





CURRICULUM VITAE James S. Logan, M.D., M.S.

PROFESSIONAL EXPERIENCE

Current

Co-Founder, Space Enterprise Institute; Austin, TX

Previous

Hyperbaric Medicine Consultants PA, St. David's Medical Center; Austin, TX Duke University Hospital, Duke University Medical Center; Durham, NC

Fellow, Duke Center for Hyperbaric Medicine

Senior NASA Attending Physician, Hyperbaric & Dive Medicine, NASA Johnson Space Center, Houston, TX Chair, NASA Dive Medicine Board; Medical Co-director, NASA Neutral Buoyancy Laboratory (NBL)

Senior Flight Surgeon, Clinical Services Branch, NASA Johnson Space Center; Houston, TX

Chief, Medical Informatics & Health Care Systems, NASA Johnson Space Center; Houston, TX

Deputy Project Manager, Kelsey-Seybold NASA Occupational Medicine Contract; Houston, TX

Founding Board Member, American Telemedicine Association; Washington, DC

Telemedicine Clinical Director, Pacific Regional Program Office, Tripler Army Medical Center; Honolulu, HI President, Logan & Associates, Inc.; Oklahoma City, OK

International & Domestic Telemedicine Consulting Services; External Consultant, The RAND Corporation

Provost, International Space University, Summer Session; Strasbourg, France

Chief Medical Liaison, Space Station Program Office, NASA Headquarters; Washington, DC

Chief, Medical Operations, NASA Johnson Space Center; Houston, TX

Chief, Flight Medicine Clinic, NASA Johnson Space Center; Houston, TX

POST-GRADUATE TRAINING

Duke University Medical Center; Durham, NC (July 2012 – June 2013)

Fellowship in Undersea & Hyperbaric Medicine

NASA Johnson Space Center, Medical Sciences Division; Houston, TX

Aerospace Medicine Residency (Year Three)

Wright State University School of Medicine; Dayton, OH

Aerospace Medicine Residency

University of Oklahoma Health Sciences Center; Oklahoma City, OK

General Surgery Internship (PG1)

EDUCATION

Wright State University School of Medicine; Dayton, OH

MS, Aerospace Medicine

University of Oklahoma Health Sciences Center; Oklahoma City, OK

Doctorate of Medicine

Southern Methodist University; Dallas, TX

BA, Social Sciences (Pre-Med)

PUBLICATIONS

Logan, JS and DR Adamo. Destination Deimos. Space Enterprise Institute, <u>www.spaceenterpriseinstitute.org</u>, 2014.

Adamo, DR and JS Logan. *Aquarius*, A Reusable Water-Based Interplanetary Human Spaceflight Transport. Space Enterprise Institute, www.spaceenterpriseinstitute.org, 2014.

Logan, JS. Space Radiation: The Elephant in the Room Trumpets. Space Enterprise Institute, www.spaceenterpriseinstitute.org, 2014.

Logan J, Oboite M, Piantadosi C. Hyperbaric Oxygen Treatment in the Management of Multi-Focal Haemophilius Influenza Necrotizing Fasciitis: A Case Report. Undersea & Hyperbaric Medical Society 46th Annual Scientific Meeting Abstracts, 2013.

Logan JS, Derrick BD, Freiberger JJ. Multicenter Hyperbaric Fellows Econference: Design and Implimentation.

Derrick BD, Logan JS, Hutson J, Moon RE, Freiberger JJ. Toxic Aniline Exposure Treated With Hyperbaric Oxygen Therapy And Exchange Transfusion: A Case Report. Undersea & Hyperbaric Medical Society 46th Annual Scientific Meeting Abstracts, 2013.

Moon RE, Martina SD, Natoli MJ, Schinazi EA, Derrick BJ, Logan JS, Freiberger JJ. Head-Out Immersed Exercise As A Screening Test For Swimming-Induced Pulmonary Edema (SIPE). Undersea & Hyperbaric Medical Society 46th Annual Scientific Meeting Abstracts, 2013.

Moon RE, Martina SD, Peacher DF, Cherrt AD, Webster TE, Fraser JAV, Natoli MJ, Derrick BJ, Logan JS, Schinazi EA, Kernagis D, Freiberger JJ. Hemodynamics of Immersion Pulmonary Edema Susceptibility and the Effect of Sildenafil. Undersea & Hyperbaric Medical Society 46th Annual Scientific Meeting Abstracts, 2013.

