Elisa Janine Gonzalez-Rothi, DPT, PhD

CURRICULUM VITAE

Research Assistant Professor
Department of Physical Therapy
University of Florida
PO Box 100154, UFHSC
Gainesville, FL 32610
Phone: (352)273-8965
Email: elisagon@phhp.ufl.edu

RESEARCH INTERESTS

- Impact of sleep disordered breathing on respiratory plasticity in chronic spinal cord injury
- Impact of sleep fragmentation/deprivation on respiratory plasticity in chronic spinal cord injury
- Intermittent hypoxia-induced recovery of respiratory function in chronic spinal cord injury
- Inflammation and spinal respiratory motor plasticity
- Neural control of respiratory function following spinal cord injury
- Electrical stimulation as a therapeutic modality in spinal cord injury
- Ampakines as a therapeutic modality for treating respiratory dysfunction in spinal cord injury
- Respiratory muscle plasticity following spinal cord injury
- Neural control of limb function following spinal cord injury

EDUCATION AND TRAINING

UNIVERSITY OF FLORIDA **GAINESVILLE, FL**

2013-2015 Post-Doctoral Research Fellowship
Department of Physical Therapy
Mentor: David D. Fuller, PhD
Research: Therapeutic strategies to enhance respiratory function after spinal injury

2008-2013 Doctor of Philosophy (PhD), Rehabilitation Sciences
Department of Physical Therapy
Mentor: David D. Fuller, PhD
Dissertation Title: Spinal Cord Injury and Plasticity in Cervical Motor Systems

UNIVERSITY OF MIAMI **CORAL GABLES, FL**

2004-2007 Doctorate in Physical Therapy (DPT)
Department of Physical Therapy - Miller School of Medicine
Mentor: Edelle Field-Fote
Research: Spasticity-Related Outcomes Following Body Weight Supported Locomotor Training Post-Incomplete Spinal Cord Injury

UNIVERSITY OF FLORIDA **GAINESVILLE, FL**

2000-2004 Bachelor of Science, Psychology
College of Liberal Arts and Sciences

RESEARCH AND PROFESSIONAL EXPERIENCE

University of Florida – Gainesville, FL
Department of Physical Therapy
Research Assistant Professor
Mentor: Gordon S. Mitchell
2015-present

University of Florida – Gainesville, FL Department of Physical Therapy	Post-Doctoral Research Fellow Advisor: David D. Fuller	2013-present
University of Florida – Gainesville, FL Department of Physical Therapy	Graduate Research Fellow Advisor: David D. Fuller	2010-2013
University of Florida – Gainesville, FL Department of Physical Therapy	Graduate Research Fellow Advisor: Carolynn Patten	2008-2010
University of Miami – Gainesville, FL Miller School of Medicine	Research Assistant Advisor: Edelle Field-Fote	2004-2007
University of Florida – Gainesville, FL Department of Physical Therapy	Undergraduate Research Fellow Advisor: Andrea Behrman	2002-2004
Shands Hospital at the University of Florida – Gainesville, FL *Per diem* Physical Therapist, Inpatient Acute Rehabilitation Services		2008-2010
Shands Hospital at the University of Florida – Gainesville, FL Full-time Staff Physical Therapist, Inpatient Acute Rehabilitation Services		2007-2008

SERVICE-UNIVERSITY OF FLORIDA

2020-present	Chair – Department of Physical Therapy Diversity and Inclusion Work Group
2020-present	Coordinator – Department of Physical Therapy "Junior Faculty Support Network"
2020-present	Member – Breathing Research and Therapeutics Center Social Justice Committee
2019-present	Steering Committee Member – Breathing Research and Therapeutics Center
2018-present	Co-Chair – Rehabilitation Research Seminar Series Programming Committee, College of Public Health and Health Professions
2018-2019	Judge – Annual Neuromuscular Plasticity Symposium
2017-2020	Member – Social and Science Seminar Series Committee, Center for Respiratory Research and Rehabilitation
2017-2019	Judge – Annual Diversity Graduate Research Symposium
2016-present	Member-Scholarship Committee, Department of Physical Therapy
2016-present	Graduation Marshal-College of Public Health and Health Professions
2016-present	Marquette Challenge Faculty Advisor, Department of Physical Therapy
2016	Coordinator – Best Practices in Respiratory Research, Rehabilitation and Neuroscience, Center for Respiratory Research and Rehabilitation

SERVICE-PROFESSIONAL

2020-present	Member – International Online Spinal Cord Injury Seminar Series Publicity and Outreach Committee
2018-2019	Member – Taskforce on Sexual Harassment and Gender Bias in Physiology, American Physiological Society
2018	Faculty Mentor - Duke University DPT House of Delegates
2017-present	Federal Affairs Liaison for Florida – American Physical Therapy Association
2017-present	Editorial Team Member-"Research In Review" a publication of the APTA's Academy of Neurologic Physical Therapy
2017-2019	Experimental Biology Respiratory Section Meeting Mentor – American Physiological Society
2017-2019	Research Host for Short Term Research Education Program to Increase Diversity in Health-Related Research (STRIDE) Undergraduate Fellowship
2016-2019	Experimental Biology Minority Student Mentor – American Physiological Society

MANUSCRIPT REVIEWER

2020-present	Experimental Neurology
2020-present	High-Altitude Medicine & Biology
2020-present	Autonomic Neuroscience: Basic and Clinical
2020-present	Journal of Neural Engineering
2020-present	Neuroscience and Biobehavioral Reviews
2020-present	Physical Therapy Reviews
2020-present	The Journal of Spinal Cord Medicine
2020-present	Brain Research Bulletin
2019	Frontiers in Cellular Neuroscience
2019	Journal of Pulmonology and Respiratory Research
2019	Pharmacological Reports
2019	Journal of Neuroscience Research
2018-present	Respiratory Physiology and Neurobiology
2018-2019	Neurology and Neurosurgery
2017-present	Experimental Physiology
2017-present	Journal of Applied Physiology
2016-present	Experimental Neurology
2015	Journal of Novel Physiotherapy and Physical Medicine
2015	Medical Research Archives

GRANT REVIEWER

2020	Craig H. Neilsen Foundation – SCIRTS Research Grants
2015	Department of Veterans Affairs - Rehabilitation Research & Development Service

ABSTRACT REVIEWER

2017-2020	American Physical Therapy Association – Combined Sections Meeting

PROFESSIONAL LICENSURE AND CERTIFICATIONS

2007-present	FLORIDA STATE BOARD OF PHYSICAL THERAPY Licensed Physical Therapist - *PT 23501*

PROFESSIONAL MEMBERSHIPS

AMERICAN PHYSIOLOGICAL SOCIETY

2014-present	Member
2014-present	Respiratory Section member
2014-present	CNS Section member

SOCIETY FOR NEUROSCIENCE

2011-2016	Annual Symposium Planning Committee Member, North Central Florida Chapter
2010-2018	Member

AMERICAN PHYSICAL THERAPY ASSOCIATION

2017-present	Federal Affairs Liaison and Advocacy Academy Program member
2008-present	Research Section member
2007-2011	Federal Affairs and Advocacy Academy Program member
2006-present	Neurology Section member
2005-present	Member

SOCIETY FOR THE NEURAL CONTROL OF MOVEMENT

2010-2011	Member

UNIVERSITY OF FLORIDA

2018-present	Association for Academic Women
2010-2011	Graduate Student Council Representative

SHANDS HOSPITAL AT THE UNIVERSITY OF FLORIDA

2008	Interdisciplinary Task Force for Certification of Shands as a National Stroke Center

UNIVERSITY OF MIAMI

2006	Chairperson, 2006 University of Miami Hurricane Challenge
2006	Captain, UMDPT MS150 Bike Tour-National Multiple Sclerosis Society
2005	Planning and Fundraising Committee, Marquette Challenge Gala

TEACHING EXPERIENCE:

