

Space Medicine Association

2011 Executive Committee Ballot

Candidates

President Elect (1 vote):

1. Kaz Shimada
2. Vernon McDonald

Treasurer (1 vote):

1. Serena Aunon
2. Shannan Moynihan
3. Yael Barr

Members at Large (2 votes):

1. Michelle Christgen
2. Steve Vanderark
3. Tara Castleberry
4. Frederick Bonato
5. Azhar Rafiq

Please see the short biographies on the next pages

To cast your vote, please reply to this email or send an email to:

sma-2011@space-medicine.net

with the names of your selected candidates.

President Elect Position

Kazuhito Shimada, M.D., Ph.D.

Dr. Shimada is currently the chief of medical operations at Japanese space agency (JAXA). He has supported Japanese spaceflight crewmembers for STS-72, 87, 95, 92, 114, 123, 124, 119, 127, 131, and for ISS-19/20/21 and 22/23(21S). He supervised hypobaric and hyperbaric chamber operations, as well as weightlessness simulation diving at Tsukuba Space Center. He served as Japanese and FAA AME, and is a vice president of FAI Medicophysiological Commission. He logged 700 hours on gliders and airplanes as a private pilot.

- 2010 Chief, JAXA Medical Operations
- 2008 AsMA Fellow
- 1997 ABPM board certification in Aerospace Medicine
- 1996 State of Ohio physician license
- 1993-1996 RAM at Wright State Univ.; 1995 MSci. in Aerospace Medicine
- 1993-present Flight Surgeon, JAXA (ex. NASDA, Japanese space agency)
- 1983-1992 Otolaryngology residence at Univ. of Tsukuba and Saku Central Hospital, then ENT practice at Ibaraki Kenritsu Chuo Hospital
- 1987 Ph.D.; Univ. of Tsukuba (auditory evoked response)
- 1983 M.D.; Univ. of Tsukuba, Japan

President Elect Position

Dr. Vernon McDonald

Dr. Vernon McDonald is currently Vice President of the Federal R&D Division with Wyle's Integrated Science and Engineering Group based in Houston, TX. This Division includes research and development contracts supporting the USAF, the US Navy, NASA and the FAA.

Dr. McDonald's tenure with Wyle over the last 18 years has included participation in the NASA Extended Duration Orbiter program; serving as co-investigator on four joint U.S./Russian investigations that have flown on the Space Shuttle and Mir; developing and deploying clinical systems for the International Space Station (ISS); developing and implementing policies and procedures for the health certification, training and care of ISS crew members in cooperation with Partner Agencies; managing Wyle's full suite of services for NASA's Space Medicine program; developing and executing a strategic plan for entry into the commercial human spaceflight sector; and most recently leading Wyle's business development efforts in the federal research and development sector.

As VP for Federal R&D, Dr. McDonald has responsibility for profit and loss of the Division, and is charged with implementing a program of growth and diversification of Wyle's business base in Federal science and technology markets. Most recently these efforts have included pursuit of opportunities at several NASA centers, the National Science Foundation, Department of Health and Human Services, the US Army, Air Force and Navy.

Dr. McDonald received his Ph.D from the University of Illinois in 1992 and an MBA from the University of Texas' McCombs School of Business in 2009. He is an adjunct faculty member at the Baylor College of Medicine and at the University of Houston, Wyle's representative to both the National Space Biomedical Research Institute's Industry Board, and the Commercial Spaceflight Federation, and a member of the UIUC Department of Kinesiology Alumni Board. He is an AsMA Associate Fellow and has held positions of Treasure/Secretary and Member at Large for the Space Medicine Association.

Treasurer Position

SERENA M. AUÑÓN (M.D.)

PERSONAL DATA: Born on April 9, 1976 in Indianapolis, Indiana. Considers Fort Collins, Colorado, to be her home town. Recreational interests include basketball, softball, martial arts, cricket, hiking, and jet-skiing.

