

James H. Cauraugh
Professor and Associate Dean for Research
College of Health and Human Performance
Applied Physiology and Kinesiology Department
University of Florida
Gainesville, FL 32611-8206

Education

- 1970-74 B.S., Physical Education, State University of New York at Brockport; Summa Cum Laude graduate; Departmental Scholar; Alumni Scholarship Award; President's Distinguished Scholar
- 1974-77 M.S., Physical Education: Motor Learning, Pennsylvania State University. Thesis: *A Test of the Proprioceptive Input Hypothesis of Anticipatory Timing*
- 1981-84 Ph.D., Movement Science: Motor Learning, Florida State University. Dissertation: *Motor Programming: Specification of Movement Parameters*

Employment

- 1974-75 Graduate Assistant, Basic Instructional Program, Pennsylvania State University
- 1975-81 Instructor/Assistant Professor and Head Baseball Coach, Pennsylvania State University, McKeesport Campus
- 1981-84 Graduate Research Assistant, Motor Learning/Control Laboratory, Florida State University
- 1984-88 Assistant Professor, University of Oklahoma
- 1988-91 Assistant Professor, Director, Motor Behavior Laboratory, Co-Director, Center for Exercise Science, University of Florida
- 1991-2002 Associate Professor, Director, Motor Behavior Laboratory, Co-Director, Center for Exercise Science, Doctoral Research Faculty, University of Florida
- 2003-present Professor, Applied Physiology and Kinesiology Department, Director, Motor Behavior Lab, Co-Director, Center for Exercise Science, Brain Rehabilitation Research Center, University of Florida
- 2007-present Associate Dean for Research, College of Health and Human Performance

Refereed Publications: 101; selected peer-reviewed publications since 2010

1. **Cauraugh, J.H.**, Lodha, N., Naik, S.K., & Summers, J.J. (2010). Bilateral movement training and stroke motor recovery progress: A structured review and meta-analysis. *Human Movement Science, 29*, 853-870.
2. Fournier, K.A., Hass, C.J., Naik, S.K., Lodha, N., & **Cauraugh, J.H.** (2010). Motor coordination in autism spectrum disorders: A synthesis and meta-analysis. *Journal of Autism and Developmental Disorders, 40*, 1227-1240.
3. Lodha, N., Naik, S.K., Coombes, S.A., & **Cauraugh, J.H.** (2010). Force control and degree of motor impairments in chronic stroke. *Clinical Neurophysiology, 121*, 1952-1961.
4. **Cauraugh, J.H.**, Naik, S.K., Hsu, W., Coombes, S.A., & Holt, K.G. (2010). Cerebral palsy children's gait and electrical stimulation: A systematic review and meta-analysis. *Clinical Rehabilitation, 24*, 963-978.
5. **Cauraugh, J.H.**, Lodha, N., Naik, S.K., & Summers, J.J. (2011). Invited commentary. Reply to

