

DAVID D. FULLER

CURRICULUM VITAE

August 22, 2011

PRESENT POSITION

Associate 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	MS, Exercise Physiology	1994
Miami University, Oxford, OH	BS, Exercise Science	1992

PROFESSIONAL EXPERIENCE

University of Florida, Gainesville, FL Dept. of Physical Therapy	Associate Professor	2009-Present
University of Florida, Gainesville, FL Dept. of Physical Therapy	Assistant Professor	2004-09
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

Editorial Board Service

Guest editor: special issue of <i>Respiratory Physiology and Neurobiology</i>	2011
Associate editor: <i>Frontiers in Respiratory Physiology</i>	2010-present
Editorial board: <i>Journal of Applied Physiology</i>	2007-present
Editorial board: <i>Frontiers in Exercise Physiology</i>	2011-present

Grant Reviewer

National Institutes of Health

Neuroimmunology and Spinal Cord Injury ZRG1 BDCN-Y(02)	2011
Respiratory Integrative Biology & Translational Research (RIBT) study section	2008-09
Lung Cellular, Molecular, and Immunobiology Study Section	2010
NIH ZRG1 CVRS-B 58 R, RFA-OD-09-003: Challenge Grants Panel 19	2009

Other organizations

Christopher & Dana Reeve Foundation	2010
Center for Integration of Medicine & Innovative Technology (Boston, USA)	2010
The Craig H. Neilsen Foundation (USA)	2008-10
Health Research Board (Ireland)	2006-08
The Agency for Science, Technology and Research (Singapore)	2008
The American Physiological Society	2008-10
The Wellcome Trust (UK)	2010

Manuscript Reviewer

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

Honors & Awards

New Investigator Award, American Physiological Society, Respiration Section	2009
Giles F. Filley Memorial Award for Excellence in Respiratory Physiology and Medicine	2005
Parker B. Francis Fellowship in Pulmonary Research	2002-04
American Physiological Society Travel Award	1998
University of Arizona Graduate Registration Scholarship	1996-97
University of Arizona Foundation Outstanding Graduate Teaching Assistant	1994

Symposium organizer

Respiratory control disorders. Featured topic at the Federation of American Societies for Experimental Biology (FASEB) annual meeting, Washington, DC, April 2011.

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.

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.

International Invited Lectures

“Cervical spinal cord injury and respiratory neuroplasticity”, 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

“Control of breathing and pompe disease”, presented at the FASEB Annual Meeting, Washington, DC, April 2011.

“Basic science in a physical therapy department”, Presented as part of the seminar “Rehabilitation Science Research and Graduate Studies: Contributing to Evidence Based Clinical Practice” at the American Physical Therapy Association Combined Sections meeting, February 2010, San Diego.

“Cervical spinal cord Injury and respiratory neuroplasticity”, presented to the Nanoscience Technology Center, University of Central Florida, Burnett School of Biomedical Sciences, Orlando, FL, August 31, 2009.

“Gene therapy for respiratory insufficiency in a mouse model of Pompe Disease”, presented at the featured symposium “Control of breathing in chronic diseases” at the FASEB Annual Meeting, New Orleans, LA, April 2009.

“Quantifying respiratory recovery after spinal cord injury”, presented at a workshop with the American Society for Neurochemistry annual meeting, Charleston, SC, March 7, 2009.

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

University of Florida

- PHT6935C: Human Physiology 2010
(3 credit graduate course, ~50 students)
- PHT6168C – Neuroscience for physical therapists 2004-10
(4 credit graduate course including lecture and neuroanatomy laboratory, ~50 students)
- PHT6318 – Neuroplasticity: a foundation for rehabilitation 2005-10
(3 credit graduate course, ~15 students)
- PHT6935C - Respiratory plasticity 2008
(2 credit graduate course, ~15 students)

Additional lectures given at the University of Florida

- PHT 6152C – Exercise Physiology (“exercise and neuroplasticity”) 2006
- GMS 6008 – Fundamentals of Physiology (“respiratory neuroplasticity”) 2006
- GMS 6002 – Fundamental Neuroscience (“spinal plasticity”) 2007
- PHT 6935: Translational Neuroscience Research (“respiratory plasticity”;
“animal models of respiratory dysfunction”) 2009-10

University of Wisconsin

- AHABS 301 – Animal Physiology 2000-02
- AHABS 301 – Respiratory physiology laboratory 2000-02

University of Arizona

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

Membership

American Physiological Society
Society for Neuroscience

1995-present
2000-present

RESEARCH SUPPORT

Active Grants

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: Mapping toxic domains in SOD1 mice
Participation: Co- Investigator (27% Effort)
Type: P01 NS049134-07, NIH program project grant (subproject PI David Borchelt)
Agency: National Institutes of Health
Direct Costs: \$36,460
Indirect Costs: \$16,935
Funding Period: 2010 – 2011

