## **CURRICULUM VITAE**

### MELISSA M. MALLIS, PH.D.

M3 Alertness Management, LLC 36 White Rock Terrace Courtdale, PA 18704

#### E-MAIL: <u>mmallis@m3alertness.com</u> Voice: 650-799-0790

#### Education

1990 -1994	B.S. Villanova University, Honors, Villanova, PA (Physics)
1994 -1999	Ph.D. Drexel University, Philadelphia, PA (Biomedical Science)

## **Academic Appointments**

2012 - current	Fellow, George Mason University, Center for Infrastructure Protection and Homeland Security, Arlington, VA
1997 - 1999	Pre-Doctoral Fellow, Unit for Experimental Psychiatry, University of Pennsylvania School of Medicine, Philadelphia, PA
1995 - 1997	Graduate Trainee Fellow, Air Force Office of Scientific Research Partnership for Research and Excellence Transition Center (AFOSR PRET), Countermeasures for Jet Lag and Sleep Deprivation, University of Pennsylvania School of Medicine, PA

### **Professional Experience**

2011 – current	President & Chief Scientist, M3Alertness Management, LLC
2011 - current	Chief Scientific Advisor, Alertness Solution, Cupertino, CA
2011 - current	Senior Science Advisor, DB&A, Fairfax, VA
2007 – 2011	Chief Scientist, Operational & Fatigue Research, Institutes for Behavior Resources, Baltimore, MD
2005 - 2007	Director, Scientific Affairs, Alertness Solutions, Cupertino, CA
1999 – 2000	Research Psychologist, Human Factors Research and Technology Division, Systems Safety Research Branch, NASA Ames Research Center, Moffett Field, CA

# Scientific Review Committees and Advisory Activities:

2013 - current	Fatigue Risk Management Task Force Member (FRMSTF), International Air Transport Association (IATA), Montreal, Canada
2013 - current	Fatigue Risk Management Task Force Member (FRMTF), International Civil Aviation Organization, Montreal, Canada
2013 - current	Flight Safety Foundation (FSF) Fatigue Countermeasures Task Force Member, Duty & Rest Committee, National Business Aviation Association Washington, DC
2008 - 2013	Scientific Expert, Flight Research Associates, Mountain View, CA
2008 - 2013	Scientific Expert, Fatigue Science, Honolulu, HI.
2008 - 2013	Scientific Research Associate, Moffett Field, CA
2008 - 2013	Federal Aviation Administration (FAA), reviewer, A332. Flag Operations in Excess of 16 Hours Block Time Ultra Long Range (ULR) Operations,
2008 - 2011	Federal Motor Carrier Safety Administration, Review Committee Chair, Research Evaluating the 34-hour and 58-hour Restarts Study
2005 - 2007	American Institute of Biological Science
2001 - current	National Institutes of Health, various institutions, ad hoc reviewer
2007 - 2008	The Big Sleep Show, Scientific Advisory Board Member
2005 - 2006	Scientific Peer Advisory and Review Services division of the American Institute of Biological Sciences
1999 –2005	National Aeronautics and Space Administration, Systems Safety Research Branch, reviewer
1999 – 2005	National Aeronautics and Space Administration, Human Factors Research and Technology Division, reviewer
2004 -2005	National Institutes of Justice, ad hoc reviewer
2002 - 2005	Palo Alto VA Patient Safety Centers of Inquiry, Scientific Advisory Board
2000 - 2004	Air Force Office of Scientific Research (AFOSR), Partnership for Research and Excellence Transition (PRET) Center for Research on Countermeasures for Jet Lag and Sleep Deprivation, Scientific Advisory Board
2008 -2009	International: Australian Government, Civil Aviation Safety Authority (CASA), ad hoc reviewer, Civil Aviation Order 48 (CAO 48), Fatigue Risk Management Systems (FRMS) regulatory material

