

**Chris J. Hass, Ph.D.**  
*Curriculum Vita*

**CONTACT INFORMATION**

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**EDUCATION**

**Ph.D.** University of Florida, Dec 2001  
Concentration: Biomechanics  
Minor: Rehabilitation Science/Physical Therapy  
Chairs: John Chow, Ph.D., Jim Cauraugh, Ph.D.,  
Dissertation: "Lower extremity kinetic chain during locomotion and landings: Relations to mechanisms of knee injury."

**M.S.** University of Florida, 1998  
Major: Exercise Science  
Specialization: Exercise Physiology  
Advisor: Michael L. Pollock, Ph.D.  
Thesis: "The effects of resistance training volume on improvements in muscular strength, endurance and body composition in resistance trained adults."

**B.S.** Furman University, 1996  
Major: Biology  
Major: Health and Exercise Science

**PROFESSIONAL EXPERIENCE**

**Associate Provost for Academic and Faculty Affairs**

University of Florida, Provost Office  
August 2018-

**Professor and Graduate Coordinator**

University of Florida, Department of Applied Physiology and Kinesiology  
August 2016-; Coordinator 2016-2018  
Courses taught: Biomechanical Basis of Human Movement, Evaluation Procedures, Research Methods, Biomechanical Instrumentation, Controlling Motor Actions, Neuromechanics of Gait, Planning Motor Actions, and Biobehavioral Seminar.

**Associate Professor**

University of Florida, Department of Applied Physiology and Kinesiology  
August 2011-August 2016  
Courses taught: Biomechanical Basis of Human Movement, Evaluation Procedures, Research Methods, Biomechanical Instrumentation, Controlling Motor Actions, Neuromechanics of Gait, Planning Motor Actions, and Biobehavioral Seminar.

**Assistant Professor**

University of Florida, Department of Applied Physiology and Kinesiology  
2006-2011  
Courses taught: Biomechanical Basis of Human Movement, Evaluation Procedures, Research Methods, Biomechanical Instrumentation, and Controlling Motor Actions.

**Assistant Professor**

Columbia University, Teachers College  
2004-2006

Courses taught: Applied Physiology Lab 1, Advanced Applied Physiology Lab, Neuromuscular Adaptations to Exercise, Neuromechanical Control of Gait and Posture, and Physiologic Aspects of Aging

**Research Scientist II**

Georgia Institute of Technology, School of Applied Physiology  
2002-2004

Courses taught: Kinesiological Basis of Human Movement, Clinical Gait Analysis Laboratory

**Postdoctoral Fellow**

Center for Research on Complementary and Alternative Medicine in Neurodegenerative diseases. Emory University College of Medicine, Department of Neurology  
September 2001-2004, Trained under Jorge Juncos, Steve Wolf, Mahlon DeLong, Bob Gregor

**HONORS AND AWARDS**

2019- Elected Fellow of American Society of Biomechanics  
2019- ACSM Biomechanics Interest Group, Career Achievement Award  
2017-2020 UF Term Professorship  
2016- UF CTSI Mentoring Academy, Master Mentor  
2016- MJ Fox Foundation, Gait Advisory Committee  
2016- President American Society of Biomechanics  
2015 HHP Outstanding Doctoral Advising Mentoring Award  
2015-Present: Graduate Program Coordinator, Department of Applied Physiology and Kinesiology  
2015: President-elect American Society of Biomechanics  
2015. TEDx UF [Speaker](#)  
2014-2015: Selected to UF Leadership Academy  
2013: HHP Outstanding Doctoral Advising Mentoring Award.  
2013: Associate Editor, Medicine and Science in Sports and Exercise  
2013: PostDoc Mentoring Award, University of Florida  
2012: University of Florida Research Foundation Professor  
2012: Meeting Co-Chair and Executive Board Member, American Society of Biomechanics.  
2011: Outstanding Young Alumni, University of Florida  
2010: Fellow Status, American College of Sports Medicine  
2008-2009: University of Florida, College of Health and Human Performance Teacher of the Year.  
2005: Teachers College Columbia University, The Outstanding Teacher Award.  
2001-2003: Post-Doctoral Fellowship in Complementary & Alternative Medicine in Movement Disorders, Emory University  
1999-2001: Grinter Fellowship, Graduate School, University of Florida  
2000-2001: Graduate Student Forum Committee Chair  
1999-2001: Graduate Student Council Representative  
1998-Present: Phi Kappa Phi Honor Society  
1995-1996: United States Achievement Academy Natural Sciences Award  
1995-1996: United States Achievement Academy All-American Scholar Award

**DIVERSITY STATEMENT**

My laboratory is committed to diversity and to providing an inclusive work environment where everyone is treated with respect and supported in their academic pursuits. We welcome individuals of any gender identity or expression, race, ethnicity, or nationality.

**RESEARCH INTERESTS**

My laboratory is focused on understanding how, within the constraints of the musculoskeletal system, sensory organs, motor pattern generators, and the brain interact to produce coordinated movement. Two prominent themes of my work are: 1) elucidating the biological bases of walking and balance impairment in persons with Movement Disorders (e.g. Parkinson's disease (PD), Essential Tremor, Ataxia) so that therapeutic

interventions can be optimized; and 2) delineating basic mechanisms of neuromechanical control governing locomotor functions.

## GRANT ACTIVITY

### Completed and Current Funding

25. Mirlleman, A. Gait as a biomarker for clinicians and researchers in Parkinson's disease. MJ Fox Role: Co-Investigator	1/01/2019-12/31/2019	\$511,312
24. Clark, D, Manini, T; Seidler, R (MPI). Multimodal imaging of brain activity to investigate walking and mobility decline in older adults NIH U01 1U01AG061389-01 Role: Co-Investigator	9/01/2018-8/31/2023	\$5,395,709
23. McFarland and Hass. Drug trial in collaboration with Axovant 11/01/2016- 2017		
22. Hass, C (PI). Locomotor adaptation training to prevent mobility disability. NIH R21 AG048133 Role: PI	8/1/2015-5/31/2017	\$412,500.00
21. Gunduz, A. Uncovering an electrical biomarker for freezing of gait in Parkinson's disease. UF Opportunity Fund Role: Co-Investigator	6/1/2015-5/30/2017	\$85,991
20. Okun, M.S. A responsive closed loop approach to treat freezing of gait in Parkinson's disease. MJFox Role: Co-Investigator	1/1/2015-12/31/2016	\$750,000
19. <b>Hass, C.J.</b> American Society of Biomechanics Annual Meeting. NIH 1R13EB015842-01 Role: PI	7/30/2012-7/29/2013	\$16,000
18. Tillman, M. 36 <sup>th</sup> Annual Meeting of the American Society of Biomechanics. Alachua County Travel Grant Role: Co-Investigator	7/30/2012-7/29/2013	\$5,600
17. Bishop, M. 36 <sup>th</sup> Annual Meeting of the American Society of Biomechanics. Department of Sponsored Research, UF Role: Co-Investigator	7/30/2012-7/29/2013	\$3,000
16. <b>Hass, C.J.</b> Characterization of subjects at risk for autosomal dominantly inherited spinocerebellar ataxias, SCA 1 and 3. UF Opportunity Fund Role: PI	5/1/2012-4/30/2015	\$35,363
15. Sonke, J., <i>DANCE FOR LIFE: Assessing the effects of dance on motor and non-motor function in Parkinson's disease</i> Parkinson Research Foundation Role: Co-Investigator	4/1/2012-3/30/2016	\$33,600
14. Nocera, J. ALTER Function- Asymmetric locomotor training in the elderly to restore function. Claude D. Pepper OAIC, University of Florida Role: Co-Investigator	4/1/2012-3/31/2014	\$116,432 (declined)
13. White, K. (PI). Nonlinear dynamics used to classify effects of mild traumatic brain injury. Army Research Office	9/15/2010-6/14/2011	\$49,999

Role: Co-PI,

12. Fregly, B. Treatment planning for gait pathologies on whole body angular and linear momentum.  
NSF 2010-2012 \$116,841  
Role: Investigator

11. **Hass, CJ** and L. Altmann. Language and executive function in Parkinson's disease: Effects of dual task and exercise.  
1R21AG033284-01A2 07/15/2010-06/30/2012 \$336,489  
Role: PI

10. White, K. Classifying effects of mild traumatic brain injury on postural sway with nonlinear dynamics.  
Army Research Office Summer 2009 \$132,368  
Role: Co-PI

9. **Hass, CJ**. Motor control in young children with autism  
Autism Speaks Pilot Grant 8/2007-07/2009 \$117,747  
Role: PI

8. **Hass, CJ**. Tai Chi and dual task interference on postural control in Parkinson's disease.  
5R03HD054594-02 9/1/2007-8/31/2009 \$146,500  
Role: PI

7. Alberts, JA and Richards, LG. Deep brain stimulation and motor function in Parkinson's disease patients.  
Department of Veterans Affairs, Center-to-Center Collaborative Research Grant  
11/1/2006-10/31/2008 \$249,300  
Role: Investigator

6. Fernandez, H. The restore study,  
Michael J. Fox Foundation 12/06/2006-9/01/09 \$267,703  
Role: Investigator

6. **Hass, C. J.** and C. Patten (Multi PI), Central versus peripheral stimulation to improve gait dysfunction in PD.  
UF National Parkinson's Center For Excellence April 2009 – March 2010 \$7500  
Role: PI

5. Tillman, M.D. Effects of whole-body vibration on spasticity, gait, balance, flexibility, & quality of life in individuals with cerebral palsy.  
HHP Research Opportunity Fund 2006-2007 \$4,500  
Role: Investigator

4. **Hass, C.J.** Resistance training to improve the ability to rise from a chair in individual's with Parkinson's disease.  
Dean's Grant for Pre-tenured Faculty, Teachers College Columbia University  
Role: PI 2004-2005 \$2,500

3. **Hass, C.J.**, Creatine monohydrate supplementation in Parkinson's disease: A pilot study in patients undergoing resistance training.  
*NIH* AT00609, Developmental Research Program, Emory Center for Research on Complimentary and Alternative Medicine in Neurodegenerative diseases.  
Role: PI 2003-2004 \$36,700

2. Tillman, M.D., The influence of joint position on lower extremity joint loads and muscle activity during exercise on a recumbent stepper and cycle ergometer.  
NuStep Inc. 9/2002-8/2003 \$11,543  
Role: Co-Investigator

1. Pollock, M.L., The effect of NuStep training on aerobic fitness, body composition, and muscular strength and endurance. NuStep Inc. 2007-2008 \$12,202  
Role: Investigator

