

CURRICULUM VITAE FOR CWRU SCHOOL OF MEDICINE

MAY 1, 2021

PERSONAL INFORMATION

Decker, Michael John
PhD

Case Western Reserve University, School of Medicine
Department of Physiology and Biophysics
Robbins E510; Mail code 4970
216-368-2467
mjd6@case.edu

2180 South Overlook Rd.
Cleveland Heights, OH 44106
770-316-2392
mdecker01@gmail.com

EDUCATION & TRAINING

Education

California College of Health Sciences, Salt Lake City, UT
CRTT, Respiratory Care
08/1982-05/1984

Case Western Reserve University, Cleveland, OH
BSN, Nursing
08/1991-94/1994

Case Western Reserve University, Cleveland, OH
PhD, Anatomy/Neuroscience
08/1995-05/1999

PhD Thesis

Wakefulness and Sleep: Intrinsic modulators of the Suprachiasmatic Nucleus
Kingman P. Strohl, Susan Redline, Musa Haxhiu, Joseph LaManna, Joseph Miller, David B. Rye

ACADEMIC APPOINTMENTS

Associate Professor / Department of Physiology & Biophysics; School of Medicine
Case Western Reserve University, Cleveland, OH
07/2018-present

Associate Professor (Secondary Appt) / Department of Neurosciences; School of Medicine
Case Western Reserve University, Cleveland, OH
07/2014-present

Associate Professor (Secondary Appt) / Department of Physiology & Biophysics; School of Medicine
Case Western Reserve University, Cleveland, OH
07/2014-06/2018

Associate Professor / Bolton School of Nursing
Case Western Reserve University, Cleveland, OH
07/2013-06/2018

Associate Professor / Byrdine F. Lewis Chair in Nursing
Georgia State University, Atlanta, GA
07/2010-05/2013

Assistant Professor / Department of Neurology; School of Medicine
Emory University, Atlanta, GA
08/2002-09/2008

Instructor / Department of Neurology; School of Medicine
Emory University, Atlanta, GA
01/2000-07/2002

Instructor / Department of Anatomy; School of Medicine
Case Western Reserve University, Cleveland, OH
09/1999-11/1999

PROFESSIONAL APPOINTMENTS

Senior Research Physiologist
Naval Medical Research Unit- Dayton
Department of Environmental Physiology
Dayton, OH
08/2018-present

Senior Service Fellow (Team Leader)
Centers for Disease Control and Prevention
Viral Exanthems & Herpesvirus Branch
Atlanta, GA
08/2008-01/2010

Visiting Scientist (30% annual effort)
Centers for Disease Control and Prevention
Viral Exanthems & Herpesvirus Branch
Atlanta, GA
11/2002-08/2008

University Hospitals, Cleveland, OH
Registered Nurse, Pulmonary Medicine
07/1994-07/1995

ADDITIONAL CAREER DEVELOPMENT

Leadership Development

Vistage International
CEO Coaching and Peer Advising (Leadership Training)
06/2006-06/2008

Personal Mentoring Program
Mentors: S. Truett Cathy; Mohammed Ali; Robert H. Waterman, Jr.
08/2002-09/2005

Clinical Development

Atlanta School of Sleep Medicine & Technology
Polysomnography Training Course—Sleep Medicine Board preparation
07/2006-08/2006

CERTIFICATION & LICENSURE

Certification

American Board of Sleep Medicine
Diplomate #3543
2006-present

Licensure

Ohio Medical Board
Respiratory Care Professional, RCP.2370
1990-2022

Ohio Nursing Board
Registered Nurse, RN.252216
1994-2021

Georgia Board of Nursing
Registered Nurse, RN182947
2006-2019

Georgia Composite Medical Board
Respiratory Care Professional, #6597
2006-2016

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Ohio Thoracic Society
Member
1990-1993

American Association of Respiratory Care
Member
1990-1996

Sleep Research Society
Member
2003-2017

Aerospace Medical Association
Member
2018-present

American Physiological Society
Member
2018-present

PROFESSIONAL SERVICES

Editorial Board Membership

Sleep Diagnosis and Therapy
2007-2010

Frontiers in Neurology: Sleep and Chronobiology, Associate Editor
2010-2015

Sleep and Breathing, Editorial Board
2013-present

Spokesman for the American Academy of Sleep Medicine
2012-2014

Manuscript Reviewer

Journal of the American Association of Respiratory Care
07/1987-07/1993

Neuroscience
08/2000-present

Brain Research
03/2000-05/2019

Sleep
11/2000-present

Sleep & Breathing
12/1996-present

Sleep Science
04/2015-present

Cerebral Cortex
02/2021-present

Study Sections/ Grant Review Committees

National Institute of Health
General Clinical Research Center site visit/ Ad-hoc reviewer
11/2004

National Science Foundation
Neuroscience Cluster/ Primary reviewer
06/2009-09/2009

National Institutes of Health
Heart Lung & Blood/ Scientific Review Group: ZHL1 CSR-N S1/ Primary Reviewer
05/2010

Canadian Institute of Health Research
Team Grants: Sleep and Circadian Rhythms
09/2010

Ministry of Science and Technological Development of the Republic of Serbia
Neuroscience/ Primary reviewer
10/2010

Centers for Disease Control and Prevention: Chairperson Epilepsy Coordinating and Collaborating Centers
Special Interest Project 10-037: Examining the impact of cognitive impairment on co-occurring chronic conditions
Special Interest Project 10-039: Epidemiologic follow-up study of newly diagnosed epilepsy
06/2012

National Institutes of Health
Developmental Brain Disorders/ Primary reviewer
10/2014 & 12/2015

National Institutes of Health
National Institute of Nursing Research/ Ad-hoc reviewer
10/2015 & 03/2017

Canadian Institute of Health Research
Team Grants: Sex influences on biologic outcome measures
12/2017

National Institutes of Health
National Institute of General Medical Sciences / Ad-hoc reviewer
06/2018-06/2019

Research Südtirol/Alto Adige
Autonomous Province of Bolzano (Italy) / Reviewer
07/2020

National Institutes of Health
Brain Disorders and Clinical Neuroscience Integrated Review Group BDCN-E(55) / Reviewer
10/2020

Advisory Groups

SiMed Medical – Seattle, WA
Consultant
06/1988-07/1990

Medcare/Flaga – Iceland
Consultant
04/2004-03/2005

Paraxel Intl – Newton, MA
Consultant
08/2005-03/2007

Invacare – Cleveland, OH
Consultant
10/2005-10/2007

COMMITTEE SERVICE

International

North Atlantic Treaty Organization (NATO)
Science & Technology Working Group: Physiologic Events/ Member
08/2019-present

National

American Association of Respiratory Care
Cardio-Pulmonary Clinical Guidelines Task Force
1993-1996

Sleep Research Society
Research & Education Committee/ Member
2003-2005

Regional / Midwest

Ohio Thoracic Society
Membership Committee Member/ Conference Planning Committee Member
10/1991-09/1993

Ohio Physiological Society
Cleveland, OH 2020 Conference Planning Committee Member
12/2019-present

Educational Committees

Emory University
Information Technology Group, Department of Neurology/ Committee Chair & Director
07/2003-06/2006

Georgia State University
Faculty Senate: Research Committee / Campus Planning & Development Committee
07/2011-06/2013

CWRU Service

CWRU Faculty Spotlight Presentation
A Hard Day's Night
Invited Guest of President Barbara Snyder, 2/11/2014

Representative Marcy Kaptur and United States Air Force (USAF) advisors
Biomarkers of Fatigue and Human Performance
Lakeland Community College /Subcommittee on Defense Preparation, 8/19/2014

CWRU Trustee Partnership Presentation
Sleep Disorders, Brain Dysfunction, and Life Above 50,000 feet
Invited Guest of President Barbara Snyder, 02/19/2016

Co-hosted a One-Day Meeting of CWRU leadership at Wright-Patterson Air Force Base. CWRU attendees included Provost (Bud Baeslack, PhD), CWRU Vice President for Research & Technology Management (Suzanne Rivera), and Director for the Institute of Origins (Glenn Starkman, PhD) that culminated in an Educational Agreement Program EPA-NAMRU-D-18-10323 between CWRU and WPAFB, 04/13/2017.

Co-hosted a showcase of CWRU research to USAF leadership and scientists from WPAFB. Laboratory tours with faculty research demonstrations occurred across the CWRU campus. Poster sessions and meetings between CWRU faculty and USAF scientists were held in Tinkham Veale 01/17 & 01/18/2017.

Co-hosted a one-day scientific exchange between multiple CWRU scientists with USAF and US Navy scientists, in Dayton at a facility adjacent to WPAFB, 09/28/2017.

Hosted a One-Day Meeting at CWRU between Naval Medical Research Unit-Dayton Leadership (CMDR Reese Lee, MD and Richard Arnold, PhD) with CWRU leadership Provost (Bud Baeslack, PhD), School of Medicine Dean (Pamela Davis, MD), Physiology & Biophysics Department Chair (Walter Boron, MD, PhD), 2/21/2018.

Inaugural Symposia of Aerospace Physiology
Named Director of the Center for Aerospace Physiology
Department of Physiology & Biophysics, 04/2019

Library of Congress CWRU Alumni event
Enhancing Pilot Performance and Resiliency to Extreme Environments
Washington, DC 06/2017, 06/18/2019

Presentation to Congressional subcommittee chaired by Congressman Pascrell and Congressman Bacon
Acquired Brain Injury and Postnatal Hypoxia
Washington, DC 06/19/2019

HONORS & AWARDS

Bolton Scholarship
Case Western Reserve University
08/1991-08/1993

Undergraduate Research Stipend, Genetic epidemiology studies at high altitude (Tibet)
National Geographic
06/1991

Undergraduate Research Stipend, Genetic epidemiology studies at high altitude (Bolivia)
National Geographic
06/1993

Undergraduate Research Stipend, Genetic epidemiology studies at high altitude (Ethiopia)
National Geographic
06/1994

Excellence in Anatomy
Stearns Foundation Award
05/1999
Research Excellence Award
American Professional Sleep Societies
06/1999

Nominee: J. Bruce Jackson, MD Award for Excellence in Undergraduate Mentoring
Case Western Reserve University
05/2015

Mary Kay Lehman Award for Outstanding Instructor
Case Western Reserve University, Bolton School of Nursing
05/2016

TEACHING ACTIVITIES

Curriculum/ Course Development at CWRU

1. SAGES USSO288 - Spirits and Synapses - Case Western Reserve University, 2015-2018 Fall semester, 50 hours to create, Undergraduate students
2. PHOL 614 - Sleep Physiology, Case Western Reserve University, 01/2015-05/2015; 06/2019-08/2019; 06/2020-07/2020; 01/2021-present, 60 hours to create, Masters in Medical Physiology students

