

DAVID D. FULLER

CURRICULUM VITAE

June 17, 2008

PRESENT POSITION

Assistant Professor, Dept. of Physical Therapy
College of Public Health and Health Professions, University of Florida,
Adjunct Faculty Appointments: Dept. of Neuroscience, Dept. of Physiological Sciences

ADDRESS

University of Florida
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EDUCATION

University of Wisconsin, Madison, WI Research: respiratory and spinal neuroplasticity Supervisor: Gordon S. Mitchell, PhD	Post-Doctoral Fellowship	1999-2002
University of Arizona, Tucson, AZ Research: respiratory-related control of upper airway muscles Supervisor: Ralph F. Fregosi, PhD	PhD, Physiological Sciences	1998
University of Arizona, Tucson, AZ Research: respiratory muscle control and fatigue in humans Supervisor: Ralph F. Fregosi, PhD	MS, Exercise Physiology	1994
Miami University, Oxford, OH	BS, Exercise Science	1992

PROFESSIONAL EXPERIENCE

University of Florida, Gainesville, FL Dept. of Physical Therapy	Assistant Professor	2004-Present
University of Wisconsin, Madison, WI Dept. of Comparative Biosciences	Assistant Scientist	2003
University of Wisconsin, Madison, WI Dept. of Comparative Biosciences	Post-Doctoral Fellow	1999-2002
University of Arizona, Tucson, AZ Dept. of Physiology	Teaching & Research Assistant	1994-98
University of Arizona, Tucson, AZ Dept. of Exercise and Sports Science	Teaching & Research Assistant	1992-94

PROFESSIONAL ACTIVITIES

Membership

American Physiological Society	1995-present
Society for Neuroscience	2000-present

Symposium chair

Disease-induced plasticity in the neural control of breathing. Featured topic at the Federation of American Societies for Experimental Biology (FASEB) annual meeting, San Francisco, CA, April 2006. (co-chaired with Dr. F.J. Golder)

Breathing and walking following spinal cord injury. Featured symposium at the Federation of American Societies for Experimental Biology (FASEB) annual meeting, Washington D.C., April 2004.

Editorial Board Service

Journal of Applied Physiology 2007-2008

Ad Hoc Grant Reviewer

National Institutes of Health (NIH) Respiratory Integrative Biology & Translational Research (RIBT) study section 2008
The Craig H. Neilsen Foundation 2008
Health Research Board (Ireland) 2006, 2008

Ad Hoc Manuscript Reviewer (>50 manuscripts reviewed)

American Journal of Physiology: Regulatory, Integrative and Comparative Physiology
Brain Research
Experimental Neurology
Journal of Spinal Cord Medicine
Journal of Applied Physiology
Journal of Physiology
Proceedings of the National Academy of Sciences
Respiratory Physiology and Neurobiology
Somatosensory & Motor Research

University Service

Committees:

Committee for research excellence, Physical Therapy Dept. (co-chair) 2007-08
College of Public Health and Health Professions "Incentive Plan" Committee 2007-08
Ad Hoc Committee for advising College Dean 2006
Rehabilitation Science Doctoral Program Committee 2005-08

Seminars:

Co-organizer: "Neuro-noons" graduate student seminar 2008
Co-organizer: Physical Therapy Dept. seminar 2006-08

Judge:

T-32 Neuromuscular Plasticity Symposium graduate poster competition 2008
College "Research Day" graduate and undergraduate grant and poster competition 2007-08

Honors and Awards

Giles F. Filley Memorial Award for Excellence in Respiratory Physiology and Medicine 2005
American Physiological Society Travel Award 1998
University of Arizona Graduate Registration Scholarship 1996-97
University of Arizona Foundation Outstanding Graduate Teaching Assistant 1994

International – Invited Lectures

“Respiratory plasticity and rehabilitation following spinal cord injury”, to be presented at the symposium “Physiology in Medicine: Bridging Bench and Bedside”, at the Beijing Joint Conference of Physiological Sciences. Beijing, China, October 19-22, 2008.