- Pollock et al. (2011): Meta-analysis issues on bilateral movement training and stroke motor recovery progress. *Human Movement Science*, 30, 147-149.
6. Naik, S.K., Patten, C., Lodha, N., Coombes, S.A., & **Cauraugh, J.H.** (2011). Force control deficits in chronic stroke: Grip formation and release phases. *Experimental Brain Research*, 211, 1-15.
 7. Coombes, S.A., Naugle, K.M., Barnes, R.T. **Cauraugh, J.H.**, Janelle, C.M. (2011). Emotional reactivity and force control: The influence of behavioral inhibition. *Human Movement Science*, 30, 1052-1061.
 8. **Cauraugh, J.H.**, Naik, S.K., Lodha, N., Coombes, S.A., & Summers, J.J. (2011). Long-term rehabilitation for chronic stroke arm movements: A randomized controlled trial. *Clinical Rehabilitation*, 25, 1086-1096.
 9. Lodha, N., Coombes, S.A., & **Cauraugh, J.H.** (2012). Bimanual isometric force control: Asymmetry and coordination evidence post stroke. *Clinical Neurophysiology*, 123, 787-795.
 10. Wikstrom E., Tillman M., Chmielewski T., **Cauraugh J.H.**, Naugle K., & Borsa P. (2012) Discriminating between copers and those with chronic ankle instability. *Journal of Athletic Training*, 47, 136-142.
 11. Naugle KM, Coombes SA, **Cauraugh JH**, Janelle CM. (2012). Influence of emotion on the control of low-level force production. *Research Quarterly for Exercise and Sport*, 83, 353-358.
 12. Lodha, N., Patten, C., Coombes, S.A., & Cauraugh, J.H. (2012). Bimanual force control strategies in chronic stroke: Finger extension versus power grip. *Neuropsychologia*, 50, 2536-2545.
 13. Lodha, N., Misra, G., Coombes, S.A., Christou, E.A., **Cauraugh, J.H.** (2013). Increased force variability in chronic stroke: Contributions of force modulation below 1 Hz. *PLoS One*, 8(12;e83468): 1-9.
 14. Kang, N., & **Cauraugh, J.H.** (2014). Force control improvements in chronic stroke: Bimanual coordination and motor synergy evidence after coupled bimanual movement training. *Experimental Brain Research*, 232, 503-513.
 15. Kang, N., Idica, J., Bhullar, A., & **Cauraugh, J.H.** (2014). Motor recovery patterns in arm muscles: Coupled bilateral training and neuromuscular stimulation. *Journal of NeuroEngineering and Rehabilitation*, 11:57, 1-9.
 16. Kang, N., & **Cauraugh, J.H.** (2014). Force frequency structure below 1 Hz in chronic stroke: Paretic arm control. *Brain Research*, 1569, 32-40.
 17. Kang, N., & **Cauraugh, J.H.** (2014). Bimanual force variability and chronic stroke: Asymmetrical hand control. *PLoS One*, 9(7; e101817).
 18. Kang, N., & **Cauraugh, J.H.** (2015). Bimanual force variability in chronic stroke: With and without visual information. *Neuroscience Letters*, 587, 41-45.
 19. Kang, N., & **Cauraugh, J.H.** (2015). Paretic hand unimanual force control: Improved submaximal force production and regularity. *Neuroscience Research*, 94, 79-86.
 20. Kang, N., & **Cauraugh, J.H.** (2015). Force control in chronic stroke. *Neuroscience and Biobehavioral Reviews*, 52, 38-48.
 21. Kang, N., Summers, J.J., & **Cauraugh, J.H.** (2015). Transcranial direct current stimulation facilitates motor learning post stroke: A systematic review and meta-analysis. *Journal of Neurology, Neurosurgery & Psychiatry*, DOI: 10. 1136/jnnp-2015-311242, 1-11.

Book

Cauraugh, J. H. (2013). *Research Methods: Functional Skills*. ISBN: 978-1-939337-34-4

External Grant Record Book

1. Title: *Stroke Induced Hemiparesis: Rehabilitation Protocols for Motor Recovery*
Grant-in-Aid: Cauraugh, J.H., PI
Funding Agency: American Heart Association: Florida/Puerto Rico Affiliate
Amount Awarded: \$119,978
Project Dates: 7/1/2001 - 6/30/2003
Direct Cost = \$107,980
Indirect Cost = \$ 11,998
Total Cost = \$119,978

4. Title: *Collaborative Research: Network-based Interactive Laboratory Modules for the Study of Movement Biomechanics, and Coordination and Control*
Chow, J. (PI), Carlton, L. (Co-PI, University of Illinois), & Cauraugh, J. (Co-PI)
Funding Agency: National Science Foundation
Amount Awarded: \$316,875
Project Dates: 7/1/2002 - 6/30/2004
Direct Cost = \$199,217
Indirect Cost = \$142,594
Total = \$316,875

5. Title: *Chronic Stroke Motor Recovery: Bimanual Coordination Theory*
Grant-in-Aid: Cauraugh, J.H., PI
Funding Agency: American Heart Association: Florida/Puerto Rico Affiliate
Total Amount Awarded: \$120,000
Project Dates: 07/01/2004 - 06/30/2006
Direct Cost = \$108,000
Indirect Cost = \$ 12,000
Total Cost = \$120,000

6. Title: *Sub-acute Stroke Recovery: Bimanual Coordination Training*
R03: Cauraugh, J.H., PI, & Richards, L. Co-Investigator
Funding Agency: NIH: NICHD
Total Amount Awarded: \$145,500
Project Dates: 6/1/2006 - 5/31/2009
Direct Cost = \$ 82,275
Indirect Cost = \$ 63,225
Total Cost = \$145,500

7. Title: *Cumulative Motor Improvements in Chronic Stroke: Longitudinal Coupled Bilateral*
Grant-in-Aid: Cauraugh, J.H., PI
Funding Agency: American Heart Association: Florida/Puerto Rico Affiliate
Total Amount Awarded: \$264,000
Project Dates: 7/1/2006 - 6/30/2010
Role: PI
Direct Cost = \$237,600
Indirect Cost = \$ 26,400
Total Cost = \$264,000