Title: Pre-Clinical Study of a Combined Treatment Strategy to Promote Respiratory Improvement Following Spinal Cord Injury
Participation: Co-Investigator (note: no salary support was provided by this internal award)
Type: University of Florida Research Opportunity Fund
Direct Costs: \$90,000
Indirect Costs: N/A
Funding Period: 2010-2011

Title: Training novel host-graft interfaces to enhance spinal cord repair
Participation: Principal Investigator (25% Effort)
Type: NIH 1 R21 HL104294-01
Agency: National Institutes of Health
Direct Costs: \$275,000
Indirect Costs: \$119,470
Funding Period: 2011 – 2013

Expired Grants

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

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: 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: 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 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

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

PUBLICATIONS

Peer-reviewed journals

60. QUI K, FALK DJ, REIER PJ, BYRNE BJ, **FULLER DD**. Spinal delivery of AAV5 vector restores enzyme activity and increases ventilation in Pompe mice. *Molecular Therapy*. [in press]
59. FREGOSI RF, BAILEY EF, **FULLER DD**. Respiratory muscles and motoneurons. *Respiratory Physiology and Neurobiology*. 2011 Jul 6. [Epub ahead of print] PMID: 21762791
58. LEE KZ, QIU K, SANDHU MS, ELMALLAH MK, FALK DJ, LANE MA, BYRNE BJ, REIER PJ, **FULLER DD**. Hypoglossal neuropathology and respiratory activity in Pompe mice. *Frontiers in Respiratory Physiology* 2011;2:31. Epub 2011 Jun 30. PMID: 21747768
57. GOLDER FJ, **FULLER DD**, BARR MRL, VINIT S, RESNICK DK, MITCHELL GS. Breathing patterns after mid-cervical spinal contusion in rats. *Experimental Neurology*. 2011 Jun 13. [Epub ahead of print]. PMID: 21683697
56. BYRNE BJ, FALK D, PACAK CA, NAYAK S, HERZOG R, CONLON TJ, LEMENT N, CLOUTIER DA, PORVASNIK SL, ISLAM S, ELMALLAH MK, MARTIN A, SMITH BK, **FULLER DD**, LAWSON LA, MAH CS. Pompe Disease Gene Therapy. *Human Molecular Genetics*. 2011. 20(R1):R61-8. PMID: 21518733
55. LEE KZ, **FULLER DD**. Neural control of phrenic motoneuron discharge. *Respiratory Physiology and Neurobiology*. (2011 Mar 3. [Epub ahead of print]). PMID: 21376841
54. BOYCHUCK CR, **FULLER DD**, HAYWARD LF. Sex differences in heart rate variability during sleep following prenatal nicotine exposure in rat pups. *Behavioral Brain Research*. 219(1):82-91, 2011. PMID: 21163307
53. QIU K, LANE MA, LEE K-Z, REIER PJ, **FULLER DD**. The phrenic motor nucleus in the mouse. *Experimental Neurology*. 226(1):254-58, 2010. PMID: 20816820
52. LEE K-Z, **FULLER DD**. Hypoxia induced short-term potentiation of respiratory-modulated facial motor output in the rat. *Respiratory Physiology and Neurobiology*. 173(1):107-11, 2010. PMID: 20601212
51. WHITE TE, LANE MA, SANDHU MS, O'STEEN BE, **FULLER DD**, REIER, PJ. Differential effects of embryonic spinal floor- and roof-plate enriched neuronal progenitor cells transplant on ventilation in adult rats. *Experimental Neurology*. Exp Neurol. 225(1):231-6, 2010. PMID: 20599981
50. LEE K-Z, SANDHU MS, DOUGHERTY BJ, REIER PJ, **FULLER DD**. Influence of vagal afferents on supraspinal and spinal respiratory activity following cervical spinal cord injury in rats. *Journal of Applied Physiology*. 2010 May 27. [Epub ahead of print] PMID: 20507963
49. SANDHU MS, LEE KZ, FREGOSI RF, **FULLER DD**. Phrenicotomy alters phrenic long term facilitation (LTF) following intermittent hypoxia in anesthetized rats. *Journal of Applied Physiology*. 109(2):377-87, 2010. PMID: 20395548
48. LEE K-Z, **FULLER DD**. Pre-inspiratory and inspiratory hypoglossal motor output during hypoxia induced plasticity in the rat. *Journal of Applied Physiology*. 108(5):1187-98, 2010. PMID: 20150564
47. MAH CS, FALK DJ, GERMAIN SA, KELLEY JS, LEWIS MA, CLOUTIER DA, DERUISSEAU LR, CONLON TJ, CREWAWN KO, FRAITES TJ, CAMPBELL-THOMPSON M, **FULLER DD**,