National – Invited Lectures

“Respiratory related neuroplasticity”, to be presented to the Dept. of Biology at Bates College, Lewiston, ME, September 22 2008.

“Plasticity in neurobiological systems”, presented at the symposium “Adaptation and Learning in Neural-Biomechatronic Systems”, Sponsored by the National Science Foundation, Arizona State University, Phoenix, AZ, March 2007.

“Glycogen storage disease and the neural control of breathing”, presented at the featured symposium “Disease-induced Plasticity in the Control of Breathing” at the FASEB Annual Meeting, San Francisco, CA, April 2006.

“Respiratory plasticity and rehabilitation following spinal cord injury”, platform presentation at the Society for Neuroscience Annual Meeting. Washington, DC, November 2005.

“Quantifying breathing in animal models of cervical spinal cord injury and glycogen storage disease”, presented at the pulmonary research symposium in conjunction with the American Thoracic Society Annual Meeting. Sponsored by Buxco Inc. San Diego, CA, May 2005.

“Intermittent hypoxia: influence on upper airway motor function”, presented to the Pulmonary Research Group Symposium: “Sleep apnea: opportunities for drug discovery”. Shering-Plough Research Institute, Kenilworth, NJ, April 2005.

“Recovery of phrenic motor function following cervical spinal cord injury”. Presented to the Dept. of Anatomy and Cell Biology at Wayne State University, Detroit MI, December 2004.

“Spinal respiratory plasticity: implications for rehabilitation following spinal cord injury”, presented at featured symposium at the FASEB Annual Meeting, Washington, DC, April 2004.

“Breathing, plasticity and spinal cord injury”, presented to the Dept. of Kinesiology at the University of Illinois, Champaign IL, November 2002.

“Spinal cord plasticity and breathing”, presented to the Depts. of Exercise Science and Physical Therapy at Marquette University, Milwaukee, WI, September 2002.

National –short oral presentations (15-20 min)

“Prenatal nicotine and respiratory long term facilitation in neonatal rats”, presented at the featured symposium “Smoking Babies Don't Breathe” at the FASEB Annual Meeting, San Diego, CA, April 2008.

“Respiratory insufficiency and recovery following cervical spinal contusion injury in rats”, presented at the Society for Neuroscience Annual Meeting. New Orleans, LA, November 2003.

“Can pre-treatments that enhance spinal serotonergic modulation improve respiratory motor function following spinal cord injury?”, presented at the FASEB Annual Meeting, Orlando, FL, April 2001.

“Phrenic long term facilitation requires 5-HT₂ receptor activation during but not following episodic hypoxia”, presented at the Society for Neuroscience Annual Meeting. New Orleans, LA, November 2000.

“Fatiguing contractions of tongue protruder and retractor muscles: influence of systemic hypoxia”, presented at the FASEB Annual Meeting, Washington, DC, November 1999.

TEACHING EXPERIENCE

Courses taught at the University of Florida

<i>Respiratory plasticity</i>	2008
(note: this is a newly developed 2 credit graduate course that will be offered for the first time in the Fall of 2008)	
PHT 6168C – <i>Neuroscience for physical therapists</i>	2004-08
(4 credit graduate course including lecture and neuroanatomy laboratory, ~50 students)	
PHT 6318 – <i>Neuroplasticity: a foundation for rehabilitation</i>	2005-08
(2 credit graduate course, ~15 students)	

Additional lectures given at the University of Florida

PHT 6152C – <i>Exercise Physiology (“exercise and neuroplasticity”)</i>	2006
GMS 6008 – <i>Fundamentals of Physiology (“respiratory neuroplasticity”)</i>	2006
GMS 6002 – <i>Fundamental Neuroscience (“spinal plasticity”)</i>	2007

Courses taught at the University of Wisconsin

AHABS 301 – <i>Animal Physiology</i>	2000-02
AHABS 301 – <i>Respiratory physiology laboratory</i>	2000-02

Courses taught at the University of Arizona

Physiology 420 – <i>Exercise Physiology</i>	1997
Physiology 418/419 – <i>Physiology for Engineering Students</i>	1996
Physiology 601/801 – <i>Systems Physiology Laboratory</i>	1996
Exercise and Sport Sciences 378, 421, 521 – <i>Exercise Physiology Laboratory</i>	1993-97
Exercise and Sport Sciences 169A, 169B, 169C, 170, 184A (<i>swimming; weight training</i>)	1992-93

PhD student supervision

Brendan Dougherty (2007-present) Interdisciplinary Program in Biomedical Sciences.