EDUCATION: Graduated from Poudre High School, Fort Collins, CO, 1993. Received a bachelor of science degree in electrical engineering from The George Washington University, Washington, D.C. in 1997; a doctorate of medicine degree from The University of Texas - Health Science Center at Houston in 2001. Completed a three year residency in Internal Medicine at The University of Texas Medical Branch (UTMB) in Galveston, TX, 2004 and then completed an additional year as Chief Resident in the Internal Medicine Department, 2005. She also completed a residency in Aerospace Medicine residency at UTMB as well as a Master of Public Health degree in 2007. Board certified in Internal and Aerospace Medicine.

ORGANIZATIONS: American College of Physicians; American College of Preventive Medicine; Alpha Omega Alpha Medical Honor Society; Aerospace Medical Association; Tau Beta Pi - The National Engineering Honor Society

SPECIAL HONORS: USAF Flight Surgeons Julian Ward Award (2009); Outstanding UTMB Resident Award (2007); William K. Douglas Award (2006); Alpha Omega Alpha Honor Society (2005); Thomas N. and Gleaves James Award for Excellent Performance by a Third Year Resident in Internal Medicine (2004).

EXPERIENCE: Dr. Auñón came to NASA-JSC in August, 2006 employed as a flight surgeon under the UTMB/Wyle Bioastronautics contract. She spent over 9 months in Russia supporting medical operations for ISS crewmembers in Star City including water survival training in the Ukraine. She served as the deputy crew surgeon for STS-127. She also held the role of deputy lead for Orion - Medical Operations.

NASA EXPERIENCE: Dr. Auñón was selected in July 2009 as one of 14 members of the 20th NASA astronaut class. She is currently in Astronaut Candidate Training that includes scientific and technical briefings, intensive instruction in International Space Station systems, Extravehicular Activity (EVA), robotics, physiological training, T-38 flight training, and water and wilderness survival training.

Treasurer Position

Shannan Moynihan, MD, MPH

Dr. Shannan Moynihan is a NASA Flight Surgeon at the Johnson Space Center. She has dual BS degrees from the Massachusetts Institute of Technology in Aerospace Engineering and Biology. She received her MD from New York University, and she is dual board certified in Aerospace Medicine and Emergency Medicine. While finishing her residency in Aerospace Medicine at UTMB, she was hired on as a contract flight surgeon supporting USOS astronaut training in Star City. She spent five years in this role, supporting training in Russia and at JSC. During this time, she was assigned as the Deputy Crew Surgeon for Expedition 16. Other responsibilities have included crew medical training, support of operations in Houston's ISS Mission Control, and medical support of hazardous training operations. Dr. Moynihan was brought over to NASA in 2008 and recently completed her first mission as Lead Surgeon for Expedition 25.

She has served as a Member At Large for the Space Medicine Branch for the last two years.

Treasurer Position

Yael R. Barr, M.D., M.P.H.

A graduate of the United World College of the American West, Dr. Barr received her Doctorate of Medicine in 1995 from the Sackler School of Medicine at the Tel-Aviv University in Israel. Following a 4-year service as a physician in the Israeli Army, she completed an Anatomic Pathology residency at the Sourasky Tel-Aviv Medical Center. Dr. Barr joined the Israel Aerospace Medicine Institute in 2002 and was a co-investigator on an Israeli life sciences experiment which flew on STS-107 in 2003. In 2003 she also completed the International Space University's summer course in Strasbourg, France.

In 2005 Dr. Barr started a 4-year combined residency in Internal Medicine and Aerospace Medicine at The University of Texas Medical Branch (UTMB) in Galveston, Texas. She graduated from the residency in 2009, receiving a Masters of Public Health from UTMB in 2008. She is board certified by the American Board of Internal Medicine and by the American Board of Preventive Medicine in Aerospace Medicine. During her residency training she supported research activities at the Johnson Space Center, served as the deputy-deputy-crew-surgeon for STS-127, and supported space flight participant Richard Garriott's medical evaluations in Moscow and Star City through Space Adventures.

Dr. Barr was hired to support NASA in June of 2009, working as a research clinician with the Space Medicine Advanced Projects section of the Bioastronautics Contract. She supports the Exploration Medical Capabilities element of NASA's Human Research Program, and has worked on diverse projects ranging from medical requirements for exploration missions, the Integrated Medical Model, the NASA papilledema and atrial arrhythmia summits, and the Constellation program. She also supported other projects including human system risk analysis and the Visual Impairment/Intracranial Hypertension team.