8. Title: *Cognitive plus Motor Rehabilitation: Combining Protocols Improves Stroke Recovery*
Grant-in-Aid: Cauraugh, J.H., PI
Funding Agency: American Heart Association: Florida/Puerto Rico Affiliate
Total Amount Awarded: \$165,000
Project Dates: 7/1/2011 - 6/30/2014
Role: PI
Direct Cost = \$150,000
Indirect Cost = \$ 15,000
Total Cost = \$165,000

Professional Service

A. Editorial Board Member

Acta Psychologica, International Journal of Psychonomics, 1990 – 2012
Journal of Motor Behavior, 2005 – present
Research Quarterly for Exercise and Sport, 2005 – 2012

B. Ad Hoc Reviewer: Journals

American Journal of Physical Medicine & Rehabilitation, 2002 – present
Applied Cognitive Psychology, 2007 – present
Archives of Physical Medicine & Rehabilitation, 2004 – present
Behavior Research Methods, 2008
Behavioural Brain Research, 2013
BioMedical Signal Processing and Control, 2015
BioMedical Central Medicine, 2013
BioMedical Central Neurology, 2014
Clinical Neurophysiology, 2007 – present
Clinical Rehabilitation, 2009 – present
Current Neuropharmacology, 2012
Developmental Medicine & Child Neurology, 2012
Disability and Rehabilitation, 2009 – present
Cognitive Brain Research, 2003 – present
Ergonomics, Sport, and Leisure, 2007 – present
Exercise and Sport Sciences Reviews, 2013
Experimental Brain Research, 2007 - present
Human Movement Science, 1995, 2006 – present
International Journal of Stroke, 2011
Journal of Applied Sport Psychology, 1994 – 96, 2005
Journal of Autism and Developmental Disorders, 2009 – present
Journal of Experimental Child Psychology, 2012
Journal of Experimental Psychology: Applied, 1996, 1997
Journal of Experimental Psychology: Human Perception & Performance, 1988, 1990, 1991
Journal of Experimental Psychology: Learning, Memory, & Cognition, 2006
Journal of Gerontology: Psychological Sciences, 1992
Journal of Motor Behavior, 1991, 1993, 1995, 1997 – present
Journal of NeuroEngineering and Rehabilitation, 2013 - present
Journal of Neurology, Neurosurgery, & Psychiatry, 2003 – present
Journal of Neurophysiology, 2006 – present

Journal of the Neurological Sciences, 2006 – present
Journal of Rehabilitation Medicine, 2004 – present
Journal of Rehabilitation Research and Development, 2003 – present
Journal of Sport & Exercise Psychology, 2001, 2003 – present
Journal of Sport Sciences, 2015 – present
Medicine & Science in Sports & Exercise, 2014
Memory and Cognition, 1987, 2009, 2012
Motor Control, 2009 – present
Neuropsychologia, 2007 – present
Neurorehabilitation and Neural Repair, 2008 – present
Neuroscience, 2013 – present
Neuroscience Letters, 2007 – present
Perceptual and Motor Skills, 1990 – 2005
Physical Therapy Journal, 2009 – 2010
Physiotherapy, 2011 – present
PLoS One, 2014 – present
Research Quarterly for Exercise and Sport, 1985 – present
Restorative Neurology and Neuroscience, 2007 – present
Sport, Leisure, & Ergonomics, 2008
Stroke, 2001 – present
Women in Sport and Physical Activity Journal, 1993, 1995, 1997

C. Invited Ad Hoc Reviewer: Grant Proposals

1. NIH: Musculoskeletal Rehabilitation Sciences Study Section. June 2008 – present
2. NIH: ZRG1 MOSS D02 Study Section. October 2009 – present
3. American Heart Association, National Grant Reviews. IRG Clinical and Behavioral Science Population Committees, September 2011 – present
4. American Heart Association, National Grant Reviews. Innovative Proposals. September 2014.
5. American Heart Association, Disparities Peer Review Committee. April 2015.
6. Natural Sciences and Engineering Research Council of Canada: Discovery Grant Review. December 2011 – present
7. Michael Smith Foundation for Health Research, British Columbia, Canada. November 2005
8. Dutch Organization for Scientific Research: VENI and VICI Proposals. January 2009
9. American Association for the Advancement of Science. December 2007 – 2013
10. New Zealand Health Research Council. January 2008
11. Canadian Institutes of Health Research. October 2000
12. United Kingdom Stroke Organization. September 2010