UNIVERSITY OF FLORIDA - DEPARTMENT OF PHYSICAL THERAPY

Spring 2021	Neuroscience for Physical Therapists (PHT6168) – **Course Director**
Spring 2020	Neuroscience for Physical Therapists (PHT6168) – **Course Director**
Spring 2019	Neuroscience for Physical Therapists (PHT6168) – **Course Director**
Fall 2018	Human Physiology (PHT 6935C) - **Guest Lecturer**
Spring 2018	Neuroscience for Physical Therapists (PHT6168) – **Course Director**
Fall 2017	Professional Issues in Physical Therapy (PHT 6935) - **Guest Lecturer**
Fall 2017	Human Physiology (PHT 6935C) - **Guest Lecturer**
Summer 2017	Motor Control/Therapeutic Exercise II (PHT6190C) – **Guest Lecturer**
Spring 2017	Neuroscience for Physical Therapists (PHT6168) – **Course Director**
Fall 2016	Human Physiology (PHT 6935C) - **Guest Lecturer**
Spring 2016	Neuroscience for Physical Therapists (PHT6168) – **Course Director**
Fall 2015	Human Physiology (PHT 6935C) - **Guest Lecturer**
Fall 2013	Human Physiology (PHT 6935C) - **Guest Lecturer**
Fall 2013	Human Physiology (PHT 6935C) - **Guest Lecturer**
Fall 2012	Neurorehabilitation I (PHT 6761C) - **Clinical Instructor**
Fall 2011	Neurorehabilitation I (PHT 6761C) - **Clinical Instructor**
Fall 2010	Human Physiology (PHT 6935C) - **Guest Lecturer**
Fall 2010	Neurorehabilitation I (PHT 6761C) - **Clinical Instructor**
Spring 2010	Clinical Skills II (PHT 6207C) - **Guest Lecturer**
Fall 2009	Neurorehabilitation I (PHT 6761C) - **Clinical Instructor**
Spring 2009	Clinical Skills II (PHT 6207C) - **Guest Lecturer**
Fall 2008	Neurorehabilitation I (PHT 6761C) - **Clinical Instructor**

UNIVERSITY OF FLORIDA - COLLEGES OF MEDICINE, NURSING, DENTISTRY, HEALTH PROFESSIONS

Spring 2017	Interdisciplinary Family Health Course (BMS 6029) – **Instructor**
Fall 2016	Interdisciplinary Family Health Course (BMS 6029) – **Instructor**
Spring 2016	Interdisciplinary Family Health Course (BMS 6029) – **Instructor**
Fall 2015	Interdisciplinary Family Health Course (BMS 6029) – **Instructor**
Spring 2012	Interdisciplinary Family Health Course (BMS 6029) – **Instructor**
Fall 2011	Interdisciplinary Family Health Course (BMS 6028) – **Instructor**
Spring 2011	Interdisciplinary Family Health Course (BMS 6029) – **Instructor**
Fall 2010	Interdisciplinary Family Health Course (BMS 6028) – **Instructor**

UNIVERSITY OF MIAMI-DEPARTMENT OF PHYSICAL THERAPY, SCHOOL OF MEDICINE

2006 Gross Anatomy - **Graduate Teaching Assistant**
2005 Gross Anatomy - **Graduate Teaching Assistant**

MENTORING EXPERIENCE:

POSTDOCTORAL FELLOWS

2018-2020 **Raphael Perim, PhD**
Project: *"Impact of Acute Intermittent Hypoxia on Intraspinal Electrical Stimulation Induced Evoked Phrenic Potentials"*
Role: Mentor

2017-present **Mohamad El Chami, PhD**
Project: *"Chronic Intermittent Hypoxia-Induced Neuroinflammation Undermines Respiratory Motor Plasticity After Chronic Incomplete Cervical Spinal Cord Injury"*
Role: Mentor

COLLEGE OF MEDICINE – DOCTORAL PROGRAM IN INTERDISCIPLINARY SCIENCES PROGRAM

2015-2020 **Marissa Ciesla**
Thesis: *Folic Acid, Vitamin B12 and Functional Recovery of Breathing Capacity After Chronic Cervical Spinal Cord Injury*
Role: Co-Chair of Doctoral Committee

2016-2019 **Latoya Allen**
Thesis: *Folic Acid and Functional Recovery of Breathing Capacity After Chronic Cervical Spinal Cord Injury*
Role: Translational Research Mentor

COLLEGE OF VETERINARY MEDICINE

2012-2013: **Natalie Stephens**
Thesis: *Activity Dependent Transneuronal Transport of Pseudorabies Virus*

COLLEGE OF LIBERAL ARTS AND SCIENCES-UNDERGRADUATE HONORS STUDENTS

2018-2019: **Amari Thomas**
Project: *Expression of phospho-ERK MAP kinase in the cervical spinal cord following acute (therapeutic) versus chronic (pathologic) intermittent hypoxia rats with and without chronic cervical spinal cord injury*

2018-2020: **Jose Oberto**
Project: *Expression of brain-derived neurotrophic factor (BDNF) in the cervical spinal cord following acute (therapeutic) versus chronic (pathologic) intermittent hypoxia rats with and without chronic cervical spinal cord injury*

2016-2019: **Juliet Santiago**[#%$@]
Project: *Expression of neuroinflammatory markers in the cervical spinal cord in acute versus chronic cervical spinal cord injury*
*currently interviewing for Graduate Neuroscience programs for fall 2019

2016-2019: **Ashley Holland**[#$@]
Honors Thesis: *Differential expression of neuroinflammatory markers in the cervical spinal cord following therapeutic (acute) vs. pathological (chronic) intermittent hypoxia*
*accepted into the University of South Alabama Medical School class of 2019

2016-2019: **Ashley Ross**
Project: *Serotonin receptor expression on phrenic motoneurons following therapeutic (acute) vs. pathological (chronic) intermittent hypoxia protocols*

2016-2019: **Kelsie Stefan[#]**
Project: *Adenosine receptor expression on phrenic motoneurons following therapeutic (acute) vs. pathological (chronic) intermittent hypoxia protocols*

2014-2015: **Marie Hanna**
Honors Thesis: *Epidural Stimulation to Enhance Respiratory Output after Incomplete Cervical Spinal Cord Injury*
*currently enrolled in Medical School at the University of Florida

2013-2016: **Anna Stamas**
Honors Thesis: *Spinal Cord Stimulation and Respiratory Motor Output After Incomplete Cervical Spinal Cord Injury*
*currently enrolled in Osteopathic Medicine Program at Auburn University

2013-2015: **Lisdelys Garcia**
Project: *Epidural Stimulation to Enhance Respiratory Motor Output Following Incomplete Cervical Spinal Cord Injury*

2012-2014: **Celeste Rousseau[@&]**
Project: *Characterization Inspiratory Intercostal Neural Circuitry in Rats*
*currently enrolled in Medical School at the University of Florida

2011-2014: **Lisbet Fernandez[@]**
Project: *Plasticity of Following High Cervical Spinal Cord Injury*

2011-2013: **Angela Rombola[#@&]**
Honors Thesis: *Neuroanatomical Plasticity After High Cervical Spinal Cord Injury*
*currently in Emergency Medicine residency program at Carolinas Medical Center

2011-2013: **Allison Daly[@&]**
Project: *Neuroanatomical Plasticity Following High Cervical Spinal Cord Injury*
*currently enrolled in Medical School at Trinity College, Dublin, Ireland

2010-2012: **Roland Federico Austin**
Project: *Neuroanatomical Plasticity In Cervical Spinal Cord Injury*
*currently in the Internal Medicine residency program at the University of Florida

PUBLIC HEALTH & HEALTH PROFESSIONS-UNDERGRADUATE HONORS STUDENTS

2009-2010: **Kristen Gangarossa[#]**
Honors Thesis: *Improved Limb Loading and Stance Stability During Gait Following Locomotor Training Post-stroke*
*graduated from the Doctorate of Physical Therapy Program at UF in 2013

2009-2010 **Katie Marcoux[#]**
Honors Thesis: *Biomechanics of Gait Post-stroke: Changes in Inter-joint Coordination associated with Locomotor Training.*
* graduated from the Doctorate of Physical Therapy Program at UF in 2013

(# denotes honors thesis, % denotes McNair Scholar, $ denotes American Physiological Society Scholar, & denotes University Scholar, @ denotes presentation at a national meeting)

HONORS AND AWARDS

NATIONAL INSTITUTES OF HEALTH-National Center for Medical Rehabilitation Research

2015-2018 K12 HD055929 Rehabilitation Research Career Development Program (PI: K Ottenbacher)
2008-2012 T32 HD043730 Interdisciplinary Pre-Doctoral Training Fellowship in Rehabilitation and Neuromuscular Plasticity (PI: K Vandenborne)