Derrick BJ, McCauley W, Natoli MJ, Martina SD, Schinazi EA, Qin M, Logan JS, Freiberger JJ. NAVSEA – Hypercapnia Narcosis: Study Protocol Validation With The MATB-II Software. Undersea & Hyperbaric Medical Society 46th Annual Scientific Meeting Abstracts, 2013.

Derrick BJ, McCauley W, Natoli MJ, Schinazi EA, Martina SD, Qin M, Logan JS, Moon RE, Freiberger JJ. NAVSEA – Hypercapnia Narcosis: Study Protocol Validation Trials. Undersea & Hyperbaric Medical Society 46th Annual Scientific Meeting Abstracts, 2013.

Pisacane VL, Kuznetz LH, Logan JS, Clark JB, Wissler EH. Use of Thermoregulatory Models to Enhance Space Shuttle and Space Station Operations. Aviation Space & Environmental Medicine (ASEM), 2006.

Pisacane VL, Kuznetz LH, Logan JS, Clark JB, Wissler EH. Thermoregulatory Models for Safety-For-Flight Issues for Space Operations. ACTA Astronautica 59 p531-546. PDF Available at www.sciencedirect.com, 2006.

Ramsey, CS and JS Logan. Emergency and Your Medical Information. Safety and Total Health, National Aeronautics & Space Administration (NASA), Vol 10, No. 8, August 2005.

Bacal K, Hamilton DR, Logan JS. Anticipated Medical Conditions for International Space Station Medical Operations. Humans in Space Symposium, Banff, Alberta, May 19-22, 2003.

Bacal K, Hamilton DR, Pettys RL, McDonald PV, Logan JS. What Do You Need to Stand and Fight on Orbit? Medical Devices for Contingency Care on the International Space Station. Humans in Space Symposium, Banff, Alberta, May 19-22, 2003.

Hamilton DR, Mcculley PA, Smith BA, Voigt B, Ownby R, Yallampalli R, Logan JS. Electrocardiographic Monitoring of Astronauts on the ISS. Humans in Space Symposium, Banff, Alberta, May 19-22, 2003.

Bacal K, Hamilton DR, Logan JS. Re-Designing the Concept of Operations for Medical Contingencies Aboard the International Space Station. Humans in Space Symposium, Banff, Alberta, May 19-22, 2003.

Hamilton DR, Melton SL, Sargsyan AE, Dulchavsky S, Beck G, Campbell M, Rasbury JA, Nicolaou S, Kirkpatrick A, Guess TM, Logan JS. The Ultrasound Detection of Thoracic Trauma on the ISS. Humans in Space Symposium, Banff, Alberta, May 19-22, 2003.

Williams DR, Bashshur RL, Pool SL, Doarn CR, Merrell, RC, Logan JS. A Strategic Vision for Telemedicine and Medical Informatics in Space Flight. Telemedicine Journal and e-Health, Vol 6, pp 441-448, Nov 4, 2001.

Bangert DC, Doktor R, Choi M, Warren J, Garshnek V, Logan JS. Enhancing Medical Decision-Making Through Telemedicine. Int. J. Healthcare Technology and Management, Vol. 2, No. 1/2/3/4, pp.255-270, 2000.

Garshnek V, Logan JS, Hassell LH. The Telemedicine Frontier: Going the Extra Mile. Space Policy Journal, 13 (1) 37-46, 1997.

Swartz DG, Logan JS. Telemedicine: Applying Telecommunications to Medical Care. Proceedings of the 1994 Annual Health Information Management Systems Society (HIMSS), Washington, D.C., October 3-5, 1994.

Logan JS. Store-and-forward Systems Avoid Problems of Interactive Video, (Expert Opinion Column). Telemedicine Newsletter, Miller Freeman, Inc., February, 1994.

Logan JS. Telemedicine 101: Innovations in Rural Health Care Delivery Systems. <u>Proceedings of Cooperative Solutions to Rural Health Care Problems: Emergency Medical Services</u>. University of California Davis School of Medicine, June, 1993.

