

Christopher T. Robertson, Ph.D.

Curriculum Vitae

Telephone: 352-376-1611x4160 (w)
Email: ctrobertson@php.ufl.edu

EDUCATION

University of Florida

Brain Rehabilitation Research Center, Malcolm Randall VA Medical Center
Postdoctoral Fellow, September, 2007-present
Associate Investigator Award: Internally v Externally-Driven BWSTT for Locomotor Recovery Post-Stroke

Stanford University

Rehabilitation Research & Development Center, VA Palo Alto Health Care System
Postdoctoral Fellow, June, 2007 – August, 2007
Associate Investigator Award: Internally v Externally-Driven BWSTT for Locomotor Recovery Post-Stroke

Indiana University

College of Arts and Sciences, Program in Neuroscience
School of Health, Physical Education & Recreation, Department of Kinesiology
Doctor of Philosophy, 2007
Dissertation: Selectivity of Presynaptic Inhibition: Supraspinal and Segmental Influences that Shape Movement Parameters

Indiana University

School of Health, Physical Education & Recreation, Department of Kinesiology
Master of Science, 2002
Research Option: Post-Activation Depression of the Soleus H-reflex in the Elderly

Indiana University

School of Health, Physical Education & Recreation, Department of Kinesiology
Bachelor of Science, 2000
Undergraduate Research: Resistance Training in the Elderly: Effects on Neuromuscular Performance

GRANTS AND AWARDS

Rehabilitation Research & Development, Department of Veterans Affairs
June 10, 2007 – June 9, 2009, Associate Investigator Award
Internally v Externally-Driven BWSTT for Locomotor Recovery Post-Stroke
National Institutes of Health
July 1, 2003 – July 1, 2005, Pre-Doctoral Research Training Grant (T32)

Supraspinal and Segmental Modulation of the Soleus H-reflex Recruitment Curve: Implications for Extrinsic and Intrinsic Presynaptic Regulation of Synaptic Efficacy
Research Associate, \$46000

Indiana University
2000-2002, Deans Fellowship
Presynaptic Inhibition of the H-reflex Relative to Test Reflex Size: Effects of a Voluntary Contraction
Principal Investigator, \$48000

Indiana University
1998-2000, McNair Scholars Program
Resistance Training in the Elderly: Effects on Neuromuscular Performance
Principal Investigator, \$30000

SCHOLARLY ACTIVITY

Peer-Reviewed Articles

1. Kitano, K., Tsuruike, M., **Robertson, C.T.**, & Koceja, D.M. The role of homosynaptic depression and presynaptic inhibition on the prolonged suppression of the soleus H-reflex following a balance task. *Submitted, Experimental Brain Research.*
2. Masaaki, T., Koceja, D.M., **Robertson, C.T.**, Yabe, K. (2006). Implications for using H-max/M-max ratio in H-reflex parameters for elderly subjects compared with young subjects. *Electromyography and Clinical Neurophysiology, 46*, 285-290.
3. Westwood, D.A., **Robertson, C.T.**, & Heath, M. (2005). Action control: Independent effects of memory and monocular viewing on reaching accuracy. *Brain and Cognition, 57*, 257-260.
4. Patikas, D.A., Kotzamanidis, C., **Robertson, C.T.**, & Koceja, D.M. (2004). The effect of the ankle joint angle in the level of soleus Ia afferent presynaptic inhibition. *Electromyography and Clinical Neurophysiology, 44(8)*, 503-511.
5. Koceja, D.M., Davison, E.B., & **Robertson, C.T.** (2004). Neuromuscular characteristics of endurance- and power-trained athletes. *Research Quarterly for Exercise and Sport, 75(1)*, 23-30.
6. **Robertson, C.T.** & Koceja, D.M. (2003). Post-activation depression of the soleus H-reflex in the elderly. *Electromyography and Clinical Neurophysiology, 43*, 103-111.
7. Earles, D.R., Dierking, J.T., **Robertson, C.T.**, & Koceja, D.M. (2002). Pre- and post-synaptic control of motoneuron excitability in athletes. *Medicine & Science in Sports & Exercise, 34*, 1766-1772.
8. **Robertson, C.T.** (1999). Resistance training in the elderly: Effects on neuromuscular performance. In R. D. Yearout (Ed.), *Proceedings of the National Conference for Undergraduate Research: Vol. 5*. (pp. 1356-1359). Asheville: The University of North Carolina.