FOUNDATION FOR PHYSICAL THERAPY

2011-2012	Promotion of Doctoral Studies-II Scholarship
	APTA Marylou Barnes Endowed Neurology Scholarship ($15,000)
2009-2010	Promotion of Doctoral Studies-I Scholarship
	APTA Barnes-Leahy Endowed Neurology Scholarship ($7,500)
2008-2009	Florence Kendall Pre-Doctoral Scholarship ($5000)

INTERNATIONAL SOCIETY FOR NEURAL REGENERATION AND REPAIR

2013	Outstanding Poster Award ($500)

BRYAN ROBINSON NEUROSCIENCE ENDOWMENT

2011	Doctoral Research Grant ($500)

UNIVERSITY OF FLORIDA-MCKNIGHT BRAIN INSTITUTE

2018	Junior Faculty Leadership Award ($1000)

UNIVERSITY OF FLORIDA-DEPARTMENT OF PHYSICAL THERAPY

2013	Frederick Family Award for Outstanding Doctoral Research in Physical Therapy ($1000)

UNIVERSITY OF FLORIDA-COLLEGE OF PUBLIC HEALTH AND HEALTH PROFESSIONS

2013	Doctoral Research Award ($500)
2011	Doctoral Research Grant ($1000)
2011	Doctoral Research Award ($500)

UNIVERSITY OF FLORIDA-NEUROMUSCULAR PLASTICITY SYMPOSIUM

2015	Post-doctoral Fellow Research Award ($500)
2013	Graduate Student Research Award ($500)
2012	Graduate Student Research Award ($500)
2011	Graduate Student Research Award ($500)

FLORIDA HIGH TECH CORRIDOR-AMERICAN SOCIETY FOR NEURAL THERAPY & REPAIR

2012	Graduate Student Research Award ($500)

RESEARCH AWARDS, GRANT SUPPORT AND CONTRACTS:

CURRENTLY ACTIVE RESEARCH AWARDS

1. **SCIRTS Pilot Research Grant** (Gonzalez-Rothi, PI; Mitchell, Co-I) 7/01/17-6/30/21
   Craig H. Neilsen Foundation (NCE pending) $301,839
   "Combinatorial Therapies to Treat Breathing Impairments After Cervical SCI"
   Our goal is to investigate the impact of repetitive acute intermittent hypoxia on functional gains elicited by intraspinal electrical stimulation following incomplete cervical spinal cord injury.

2. **W81XWH-16-SCIRP-IIRA** (Gonzalez-Rothi, PI; Mitchell, Co-I) 11/01/17-10/31/21
   Department of Defense (NCE pending) $661,151
   "Chronic intermittent hypoxia-induced neuroinflammation undermines respiratory motor plasticity after chronic incomplete cervical spinal cord injury"
   The goal of this project is to investigate the impact of chronic intermittent hypoxia, a hallmark feature of sleep disordered breathing, on the potential to induce spinal neural plasticity following incomplete cervical spinal cord injury.

3. **R01 NS097748-01A1** (Fuller, PI; Gonzalez-Rothi, Co-I) 8/01/18-6/30/22
   NIH/NHLBI $1,498,248 total project

"Ampakines and respiratory function after spinal cord injury"
This project focuses on the use of drugs that modulate glutamate receptor function to treat spinal cord injury.

4. **R01 NS097748-01** (Mitchell, PI; Gonzalez-Rothi, Co-I) 4/01/19-3/31/23
   NIH/NHLBI $1,498,753 total project
   "Optimizing respiratory plasticity with chronic cervical SCI"
   This project focuses on optimization of acute intermittent hypoxia protocols and mitigation of factors which undermine therapeutic efficacy of acute intermittent hypoxia to enhance functional recovery of breathing after chronic spinal cord injury.

5. **Brain and Spinal Cord Injury Research Trust Bridge Funds** 7/1/20-6/30/21
   University of Florida McKnight Brain Institute $75,000
   "Effects of chronic intermittent hypoxia on plasticity-related outcomes in cervical spinal cord injury"
   The goal of this project is to investigate the impact of chronic intermittent hypoxia (with and without concurrent hypercapnia), a hallmark feature of sleep disordered breathing, on the potential to induce spinal neural plasticity following incomplete cervical spinal cord injury.

COMPLETED RESEARCH AWARDS

1. **SPARC** (Bolser, PI; Gonzalez-Rothi, Co-I) 9/01/16-8/31/19
   National Institutes of Health - Directors Commons Fund $7,962,951 total project
   "Functional mapping of peripheral and central circuits for airway protection and breathing"
   Our goal is to understand fundamental principles of modulation and plasticity in afferent pathways, brain networks and efferent systems controlling breathing and airway defense. This pending award is allocated on three annual contracts.

2. **BISCIRTF** (Mitchell, PI; Gonzalez-Rothi, Co-I) 3/01/16-2/28/17
   Internal – McKnight Brain Institute $20,000 total project
   "Cervical spinal cord repair: path to translation"
   These funds are intended to support pilot studies that will enable a future grant submissions investigating combinatorial therapies designed to restore respiratory and motor function following spinal cord injury. These studies will test whether combining treatments such as intermittent hypoxia and spinal cord stimulation will lead to synergistic effects, enhancing functional recovery after cervical spinal injury.

SCHOLARLY PUBLICATIONS AND PRESENTATIONS:

PEER REVIEWED MANUSCRIPTS:

1. **Gonzalez-Rothi EJ**, Tadjalli A, Allen LL, Ciesla KN, El Chami M, Mitchell GS (2021). Intermittent hypoxia preconditioning and phrenic motor plasticity in rats with chronic cervical spinal cord injury. *J Neurotrauma.* epub ahead of print.
2. Ciesla MC, Seven YB, Allen LL, Smith KN, Asa ZA, Simon A, Holland A, Santiago JV, Stefan K, Ross A, **Gonzalez-Rothi EJ**, Mitchell GS. Serotonin reinnervation of respiratory motor nuclei after cervical spinal injury: impact of intermittent hypoxia. *Experimental Neurol* – epub ahead of print.
3. Perim RR, El Chami M, **Gonzalez-Rothi EJ,** Mitchell GS. Baseline arterial PCO2 regulates acute intermittent hypoxia-induced phrenic long-term facilitation in rats. *Frontiers in Physiol* – epub ahead of print.