Invited Lectures

International

1. Neurochemical and Behavioral Correlates of Neonatal Intermittent Hypoxia” Laboratory Animal Science Meeting, Tokyo, Japan, Guest Speaker, 09/2003
2. Long Term Neurochemical and Behavioral Outcomes of Intermittent Hypoxic Insults During Early Brain Development. Institute de Sono, Sao Paulo, Brazil, Guest Speaker, 10/2005
3. Convention of Sleep and Disorders of Sleep, Bombay, India, Co-Chair, 02/2005
4. Electroencephalography in Safety Pharmacology, Tokyo, Japan, Guest Speaker, 09/2005
5. Neurochemical Outcomes of Sleep Apnea, Tokyo, Japan, Guest Speaker, 04/2005
6. Methods for Diagnosing Excessive Daytime Sleepiness, Sao Paulo, Brazil, Guest Speaker, 10/2005
7. Sexual Dysfunction in Sleep Apnea, Curitiba, Brazil, Guest Speaker, 07/2005
8. Sleep Apnea Associated Cognitive Decline, Curitiba, Brazil, Guest Speaker, 07/2005
9. Use of Computational Medicine to Advance Understanding of Psoriasis and Comorbidities that Promote Inflammation and CVD, International Workshop of Dermatology, CWRU, Guest Speaker, 06/2014
10. The Impact of Poor Sleep on Well-Being in People with Dermatological Conditions. The 23rd World Congress of Dermatology, Vancouver, Canada, Guest Speaker, 09/2015
11. Neuroimaging of the Sleep Disordered Patient: Findings & Implications. Chinese Sleep Meeting, Peking University, Guest Speaker, 11/2018
12. MRI Imaging of Persons After Exposure to Hypobaric Hypoxia. World Sleep Meeting, Vancouver CA, Invited Speaker, 09/2019
13. Neurobiologic Sequelae of Nocturnal Hypoxemia. International Hospital, Peking, China, Invited Speaker, 11/2019
14. Metabolic Outcomes of Short Sleep. Peking University, China, Invited Speaker, 11/2019
15. Oxygen: More is Not Better. Chinese Sleep Meeting, Binzhou City, China, Invited Speaker, 11/2019
16. Brain Outcomes of Hyperoxia and Hypobaria. NATO Köln: Butzweilerhof Airfield, Invited Speaker, 02/2020

National

1. Controversial Issues in Home Diagnostic Studies for Sleep Related Respiratory Disorders. The American Association of Respiratory Care, Respiratory Care Journal Conference, St. Petersburg Fla, Workshop, 05/1993

2. Intermittent Hypoxia Across the Lifespan: Neuropathologic Underpinnings of Executive Dysfunction” Association of Professional Sleep Societies. Seattle, WA. Symposia Chair, 06/2002
3. Neonatal Intermittent Hypoxia Impairs Dopamine Signaling and Executive Functioning. Stanford Research Institute, San Francisco, CA, Guest Speaker, 08/2004
4. Forgetful and Unable to Stay Focused? You may be Hypoxic While Asleep. National Meeting of the Association of Polysomnographic Technicians, Philadelphia, PA. Guest Speaker, 06/2004
5. Preventing Sudden Infant Deaths. First Candle, Atlanta, GA. Guest Speaker, 10/2005
6. The Role of Electroencephalography in Safety Pharmacology. American College of Safety Pharmacology, San Diego, USA. Guest Speaker, 09/2006
7. The Biological Basis of ADHD. Pediatric Sleep Medicine Conference, Amelia Island, FL, USA. Guest Speaker, 04/2006
8. The Utility of Electroencephalography in Safety Pharmacology. American College of Clinical Toxicology, NC, USA, Guest Speaker 11/2007
9. Apnea Induced Executive Dysfunction: Is dopamine the Culprit or Unwitting Scapegoat? University of Illinois, Chicago, Guest Speaker, 01/2007
10. Performing Clinical Research in a Sleep Disorders Center. American Academy of Sleep Medicine management series, Florida, Guest Speaker, 02/2008
11. Owning & Operating a Sleep Disorders Center. American Academy of Sleep Medicine Management series, Florida, Guest Speaker, 02/2008
12. Electroencephalography in Safety Pharmacology. Charles Rivers “MASS PHYSIO” Boston, MASS, Guest Speaker, 04/2008
13. Sleep Pathology Contributing to Hypersomnolence in Georgia. Future of Clinical Sleep Medicine, Boston, MA, Panel, 09/2008
14. Persistent Fatigue in Chronic Fatigue Syndrome: A manifestation of Cortical Hypoarousal? Lake Arrowhead NIH sponsored Sleep Workshop, UCLA, CA, Guest Speaker, 09/2008
15. Hypersomnolence and Sleep Related Complaints in Metropolitan, Urban, and Rural Georgia. Lake Arrowhead NIH sponsored Sleep Workshop, UCLA, CA, Guest Speaker, 09/2008
16. Prevalent Sleepiness: A Population-Based Study. NHLBI, NIH, Bethesda, MD. Guest Speaker, 04/2009
17. Translating Preclinical Research to the Public Health Agenda: Sleep Complaints as Biomarkers of CNS Dysfunction. Battelle Eastern Science & Technology Center, Aberdeen, MD, Guest Speaker 07/2009
18. Does Poor Sleep Make Us Fat? American Academy of Dental Sleep Medicine, Las Vegas, NV., Guest Speaker, 06/2010
19. Obesity, OSA and the Airway: Implications for Oral Appliance Therapy and the Impact of Weight Loss. American Academy of Dental Sleep Medicine, Las Vegas, NV, Guest Speaker, 06/2010
20. Sleep Disorders in Chronic Fatigue Syndrome: Cause, Consequence, or Red Herring. Sleep epidemiology program. Harvard Brigham & Women’s Hospital, Boston, MA, Guest Speaker, 06/2012
21. State-of-the-Art: Hypoglossal Nerve Stimulation in Obstructive Sleep Apnea. American Academy of Dental Sleep Medicine, Boston, MA, Guest Speaker, 06/2012
22. Biomarkers of Sleep: Post Traumatic Stress Disorder. Lake Arrowhead NIH-sponsored Sleep Workshop, UCLA, CA, Panel Chair, 09/2012
23. A Future Role for Pharyngeal Stimulation Therapy for Mild and More Severe OSA. American College of Chest Physicians, Guest Speaker, 10/2012, Atlanta, Georgia

24. REM Sleep Behavior Disorder as a Predictor of Neurodegenerative Disease & Establishing Sleep Disorder & Chronic Inflammation Phenotypes in CFS. UCLA-NIH Lake Arrowhead, CA Neuroscience and Sleep Workshop. Guest Speaker, 09/2013
25. Establishing Chronic Fatigue Syndrome Phenotypes with Unique Molecular and Electrophysiological Markers – Symposia Chair. Council for the Advancement of Nursing Science. Washington, DC. Guest Speaker, 09/2014
26. Use of Computational Medicine to Advance Understanding of Psoriasis and Comorbidities that Promote Inflammation and CVD. International Workshop hosted by Department of Dermatology, CWRU, 10/2014
27. The Basic Science of Sleep, Wakefulness and Upper Airway Tone. American Academy of Dental Sleep Medicine, Denver, CO, Guest Speaker, 06/2016
28. Neuroimaging in Self-Management. Preconference workshop, Midwest Nursing Research Society. Milwaukee, WI., Guest Speaker, 03/2016
29. Neuroimaging of the Sleep Disordered Patient: Findings and Implications. American Academy of Sleep Medicine. Boston, MA., Guest Speaker, 06/2017
30. The Effect of Hyperoxia Upon Neural Function. COPE - Fighter Pilot Summit. Guest Speaker, 11/2018
31. Paradoxical Hyperoxia: The Fifth Type of Hypoxia? Aerospace Medical Association 90th Annual Scientific Meeting: Aerospace Medicine sans Frontières, Las Vegas NV, Symposia Speaker, 05/2019
32. Drug Repurposing Informed by Mammalian Models of Hypoxia, Epilepsy and Neurodegeneration. MERCK, West-Point, PA, Guest Speaker, 05/2019
33. Sorties and Super Bowls: Insights into Mechanisms of Post Flight Fatigue. COPE - Fighter Pilot Summit. Guest Speaker, 12/2019

Regional

1. Pathophysiology & Interventions of Obstructive & Central Sleep Apnea. Georgia Dental Sleep Society, GA. USA, Guest Speaker, 04/2006
2. Long Term Behavioral and Neurochemical Sequelae Outcomes Attributed to Perinatally Occurring Hypoxic Insults. Dekalb Medical Center, Atlanta GA, Guest Speaker, 02/2011
3. Neuroprotective Strategies to Mitigate Neurochemical Sequelae Attributed to Perinatally Occurring Hypoxic Insults. Dekalb Medical Center, Atlanta GA, Guest Speaker, 02/2012
4. Establishing Fatigue Phenotypes with Unique Molecular and Electrophysiological Markers. Health and Human Performance Research Summit. Dayton, Ohio, Guest Speaker, 05/2015

Local

1. Noninvasive Ventilation: Frances Payne Bolton Symposia on Critical Care Techniques. University Hospitals of Cleveland, Ohio, Guest Speaker, 09/1994.
2. Neurochemical and Executive Dysfunction Following Neonatal Intermittent Hypoxia. Case Western Reserve University, Cleveland, Ohio, Guest Speaker, 03/2004.
3. Applications of Chaos Theory in Heart Rate and Respiratory Algorithms, Cleveland Clinic, Ohio, Guest Speaker, 04/2006.
4. Chan JM, **Decker MJ**. A role for ApoA2 in cognition. Intersections Fall Symposium. Case Western Reserve University Support of Undergraduate Research and Creative Endeavors, SOURCE, Cleveland OH, 12/2016.
5. Ziganti AM, Abdollahifar A, Flak T, Galan R, Flask C, Damato EG, **Decker MJ**. Phenotypic variation in response to a hyperoxic environment. Intersections Spring Symposium. Case Western Reserve University Support of Undergraduate Research and Creative Endeavors, SOURCE, Cleveland OH, 04/2018.

Grand Rounds

1. The Influence of Environmental Illumination and Sleep upon Circadian Rhythms. Neurology Grand Rounds University Hospitals of Cleveland, OH, Guest Speaker, 09/1999.