**Postdoc / Graduate Student Directed Funding**

8. Stegemoller, E.L. Parkinson's Action Network Postdoctoral Research Advocacy Award Parkinson's Action Network.	\$12,500
7. Stegemoller, E.L. Current effects of singing on speech, swallow in patients with Parkinson's disease. Parkinson's study group.	\$24,995.18
6. Stegemoller, E.L. The effect of disease progression on rate dependent impairments in repetitive finger movements in patients with Parkinson's disease. CTSI Pilot Project.	\$7000
5. Nocera, J. Aerobic exercise to improve executive language function in older adults. VA CDA 1.	\$118,000
4. Dalton, E. Science Partners in Inquiry-based Collaborative Education, Type I Fellowship, National Science Foundation.	\$30,000
3. Fournier, K. Static and dynamic balance control in children with autism. Organization for Autism Research.	\$2500
2. Wikstrom, E. Control strategies during gait termination: Elucidating the mechanism of ankle instability. Southeast Athletic Trainers Association.	\$2000
1. Gysin, P., Effects of predictable and unpredictable postural perturbations on grip force coordination of a hand-held object. Spencer Foundation Research Training Grant.	\$3000

**Undergraduate Student Research Funding \$2250 per award**

17. Justin Daniels, 2019-2020, "Osteoarthritis in Parkinson's disease"
16. Tatianna White, 2018-2019, "Comparing spatiotemporal gait parameters in older adults between indoor and outdoor settings."
15. Grace Kellaher, 2018-2019, "Coordination impairment during backward walking in persons with Parkinson's disease and healthy older adults."
14. Jeff Dela Cruz, 2018-2019, "Long term retention of a novel gait pattern under different practice conditions"
13. Adam Hockman, 2017-2018, "Locomotor Adapation"
12. Michaela Fallon, 2017-2018, " Gait Variability Index and walking in Parkinson's disease.
11. Alex Weimer, 2017-2018, "Sex differences in dual task performance"
10. Grace Kellaher, 2017-2018, "The effects of treadmill training on obstacle crossing behaviour in older adults."
9. Sarah Brinkerhoff, 2016-2017, "Effects of gait speed on obstacle avoidance behaviour in adults at risk for mobility disability"
8. Benjamin Harris, 2015-2016, "Locomotor adaptability in essential tremor."
7. Mary Bramlage, 2015-2016, "Impacts of dual tasking on elliptical and treadmill performance of healthy young adults."
6. Sean Wehry, 2014-2015, "The effect of motor modality on dual task performance within healthy younger adults."

5. Jacob Cohen, 2013-2014, "Evaluation of metabolic cost during ergonomic hand drive wheelchair use."
4. Carolina Sarmiento, 2013-2014, "The effects of standing posture on gait initiation."
3. Kelly Briggs, 2012-2013, "Minimal clinically important difference in gait initiation in Parkinson's disease."
2. Ryan Belmore, 2011-2012, "Does variability in gait initiation correlate with gait variability in Parkinson's disease?"
1. Robert Pastula, 2011-2012, "The effect of low-intensity aerobic exercise on the cognitive function of young adults with intellectual disabilities."

Howard Hughes Medical Institute Scholar

1. Mary Bramlage, 2014-2015, "Impact of dual tasking on cycling performance of healthy young adults."

**PUBLICATIONS (Web of Science H-Index 29, Google Scholar H-Index 38)**

**MANUSCRIPTS (First and Last Author are considered the most significant contributors)**

- Web of Science 2950 citations to our work - Google Scholar 5170 citations
- Citations to Fournier, K.A., **C.J. Hass**, S.K. Naik, N. Lodha, & J.H. Cauraugh. Motor coordination in autism spectrum disorders: A synthesis and meta-analysis. *J Autism Dev Disord*, Oct;40(10):1227-40, 2010 places this article in the top 1% of my academic field based on a highly cited threshold for the field and publication year.

136. De Jesus S, Okun MS, Foote KD, Martinez-Ramirez D, Roper JA., Hass CJ., Shahgholi L, Akbar U, Wagle Shukla A, Raike RS., Almeida L. Square Biphasic Pulse Deep Brain Stimulation for Parkinson's Disease: The BiP-PD Study. *Frontiers in Human Neuroscience*.13, 2019

135. Martinez-Ramirez D, Kraslow M, Armstrong MJ, Ramirez- Zamora A, Almeida L, Besharat A, Wagle Shukla A, Malaty IA Okun, MS, Hass CJ. Update on Non-Traditional Exercises in Parkinson's Disease: A Motor Symptom-Focused Approach. *Clin Neurol Int.*; 1(1): 1004, 2019

134. Higuchi MA, Roemmich RT, Martinez-Ramirez D, Roper JA, Zukowski LA, Foote KD, Okun MS, Hass CJ. Changes in Midline Tremor and Gait Following Deep Brain Stimulation for Essential Tremor. *Tremor Other Hyperkinet Mov (N Y)*. 2019 Sep 11;9

133. Roper JA, Brinkerhoff SA, Harrison BR, Schmitt AC, Roemmich RT, Hass CJ. Persons with Essential Tremor Can Adapt to New Walking Patterns. *J Neurophysiol*. 2019 Jul 31. doi: 10.1152

132. Schmitt AC, Daniels JN, Baudendistel ST, Okun MS, Hass CJ. The Primary Gait Screen in Parkinson's disease: Comparison to standardized measures. *Gait Posture*. Sep;73:71-73, 2019

131. Hazamy AA, Horne SA, Okun MS, Hass CJ, Altmann LJP. Effects of a Cycling Dual Task on Emotional Word Choice in Parkinson's Disease. *J Speech Lang Hear Res*. 2019 Jun 6:1-8.

130. Raffegeau TE, Kellaher GK, Terza MJ, Roper JA, Altmann LJ, **Hass CJ**. Older women take shorter steps during backwards walking and obstacle crossing. *Exp Gerontol*. Apr 26;122:60-66, 2019.

129. Roper JA, Terza MJ, De Jesus S, Jacobson CE 4th, Hess CW, **Hass CJ**. Spatiotemporal gait parameters and tremor distribution in essential tremor. *Gait Posture*. Apr 14;71:32-37, 2019

128. Mirelman A, Bonato P, Camicioli R, Ellis TD, Giladi N, Hamilton JL, **Hass CJ**, Hausdorff JM, Pelosin E, Almeida QJ. Gait impairments in Parkinson's disease. *Lancet Neurol*. Apr 8. pii: S1474-4422(19)30044-4, 2019

127. Park KS, **Hass CJ**, Fawver B, Lee H, Janelle CM. Emotional states influence forward gait during music listening based on familiarity with music selections. *Hum Mov Sci.* Mar 23;66:53-62, 2019
126. Roemmich R, Roper JA, Eisinger RS, Cagle JN, Maine L, Deeb W, Wagle Shukla A, Hess CW, Gunduz A, Foote KD, Okun MS, **Hass CJ**. Gait worsening and the microlesion effect following deep brain stimulation for essential tremor. *J Neurol Neurosurg Psychiatry.* Mar 7. pii: jnnp-2018-319723, 2019
125. Otzel D.M., C. J. **Hass**, E.A.Wikstrom, M.D. Bishop, P.A. Borsa, M.D. Tillman. Motoneuron Function Does Not Change Following Whole-Body Vibration in Individuals With Chronic Ankle Instability. *J Sport Rehabil.* Feb 14:1-9, 2019
124. Skinner JW, Christou EA, Hass CJ. Lower Extremity Muscle Strength and Force Variability in Persons With Parkinson Disease. *J Neurol Phys Ther.* Jan;43(1):56-62, 2019
123. Stone AE, Terza MJ, Raffegeau TE, Hass CJ. Walking through the looking glass: Adapting gait patterns with mirror feedback. *J Biomech.* Jan 23;83:104-109, 2019
122. Raffegeau TE, Krehbiel LM, Kang N, Thijs FJ, Altmann LJP, Cauraugh JH, Hass CJ. A meta-analysis: Parkinson's disease and dual-task walking. *Parkinsonism Relat Disord.* Dec 12. pii: S1353-8020(18)30540-6, 2018
121. Stone A.E., J.A. Roper, D.C. Herman, **C. J. Hass**. Cognitive Performance and Locomotor Adaptation in Persons With Anterior Cruciate Ligament Reconstruction. *Neurorehabil Neural Repair.* Jun;32(6-7):568-577, 2018
120. Fawver B, J. A. Roper, C. Sarmento, **C.J.Hass**. Forward leaning alters gait initiation only at extreme anterior postural positions. *Hum Mov Sci.* Jun;59:1-11, 2018
119. De Jesus S, L. Almeida, L. Shahgholi, D. Martinez-Ramirez, J. Roper, **C.J. Hass**, U. Akbar, A. Wagle Shukla, R.S. Raike, M.S. Okun. Square biphasic pulse deep brain stimulation for essential tremor: The BiP tremor study. *Parkinsonism Relat Disord.* 2018 Jan;46:41-46, 2018
118. Sowalsky K.L., J. Sonke, L.J.P. Altmann, L. Almeida, **C.J. Hass**. Biomechanical Analysis of Dance for Parkinson's Disease: A Paradoxical Case Study of Balance and Gait Effects? *Explore (NY).* Nov - Dec;13(6):409-413, 2017
117. Tahafchi P., R. Molina, J.A. Roper, K. Sowalsky, **C.J.Hass**, A. Gunduz, M.S. Okun, J.W. Judy. Freezing-of-Gait detection using temporal, spatial, and physiological features with a support-vector-machine classifier. *Conf Proc IEEE Eng Med Biol Soc.* Jul;2017:2867-2870, 2017
116. Stone A.E., J.W. Skinner, H.K. Lee, **C.J. Hass**. A little trouble getting started: Initial slowness in Parkinson's disease step negotiation. *Gait Posture.* May 31;57:97-101, 2017
115. Zukowski LA, **C.J. Hass**, O. Shechtman, E.A. Christou, M.D. Tillman. The effect of wheelchair propulsion style on changes in time spent in extreme wrist orientations after a bout of fatiguing propulsion. *Ergonomics.* Mar 21:1-10, 2017
114. Almeida L, D. Martinez-Ramirez, B. Ahmed, Deeb W, S. Jesus, J. Skinner, M.J. Terza, U. Akbar, R.S. Raike, **C.J. Hass**, M.S. Okun. A pilot trial of square biphasic pulse deep brain stimulation for dystonia: The BiP dystonia study. *Mov Disord.* Apr;32(4):615-618. 2017
113. Hazamy AA, L.J Altmann., E. Stegemöller, D. Bowers, H.K. Lee, J. Wilson, M.S Okun., **C.J. Hass** Improved cognition while cycling in Parkinson's disease patients and healthy adults. *Brain Cogn.* Jan 11;113:23-31 ,2017
112. Roper JA, R.T. Roemmich, M.D. Tillman, M.J. Terza, **C.J. Hass**. Split-belt Treadmill Walking Alters Lower Extremity Frontal Plane Mechanics. *J Appl Biomech.* Aug;33(4):256-260, 2017