## Major Teaching Responsibilities:

October 2, 2013	Fatigue Management in Business Aviation: Everything You Need To Know About What It Is And How To Do It, half day workshop, presented at Bombardier Safety Standdown, Wichita, Kansas
May 1, 2013	Fatigue Risk Management in Aviation Operations - The Ongoing Fight for Alertness and Safety, full day seminar, presented at George Mason University, Arlington, VA
January 31, 2013	Fatigue Risk Management in Aviation Operations - The Ongoing Fight for Alertness and Safety, full day seminar, presented at George Mason University, Arlington, VA
June 26, 2012	<i>Fatigue Risk Management Executive Seminar</i> , half day seminar, presented at George Mason University, Arlington, VA
2006	Managing Alertness in 24/7 Law Enforcement Operations: Enhancing Public and Officer Safety, presented at Association of Bay Area Governments (ABAG) Conference (11/14/06), Suisun City, CA
1999 - 2006	Thesis Committee Member, Nick Price, Doctor of Philosophy in the Biomedical Science Department, Drexel University, PA
2004	Managing Alertness Management in Operational Environments, presented at the Stanford Sleep Grand Rounds (10/22/04), Stanford, CA
2002 - 2004	Supervisor, Ray Oyung, Master of Science student in the Human Factors and Ergonomics Program, San José State University, San José, CA
2002 - 2004	NASA Fatigue Education and Training Workshop (total of 7, two-day courses), NASA Ames Research Center, Mountain View, CA
2000 - 2004	NASA Fatigue Education and Training Workshop (total of 7, two-day courses), NASA Ames Research Center, Mountain View, CA
2002 - 2003	<i>Implementation of Fatigue Countermeasures and Scheduling Techniques</i> <i>Training for</i> Scientists/engineers working the Mars Exploration Rover (MER) Operations (total of 4, <sup>1</sup> / <sub>2</sub> -day courses), Jet Propulsion Laboratories, Pasadena, CA

## Awards, Honors and Membership in Honorary Societies:

1998	Trainee Research Excellence Awards, Sleep Research Society
1998	NASA Turning Goals into Reality (TGIR) Exceptional Progress Toward Aviation Safety Award, NASA Office of Aerospace Technology
1999	Research Merit Award, Sleep Research Society
2000	NASA Superior Performance Award

2001	NASA Performance Incentive Award
2001	2002 NASA Superior Performance Award
2002	NASA Performance Incentive Award
2003	NASA Performance Incentive Award
2003	Arnold D. Tuttle Award for "Original Research that has Made the Most Significant Contribution Toward the Solution of a Challenging Problem in Aerospace Medicine and published in <i>Aviation, Space, and Environmental</i> <i>Medicine</i> ," Aerospace Human Factors Association
2003	William E. Collins Award for the "Outstanding Human Factors Publication of the Year" entitled <i>Controlled Breaks as a Fatigue Countermeasure on the Flight Deck,</i> Aerospace Human Factors Association
2003	NASA Ames Honor Award for Excellence in the category of Group/Team
2003	NASA Turning Goals into Reality (TGIR) Exceptional Progress Toward Support of MER Ops (Mars Exploration Rover Operations), NASA Office of Aerospace Technology
2004	NASA Turning Goals into Reality (TGIR) Award for the Mars Exploration Rover (MER) Information Technology Infusion Team
2004	NASA Headquarters Award for Group Achievement for the Mars Exploration Rover Mission System Development Team
2004	NASA Administrator's Award, Turning Goals into Reality (TGIR), for Valuable Contributions to the Advanced Information Technology Infusion Team for the Mars Exploration Rovers 2003 Mission
2004	NASA Ames Certificate of Appreciation for an Outstanding Contribution Toward the Success of the NASA Ames Exploration Center
2005	NASA Tech Brief (Space Act) Award for "Education and Training Module in Alertness Management for the WINGS Program"
2006	NASA Tech Brief (Space Act) Award for "General Aviation Alertness Management Web-Based Education and Training Module"
2007	William E. Collins Award for the "Outstanding Human Factors Publication of the Year" entitled <i>Alertness Management in Aviation Operations: Enhancing Performance and Sleep</i> , Aerospace Human Factors Association
2009	William E. Collins Award for the "Outstanding Human Factors Publication of the Year" entitled <i>Fatigue Countermeasures in Aviation</i> , Aerospace Human Factors Association

#### Memberships in Professional and Scientific Societies:

#### International Societies:

World Federation of Sleep Research and Sleep Medicine Societies (Member) Fatigue Risk Management Systems Forum (Member)

### National Societies:

Aerospace Medical Association (Member)

Aerospace Human Factors Association (Member, Aerospace Human Factors Committee)

American Academy of Sleep Medicine (Member)

American Industrial Hygiene Association (Member)

Associated Professional Sleep Societies (Chair, Sleep Deprivation Section Steering Committee), 2011 – 2013

Associated Professional Sleep Societies (Co-chair, Sleep Deprivation Section Steering Committee), 2008 – 2011