Houtchens BA, Clemmer TP, Holloway HC, Kiselev AA, Logan JS, et. al. Telemedicine and International Disaster Response: Medical Consultation to Armenia and Russia Via a Telemedicine Spacebridge. Prehospital and Disaster Medicine, Vol. 8, No. 1, 1993.

Logan JS, Swartz, DG. Oklahoma Medical Information Network. AHEC News, Oklahoma City, OK, January 1993.

Logan, JS. Telemedicine: New Telecommnications Markets for Health Care Applications. In: <u>Telecommunications Applications in Business Today</u>, 1992, Annual Proceedings of the Tele-Communications Association, San Diego, CA, September 21-25, 1992.

Aroesty JR, Zimmerman R, Logan JS. Human Support Issues and Systems for the Space Exploration Initiative: Results from Project Outreach. RAND Note N-3287-AF/NASA, The RAND Corporation, Santa Monica, CA, December 1991.

Alter WS, Logan JS. NASA Goes To Ground. Whole Earth Review, Winter Edition, No. 73, p 36-40, 1991.

Logan JS. Inflight Health Care Capabilities for Long Duration Missions: Objectives, Design Strategies, and Operational Considerations. (In) <u>Aerospace Science</u>, Proceedings of the 3rd Nihon University International Symposium on Aerospace Science, Yajima K, (Ed), Nihon University, Tokyo, p151-157, 1991.

Logan JS. What Are We Doing Out There Anyway: Linking International Space Goals to Real World Agendas. (In) <u>Aerospace Science</u>, Proceedings of the 3rd Nihon University International Symposium on Aerospace Science, Yajima K, (Ed), Nihon University, Tokyo, p545-550, 1991.

Logan JS. Space Technology Applied to Terrestrial Medicine. (In) <u>Qualitatssicherung in der Notfallmedzin</u> - Transportmedizin, Herden HN, Moeke H, (Ed), ISBN 3-89412-089-4, 1990.

Gardner R, Ostler D, Nelson B, Logan JS. Medical Impact Analysis for the Space Station. <u>Aviat. Space Environ.</u> Med, 61(2): 169-175, 1990.

Logan JS. Health Maintenance on Space Station. (In) <u>Working in Orbit and Beyond: The Challenges for Space Medicine</u>. Lorr D, Garshnek V, Cadoux C (Ed), American Astronautical Society, Volume 72 Science and Technology Series, 87-99, 1989.

Gardner R, Ostler D, Nelson B, Logan JS. The Role of Smart Medical Systems in the Space Station. International Journal of Clinical Monitoring and Computing, Vol. 6: 91-98, 1989

Ostler D, Gardner R, Logan JS. A Medical Decision Support System for the Space Station Health Maintenance Facility. <u>Proceedings of the Twelfth Annual Symposium on Computer Applications in Medical Care</u>, Washington, D.C., November 6-9, 1988.

Logan JS. Medical Requirements of an Inflight Medical System for Space Station, JSC 31013, Space Station Projects Office, Johnson Space Center, July 14, 1986.

Logan JS. Health Maintenance Onboard the Space Station. <u>Proceedings 8th Biennial Conference on Space</u> Manufacturing, Princeton, NJ, May 6-9, 1987.

Logan JS, Jurmain MH. Considerations in the Design of a Health Maintenance Facility. Research and Technology Annual Report 1986. NASA Technical Memorandum 58227, p7, 1986.

Logan JS, Stolle MF. Treatment Capabilities of Space Station Health Maintenance Facility. <u>Research and Technology Annual Report 1986</u>. NASA Technical Memorandum 58227, p8. 1986.

Logan JS. Medical Requirements of an Inflight Medical System for Space Station. <u>Proceedings of Space:</u> Biomedicine and Biotechnology, National Research Council of Canada, Ottawa, May 29-30, p21-27, 1986.

Logan JS. An Approach to the Design of the Inflight Medical Care Delivery System Aboard Space Station. <u>Procs of American Association for the Advancement for Science</u>, Philadelphia, May 25-30, 1986.

Logan JS. Medical Requirements of an Inflight Medical System for Space Station. <u>Proceedings of Space:</u> Biomedicine and Biotechnology, National Research Council of Canada, Ottawa, May 29-30, p21-27, 1986.