111. M. J. Bellman, T. -H. Cheng, R. J. Downey, **C. J. Hass**, and W. E. Dixon, "Switched Control of Cadence During Stationary Cycling Induced by Functional Electrical Stimulation," *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, Vol. 24, No. 12, pp. 1373-1383, 2016.
110. Roper JA, M.J. Terza, **C.J. Hass**. Perception of symmetry and asymmetry in individuals with anterior cruciate ligament reconstruction. *Clin Biomech (Bristol, Avon)*. Dec;40:52-57, 2016
109. Altmann LJ, E. Stegemöller , A.A. Hazamy, J.P. Wilson, D. Bowers, M.S. Okun, **C.J. Hass**. Aerobic Exercise Improves Mood, Cognition, and Language Function in Parkinson's Disease: Results of a Controlled Study. *J Int Neuropsychol Soc*. Sep 22:1-12, 2016
108. Roper JA, N. Kang, J. Ben, J.H. Cauraugh, M.S. Okun, **C.J. Hass**. Deep brain stimulation improves gait velocity in Parkinson's disease: a systematic review and meta-analysis. *J Neurol*. Jun;263(6):1195-203, 2016
107. Jackson, J.N., **C.J. Hass**, B.J. Fregly. Development of a Subject-Specific Foot-Ground Contact Model for Walking. *J Biomech Eng*. Sep 1;138(9). doi: 10.1115/1.4034060, 2016
106. Stegemöller, E, A. Zaman, C.D. MacKinnon, M.D. Tillman, **C.J. Hass**., M.S. Okun. Laterality of repetitive finger movement performance and clinical features of Parkinson's disease. *Hum Mov Sci*. Jun 29;49:116-123, 2016
105. Zukowski, L.A., E.A Christou, O. Shechtman, **C.J. Hass**, M.D. Tillman. The Effect of Propulsion Style on Wrist Movement Variability During the Push Phase After a Bout of Fatiguing Propulsion. *PM R*. Jul 4. pii: S1934-1482(16)30250-7, 2016
104. Lee, H.K., L.J. Altmann, N. McFarland, **C.J. Hass**. The relationship between balance confidence and control in individuals with Parkinson's disease. *Parkinsonism Relat Disord*. May;26:24-8, 2016
103. Park K, R..T Roemmich, J.M. Elrod, **C.J. Hass**, E.T. Hsiao-Wecksler. Effects of aging and Parkinson's disease on joint coupling, symmetry, complexity and variability of lower limb movements during gait. *Clin Biomech (Bristol, Avon)*. Mar;33:92-7, 2016
102. Roper, J.A., M.J. Terza, M.D. Tillman, **C.J. Hass**. Adaptation Strategies of Individuals With Anterior Cruciate Ligament Reconstruction. *Orthop J Sports Med*. Feb 8;4(2):2325967115627611, 2016
101. Scott, BM, J. Maye, J. Jones, K. Thomas, P.C. Mangal, E. Trifilio, **C. Hass**, M. Marsiske, D. Bowers Post-exercise pulse pressure is a better predictor of executive function than pre-exercise pulse pressure in cognitively normal older adults. *Neuropsychol Dev Cogn B Aging Neuropsychol Cogn*. Dec 2:1-1, 2015
100. Martinez-Ramirez D, JC Giugni, L Almeida, R Walz, B Ahmed, FA Chai, V Rundle-Gonzalez, AR Bona, E Monari, A Wagle Shukla, CW Hess, **C.J. Hass**, MS Okun. Association between antidepressants and falls in Parkinson's disease. *J Neurol*. Jan;263(1):76-82, 2016
99. Wahid F, R. Begg, N. Lythgo, **C.J. Hass**, S. Halgamuge, D.C. Ackland. A Multiple Regression Approach to Normalization of Spatiotemporal Gait Features. *J. Appl Biomech*, Apr;32(2):128-39, 2016
98. Jackson JN, **C.J. Hass**, BJ Fregly. Residual Elimination Algorithm Enhancements to Improve Foot Motion Tracking during Forward Dynamic Simulations of Gait. *J Biomech Eng*. Nov;137(11):111002, 2015
97. Wahid, F., R. Begg, **C.J. Hass**, S. Halgamuge, & D.C. Ackland. Classification of Parkinson's disease gait using spatial-temporal gait features. *IEEE Journal of Biomedical and Health Informatics*. Nov;19(6):1794-802, 2015
96. Amano S., J.W. Skinner, H.K. Lee, E.L. Stegemöller, N. Hack, U. Akbar, D. Vaillancourt, N.R. McFarland, & **C.J. Hass**. Discriminating features of gait performance in progressive supranuclear palsy. *Parkinsonism Relat Disord*. (8):888-93, Aug 2015.



95. Burciu, R.G., E. Ofori, P. Shukla, P.J. Planetta, A.F. Snyder, H. Li, **C.J. Hass**, M.S. Okun, N.R. McFarland, & D.E. Vaillancourt. Distinct patterns of brain activity in progressive supranuclear palsy and Parkinson's disease. *Mov Disord.* 30(9):1248-58, 2015
94. Altmann, L.J., E. Stegemöller, A.A. Hazamy, J.P. Wilson, M.S. Okun, N.R. McFarland, A. Wagle Shukla, & **C.J. Hass**. Unexpected dual task benefits on cycling in Parkinson disease and healthy adults: A neuro-behavioral model. *PLoS One.* May 13;10(5):e0125470, 2015
93. Stegemöller, E.L., P. Schmidt, **C.J. Hass**; I. Malaty, & M.S. Okun. How should pushing off or the use of assistive devices be incorporated in the timed up and go for persons with Parkinson's disease? *Arch Phys Med Rehabil.*, 2015
92. Stegemöller, E.L., J. Uzochukwu, M.D. Tillman, N.R. McFarland, S.H. Subramony, M.S. Okun, & **C.J. Hass**. Repetitive finger movement performance differs among Parkinson's disease, progressive supranuclear palsy, and spinocerebellar ataxia. *J Clin Mov Disord.* Feb 16;2:6, 2015
91. Skinner, J.W., H.K. Lee, R.T. Roemmich, S. Amano, & **C.J. Hass**. Execution of activities of daily living in persons with Parkinson's disease. *Med Sci Sports Exerc.* Sep;47(9):1906-12, 2015
90. Morita, H., **C.J. Hass**, E. Moro, A. Sudhyadhom, R. Kumar, & M.S. Okun. Pedunculo pontine nucleus stimulation: Where are we now and what needs to be done to move the field forward? *Frontiers in Neurology: Movement Disorders.* 2014 Dec 4;5:243. doi: 10.3389/fneur.2014.00243. eCollection
89. Vallabhajosula, S., I.U. Haq, N.H. Hwynn, G. Oyama, M.S. Okun; M.D. Tillman, & **C.J. Hass**. Low-frequency versus high-frequency subthalamic nucleus deep brain stimulation on postural control and gait in Parkinson's disease: A quantitative study. *Brain Stimulation.* Jan-Feb;8(1):64-75, 2015
- \* 88. Malone, A., M. Manto, & **C.J. Hass**. Dissecting the links between cerebellum and dystonia. *Cerebellum.* 13(6):666-8, 2014
87. Jones, J.D., **C.J. Hass**, P. Mangal, J. Lafo, M.S. Okun, & D. Bowers. The cognition and emotional well-being indices of the Parkinson's disease questionnaire-39: What do they really measure? *Parkinsonism Relat Disord.* Nov;20(11):1236-41, 2014
86. **Hass, C.J.**, M. Bishop, M. Moscovich, E.L. Stegemöller, J. Skinner, I.A. Malaty, A. Wagle Shukla, N. McFarland, & M.S. Okun. Defining the clinically meaningful difference in gait speed in persons with Parkinson disease. *J Neurol Phys Ther.* 2014 Oct;38(4):233-8.
85. Fawver B, G.F. Beatty, K.M. Naugle, **C.J. Hass**, & C.M. Janelle. Emotional state impacts center of pressure displacement prior to forward gait initiation. *J Appl Biomech.* Feb;31(1):35-40, 2015.
84. Fawver, B., **C.J. Hass**, K. D. Park, & C.M. Janelle. Autobiographically recalled emotional states impact forward gait initiation as a function of motivational direction. *Emotion.* 14(6):1125-36, 2014
83. S. Vallabhajosula, B.L. Roberts, & **C.J. Hass**. Tai Chi intervention improves dynamic postural control during gait initiation in older adults: A pilot study. *J Appl Biomech.* 30(6):697-706, 2014
82. Parr ND, **C.J. Hass**, & M.D. Tillman. Cellular phone texting impairs gait in able-bodied young adults. *J Appl Biomech.* 30(6):685-8, 2014
81. Roemmich R.T., B.J. Fregly, & **C.J. Hass**. Neuromuscular complexity during gait is not responsive to medication in persons with Parkinson's disease. *Ann Biomed Eng.* 42(9):1901-12, 2014.
80. van der Marck MA, M.P. Klok, M.S. Okun, N. Giladi, M. Munneke, B.R. Bloem, & **NPF Falls Task Force**. Consensus-based clinical practice recommendations for the examination and management of falls in patients with Parkinson's disease. *Parkinsonism Relat Disord.* Apr;20(4):360-9, 2014.
79. Roemmich RT, N. Hack, U. Akbar, & **C.J. Hass**. Effects of dopaminergic therapy on locomotor adaptation and adaptive learning in persons with Parkinson's disease. *Behav Brain Res.* Jul 15; 268:31-9, 2014