FRMS Forum (Member)

Human Factors and Ergonomics Society (Member)

National Business Aviation Association (Member)

National Sleep Foundation (Member)

Sleep Research Society (Member)

## **Editorial:**

#### Ad Hoc Reviewer:

American Journal of Industrial Medicine Aviation, Space and Environmental Medicine Current Anthropology, European Journal of Applied Physiology Human Factors Journal of Adolescence Journal of Sleep Research Psychophysiology Physiology & Behavior Sleep Sleep Medicine Reviews

## Supervision/Thesis Advisor:

2006 - current	External Thesis Supervisor. A crew utilization study into fatigue and flight crew performance, Simon Stewart, Doctoral Dissertation, College of Aeronautics at Cranfield University
May, 2006	Thesis Committee Advisor. Sleep/Wake Cycles of Personnel Working a Mars Day (24.65 hr), Laura Colletti, Master of Science, Department of Industrial and Systems Engineering, San José State University
March, 2006	Dissertation Reader. Validation of a tool to help manage fatigue in the workplace, Katie Kandelaars, Doctoral Dissertation, School of Psychology, July, 2001
2006 - current	External Thesis Supervisor. A crew utilization study into fatigue and flight crew performance, Simon Stewart, Doctoral Dissertation, College of Aeronautics at Cranfield University
May, 2006	Thesis Committee Advisor. Sleep/Wake Cycles of Personnel Working a Mars Day (24.65 hr), Laura Colletti, Master of Science, Department of Industrial and Systems Engineering, San José State University
March, 2006	Dissertation Reader. Validation of a tool to help manage fatigue in the workplace, Katie Kandelaars, Doctoral Dissertation, School of Psychology, Division of Education, Arts and Social Sciences, University of South Australia
July, 2001	Dissertation Reader. The circadian disruption and adaptation associated with night work and transmeridian flight, Gregory D. Roach, Doctoral Dissertation, School of Psychology, Division of Education, Arts and Social Sciences, University of South Australia Division of Education, Arts and Social Sciences, University of South Australia
July, 2001	Dissertation Reader. The circadian disruption and adaptation associated with night work and transmeridian flight, Gregory D. Roach, Doctoral Dissertation, School of Psychology, Division of Education, Arts and Social Sciences, University of South Australia

# Lectures by Invitation:

Oct. 31, 2013	<i>Fatigue Risk Management: A Critical Component of Infrastructure Protection</i> , presented at Security Analysis and Risk Management Association (SARMA) Conference at the George Mason University, Arlington, VA
Oct. 23, 2013	<i>Duty/Rest Guidelines for Business Aviation: A Scientific Perspective</i> , presented at National Business Aviation Association (NBAA) 2013 – Business Aviation Convention and Exhibition, Las Vegas, NV
Oct. 9, 2013	<i>Overview of FRMS within the Business Jet Community,</i> presented at the Fatigue Risk Management Forum: Promoting Occupational Alertness, Paris, France
May 20, 2013	<i>The Physiology of Fatigue,</i> presented at the American Industrial Hygiene Conference, Montreal, Canada