2. The Effects of Wakefulness and Sleep upon the Circadian Pacemaker Pediatric Neurology Grand Rounds University Hospitals of Cleveland, OH, Guest Speaker, 10/1999.
3. Translating Public Health Research into Improved Patient Outcomes: Improving Recognition & Intervention of Sleep Disorders. Grand Rounds, Good Samaritan Hospital, York, PA, Guest Speaker, 10/2009.
4. Cognitive Dysfunction and Sleep Apnea. Sleep Grand Rounds Cleveland Clinic, Cleveland, OH, Guest Speaker, 07/2014.
5. Hypoxia-induced Brain Dysfunction. Sleep Grand Rounds Cleveland Clinic, Cleveland, OH, Guest Speaker, 08/2014.
6. Translating Public Health Research into Improved Patient Outcomes: Improving Recognition & Intervention of Sleep Disorders. Nursing Grand Rounds MetroHealth Hospital, Cleveland, OH, Guest Speaker, 09/2014.
7. Hypoxia-induced Neuropathology at Sea Level and at 50,000 Feet. Neurology & Sleep Medicine Grand Rounds Emory University, Atlanta, GA, Guest Speaker, 01/2018.
8. White Matter Hyperintensities in Pilots of High-Performance Aircraft. Pulmonary and Critical Care Grand Rounds University Hospitals of Cleveland, OH, Guest Speaker, 05/2018.
9. Neuroimaging's Role in Diagnosing Sleep Related Disorders. Pulmonary and Critical Care Grand Rounds University Hospitals of Cleveland, OH, Guest Speaker, 10/2020.

Other Presentations

1. Schwartz HJ, Arnold JL, **Decker MJ**, Hoekje PL, Strohl KP. Posterior rhinometry as an objective, rapid screening test for nasal obstruction or disease. VIII International Symposium on Infection and Allergy of the Nose: International Rhinology Conference, Baltimore, MD, 06/1989.
2. Cahan C, Arafah B, **Decker MJ**, Arnold JL, Strohl KP. Adrenal steroids in sleep apnea before and after NCPAP treatment. American Review of Respiratory Disease 1991; 143(4):A382. American Thoracic Society, Anaheim, CA, 05/1991.
3. Munger MA, Stanek EJ, Strohl KP, Nair RN, Nara AR, **Decker MJ**, Flaharty KK. Circadian variation in oxygen saturation profiles in chronic mild moderate heart failure. American College of Clinical Pharmacology Annual Meeting, Toronto, Ontario, Canada, 08/1992. American Heart Association 65th Scientific Sessions, New Orleans, LA, 11/1992.
4. Blangero J, Williams-Blangero S, **Decker MJ**, Strohl KP, Brittenham G, Beall CM. Genetic analysis of hypoxic ventilatory response in a high-altitude Tibetan population. American Association of Physical Anthropologists, Research Triangle Park, Durham, NC, 04/1994.
5. Jones KA, Carter S, Shoemaker JT, Solomon IG, Lah J, Levey A, **Decker MJ**. Intermittent hypoxic insults occurring during a period of critical brain development reduce the expression of insoluble beta amyloid within the hippocampus. 9th International Conference on Alzheimer's Disease, Philadelphia, PA, 07/2004.
6. Baharav A, **Decker MJ**, Eyal S, Fuxman Y, Cahan C, Reeves WC. Validation of a novel sleep diagnostic system based on ECG and oxygen saturation. American Thoracic Society Meeting, San Diego, CA, 05/2009.
7. Helvig A, Keating G, **Decker M**. Maternal dietary supplementation with Omega 3 confers neuroprotection to the newborn against hypoxia-induced neurochemical morbidity. Lake Arrowhead Training Workshop in Basic Sleep Research, Los Angeles, CA, 09/2010.
8. Helvig A, **Decker MJ**. Protecting the newborn's brain with Omega 3 fatty acids. Georgia Public Health Association conference, Atlanta, GA, 05/2011.
9. Helvig A, Sawyer N, Escayg A, **Decker M**. Seizure and behavioral phenotyping of the Scn1a mouse model of genetic epilepsy with febrile seizures plus. Southern Nursing Research Society 27th Annual Conference. Little Rock, AR, 02/2013.

10. Lorain Community College—Presentation to Representative Marcy Kaptur & 711th Human Performance Wing leadership. Biomarkers of Fatigue & Cognition, 07/2014.
11. Givens SE, Damato EG, Litman P, **Decker MJ**. Electrochemiluminescence detection and multiplexing technology facilitates reconstitution and measurement of cytokines from dried blood samples. Council for the Advancement of Nursing Science: 2014 State of the Science Conference, Washington DC, 09/2014.
12. **Decker MJ**, Damato EG, Darrah RJ, Strohl KP. Establishing chronic fatigue syndrome phenotypes with unique molecular and electrophysiological markers. Council for the Advancement of Nursing Science: 2014 State of the Science Conference, Washington DC, 09/2014.
13. Damato EG, Sattar A, Darrah RJ, **Decker MJ**. Sleep & circadian mechanisms as mediators of reward system responsiveness to amphetamine. Council for the Advancement of Nursing Science: 2014 State of the Science Conference, Washington DC, 09/2014.
14. **Decker MJ**, Damato EG, Decker DD, Strohl KP. Towards defining hypothalamic and cortical mechanisms through which peroneal nerve simulation attenuates physiologic responses to pain. DARPA ElectRx Proposers' Day, Arlington, VA, 12/2014.
15. Helvig A, Sawyer N, Escayg A, **Decker M**. Examining complementary methods to mitigate hyperactive behavior. Southern Nursing Research Society 29th Annual Conference. Tampa, FL, 02/2015.
16. Damato EG, Carr S, Ponton C, Griswold M, Walter B, Strohl KP, **Decker MJ**. Mapping changes in cortical network activity using integrated high density electroencephalography and functional magnetic resonance imaging. Health and Human Performance Research Summit: Creating Game Changers, Dayton, OH, 04/2015.
17. Life at 70,000 feet and beyond. CWRU Science Slam Auxiliary Program. Republican National Convention, Cleveland, OH, Guest Speaker, 07/2016
18. Damato EG, Flak TA, Ziganti AM, Flask CA, **Decker MJ**. Atrophy within neural networks mediating cognitive function in persons without corresponding neurodegenerative disease. Midwest Nursing Research Society 42nd Annual Research Conference, Cleveland OH, 04/2018.
19. **Decker MJ**, Damato EG, Flak TA, Galan RF, Donnola S, Ziganti AM, Abdollahifar A, Flask CA. Development of multimodal neuroimaging to measure brain responses to differing levels of inspired oxygen and carbon dioxide. Aerospace Medical Association 89th Annual Scientific Meeting: Synergy, The Power of Multidisciplinary Problem Solving, Dallas TX, 05/2018.
20. Mayes RS, **Decker MJ**, Damato EG, Flak TA, Ziganti AM, Abdollahifar A, LaManna JC, Strohl KP, Flask CA. Harbor Seals and Pilots: The impact of high oxygen levels on cerebral perfusion. Aerospace Medical Association 90th Annual Scientific Meeting: Aerospace Medicine sans Frontières, Las Vegas NV, 05/2019.
21. Damato EG, Flak TA, **Decker MJ**, Ziganti AM, Mayes RS, Abdollahifar A, LaManna JC, Strohl KP, Flask CA. Flight, then fight: hyperoxia and increased cognitive function. Aerospace Medical Association 90th Annual Scientific Meeting: Aerospace Medicine sans Frontières, Las Vegas NV, 05/2019.

Trainees / Mentees

High School Summer Interns

1. Anaya N.M. Spencer, Cleveland School of Science & Medicine
06/2018-08/2018
Current: Student at Cuyahoga Community College
2. Elisa Katz, Shaker Heights High School
06/2019-08/2019
Current: Biology major at Temple University, Philadelphia, PA

3. Wiktor Golczak, Mayfield Heights High School
06/2020-08/2020
Current: Accepted to CWRU for Fall 2021; plans to major in Aerospace Engineering

Undergraduate Trainees

1. Karra A. Jones, Emory University (B.S. Chemistry)
09/2003-05/2005
Current: MD, PhD Clinical Associate Professor of Pathology, University of Iowa Health Care
2. Sara Mithani, Case Western Reserve University (B.S.N. Nursing)
08/2014-05/2016
Current: PhD, Postdoctoral Researcher, National Institutes of Health
3. Jessica Chan, Case Western Reserve University (B.A. Biology)
05/2016-12/2016
Current: Doctor of Osteopathic Medicine Student, New York Institute of Technology
4. Treasure Byrge, Walsh University (B.A. Psychology)
06/2018-08/2018
Current: Public Health Associate, Centers for Disease Control & Prevention, Atlanta, GA

Masters Student Trainees

1. Amanda E. Hodges, Georgia State University (Masters in Public Health; served on thesis committee)
01/2010-05/2011
Current: unknown
2. Rebecca New Davenport, CWRU (M.S. Medical Physiology)
08/2018-05/2019
Naval Research Enterprise Intern-Navy Experimental Diving Unit, Panama City, FL, Summer 2019
Current: Enlisting in United States Air Force for Cardiopulmonary lab technician/Respiratory therapist position
3. Will Roeder, CWRU (M.S. Medical Physiology)
06/2019-06/2020
Current: Medical Student, University of Nebraska, Omaha, NE
4. Peter O'Connor, CWRU (M.S. Medical Physiology)
08/2019-05/2020
Current: Operational Paramedic (US Dept of State, Bureau of Diplomatic Security)
5. Lily Norton, CWRU (M.S. Medical Physiology)
08/2019-present
Current: Research Assistant 2, Decker Lab; Medical School Applicant
6. Ian Vannix, CWRU (M.S. Medical Physiology)
08/2020-present
Current: Research Assistant 1, Decker Lab; Medical School Applicant

Predoctoral Trainees

1. Thomas Guillot, Emory University (PhD Neuroscience; served on dissertation committee)
04/2003-05/2004
Current: Assistant Research Professor, Environmental Health Department, Emory University Morris K. Udall Center of Excellence for Parkinson's Disease Research
2. Ashley Helvig Coombe, Georgia State University (PhD Nursing; chaired dissertation committee)

08/2010-05/2012

Current: Clinical Assistant Professor, Nell Hodgson Woodruff School of Nursing, Emory University

3. Sara Taki, CWRU (PhD Physiology & Biophysics; serving on dissertation committee)
08/2020-present
Current: PhD student
4. Raisa Echols, CWRU Biomedical Scientist Training Program (serving as dissertation chair)
01/2019-present
Naval Research Enterprise Intern-Naval Medical Research Laboratory-Dayton, OH. Summer 2019
Current: BSTP-PhD student
5. Cassandra Barone, CWRU Biomedical Scientist Training Program (serving as dissertation chair)
08/2020-present
Current: BSTP-PhD student

Postdoctoral Trainees/Mentees

1. Michael Scullin, Post-doctoral scholar, Emory University Neurology/Sleep Medicine Program
06/2012-05/2013
Current: Associate Professor of Psychology and Neuroscience, Baylor University, Waco, TX
2. Yu-Yun Hsu, Fulbright Scholar, CWRU, Decker Neuroscience Nursing Lab
02/2016-08/2016
Current: Professor, Department of Nursing, College of Medicine at National Cheng Kung University, Taiwan
3. Jessica Beebe, Post-doctoral scholar, CWRU, Decker Lab/Center for Aerospace Physiology
10/2019-07/2020
Current: Wright Center National Family Medicine Residency, HealthSource Ohio/Mercy Hospital System
4. Seth Fillioe, Syracuse University (M.S. & PhD, Chemistry), Hofstra University (B.A. Chemistry)
10/2020-present
Current: Post-doctoral scholar, Decker Lab/Center for Aerospace Physiology