Dr. Barr has been the recipient of numerous awards and scholarships, most notable being the 2009 Society of NASA Flight Surgeons Recognition Award, the 2008 William K. Douglas Scholarship, the 2007 Airbus North America Leadership Grant, the 2004 International Academy of Aviation and Space Medicine (IAASM) Scholarship Grant, and the 2003 Ilan Ramon Memorial Scholarship.

A member of AsMA since 2003, Dr. Barr is also a member of the Space Medicine Association and the Society of NASA Flight Surgeons. She has been a member of AsMA's resolution committee since 2006, and an AsMA Associate Fellow since 2008.

Member at Large Position

Michelle Christgen

Professional Background: Michelle Christgen is the Space Medicine Group Manager for Wyle Integrated Science and Engineering. An alumnus of Vanderbilt University, Michelle holds her Bachelor of Science in Molecular Biology. She began her career as a researcher at University of Virginia and M.D. Anderson Cancer Center focusing on developing treatments for anaplastic thyroid carcinoma.

Hired by Wyle in 1999, Michelle has held positions of increasing levels of responsibility, starting as a flight controller focusing on medical operations for both the space shuttle and International Space Station programs. From there she moved into overseeing Space Medicine training operations where she helped design and identify innovative training techniques for astronauts and ground crew. Michelle utilized her expertise in human spaceflight operations to concentrate on the emerging commercial human spaceflight market. During that time, she co-chaired the Commercial Space Transportation Advisory Council (COMSTAC) Reusable Launch Vehicle (RLV) working group Task Force on Training. As a part of this task force, Michelle helped author the Commercial Human Space Operations Training Standards.

Experience:

Dec 2009 -- Present Wyle Houston, TX

Space Medicine Group Manager, Responsible for an annual budget of \$32M, Oversee 200 employees, Direct customer interface for NASA Space Medicine.

2008 - 2009 Wyle Houston, TX

Clinical Services Branch Project Lead/Serve as lead for Patient Data Flow Committee/Instrumental in LSAH program and document development/Develop branch and project SharePoint sites for increased efficiency

2006-2008 Wyle Houston, TX

Operations Manager, Commercial Human Spaceflight/Performed duties as Virgin Galactic Medical Program Manager/Developed Spaceflight Participant Training Program/Served as COMSTAC Training Task Force alternate chair.

2004-2006 Wyle Houston, TX

Space Medicine Training Section Manager/Responsible for training staff, budget, and schedules/Completed Flight Surgeon Certification guides/Completed written lesson plans for all crew classes.

1999-2004 Wyle Houston, TX

Shuttle BME; Lead Training/Shuttle Operations/Responsible for all BME training operations/Developed training plan to transition ISS BME to FCR

position/Implemented BME performance feedback process during simulations.

Education:

1992-1996 Vanderbilt University, Nashville, TN / B.S., Molecular Biology.

Interests:

Wyle National Management Association -President 2010, Vice President 2008 & 2009

Flying / Travel

Awards:

Silver Snoopy-NASA / Excellence in Management / NMA Manager of the Year

Civic Activities:

Young Life Leader / High Schools United with NASA-Clear Creek ISD, HUNCH program / Wyle Community Service Committee Member

Organizational Responsibilities:

Certified project management instructor for Kepner-Tregoe project management leadership development institute

Member at Large Position

STEPHEN T. VANDER ARK, MS

EDUCATION:

M.S. Industrial/Organizational Psychology, University of Wisconsin, March 1993 / B.A. Psychology, Dordt College, Sioux Center, IA. May 1987

AWARDS AND HONORS:

NASA JSC Group Achievement Award, Astronaut Selection Team, December 1994.

NASA JSC Group Achievement Award, Medical Sciences Team, December 1996.

NASA JSC Group Achievement Award, Early Human Test Initiative, July 1996.

NASA JSC Astronaut Office Award for Significant Contributions to the Success of NASA 3/Mir 22, January 1997.

NASA JSC Astronaut Office Award for Significant Contributions to the Success of NASA 4/Mir 23, June 1997.