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June 1, 2012	<i>Fatigue in the Aerospace Industry Break-Out Session,</i> presented at the Women in Aviation Annual International Aviation Conference, Arlington, VA
July 22, 2010	Analysis of Crew Performance for the easyJet Human Factors Monitoring Program (HFMP) using the FAST Scheduling Tool, presented at NASA Ames, Moffett Field, CA
July 7, 2010	Fatigue Doesn't Affect Me Or Am I Just Too Tired to Know? presented at Interlaken Capital Aviation Services Inc., Westchester, NY
May 11, 2010	Fatigue Risk Management Systems (FRMS): Enhancing Aviation Safety, presented at the Aerospace Medical Association Meeting, Phoenix, AZ
May 11, 2010	Flight Attendant Work/Rest Patterns, Alertness, and Performance Assessment: Field Study Results, presented at the Aerospace Medical Association Meeting, Phoenix, AZ
March 9, 2010	Institutes for Behavior Resources Board of Directors Meeting: Current Fatigue Projects, presented at the Institutes of Behavior Resources, Baltimore, MD
March 29, 2010	<i>Current Medical Issues: Fatigue Management Approaches for Aviation Environments,</i> presented at the National Business Aviation Association (NBAA International Operators Conference (IOC), New Orleans, LA
Nov 18, 2009	<i>Tools for Managing Fatigue in Aviation Operations,</i> presented at easyJet, Luton, UK
Nov 17, 2009	<i>Tools for Managing Fatigue in Aviation Operations,</i> presented at British Petroleum, London, UK
Nov 16, 2009	<i>Tools for Managing Fatigue in Aviation Operations</i> , presented at British Airways, Waterside, UK
Oct 22, 2009	Managing Fatigue in Aviation Operations, presented at the National Business Aviation Association (NBAA) annual conference, Orlando, FL
July 28, 2009	<i>Fatigue Management in Aviation Operations,</i> presented at Interlaken Capital Aviation Services Inc., Westchester, NY
May 6, 2009	Effects of Sleep Loss on Operational Performance, presented at the Aerospace Medical Association Meeting, Los Angeles, CA
May 4, 2009	Enhancing Astronaut Performance During Spaceflight using Human Centered, presented at the Aerospace Medical Association Meeting, Los Angeles, CA
May 2, 2009	<i>Fatigue Countermeasures in Aviation: The Position of the Aerospace Medical,</i> presented at the Airlines Medical Directors Association meeting, Los Angeles, CA
March 30, 2009	<i>Current Medical Issues: Fatigue Management: Multi-Component and Scientific Approaches,</i> presented at the National Business Aviation Association (NBAA) International Operators Conference (IOC), San Diego, CA

## Melissa M. Mallis, Ph.D.

Oct 1, 2008	<i>Fatigue Management in Cabin Crew and Future Research</i> , presented at the International Air Transport Association's Cabin Health Conference, Geneva, Switzerland
April 24, 2008	<i>Fatigue Management Systems: Potential for Assessment of Ocular Variables</i> , presented at the Eye/Eye-Movement Monitoring Workshop, NASA Ames Research Center, Moffett Field, CA
April 14, 2008	<i>Fatigue in the Workplace</i> , presented as part of Fatigue in the Workplace: Enhancing Employee Safety and Health, National Safety Council webinar series, international broadcast
March 10, 2008	<i>Current Medical Issues Panel: Extending the Duty Day: Effects of Fatigue,</i> presented at the National Business Aviation Association (NBAA) International Operators Conference (IOC), San Antonio, TX
Sept 21, 2007	Managing Fatigue in Aviation Operations, presented at the Cessna Flight Operations Safety Day, Wichita, KS
March 26, 2007	<i>Current Medical Issues Panel: Managing Fatigue</i> , presented at the National Business Aviation Association (NBAA) International Operators Conferece (IOC), San Diego, CA
March 21, 2007	AvAlert Workshop, presented at Proctor and Gamble Training Day, Cincinnati, OH
Oct 12, 2006	<i>Fatigue and Safety</i> , presented at the Cessna Flight Operations Safety Day, Wichita, KS
Sept 14 &15, 2006	<i>Alertness Matters</i> , presented as part of the Alertness Matters Awareness Campaign sponsored by Cephalon Inc., Greyhound Lines Inc., Las Vegas, NV
Sept 14, 2006	Alertness Matters, presented as part of the Alertness Matters Awareness Campaign sponsored by Cephalon Inc., USF Bestway, Las Vegas, NV
Sept 13 &14, 2006	Alertness Matters, presented as part of the Alertness Matters Awareness Campaign sponsored by Cephalon Inc, University Medical Center, Las Vegas, NV
July 27, 2006	Alertness Matters, presented as part of the Alertness Matters Awareness Campaign sponsored by Cephalon Inc., Federal Express, Memphis, TN
July 27, 2006	<i>Alertness Matters</i> , presented as part of the Alertness Matters Awareness Campaign sponsored by Cephalon Inc., Swift Transportation, Memphis, TN
July 26, 2006	<i>Alertness Matters</i> , presented as part of the Alertness Matters Awareness Campaign sponsored by Cephalon Inc., Greyhound Lines Inc., Memphis, TN