Project: Enhancing the efficacy of graft-host interaction following transplant of fetal stem cells into the injured spinal cord

Milap Sandhu (2005-present) Rehabilitation Sciences Doctoral Program.

Project: The impact of fetal cervical spinal grafts on axon regeneration and respiratory motor recovery after high cervical spinal cord injury.

*Lara R. DeRuisseau (2004-2006) Physiological Sciences Doctoral Program,

Project: Ventilatory and Central Nervous System Characterization and Gene-therapy Treatment of a Mouse Model of Glycogen Storage Disease Type II; *, Co-mentor with Dr. Barry Byrne

PhD committee member

Kathryn Pate (2007-present) Physiological Sciences Doctoral Program

Project: TBD

Prithvi Shah (2007-2008) Rehabilitation Sciences Doctoral Program

Project: Magnetic resonance characterization of skeletal muscle adaptations after incomplete spinal cord injury.

Vipa Bernhard (2007-present) Physiological Sciences Doctoral Program

Project: Neural gating of respiratory sensation

Fan Ye (2006-present) Rehabilitation Science Doctoral Program

Project: Role of IGF in Skeletal Muscle Plasticity Following Spinal Cord Injury and Locomotor Training.

Tseng-Tien Huang (2005-present) Rehabilitation Sciences Doctoral Program

Project: Weaning from prolonged mechanical ventilation in humans.

Deoghare Harshavardhan (2005-present) Rehabilitation Sciences Doctoral Program

Project: Weaning from prolonged mechanical ventilation in humans.

Pei-Ying Sarah Chan (2005-present) Physiological Sciences Doctoral Program

Project: Respiratory sensation in humans.

Min Lui (2004-2006) Rehabilitation Science Doctoral Program

Project: Adaptations In Skeletal Muscle Following Spinal Cord Injury and Locomotor Training.

Undergraduate student senior honors thesis advisor

Amanda Sundholm (2007-08)

Project: The influence of prenatal nicotine exposure on hypoglossal long term facilitation in rats.

Kennah Johnson (2005-2006)

Project: The influence of cervical spinal cord injury on spontaneous augmented breaths (sighs) in rats.

Whitney Bour (2005-2006)

Project: Long term facilitation of phrenic motor output following cervical spinal cord injury in rats.

Kelly Vollendorf (2004-2005)

Project: Influence of endogenous sex hormones on respiration in rats.

Claudia Mena (2004-2005)

Project: Respiratory muscle strength training after spinal cord injury in rats.

RESEARCH SUPPORT

Principal Investigator of Awarded Grants: External Funding

Title: Control of breathing in glycogen storage disease
Participation: Principal Investigator (50% Effort)
Type: NIH 1R01HD052682-01A1
Agency: National Institutes of Health
Direct Costs: \$910,440
Indirect Costs: \$408,530
Funding Period: 2007 – 2012

Title: The role of nicotine in the neural control of respiratory and cardiovascular systems
Participation: Co-Principal Investigator (10% Effort)
Type: Award from the State of Florida
Agency: James & Esther King Biomedical Research Program
Direct Costs: \$179,354
Indirect Costs: \$8,967
Funding Period: 2006 – 2008

Title: Safety and feasibility of viral vector or plasmid based targeting of zinc finger protein gene activator in the normal and injured rat spinal cord.
Participation: Co-Principal Investigator (5% Effort)
Type: Contractual Research Project
Agency: Sangamo BioSciences, Inc.
Direct Costs: \$44,623
Indirect Costs: \$20,303
Funding Period: 2006 - 2007