Current Teaching Material Produced and Activities

1. Block 2 "*Circuits of the Central Nervous System*" / PHOL 481 - Med Phys I / 2018-2021
2. Block 5 "*Hyperoxia and Pulmonary outcome*" / PHOL 484 - Trans Phys II / 2018-2021
3. Block 5 "*Neural Outcomes of Postnatal Hypoxia*" / PHOL 484 - Trans Phys II / 2018-2021
4. Block 8 **Director** and lecturer of "*Disorders of Sleep*" / PHOL 484 - Trans Phys II / 2018-2021
5. Block 8 "*Naval Medical Research*" / PHOL 484 - Trans Phys II / 2018-2021
6. Block 8 "*Environmental Physiology*" / PHOL 482 - Med Phys II / 2018-2021

Teaching Activities

1. Teaching Assistant, Histology, (CWRU), ANAT 412-413, 1996
2. Module Leader – Neurobiology and Neuropathology of Disorders of Sleep, (Emory University), NBB401, 2003-2004
3. Neurobiology of Sleep and Wake (Georgia State University) HHS8050, 2010
4. Epidemiology for Health Professionals, (Georgia State University), PH8001, 2011- 2013

5. Spirits & Synapses, SAGES (CWRU) USSO288, 2015-2018
6. Cardiac Physiology, SAMI-(CWRU School of Medicine), Congestive Heart Failure, 2019
7. Renal Physiology, SAMI- (CWRU School of Medicine), Diabetic Ketoacidosis, 2020

RESEARCH / GRANT SUPPORT

Total Direct Costs of Research Funding from 2018-March 2021 is \$3,016,907

Direct costs of funding acquired in 2018 via grants and contracts: \$262,500

Direct costs of funding acquired in 2019 via grants and contracts: \$979,912

Direct costs of funding acquired in 2020 via grants and contracts: \$867,198

Direct costs of funding acquired in 2021 via grants and contracts: \$907,297

The above funding only includes projects in which I am the PI. Co-I funding that supports salary effort, etc., is not included in the sums provided above..

Active Research Support

Department of Defense – 711th Human Performance Wing

Defining mechanisms mediating vulnerability towards cognitive fatigue: Post Sortie Systemic Inflammation, Sleep, Diet, and Exercise

10% effort

10% Salary Support

TDC=\$330,394

07/2021-09/2022 (NOA received 03/04/2021, contracting underway)

Department of Defense – United States Navy - NAMRU

Co-funding to support Defining mechanisms mediating vulnerability towards cognitive fatigue: Post Sortie Systemic Inflammation, Sleep, Diet, and Exercise

50% effort

50% Salary Support

TDC=\$240,051

07/2021-09/2022 (NOA received 03/04/2021, contracting underway)

Department of Defense - Air Force Research Laboratories, F4F4FE0163G001

Establishing Biomarkers of Post-Sortie Cognitive Fatigue

50% effort

50% Salary Support

TDC=\$361,415

08/2020-8/2021

Department of Defense - Air Force Research Laboratories, FA8650-19-C-6103

Defining Hyperoxia-Induced Physiologic Destabilization

20% effort

20% Salary Support

TDC=\$1,010,556

09/2019-09/2022

Department of Defense – US Navy Bureau of Medicine and Surgery, N3239819P0321

Characterizing the Duration of Hyperoxia-Induced Reductions in Brain Perfusion

50% effort

50% Salary Support; no cost extension 09/2020-03/2021

TDC=\$336,629

09/2019-03/2021

National Institutes of Health, 1R34DA050342-01
Planning for the HEALthy Early Development Study (Singer, PI)
Role: Co-investigator
4% effort
4% Salary Support
TDC=\$337,862
09/2019-09/2021

National Institutes of Health, R21NR017235-01
Structure & Function of Dopaminergic Brain Networks following Postnatally-Occurring Hypoxia
12% effort
12% Salary Support; no cost extension 01/2020-12/2021
TDC=\$275,000
01/2018-12/2021

Pending

National Institutes of Health R21
Prevention of cardiac arrest-induced neuroinflammation (Piktel, PI)
Role: Co-Investigator
5% effort
5% Salary Support
TDC=\$250,000
12/2021-12/2023

Joint Program Commission 5
Mechanisms Evoking Post-Sortie Systemic Inflammation, Reduced Prefrontal Cortical Activity & Cognitive Fatigue
50% effort
50% Salary Support
TDC=\$1,012,165
10/2021-09/2024

Department of Defense – 711th Human Performance Wing
Defining mechanisms by which CO₂ and O₂ move through AQP4 at the blood-brain-barrier (Boron, PI)
Role: Co-Investigator
1% effort
1% Salary Support
TDC=\$251,332
06/2021-08/2022

Recently Completed at CWRU

Department of Defense – US Navy; Naval Medical Research Unit-Dayton
Defining Traits Conferring Enhanced Performance and Resilience in Austere Environment
50% effort
50% Salary Support
TDC=\$257,360
08/2018-08/2020

National Institutes of Health, 5 P30 NR015326-03
SMART Center II Brain Behavior Connections in Self-Management Science (Moore, PI)
Role: Core Director
10% effort
10% Percent Salary Support
TDC=\$462,590
03/2014-08/2019

National Institutes of Health, 5T32HL007913-14
Sleep Medicine Neurobiology and Epidemiology (Strohl, PI)
Role: Trainer
5% effort
0% Salary Support
09/1999-06/2020

Department of Defense – Defense University Research Instrumentation Program (DURIP) FA9550-18-1-0426
Viewing the Human Brain’s Response to Cockpit Levels of Hyperoxia
0% effort
0% Salary Support
TDC=\$282,187
07/2018-06/2019

Department of Defense – Air Force Research Laboratories, FA8650-17-F-6822
Hyperoxia: An Unrecognized Mechanism for Inducing “Hypoxia-Like” Symptoms
15% effort
15% Salary Support
TDC=\$245,733
06/2017-09/2018

Department of Defense—Wright Patterson Air Force Base, 711th Human Performance Wing,
Subcontract C1770.0105
Respiratory Assessment of F-22 Aircrew Life Support (RAALS) Gear
10% effort
10% Salary Support
TDC=\$14,440

National Institute of Biomedical Imaging and Bioengineering; 3U18EB021792-01S1
A Tool for Neurotherapeutic Therapy for Sleep Disordered Breathing (Strohl, PI)
Role: Co-Investigator
10% effort
10% Salary Support
TDC=\$577,727
07/2015-06/2017

Funding received at Emory

NIH- National Institute of Neurological Disorders and Stroke, 1R01NS046484
Sodium channel dysfunction and epilepsy (Andrew Escayg, PI)
12/2004-11/2009

NIH- National Institute of Neurological Disorders and Stroke, R01NS051834
Sodium channel regulation and disease, (Andrew Escayg, PI)
04/2005-03/2009

Organon, 176002
A six-week, double-blind, randomized, placebo-controlled, parallel group, efficacy and safety, sleep lab trial with
Org 50081 in patients with chronic primary insomnia
06/2007-05/2008

NIH– National Heart, Lung, and Blood Institute, R01HL72722
Episodic Neonatal Hypoxia Impairs Sleep and Cognition
07/2002-07/2006

Eli-Lilly, H9U-MC-MDBD

Oversight of Multi-Center acquisition of Polysomnographic Data
10/2005-06/2006

NIH- National Institute of Neurological Disorders and Stroke, R01NS043374
Functional Circuitry of Midbrain Dopamine in Sleep and Wake (David B. Rye, PI & Michael Decker)
04/2002-03/2006

Centers for Disease Control and Prevention (CDC)
Polysomnographic Correlates of Chronic Fatigue Syndrome (Michael Decker, PI & David Rye)
11/2002-10/2005

Emory Center for Alternative Medicine Research Pilot project
Dietary supplementation with fatty acids protects the mesotelencephalic dopamine system against hypoxia-induced impairment and degeneration.
4/2004-4/2005

NIH – National Center for Complementary and Alternative Medicine, R01AT000611
Polysomnographic Assessment of Alternative Treatment for Sleep Disturbance in PD. (Donald Bliwise, PI & Michael Decker)
04/2004-04/2005

Emory Collaborative Center for Parkinson's Disease
Genetic and developmental influences of environmental toxin induced neurodegeneration.
11/2002-10/2004

NIH- National Institute of Neurological Disorders and Stroke, R01NS040221
Sleep/Dopamine Phenotypes in Genetically Distinct Mice (David B. Rye, PI & Michael Decker)
10/1999 - 09/2004

BIBLIOGRAPHY

Peer Reviewed Articles (served as mentor for those denoted with *)

1. Strohl KP, **Decker MJ**, Olson LG, Flak T, Hoekje PL. The nasal response to exercise is similar in healthy and asthmatic subjects. *Thorax* 1988; 43:890-895.
2. **Decker MJ**, Hoekje PL, Strohl KP. Ambulatory monitoring of arterial oxygen saturation. *Chest* 1989; 95(4):717-722.
3. **Decker MJ**, Conrad KP, Strohl KP. Noninvasive oximetry in the rat. *Biomedical Instrumentation and Technology* 1989; 23:222-228.
4. **Decker MJ**, Dickensheets D, Arnold JL, Strohl KP, Cheung PW. A comparison of a new reflectance oximeter with the Hewlett-Packard ear oximeter. *Biomedical Instrumentation and Technology* 1990; 24:122-126
5. Cahan C, **Decker M**, Strohl KP. Humoral correlates of sleep apnea: Erythropoietin and hypoxemia. *Progress in Clinical & Biologic Research* 1990; 345:317-322.
6. Cahan C, **Decker MJ**, Arnold JL, Hoekje PL, Brown DP, Cheung PW, Strohl KP. Agreement between noninvasive oximetric values for oxygen saturation. *Chest* 1990; 97(4):814-819.
7. Cahan C, Hoekje PL, Goldwasser E, **Decker MJ**, Strohl KP. Assessing the characteristic between length of hypoxic exposure and serum erythropoietin levels. *The American Journal of Physiology* 1990; 258 (4 Pt 2): R1016-R1021.