July 26, 2006	<i>Alertness Matters</i> , presented as part of the Alertness Matters Awareness Campaign sponsored by Cephalon Pharmaceuticals, VA Medical Center, Memphis, TN
July 11, 2006	Alertness Matters, presented as part of the Alertness Matters Awareness Campaign sponsored by Cephalon Inc., Mellon Bank, West Mifflin, PA
July 11, 2006	<i>Alertness Matters</i> , presented as part of the Alertness Matters Awareness Campaign sponsored by Cephalon Inc., Greyhound Lines Inc., Pittsburgh, PA
June 19, 2006	Effects of Insomnia Subtypes on Perceived Health, Mood, and Help- Seeking: Survey of Nursing Professionals, presented at the Associated Professional Sleep Societies Meeting, Salt Lake City, UT
June 7, 2006	Alertness Matters, presented as part of the Alertness Matters Awareness Campaign sponsored by Cephalon Inc., Batavia VA Facility, Batavia, NY
June 6, 2006	Alertness Matters, presented as part of the Alertness Matters Awareness Campaign sponsored by Cephalon Inc., VA Medical Center, Buffalo, NY
May 4, 2006	<i>Alertness Matters</i> , presented as part of the Alertness Matters Awareness Campaign sponsored by Cephalon Inc., Delta AirElite Business Jets, Hebron, KY
Oct 19, 2005	Alertness Management, presented at the 5 <sup>th</sup> Annual Safety & Security Conference, hosted by Greyhound Lines, Inc., Dallas, TX
May 12, 2005	<i>Ocular-Based Fatigue Management Systems: Demonstrating Scientific Validity and Feasibility, presented at the Aerospace Medical Association Meeting, Kansas City, MO.</i>
May 12, 2005	Ocular Measures of Fatigue and Extended Wakefulness, presented at the Aerospace Medical Association Meeting, Kansas City, MO.
May 10, 2005	<i>The Effects of Ultra Long-Range Flights on the Alertness and Performance of Aviators,</i> presented at the Aerospace Medical Association Meeting, Kansas City, MO.
May 10, 2005	<i>Extending the Duty Day: Effects on the Operational Performance of Commercial Aviators</i> , presented at the Aerospace Medical Association Meeting, Kansas City, MO.
April 9, 2005	Fatigue & Jetlag – Causes & Countermeasures, presented at the
	25 <sup>th</sup> Annual Scientific Meeting of the Association of Aviation Medical Examiners, Droitwich, UK
March 29, 2005	Panel Presenter, Biomonitoring for Physiological and Cognitive Performance During Military Operations, Orlando, FL
Oct 4, 2004	<i>Alertness and Operational Performance</i> , presented at the International Management Conference, hosted by the International Air Transport Association, Cairo, Egypt

Sept 22, 2004	Panel Presenter, <i>Sleep in Space</i> , as part of the Panel "Human Factors Engineering for Space Exploration Missions" (Aerospace
	Systems Technical Group), presented at the 48 <sup>th</sup> annual meeting of the Human Factors and Ergonomics Society, New Orleans, LA
Aug 10, 2004	Panel Presenter, <i>Slow Eye Movements as a Potential Measure of</i> <i>Oculomotor Fatigue and Alertness</i> , presented at the Higher Order Cognition in Warflighters, hosted by the US Army's Commanding General of Medical Research and Materiel Command, St. Pete Beach, Fl
June 16, 2004	<i>Challenges of Fatigue and Jetlag</i> , presented at the International Air Transport Association's Cabin Health Conference, Geneva, Switzerland
June 10, 2004	<i>Evaluation of the NASA Education and Training Module on Alertness</i> <i>Management: Knowledge Gained an Organizational Impact</i> , presented at the Associated Professional Sleep Societies Meeting, Philadelphia, PA
June 10, 2004	Feasibility of an Automated Drowsiness Monitoring Device on the Flightdeck, presented at the Associated Professional Sleep Societies Meeting, Philadelphia, PA
May 5, 2004	Comparison of Sleep/Wake Cycles and Fatigue/Alertness Ratings Between Duty- Work Days and Nonduty-Nonwork Days of F-117 and HH-60 Aircrew, presented at the Aerospace Medical Association Meeting, Seattle, WA
May 01, 2004	<i>Fatigue Management Technologies: Strengths and Weaknesses</i> , presented at the U.S. Department of Justice, National Institute's of Justice Workshop on Police Fatigue and Long Work Hours, Baltimore, MD
Jan 5, 2004	<i>Foundation for the Development of an Astronaut Scheduling Assistant,</i> presented at the Habitation Conference, Orlando, FL.
Dec 3, 2003	Sleep, Performance, and Alertness Management, presented at the New Directions in Behavioral Health: Integrating Research and Application Conference; hosted by NASA Johnson Space Center, Davis, CA
Oct 5, 2003	Panel Presenter and Co-Chair, <i>Managing Alertness in Business Aviation:</i> <i>Enhancing Flight Safety</i> , presented at the National Business Aviation Association Workshop, Orlando, FL
June 11, 2003	Alertness Assessment: Slow Eyelid Closures, presented at the Cognitive, Psychophysiological, and Behavioral Monitoring for the Military Field Applications Workshop, Cincinnati, OH
June 5, 2003	Morningness-Eveningness Assessed in Commercial Aviators, presented at the Associated Professional Sleep Societies Meeting, Chicago, IL
May 5, 2003	<i>Evaluation of a Web-based Fatigue Education and Training Module in the General Aviation (GA) Population</i> , presented at the Aerospace Medical Association Meeting, San Antonio, TX.