4. Wollman LB, Streeter KA, Fusco AF, **Gonzalez-Rothi EJ,** Sandhu MS, Greer JJ, Fuller DD. Ampakines stimulate phrenic motor output after cervical spinal cord injury (2020). *Experimental Neurol*. 334:113465. PMID: 32949571
5. Streeter KA, Sunshine MD, Patel SR, **Gonzalez-Rothi EJ**, Reier PJ, Baekey DM, Fuller DD. Mid-cervical spinal discharge following chronic spinal cord injury (2020). *Respiratory Physiology and Neurobiology*. 271:103305. PMID: 31553921; PMCID: PMC6864252
6. Cornelison RC, **Gonzalez-Rothi EJ**, Porvasnik SL, Wellman S, Park JH, Fuller DD, Schmidt CE (2018). Injectable hydrogels of optimized acellular nerve for applications in the injured spinal cord. *Biomedical Materials.* 13(3): 034110. PMID: 29380749.
7. Streeter KA, Sunshine MD, Patel SR, **Gonzalez-Rothi EJ**, Reier PJ, Baekey DM, Fuller DD (2017). Intermittent hypoxia enhances functional connectivity of mid-cervical spinal interneurons. *J Neuroscience*. 37(35): 8349-8362. PMID: 28751456.
8. **Gonzalez-Rothi EJ** and Lee KZ. Contribution of $5HT_{2A}$ receptors on diaphragmatic recovery after chronic cervical spinal cord injury (2017). *Respir Physiol and Neurobiol.* 244:51-55. PMID: 28711602.
9. **Gonzalez-Rothi EJ**, Hanna MA, Stamas A, Streeter KA, Reier PJ, Baekey DM, Fuller DD (2017). High frequency epidural stimulation enhances tonic versus phasic phrenic output following incomplete cervical spinal cord injury. *J Neurophysiol.* 118(4):2344-2357. PMID: 28615341.
10. Mercier LM, **Gonzalez-Rothi EJ**, Streeter KA, Posgai SS, Poirier AS, Fuller DD, & Baekey DM (2016). Intraspinal microstimulation and diaphragm activation following cervical spinal cord injury. J Neurophysiology, 117(2):767-776. PMID: 27881723
11. Smuder A, **Gonzalez-Rothi EJ**, Kwon OS, Morton A, Sollanek K, Powers S, & Fuller DD (2016). Cervical spinal cord injury exacerbates ventilator-induced diaphragm dysfunction. *Journal of Applied Physiology,* 120(2):166-177. PMID: 26472866
12. Kloefkorn HE, Pettengill TR, Turner SM, Streeter KA, Gonzalez-Rothi EJ, Fuller DD, Allen KD (2016). Automated gait analysis through hues and areas (AGATHA): A method to characterize the spatiotemporal pattern of rat gait. *Ann Biomed Eng*, 45(3): 711-725. PMID: 27554674
13. Dougherty BJ, **Gonzalez-Rothi EJ,** Lee KZ, Ross HH, Reier DD, Fuller DD (2016). Respiratory outcomes after mid-cervical transplantation of embryonic medullary cells in rats with cervical spinal cord injury. *Experimental Neurol.* 278:22-26. PMID: 26808660
14. **Gonzalez-Rothi EJ**, Lee KZ, Dale EA, Mitchell GS, Fuller DD (2015). Intermittent hypoxia and Neurorehabilitation. *J Appl Physiol.* 119(12); 1455-1465. PMID:25997947
15. **Gonzalez-Rothi EJ**, Armstrong GT, Cerreta AJ, Fitzpatrick GM, Lane MA, Fuller DD (2015). Forelimb muscle plasticity following incomplete cervical spinal cord injury in adult rats. *Muscle and Nerve.* 53(3):475-8. PMID: 26662579
16. **Gonzalez-Rothi EJ**, Rombola AM, Rousseau AC, Mercier LM, Fitzpatrick GM, Reier PJ, Fuller DD, Lane MA (2015). Spinal Interneurons and Forelimb plasticity following incomplete cervical spinal cord injury in adult rats. *J Neurotrauma.* 32(12):893-907. PMID: 25625912
17. Gill LC, Ross HH, Lee KZ, **Gonzalez-Rothi EJ**, Dougherty BJ, Judge AR, Fuller DD (2014). Repeated intravenous doxapram induces phrenic motor facilitation. *Respir Physiol Neurobiol*. 192:66-73. PMID: 24231999
18. Sandhu MS, Lee KZ, Gonzalez-Rothi EJ, Lane MA, Reier PJ, Fuller SS. (2013). Repeated intravenous doxapram induces phrenic motor facilitation. *Exp Neurol*. 250:108-15. PMID: 24013015
19. Dougherty BJ, Lee KZ, **Gonzalez-Rothi EJ,** Lane MA, Reier PJ, Fuller SS. (2012). Recovery of inspiratory intercostal muscle activity following high cervical hemisection. *Respiratory Physiology and Neurobiology*. PMID: 22705013
20. Patten C, **Gonzalez-Rothi EJ,** Little VL, Kautz SA (2009). Allowing intralimb kinematic variability during locomotor training poststroke improves kinematic consistency: a subgroup analysis from a randomized clinical trial." Phys Ther. 89(8):e1-2. PMID: 19648104

MANUSCRIPTS IN PREPARATION/REVIEW:

1. **Gonzalez-Rothi EJ,** Allen LL, Ciesla MC, Santiago-Moreno J, Tadjalli A, Perim RR, Satriotomo I, Asa Z, Santiago JV, Holland A, Stefan K, Ross A, Simon A, Kelly M, Seven YB, Yarrow J, Mitchell GS. Long-term Delivery of Repetitive Acute Intermittent Hypoxia is not associated with Detectable Pathology. *J Neurotrauma* – in review.
2. Allen LL, Santiago JV, Asa Z, Holland A, Ciesla MC, Satriotomo I, Mitchell GS, **Gonzalez-Rothi EJ**. Phrenic motor neuron survival caudal to C2 spinal cord hemisection. *Experimental Neurology* – in review.
3. Perim RR, Sunshine MD, Santiago J, Holland A, Ross A, Welch JF, Mitchell GS, **Gonzalez-Rothi EJ**. Phrenic evoked responses are enhanced after daily acute intermittent hypoxia in rats. *J Neurohysiol* – in review.
4. Ciesla MC, Seven YB, Allen LL, Smith KN, Asa ZA, Simon A, Holland A, Santiago JV, Stefan K, Ross A, **Gonzalez-Rothi EJ** and Mitchell GS. Daily acute intermittent hypoxia enhances serotonergic innervation of hypoglossal motor nuclei with and without cervical spinal cord injury. *Respiratory Physiol and Neurobiol* – in review.
5. Gonzalez-Rothi EJ & Lee KZ. Impact of intermittent hypoxia on respiratory recovery in cervical spinal cord injured model. *Experimental Neurol* – in review.
6. Perim RR, **Gonzalez-Rothi EJ,** Mitchell GS. Cervical spinal cord injury compromises caudal spinal tissue oxygenation and undermines acute intermittent hypoxia-induced phrenic long-term facilitation. *Experimental Neurol* – in review.
7. **Gonzalez-Rothi EJ**, Perim RR, Tadjalli A, Ciesla MC, Mitchell GS. Intermittent hypoxia exerts protocol specific effects on phrenic motor output and plasticity. *J Neurophysiol* – in preparation.
8. Allen LL, Seven YB, Ciesla MC, Smith KN, Asa ZA, Simon A, Holland A, Santiago JV, Stefan K, Ross A, **Gonzalez-Rothi EJ**, Mitchell GS. Neurochemical plasticity of serotonin receptors on phrenic motor neurons: effects of cervical spinal cord injury and intermittent hypoxia. *Neuroscience* – in preparation.
9. Marciante AB, Kelly MN, Ciesla MC, Santiago-Moreno J, Allen LL, **Gonzalez-Rothi EJ,** Lewis JL, Mitchell GS, Intermittent hypoxia differentially modulates endogenous tau phosphorylation in rats. *eLIFE* – in preparation.
10. Seven YB, Allen LL, Ciesla MC, Smith KN, Asa ZA, Simon A, Holland A, Santiago JV, Stefan K, Ross A, **Gonzalez-Rothi EJ**, Mitchell GS. Neurochemical plasticity of adenosine receptors on phrenic motor neurons: effects of cervical spinal cord injury and intermittent hypoxia. *Neuroscience* – in preparation.
11. Ciesla MC, Seven YB, Allen LL, Smith K, Asa ZA, Iskandar BJ, **Gonzalez-Rothi EJ,** Mitchell GS**.** Impact of dietary folate on respiratory recovery after cervical spinal cord hemisection. *Respiratory Physiology and Neurobiology* – in preparation.
12. Ciesla MC, Oberto JR, Seven YB, Kelly MN, Allen LL, Smith KN, Asa ZA, Simon AK, Holland AE, Santiago JV, Stefan K, Ross A, **Gonzalez-Rothi EJ,** Mitchell GS. Intermittent hypoxia exerts protocol-specific effects on BDNF expression in phrenic motor neurons of spinal intact and injured rats. *Respiratory Physiol and Neurobiol* – in preparation.
13. El-Chami M, Holland A, Mitchell GS, **Gonzalez-Rothi EJ**. Chronic intermittent hypoxia and respiratory motor plasticity after cervical spinal contusion. *Experimental Neurology* – in preparation.
14. Ciesla MC, Seven YB, Allen LL, Smith KN, Asa ZA, Simon A, Holland A, Santiago JV, Stefan K, Ross A, **Gonzalez-Rothi EJ** and Mitchell GS. Serotonergic reinnervation of axial and forelimb motor nuclei after cervical spinal cord injury. *Experimental Neurol* – in preparation.
15. Yarrow JF, Reynolds M, Ciesla MC, Allen LL, **Gonzalez-Rothi EJ** and Mitchell GS. Effects of C2 hemisection with and without chronic intermittent hypoxia on cancellous bone. – in preparation.