- BYRNE BJ. Gel-mediated delivery of AAV1 vectors corrects ventilatory function in pompe mice with established disease. *Molecular Therapy* 18(3):502-10, 2010. PMID: 20104213
46. **FULLER DD**, DOUGHERY BJ, SANDHU MS, DOPERALSKI NJ, REYNOLDS CR, HAYWARD LF. Prenatal nicotine exposure alters respiratory long term facilitation in neonatal rats. *Respiratory Physiology and Neurobiology*. 169(3):333-7, 2009. PMID: 19818419
45. BOLSER DC, JEFFERSON SC, ROSE MJ, TESTER NJ, REIER PJ, **FULLER DD**, DAVENPORT PW, HOWLAND D. Recovery of airway defensive behaviors after spinal cord injury. *Respiration Physiology and Neurobiology*. 169(2):150-6, 2009. PMID: 19635591
44. LANE MA, LEE K-Z, **FULLER DD**, REIER PJ. Spinal circuitry and respiratory recovery following spinal cord injury. *Respiration Physiology and Neurobiology*. 169(2):123-32, 2009. PMID: 19657076
43. LEE K-Z, REIER PJ, **FULLER DD**. Phrenic motoneuron discharge patterns during hypoxia-induced short term potentiation. *Journal of Neurophysiology*. 102(4):2184-93, 2009. PMID: 19657076
42. SANDHU MS, DOUGHERTY BJ, LANE MA, BOLSER D, KIRKWOOD PA, REIER PJ, **FULLER DD**. Respiratory recovery following high cervical hemisection. *Respiration Physiology and Neurobiology*. 169(2):94-101, 2009. PMID: 19560562
41. DERUISSEAU LR, **FULLER DD**, DERUISSEAU K, MAH C, REIR PJ, BYRNE BJ. Neural Deficits Contribute to Respiratory Insufficiency in Pompe Disease. *Proceedings of the National Academy of Science*. 106(23):9419-24, 2009. PMID: 19474295
40. **FULLER DD**, SANDHU MS, DOPERALSKI NJ, LANE MA, WHITE TE, BISHOP MA, REIER PJ. Graded unilateral cervical spinal cord injury and respiratory motor recovery. *Respiratory Physiology and Neurobiology*. 165(2-3):245-53, 2009. PMID: 19150658
39. LANE MA, WHITE TE, COUTTS MA, JONES AL, SANDHU MS, BLOOM DC, BOLSER DC, YATES BJ, **FULLER DD**, REIER PJ. Cervical pre-phrenic interneurons in the normal and lesioned spinal cord of the adult rat. *Journal of Comparative Neurology*. 511(5):692-709, 2008. PMID: 18924146
38. LANE MA, **FULLER DD**, WHITE TE, REIER PJ. Respiratory Plasticity and Spinal Cord Injury. *Trends in Neuroscience*. 31(10):538-47, 2008. PMID: 18775573
37. 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*. 162(2):160-7, 2008. PMID: 18586119
36. **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. PMID: 18308305
35. 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. PMID: 17916674
34. 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. PMID: 17245350

33. 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. PMID: 17082369
32. 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. PMID: 16973814
31. 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. PMID: 16647702
30. 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. PMID: 16723284
29. **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. PMID: 16269524
28. **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. PMID: 15640385
27. **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. PMID: 15716627
26. 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. PMID: 15531560
25. 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. PMID: 15020695
24. 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. PMID: 14699417
23. 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. PMID: 12909596
22. **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. PMID: 12684486
21. 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. PMID: 12657710
20. **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. PMID: 11911982

19. 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. PMID: 12042369
18. **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. PMID: 11826178
17. 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. PMID: 11738644
16. **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. PMID: 11691883
15. 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. PMID: 11438615
14. 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. PMID: 11457785
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. PMID: 11306669
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(5):2001-6, 2001. PMID: 11299296
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. PMID: 11306669
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. PMID: 11160996
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. PMID: 10926642
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. PMID: 10963770
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. PMID: 10846026
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. PMID: 10457075
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. PMID: 9490849

4. FREGOSI RF, **FULLER DD**. Respiratory-related control of extrinsic tongue muscles. *Respiration Physiology*. 110:295-306, 1997. PMID: 9407623
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. PMID: 8727535
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. PMID: 8727532
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. PMID: 7559231

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

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