Manuscripts in Preparation

Robertson, C.T. & Koceja, D.M. Selectivity of presynaptic inhibition: supraspinal and segmental influences that shape movement parameters. *in preparation for Brain Research.*

Robertson, C.T. & Koceja, D.M. Presynaptic inhibition of the H-reflex relative to test reflex size: effects of a voluntary contraction. *in preparation for Experimental Brain Research.*

Robertson, C.T. & Koceja, D.M. Supraspinal and segmental modulation of the soleus H-reflex recruitment curve: implications for extrinsic and intrinsic presynaptic regulation of synaptic efficacy. *in preparation for Clinical Neurophysiology.*

- Robertson, C.T.,** Kitano, K. & Koceja, D.M. H-reflex modulation during a passive muscle stretch in humans is differentiated by temporal dynamics and stimulus intensity. *in preparation for Clinical Neurophysiology.*
- Tsuruike, M., Kitano, K., **Robertson, C.T.,** & Koceja, D.M. H-reflex modulation during sagittal and lateral balance training: presynaptic discrimination due to task. *in preparation for Experimental Brain Research.*

Published Abstracts

1. **Robertson, C.T.,** Kitano, K., & Koceja, D.M. (2007). Selectivity of presynaptic inhibition: supraspinal and segmental influences that shape movement parameters. *Accepted, Society for Neuroscience Abstracts.*
2. **Robertson, C.T.,** Kitano, K., Tsuruike, M., & Koceja, D.M. (2006). Presynaptic inhibition of the H-reflex relative to test reflex size: effects of a voluntary contraction [Abstract]. *Medicine & Science in Sports & Exercise, 38(5),* S441.
3. Kitano, K., Tsuruike, M., **Robertson, C.T.,** & Koceja, D.M. (2006). Depression and recovery of spinal synaptic efficacy following a balance task [Abstract]. *Medicine & Science in Sports & Exercise, 38(5),* S442.
4. Tsuruike, M., Kitano, K., **Robertson, C.T.,** & Koceja, D.M. (2006). Investigation of H-reflex modulation with two experimental techniques and active movement of the balance board [Abstract]. *Medicine & Science in Sports & Exercise, 38(5),* S442.
5. Harris, R.A., Kitano, K., **Robertson, C.T.,** & Koceja, D.M. (2006). Electrically and mechanically induced depression of the soleus H-reflex at different stimulus intensities [Abstract]. *Medicine & Science in Sports & Exercise, 38(5),* S523.
6. **Robertson, C.T.,** Kitano, K., & Koceja, D.M. (2005). Supraspinal and segmental modulation of the soleus H-reflex recruitment curve: implications for extrinsic and intrinsic presynaptic regulation of synaptic efficacy [Abstract]. *Society for Neuroscience Abstracts, 515.3.*
7. Kitano, K., **Robertson, C.T.,** Tsuruike, M., & Koceja, D.M. (2005). Effects of down-training upon spinal plasticity during a balance task. [Abstract]. *Medicine & Science in Sports & Exercise, 37(5),* S162-S163.
8. Elpers, R.M., Kitano, K., **Robertson, C.T.,** Wallace, J.P., ACSM, & Koceja, D.M. (2005). The efficacy of a home-based balance training program. [Abstract]. *Medicine & Science in Sports & Exercise, 37(5),* S293.
9. **Robertson, C.T.** & Heath, M. (2004). Preview time and visual illusions. [Abstract]. *Journal of Sport Exercise Psychology, 26,* S155.
10. **Robertson, C.T.** & Koceja, D.M. (2004). Within-subject reliability of the soleus H-reflex recruitment curve in man: effects of muscle length on measurement error. [Abstract]. *Medicine & Science in Sports & Exercise, 36(5),* S164.
11. **Robertson, C.T.** & Koceja, D.M. (2003). H-reflex modulation during a passive muscle stretch in humans is differentiated by temporal dynamics and stimulus intensity [Abstract]. *Society for Neuroscience Abstracts, 186.10.*
12. Koceja, D.M. & **Robertson, C.T.** (2003). The influence of soleus muscle length on motoneuron pool excitability and implications regarding the “gain” of the reflex [Abstract]. *Society for Neuroscience Abstracts, 186.11.*
13. **Robertson, C.T.** & Koceja, D.M. (2003). The role of three physical training programs on muscle amplitudes following postural perturbation in the elderly [Abstract]. *Medicine & Science in Sports & Exercise, 35(5),* S314.
14. **Robertson, C.T.** & Koceja, D.M. (2002). Weight-bearing effects on post-activation depression of the soleus H-reflex [Abstract]. *Society for Neuroscience Abstracts, 66.8.*