Broadwell DK, Logan JS. A Total Parenteral Nutrition System for Emergency Use Aboard the Space Station Health Maintenance Facility. <u>Preprints of the 1986 Annual Scientific Meeting</u>, Aerospace Medical Association, Nashville, 1986.

Logan JS, Stewart GR. Preparing a Health Care Delivery System for Space Station. <u>Proceedings of the Fifteenth</u> Intersociety Conference on Environmental Systems, Society of Automotive Engineers, San Francisco, 1985.

Vanderploeg JM, Logan JS, Leach CS, Taylor GR, Peirson DL. Medical Results of STS Operations. <u>Preprints of</u> the 1984 Annual Scientific Meeting, Aerospace Medical Association, May 1984.

Vanderploeg JM, Logan JS, Shulman EL, Kuklinski P. Medical Operations Support for Spacelab-1. <u>Preprints of the 1984 Annual Scientific Meeting</u>, Aerospace Medical Association, May 1984.

Logan JS, Shulman EL, Johnson PC. Health Care Delivery System for Long Duration Manned Space Operations. <u>SAE Technical Paper Series (831134)</u>, Thirteenth Intersociety Conference on Environmental Systems, San Francisco, California, July 11-13, 1983.

Logan JS, Veghte JH, Frey MAB, Robillard LMJ, Mann BL, Luciani RJ. Cardiac Function Monitoring by Impedance Cardiography During Changing Seatback Angles and Anti-G Suit Inflation. <u>Aviat. Space Environ.</u> Med. 54(4):328-333, 1983.

Logan JS, et al. Medical Operations and Life Sciences Activities on Space Station. <u>NASA Technical</u> Memorandum 58248. Johnson PC, Mason JA, (Eds), Lyndon B. Johnson Space Center, October, 1982.

Vanderploeg JM, Logan JS. Current Issues in Space Medicine. <u>Preprints of the 1983 Annual Scientific Meeting,</u> Aerospace Medical Association, 1983

Logan JS, Robillard LMJ, Veghte JH, Frey MAB. Noninvasive Assessment of Cardiac Function at 2, 3, and 4 + Gz with and without Anti-G Inflation. <u>Preprints of the 1982 Annual Scientific Meeting</u>, Aerospace Medical Association, p. 163-164, 1982.

Robillard LMJ, Hudgson KE, Logan JS, Poter G, Rogers GB. Impedance Cardiography Waveform Variations. <u>Preprints of the 1982 Annual Scientific Meeting</u>, Aerospace Medical Association, p.116-117, 1982.

Hadley AT, Berry MA Logan JS. Decompression Sickness. <u>American Family Physician</u>, Vol. 26, No. 1, January 1982.

INVITED PRESENTATIONS

American Association for the Advancement of Science

American Hospital Association

American Health Information Management Association (AHIMA)

American Institute of Aeronautics & Astronautics (AIAA)

American Medical Association (AMA)

American Telemedicine Association (ATA)

American Urological Association

Arizona Tool & Manufacturing Association

Australian Army Helicopter Forces

Baptist Memorial Health Care System, Inc., Memphis Tennessee

Barnes Hospital Healthcare System, St. Louis Missouri

Canadian National Research Council

Chinese Medical Association, Peoples Republic of China, Beijing

College of Healthcare Information Management Executives (CHIME)

Columbia-Presbyterian Medical Center, New York

Department of Defense

Georgetown University

Governor's Conference on Telemedicine

Hamilton Civic Hospitals, Hamilton, Ontario

Health Data Management Magazine

Health Informatics Management Association (HIMA)

Health Information Systems Association (HISA)

Health Innovation Technology Society

Health Resources Services Administration (HRSA)

Health Strategy Institute

Hermann Hospital, Houston Texas

Holland America Cruise Line

Indian Health Service

International Space University

Intersociety Conference on Environmental Systems (ICES)

Iowa Methodist Health Care System

State of South Dakota

State of Oklahoma

The Mayo Clinic

McDonnell Douglas Astronautics Corporation

NASA Johnson Space Center, Texas

NASA Kennedy Space Center, Florida

NASA Lewis Research Center, Ohio

National Trauma Symposium

NewSpace 2010

North Atlantic Treaty Organization (NATO)