Jan 18, 2003	<i>Fatigue in Aviation Operations</i> , presented at the Great Lakes International Aviation Conference, hosted by the FAA. East Lansing, MI
Jan 13, 2003	Development of the Astronaut scheduling Assistant: Biomathematical Model to Predict Alertness and Fatigue In Astronauts, presented at the Bioastronautics Investigators' Workshop, Galveston, TX
Sept 11, 2002	<i>Pilot Alertness and Fatigue</i> , presented at the Safety Stand Down Conference for AirStar Helicopters. Grand Canyon, AZ
Aug 4, 2002	<i>Operational and Preventive Fatigue Countermeasures</i> , keynote address, Queensland Mining Industry Health & Safety Conference, Townsville, Australia
June 12, 2002	Stability of Behavioral Alertness in Pilots Repeating Simulated Night Flights, presented at the Associated Professional Sleep Societies Meeting, Seattle, WA
June 12, 2002	Flight Deck Light Exposure of Pilots During Long-Haul Trips Between the United States and Japan, presented at the Associated Professional Sleep Societies Meeting, Seattle, WA
May 8, 2002	Biobehavioral Differences in Alertness of Pilots During a 6-hr Simulated Night Flight, presented at the Aerospace Medical Association Meeting, Montreal, Canada
March 5, 2002	<i>Importance of Recuperative Sleep in the Bunk</i> , presented at the Ultra-Long Range Operations Workshop, hosted by the Flight Safety Foundation and Boeing Inc., Paris, France
June 12, 2001	<i>Crew Alertness in Ultra Long Range Operations</i> , presented at the Ultra- Long Range Operations Workshop, hosted by the Flight Safety Foundation and Boeing Inc., Washington DC
June 10, 2001	A NASA Education Training Module on alertness management: A survey of implementation and application, presented at the Associated Professional Sleep Societies Meeting, Chicago, IL
June 10, 2001	Factors Associated with Behavioral Alertness in Pilots Flying Simulated Night Flights, presented at the Associated Professional Sleep Societies Meeting, Chicago, IL
May 24, 2001	<i>The Fatigue Countermeasures Group: An Overview,</i> presented at the Alertness Management in Flight Operations: Enhancing Aviation Safety, hosted by the Air Transport Association (ATA), Washington DC
Aug 28, 2000	Automated Alertness Monitoring on the Flightdeck, Boeing Aerospace Corp, Seattle, WA
July 28, 2000	<i>Fatigue Countermeasures on the Flightdeck</i> , presented to the Chief, Head Scientific Officer and Senior Scientific Office of RF DM State Scientific-