8. Schwartz HJ, Arnold JL, **Decker MJ**, Hoekje PL, Strohl KP. Posterior rhinometry as a rapid screening test for nasal dysfunction. *American Journal of Rhinology & Allergy* 1990; 4(2):69-73.
9. **Decker MJ**, Redline S, Arnold JL, Masny J, Strohl KP. Normative values of oxygen saturation over time. *Journal of Ambulatory Monitoring* 1991; 4(4):297-304.
10. Strohl KP, Arnold JL, **Decker MJ**, Hoekje PL, Mcfadden ER. Nasal flow-resistive responses to challenge with cold dry air. *Journal of Applied Physiology* 1992; 72(4):1243-1246.
11. Cahan C, **Decker MJ**, Arnold JL, Washington LH, Veldhuis J, Goldwasser E, Strohl KP. Diurnal variations in serum erythropoietin levels in healthy subjects and sleep apnea patients. *Journal of Applied Physiology* 1992; 72(6):2112-2117.
12. **Decker MJ**, Arnold JL, Haney D, Masny J, Strohl KP. Extended monitoring of oxygen saturation in chronic lung disease. *Chest* 1992; 102(4): 1075-1079.
13. Strohl KP, Arnold JL, **Decker MJ**, Hoekje PL, Doershuk CF, Stern RC. The nasal response to exercise in patients with cystic fibrosis. *Rhinology* 1992; 30(4):241-248.
14. Cahan C, Gothe B, **Decker MJ**, Arnold JL, Leitner J, Strohl KP. Arterial oxygen saturation over time and sleep studies in quadriplegic patients. *Paraplegia* 1993; 31:172-179.
15. **Decker MJ**, Haaga J, Arnold J, Atzberger D, Strohl KP. Functional electrical stimulation and respiration during sleep. *Journal of Applied Physiology* 1993; 75(3): 1053-1061.
16. Strohl KP, Boehm KD, Denko CW, Novak RD, **Decker MJ**. Biochemical morbidity in sleep apnea. *Ear Nose & Throat Journal* 1993; 72(1):34-41.
17. Munger MA, Stanek EJ, Nara AR, Strohl KP, **Decker MJ**, Nair R.N. Arterial oxygen saturation in chronic congestive heart failure. *The American Journal of Cardiology* 1994; 73:180-185.
18. Stanek EJ, Nara AR, Strohl KP, Nair RN, **Decker MJ**, Munger MA. Effect of long-term angiotensin-converting enzyme inhibitor therapy on arterial oxygen saturation in patients with mild to moderate heart failure. *Pharmacotherapy*; 1994; 14(3):321-329.
19. **Decker MJ**, Smith BL, Strohl KP. Center-based vs patient-based diagnosis and therapy of sleep related respiratory disorders and the role of the respiratory care practitioner. *Respiratory Care* 1994; 39(4):390-396.
20. Cahan C, **Decker MJ**, Arnold JL, Goldwasser E, Strohl KP. Erythropoietin levels with treatment of obstructive sleep apnea. *Journal of Applied Physiology* 1995; 79(4):1278-1285.
21. Smith ML, Niedermaier NW, Hardy SM, **Decker MJ**, Strohl KP. Role of hypoxemia in sleep apnea-induced sympathoexcitation. *Journal of the Autonomic Nervous System* 1996; 56:184-190.
22. Beall CM, Gebremedhin A, Brittenham GM, **Decker MJ**, Shamebo M. Blood pressure variation among Ethiopians on the Simien Plateau. *Annals of Human Biology* 1997; 24(4):333-342.
23. Beall CM, Strohl KP, Blangero J, Williams-Blangero S, **Decker MJ**, Brittenham GM, Goldstein MC. Quantitative genetic analysis of arterial oxygen saturation in Tibetan Highlanders. *Human Biology* 1997; 69(5):597-604.

24. Beall CM, Strohl KP, Blangero J, Williams-Blangero S, Almasy LA, **Decker MJ**, Worthman CM, Goldstein MC, Vargas E, Villena M, Soria R, Alarcon AM, Gonzales C. Ventilation and hypoxic ventilatory response of Tibetan and Aymara high altitude natives. *American Journal of Physical Anthropology* 1997; 104(4):427-447.
25. Netzer N, Schuschnik M, Matthys H, Miles L, Steinacker J, **Decker MJ**, Lehmann M. [Sleep and respiration at an altitude of 6,400 m (Aconcagua, Argentina)] *Pneumologie* 1997; 51 Suppl 3:729-735.
26. Beall CM, Brittenham GM, Strohl KP, Blangero J, Williams-Blangero S, Goldstein MC, **Decker MJ**, Vargas E, Villena M, Soria R, Alarcon AM, Gonzales C. Hemoglobin concentration of high- altitude Tibetans and Bolivian Aymara. *American Journal of Physical Anthropology* 1998; 106:385-400.
27. Beall CM, Almasy LA, Blangero J, Williams-Blangero S, Brittenham GM, Strohl KP, **Decker MJ**, Vargas E, Villena M, Soria R, Alarcon AM, Gonzales C. Percent of oxygen saturation of arterial hemoglobin among Bolivian Aymara at 3,900-4,000 m. *American Journal of Physical Anthropology* 1999; 108(1):41-51.
28. Papp KK, Erokwu B, **Decker M**, Strohl KP. Medical student competence in eliciting a history for "chronic fatigue". *Sleep and Breathing* 2001; 5(3):123-129.
29. Berkeley JL, **Decker MJ**, Levey AI. The role of muscarinic acetylcholine receptor-mediated activation of extracellular signal-regulated kinase 1/2 in pilocarpine-induced seizures. *Journal of Neurochemistry* 2002; 82(1):192-201.
30. **Decker MJ**, Rye DB. Neonatal intermittent hypoxia impairs dopamine signaling and executive functioning. *Sleep and Breathing* 2002; 6(4):205-210.
31. Beall CM, **Decker MJ**, Brittenham GM, Kushner I, Gebremedhin A, Strohl KP. An Ethiopian pattern of human adaptation to high-altitude hypoxia. *Proceedings of the National Academy of Sciences of the United States of America* 2002; 99(26):17215-17218.
32. **Decker MJ**, Hue GE, Caudle WM, Miller GW, Keating GL, Rye DB. Episodic neonatal hypoxia evokes executive dysfunction and regionally specific alterations in markers of dopamine signaling. *Neuroscience* 2003; 117(2):417-425.
33. **Decker MJ**, Jones KA, Solomon IG, Keating GL, Rye DB. Reduced extracellular dopamine and increased responsiveness to novelty: neurochemical and behavioral sequelae of intermittent hypoxia. *Sleep* 2005; 28(2):169-176.
34. Boss V, Sola A, Wen TC, **Decker MJ**. Mild intermittent hypoxia does not induce stress responses in the neonatal rat brain. *Biology of the Neonate* 2005; 88(4):313-320.
35. Reeves WC, Heim C, Maloney EM, Youngblood LS, Unger ER, **Decker MJ**, Jones JF, Rye DB. Sleep characteristics of persons with chronic fatigue syndrome and non-fatigued controls: Results from a population-based study. *BMC Neurology* 2006; 6:41.
36. Majer M, Jones JF, Unger ER, Youngblood LS, **Decker MJ**, Gurbaxani B, Heim C, Reeves WC. Perception versus polysomnographic assessment of sleep in CFS and non-fatigued control subjects: results from a population-based study. *BMC Neurology* 2007; 7:40.
37. Boneva RS, **Decker MJ**, Maloney EM, Lin JM, Jones JF, Helgason HG, Heim CM, Rye DB, Reeves WC. Higher heart rate and reduced heart rate variability persist during sleep in chronic fatigue syndrome: a population-based study. *Autonomic Neuroscience: Basic & Clinical* 2007; 137(1-2):94-101.

38. Baekey DM, Feng P, **Decker MJ**, Strohl KP. Breathing and sleep: measurement methods, genetic influences, and developmental impacts. *Institute for Laboratory Animal Research (ILAR) Journal* 2009; 50(3):248-261.
39. **Decker MJ**, Lin JM, Tabassum H, Reeves WC. Hypersomnolence and sleep-related complaints in metropolitan, urban, and rural Georgia. *American Journal of Epidemiology* 2009; 169(4):435-443.
40. **Decker MJ**, Tabassum H, Lin JM, Reeves WC. Electroencephalographic correlates of Chronic Fatigue Syndrome. *Behavioral and Brain Functions* 2009; 5:43.
41. Lin JM, **Decker MJ**, Brimmer DJ, Reeves, WC. Validity of self-reported body mass index and sleeping problems among adult population of Georgia. *The Open Obesity Journal* 2010; (2):145.
42. **Decker MJ**, Eyal S, Shinar Z, Fuxman Y, Cahan C, Reeves WC, Baharav A. Validation of ECG-derived sleep architecture and ventilation in sleep apnea and chronic fatigue syndrome. *Sleep and Breathing* 2010; 14(3):233-239.
43. **Decker MJ**, Rye DB, Lee SY, Strohl KP. Paradoxical sleep suppresses immediate early gene expression in the rodent suprachiasmatic nuclei. *Frontiers in Neurology* 2010; 1:122.
44. Lee SY, Lee KA, Aycock D, **Decker M**. Circadian activity rhythms for mothers with an infant in ICU. *Frontiers in Neurology* 2010; 1:155.
45. Papale LA, Makinson CD, Ehlen JC, Tufik S, **Decker MJ**, Paul KN, Escayg A. Altered sleep regulation in a mouse model of SCN1A-derived genetic epilepsy with febrile seizures plus (GEFS+). *Epilepsia* 2013; 54(4):625-634.
46. Puzerey PA, **Decker MJ**, Galán RF. Elevated serotonergic signaling amplifies synaptic noise and facilitates the emergence of epileptiform network oscillations. *Journal of Neurophysiology* 2014; 112(10):2357-2373.
47. Sawyer NT, *Helvig AW, Makinson CD, **Decker MJ**, Neigh GN, Escayg A. Scn1a dysfunction alters behavior but not the effect of stress on seizure response. *Genes, Brain, and Behavior* 2016; 15(3):335-347.
48. **Decker MJ**, *Jones K, Keating GL, Damato EG, Darrah R. Maternal dietary supplementation with omega-3 polyunsaturated fatty acids confers neuroprotection to the newborn against hypoxia-induced dopamine dysfunction. *Sleep Science* 2016; 9(2):94-99.
49. Darrah R, Nelson R, Damato EG, **Decker M**, Matthews A, Hodges CA. Growth deficiency in cystic fibrosis is observable at birth and predictive of early pulmonary function. *Biological Research for Nursing* 2016; 18(5):498-504.
50. Webel AR, Perazzo J, **Decker M**, Horvat-Davey C, Sattar A, Voss J. Physical activity is associated with reduced fatigue in adults living with HIV/AIDS. *Journal of Advanced Nursing* 2016; 72(12):3104-3112.
51. Gillombardo CB, Darrah R, Dick TE, Moore M, Kong N, **Decker MJ**, Han F, Yamauchi M, Dutschmann M, Azzam S, Strohl KP. C57BL/6J mouse apolipoprotein A2 gene is deterministic for apnea. *Respiratory Physiology & Neurobiology* 2017; 235:88-94.
52. *Scullin MK, Fairley J, **Decker MJ**, Bliwise DL. The effects of an afternoon nap on episodic memory in young and older adults. *Sleep* 2017; 40(5).
53. **Decker MJ**, *Jones KA, Keating GL, Rye DB. Postnatal hypoxia evokes persistent changes within the male rat's dopaminergic system. *Sleep and Breathing* 2018; 22(2):547-554.