15. **Robertson, C.T.** & Koceja, D.M. (2002). Speed of muscular movement and its effect on post-activation depression of the soleus H-reflex [Abstract]. *Medicine & Science in Sports & Exercise*, 34(5), S116.
16. **Robertson, C.T.**, Davison, E.B., Earles, D.R., & Koceja, D.M. (2001). Post-activation depression of the soleus H-reflex in the elderly [Abstract]. *Society for Neuroscience Abstracts*, 936.10.
17. **Robertson, C.T.**, Earles, D.R., & Koceja, D.M. (2000). Role of exercise programs on balance and reflex profiles in the elderly [Abstract]. *Medicine & Science in Sports & Exercise*, 32(5), S349.
18. **Robertson, C.T.**, Earles, D.R., & Koceja, D.M. (1999). Resistance-training in the elderly: effects on neuromuscular performance [Abstract]. *Medicine & Science in Sports & Exercise*, 31(5), S205.

Invited Presentations

Robertson, C.T., Koceja D.M., & Hoffman, M. (2005, June). The physiological and technical aspect of the measurement of spinal control of movement. In G. Kaman (Chair), *Spinal Control of Human Movement*. Mini-Symposium conducted at the national meeting of the American College of Sports Medicine, Nashville, TN.

Research Presentations

- Robertson, C.T.**, Kitano, K., Tsuruike, M., & Koceja, D.M. (2006, June). *Presynaptic inhibition of the H-reflex relative to test reflex size: effects of a voluntary contraction*. Poster session presented at the annual meeting of the American College of Sports Medicine, Denver, CO.
- Kitano, K., Tsuruike, M., **Robertson, C.T.**, & Koceja, D.M. (2006, June). *Depression and recovery of spinal synaptic efficacy following a balance task*. Poster session presented at the annual meeting of the American College of Sports Medicine, Denver, CO.
- Tsuruike, M., Kitano, K., **Robertson, C.T.**, & Koceja, D.M. (2006, June). *Investigation of H-reflex modulation with two experimental techniques and active movement of the balance board*. Poster session presented at the annual meeting of the American College of Sports Medicine, Denver, CO.
- Harris, R.A., Kitano, K., **Robertson, C.T.**, & Koceja, D.M. (2006, June). *Electrically and mechanically induced depression of the soleus H-reflex at different stimulus intensities*. Poster session presented at the annual meeting of the American College of Sports Medicine, Denver, CO.
- Robertson, C.T.**, Kitano, K., & Koceja, D.M. (2005, November). *Supraspinal and segmental modulation of the soleus H-reflex recruitment curve: implications for extrinsic and intrinsic presynaptic regulation of synaptic efficacy*. Poster session presented at the annual meeting of the Society for Neuroscience, Washington, DC.
- Kitano, K., **Robertson, C.T.**, Tsuruike, M., & Koceja, D.M. (2005, June). *Effects of down-training upon spinal plasticity during a balance task*. Poster session presented at the annual meeting of the American College of Sports Medicine, Nashville, TN.
- Elpers, R.M., Kitano, K., **Robertson, C.T.**, Wallace, J.P., FACSM, & Koceja, D.M. (2005, June). *The efficacy of a home-based balance training program*. Thematic poster session presented at the annual meeting of the American College of Sports Medicine, Nashville, TN.
- Westwood, D.A., **Robertson, C.T.**, Heath, M. (2004, June). *Action control: independent effects of memory and monocular viewing on reaching accuracy*. Poster session presented at the annual meeting of Theoretical and Experimental Neuropsychology, Montreal, Canada.
- Robertson, C.T.** & Heath, M. (2004, June). *Preview time and visual illusions*. Poster session presented at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity, Vancouver, British Columbia.
- Robertson, C.T.** & Koceja, D.M. (2004, June). *Within-subject reliability of the soleus H-reflex recruitment curve in man: effects of muscle length on measurement error*. Poster session presented at the annual meeting of the American College of Sports Medicine, Indianapolis, IN.