Title: Female sex hormones and spinal cord injury
Participation: Principal Investigator (15% Effort)
Type: NIH RO3 NS050684-01A1
Agency: National Institutes of Health
Direct Costs: \$98,825
Indirect Costs: \$44,965
Funding Period: 2005 – 2007

Title: Giles F. Filley Memorial Award for Excellence in Respiratory Physiology
Participation: Principal Investigator (note: no salary support was provided by this internal award)
Type: External Funding Agency
Agency: American Physiological Society
Direct Costs: \$20,000
Indirect Costs: N/A
Funding Period: 2005

Title: Respiratory Muscle Training Following Spinal Cord Injury
Participation: Principal Investigator (5% Effort)
Type: External Funding Agency
Agency: American Paraplegia Society
Direct Costs: \$13,393
Indirect Costs: \$1,607
Funding Period: 2004 – 2005

Title: Spinal cord injury and plasticity in respiratory motor control
Participation: Principal Investigator (60% Effort)
Type: Foundation Award
Agency: Parker B. Francis Foundation for Pulmonary Research
Direct Costs: \$21,000
Indirect Costs: N/A
Funding Period: 2004

Title: Plasticity in spinal respiratory pathways following treadmill exercise
Participation: Principal Investigator (20% Effort)
Type: External Funding Agency
Agency: Christopher Reeve Paralysis Foundation
Direct Costs: \$68,182
Indirect Costs: \$6,818
Funding Period: 2003 – 2005

Co-Investigator of Awarded Grants: External Funding

Title: Plasticity and repair in the phrenic motor system
Participation: Co- Investigator (10% Effort)
Type: 1 R01 NS054025-01
Agency: National Institutes of Health
Direct Costs: \$70,460
Indirect Costs: \$32,060
Funding Period: 2005 – 2010

Principal Investigator of Grants: Internal Funding

Title: Training the transplant after spinal cord injury
Participation: Principal Investigator (note: no salary support was provided by this internal award)
Type: University of Florida Research Opportunity Fund
Direct Costs: \$87,000
Indirect Costs: N/A
Funding Period: 2008 – 2010

Title: Mechanisms Underlying Rehabilitative Training-Induced Motor Recovery Following Spinal Cord
Participation: Principal Investigator (note: no salary support was provided by this internal award)
Type: University of Florida Research Opportunity Fund
Direct Costs: \$100,000
Indirect Costs: N/A
Funding Period: 2004 – 2005

Grants awarded to students

Student: Milapjit Sandhu, PT
Title: Combining pharmacological therapy with cell transplant to improve respiratory function after spinal cord injury
Participation: Primary mentor
Type: Bryan W. Robinson Endowment, Tallahassee Memorial Neuroscience Center
Direct Costs: \$2,500
Indirect Costs: N/A
Funding Period: 2008-2009

Student: Milapjit Sandhu, PT
Title: Neural repair and functional respiratory recovery after cervical spinal cord injury
Participation: Primary mentor
Type: Internal award from the College of Public Health and Health Professions
Direct Costs: \$1,000
Indirect Costs: N/A
Funding Period: 2007-2008

Student: Brendan Dougherty, PT
Title: Enhancing the Integration of Fetal Spinal Cord Grafts with Host Spinal Cord
Participation: Primary mentor
Type: University of Florida Medical Guild Research Incentive Award
Direct Costs: \$500
Indirect Costs: N/A
Funding Period: 2008-2009

Principal Investigator of Grants *in revision*

Title: Neuroplasticity and respiratory rehabilitation after spinal cord injury
Participation: Principal Investigator
Type: 1R01HD051890-01
Agency: National Institutes of Health
Direct Costs: \$1,250,000
Funding Period: N/A

Participation in Graduate Student Training Grants

Title: Interdisciplinary Training in Rehabilitation and Neuromuscular Plasticity
Role: Faculty Preceptor (PI: Dr. Krista Vandenberg)
Type: T32HD043730
Agency: National Institutes of Health
Participation: 2005 – present

