## Space Medicine Association News

## The Jeff Myers Young Investigators Award

## K. Jeffrey Myers, M.D.

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

The potential applicability of the findings to Space Medicine and the degree of involvement of the student in the project are major considerations. The finalists in this years' competition, selected from 177 contestants, were richly talented and diversified (listed later in this article).

The winner of the 2007 SMA JM YIA is Hirofumi Aoki, Ph.D. His paper is entitled "Virtual Reality Based 3D Navigation Training for Emergency Egress of Spacecraft." Hiro's interest in aerospace dates back to his kindergarten year when he expressed a desire to become a pilot. Several years later he became a glider pilot and soon had achieved his instructor rating, as well. He earned his undergraduate degree in mechanical engineering from Waseda University and a Ph.D. in Human Factors Engineering from the Tokyo Institute of Technology in Japan. Hiro sought to apply these talents to his early dream of contributing to space exploration. He became aware of a potential problem of astronauts having difficulty at times choosing the correct path through nodes of space stations when moving about. What might seem simply an amusing nuisance could be quite serious during an emergency egress! Hiro wanted to help. He applied for and received grants

from the Japan Aerospace Exploration Agency (JAXA) and from the National Space Biomedical Research Institute (NSBRI). He undertook this project at the Man-Vehicle Laboratory of the Massachusetts Institute of Technology. It was a lot of work. Hiro even had to write all of the software programs himself, but he has a working system which he plans to test with the help of JSC on a future flight. Someday the life he could save might be your own! These kinds of efforts have come to characterize the Young Investigator Award.

The first runner up is Major James "Russ" Strader, from USAF School of Aerospace Medicine at Brooks City-Base, TX. His paper is entitled : "Efficacy of United States Air Force Pilot Applicant Screening Echocardiography." The other finalists include: Eckard Glaser from Germany; Major **Robert Kent from the Uniformed Services** University of Health Sciences; Thomas Barth from Phoenix, AZ; Zuo-Ming Zhang, Ph.D., from China; and John Langell, M.D., Ph.D., with a collaborative project from the University of Utah and the University of Texas Medical Branch at Galveston, TX.

I would like to thank the members of the YIA committee (without whom this competition would not be possible!): Drs. John Darwood, Lloyd Tripp, Smith Johnston, Phil Scarpa, Art Arnold, Lu Moreno, and Vernon McDonald.

It is certainly my good fortune to serve in this capacity. This competition is a window to the good future of our field. These Young Investigators demonstrate not only the lessons of science, but of life, as they overcome its struggles to pursue their dreams. It is with special pride that I noticed one of our former Young Investigators, Dr. Jayashri Sharma, came all the way from India to help us with the Habitat for Humanity project at this meeting! This work has always been richly rewarding and an honor for me to be associated with. I am overwhelmed beyond imagination to have this award named for me! I thank you for recognizing me in this wonderful way.

## **Hubertus Strughold Award Clarence Jernigan**

The Hubertus Strughold Award is presented each year to a member of the Space Medicine Association for dedication and outstanding contributions in advancing the frontiers of space medicine, for sustained contributions to the Space Medicine Association, and who best exemplifies the ideals of Dr. Hubertus Strughold, the "Father of Space Medicine." The recipient of the award is chosen by the Awards Committee which is made up of the members of the Executive Committee and former recipients of the Strughold award. The 2007 recipient is Dr. Clarence Jernigan.

Clarence Jernigan was born in San

Antonio, TX, in 1934 and received his B.A. in Biology in 1956 from Oklahoma Baptist University and his M.D. from the Baylor University College of Medicine in 1960. In 1966 he obtained a M.P.H. from the Harvard School of Public Health. After a rotating internship at Wilford Hall in San Antonio in 1961, he completed residencies in Family Practice and Aerospace Medicine. He is board certified in Aerospace Medicine and Family Practice and is a Fellow of the American Academy of Family Practice. He became an Air Force flight surgeon after graduating from the Aerospace Medicine Primary course at Brooks AFB in 1961. He was a Flight Medical Officer with the Strategic Air Command and then Director of Aerospace Medicine at Altus AFB, OK (1961-1963). Dr. Jernigan joined NASA in 1964 and was a Remote Site Medical Flight Controller for Gemini 3, 4 and 5. He was the Crew Flight Surgeon for Apollo 7, 8, 12, and 15, and was also the Deputy Crew Surgeon and the Recovery Area Quarantine Manager (onboard the USS Hornet) for Apollo 11. The evaluation of the physiological capability of nitrogen/oxygen mixtures on the launch pad after the Apollo 1 fire was one of his notable accomplishments. He was the Chief, Flight Medicine Branch at NASA JSC from 1968-1972 and received a NASA Commendation for "Outstanding Contribution to the Apollo Program" in 1971. Oklahoma Baptist University awarded him the Profile in Excellence Award in 1982. Dr. Jernigan pioneered the implementation of the Electronic Medical Record at The University of Texas Medical Branch (UTMB) in Galveston, TX. He currently is a Professor in the Departments of Preventive Medicine and Community Health and Family Medicine at UTMB.

It gives us great pleasure to award the Space Medicine Association's Highest Honor to Dr. Clarence Jernigan.

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STRUGHOLD AWARD -- Jeff Davis presents the award to Clarence Jernigan.





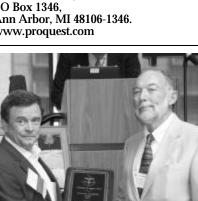
YIA Award--Jeff Myers presents the 2007

for emergency egress of space stations.

Young Investigators Award to Hirofumi Aoki,

Ph.D., for his paper on virtual reality training





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