NASA Administrators Group Achievement Award for the Phase 1 Program Team for Outstanding Execution of the Phase 1 Shuttle-Mir Program, 1998

NASA JSC Astronaut Office Silver Snoopy Award, October 2000.

Wyle Laboratories, Excellence in Management Award, 2004

DoD Employer Support for The Guard and Reserve, Patriot Award, 2010

Wyle 2010 Group Achievement Award, March 2011

PROFESSIONAL CAREER SUMMARY:

July 2003 - present, Section Manager, Behavioral Health and Performance, Wyle, Crew Health and Research Department, Space Medicine Group.

- Manage the day-to-day operations for psychological support and behavioral medicine services for the operational psychology group, family support office, and ground analog test projects.
- Managed the growth and influence of the BHP discipline of NASA JSC's Behavioral Health and Performance Group. During my tenure the Section has grown from 1 to 21 individuals, with specialties in Psychiatry, Clinical Psychology, Industrial/Organizational Psychology and Behavioral Sciences.
- Manage the day-to-day work of the BHP Research Element of NASA's Human Research Program. The BHP Element is responsible for defining and managing a program of research to

address the Risks and Gaps in knowledge for sending humans on exploration missions beyond low earth orbit.

- Serve as the Executive Secretary to the multinational operations group responsible for international agreements and policies for Behavioral Health and Performance issues on ISS missions.
- Working with the NASA Behavioral Sciences and National Space Biomedical Research Institute to define a program of research to address behavioral issues related to NASA's Exploration Initiative.

May 2004 - November 2010, Supervisor, Medical Operations Contingency Group, Wyle, Crew Health and Research Department, Space Medicine Group.

- Managed the group responsible for medical contingency planning and preparation for contingencies involving NASA aircraft or space vehicles, and integrating NASA Space Medicine's Contingency Action Plans to the Johnson Space Center's and NASA-wide response plans for non-spaceflight contingencies (e.g., hurricane response).
- This was a dual role with BHP Section responsibilities. In November 2010 Space Medicine re-organized and moved the Contingency Group under a newly formed Section.

May 1996 - June 2003, Supervisor, Behavioral Health and Performance Group, Wyle, Space Medicine Department.

- Oversee the development and implementation of the Operational Psychology and Behavioral Medicine activities for all phases of spaceflight, including astronaut selection, training, preflight preparation, in-flight monitoring and support, and postflight recovery.
- Supporting real-time operations for International Space Station crews and their families.
- Oversight of the astronaut selection psychological and psychiatric screening for US Astronaut Selection cycles.

6/94 - 4/96, Psychological Support Scientist, Psychological Services Section, Medical Operations Group, KRUG Life Sciences.

- Supported real-time operations for 2.5 years with the 7 astronauts participating in the NASA-Mir Program, including psychological training and preparation, in-flight monitoring and support, and postflight recovery of astronauts, and their family members, assigned to fly long-duration missions aboard the Russian Mir Space Station.

- Assisted in developing an astronaut applicant screening approach to select individuals best suited for long-duration space missions.
- Supported selection and training for a series of ground-based engineering studies requiring small crews to live and work in an environmental chamber for 15 to 91 days.

10/90 - 5/94, Support Scientist, Physiological Research Group, Behavior and Performance Laboratory, KRUG Life Sciences.

- Assisted in development and implementation of research projects for NASA JSC's Space Biomedical Research Institute regarding human adaptation and performance in space and space analogue environments.
- Designed remote data collection technologies for crews in analogue science stations.
- Developed research programs between NASA JSC and the Australian National Antarctic Research Expedition teams conducting 100-day science expeditions and "Wintering-over".

SELECTED PAPERS, PRESENTATIONS, PANELS:

Holland, AW, Sipes, W., Beven, G., Schmidt, L., Slack, K. Moomaw, R. and Vander Ark, ST. (May, 2011). NASA Astronaut Selection 2009: A Behavioral Overview. In W. Sipes and G. Beven (Co-chairs). International partner perspectives on behavioral health participation in Astronaut Selection. Symposium conducted at the Aerospace Medical Association, 82nd Annual Scientific Meeting. Anchorage, AK.