PUBLICATIONS

Peer-reviewed journals

35. LANE MA, **FULLER DD**, WHITE TE, REIER PJ. Respiratory Plasticity and Spinal Cord Injury. *Trends in Neuroscience*. (accepted pending minor text revisions)
34. DOPERALSKI NJ, SANDHU M, BAVIS RW, REIER PJ, **FULLER DD**. Ventilation and phrenic output following high cervical spinal hemisection in male vs. female rats. *Respiratory Physiology and Neurobiology* (in press).
33. **FULLER DD**, DOPERALSKI NJ, SANDHU MS, BOLSER DC, REIER PJ. Modest spontaneous recovery of ventilation following chronic high cervical hemisection in rats. *Experimental Neurology*. 211:97-106, 2008.
32. LEE KZ, **FULLER DD**, LU IJ, KU LC, HWANG JC. Pulmonary C-fiber activation abolishes the uncoupling of upper airway and phrenic respiratory bursting normally observed during application of positive end expiratory pressure in the rat. *Journal of Applied Physiology*. 104:119-29, 2008.
31. MAH C, PACAK CA, CRESAWN KO, DERUISSEAU LR, GERMAIN S, LEWIS MA, **FULLER DD**, BYRNE BJ. Physiological correction of Pompe disease by systemic delivery of adeno-associated virus serotype 1 vectors. *Molecular Therapy*. 15(3):501-7, 2007.
30. LEE KZ, **FULLER DD**, TUNG LC, LU IJ, KU LC, HWANG JC. Uncoupling of upper airway motor activity from phrenic bursting by positive end-expired pressure in the rat. *Journal of Applied Physiology*. 102(3):878-89, 2007.
29. LEE KZ, **FULLER DD**, LU I-J, LIN JT, HWANG JC. Neural drive to tongue protruder and retractor muscles following pulmonary C-fiber activation. *Journal of Applied Physiology*. 102(1):434-44, 2007.
28. DOPERALSKI NJ, **FULLER DD**. Long term facilitation of ipsilateral but not contralateral phrenic motor output in rats with chronic cervical spinal cord hemisection. *Experimental Neurology*. 200(1):74-81, 2006.
27. BOLSER DC, POLIACEK I, JAKUS J, **FULLER DD**, DAVENPORT PW. Neurogenesis of cough, other airway defensive behaviors and breathing: a holonarchical supersystem? *Respiratory Physiology and Neurobiology*. 152(3):255-65, 2006.
26. **FULLER DD**, GOLDER FJ, OLSON EB Jr., MITCHELL GS. Recovery of phrenic activity and ventilation following cervical spinal hemisection in rats. *Journal of Applied Physiology*. 100(3):800-6, 2006.
25. **FULLER DD**. Long-term facilitation of inspiratory drive to tongue protruder and retractor muscles in the rat. *Journal of Applied Physiology*. 98(5):1761-7, 2005.
24. **FULLER DD**, BAKER-HERMAN TL, GOLDER FJ, DOPERALSKI NJ, WATTERS JJ, MITCHELL GS. Cervical spinal cord injury upregulates ventral spinal 5-HT_{2A} receptors. *Journal of Neurotrauma*. 22(2):203-13, 2005.