- Robertson, C.T.** & Koceja, D.M. (2003, November). *H-reflex modulation during a passive muscle stretch in humans is differentiated by temporal dynamics and stimulus intensity*. Poster session presented at the annual meeting of the Society for Neuroscience, New Orleans, LA.
- Koceja, D.M. & **Robertson, C.T.** (2003, November). *The influence of soleus muscle length on motoneuron pool excitability and implications regarding the “gain” of the reflex*. Poster session presented at the annual meeting of the Society for Neuroscience, New Orleans, LA.
- Robertson, C.T.** & Koceja, D.M. (2003, May). *The role of three physical training programs on muscle amplitudes following postural perturbation in the elderly*. Thematic poster session presented at the annual meeting of the American College of Sports Medicine, San Francisco, CA.
- Robertson, C.T.** & Koceja, D.M. (2002, November). *Weight-bearing effects on post-activation depression of the soleus H-reflex*. Poster session presented at the annual meeting of the Society for Neuroscience, Orlando, FL.
- Robertson, C.T.** & Koceja, D.M. (2002, June). *Velocity of spindle stretch and its effect on post-activation depression of the soleus H-reflex*. Poster session presented at the annual meeting of the American College of Sports Medicine, St. Louis, MO.
- Robertson, C.T.**, Davison, E.B., Earles, D.R., & Koceja, D.M. (2001, November). *Post-activation depression of the soleus H-reflex in the elderly*. Poster session presented at the annual meeting of the Society for Neuroscience, San Diego, CA.
- Robertson, C.T.**, Earles, D.R., & Koceja, D.M. (2000, June). *Role of exercise programs on balance and reflex profiles in the elderly*. Thematic poster session presented at the annual meeting of the American College of Sports Medicine, Indianapolis, IN.
- Robertson, C.T.**, & Koceja, D.M. (1999, November). *Role of exercise programs on balance and reflex profiles in the elderly*. Poster session presented at the annual meeting of the National Ronald E. McNair Scholars Research Conference & Graduate School Fair, Delavan, WS.
- Robertson, C.T.**, & Koceja, D.M. (1999, October). *Role of exercise programs on balance and reflex profiles in the elderly*. Slide session presented at the annual meeting of the Indiana University Undergraduate Research Conference, Indianapolis, IN.
- Robertson, C.T.**, & Koceja, D.M. (1999, August). *Role of exercise programs on balance and reflex profiles in the elderly*. Slide session presented at the annual meeting of the Indiana University Undergraduate Summer Research Program, Bloomington, IN.
- Robertson, C.T.**, Earles, D.R., & Koceja, D.M. (1999, June). *Resistance-training in the elderly: effects on neuromuscular performance*. Poster session presented at the annual meeting of the American College of Sports Medicine, Seattle, WA.
- Robertson, C.T.**, & Koceja, D.M. (1999, March). *Resistance-training in the elderly: effects on neuromuscular performance*. Slide session presented at the annual meeting of the National Conference for Undergraduate Research, Rochester, NY.
- Robertson, C.T.**, & Koceja, D.M. (1998, November). *Resistance-training in the elderly: effects on neuromuscular performance*. Slide session presented at the annual meeting of the Indiana University Undergraduate Research Conference, Indianapolis, IN.
- Robertson, C.T.**, & Koceja, D.M. (1998, October). *Resistance-training in the elderly: effects on neuromuscular performance*. Poster session presented at the annual meeting of the National Ronald E. McNair Scholars Research Conference & Graduate School Fair, Delavan, WS.
- Robertson, C.T.**, & Koceja, D.M. (1998, August). *Resistance-training in the elderly: effects on neuromuscular performance*. Slide session presented at the annual meeting of the Indiana University Undergraduate Summer Research Program, Bloomington, IN.

RESEARCH EXPERIENCE

Postdoctoral Fellow

Brain Rehabilitation Research & Development Center, Gainesville, Florida

Internally v Externally-Driven BWSTT for Locomotor Recovery Post-Stroke
September 2007 –

Postdoctoral Fellow

Rehabilitation Research & Development Center, VA Palo Alto Health Care System
Internally v Externally-Driven BWSTT for Locomotor Recovery Post-Stroke
June 2007 – August 2007

Graduate Research Assistant

Motor Control Laboratory, Indiana University, Department of Kinesiology
August 2000 – May 2007
Neuroplasticity Laboratory, Indiana University, Program in Neuroscience
August, 2003 – May, 2004

Research Assistant

Motor Control Laboratory, Indiana University, Department of Kinesiology
August 1998 – May 2000

ACADEMIC EXPERIENCE

Graduate Associate Instructor

Indiana University, Department of Kinesiology
Interpretation of Data/Statistics (T591), 2006
Topics in Motor Integration (K641), 2005
Motor Learning/Control (P452), 2001-2005

PROFESSIONAL SERVICE

Grant and Scientific Review

National Athletic Trainers Association (NATA), 2004-2006

Manuscript Review

Clinical Neurophysiology, 2006
Journal of Neuroscience Methods, 2006
Somatosensory and Motor Research, 2005

Memberships

Society for Neuroscience (SFN)
American College of Sports Medicine (ACSM)
Sigma Xi National Scientific Research Society