54. Damato EG, Flak TA, Mayes RS, Strohl KP, Ziganti AM, Abdollahifar A, Flask CA, LaManna JC, **Decker MJ**. Neurovascular and cortical responses to hyperoxia: Enhanced cognition and electroencephalographic activity despite reduced perfusion. *Journal of Physiology* 2020; 598:3941-3956.
55. Damato EG, Burant CJ, Brubaker JA, **Decker MJ**. Sleep pattern gender differences & fragmentation in postpartum parents of twins. *Sleep Science* (in press).

Invited, Non-Peer Reviewed

1. Sleep and Its Disorders in Children. Edited by C. Guilleminault. *Respiratory Care*, 1987; 971-972. [Book review]
2. Principles and Practices of Sleep Medicine. Edited by M.H. Kryger, T. Roth, W.C. Dement. *Respiratory Care*, 1989; 34(10): 930-931. [Book review]
3. Obstructive Sleep Apnea Syndrome: Clinical Research and Treatment. Edited by C. Guilleminault, M. Partinen. *Respiratory Care*, 1990; 35(8):850. [Book review]
4. Shrake K, Blonshine S, Brown RA, **Decker MJ**, Ruppel GL, Wanger J. AARC Guideline: Body Plethysmography. *Respiratory Care* 1994; 39(12):1184-1190.
5. Shrake K, Blonshine S, Brown RA, **Decker MJ**, Ruppel GL, Wanger J. AARC Guideline: Static Lung Volumes. *Respiratory Care* 1994; 39(8):830-836.
6. ABC of Sleep Disorders. Edited by Colin M Shapiro. *Respiratory Care*. 1994; 39(10):1001-1002. [Book review]
7. Shrake K, Blonshine S, Brown RA, **Decker MJ**, Ruppel GL, Wanger J. AARC Guideline: Infant-Toddler Pulmonary Function Tests. *Respiratory Care* 1995; 40(7):761-768.
8. Shrake K, Blonshine S, Brown RA, **Decker MJ**, Ruppel GL, Wanger J. AARC Guideline: Polysomnography. *Respiratory Care* 1995; 40(12):1336-1343.
9. Handbook of Sleep Related Breathing Disorders. By J.R. Stradling. *Respiratory Care*, 1995; 40(2):185. [Book review]
10. **Decker MJ**, Durmer JS. Pharmaceuticals used to treat narcolepsy. *FOCUS: Journal for Respiratory Care & Sleep Medicine*. 2008; January:30-31.
11. **Decker MJ**, Durmer JS. Pharmaceuticals used to treat restless legs syndrome. *FOCUS: Journal for Respiratory Care & Sleep Medicine*, 2008; March:32-33.
12. **Decker MJ**, Durmer JS. Sleep Medicine Pharmaceuticals: The treatment of parasomnias. *FOCUS: Journal for Respiratory Care & Sleep Medicine*. 2008; May:33-34.
13. **Decker MJ**, Durmer JS. Pharmaceuticals frequently employed in sleep medicine. *FOCUS: Journal for Respiratory Care & Sleep Medicine*. 2007; November: 26-27.
14. **Decker MJ**. Assessing fatigue in multiple sclerosis: Shedding light on the elephant in the dark. *Sleep* 2010; 33(8):1005-1006. [Invited commentary on Braley and Chervin, Fatigue in multiple sclerosis: Mechanisms, evaluation, and treatment. *Sleep* 2010; 33:1061-1067].

15. **Decker MJ**. Technical corner: Sleep restriction may promote obesity: Implications for clinical practice. *AADSM Journal Dialogue*, Summer 2011.

Book & Book Chapters

1. **Decker MJ**, Strohl KP. Pulse Oximetry. In: *Spacelabs Biophysical Measurement Series: Respiration*. Redmond, WA: Spacelabs, Inc. 1992; pp. 78-93.
2. McCarthy K, **Decker MJ**, Stoller J, Strohl KP. Pulse Oximetry. In Kacmarek RM, Hess D, Stoller JK (Eds.). *Monitoring in Respiratory Care*. St. Louis, MO: Mosby 1993; pp. 309-347.
3. Strohl KP, **Decker MJ**, Redline S. Unattended Monitoring for Respiratory Events. In Kacmarek RM, Hess D, Stoller JK (Eds.). *Monitoring in Respiratory Care*. St. Louis, MO: Mosby 1993; pp. 798-804.
4. **Decker MJ**, Strohl KP. Pulse Oximetry: Considerations and Applications for neonates and infants. In: *Spacelabs Biophysical Measurement Series: Respiration*. Redmond, WA: Spacelabs, Inc. 1995; pp. 48-60.
5. **Decker MJ**, Pandi-Perumal SR, Sinton CM. Sleep and Sleep Pharmacology. In Gardenhire DS, Rau JL (Eds.). *Rau's Respiratory Care Pharmacology* (8th ed.), St. Louis, MO: Mosby 2012; pp. 399-416.
6. **Decker MJ**, Strohl KP. Diagnostic Testing. In Strohl KP (Ed.). *Competencies in Sleep Medicine: An Assessment Guide*. New York, NY: Springer 2014; pp. 129-144.
7. Perry JC, **Decker MJ**. Hypoxia: Introduction of Mechanisms and Consequences. In Andersen ML, Tufik S (Eds.). *Rodent Model as Tools in Ethical Biomedical Research*. New York, NY: Springer 2016; pp. 415-429.
8. Damato EG, **Decker MJ**, Schiefer MA, Baskin JZ, Benderro GF, & Strohl KP. Chapter 108: Upper Airway Neurostimulation to Treat Obstructive Sleep Apnea. In Krames ES, Peckham PH, Rezai AR. (Eds.). *Neuromodulation* (2nd ed.), Boston, MA: Elsevier 2018; pp. 1307-1320.
9. Dituri J, Juergensen K, **Decker M**. Electronic Life Support Control and Biometric Monitoring for Space Suits. In Seedhouse E., Shayler DJ (Eds.). *Handbook of Life Support Systems for Spacecraft and Extraterrestrial Habitats*, Springer eBook 2019; <https://doi.org/10.1007/978-3-319-09575-2>

Media Appearances & Coverage / Podcasts

1. Laird, Susan. Sleep Disorders: Not Just Phantoms of the Night, February 2009, CDC Podcast.
2. The Joy Cardin Show- Effects of Sleep Deprivation on the Body, Apr 27, 2011, Wisconsin Public Radio interview
<https://www.wpr.org/people/michael-decker>
3. Johnson, Kate. Cognitive Gains with Long-Term CPAP for Sleep Apnea, Jun 24, 2011, online article
<https://www.medscape.com/viewarticle/745316>
4. Alaska Northern Lights, Daylight Saving 2011: How Time Change Affects Our Health, Nov 7, 2011, online article
<https://www.alaskanorthernlights.com/blog/daylight-saving-2011-how-time-change-affects-our-health/>
5. Chan, Amanda. 5 Everyday Things Keeping You from Good Sleep. Jan 2, 2012, online article
https://www.huffpost.com/entry/sleep-quality-factors_n_1069710
6. Watson, Stephanie. The Best Mattress for a Good Night's Sleep, Mar 2, 2012, online article
<https://www.medicinenet.com/script/main/art.asp?articlekey=87309>
7. Weeks, Carly. Do Snoring Remedies Actually Work, May 6, 2012, online article

<https://www.theglobeandmail.com/life/health-and-fitness/do-snoring-remedies-actually-work/article4104852/>

8. Katz, Andrew. 4 Ways to Sleep Better, Jul 17, 2012, online article
<https://www.menshealth.com/health/a19526509/4-ways-to-sleep-better-tonight/>
9. Wheeler, Regina. Sleep Tips for COPD, Jul 17, 2012, online article
<https://www.everydayhealth.com/hs/chronic-obstructive-pulmonary-disease/copd-sleep-tips/>
10. Schocker, Laura. How the Olympics Messes with Your Sleep (And What to do About It), Jul 27, 2012. Online article
https://www.huffpost.com/entry/olympics-sleep_n_1707845
11. Wheeler, Regina. 7 Tips to Sleep Better with Menopause, Nov 20, 2012, online article
<https://www.everydayhealth.com/menopause-pictures/tips-to-sleep-better-with-menopause.aspx>
12. *Live TV*. ABC Lookout Segment, Mattress Wars, Sep 4, 2013, Television
<https://abcnews.go.com/Nightline/video/mattress-wars-20161329>
13. Leibovich, Lori & Samakow, Jessica. Here's What a Constantly Plugged-In Life is Doing to Kids' Bodies, Oct 17, 2013, online article
https://www.huffpost.com/entry/teens-on-screens_n_4101758
14. Schocker, Laura. 8 Habits of Extremely Well-Rested People, Oct 23, 2013, online article
https://www.huffpost.com/entry/sleep-habits_n_4145681
15. *Live TV*. Fox 8 – Cleveland Today Show, Sleep Myths, Jan 23, 2014, television interview
16. Klein, Sarah. How to Kick Your Snooze Button Habit, Jan 27, 2014, online article
https://www.huffpost.com/entry/quit-snooze-button-habit-sleep_n_4654962
17. Schocker, Laura. Ask Healthy Living: Does Counting Sheep Really Help You Fall Asleep? Apr 20, 2014, online article
https://www.huffpost.com/entry/counting-sheep-fall-asleep_n_5169807
18. Wheeler, Regina. Understanding Baby Sleep Patterns, Jul 1, 2014, online article
<https://www.everydayhealth.com/hs/your-developing-baby/baby-sleep-patterns/>
19. *Live TV*. Fox 8 – Cleveland Today Show, The Ideal Environment for Sleep, Sep 11, 2014, television interview
20. Klein, Sarah. Does the Sound of Your Alarm Have an Effect on Your Morning? Sep 9, 2014, online article
https://www.huffpost.com/entry/best-worst-alarm-sound-morning_n_5759706
21. MIT Technology Review Insights, A Wake-Up Call for Better Sleep, Sep 30, 2014, online article
22. *Live TV*. Fox 8 – Cleveland Today Show, The Impact of Daylight Savings Time on Sleep, Oct 31, 2014, television interview
23. Kahaner, Larry. Debunking Myths about Sleep Apnea, Dec 30, 2015, online article
<https://www.fleetowner.com/resource-center/driver-management/article/21692512/debunking-myths-about-sleep-apnea>
24. *Live TV*. Fox 8—New Day Cleveland, Could One of These Things Be Ruining Your Sleep, Aug 9, 2016, television interview
<https://fox8.com/on-air/new-day-cleveland/could-one-of-these-things-be-ruining-your-sleep/>
25. *Live TV*. Fox 8—New Day Cleveland, How to Create a Sleep Schedule, 2016, television interview

<https://fox8.com/on-air/new-day-cleveland/how-to-create-a-sleep-schedule/amp/>

26. Kuzma, Cindy. When your partner affects your sleep, Jul 18, 2019, online article <https://www.healthgrades.com/right-care/sleep-disorders/when-your-partner-affects-your-sleep>

Software / Application Development

1. Flak T, **Decker MJ**, Strohl KP. OXYSTAT: An oxygen saturation analysis program for use with ambulatory monitoring systems. 1988, copyrighted software.
2. Flak T, **Decker MJ**, Strohl KP. VITAL SIGNS: A multi-parameter, physiologic data collection, storage, and analysis program. 1990, copyrighted software.