INVITED PRESENTATIONS:

1. Neuromedicine Seminar Series, Department of Neuroscience, University of Florida, Gainesville, FL. “Intermittent Hypoxia and Respiratory Motor Plasticity: Implications for Spinal Cord Injury.” June 18, 2018.
2. Therapeutic Intermittent Hypoxia Conference, University of Florida, Gainesville, FL. “Therapeutic Potential of Intermittent Hypoxia: A Matter of Dose.” April 17, 2018
3. Department of Human Physiology, University of Oregon, Eugene OR. “Respiratory Motor Plasticity: Implications for Rehabilitating the Injured Spinal Cord.” Host: A. Huxtable. December 1, 2017
4. SPARC Mini Symposia, University of Florida, Gainesville, FL. “Plasticity in the Phrenic Motor System: Impact of Spinal Cord Injury and Pathogenic Intermittent Hypoxia.” August 11, 2017.
5. Experimental Biology Conference, Symposium on Neurostimulation to Restore Breathing with Neuromuscular Disorders. San Diego, CA. “Spinal cord stimulation as a rehabilitative tool to restore respiratory motor output after spinal cord injury.” April 5, 2016
6. Respiratory Science and Social Symposium, Center for Respiratory Research and Rehabilitation, University of Florida, Gainesville, FL. “Spinal Cord Stimulation and Breathing: Intraspinal and Epidural Approaches.” August 18, 2015.
7. Department of Neurobiology and Anatomy and the Spinal Cord Injury Research Center, Drexel University, Philadelphia, PA. “Plasticity in cervical motor systems: Implications for spinal cord injury and rehabilitation.” Host: J. Houle. December 12, 2014
8. B. W. Robinson Memorial Endowment for the Neurosciences of the Tallahassee Memorial Foundation, Inc. Annual Meeting, Tallahassee Memorial Hospital, Tallahassee, FL. “Neuroanatomical and functional upper extremity plasticity following incomplete cervical spinal cord injury.” June 13, 2012

NON-INVITED PRESENTATIONS:

1. Neuromuscular Plasticity Noons Seminar Series. “Spinal Cord Stimulation and Respiratory Motor Plasticity Following Incomplete Cervical Spinal Cord Injury.” July 2015
2. Neuromuscular Plasticity Noons Seminar Series. “Therapeutic Efficacy of Epidural Stimulation for Enhancing Respiratory Motor Function Following Incomplete Cervical Spinal Cord Injury.” June 2014
3. Neuromuscular Plasticity Noons Seminar Series. “Spinal Networks and Respiratory Rhythm Generation.” July 2013
4. Neuromuscular Plasticity Noons Seminar Series. “Mechanisms of Forelimb Plasticity Following Incomplete Cervical Spinal Cord Injury.” August 2012
5. Neuromuscular Plasticity Noons Seminar Series. “Neuromuscular Plasticity of the Forelimb in a Rodent Model of High Cervical Spinal Cord Injury.” August 2011
6. Neuromuscular Plasticity Noons Seminar Series. “Neuromechanical Adaptations Following Locomotor Training Post-Stroke.” July 2009

CONFERENCE ABSTRACTS:

1. El Chami M, Mitchell GS, **Gonzalez-Rothi EJ**. Daily administration of ketoprofen restores AIH-induced phrenic long-term facilitation with prolonged chronic intermittent hypoxia (2021). *Experimental Biology.* (POSTER)

2. Reynolds M, **Gonzalez-Rothi EJ**, Ciesla MC, Allen LL, Mitchell GS, Yarrow JF. Effects of C2 hemisection with daily acute intermittent hypoxia or chronic intermittent hypoxia on cancellous bone (2020). *was accepted for poster presentation at *Experimental Biology 2020*, which was cancelled due to the global COVID-19 pandemic
3. Oberto J, Ciesla MC, Seven YB, Kelly MN, Allen LL, Smith K, Asa Z, Simon A, Holland A, Santiago JV, Stefan K, Ross A, **Gonzalez-Rothi EJ** and Mitchell GS. BDNF in phrenic motor neurons: Effects of cervical spinal cord injury and intermittent hypoxia (2020). *was accepted for poster presentation at *Experimental Biology 2020*, which was cancelled due to the global COVID-19 pandemic
4. El Chami M, Mitchell GS, **Gonzalez-Rothi EJ**. Chronic intermittent hypoxia blunts phrenic motor plasticity: role of inflammation (2020). *was accepted for poster presentation at *Experimental Biology 2020*, which was cancelled due to the global COVID-19 pandemic
5. Ciesla MC, Seven YB, Allen LL, Smith K, Asa Z, Simon A, Holland A, Santiago JV, Stefan K, Ross A, **Gonzalez-Rothi EJ**, Mitchell GS. Recovery of serotonergic innervation in spinal motor nuclei below cervical spinal injury: effects of intermittent hypoxia (2020). *was accepted for poster presentation at *Experimental Biology 2020*, which was cancelled due to the global COVID-19 pandemic
6. Marciante A, Ciesla MC, Kelly M, Santiago-Moreno, Allen LL, **Gonzalez-Rothi EJ**, Lewis J, Mitchell GS. Intermittent hypoxia differentially modulates endogenous Tau phosphorylation in rats (2020). *was accepted for poster presentation at *Experimental Biology 2020*, which was cancelled due to the global COVID-19 pandemic
7. Tadjalli A*, **Gonzalez-Rothi EJ*,** Allen LL, Ciesla MC, Simon A, Asa Z, Smith K, El-Chami M, Holland A, Santiago J, Stefan K, Ross A, Mitchell GS. Daily acute, but not chronic, intermittent hypoxia enhances phrenic motor plasticity in chronic cervical spinal cord injury (2019). *International Society for Autonomic Neuroscience*. (POSTER)
8. Seven YB, Allen LA, Ciesla MC, Smith K, Asa Z, Simon A, Holland A, Santiago J, Stefan K, Ross A, **Gonzalez-Rothi EJ,** Mitchell GS (2019). Neurochemical plasticity of phrenic motor neuron adenosine receptors: Effects of cervical spinal injury and intermittent hypoxia. *International Society for Autonomic Neuroscience.* (POSTER)
9. Ciesla MC, Seven YB, Allen LL, Smith K, Asa ZA, Simon A, Holland A, Santiago J, Stefan K, Ross A, **Gonzalez-Rothi EJ,** Mitchell GS (2019). Recovery of Serotonergic Innervation in Respiratory Motor Nuclei after Cervical Spinal Injury, with and without Intermittent Hypoxia. *International Society for Autonomic Neuroscience.* (POSTER)
10. Allen LL, Seven YB, Ciesla MC, Smith K, Asa Z, Simon A, Holland A, Santiago J, Stefan K, Ross A, **Gonzalez-Rothi EJ,** Mitchell GS. Neurochemical plasticity of serotonin receptors on phrenic motoneurons: Effects of cervical spinal cord injury and intermittent hypoxia (2019). *International Society for Autonomic Neuroscience*. (POSTER).
11. **Gonzalez-Rothi EJ,** Tadjalli A, Allen LL, Ciesla MC, Simon A, Asa Z, Smith K, El-Chami M, Holland A, Santiago J, Stefan K, Ross A, Mitchell GS. Daily acute, but not chronic, intermittent hypoxia enhances phrenic motor plasticity in chronic cervical spinal cord injury (2019). *Experimental Biology*. (POSTER).
12. Allen LL, Seven YB, Ciesla MC, Smith K, Asa Z, Simon A, Holland A, Santiago J, Stefan K, Ross A, **Gonzalez-Rothi EJ,** Mitchell GS. Neurochemical plasticity of serotonin receptors on phrenic motoneurons: Effects of cervical spinal cord injury and intermittent hypoxia (2019). *Experimental Biology*. (POSTER).
13. Smith K, Allen LL, Seven YB, Ciesla MC, Asa Z, Simon A, Holland A, Santiago J, Stefan K, Ross A, **Gonzalez-Rothi EJ,** Mitchell GS. Neurochemical plasticity of phrenic motor neuron adenosine

2A receptors: Effects of cervical spinal injury and intermittent hypoxia (2019). *Experimental Biology*. (POSTER)