	Research Testing Institute of Military Medicine, Col. USHAKOV Igor Borisovich, Moffett Field, CA
June 21, 2000	Drowsiness and Behavior in Response to PERCLOS Feedback during Simulated Nighttime Drives, presented at the Associated Professional Sleep Societies Meeting, Las Vegas, NV
Feb 28, 2000	<i>Circadian Rhythms and Circadian Desynchronosis</i> , presented at the Disaster Stress Management, hosted by United States Coast Guard, Portland, MA
June 23, 1999	<i>Effects of Auditory-Vibrotactile Alerts on Performance in Sleepy Subjects, presented at the Associated Professional Sleep Societies Meeting,</i> Orlando, FL
June 20, 1999	Panel Presenter, <i>Managing Fatigue by Drowsiness Detection Technologies:</i> <i>the Importance of Validation Testing</i> , presented at the Fourth Annual Trainee Symposium Series, Association of Professional Sleep Societies
	(APSS) 13 <sup>th</sup> Annual Meeting, Orlando, FL
June 2, 1999	PERCLOS Predicts both PVT Lapse Frequency and Cumulative Lapse Duration, presented at the Associated Professional Sleep Societies Meeting, Orlando, FL
May 17, 1999	<i>Effectiveness of In-flight Activity Breaks as Fatigue Countermeasures During a Simulated Night Flight,</i> presented at the Aerospace Medical Association Meeting, Detroit, MI
Feb 9, 1999	Scientific evidence for PERCLOS as an objective monitor of alertness, Boeing Commercial Airplane Group, Human Factors Division, Renton, WA
July 17, 1998	Vigilance performance validation of new technologies for fatigue monitoring, Third Annual Review of Air Force Office of Scientific Research Partnership for Research Excellence Transition (AFOSR PRET) Center, Countermeasures for Jet Lag and Sleep Deprivation, Harvard University, MA
June 21, 1998	New Drowsiness Detection Technologies Testing their Validity to Track Hypovigilance, presented at the Associated Professional Sleep Societies, New Orleans, LA
May 20, 1998	<i>Technological solutions to fatigue management: A controlled double – blind validation trial on six technologies,</i> Boeing Commercial Airplane Group, Human Factors Division, Seattle, WA
May 19, 1998	Technological Solutions to Fatigue Management: A Controlled Double- Blind Validation Trial on Six Technologies, presented at the Aerospace Medical Association Meeting, Seattle, WA

Feb 27, 1998	Validation of Biobehavioral Monitors for Detecting Drowsy Driving, presented at NIH Symposium: Bioengineering: Building the Future of Biology and Medicine, Bethesda, MD
Feb 20, 1998	Evaluation of Techniques for Ocular Measurement as an Index of Fatigue and as the Basis for Alertness Management: Final Report on Experiment on Performance-Based Validation of Technologies and Experimental Study of Effects of Alerting Stimuli, National Highway Traffic Safety Administration, U.S. Department of Transportation, Washington, DC
May 07, 1997	<i>Countermeasures for jet lag and sleep deprivation,</i> Basic Research in the National Defense, US House of Representatives, Washington DC

## **Organizing Roles in Scientific Meetings:**

May 2 – 3, 2011	Member, Organizing Committee, Advancing Public Health and Safety, It's all about Behavior: Celebrating Contributions of Dr. Joseph V. Brady and 50 Years of the Institutes for Behavioral Resources, Inc.
May 5, 2011	Organizer & Co-Chair, <i>Panel: You Sound Sleepy: Speech and Voice Indicators of Sleepiness and Fatigue Levels</i> , sponsored by the Aerospace Human Factors Association, at the annual Aerospace Medical Association (AsMA) Scientific Meeting, Anchorage, AK
May 11, 2010	Organizer & Co-Chair, <i>Panel: Fatigue Risk Management Systems (FRMS):</i> <i>Enhancing Aviation Safety: Part I</i> , sponsored by the Aerospace Human Factors Association, at the annual Aerospace Medical Association (AsMA) Scientific Meeting, Phoenix, AZ
May 11, 2010	Organizer & Co-Chair, <i>Panel: Fatigue Risk Management Systems (FRMS):</i> <i>Enhancing Aviation Safety: Part II</i> , sponsored by the Aerospace Human Factors Association, at the annual Aerospace Medical Association (AsMA) Scientific Meeting, Phoenix, AZ
May 4, 2009	Organizer & Co-Chair, <i>Panel: Enhancing Astronaut Performance During Spaceflight Using Human-Centered Technologies</i> , sponsored by the Aerospace Human Factors Association, at the annual Aerospace Medical Association (AsMA) Scientific Meeting, Los Angeles, CA
June 17 – 19, 2008	Organizer & Co-Chair, Aviation Fatigue Management Symposium: Partnerships for Solutions, sponsored by the Federal Aviation Administration (FAA), Tysons Conner, VA
May 9 – 10, 2008	Organizer & Co-Chair, Fatigue and Work Seminar, Big Sleep Show, Chicago, IL
Feb 20 - 21, 2008	Organizer & Chair, <i>Individual Differences Workshop: Issues in Modeling of Alertness and Performance</i> , sponsored by the U.S. Army Medical Research and Material Command, Baltimore, MD