78. Stegemöller E.L., J.P. Wilson, A. Hazamy, M.C. Shelley, M.S. Okun, L.J. Altmann, & **C.J. Hass**. Associations between cognitive and gait performance during single- and dual-task walking in people with Parkinson disease. *Phys Ther*. Jun;94(6):757-66, 2014.
77. Huynh, K.V., C.H. Sarmiento, R.T. Roemmich, E.L. Stegemöller, & **C.J. Hass**. Comparing after effects following split-belt treadmill walking and unilateral stepping. *Med Sci Sports Exerc*. 46(7):1392-9, 2014
76. Nocera J., K. McGregor, **C.J. Hass**, & B. Crosson. Spin exercise improves semantic fluency in previously sedentary older adults. *J Aging and Phys Act*. 23(1):90-4, 2015.
75. Stegemöller E.L., J. Nocera, I. Malaty, M. Shelley, M.S. Okun, & **C.J. Hass**. Timed up and go, cognitive, and quality of life correlates in Parkinson's disease. *Arch Phys Med and Rehabil*. Apr;95(4):649-55, 2014
74. Hassan, A. S. Vallabhajosula, L.B. Zahodne, D. Bowers, M.S. Okun, H.H. Fernandez, & **C.J. Hass**. Correlations of apathy and depression with postural instability in Parkinson disease. *J Neurol Sci*. Mar 15;338(1-2):162-5, 2014
73. Nocera, J.R., S. Amano, S. Vallabhajosula, & **C.J. Hass**. Tai Chi exercise to improve non-motor symptoms of Parkinson's disease. *J Yoga Phys Ther*. Aug 20;3. 2013
72. Fournier, K.A., S. Amano, K.J. Radonovich, T.M. Blesser, & **C.J. Hass**. Decreased dynamical complexity during quiet stance in children with autism spectrum disorders. *Gait Posture*. Jan;39(1):420-3, 2014.
71. Roemmich, R.T., P.R. Zeilman, D.E. Vaillancourt, M.S. Okun, & **C.J. Hass**. Gait variability magnitude but not structure is altered in essential tremor. *J Biomech*. Oct 18;46(15):2682-7, 2013.
70. Stegemöller E.L., S. Vallabhajosula, I. Haq, N Hwynn, **C.J. Hass**, & M.S. Okun. Selective use of low frequency stimulation in Parkinson's disease based on the absence of tremor. *NeuroRehabil*. 33(2):305-12, 2013.
69. Stegemöller E.L., J. Roper, **C.J. Hass**, & D.J. Kennedy. Changes in gait kinematics and lower back muscle activity post radiofrequency denervation of the zygapophysial joint: A case study. *Spine*. 15: E21-E27, 2015.
68. Amano, S., J.R. Nocera, S. Vallabhajosula, J.L. Juncos, R.J. Gregor, D.E. Waddell, S.L. Wolf, & **C.J. Hass**. The effect of Tai Chi exercise on gait initiation and gait performance in persons with Parkinson's disease. *Parkinsonism Relat Disord*. Nov;19(11):955-60, 2013
67. Fernandez, K.M., R.T. Roemmich, E.L. Stegemöller, S. Amano, A. Thompson, M.S. Okun, & **C.J. Hass**. Gait initiation impairments in both essential tremor and Parkinson's disease. *Gait Posture*. Sep;38(4):956-61, 2013
66. Radonovich, K.J., K.A. Fournier, & **C.J. Hass**. Relationship between postural control and restricted, repetitive behaviors in autism spectrum disorders. *Front Integr Neurosci*. May 7;7:28 2013
65. Rodriguez, K.L., R.T. Roemmich, B. Cam, B.J. Fregly, & **C.J. Hass**. Persons with Parkinson's disease exhibit decreased neuromuscular complexity during gait. *Clin Neurophysiol*. Jul;124(7):1390-7, 2013
64. Nocera, J.R., R.T. Roemmich, J. Elrod, L. Altmann, & **C.J. Hass**. Effects of a cognitive task on gait initiation in Parkinson's disease: Evidence of motor prioritization? *J Rehabil Research and Development*. Aug;50(5):699-708, 2013.
63. Nocera J., E.L. Stegemöller, I. Malaty, M.S. Okun, M. Marsiske, & **C.J. Hass**. Using the timed up and go test in a clinical setting to predict falling in Parkinson's disease. *Arch Phys Med Rehabil*. Jul;94(7):1300-5, 2013
62. Amano, S., R. Roemmich, J.W. Skinner, & **C.J. Hass**. Ambulation in Parkinson's disease. *PM, & R Clinics*. May;24(2):371-92, 2013.

61. Roper, J., E.L. Stegemoller, M.D. Tillman, & **C.J. Hass**. Oxygen consumption, oxygen cost, heart rate, and perceived effort during split-belt treadmill walking in young healthy adults. *Euro J. Appl Phys.* Mar;113(3):729-34, 2013
60. Roemmich, R.T., A.M. Field, J.M. Elrod, E.L. Stegemoller, M.S. Okun, & **C.J. Hass**. Interlimb coordination is impaired during walking in persons with Parkinson's disease. *Clin Biomech.* 28 (1):93-97, 2012.
59. Nocera, J.R. & **C.J. Hass**. Should gait speed be included in the clinical evaluation of Parkinson's disease? *Advances in Parkinson's Disease.* 1(1):1-4, 2012.
58. Pastula, M., C. Stopka, A.T. Delisle, & **C.J. Hass**. Effect of moderate-intensity exercise training on the cognitive function of young adults with intellectual disabilities. *J Strength and Conditioning Research.* 26(12): 3441-3448, 2012.
57. Roemmich, R.T., E.L. Stegemöller, & **C.J. Hass**. Lower extremity sagittal joint moment production during split-belt treadmill walking. *J Biomech.* 45(16): 2817-2821, 2012.
56. Vallabhajosula, S., T.A. Buckley, M.D. Tillman, & **C.J. Hass**. Age and Parkinson's disease related kinematic alterations during multi-directional gait initiation. *Gait Posture.* 37(2):280-286, 2013.
55. **Hass, C.J.**, P. Malczak, J. Nocera, E.L. Stegemoller, A. Shukala, I. Malaty, C.E. Jacobson, M.S. Okun, & N. McFarland. Quantitative normative gait data in a large cohort of ambulatory persons with Parkinson's disease. *PLoS One.* 7(8):e42337.
54. Fawver, B, S. Amano, **C.J. Hass**, & C.M. Janelle. Active control of approach-oriented posture is influenced by emotional reactions. *Emotion.* Dec;12(6):1350-61, 2012
53. Wikstrom, E.A., & **C.J. Hass**. Gait termination strategies differ between those with and without ankle instability. *Clin Biomech.* 27(6):619-24, 2012.
52. Roemmich, R.T., J.R. Nocera, S. Vallabhajosula, S. Amano, K.M. Naugle, E.L. Stegemöller, & **C.J. Hass**. Spatiotemporal variability during gait initiation in Parkinson's disease. *Gait Posture.* Jul;36(3):340-3, 2012
51. **Hass, C.J.**, T.A. Buckley, C. Pitsikoulis, & E. Barthelemy. Progressive resistance training improves gait initiation in individuals with Parkinson's disease. *Gait Posture.* Apr;35(4):669-73, 2012
50. Naugle, K.M., **C.J. Hass**, D. Bowers, & C.M. Janelle. Emotional state affects gait initiation in individuals with Parkinson's disease. *Cogn Affect Behav Neurosci.* 12(1):207-19, 2012
49. Stegemöller, E.L., T. Buckley, C. Pitsikoulis, E. Barthelemy, R. Roemmich, & **C.J. Hass**. Postural instability and gait impairment during obstacle crossing in Parkinson's disease. *Arch Phys Med Rehabil.* 93(4):703-709, 2012.
48. Gao, J., J. Hu, T. Buckley, K. White, & **C.J. Hass**. Shannon and renyi entropies to classify effects of mild traumatic brain injury on postural sway. *PLoS One.* 6(9):e24446, 2011
47. Buckley, T. & **C.J. Hass**. Reliability in one-repetition maximum performance in people with Parkinson's disease. *Parkinson's Disease.* Open Access, 928736, 2012.
46. Dalton, E., M.D. Tillman, M.D. Bishop, & **C.J. Hass**. Simple change in initial standing position enhances the initiation of gait. *Med Sci Sports Exerc.* Dec;43(12):2352-8, 2011.
45. Shemisa, K, **C. J. Hass**, K.D. Foote, M.S. Okun, S.S. Wu, C.E. Jacobson, Y. Dai, G. Oyama, & H.H. Fernandez. Unilateral deep brain stimulation surgery in Parkinson's disease improves ipsilateral symptoms regardless of laterality. *Parkinsonism Relat Disord.* Dec;17(10):745-8, 2011
44. Morishita, T., M. Rahmann, K. Foote, K. Fargern, C.E. Jacobson, H.H. Fernandez, R. Rodriguez, I. Malaty, D. Bowers, **C.J. Hass**, Y. Katayama, T. Yamamoto, & M.S. Okun. DBS candidates that fall short on a levodopa challenge test: Alternative and important indications. *The Neurologist.* 17(5):263-268, 2011.