14. Zwick A, Allen LA, Seven YB, Ciesla MC, Smith K, Asa Z, Simon A, Holland A, Santiago J, Stefan K, Ross A, **Gonzalez-Rothi EJ,** Mitchell GS (2019). Adenosine A1 receptor expression on phrenic motor neurons after cervical spinal injury and different intermittent hypoxia exposures. *Experimental Biology.* (POSTER)
15. Seven YB, Allen LA, Tadjalli A, Zwick A, El-Chami M, Perim RR, **Gonzalez-Rothi EJ,** Mitchell GS (2019). Adenosine 2A receptor antagonism in acute cervical contusion/compression injury preserves serotonin-dependent phrenic motor plasticity. *Experimental Biology.* (POSTER)
16. Ciesla MC, Seven YB, Allen LL, Smith K, Asa ZA, Iskandar BJ, **Gonzalez-Rothi EJ,** Mitchell GS (2019). Impact of Dietary Folate on Respiratory Recovery after Cervical SCI. *Experimental Biology.* (POSTER)
17. Holland A, Santiago JV, Allen LL, Seven YB, Asa ZA, Ciesla MC, Simon AK, Perim RR, Tadjalli A, Mitchell GS, Gonzalez-Rothi EJ. Impact of intermittent hypoxia protocol on phospho-p38 and phospho-ERK MAP Kinase expression within phrenic motoneurons (2019). *Experimental Biology.* (POSTER)
18. El-Chami M, Holland A, Mitchell GS, Gonzalez-Rothi EJ. Chronic intermittent hypoxia and respiratory motor plasticity after cervical spinal contusion (2019). *Experimental Biology.* (POSTER)
19. **Gonzalez-Rothi EJ,** Allen LL, Ciesla MC, Santiago-Moreno J, Tadjalli A, Perim RR, Satriotomo I, Asa Z, Santiago JV, Holland A, Stefan K, Ross A, Simon A, Kelly M, Seven YB, Yarrow J, Mitchell GS. Long-term delivery of "low dose" repetitive intermittent hypoxia is not associated with detectable pathology (2018). *Experimental Biology.* (POSTER)
20. Holland A, Santiago JV, Allen LL, Asa Z, Ciesla M, Mitchell GS, **Gonzalez-Rothi EJ.** Phrenic Motor Neuron Survival Below a Cervical Spinal Cord Injury (2018). *Experimental Biology.* (POSTER)
21. Ciesla MC, Seven YB, Allen LL, Smith K, Asa ZA, Iskandar BJ, **Gonzalez-Rothi EJ,** Mitchell GS (2019). Impact of Dietary Folate on Respiratory Recovery after Cervical SCI (2017). *International Society for Neural Regeneration and Repair.* (POSTER)
22. Smith K, Allen LL, Ciesla MC, Asa ZA, Santiago-Moreno JG, Tadjalli A, Perim R, Santiago JV, Holland AE, Stefan KA, Ross A, Satriotomo I, Simon AK, Poirier AE, Kelly MN, Seven YB, **Gonzalez-Rothi EJ**, Mitchell GS. Safety profile of prolonged “low-dose” acute intermittent hypoxia in rats with chronic cervical spinal cord injury (2017). *International Society for Neural Regeneration and Repair.* (POSTER)
23. **Gonzalez-Rothi EJ**, Perim RR, Tadjalli A, Allen LL, Ciesla MC, Mitchell GS. Dose-dependent effects of intermittent hypoxia on phrenic long-term facilitation (2017). *XIV Oxford Conference on Modeling and Control of Breathing*. (POSTER)
24. Sunshine M, Streeter KA, Turner SM, **Gonzalez-Rothi EJ,** Baekey DM, Fuller DD. Phrenic afferent stimulation in the adult rat (2017). *XIV Oxford Conference on Modeling and Control of Breathing*. (POSTER)
25. **Gonzalez-Rothi EJ**, Perim RR, Tadjalli A, Ciesla MC, Mitchell GS. Episode frequency determines the impact of chronic intermittent hypoxia on phrenic long-term facilitation (2017). *Experimental Biology*. (POSTER)
26. Allen LL, Santiago JV, Asa Z, Holland A, Ciesla MC, Satriotomo I, Mitchell GS, **Gonzalez-Rothi EJ**. Phrenic motor neuron survival caudal to C2 spinal cord hemisection (2017). *Experimental Biology*. (POSTER)

27. Streeter KA, Sunshine MD, Patel S, **Gonzalez-Rothi EJ**, Reier PJ, Baekey DM, Fuller DD (2017). Intermittent hypoxia enhances connectivity between cervical spinal interneurons. *Experimental Biology*. (POSTER)

28. **Gonzalez-Rothi EJ**, Streeter KA, Sandhu MS, Baekey DM, Greer JJ, Fuller DD (2016). Ampakines increase spinal respiratory motor output after cervical spinal cord injury in rats. *Experimental Biology*. (PLATFORM)

29. Streeter KA, **Gonzalez-Rothi EJ**, Sandhu MS, Baekey DM, Greer JJ, Fuller DD (2016). Ampakines increase spinal respiratory motor output after cervical spinal cord injury in rats. *Experimental Biology*. (POSTER)

30. **Gonzalez-Rothi EJ**, Ross HH, Armstrong GT, Streeter KA, Cerreta A, Reier PJ, Fuller DD (2015). Serotonergic innervation of spinal interneurons synaptically coupled with phrenic and intercostal motor pools. *Experimental Biology*. (POSTER)

31. **Gonzalez-Rothi EJ**, Armstrong GT, Cerreta AJ, Mitchell GS, Reier PJ, Fuller DD (2015). Astrocyte serotonin receptor expression near phrenic motor circuitry. *Experimental Biology*. (POSTER)

32. **Gonzalez-Rothi EJ**, Turner SM, Streeter KA, Fitzpatrick GM, Reier PJ, Baekey DM, Fuller DD (2015). Impact of high frequency epidural stimulation on respiratory function in rats. *American Physical Therapy Association Combined Sections Meeting*. (POSTER)

33. **Gonzalez-Rothi EJ**, Turner SM, Streeter KA, Fitzpatrick GM, Reier PJ, Baekey DM, Fuller DD (2014). Impact of high frequency epidural stimulation on respiratory function in rats. *Neuroscience*. (POSTER)

34. Streeter KA, **Gonzalez-Rothi EJ**, Fitzpatrick G, Armstrong GT, Reier PJ, Fox EJ, Fuller DD (2014). Electrical stimulation of the diaphragm following cervical spinal cord injury. Neuroscience. (POSTER)

35. Little LN, Hussey S, **Gonzalez-Rothi EJ**, O'Steen BE, Fuller DD, Lane MA, Reier PJ (2014). Absence of secondary phrenic motoneuron loss following lateralized cervical contusion. diaphragm dysfunction following lateralized cervical contusion. Neuroscience. (POSTER)

36. Turner SMF, Elmallah MK, **Gonzalez-Rothi EJ**, Greer JJ, Fuller DD (2014). Ampakine administration potentiates intermittent hypoxia-induced long-term facilitation in mice. Neuroscience. (POSTER)

37. **Gonzalez-Rothi EJ**, Sandhu MS, Amirzadehasl P, Garcia L, Turner SM, Reier PJ, Baekey DM, Greer JJ, Fuller DD (2013). Ampakine therapy improves respiratory motor output in rats with incomplete cervical spinal cord injury. 15th International Symposium on Neural Regeneration. (POSTER)

38. Rousseau CA, **Gonzalez-Rothi EJ**, Little LN, Fernandez L, Garcia L, Dougherty BJ, Baekey DM, Reier PJ, Fuller DD (2013). Serotonergic innervation of the intercostal spinal motor circuit after cervical spinal cord injury. 15th International Symposium on Neural Regeneration. Monterey, CA. (POSTER)

39. Mercier LM, **Gonzalez-Rothi EJ**, Little LN, Fuller DD, Muir EM, Rogers JH, MB Bunge, Lane MA, Reier PJ (2013). Schwann cell transplantation enhances diaphragm recovery following cervical spinal cord injury. 15th International Symposium on Neural Regeneration. (POSTER)

40. Little LN, Hussey S, **Gonzalez-Rothi EJ**, O'Steen BE, Fuller DD, Lane MA, Reier PJ (2013). Absence of secondary phrenic motoneuron loss following lateralized cervical contusion. diaphragm dysfunction following lateralized cervical contusion. 15th International Symposium on Neural Regeneration. (POSTER)

41. Mercier LM, Sandhu MS, Arias NL, **Gonzalez-Rothi EJ**, Little LN, Fuller DD, Reier PJ, **Lane MA** (2013). Cervical spinal cord injury alters the pattern of inspiratory and expiratory neuronal activity in the rat brainstem respiratory centers. *Society for Neuroscience*, San Diego, CA. (POSTER)

42. Spruance VM, Sanchez DE, Gonzalez-Rothi EJ, Grossl GB, O'Steen BE, Fuller BE, Fuller DD, Reier PJ, **Lane MA** (2013). Transplantation of spinal neural progenitors improves diaphragm function following cervical contusion injury. *Society for Neuroscience*, San Diego, CA. (POSTER)

43. Little LN, Hussey SP, **Gonzalez-Rothi EJ**, Mercier LM, Sanchez DE, O'Steen BE, Fuller DD, Lane MA, Reier PJ (2013). Phrenic motoneuron loss and diaphragm function following a mid-cervical spinal contusion injury, *Society for Neuroscience*, San Diego, CA. (POSTER)