Nebraska Methodist Medical Center

New York Eye and Ear Infirmary

New York University Medical Center

Nihon University, Tokyo Japan

Oklahoma Venture Forum

Pacificare Corporation

Samuel Merritt Hospital, Oakland California

Sharp Memorial Hospital, San Diego California Space Development Conference

Space Studies Institute, Princeton University

Strategic Research Institute (SRI)

Tele-Communications Association (TCA)

Texas Tech University Health Sciences Center

Texas Christian University

The RAND Corporation

TIME Magazine

Undersea Medical Society University Association for Emergency Medicine

University of Alabama at Huntsville

University of California Davis

University of California San Diego

University of Iceland, Reykjavik Iceland

University of New Mexico School of Medicine

University of Oklahoma Health Sciences Center

University of Queensland, Australia

University of Texas Health Sciences Center Houston

University of Texas Medical Branch at Galveston

USAF School of Aerospace Medicine

Utah State University

Vanderbilt University Medical Center

Wellesley Hospital, Toronto, Ontario

West German Emergency Medical System, Hamburg, Germany

Western Trauma Association

Westchester Community College Foundation

World Presidents Organization Wright-Patterson Air Force Base, Dayton, Ohio Young Presidents Organization Young Entrepreneurs Organization

LICENSURE & CERTIFICATION

Board Certification: American Board of Preventive Medicine

Specialty Certification: Aerospace Medicine

Medical Certification: Diplomat, National Board of Medical Examiners

ACLS, BLS

Physicians Training in Diving Medicine (NOAA/UHMS)

Medical Licensure: Texas License

Oklahoma License Nebraska License

AWARDS & HONORS

Lifetime Recipient, NASA Distinguished Speaker Award

Dr. David M. Throckmorton Memorial Lecturer Award, University of Alabama School of Medicine at Huntsville. Massachusetts Medical Society Medical/Cultural Physician Exchange Program with People's Republic of China. Julian E. Ward Memorial Award, presented by the American Medical Association "in recognition of superior performance and outstanding achievement in the art and science of aviation medicine during a residency training program."

NASA Grant Award, Residency Training in Aerospace Medicine, Wright State University, Dayton, Ohio.

Coyne H. Campbell Award, presented by the University of Oklahoma Health Sciences Center "in recognition of outstanding scholarship, intellectual promise, and creative ability in medicine for the third year of medical school." Vice Commandant's Award, ROTC Summer Camp, Lackland Air Force Base, San Antonio, Texas.

Anderson Award for Best Grade Point Average, Detachment 815, AFROTC, Southern Methodist University, Dallas, Texas.

PROFESSIONAL APPOINTMENTS & OFFICES

Associate Fellow, Space Medicine Branch, Aerospace Medical Association

Senior Associate, Space Studies Institute

Clinical Assistant Professor of Community Health, Wright State University School of Medicine, Dayton, OH

Founding Director, American Telemedicine Association, 1996

Secretary-Treasurer, American Telemedicine Association, 1996-1998

President, Space Medicine Branch, Aerospace Medical Association, 1989-1990

Adjunct Scientist, Oklahoma Medical Research Foundation, 1994-1998

Oklahoma Academy of State Goals Task Force on Telecommunications, 1993-1995

Governor's Steering Committee on Telecommunications, State of Oklahoma, 1992-1993

James S. Logan, M.D., M.S.

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Phone: 713.213.7890

Citizenship: USA

Education Wright State University School of Medicine

MS Aerospace Medicine

University of Oklahoma Health Sciences Center

Doctorate of Medicine

Southern Methodist University Dallas, TX

Dayton, OH

Oklahoma City, OK

MS Biology

Southern Methodist University Dallas, TX

BA Social Science (Pre-Med)

Post-degree Training University of Oklahoma Health Sciences Center Oklahoma City, OK

PG1 – General Surgery

Wright State University School of Medicine Dayton, OH

Aerospace Medicine Residency

NASA Johnson Space Center Houston, TX

Aerospace Medicine Residency (third year)

Duke University Medical Center Durham, NC

Hyperbaric Medicine Fellowship

Academic Appointments Wright State University School of Medicine Dayton, OH

Clinical Assistant Professor of Community Medicine

Certifications & Licenses Aerospace Medicine Board Certified

Medical License: Texas Medical License: Oklahoma Medical License: Nebraska

Certifications: Advanced Cardiac Life Support NOAA Physicians Training in Dive Medicine