23. GOLDER FJ, ZABKA AG, BAVIS RW, BAKER-HERMAN TL, **FULLER DD**, MITCHELL GS. Differences in time-dependent hypoxic phrenic responses among inbred rat strains. *Journal of Applied Physiology*. 98(3):838-44, 2005.
22. BAVIS RW, OLSON EB Jr, VIDRUK EH, **FULLER DD**, MITCHELL GS. Developmental plasticity of the hypoxic ventilatory response in rats induced by neonatal hypoxia. *Journal of Physiology (London)*. 557(2):645-60, 2004.
21. BAKER-HERMAN TL, **FULLER DD**, BAVIS RW, ZABKA AG, GOLDER FJ, DOPERALSKI NJ, JOHNSON RA, WATTERS JJ, MITCHELL GS. BDNF is necessary and sufficient for spinal respiratory plasticity following intermittent hypoxia. *Nature Neuroscience*. 7(1):48-55, 2004.
20. BISGARD GE, OLSON EB Jr, WANG Z-Y, BAVIS RW, **FULLER DD**, MITCHELL GS. Duration of postnatal hyperoxia determines function of the adult carotid body. *Journal of Applied Physiology*. 95:946-952, 2003.
19. **FULLER DD**, JOHNSON SM, OLSON EB Jr, MITCHELL GS. Synaptic pathways to phrenic motoneurons are enhanced by chronic intermittent hypoxia following cervical spinal cord injury. *Journal of Neuroscience*. 23(7):2993-3000, 2003.
18. GOLDER FJ, **FULLER DD**, DAVENPORT PW, JOHNSON RD, REIER PJ, BOLSER DC. Phrenic motor recovery following unilateral cervical spinal cord injury: functional contributions to the control of breathing. *Journal of Neuroscience*. 23(6):2494-501, 2003.
17. **FULLER DD**, JOHNSON SM, JOHNSON RA, MITCHELL GS. Chronic spinal sensory denervation reveals ineffective spinal pathways to respiratory motoneurons. *Neuroscience Letters*. 323:25-8, 2002.
16. ABRAHAM KA, FEINGOLD H, **FULLER DD**, JENKINS M, MATEIKA JH, FREGOSI RF. Pattern of abdominal muscle activation during exercise in humans. *Journal of Physiology (London)*. 541(2):653-63, 2002.
15. **FULLER DD**, BAVIS RS, VIDRUK EH, OLSON EB Jr, MITCHELL GS. Life-long impairment of hypoxic phrenic responses in rats following developmental hyperoxia. *Journal of Physiology (London)*. 538(3):947-55, 2002.
14. BAKER TL, **FULLER DD**, ZABKA AG, MITCHELL GS. Respiratory plasticity: different effects of continuous and episodic hypoxia and hypercapnia. *Respiration Physiology*. 129:25-35, 2001.
13. **FULLER DD**, WANG Z-Y, LING L, OLSON EB Jr, BISGARD GE, MITCHELL GS. Induced recovery of hypoxic phrenic responses in adult rats exposed to hyperoxia for the first month of life. *Journal of Physiology (London)*. 536(3):917-26, 2001.
12. LING L, **FULLER DD**, BACH KB, KINKEAD R, OLSON EB Jr, MITCHELL GS. Chronic intermittent hypoxia elicits serotonin-dependent plasticity in the central neural control of breathing. *Journal of Neuroscience*. 21(14):5381-5388, 2001.
11. OLSON EB, Jr, BOHNE CJ, DWINELL MR, PODOLSKY A, VIDRUK EH, **FULLER DD**, POWELL FL, MITCHELL GS. Ventilatory long term facilitation in unanesthetized rats. *Journal of Applied Physiology*. 91(2):709-716, 2001.