43. Price, C., J. Favilla, J. Tanner, S. Towler, C.E. Jacobson, **C.J. Hass**, K.D. Foote, & M.S. Okun. Lateral ventricle volume is poor predictor of post unilateral DBS motor change for Parkinson's disease. *Parkinsonism Relat Disord.* Jun;17(5):343-7, 2011
42. Hwynn, N., **C.J. Hass**, P. Zeilman, J. Romrell, Y. Dai, S.S. Wu, K.D. Foote, S.H. Subramony, G. Oyama, F. Velez-Lago, H.H. Fernandez, A.S. Resnick, I.A. Malaty, & M.S. Okun. Steady or not following thalamic deep brain stimulation for essential tremor. *J Neurol.* 258(9):1643-8, Sept 2011
41. Gamble, K.M., J. Joyner, **C.J. Hass**, & C.M. Janelle. Emotional influence on locomotor behavior. *J Biomech.* 43(16):3099-103, 2010.
40. Gamble, K.M., J. Joyner, S.A. Coombes, **C.J. Hass**, & C.M. Janelle. Emotional state affects the initiation of forward gait. *Emotion.* Apr;11(2):267-77, 2011.
39. Nocera, J.R., C. Price, H.H. Fernandez, S. Amano, S. Vallabhajosula, M.S. Okun, N. Hwynn, & **C.J. Hass**. Tests of dorsolateral frontal function correlate with objective tests of postural stability in early to moderate stage Parkinson's disease. *Parkinsonism Relat Disord.* Nov;16(9):590-4, 2010.
38. Taba, H., S.S. Wu, K.D. Foote, **C.J. Hass**, H.H. Fernandez, I.A. Malaty, R.L. Rodriguez, Y. Dai, P. Zeilman, C.E. Jacobson, & M.S. Okun. A closer look at unilateral vs bilateral DBS: Results of the NIH COMPARE COHORT. *J Neurosurg.* Dec;113(6):1224-9, 2010.
37. Fournier, K.A., **C.J. Hass**, S.K. Naik, N. Lodha, & J.H. Cauraugh. Motor coordination in autism spectrum disorders: A synthesis and meta-analysis. *J Autism Dev Disord.* Oct;40(10):1227-40, 2010.
36. Stewart, K.C., H.H. Fernandez, M.S. Okun, J.L. Alberts, I.A. Malaty, R.L. Rodriguez, & **C.J. Hass**. Effects of dopaminergic medication on objective tasks of deftness, bradykinesia and force control. *J Neurol.* Dec;256(12):2030-5, 2009.
35. Fournier, K.A., C.I. Kimberg, K.J. Radonovich, M.D. Tillman, J.W. Chow, M.H. Lewis, J.W. Bodfish, & **C.J. Hass**. Decreased static and dynamic postural control in children with autism spectrum disorders. *Gait Posture.* 32(1) 6-9, 2010.
34. Nocera, J.R., L.J. Altmann, C. Sapienza, M.S. Okun, & **C.J. Hass**. Can exercise improve language and cognition in Parkinson's disease? A case report. *Neurocase.* April 12:1-6, 2010.
33. Wikstrom, E.A., M.D. Bishop, A.D. Inamdar, & **C.J. Hass**. Gait termination control strategies are altered in chronic ankle instability subjects. *Med Sci Sports Exerc.* 42: 197-205, 2010.
32. Nocera, J.R., T. Buckley, D. Waddell, M.S. Okun, & **C.J. Hass**. Knee extensor strength, dynamic stability, and functional ambulation: are they related in Parkinson's disease? *Arch Phys Med Rehabil.* 91: 589-95, 2010.
31. Morishita, T., K.D. Foote, S.S. Wu, C.E. Jacobson, R.L. Rodriguez, I.U. Haq, M.S. Siddiqui, I.A. Malaty, **C.J. Hass**, & M.S. Okun. Brain penetration effects of microelectrodes and deep brain stimulation leads in ventral intermediate nucleus stimulation for essential tremor. *J Neurosurg.* 112: 491-6, 2010.
- \*30. **Hass, C.J.** & M.S. Okun. Time for comprehensive care networks for Parkinson's disease. *Lancet Neurol.* 9: 20-2, 2010.
29. **Hass, C.J.**, M.D. Bishop, D. Doidge, & E.A. Wikstrom. Chronic ankle instability alters central organization of movement. *Am J Sports Med.* 38: 829-34, 2010.
28. Stewart, K.C., H.H. Fernandez, M.S. Okun, R.L. Rodriguez, C.E. Jacobson, & **C.J. Hass**. Side onset influences motor impairments in Parkinson disease. *Parkinsonism Relat Disord.* 15: 781-3, 2009.
27. Mann, J.M., K.D. Foote, C.W. Garvan, H.H. Fernandez, C.E. Jacobson, R.L. Rodriguez, I.U. Haq, M.S. Siddiqui, I.A. Malaty, T. Morishita, **C.J. Hass**, & M.S. Okun. Brain penetration effects of microelectrodes and DBS leads in STN or GPi. *J Neurol Neurosurg Psychiatry.* 80: 794-7, 2009.

26. Kirsch-Darrow, L., L.B. Zahodne, **C.J. Hass**, A. Mikos, M.S. Okun, H.H. Fernandez, & D. Bowers. How cautious should we be when assessing apathy with the Unified Parkinson's Disease Rating Scale? *Mov Disord.* 24: 684-8, 2009.
25. Buckley, T., C. Pitsikoulis, E. Barthelemy, & **C.J. Hass**. Age impairs sit-to-walk motor performance. *J Biomech.* 42: 2318-22, 2009.
- \*24. Alberts, J.L., **C.J. Hass**, J.L. Vitek, & M.S. Okun. Are two leads always better than one: An emerging case for unilateral subthalamic deep brain stimulation in Parkinson's disease. *Exp Neurol.* 214(1): 1-5, 2008.
23. Stewart, K.C., H.H. Fernandez, M.S. Okun, C.E. Jacobson, & **C.J. Hass**. Distribution of motor impairment influences quality of life in Parkinson's disease. *Mov Disord.* 23: 1466-8, 2008.
22. **Hass, C.J.**, D.E. Waddell, S.L. Wolf, J.L. Juncos, & R.J. Gregor. Gait initiation in older adults with postural instability. *Clin Biomech.* 23: 743-53, 2008.
- \*21. **Hass, C.J.**, B.R. Bloem, & M.S. Okun. Pushing or pulling to predict falls in Parkinson disease? *Nat Clin Pract Neurol.* 4: 530-1, 2008.
20. Gysin, P., T.R. Kaminski, **C.J. Hass**, C.E. Grobet, & A.M. Gordon. Effects of gait variations on grip force coordination during object transport. *J Neurophysiol.* 100: 2477-85, 2008.
19. Diermayr, G., P. Gysin, **C.J. Hass**, & A.M. Gordon. Grip force control during gait initiation with a hand-held object. *Exp Brain Res.* 190: 337-45, 2008.
18. Buckley, T. A., C. Pitsikoulis, & **C.J. Hass**. Dynamic postural stability during sit-to-walk transitions in Parkinson disease patients. *Mov Disord.* 23: 1274-80, 2008.
17. Lay, A.N., **C.J. Hass**, T. Richard Nichols, & R.J. Gregor. The effects of sloped surfaces on locomotion: An electromyographic analysis. *J Biomech.* 40: 1276-85, 2007.
16. Lay, A.N., **C.J. Hass**, & R.J. Gregor. The effects of sloped surfaces on locomotion: Backward walking as a perturbation. *J Biomech.* 40: 3050-5, 2007.
15. **Hass, C.J.**, M.A. Collins, & J.L. Juncos. Resistance training with creatine monohydrate improves upper-body strength in patients with Parkinson disease: A randomized trial. *Neurorehabil Neural Repair.* 21: 107-15, 2007.
14. Lay, A.N., **C.J. Hass**, & R.J. Gregor. The effects of sloped surfaces on locomotion: A kinematic and kinetic analysis. *J Biomech.* 39: 1621-8, 2006.
13. Tillman, M.D., **C.J. Hass**, J.W. Chow, & D. Brunt. Lower extremity coupling parameters during locomotion and landings. *J Appl Biomech.* 21: 359-70, 2005.
12. Lay, A.N., **C.J. Hass**, D.W. Smith, & R.J. Gregor. Characterization of a system for studying human gait during slope walking. *J Appl Biomech.* 21: 153-66, 2005.
11. **Hass, C.J.**, D.E. Waddell, R.P. Fleming, J.L. Juncos, & R.J. Gregor. Gait initiation and dynamic balance control in Parkinson's disease. *Arch Phys Med Rehabil.* 86: 2172-6, 2005.
10. **Hass, C.J.**, E.A. Schick, M.D. Tillman, J.W. Chow, D. Brunt, & J.H. Cauraugh. Knee biomechanics during landings: Comparison of pre- and postpubescent females. *Med Sci Sports Exerc.* 37: 100-7, 2005.
9. Tillman, M.D., **C.J. Hass**, D. Brunt, & G.R. Bennett. Jumping and landing strategies in women's volleyball. *J Sports Sci Med.* 3: 30-36, 2004.
8. Tillman, M.D., R.M. Criss, D. Brunt, & **C.J. Hass**. Landing constraints influence ground reaction forces and lower extremity EMG in female volleyball players. *J Appl Biomech.* 20: 38-50, 2004.



7. **Hass, C.J.**, R.J. Gregor, D.E. Waddell, A. Oliver, D.W. Smith, R.P. Fleming, & S.L. Wolf. The influence of Tai Chi training on the center of pressure trajectory during gait initiation in older adults. *Arch Phys Med Rehabil.* 85: 1593-8, 2004.
6. Tillman, M.D., A. Chiumento, M. Trimble, J.A. Bauer, J.H. Cauraugh, T.W. Kaminski, & **C.J. Hass**. Can functional foot orthotics alter tibiofemoral rotation during landing activities in females? *Physical Therapy in Sport.* 4: 34-39, 2003.
5. **Hass, C.J.**, E.A. Schick, J.W. Chow, M.D. Tillman, D. Brunt, & J.H. Cauraugh. Lower extremity biomechanics: A comparison between prepubescent and postpubescent female athletes during stride jumps. *J Appl Biomech.* 19: 139-152, 2003.
4. **Hass, C.J.**, L. Garzarella, D.V. de Hoyos, D.P. Connaughton, & M.L. Pollock. Concurrent improvements in cardiorespiratory and muscle fitness in response to total body recumbent stepping in humans. *Eur J Appl Physiol.* 85: 157-63, 2001.
3. **Hass, C.J.**, M.S. Feigenbaum, & B.A. Franklin. Prescription of resistance training for healthy populations. *Sports Med.* 31: 953-64, 2001.
2. Bauer, J.A., T.S. Thomas, J.H. Cauraugh, T.W. Kaminski, & **C.J. Hass**. Impact forces and neck muscle activity in heading by collegiate female soccer players. *J Sports Sci.* 19: 171-9, 2001.
1. **Hass, C.J.**, L. Garzarella, D. de Hoyos, & M. L. Pollock. Single versus multiple sets in long-term recreational weightlifters. *Med Sci Sports Exerc.* 32: 235-42, 2000.

\* denotes published Invited Commentary

## BOOK CHAPTERS

1. **C.J. Hass**, E.L. Stegemoller, M.E. Hackney, J.R. Nocera. Lessons and challenges of trials involving ancillary therapies for Parkinson's disease *Parkinson's Disease: Current & Future Therapeutics & Clinical Trials*, GALVEZ-JIMENEZ et al. Cambridge University Press, Cambridge UK. 2016
2. M. E. Hackney, J. R. Nocera, D. Bowers, L. J.P. Altmann, **C. J. Hass**. The Chronic Exercise–Cognition Interaction and Parkinson Disease. In *Exercise-Cognition Interaction: Neuroscience Perspectives*; T.McMillan ed; Elsevier, New York, 2016.
3. J. R. Nocera, **C.J. Hass**. J. L. Alberts. Neuromuscular plasticity in Parkinson's disease. In, *Advances in Neuromuscular Physiology of Motor Skills and Muscle Fatigue*. Shinohara ed. Research Signpost, 2009

## ABSTRACTS / PRESENTATION

163. Lipat, A.L, A.E Stone, H.H Holmes , **C.J. Hass**. The Effects of Muscular Fatigue and Gender on Knee Kinetics and Kinematics during the Forward Lunge. American Society of Biomechanics, Rochester, MN August 2018.
162. Roper, J., Y. He, P. Schmitt, M. Okun, **C.J. Hass**. Osteoarthritis influences functional mobility performance in patients with Parkinson's disease. American Society of Biomechanics, Boulder, CO August 2017.
161. Terza, M. R. Roemmich, **C.J. Hass**. Movement variability during splitbelt treadmill walking. American Society of Biomechanics, Boulder, CO August 2017.
160. Stone, A., M.Terza, D. Ludden, T. Raffegeau, L. Krehbiel. **C.J. Hass**. Mirror feedback on motor adaptation and learning. American Society of Biomechanics, Boulder, CO August 2017.