Editorials

1. **Decker M**, Yamauchi M, Strohl KP. Keep the airway open and let the brain sleep. *American Journal of Respiratory & Critical Care Medicine* 2014; 190(11):1207-1209.

Letters

1. Gothe B, Redline S, **Decker MJ**, Strohl KP. Equipment failure with nasal continuous positive airway pressure. *The American Review of Respiratory Disease* 1991; 144(1):239.

Abstract Presentations (published)

1. **Decker MJ**, Conrad KP, Strohl KP. Non-invasive oximetry in the rat. *The Physiologist* 1987; 30(4):15. American Physiological Society, San Diego, CA, 06/1987.
2. Strohl KP, **Decker MJ**, Flak T, Olson LG, Hoekje PL. The nasal response to exercise is similar in healthy and asthmatic subjects. *American Federation for Clinical Research* 1987; 35:540A. American Thoracic Society, New Orleans, LA, 10/1987.
3. Brown DP, Cheung PW, Kenney MA, Shoene RB, Strohl KP, **Decker MJ**. Theoretical models and experimental studies of pulse oximetry. *IEEE Proceedings IX* 1987; 435-437. Engineering in Medicine and Biology Society Congress, Boston, MA, 11/1987.
4. **Decker MJ**, Hoekje P, Strohl KP. Ambulatory monitoring of arterial oxygen saturation. *Respiratory Care Open Forum* 1988; 33(10):919. American Thoracic Society, Las Vegas, NV, 05/1988.
5. Cahan C, Hoekje PL, Goldwasser E, **Decker MJ**, Strohl KP. Modeling the characteristic between serum erythropoietin levels and hypoxic exposure. *American Federation for Clinical Research* 1988; 36(3):503A. American Thoracic Society, Las Vegas, NV, 05/1988.
6. Cahan C, **Decker MJ**, Arnold JL, Hoekje PL, Brown DP, Cheung PW, Strohl KP. Agreement between noninvasive oximetry values for oxygen saturation. *American Review of Respiratory Disease*. 1988; 137(4):451. American Thoracic Society, Las Vegas, NV, 05/1988.
7. Cahan C, **Decker MJ**, Rabinowitz G, Washington L, Arnold JL, Strohl KP. Hormonal and biochemical markers associated with sleep apnea. *American Review of Respiratory Disease* 1989; 139(4):A81. American Thoracic Society, Cincinnati, OH, 05/1989.
8. Cahan C, Gothe B, **Decker MJ**, Arnold JL, Leitner J, Strohl KP. Continuous arterial oxygen saturation and sleep studies in quadriplegic patients and healthy subjects. *American Review of Respiratory Disease* 1989; 139(4):A113. American Thoracic Society, Cincinnati, OH, 05/1989.
9. Strohl KP, **Decker MJ**, Flak T, Gothe B, Arnold JL, Cahan C, Kessler BS. Normative values for oxygen saturation with long term ambulatory monitoring. *Chest* 1989; 96(2):230. American Thoracic Society, Cincinnati, OH, 05/1989.

10. Yuen DM, Cooper C, Strohl KP, Leonard ML, Stucky RM, **Decker MJ**, Rich EA. Increase in surfactant release and lung size induced by chronic hypobaric hypoxia in rats. *American Review of Respiratory Disease* 1989; 139(4):A403. American Thoracic Society, Cincinnati, OH, 05/1989.
11. Adler LP, Berridge MS, **Decker MJ**, Bednarczyk EM, Strohl KP, Nelson DA, Leisure GP, Muswick GJ, Miraldi F. Cerebral blood flow measurements in humans with O-15 Butanol by using PET (Positron Emission Photography). *Journal of Radiology* 1989. Radiologic Society of North America 75th Annual Meeting, Chicago, IL, 11/1989.
12. Cahan C, Washington LH, **Decker MJ**, Ingami T, Xie M, Douglas J, Strohl KP. Isolation of rat renal cortical tubular epithelial cells: characterization and evidence of renin production. *The Federation of American Societies for Experimental Biology (FASEB) Journal* 1990; 4(4):A954. FASEB Spring Meeting, Washington, DC, 04/1990.
13. Berridge MS, Adler AD, Nelson DA, Cassidy EH, Bednarczyk EM, **Decker MJ**. Cerebral blood flow measured by O-15 Butanol and PET in human subjects. *Journal of Nuclear Medicine* 1990; 31(5):884. Society of Nuclear Medicine 37th Annual Meeting, Washington DC, 06/1990.
14. Smith BL, **Decker MJ**, Caruso FJ, Braun B, Deal EC, Strohl KP. Nasal CPAP as a respiratory care procedure. *Respiratory Care Open Forum* 1990; 35(11):1104. American Thoracic Society, Anaheim, CA, 10/1990.
15. Montenegro H, **Decker MJ**, Smith B, Caruso F, Deal C, Strohl KP. The effects of anemia and hypothermia on pulse oximetry monitoring in the intensive care units. *Chest* 1990; 88(2):118. American College of Chest Physicians 56th Annual Scientific Assembly, Toronto, Ontario, Canada, 10/1990.
16. Cahan C, Denko C, Arnold J, **Decker MJ**, Haake L, Strohl KP. Insulin levels in sleep apnea syndrome. *Chest* 1990; 88(2):122. American College of Chest Physicians 56th Annual Scientific Assembly, Toronto, Ontario, Canada, 10/1990.
17. Ernsberger P, Damon TH, Wendorff LA, **Decker MJ**, Strohl KP. Muscarinic acetylcholine receptor binding sites in the upper airway: Characterization and autoradiographic visualization. *American Federation for Clinical Research* 1991; 39(3):706A. American Heart Association 64th Scientific Sessions, Anaheim, CA, 11/1991.
18. Stanek EJ, Nara AR, Strohl KP, **Decker MJ**, Ravi RN, Munger MA. Abnormal arterial oxygen saturation in CHF patients. *Circulation Supp II* 1991; 84(4):56. American Heart Association 64th Scientific Sessions, Anaheim, CA, 11/1991.
19. Cahan C, Arafah B, **Decker MJ**, Arnold JL, Strohl KP. Alterations in hypothalamic-pituitary-adrenal and gonadal functions in patients with obstructive sleep apnea: Effect of treatment. Annual Meeting of the Endocrine Society, Symposium on Sleep and Respiration in Aging Adults. Atlanta, GA, March 1991.
20. Stanek EJ, Nara AR, Strohl KP, Decker MJ, Nair RN, Munger MA. The effect of chronic ACE inhibition on arterial oxygenation in heart failure. *Clinical Pharmacology and Therapeutics* 1992; 51(2):150. American Society for Clinical Pharmacology and Therapeutics. Orlando, FL, 03/1992.
21. Strohl KP, **Decker MJ**, Atzberger D, Haaga J, Mortimer T. Functional electrical stimulation for tongue protrusion and sleep apnea. *Sleep* 1992; Abstract #087, 44. 6th Annual Meeting of the Association of Professional Sleep Societies, Phoenix, AZ, 06/1992.
22. Smith ML, **Decker MJ**, Strohl KP. Peripheral and central chemoreflexes operate significantly below the threshold for activation in healthy humans. *Physiologist* 1992; 36:238. American Physiological Society Conference, Colorado Springs, CO, 09/1992.
23. Munger MA, Stanek EJ, Strohl KP, Nair RN, Nara AR, **Decker MJ**, Flaharty KK. Circadian variation in oxygen saturation profiles in chronic mild moderate heart failure. American College of Clinical Pharmacology Annual Meeting, Toronto, Ontario, Canada, 08/1992. American Heart Association 65th Scientific Sessions, New Orleans, LA, 11/1992.

24. Smith ML, **Decker MJ**, Strohl KP., Thames MD. Sympathetic response to hypercapnia is augmented in patients with obstructive sleep apnea. *Circulation* 1992; 86(1):636. American Heart Association 65th Scientific Sessions, New Orleans, LA, 11/1992.
25. Smith ML, **Decker MJ**, Strohl KP., Thames MD. Augmented peripheral chemoreflex gain in patients with obstructive sleep apnea syndrome. *Circulation* 1992; 86(1):636. American Heart Association 65th Scientific Sessions, New Orleans, LA, 11/1992.
26. Strohl KP, Arnold J, Cahan C, **Decker MJ**. Erythropoietin profiles before and after short-term NCPAP therapy for OSAS. *American Review of Respiratory Disease* 1994; 149(4):A808. American Lung Association / American Thoracic Society International Conference, Boston, MA, 05/1994.
27. Strohl KP, Beall CM, **Decker MJ**, Brittenham G, Blangero J, Williams-Blangero S. Quantitative genetic analysis of hypoxic ventilatory response at 4000m. *Respiratory and Critical Care Medicine* 1995; 151(4):A634. American Thoracic Society Meeting, Seattle, WA, 04/1995.
28. **Decker MJ**, Beall CM, Vargas E, Villena M, Soria R, Alacron A, Gonzales C, Schork N, St. Jean P, Strohl KP. Hypoxic ventilatory response of Bolivian Aymara at 4000m. *Respiratory and Critical Care Medicine* 1996; 153(4):A120. American Thoracic Society Meeting, New Orleans, LA, 04/1996.
29. Smith ML, Niedermaier ONW, Decker MJ, Strohl KP. Treatment of sleep apnea reverses abnormal chemoreflex control of sympathetic activity. *Circulation Suppl.* 1998; 98:(17, supp. 1):I-471. American Heart Association, Dallas, TX, 11/1998.
30. **Decker MJ**, Rye DB, Chavez JC, Pichiule P, Bergmann BM, Strohl KP. Functional differences in the retinorecipient area of the albino and pigmented rat suprachiasmatic nucleus. *Society for Neuroscience* 1998; Vol 24(2):663.2:1690. Los Angeles, CA, 11/1998.
31. Filon ME, Freeman B, **Decker MJ**, Strohl KP. Strain-dependent neuronal activation within the supraoptic nucleus. *SLEEP Suppl* 1999; 22:S32. 13th Annual Meeting of the Associated Professional Sleep Societies, Orlando, FL, 06/1999.
32. **Decker MJ**, Keating GL, Freeman A, Rye DB. Focal depletion of dopamine in the sensorimotor striatum of the rat recapitulates Parkinsonian-like sleep-wake disturbances. *SLEEP Suppl* 2000; 23:A132. 14th Annual Meeting of the Associated Professional Sleep Societies, Las Vegas, NV, 06/2000.
33. **Decker MJ**, Keating GL, Freeman A, Rye DB. Parkinsonian-like sleep-wake architecture in rats with bilateral striatal 6-OHDA lesions. *Society for Neuroscience* 2000; 26(2):1514. New Orleans, LA, 11/2000.
34. **Decker MJ**, Hue GE, Rye DB. Persistence of impaired sleep-wake homeostasis, cognition and hyperlocomotion after intermittent neonatal hypoxia. *Mental and Behavioral Dysfunction in Movement Disorders: An International Symposium*. Montreal, Quebec, Canada, 10/2001.
35. Hue GEA, **Decker MJ**, Rye DB. Learning and memory is impaired in juvenile rats exposed to intermittent hypoxia as neonates. Program Number 315.16 2001 Abstract Viewer/Itinerary Planner Washington DC: *Society for Neuroscience*. San Diego, CA, 11/2001.
36. **Decker MJ**, Hue GEA, Feng PF, Rye DB. Diminished wakefulness and locomotor hyperactivity in juvenile rats exposed to intermittent hypoxia as neonates. Abstract Viewer/Itinerary Planner Washington DC: *Society for Neuroscience*. San Diego, CA, 11/2001.
37. Keating GL, **Decker MJ**, Rye DB. Validation of a commercially available rodent polysomnographic scoring algorithm. *SLEEP Suppl* 2002; 25:A507-A508. 16th Annual Meeting of the Associated Professional Sleep Societies, Seattle, WA, 06/2002.