13. MITCHELL GS, BAKER TL, NANDA SA, **FULLER DD**, ZABKA AG, HODGEMAN BA, BAVIS RW, OLSON EB Jr. Intermittent hypoxia and respiratory plasticity. *Journal of Applied Physiology*. 90(6):2466-75, 2001.
12. **FULLER DD**, ZABKA AG, BAKER TL, MITCHELL GS. Phrenic long term facilitation in the rat requires 5-HT₂ receptor activation during but not following episodic hypoxia. *Journal of Applied Physiology*. 90:2001. (note: this manuscript was featured as a Highlighted Topic)
11. BAILEY EF, JONES CL, REEDER J, **FULLER DD**, FREGOSI RF. Influence of pulmonary stretch receptor feedback and CO₂ on upper airway and respiratory pump muscle activities in the rat. *Journal of Physiology (London)*. 532:525-534, 2001.
10. **FULLER DD**, BAKER TL, BEHAN M, MITCHELL GS. Expression of hypoglossal long term facilitation differs between sub-strains of Sprague-Dawley rats. *Physiological Genomics*. 4:175-81, 2001.
9. WILLIAMS JS, JANSSEN PL, **FULLER DD**, FREGOSI RF. Influence of posture and breathing route on neural drive to upper airway dilator muscles during exercise. *Journal of Applied Physiology*. 89(2):590-8, 2000.
8. **FULLER DD**, BACH KB, BAKER TL, KINKEAD R, MITCHELL GS. Long term facilitation of phrenic motor output. *Respiration Physiology*. 121(2-3):135-146, 2000.
7. **FULLER DD** and FREGOSI RF. Fatiguing contractions of tongue protruder and retractor muscles: influence of systemic hypoxia. *Journal of Applied Physiology*. 88:2123-2130, 2000.
6. **FULLER DD**, WILLIAMS JS, JANSSEN PL, FREGOSI RF. Effect of selective hypoglossal nerve stimulation on tongue movements and pharyngeal airflow mechanics in the rat. *Journal of Physiology (London)*. 519.2:601-613, 1999.
5. **FULLER DD**, MATEIKA JH, FREGOSI RF. Co-activation of tongue protruder and retractor muscles during chemoreceptor stimulation in the rat. *Journal of Physiology (London)*. 507.1:265-276, 1998.
4. FREGOSI RF, **FULLER DD**. Respiratory-related control of extrinsic tongue muscles. *Respiration Physiology*. 110:295-306, 1997.
3. SULLIVAN J, **FULLER DD**, FREGOSI RF. Control of nasal dilator muscle activities during exercise: Role of nasopharyngeal afferents. *Journal of Applied Physiology*. 80(5):1520-1527, 1996.
2. **FULLER DD**, SULLIVAN J, FREGOSI RF. Expiratory muscle endurance performance following exhaustive sub-maximal exercise. *Journal of Applied Physiology*. 80(5):1495-1502, 1996.
1. **FULLER DD**, SULLIVAN J, PERSONIUS K, ESSIF E, FREGOSI RF. Measurement of the EMG-force relationship in a human upper airway muscle. *Journal of Applied Physiology*. 79(1):270-278, 1995.

Manuscripts in revision

- DOPERALSKI NJ, REIER PJ, **FULLER DD**. Graded unilateral cervical spinal cord injury and respiratory motor recovery. *Respiratory Physiology and Neurobiology*.
- DERUISSEAU LR, **FULLER DD**, DERUISSEAU K, MAH C, REIER PJ, BYRNE BJ. Neural Deficits Contribute to Respiratory Insufficiency in a Mouse Model of Pompe Disease. *PNAS*.
- LANE MA, WHITE TE, COUTTS MA, JONES AL, SANDHU M, BLOOM DC, BOLSER DC, YATES BJ, **FULLER DD**, REIER PJ. Transneuronal Tracing Reveals Cervical Interneurons with Connections to the Phrenic Motoneuron Pool in the Adult Rat. *Journal of Neuroscience*.
- GOLDER FJ, **FULLER DD**, BARR MRL, RESNICK DK, MITCHELL GS. Respiratory motor plasticity contributes to breathing patterns after mid-cervical spinal contusion in rats. *Journal of Neurotrauma*.

Book Chapter

- FULLER DD**, BAVIS RW and MITCHELL GS. Respiratory plasticity: respiratory gases, development, and spinal injury. In: *Pharmacology and Pathophysiology of the Control of Breathing*. Editors: D.S. Ward, A. Dahan and L. Teppema. Boca Raton: Taylor & Francis, p.155-223, 2005.