Vander Ark, ST, Sipes, W., Holland, AW, and Cockrell, G. (May, 2011). NASA Operational Psychology for Six Crew Operations. In L. Tomi and S. Stepanova (Co-chairs). International perspective on human behavior and performance and International Space Station crews. Symposium conducted at the Aerospace Medical Association, 82nd Annual Scientific Meeting. Anchorage, AK.

Leveton, LB, Vander Ark, ST and King, R. (2008). Panel on Measurement of Cognitive Function. Aerospace Medical Association, 79th Annual Scientific Meeting. Boston, MA.

Vander Ark, S. Tomi, L. Vassin, A., Inoue, N. Bessone, L., O'Connor, S., Mukai, C., Coffee, E., Sipes, W., Salnitskiy, V., Ren, V., and Spsychalski, A. (2007). Development of a human behaviour and performance training curriculum for ISS astronauts. In D. Manzey and N. Kanas (Co-chairs), Psychology, interpersonal and cultural relations. Symposium conducted at the 16th IAA Humans in Space Symposium, Beijing, China. 21-24 May 2007.

Manzey, D., Carpenter, F., Beven, G., Sipes, W., Vander Ark, S., Kozarenko, O., Salnitskiy, V. And Vassin, A. (2007). Private psychological conferences

for long duration space missions. In D. Manzey and N. Kanas (Co-chairs), Psychology, interpersonal and cultural relations. Symposium conducted at the 16th IAA Humans in Space Symposium, Beijing, China. 21-24 May 2007.

Carpenter, F., Beven, G., Scheuring, RA, Jones, JA, Polk, JD, Gillis, D, Sipes, W., Vander Ark, S. and Duncan, JM. (May, 2007). Apollo medical operations project: Behavioral health and performance recommendations for exploration crews. In R.A. Scheuring and J.A. Jones (Co-chairs), Apollo medical operations project. Symposium conducted at the Aerospace Medical Association, 78th Annual Scientific Meeting, New Orleans, LA.

Vander Ark, S. (December, 2006). Behavioral Health and Spaceflight. *The Longitudinal Study of Astronaut Health Newsletter*. Volume 14, Issue 2.

Sipes, W., Spsychalski, A., and Vander Ark, S. (2006). Psychological and psychiatric issues for missions to Mars. In G. Bopp and M. Fry (Co-chairs). Research and Operational Medicine: To Mars and Back. Symposium conducted at the Aerospace Medical Association, 77th Annual Scientific Meeting, Orlando, FL.

Vander Ark, S., Fiedler, E., and Sipes, W. (May, 2005). Behavioral Health and Performance for Exploration: ISS Lessons. In: Living and working on the International Space Station, D. Manzey and N. Kanas (Co-chairs). 15th IAA Humans in Space Symposium, Graz, Austria. 22-26 May 2005.

Sipes, W., Vander Ark, S. (2005). Operational Behavioral Health and Performance Resources for International Space Station Crews and Families. Aviation, Space & Environmental Medicine. 76(6 Supplement), B36-41.

Carpenter, F., Sipes, W., Spsychalski, A., and Vander Ark, S. (2005). Behavioral Sciences: Operational Applications at Johnson Space Center. In E. Fiedler and S. Vander Ark (Co-chairs). NASA Investigator's Workshop, 10-12 January 2005, Galveston, TX.

Flynn, Vander Ark, Eksuzian, Sipes, Kane, Vanderploeg, Retzlaff, Elsmore, Moore (Nov., 2004), Neuropsychological testing of astronauts. NASA Tech Briefs, Vol 28, #11, p.37.

Flynn, C., Salnitskiy, V., Tomi, L., and Vander Ark, S. (2004). Overview of ISS Spaceflight Human Behaviour and Performance Working Group. In C. Flynn and L. Tomi (Co-chairs), Spaceflight Human Behavior and Performance International Working Group, Symposium conducted at the Aerospace Medical Association, 75th Annual Scientific Meeting, Anchorage, AK.

Sipes, W., Flynn, C., Carpenter, F., and Vander Ark, S. (2004). Cognitive Assessment on the International Space Station. In C. Flynn and L. Tomi (Co-chairs), Spaceflight Human Behavior and Performance International Working Group, Symposium conducted at the Aerospace Medical Association, 75th Annual Scientific Meeting, Anchorage, AK.

