning and conducting an annual scientific meeting, publishing a scientific journal, and conducting liaison with related national and international organizations. Salary will be commensurate with these responsibilities and the experience of the applicant. Applications should include a 1- to 2-page narrative describing interest, professional qualifications, and vision for the Association. Also include a professional resume, salary history, and salary requirements. A position description may be obtained by calling (301) 469-5461. Mail applications to: Robert R. McMeekin, M.D, Chair, Search Committee, 7435 Arrowood Road, Bethesda, MD 20817-2822.

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CLASSIFIED ADS

POSTDOCTORAL FELLOWSHIP

The Center for Research and Education in Special Environments in the School of Medicine and Biomedical Sciences at the University at Buffalo is recruiting for a Postdoctoral Fellow with interest in one or more of the following fields: undersea and hyperbaric medicine, environmental physiology, gravity or exercise physiology. This is a three year Office of Naval Research funded fellowship. The successful candidate must have a Medical Degree or Ph.D. or equivalent. The position will be available in the fall of 2008 and the salary is dependent upon qualifications. Applications will be considered until the position is filled.

Interested candidates can get further information or send a letter of application and curriculum vitae to:

Dr. David R. Pendergast
Professor of Physiology and Biophysics and Adjunct Professor of Mechanical and Aerospace Engineering
Director, CRESE
124 Sherman Hall
University at Buffalo
3435 Main Street
Buffalo, NY 14214
716-829-3830
dpenderg@buffalo.edu

CRESE FACULTY POSITION

The School of Medicine and Biomedical Sciences at the University at Buffalo is recruiting for a Professor or an Associate Professor and Director or an Associate Director of the Center for Research and Education in Special Environments (CRESE). The successful candidate must have a M.D., qualify for licensure in NY, have a demonstrated successfully extramurally funded research program in Undersea and/or Hyperbaric Medicine and provide leadership in the development of a HBO treatment program. The position will be available in the fall of 2008 and the salary is dependent upon qualifications. Applications will be considered until the position is filled.

Interested candidates can get further information or send a letter of application and curriculum vitae to:

Dr. David R. Pendergast
Professor of Physiology and Biophysics and Adjunct Professor of Mechanical and Aerospace Engineering
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