Abstracts

64. **FULLER DD**, LANE MA, WHITE TE, SANDHU MS, REIER PJ. Cervical Spinal Cord Injury (SCI) and Respiratory Neuroplasticity. Beijing Joint Conference of Physiological sciences – Physiology in Medicine: Bridging Bed and Benchside. October, 2008. Citation not yet available.
63. LANE MA, COUTTS MA, WHITE TE, JONES AL, HUNSAKER FL, O'STEEN BE, **FULLER DD**, REIER PJ. Characterization of spinal and supraspinal input to phrenic motor circuit in the normal and injured spinal cord of adult rat. Society for Neuroscience Annual Meeting 2008. Citation not yet available.
62. LANE MA, WHITE TE, COUTTS MA, SANDHU M, SIEGEL KA, O'STEEN BE, **FULLER DD**, REIER PJ. Could interneurons contribute to respiratory plasticity following cervical spinal cord injury in rat? 15th Annual Meeting of the American Society for Neural Therapy and Repair (ASNTR), Clearwater, Florida. Cell Transplantation. 17:4, 470, 2008.
61. WHITE TE, **FULLER DD**, SIEGEL KA, OSTEEN BE, LANE MA, REIER PJ. Characterization of cellular replacement mediated modulation of respiratory behavioral neuroplasticity following cervical spinal cord hemisection. 15th Annual Meeting of the American Society for Neural Therapy and Repair (ASNTR), Clearwater, Florida. Cell Transplantation. 17:4, 485, 2008.
60. DOPERALSKI NJ, REIER PJ, **FULLER DD**. Sex differences in respiratory recovery following high cervical spinal hemisection in the rat. Society for Neuroscience Annual Meeting 2007. Program No. 601.21. 2007. Neuroscience Meeting Planner. San Diego, CA. Society for Neuroscience, 2007 Online.

59. LANE MA, WHITE TE, COUTTS MA, SANDHU M, SIEGEL KA, O'STEEN BE, **FULLER DD**, , REIER PJ. Plasticity in respiratory circuitry following partial spinal cord injury (SCI) in the adult rat. Program No. 600.29. 2007. Neuroscience Meeting Planner. San Diego, CA. Society for Neuroscience, 2007 Online.
58. LANE MA, WHITE TE, COUTTS MA, JONES AL, SANDHU M, SIEGEL KA, O'STEEN BE, **FULLER DD**, REIER PJ. Neuroplasticity in the respiratory circuit following lateral hemisection in the adult rat cervical spinal cord. 12th International Symposium on Neural Regeneration. Asilomar, California, 2007.
57. WHITE TE, **FULLER DD**, SIEGEL KA, OSTEEN BE, LANE MA, REIER PJ. Cellular replacement modulates behavioral neuroplasticity following high cervical spinal cord injury. 12th International Symposium on Neural Regeneration. Asilomar, California, 2007.
56. **FULLER DD**, DOPERALSKI NJ, DOUGHERTY BJ, SANDHU M, REYNOLDS C, HAYWARD L. Prenatal nicotine and respiratory long-term facilitation in neonatal rats. 2008 Experimental Biology meeting abstracts [available at <http://www.eb2008-online.com/faseb.html>], FASEB J. 22:955.12, 2008.
55. REYNOLDS C, WARD C, DOPERALSKI N, **FULLER DD**, HAYWARD L. Developmental changes of autonomic control of heart rate in the conscious behaving rat: State and sex influences. American Physiological Society Meeting: Sex and Gender in Cardiovascular-Renal Physiology and Pathophysiology. August 9-12, 2007, Austin, TX. Abstract #5.7, page 14. [available at <http://www.the-aps.org/meetings/aps/austin07/program.pdf>]
54. REIER PJ, BEHRMAN A, HOWLAND DR, LANE M, **FULLER DD**. Spinal Cord Neuroplasticity, Neural Circuitry, and A "Little Bit of Lamprey" In All of Us. 14th Annual Meeting of the American Society for Neural Therapy and Repair (ASNTR), Clearwater, Florida. Cell Transplantation. 16:3, page 313, 2007.
53. LANE MA, WHITE, TE, COUTTS MA, SANDHU M, SIGEEL KA, O'STEEN BE, **FULLER DD**, REIER PJ. Transneuronal tracing reveals interneurons premotor to the phrenic motor nucleus in the adult rat spinal cord. 14th Annual Meeting of the American Society for Neural Therapy and Repair (ASNTR), Clearwater, Florida. Cell Transplantation. 16:3, page 331, 2007.
52. SANDHU MS, DOPERALSKI NJ, BOLSER DC, REIER PJ, **FULLER DD**. The phrenic motor circuitry after cervical spinal cord injury: insights from neurophysiological methods. 14th Annual Meeting of the American Society for Neural Therapy and Repair (ASNTR), Clearwater, Florida. Cell Transplantation. 16:3, pages 343-44, 2007.
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