38. **Decker MJ**, Caudle WM, Hue GE, Miller GW, Rye DB. Neonatal intermittent hypoxia induces hypodopaminergic activity in the striatum, decreased wakefulness, hyperactivity, and working memory impairment. *SLEEP* Suppl 2002; 25:A349. 16th Annual Meeting of the Associated Professional Sleep Societies, Seattle, WA, 06/2002.
39. **Decker MJ**, Keating GL, Hue GE, Freeman AA, Rye DB. Mesolimbic dopamine modulation of REM sleep. *Journal of Sleep Research* Suppl 2002; 99, 52. European Sleep Research Society, Reykjavik, Iceland, 06/2002.
40. **Decker MJ**, Farzaneh PA, Straight LM, Bliwise DL. Elderly males with mild nocturnal oxygen desaturation exhibit reduced cognitive performance. *SLEEP* Suppl 2003; 26:A164. 17th Annual Meeting of the Associated Professional Sleep Societies, Chicago, IL, 06/2003.
41. Boss V, Strohl KP, O'Donnell WT, **Decker MJ**. Intermittent hypoxia alters gene expression in the neonatal rat brain. Program Number 324.8, 2003 Abstract Viewer/Itinerary Planner Washington DC: *Society for Neuroscience*. New Orleans, LA, 11/2003.
42. Hue GE, **Decker MJ**, Solomon IG, Rye DB. Increased wakefulness and hyper-responsivity to novel environments in mice lacking functional dopamine D3 receptors. Program Number 616.16, 2003 Abstract Viewer/Itinerary Planner Washington DC: *Society for Neuroscience*. New Orleans, LA, 11/2003.
43. Jones KA, Solomon IG, Keating GL, Mak R, Chitembeya L, Miller DR, Rye DB, **Decker MJ**. Reduced extracellular dopamine in the striatum of juvenile rats exposed to intermittent hypoxia as neonates. *SLEEP* Suppl 2004; 27:A6-7. 18th Annual Meeting of the Associated Professional Sleep Societies, Philadelphia, PA, 06/2004.
44. Jones KA, Solomon IG, Keating GL, Rye DB, **Decker MJ**. Amphetamine mediated release of dopamine is markedly enhanced in juveniles exposed to intermittent hypoxia as neonates. *SLEEP* Suppl 2004; 27:A20. 18th Annual Meeting of the Associated Professional Sleep Societies, Philadelphia, PA, 06/2004.
45. Greer SA, Saunders DD, Wood-Siverio C, Hitchcock SE, **Decker MJ**, Rye DB, Bliwise DL. Nightly Variability in PLMS in Parkinson's Disease. *SLEEP* Suppl 2004; 27:A314. 18th Annual Meeting of the Associated Professional Sleep Societies, Philadelphia, PA, 06/2004.
46. Saevarsson G, Chitembeya L, Feroah TR, Krinstjansson S, Thoroddssen S, Solomon IL, Rye D, **Decker MJ**. Validation of a commercially available rodent polysomnographic scoring system. *SLEEP* Suppl 2004; 27:A355. 18th Annual Meeting of the Associated Professional Sleep Societies, Philadelphia, PA, 06/2004.
47. Keating GL, Thurmond M, Jones KA, Solomon IG, Rye DB, **Decker MJ**. Enhanced responsivity to novelty and increased total tissue content of dopamine in the striatum of adult rats exposed to intermittent hypoxia as neonates. Program Number 359.5, 2004 Abstract Viewer/Itinerary Planner Washington DC: *Society for Neuroscience*. San Diego, CA, 11/2004.
48. Hitchcock SE, Greer SA, Pour Ansari F, Wood-Siverio C, **Decker MJ**, Rye DB, Bliwise DL. Sleep disordered breathing (SDB) in Parkinson's Disease (PD). *SLEEP* Suppl 2005; 28:A286. 19th Annual Meeting of the Associated Professional Sleep Societies, Denver, CO, 06/2005.
49. Saunders DD, Hitchcock SE, Greer SA, Pour Ansari F, Wood-Siverio C, **Decker MJ**, Rye DB, Bliwise DL. Nightly variability in perceived sleep quality of Parkinson's disease (PD) patients is reflected in polysomnography. *SLEEP* Suppl 2005; 28:A286. 19th Annual Meeting of the Associated Professional Sleep Societies, Denver, CO, 06/2005.
50. Hue GE, Keating GL, Miller RD, Rye DB, **Decker MJ**. Neonatal intermittent hypoxia in rats induces sex-specific increases in dopamine levels in the nucleus accumbens. *SLEEP* Suppl 2006; 29:A26. 20th Annual Meeting of the Associated Professional Sleep Societies, Salt Lake City, UT, 06/2006.

51. Bliwise D, Saunders D, Wood-Siverio C, Greer S, Pour Ansari F, Rye DB, Hitchcock S, **Decker M**. Double blind placebo (PLO) – controlled polysomnographic randomized clinical trial (RCT) of Valerian (VAL) for sleep in Parkinson’s disease (PD). *SLEEP Suppl* 2007; 30:A41. 21st Annual Meeting of the Associated Professional Sleep Societies, Minneapolis, MN, 06/2007.
52. Papale L, Martin M, Andersen M, Perry J, Keating G, **Decker M**, Tufik S, Escayg A. Altered sleep pattern in a mouse model of GEFS+. *SLEEP Suppl* 2007; 30:A26. 21st Annual Meeting of the Associated Professional Sleep Societies, Minneapolis, MN, 06/2007.
53. **Decker MJ**, Stevens R, Messenger R. Use of CPAP exhalation comfort features results in improved sleep related quality of life scores. *SLEEP Suppl* 2007; 30:A178. 21st Annual Meeting of the Associated Professional Sleep Societies, Minneapolis, MN, 06/2007.
54. Keating GL, Karlsson K, Saevarsson G, Hilmarsson O, **Decker MJ**. Validation of a commercial rodent polysomnographic scoring algorithm. *SLEEP Suppl* 2008; 31:A346. 22nd Annual Meeting of the Associated Professional Sleep Societies, Baltimore, MD, 06/2008.
55. Baharav A, **Decker MJ**, Shinar Z, Shuli Eyal S, Cahan C, Boneva RS, Reeves WC. Autonomic nervous system dysfunction in CFS: a population-based study. *SLEEP Suppl* 2008; 31:A297. 22nd Annual Meeting of the Associated Professional Sleep Societies, Baltimore, MD, 06/2008.
56. Shinar Z, Shuli Eyal S, **Decker MJ**, Reeves WC, Baharav A. ECG derived respiration as a valid respiratory signal for detection of apnea/hypopnea events. *SLEEP Suppl* 2008; 31:A330. 22nd Annual Meeting of the Associated Professional Sleep Societies, Baltimore, MD, 06/2008.
57. Baharav A, **Decker MJ**, Cahan C, Durmer JS, Reeves WC, Akselrod S. Autonomic correlates of daytime sleepiness. *SLEEP Suppl* 2008; 31:A216. 22nd Annual Meeting of the Associated Professional Sleep Societies, Baltimore, MD, 06/2008.
58. **Decker MJ**, Shinar Z, Eyal S, Durmer JS, Reeves WC, Cahan C. Validation of an ECG based sleep diagnostic system. *SLEEP Suppl* 2008; 31:A329. 22nd Annual Meeting of the Associated Professional Sleep Societies, Baltimore, MD, 06/2008.
59. **Decker MJ**, Keating GL, Tabssum H, Reeves WC. Persistent fatigue and unrefreshing sleep in chronic fatigue syndrome: a manifestation of cortical hypoarousal? *SLEEP Suppl* 2008; 31:A292. 22nd Annual Meeting of the Associated Professional Sleep Societies, Baltimore, MD, 06/2008.
60. Scullin MK, **Decker MJ**, Bliwise DL. Napping and memory consolidation in younger and older adults. *SLEEP Suppl* 2014; 37:A340. 28th Annual Meeting of the Associated Professional Sleep Societies, Minneapolis, MN, 06/2014.
61. Pruden Y, **Decker M**, Pruden PM, Strohl KP. Baseline oxygen saturation in EEG determined wakefulness in relation to sleep position and its correlation to hypoxic stress during sleep in OSA. *SLEEP Suppl* 2014; 37:A129. 28th Annual Meeting of the Associated Professional Sleep Societies, Minneapolis, MN, 06/2014.
62. Damato EG, Burant C, Strohl KP, Brubaker J, **Decker MJ**. Sleep pattern gender differences and fragmentation in postpartum parents of twins. *SLEEP Suppl* 2014; 37:A355. 28th Annual Meeting of the Associated Professional Sleep Societies, Minneapolis, MN, 06/2014.
63. **Decker MJ**, Sattar A, Damato EG, Strohl KP. Sleep disorders mask peripheral markers of inflammation and immune system activity in chronic fatigue syndrome. *SLEEP Suppl* 2014; 37:A258. 28th Annual Meeting of the Associated Professional Sleep Societies, Minneapolis, MN, 06/2014.