159. Brinkerhoff, S., T. Raffegeau, G. Kellaher, M. Terza, L. Altmann, **C.J. Hass**. Effects of a verbal fluency task on stability while walking and obstacle crossing in aging. American Society of Biomechanics, Boulder, CO August 2017.
158. Schmitt, A., C. Jacobson, M. Okun, **C.J. Hass**. Evaluating the primary gait screen as a measure of gait velocity in persons with movement disorders. American Society of Biomechanics, Boulder, CO August 2017.
157. Raffegeau, T., S. Brinkerhoff, G. Kellehar, M. Terza, J. Roper, L. Altmann, **C. J. Hass**. Stability control during walking and obstacle crossing at fast speeds and its relationship to a clinical test battery in older adults. World Congress of the International Society of Gait and Posture Research, Fort Lauderdale, FL, June 2017.
156. Sowalsky, K., L. Almeida, J. Skinner, C. Jacobson, N. McFarland, **C.J. Hass**. Differentiation of Parkinson's disease and atypical Parkinson syndromes through spatiotemporal gait analysis. World Congress of the International Society of Gait and Posture Research, Fort Lauderdale, FL, June 2017.
155. Roper, J., S. Wu, P. Schmitt, **C. J. Hass**, M. Okun. Influence of osteoarthritis on disease characteristics, mobility and function in patients with Parkinson's disease. World Congress of the International Society of Gait and Posture Research, Fort Lauderdale, FL, June 2017.
154. Stone, A., M. Terza, J. Roper. **C. Hass**. When you adapt, you retain: locomotor adaptation in ACLR and implications for rehabilitation. World Congress of the International Society of Gait and Posture Research, Fort Lauderdale, FL, June 2017.
153. Stone, A. E., M. L. Pello, L. M. Garfield, A. M. Barrozo, D. R. Ludden, D. Herman, J. A. Roper, **C.J. Hass** Cognitive Acuity and Locomotor Adaptation in Persons with Anterior Cruciate Ligament Reconstruction .American Society of Biomechanics, Raleigh, NC. August 2016.
152. Terza, M. J., J. A. Roper., **C.J. Hass**. Differences in Temporal Contributions to Split-Belt Treadmill Adaptation in Individuals with Anterior Cruciate Ligament Reconstruction. American Society of Biomechanics. Raleigh, NC.
151. Raffegeau, T.E., L. Altmann, E. Stegemoller, H. K. Lee, **C.J. Hass**. Concurrent cognitive task performance facilitates speed of cycling. American College of Sports Medicine, Boston, MA, June 2016.
150. Skinner, J. W., H.K. Lee, J. R. Suggs. **C. J. Hass**. Gait termination impairment in individuals with Parkinson's disease and essential tremor. American College of Sports Medicine, Boston, MA, June 2016.
149. Stone, A. E., J. A. Roper, M. L. Pello, L. M. Garfield, A. M. Barrozo, **C. J. Hass**. Posterior Center of Pressure Displacement is Predictive of Gait Speed. American College of Sports Medicine, Boston, MA, June 2016.
148. Terza, M. J., J. A. Roper., Hass, **C.J. Hass**, Differences in Rate of Locomotor Adaptation of ACLR Individuals. American College of Sports Medicine. Boston, MA. June 2016
147. Sowalsky, K.L., J.A. Roper, **C.J Hass**. Detection of Symmetry and Asymmetry of Gait During Split-belt Treadmill Walking in Parkinson's Disease. Society for Neuroscience. October 2015
146. Amano S., R.T. Roemmich, J.W. Skinner, S.L. Hong and **C.J. Hass**. Temporal, but not spatial, gait variability is affected in persons with Essential Tremor. Society of Neuroscience Oct 2015.
145. Roper J., J.H. Cauraugh, N. Kang, J. Ben, M. Okun, **C.J. Hass**. DBS improves gait speed in Parkinson's disease: A meta-analysis. Soceity for Neuroscience, Oct 2015.
144. **Hass,CJ**, J. Skinner, R. Roemmich, M. Terza, J. Roper, P. Zeilman, M. Okun. Walking performance and deep brain stimulation in Essential Tremor. Society for Neuroscience Oct 2015.
- 143.Lee, H.K., J.W. Skinner, & **C.J. Hass**. Redistribution of lower extremity joint moments affect dynamic postural stability of persons with Parkinson's disease. American Society of Biomechanics, Columbus, OHio, August 2015



142. Wehry, S. Raffegeau, T., Bramlage, M., Altmann, L. J., **C.J. Hass**. Dual task effects on motor performance in healthy young adults. American Society for Biomechanics (ASB), Columbus, Ohio, August 2015
141. Stone, A. E., Alonso, D., Norder, K. C., Norden, A. C., Girard, K. T., **C. J. Hass**. Influence of Fatigue on Lower Extremity Biomechanical Variability during Forward Lunge [Poster]. American Society of Biomechanics Annual Conference August 2015
140. Sowalsky, K.L., Sonke, J., Altmann, L., **C.J. Hass**, Dance Alters Subjective and Objective Biomechanical Gait and Balance Measures in Parkinson's Disease: A Case Study. American Society of Biomechanics. Columbus, OH. August 2015.
139. Skinner, J.S., H.K. Lee, R. Roemich, S. Amano, J.S. Suggs, C.J. Hass. Locomotor control during planned and unplanned gait termination in essential tremor. American Society of Biomechanics. Columbus, Ohio. August 2015
138. Roper JA, Terza, MJ, Tillman, MD, **Hass, CJ**. (2015). Adaptation Strategies of Individuals with Anterior Cruciate Ligament Reconstruction. American Society of Biomechanics. Columbus, Ohio. August 2015
137. Amano, S., J.W. Skinner, H. Lee, E. Stegemoller, N. Hack, U. Akbar, N. McFarland, & **C.J. Hass**. Pronounced lateral postural instability in persons with progressive supranuclear palsy: A comparison with Parkinson's disease. International Society for Posture and Gait Research (ISPGR), Seville, Spain, June 2015.
136. Ben, J, A.E. Stone, M.S. Okun, J. Nocera, P. Schmidt, S.S. Wu, Q. Pei, & **C.J. Hass**. Progression of mobility impairment and motor related quality of life in individuals with Parkinson's disease: Results from NPF-QII. International Parkinson and Movement Disorder Society, San Diego, CA, June 2015.
135. Roper J.A., M.J. Terza, **C.J. Hass**. To What Extent can Persons with Anterior Cruciate Ligament Reconstruction Detect Asymmetry and Symmetry during Gait? Neural Control of Movement. (NCM), Charleston, SC, April 2015
134. Terza, M.J., J. A. Roper J.A., **C.J. Hass**. Differences in the Structure of Variability in Kinematic Data Between Normal Treadmill and Split-Belt Treadmill Walking. Neural Control of Movement. (NCM), Charleston, SC, April 2015
133. Raffegeau, T.E., L.J.P. Altmann, E. Stegemöller, H.K. Lee, & **C.J. Hass**. Does language formulation benefit concurrent cycling in people with Parkinson's disease? Society for the Neural Control of Movement (NCM), Charleston, SC, April 2015.
132. Stone, A.E., J.W. Skinner, H.K. Lee, & **C.J. Hass**. Single step negotiation differences in Parkinson's disease. Society for the Neural Control of Movement (NCM), Charleston, SC, April 2015.
131. Lee, H.K., J.W. Skinner, & **C.J. Hass**. Redistribution of lower extremity joint moments affect dynamic postural stability of persons with Parkinson's disease. Society for the Neural Control of Movement (NCM), Charleston, SC, April 2015.
130. Altmann, L. J. P., E. Stegemöller, D. Bowers, A. A Hazamy, M. S. Okun, **C. J. Hass**, Effects of an aerobic exercise intervention in Parkinson's disease. Presented at the 2014 conference of the International Neuropsychological Society, Denver, CO. February 2015.
129. Mucci, S. M., Y. Rogalski, J. P. Wilson, A. A. Hazamy, **C. J. Hass**, L. J. P. Altmann. Global and local coherence in Parkinson's disease. Presented at the 2014 meeting of the American Speech, Language and Hearing Association, Orlando, FL. November 2014.
124. **Hass, C.J.**, E. Stegemoller, R. Roemmich, & L. Altmann. Backward walking impairs locomotor coordination in persons with Parkinson's disease. World Congress of Biomechanics, Boston, MA. July 2014.
128. Lee, H., S. Amano, & **C.J. Hass**. The effect of computerized balance training on balance control and confidence in persons with Parkinson's disease. World Congress of Biomechanics, Boston, MA. July 2014.