44. Spruance VM, Sanchez DE, **Gonzalez-Rothi EJ**, Grossl GB, Meola DM, O'Steen BE, Fuller BE, Fuller DD, Reier PJ, Lane MA (2013). Neural progenitor transplantation improves diaphragm function following cervical spinal cord injury. 15th Spinal Research Network Meeting. *Annual meeting of the International Spinal Research Trust.* London, UK. (POSTER)

45. **Gonzalez-Rothi EJ**, Dougherty BJ, Baekey DM, Lane MA, Reier PJ, Fuller DD (April 2013). Retrograde transynaptic tracing of the inspiratory intercostal circuitry following cervical spinal cord injury in rats. *Experimental Biology Conference.* Boston, MA. (POSTER)

46. Mercier LM, Arias N, **Gonzalez-Rothi EJ**, Little LN, Fuller DD, Muir EM, Rogers JH, MB Bunge, Lane MA, Reier PJ (April 2013). Schwann cell transplantation enhances diaphragm recovery following cervical spinal cord injury. *Experimental Biology Conference.* Boston, MA. (POSTER)

47. Little LN, Hussey S, **Gonzalez-Rothi EJ**, Sanchez DE, O'Steen BE, Fuller DD, Lane MA, Reier PJ (April 2013). Absence of secondary phrenic motoneuron loss following lateralized cervical contusion. diaphragm dysfunction following lateralized cervical contusion. *Experimental Biology Conference.* Boston, MA. (POSTER)

48. Spruance VM, Sanchez DE, Gonzalez-Rothi EJ, Grossl GB, O'Steen BE, Fuller BE, Fuller DD, Reier PJ, **Lane MA** (2013). Neural progenitor transplantation improves respiratory function following cervical contusion injury in the adult rat. 18th Annual Meeting of the American Society for Neural Therapy and Repair (ASNTR), Clearwater, Florida. *American Society for Neural Therapy and Repair.* Clearwater, FL. (POSTER)

49. Rombola A, **Gonzalez-Rothi EJ**, Fernandez L, Mercier LM, Alappattu M, Rousseau CA, O'Steen BE, Reier PJ, Fuller DD, Lane MA (April 2013). Forelimb neuroplasticity following incomplete cervical spinal cord injury in adult rats. *American Society for Neural Therapy and Repair.* Clearwater, FL. (POSTER)

50. Fernandez L, **Gonzalez-Rothi EJ**, Rombola A, Sandhu MS, Doperalski, NJ, Lane MA, Reier PJ, Fuller DD (April 2013). Serotonergic Innervation of Pre-Phrenic Cervical Interneurons. *American Society for Neural Therapy and Repair.* Clearwater, FL. (POSTER)

51. Mercier LM, Arias N, **Gonzalez-Rothi EJ**, Little LN, Fuller DD, Muir EM, Rogers JH, MB Bunge, Lane MA, Reier PJ (April 2013). Schwann cell transplantation enhances diaphragm recovery following cervical spinal cord injury. *American Society for Neural Therapy and Repair.* Clearwater, FL. (POSTER)

52. Little LN, Hussey S, **Gonzalez-Rothi EJ**, Sanchez DE, O'Steen BE, Fuller DD, Lane MA, Reier PJ (April 2013). Absence of secondary phrenic motoneuron loss following lateralized cervical contusion. diaphragm dysfunction following lateralized cervical contusion. *American Society for Neural Therapy and Repair.* Clearwater, FL. (POSTER)

53. **Gonzalez-Rothi EJ**, Little LN, Rombola A, Mercier LM, Lane MA, Fuller DD, Reier PJ (March 2013). Propriospinal interneurons: Substrates mediating functional respiratory and upper extremity recovery after chronic cervical spinal cord injury. *8TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL (POSTER)

54. Mercier LM, Arias N, **Gonzalez-Rothi EJ**, Little LN, Fuller DD, Muir EM, Rogers JH, MB Bunge, Lane MA, Reier PJ (March 2013). Schwann cell transplantation enhances diaphragm recovery following cervical spinal cord injury. *8TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL (POSTER)

55. Little LN, Hussey S, **Gonzalez-Rothi EJ**, Sanchez DE, O'Steen BE, Fuller DD, Lane MA, Reier PJ (March 2013). Absence of secondary phrenic motoneuron loss following lateralized cervical contusion. diaphragm dysfunction following lateralized cervical contusion. *8TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL (accepted-POSTER)

56. **Gonzalez-Rothi EJ**, Rombola A, Fernandez L, Mercier LM, Alappattu M, Rousseau CA, O'Steen BE, Reier PJ, Fuller DD, Lane MA (October 2012). Forelimb neuroplasticity following incomplete cervical spinal cord injury in adult rats. *Society for Neuroscience.* New Orleans, LA.

57. **Gonzalez-Rothi EJ**, Fernandez L, Rombola A, Sandhu MS, Doperalski, NJ, Lane MA, Reier PJ, Fuller DD (October 2012). Serotonergic Innervation of Pre-Phrenic Cervical Interneurons. *Society for Neuroscience.* New Orleans, LA

58. Mercier LM, Arias N, Ryczek DF, **Gonzalez-Rothi EJ**, Lee KZ, O'Steen BE, Fuller DD, Reier PJ, Lane MA (October 2012). High cervical spinal cord injury results in altered distributions of medullary inspiratory and expiratory neuronal activity. *Society for Neuroscience.* New Orleans, LA

59. **Gonzalez-Rothi EJ**, Dougherty BJ, Rombola A, Fernandez L, Alappattu M, Daly A, Federico RA, O'Steen BE, Lane MA, Reier PJ, Fuller DD (May 2012). Spontaneous forelimb plasticity following incomplete cervical spinal cord injury in adult rats. *Symposium on Cellular and Network Functions in the Spinal Cord Program.* Online.

60. **Gonzalez-Rothi EJ**, Rombola A, Fernandez L, Daly A, Rousseau CA, Federico RA, O'Steen BE, Vandenborne KV, Reier PJ, Fuller DD, Lane MA (April 2012). Forelimb neuroplasticity following incomplete cervical spinal cord injury in adult rats. *American Society for Neural Therapy and Repair Program.* Online.

61. Hussey S, **Gonzalez-Rothi EJ**, Sanchez DE, O'Steen BE, Fuller DD, Lane MA, Reier PJ (April 2012). Persistent diaphragm dysfunction following lateralized cervical contusion. *American Society for Neural Therapy and Repair Program.* Online.

62. Mercier LM, Arias N, Ryczek DF, **Gonzalez-Rothi EJ**, Lee KZ, O'Steen BE, Fuller DD, Reier PJ, Lane MA (April 2012). High cervical spinal cord injury results in altered distributions of medullary inspiratory and expiratory neuronal activity. *American Society for Neural Therapy and Repair Program.* Online.

63. Sandhu MS, **Gonzalez-Rothi EJ**, Lee KZ, Lane MA, Mailing N, Reier PJ, Bakey DM, Sanchez JC, Fuller DD (May 2012). Cervical interneuron bursting during hypoxia in anesthetized rats. *Syposium on Cellular and Network Functions in the Spinal Cord Program.* Online.