Stepanova, S., Flynn, C., Salnitskiy, V., Lange, M., Tomi, L., Inoue, N., Holland, A., Kozarenko, O., Spatenko, Y., Ryumin, O., Vasin, A., Manzey, D.,

Vander Ark, S., de Jong, F., and Carpenter, F. (2004). Support of Workday Limits to Reduce the Risk for Human Error in Long-duration Spaceflight Astronauts. In C. Flynn and L. Tomi (Co-chairs), Spaceflight Human Behavior and Performance International Working Group, Symposium conducted at the Aerospace Medical Association, 75th Annual Scientific Meeting, Anchorage, AK.

Flynn, C. F., Vander Ark, S. T., Sipes, W. E., Kane, R. (2000). Development of the Spaceflight Cognitive Assessment Tool. In C. Flynn (Chair), Development and validation of the Spaceflight Cognitive Assessment Tool. Symposium conducted at the Aerospace Medical Association, 71st Annual Scientific Meeting, Houston, TX.

Vander Ark, S. T. and Curtis, K. C. (1999). Psychological support of NASA astronauts for International Space Station missions. In L. Galarza (Chair), The role of psychology and behavioral sciences for International Space Station missions. Symposium conducted at the 60th Annual Convention of the Canadian Psychological Association, Halifax, Nova Scotia, Canada.

Kane, R., Flynn, C., Vanderploeg, R., Retzlaff, P., Moore, J., Vander Ark, S., Eksuzian, D., Reeves, D., Elsmor, T. & Winter, K. (1998). Neurology in space. The Clinical Neuropsychologist.

Vander Ark, S.T., Holland, A.W., Flynn, C.F, & Curtis, K. D. (1997). Operational psychological issues for mars and other exploration missions. SAE Technical Paper Series, Paper No. 97ES-233. 27th International Conference on Environmental Systems, Lake Tahoe, NV.

Holland, A. W. & Vander Ark, S. T. (1997, April) Astronaut selection: Past, present, and future. In R. D. Arvery (Chair), The selection of astronauts for long duration space flights. Symposium conducted at the 12th Annual Conference, Society for Industrial and Organizational Psychology, St. Louis, MO.

Vander Ark, S.T., Holland, A.W., & Marsh, R. W. (1996). Psychological preparation and support for space station crews. SAE Technical Paper Series, Paper No. 961348. 26th International Conference on Environmental Systems, Monterrey, CA.

Vander Ark, S.T., Holland, A.W., & Wood, J.W. (1993, August). LaChalupa-30: Lessons learned from a 30-day subsea mission analogue. In T. Scoggins (Chair), Human Factors in Spaceflight. Symposium conducted at the meeting of the Space Operations Applications and Research, Houston, TX.

Holland, A.W. & Vander Ark, S.T. (1993). Task analysis of shuttle entry and landing activities. NASA TM 104761. Houston: National Aeronautics and Space Administration.

Holland, A.W., Wood, J.W., Vander Ark, S.T., & Williamson, L.G. (1992). Behavior and performance in a long-duration space analogue. Johnson Space Center Research and Technology 1992 Annual Report. Houston: JSC New Initiatives Office.

Member at Large Position

TARAH L. CASTLEBERRY, DO, MPH

CURRENT POSITION:

Aerospace Medicine Specialist and Family Medicine Physician at the University of Texas Medical Branch, Department of Preventive Medicine and Community Health and contracted NASA Flight Surgeon through Wyle Integrated Science and Engineering Group Bioastronautics contract. Certified NASA Flight Surgeon.

Duties include assignment as ISS Expedition 30 Deputy Crew Surgeon as well as serving as the sole physician in Star City, Russia, for two month deployments annually in support of NASA personnel and US and international astronauts while they train for Soyuz and Russian ISS operations. Supported Soyuz water survival training in August 2010.

Also serve as one of the ISS Direct Return Air Docs. Deployed to Karaganda, Kazakhstan, and accompanied Expedition 23/24 US crewmember from Soyuz TMA-18 landing in Sept 2010.