127. Elrod, J.M., L. Altmann, & **C.J. Hass**. Walking & talking: Understanding the influences of language on motor execution. World Congress of Biomechanics, Boston, MA. July 2014.
126. Terza, M., **C.J. Hass**, M.S. Okun, & P. Zeilman. Deep brain stimulation does not improve gait initiation in individuals with essential tremor. World Congress of Biomechanics, Boston, MA. July 2014.
125. Skinner, J.W., R.T. Roemmich, S. Amano, R. W. Belmore, L. Altmann, & **C.J. Hass**. Modulation of variability across gait initiation and gait in Parkinson's disease and healthy older adults. World Congress of Biomechanics, Boston, MA. July 2014.
124. Covino, K.L., J.W. Skinner, N. McFarland, & **C.J. Hass**. Spatiotemporal differences in gait in Parkinson's disease vs. progressive supranuclear palsy: A potential aid in diagnosis. World Congress of Biomechanics, Boston, MA. July 2014.
123. Hovis, P.W., M.D. Brown, **C.J. Hass**, & M.D. Tillman. A preliminary evaluation of shoulder mechanics using a novel wheelchair: The influence of pain. World Congress of Biomechanics, Boston, MA. July 2014.
122. Zukowski, L.A., E.A. Christou, **C.J. Hass**, & M.D. Tillman. An exploratory analysis of the effect of fatigue on wrist variability utilizing different propulsion styles. World Congress of Biomechanics, Boston, MA. July 2014.
121. Roper J.A., R.T. Roemmich, & **C.J. Hass**. Individuals with Parkinson's disease display altered dynamic stability during locomotor adaptation. World Congress of Biomechanics. Boston, MA. July 2014.
120. Altmann, L. J. P., E. Stegemöller, M. S. Okun, **C. J. Hass**, Improvements in Language use but not cognition after an aerobic exercise intervention for Parkinson's disease. Presented at the 2014 Cognitive Aging Conference, Atlanta, GA, April 2014.
119. Hazamy, A. A., L. J. P. Altmann, J. P. Wilson, E. Stegemöller, M. S Okun, , **C. J. Hass**. The effects of a cycling dual task on cognition in Parkinson's disease. Presented at the 2014 Meeting of the International Neuropsychological Society, Seattle, WA, February 2014. *JINS*, 20, Supplement s1, 162. Doi: 10.1017/S1355617714000381
118. Wilson, J. P., Altmann, L. J. P., A. A. Hazamy, E. Stegemöller, M. S Okun,, **C. J. Hass**. Differences in dual task and group effects in sentence versus discourse production in Parkinson's disease. Presented at the 2014 Meeting of the International Neuropsychological Society, Seattle, WA, February 2014. *JINS*, 20, Supplement s1, 65. Doi: 10.1017/S1355617714000381
117. Altmann, L. J. P., J. P. Wilson, J. M Elrod, **C. J. Hass**. Semantic priming of action initiation: Does it have therapeutic potential? Presented at the 2014 Meeting of the International Neuropsychological Society, Seattle, WA, February 2014. *JINS*, 20, Supplement s1, 63. Doi: 10.1017/S1355617714000381
116. **Hass, C.J.**, S. Amano, J. Skinner, H. Lee, E. Stegemoller, N. Hack, U. Akbar, & N. McFarland. Altered motor strategy during gait initiation in persons with progressive supranuclear palsy. Society for Neuroscience. November 2013.
115. Lee, H., J. Skinner, & **C.J. Hass**. Balance control of persons with Parkinson's disease during stair ascent. Society for Neuroscience. November 2013.
114. Stegemoller, E.L., M.D. Tillman, N. McFarland, S. Subramony, M.S. Okun, & **C.J. Hass**. Repetitive finger movement performance differs between Parkinson's disease and atypical Parkinsonian syndromes. Society for Neuroscience. November 2013.
113. Stegemöller, E., J. P. Wilson, A. A. Hazamy, M. S. Okun, L. J. P. Altmann, **C. J. Hass**. Associations between cognitive performance and gait variability in Parkinson's disease (Award of Merit). Presented at the 2013 meeting of the American Speech, Language and Hearing Association, Chicago, IL, November 2013.

112. Roper, J.A., R.T. Roemmich, **C.J. Hass**, & M.D. Tillman. Individuals with anterior cruciate ligament reconstruction display altered mechanics during split-belt walking. American Society of Biomechanics, Omaha, NE. September 2013.
111. Roemmich, R., M. Okun, P. Zeilman, N. McFarland, & **C.J. Hass**. Clinical correlates and effects of deep brain stimulation on gait variability in essential tremor. American Society of Biomechanics, Omaha, NE. September 2013.
110. Hoover, B., R. Roemmich, J. Roper, & **C.J. Hass**. The effect of split-belt treadmill speed configurations on interlimb coordination and gait cycle patterns. American Society of Biomechanics, Omaha, NE. September 2013.
109. Stegemöller, E., J. Wilson, A. Hazamy, M. Okun, L. Altmann, & **C.J. Hass**. Associations between cognitive performance and gait variability in Parkinson's disease. American Society of Biomechanics, Omaha, NE. September 2013.
108. Skinner, J.W., H.K. Lee, R. Roemmich, S. Amano, & **C.J. Hass**. Execution of activities of daily living in persons with Parkinson's disease. American Society of Biomechanics Annual meeting, Omaha, NE. September 2013.
107. Roper, J.A., R.T. Roemmich, **C.J. Hass**, & M.D. Tillman. Individuals with anterior cruciate ligament reconstruction display altered mechanics during split-belt walking. Rocky Mountain American Society of Biomechanics, Estes Park, CO. April 2013.
106. Sarmiento, C.H., K.V. Huynh, R.T. Roemmich, & **C.J. Hass**. The relationship between center of mass movement and overground gait aftereffects of split-belt treadmill walking and unilateral stepping. ACSM Annual meeting, Indianapolis, IN. May 2013.
105. Huynh, K.V., C.H. Sarmiento, R.T. Roemmich, & **C.J. Hass**. Overground gait aftereffects produced by split-belt treadmill walking and unilateral stepping. ACSM Annual meeting, Indianapolis, IN. May 2013.
104. Roemmich, R.T., P.R. Zeilman, M.S. Okun, & **C.J. Hass**. Magnitude but not structure of gait variability is altered in persons with essential tremor. ACSM Annual meeting, Indianapolis, IN. May 2013.
103. Otzel, D.M., **C.J. Hass**, E.A. Wikstrom, M.D. Bishop, P.A. Borsa, & M.D. Tillman. Neuromotor and functional measures following whole body vibration in individuals with chronic ankle instability. ACSM Annual meeting, Indianapolis, IN. May 2013.
102. Stegemöller, E.L., L.J.P. Altmann, A. Hazamy, J. Wilson, M.S. Okun, & **C.J. Hass**. Effects of dual task on cycling performance in persons with PD. Abstract: Society for Neuroscience. October 2012.
101. Jackson, J., **C.J. Hass**, & B.J. Fregly. Residual elimination algorithm enhancements to improve foot motion tracking during forward dynamic simulation of gait. ASME 2012 Summer Bioengineering Conference, Puerto Rico. June 2012.
100. Roemmich, R.T., C. Patten, M. Corti, E.L. Stegemöller, & **C.J. Hass**. Split-belt treadmill training alters inter-hemispheric interactions and improves interlimb coordination in persons with Parkinson's disease. Society for Neuroscience Annual Meeting 2012. October 2012.
99. **Hass, C.J.**, R. Roemmich, K. Hernandez, & B.J. Fregly. Persons with Parkinson's disease exhibit decreased neuromuscular complexity during gait. Society for Neuroscience, New Orleans. October 2012.
98. Jackson, J., **C.J. Hass**, B. Fregly. Residual elimination algorithm improvements for forward dynamic simulation of gait. 36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL. August 2012.
97. Amano, S., E. Stegemöller, L. Altmann, & **C.J. Hass**. The relationship between structural and spatial variability of postural control in persons with Parkinson disease. 36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL. August 2012.

96. Nocera, J., M. Okun, J. Skinner, & **C.J. Hass**. The gait variability profile of patients with Parkinson's disease when compared to older adults with mobility disability and a history of falls. 36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL. August 2012.
95. Beatty, G., R. Roemmich, K. Naugle, C. Janelle, & **C.J. Hass**. Emotion as a gait therapy in Parkinson's patients: Affective stimuli, & gait pattern variability. 36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL. August 2012.
94. Stegemoller, E., C. MacKinnon, M. Tillman, & **C. J. Hass**. Differences in repetitive finger movement between the most effected and least effected hand in Parkinson's disease. 36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL. August 2012.
93. Skinner, J., R. Roemmich, S. Amano, E. Stegemoller, L. Altmann, & **C.J. Hass**. Frequency domain analysis of ground reaction force does not differentiate between hyperkinetic and hypokinetic movement disorders. 36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL. August 2012.
92. Roper, J., R. Roemmich, M. Tillman, & **C.J. Hass**. Frontal plane mechanics are altered during split belt treadmill walking in young healthy adults. 36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL. August 2012.
91. Fernandez, K., R. Roemmich, E. Stegemoller, J. Nocera, & **C.J. Hass**. Gait initiation impairments in essential tremor and Parkinson's disease. 36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL. August 2012.
90. Vallabhajosula, S., B. Roberts, & **C.J. Hass**. Influence of Tai Chi on kinematics during multi-directional gait initiation. 36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL. August 2012.
89. Elrod, J., B. Hoover, R. Roemmich, & **C.J. Hass**. Induced alterations of interlimb coordination caused by the use of a split-belt treadmill. 36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL. August 2012.
88. Lee, H., S. Amano, K. Fournier, K. Radonovich, & **C.J. Hass**. A new approach to understand postural instability in young children with autism spectrum disorders. 36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL. August 2012.
87. Jackson, J., **C.J. Hass**, & B. Fregly. Development of a subject-specific vertical ground contact force model. 36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL. August 2012.
86. Roemmich, R., J. Nocera, & **C.J. Hass**. Locomotor adaptive learning is impaired in persons with Parkinson's disease. 36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL. August 2012.
85. Altmann, L.J. P., E.L. Stegemöller, A.A. Hazamy, J.P. Wilson, D. Bowers, C.M. Sapienza, M.S. Okun, & **C.J. Hass**. Graded dual task benefits of cognitive tasks on cycling in Parkinson's disease. Abstract: Society for Movement Disorders. June 2012.
84. Hazamy, A.A., L.J.P. Altmann, J.P. Wilson, E.L. Stegemöller, D. Bowers, C.M. Sapienza, M.S. Okun, & **C.J. Hass**. Dual task dissociations in cognitive performance in Parkinson's disease. Abstract: Society for Movement Disorders. June 2012.
83. Wilson, J.P., L.J.P. Altmann, A.A. Hazamy, E.L. Stegemöller, M.S. Okun, & **C.J. Hass**. Dual task effects during sentence production in Parkinson's disease. Abstract: Society for Movement Disorders. June 2012.
82. Elrod, J.M., R. Roemmich, S. Vallabhajosula, & **C.J. Hass**. Improvements in interlimb coordination due to subthalamic nucleus stimulation in people with Parkinson's disease. The American College of Sports Medicine, San Francisco, CA. 2012.
81. Skinner, J. S., R. Roemmich, & **C.J. Hass**. Hoehn and Yahr–defined severity of Parkinson's disease does affect gait initiation variability. The American College of Sports Medicine, San Francisco, CA. 2012.