64. Sandhu MS, **Gonzalez-Rothi EJ**, Lee KZ, Lane MA, Mailing N, Reier PJ, Bakey DM, Sanchez JC, Fuller DD (April 2012). Cervical interneuron bursting during hypoxia in anesthetized rats. *Experimental Biology Annual Conference,* San Diego, CA

65. **Gonzalez-Rothi EJ**, Rombola A, Fernandez L, Daly A, Rousseau CA, Federico RA, O'Steen BE, Vandenborne KV, Reier PJ, Fuller DD, Lane MA (April 2012). Forelimb neuroplasticity following incomplete cervical spinal cord injury in adult rats. *7TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL

66. Mercier LM, Arias N, Ryczek DF, **Gonzalez-Rothi EJ**, Lee KZ, O'Steen BE, Fuller DD, Reier PJ, Lane MA (April 2012). High cervical spinal cord injury results in altered distributions of medullary inspiratory and expiratory neuronal activity. *7TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL

67. **Gonzalez-Rothi EJ**, Fuller DD, Federico RA, Vandenborne KV, Reier PJ, Lane MA (February 2012). Upper extremity neuromuscular plasticity following high cervical spinal cord injury. *American Physical Therapy Association Combined Sections Meeting,* Chicago, IL

68. **Lopez** C, Lane MA, Loftus J, **Gonzalez-Rothi EJ**, Mercier LM, Rombola A, O'Steen BE, Fuller DD, Reier PJ (December 2011). Synaptic integration of transplanted cells with phrenic circuitry following high cervical spinal cord injury in adult rats. *14th International Symposium on Neural Regeneration,* Monterey, CA

69. **Gonzalez-Rothi EJ**, Federico RA, Daly A, Rombola A, O'Steen BE, Vandenborne KV, Reier PJ, Fuller DD, Lane MA (December 2011). Neuromuscular plasticity in the rat forelimb after high cervical spinal cord injury. *14th International Symposium on Neural Regeneration,* Monterey, CA

70. Lopez C, Lane MA, Loftus J, **Gonzalez-Rothi EJ**, Mercier LM, Rombola A, O'Steen BE, Fuller DD, Reier PJ (November 2011). Synaptic integration of transplanted cells with the injured cervical spinal cord in the adult rat. *Society for Neuroscience,* Washington, DC

71. **Gonzalez-Rothi EJ**, Fuller DD, Federico RA, Vandenborne KV, Reier PJ, Lane MA (November 2011). Neuromuscular plasticity in the rat forelimb after high cervical spinal cord injury. *Society for Neuroscience,* Washington, DC

72. Elmallah MK, Falk DJ, Lee KZ, Shafi NI, Lane MA, Mattio RY, **Gonzalez-Rothi EJ**, Sandhu MS, Reier PJ, Byrne BJ, Fuller DD (November 2011). Retrograde gene delivery to hypoglossal motoneurons: implications for treatment of Pompe Disease. *Society for Neuroscience,* Washington, DC

73. Roemmich RT, **Gonzalez-Rothi EJ,** Little VL, Elrod J, Nocera JR, Hass CJ (May 2011). Adaptation strategies to split-belt treadmill walking in healthy young adults*. The American College of Sports Medicine 58th Annual Conference,* Denver, CO

74. **Gonzalez-Rothi EJ,** Gill LC, Dougherty BJ, Lee KZ, Reier PJ, Vandenborne KH, Fuller DD (April 2011). Upper extremity skeletal muscle adaptations after high cervical spinal cord injury. *Experimental Biology Annual Conference*, Washington DC (*FASEB J* March 17, 2011 25:1105.16)

75. Gill LC, **Gonzalez-Rothi EJ,** Lee KZ, Vandenborne KH, Reier PJ, Fuller DD (April 2011). Ipsilateral hemidiaphragm atrophy following unilateral cervical spinal cord injury. *Experimental Biology Annual Conference*, Washington DC

76. Sandhu MS, Lee KZ, FalkDJ, Elmallah MK, Mattio RY, **Gonzalez-Rothi EJ,** Reier PJ, Byrne BJ, Fuller DD (April 2011). Hypoglossal motoneuron pathology in a mouse model of Pompe Disease*. Experimental Biology Annual Conference*, Washington DC.

77. **Gonzalez-Rothi EJ,** Gill LC, Dougherty BJ, Lee KZ, Reier PJ, Vandenborne, Fuller DD (March 2011). Upper extremity skeletal muscle adaptations after high cervical spinal cord injury. *6TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL

78. Gill LC, **Gonzalez-Rothi EJ,** Lee KZ, Vandenborne KH, Reier PJ, Fuller DD (March 2011). Ipsilateral hemidiaphragm atrophy following unilateral cervical spinal cord injury. *6TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL

79. Elmallah M, Falk DJ, Shafi N, Lee KZ, MattioRY, Sandhu MS, **Gonzalez-Rothi EJ,** Reier PJ, Byrne BJ, Fuller DD (March 2011). Retrograde gene delivery to hypoglossal motoneurons. *6TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL

80. Lim WT, **Gonzalez-Rothi EJ,** Baligand C, Ye F, Vohra RS, Keener JS, Bose P, Walter GA, Thompson F, Vandenborne KH (March 2011). Measures of locomotor asymmetry and muscle atrophy in severe spinal cord injury. *6TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL

81. Roemmich RT, **Gonzalez-Rothi EJ,** Little VL, Elrod J, Nocera JR, Hass CJ (March 2011). Adaptation strategies to split-belt treadmill walking in healthy young adults. *6TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL

82. Little VL, Westlake KP, **Gonzalez-Rothi EJ,** McGuirk TE, Patten C (February 2011). Inter-joint coordination: Differential changes following locomotor training post-stroke. *American Physical Therapy Association Combined Sections Meeting*. New Orleans, LA

83. Little VL, Westlake KP, **Gonzalez-Rothi EJ,** McGuirk TE, Patten C (August 2010). Does robotic locomotor training influence the fundamental locomotor pattern post-stroke? *North Americal Neurorehabilitation Symposium.* Atlanta, GA

84. Little VL, Westlake KP, **Gonzalez-Rothi EJ,** McGuirk TE, Patten C (April 2010). More is not always better: Adaptations in muscle activation patterns during overground gait following locomotor training. *Society for the Neural Control of Movement.* Naples, FL

85. Robertson CT, Little VL, **Gonzalez-Rothi EJ,** Patten C (April 2010). Biomechanical control of locomotion normalizes the bilateral sensorimotor state. *Society for the Neural Control of Movement.* Naples, FL

86. Patten C, McGuirk TE, **Gonzalez-Rothi EJ,** Little VL, Robertson CT (April 2010). External biomechanical control of locomotion normalizes the bilateral sensorimotor state. *Society for the Neural Control of Movement.* Naples, FL

87. **Gonzalez-Rothi EJ**, Little VL, McGuirk TE, Patten C (March 2010). Asymmetrical locomotor paradigms yield bilateral outcomes post-stroke. *5TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL

88. Little VL, Westlake KP, **Gonzalez-Rothi EJ**, McGuirk TE, Patten C (March 2010). Less is more: Considerations for locomotor training post-stroke. *5TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL

89. Robertson CT, Little VL, **Gonzalez-Rothi EJ,** Patten C (March 2010). Biomechanical control of locomotion normalizes the bilateral sensorimotor state. *5TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL

90. **Gonzalez-Rothi EJ,** Little V, McGuirk TE, Jaramillo J, Patten C (February 2010). Neuromechanical adaptations following locomotor training post-stroke. *American Physical Therapy Association Combined Sections Meeting*. San Diego, CA

91. **Gonzalez-Rothi EJ,** Little V, Mcguirk TE, Jaramillo J, Patten C (October 2009). Improved gait neuromechanics following locomotor training post-stroke. *American Congress of Rehabilitation Medicine Early Career Course.* Denver, CO

92. **Gonzalez-Rothi EJ,** Little V, Mcguirk TE, Jaramillo J, Patten C (September 2009). Walking-related outcomes following locomotor training post-stroke. *European Society for Motion Analysis in Adults and Children.* London, UK

93. Little V, Westlake KP, **Gonzalez-Rothi EJ,** Mcguirk TE, Patten C (September 2009). Gait adaptations following locomotor training post-stroke. *European Society for Motion Analysis in Adults and Children.* London, UK

94. Little V, Westlake KP, **Gonzalez-Rothi EJ,** Mcguirk TE, Patten C (August 2009). Gait adaptations following locomotor training post-stroke. *American Physical Therapy Association Section on Research Retreat.* Monterey, CA

95. Robertson CT, **Gonzalez-Rothi EJ,** Little V, Patten C (August 2009). Bilateral spinal modulation during walking in persons post-stroke. *Southeastern Biomechanics Society.* Gainesville, FL

96. Little V, Westlake KP, **Gonzalez-Rothi EJ,** Mcguirk TE, Patten C (April 2009). Gait adaptations following locomotor training post-stroke. *Southeastern Biomechanics Society.* Gainesville, FL

97. **Gonzalez-Rothi EJ,** Jaramillo J, Patten C (December 2008). Influence of the severity of residual stroke deficits on walking-related outcomes following locomotor training. *4TH Annual University of Florida Neuromuscular Plasticity Symposium.* Gainesville, FL

98. **Gonzalez-Rothi EJ,** Apanovitch EK, Galindo C, Vaughan G, Field-Fote E (February 2007). Spasticity-related outcomes associated with locomotor training in individuals with incomplete spinal cord injury. *American Physical Therapy Association Combined Sections Meeting,* Boston, MA