WORK HISTORY/MILITARY ASSIGNMENT HISTORY:

2002-2004 Flight Surgeon, Marine Fixed Wing Fighter-Attack Training Squadron One Zero One, Marine Corps Air Station Miramar, San Diego, CA

2004-2007 Flight Surgeon, Naval Flight Demonstration Squadron, The Blue Angels, Naval Air Station, Pensacola, FL

PROFESSIONAL TRAINING:

1998-1999 Family Medicine Internship, University of Alabama, Birmingham, AL

2000-2002 Aerospace Medicine Residency, Naval Aerospace Medical Institute, Pensacola, FL

2007-2009 Family Medicine Residency, Mayo Clinic Arizona, Scottsdale, AZ

BOARD CERTIFICATION:

Aerospace Medicine and Family Medicine

ADDITIONAL INFORMATION and INTERESTS:

Other than operational Aerospace Medicine, interests include Preventive Medicine, countermeasures for longer duration human space flight, and Russian language training. I enjoy practicing clinically as a volunteer staff physician at St. Vincent's Clinic in Galveston, TX, a free clinic run by UTMB medical students and residents, treating acute and chronic medical conditions of uninsured patients. Future plans include continued involvement in the field of operational Aerospace Medicine as well as teaching and practicing both Aerospace and Family Medicine.

Member at Large Position

FREDERICK BONATO

PROFESSIONAL EXPERIENCE

Editor-in-Chief, Aviation, Space and Environmental Medicine (ASEM), the official journal of the Aerospace Medical Association. 2010-present.

Director, Office of Faculty Research and Sponsored Programs, Saint Peter's College, 2004-present. Reporting directly to the Provost and handling the submission and processing of all government grant applications for the College.

Chair, Department of Psychology, Saint Peter's College, 2000-2009.

ACADEMIC APPOINTMENTS

Professor, Saint Peter's College, Jersey City, NJ, 2005-present

Associate Professor, Saint Peter's College, Jersey City, NJ, 2000-2005

Assistant Professor, Saint Peter's College, Jersey City, NJ, 1995-2000

Assistant Professor, Upsala College, East Orange, NJ, 1993-1995

EDUCATION

Doctor of Philosophy, Rutgers University, 1993.

Master of Arts, Rutgers University, 1992.

Bachelor of Arts, magna cum laude, Rutgers University, 1989.

RESEARCH

My research interests include motion sickness and all related phenomena such as space motion sickness, simulator sickness, cybersickness, and spatial orientation. My collaborators and I publish regularly in peer-reviewed journals and I have been an author on over 75 conference presentations. NASA and the NSF have funded some of my research. Various media outlets have covered some of my motion sickness work, most recently the Science Channel (January, 2011).

Member at Large Position

Azhar Rafiq, M.D., MBA, MEd.

Dr. Azhar Rafiq, serves as the Director of Medical Informatics for NASA Headquarters in the Office of Chief Health and Medical Officer. In this role, he is responsible for providing leadership to implement Electronic Medical Record system throughout the agency. This includes overall team engagement integrating Information technology groups with finance and clinicians in occupational health clinics. Outcomes include validation of increase in quality of patient care with effective deployment of software systems integrating clinical practice dynamics with Industrial Hygiene and Occupational Health monitoring capabilities.

Dr. Rafiq is also Associate Professor of Surgery at Virginia Commonwealth University School of Medicine with expertise and peer reviewed publications supporting his efforts in study of utilizing simulation towards clinical training within VCU, an academic teaching hospital environment, as well as with international partnerships and with NASA under varied gravitational influences.

He also has expertise in integration of technology to medical care including telemedicine and application of bio sensor systems for remote patient monitoring. This work has been done in partnership with EVA group at JSC to study data relay from within space suits during simulated EVA sessions in Flagstaff Arizona and Devon Island. His leadership as principal and co-investigator on numerous research products has included assessment of human performance capabilities for clinical skills including surgical robotics. Dr Rafiq has authored numerous manuscripts, book chapters, and abstracts in the arena of telemedicine, robotics in surgery, and integration of technology in medical education. For over 19 years at VCU, Dr Rafiq has been involved in various aspects clinical research to improve health care.