May 10, 2005	Organizer & Co-Chair, <i>Panel: ULR – Extending the Duty Day: Effects on the Operational Performance of Commercial Aviators – Part I,</i> sponsored by the Aerospace Human Factors Association, at the annual Aerospace Medical Association (AsMA) Scientific Meeting, Kansas City, MO
May 10, 2005	Organizer & Co-Chair, <i>Panel: ULR – Extending the Duty Day: Effects on the Operational Performance of Commercial Aviators – Part II</i> , sponsored by the Aerospace Human Factors Association, at the annual Aerospace Medical Association (AsMA) Scientific Meeting, Kansas City, MO
May 12, 2005.	Organizer & Co-chair, <i>Panel: Ocular Measures of Fatigue and Extended Wakefulness Part I</i> , sponsored by the Aerospace Human Factors Association, at the annual Aerospace Medical Association (AsMA) Scientific Meeting, Kansas City, MO
March 12, 2005	Organizer & Co-chair, <i>Panel: Ocular Measures of Fatigue and Extended Wakefulness Part II</i> , sponsored by the Aerospace Human Factors Association, at the annual Aerospace Medical Association (AsMA) Scientific Meeting, Kansas City, MO
June 13 – 14, 2002	Organizer & Co-Chair, <i>Fatigue and Performance Mathematical Modeling</i> <i>Workshop</i> , sponsored by the National Aeronautics and Space Administration, U.S. Department of Defense, U.S. Army Medical Research and Materiel Command, Office of Naval Research, Air Force Office of Scientific Research, and U.S. Department of Transportation, Seattle, WA

## **Bibliography:**

#### Research Publications, peer reviewed:

- 1. Grace, R., Guzman, A., Staszewski, J., Dinges, D. F., Mallis, M., Peters, B. A. (1998). The Carnegie Mellon truck simulator, a tool to improve driving safety. *Society of Automotive Engineers International: Truck and Bus Safety Issues*, SP1400, 1-6.
- 2. Neri, D. F., Oyung, R. L., Colletti, L. M., Mallis, M. M., Tam, P. Y., Dinges, D. F. (2002). Controlled breaks as a fatigue countermeasure on the flight deck. *Aviation, Space, and Environmental Medicine*, 73(7), 654-664.
- 3. Mallis, M. M., Mejdal, S., Nguyen, T. T., Dinges, D. F. (2004). Summary of the key features of seven biomathematical models of human fatigue and performance. *Aviation, Space, and Environmental Medicine*, *75*(3), A4-A14.
- 4. Friedl, K. E., Mallis, M. M., Ahlers, S., Popkin, S., Larkin, W. (2004). Research Requirements for operational decision making using fatigue and performance models. *Aviation, Space, and Environmental Medicine*, 75(3), A192-A199.
- 5. Mallis, M. M., DeRoshia, C. W. (2005). Circadian rhythms, sleep, and performance in space. *Aviation, Space, and Environmental Medicine*, *76*(6, Suppl.), B94-107.
- 6. Rosekind, M. R., Gregory, K. B., Mallis, M. M. (2006). Alertness management in aviation operations: Enhancing performance and sleep. *Aviation, Space, and Environmental Medicine*, 77(12), 1256-65.
- 7. Mallis, M. M., Brandt, S. L., & Rosekind, M. R. (2007). The challenges of modern day work

schedules: Effects on alertness, performance, safety, and health. *International Journal of Sleep Disorders*, 1(1), 2-8.

- Myers, J. G., Lewandowski, B. E., Brooker, J. E., Hursh, S. R., Mallis, M. M., & Caldwell, J. L. (2008).Estimating the need for medical intervention due to sleep disruption on the international space station, Paper ID: 1499, 59th International Astronautical Congress 2008, Space Life Sciences Symposium (A1.)
- Caldwell, J. A., Mallis, M. M., Caldwell, J. L., Michel, A. P., Miller, J. C., & Neri, D. F. (2009). Fatigue Countermeasures in Aviation, *Aviation, Space, and Environmental Medicine*, 80 (1), 29-59.
- Rosekind, M. R., Gregory, K. B., Mallis, M. M., Brandt, S. L., Seal, B., & Lerner, D (2010). The Cost of Poor Sleep: Workplace Productivity Loss and Associated Costs, *Journal of Occupational and Environmental Medicine*, 52(1), 91-98.

### **Book Chapters and Reviews:**

- Dinges, D. F., & Mallis, M. M. (1998). Managing fatigue by drowsiness detection: Can technological promises be realized? (Chapter 11). In L. Hartley, (Ed.), *Managing fatigue in transportation* (pp. 209-229). Kidlington, Oxford, UK: Elsevier Science Ltd.
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