80. Roemmich, R.T., J.R. Nocera, S. Amano, & **C.J. Hass**. Mediolateral control of the center of pressure during quiet stance is altered in Parkinson's disease. The American College of Sports Medicine, San Francisco, CA. 2012.
79. Amano, S., J.R. Nocera, S. Vallabhajosula, & **C.J. Hass**. The effect of Tai Chi on postural control in Parkinson's disease: a pilot study. The American College of Sports Medicine 59<sup>th</sup> Annual Meeting, San Francisco, CA. May 2012.
78. Stegemoller, E.L., S. Vallabhajosula, M. S. Okun, I. Haq, N. Hwynn, & **C.J. Hass**. Is there a case for low frequency DBS in Parkinson's disease. Society for Neuroscience Meeting. November 2011.
77. Park, K., S. Vallabhajosula, R. Roemmich, **C.J. Hass**, & E. Hsiao-Wecksler. Effects of subthalamic nucleus deep brain stimulation on Parkinsonian gait behavior. Poster presented at the 35<sup>th</sup> Annual Meeting of the American Society of Biomechanics, Long Beach, California. August 2011.
76. Roemmich, R., & **C.J. Hass**. Lower extremity joint moment asymmetry during split belt treadmill walking. 35<sup>th</sup> Annual Meeting of the American Society of Biomechanics, Long Beach, California. August 2011.
75. Waddell, D., R.T. Roemmich, **C.J. Hass**, I. Malaty, & D. Nuckley. Quantifying spinal forces during head and neck tics in a Tourette population: implementation of a new dynamic model. The 35<sup>th</sup> Annual Meeting of the American Society of Biomechanics. August 2011.
74. Waddell, D., R.T. Roemmich, **C.J. Hass**, I. Malaty, & D. Nuckley. A dynamic model quantifying spinal forces during head and neck tics in a Tourette population. The MDS 15<sup>th</sup> International Congress of Parkinson's Disease and Movement Disorders. June 2011.
73. Vallabhajosula, S., M. Okun, N. Hwynn, I. Haq, & **C.J. Hass**. Effect of low frequency bilateral deep brain stimulation of subthalamic nucleus on gait in Parkinson disease. Podiums presentation at the 16<sup>th</sup> Annual Gait and Clinical Movement Analysis Society Meeting, Bethesda, Maryland. April 2011.
72. Nocera, J.R., **C.J. Hass**, & B. Crosson. Aerobic exercise improves executive language function in older adults. 7<sup>th</sup> Annual International Conference on Kinesiology and Exercise Science, Athens, Greece. 2011.
71. Elrod, J.M., A. Field, R.T. Roemmich, N. Tester, & **C.J. Hass**. Interlimb coordination patterns in people with Parkinson's disease. The American College of Sports Medicine 58<sup>th</sup> Annual Meeting. May 2011.
70. Nocera, J.R., R. Roemmich, J. Elrod, B. Hoover, & **C.J. Hass**. Gait initiation maintains characteristics during a dual cognitive task. American College of Sports Medicine, Denver, CO. 2011.
69. **Hass, C.J.**, J. R. Nocera, S. Amano, S. Vallabhajosula, & R.T. Roemmich. Tai Chi training and non-motor features of Parkinson's disease. The American College of Sports Medicine, Denver, CO. 2011.
68. Hoover, B., S. Amano, S. Vallabhajosula, J.R. Nocera, & **C.J. Hass**. Self-rating scales do not predict balance in Parkinson disease. American College of Sports Medicine, Denver, CO. 2011.
67. Altmann, L.J.P., **C.J. Hass**, J. Nocera, M. Troche, M. Daly, & M.S. Okun. Exercise effects on cognition and language in PD: A case study. A poster presentation at the meeting of Exercise in Parkinson's Disease Group, American. 2010.
66. Roemmich, R.T., J.R. Nocera, S. Vallabhajosula, S. Amano, B. Hoover, & **C.J. Hass**. Step length variability during gait initiation in Parkinson's disease. The 34<sup>th</sup> Annual Meeting of the American Society of Biomechanics, Providence, RI. 2010.
65. Fawver, B.J., K.M. Gamble, **C.J. Hass**, & C.M. Janelle. Emotional influences on postural sway prior to gait initiation. Journal of Sport & Exercise Psychology, 31, 2010.
64. Jackson, J.N., **C.J. Hass**, J.K. De Witt, J.P. Walter, & B.J. Fregly. Variation of whole-body angular and linear momentum during human locomotion. In Proceedings of the ASME Summer Bioengineering Conference. June 16-19, 2010.



63. Nocera, J.R., S. Vallabhajosula, L. Zahodne, C. Sosdza, H. Fernandez, D. Bowers, & **C.J. Hass**. Is apathy associated with postural control in Parkinson's disease? *Gait and Mental Function*. Feb 2010.
62. Nocera, J.R., S. Vallabhajosula, S. Amano, H. Fernandez, & **C.J. Hass**. Gait performance and cognitive function in Parkinson's disease. *Gait and Mental Function*. Feb 2010.
61. Amano, S., J.R. Nocera, S. Vallabhajosula, J. Juncos, & **C.J. Hass**. Biomechanical and clinical gait assessment for person with Parkinson disease. *Gait and Mental Function*. Feb 2010.
60. Fournier, K., K. Radonovich, J. Selbst, H. Benefield, & **C.J. Hass**. Quiet standing and quiet sitting in young children with autism spectrum disorders. *American Society of Biomechanics*. Aug 2009.
59. **Hass, C.J.**, K. Fournier, J. Selbst, H. Benefield, & K. Radonovich. Are repetitive restrictive behaviors and postural control related in autism spectrum disorders? *American Society of Biomechanics*. Aug 2009.
58. Gamble, K.M., J. Joyner, K. Fournier, **C.J. Hass**, & C. Janelle. Emotional influences on the center of pressure trajectory during gait initiation. *American Society of Biomechanics*. August 2009.
57. Mizell, R., **C.J. Hass**, R. Siders, & M.D. Tillman. Anticipatory effects on frontal plane kinematics during cutting movements. *American Society of Biomechanics*. August 2009.
56. Nocera, J.R., S. Vallabhajosula, S. Amano, & **C.J. Hass**. The relationship between balance and cognition in Parkinson's disease. *The American Society of Biomechanics*. August 2009.
55. Amano, S., J. Alberts, D. Doidge, J. Joyner, & **C.J. Hass**. Relationship between clinical and measures of hand function. *The Annual Meeting for the American Society of Biomechanics*. August 2009.
54. Wikstrom, E.A., & **C.J. Hass**. Control strategies during gait termination differ among, control, copers, and chronic ankle instability subjects. *National Athletic Trainers' Association*. June 2009.
53. Doidge, D., E. A. Wikstrom, S. Amano, & **C.J. Hass**. The influence of ankle instability on the kinetics of gait termination. *American College of Sports Medicine*. May 2009.
52. Nocera, J.R., S. Vallabhajosula, S. Amano, T. Buckley, & **C.J. Hass**. Dynamic stability during multi-directional gait initiation: Influence of age and disease. *American College of Sports Medicine*. May 2009.
51. Altmann, L.J.P., J.R. Nocera, **C.J. Hass**, & C.M. Sapienza. Exercise effects on cognition and language in Parkinson's disease: A case study. *International Neuropsychological Society*. Feb 2009.
50. **Hass, C.J.**, E. Wikstrom, K. Fournier, A. Inamdar, & M. Bishop. Locomotor initiation: Influence of functional ankle instability. *American Society of Biomechanics*. August 2008.
49. Stewart, K.C., M. Fernandez, M.S. Okun, C.E. Jacobson, R.L. Rodriguez, & **C.J. Hass**. Does Parkinson's disease alter the natural ipsilateral influence of the dominant left hemisphere? *Movement Disorders Society Meeting*. June 2008.
48. **Hass, C.J.**, T. Buckley, & J. Juncos. Subjective versus objective measures of gait function: Accuracy in Parkinson disease. *American College of Sports Medicine*. May-June 2008.
47. Fournier, K., **C.J. Hass**, M.D. Tillman, K. Radonovich, M. Lewis, & J. Chow. Dynamic balance control in children with autism: A pilot study. *Gait and Clinical Movement Analysis Society*. April 2008.
46. Stewart, K.C., H.H. Fernandez, M.S. Okun, C.E. Jacobson, & **C.J. Hass**. Correlating upper extremity and lower extremity motor impairment in Parkinson's disease to quality of life: Which has the stronger influence? *ANA Meeting*. April 12-19 2008.
45. Buckley, T., & **C.J. Hass**. Progressive resistance training improves sit-to-walk performance in Parkinson's disease patients: A pilot study. *Gait and Clinical Movement Analysis Society*. April 2008.

44. **Hass, C.J.**, & T. Buckley. Progressive resistance training improves gait initiation performance in Parkinson's disease patients: A pilot study. *Gait and Clinical Movement Analysis Society*. April 2008.
43. Darrow, L.K., L. Zahodne, A. Mikos, B. Skoblar, **C.J. Hass**, C. Jacobson, M.S. Okun, H.H. Fernandez, R. Rodriguez, & D. Bowers. Assessing apathy with the UPDRS: Comparison to the apathy evaluation scale. *Parkinson's Study Group*. October 2007.
42. Buckley, T.A., C. Pitsikoulis, & **C.J. Hass**. Dynamic postural stability during sit-to-walk transitions in healthy young and healthy elderly. *American Society of Biomechanics meetings*. August 2007.
41. **Hass, C.J.**, T. Buckley, & C. Pitsikoulis. Obstacle crossing behavior is affected by Parkinson's disease. *American Society of Biomechanics Meeting*. August 2007.
40. Waddell, D.W., **C.J. Hass**, R. Gregor, & S. Wolf. Intense Tai Chi training and its effects on gait in older, transitionally frail adults. *18<sup>th</sup> Conference of the International Society for Posture and Gait Research*. July 2007.
39. Buckley, T.A., C. Pitsikoulis, E. Barthelemy, & **C.J. Hass**. Progressive resistance training improves strength and sit-to-stand performance in Parkinson's disease: A pilot study. *American College of Sports Medicine*. 2007.
38. Buckley, T.A., C. Pitsikoulis, & **C.J. Hass**. Dynamic stability during sit-to-walk transitions in Parkinson's disease patients. *Society for Neuroscience*. October 2006.
37. Diermayr, G., P. Gysin, **C.J. Hass**, & A.M. Gordon. Anticipatory adjustments in fingertip forces during gait initiation while holding an object. *Society for Neuroscience*. October 2006.
36. **Hass, C.J.**, D.E. Waddell, S.L. Wolf, J.L. Juncos, & R.J. Gregor. The influence of Tai Chi training on locomotor ability in Parkinson's disease. *American Society of Biomechanics*. Sept 2006.
35. Lay, A.N., **C.J. Hass**, & R.J. Gregor. Backward upslope walking: Implications for the knee joint. *International Society of Biomechanics and American Society of Biomechanics*. July 2005.
34. Lay, A.N., D. Lai, **C.J. Hass**, & R.J. Gregor. Control strategy transitions during slope walking. *XXth International Society of Biomechanics and American Society of Biomechanics*. July 2005.
33. **Hass, C.J.**, D. Waddell, S.L. Wolf, J.L. Juncos, & R.J. Gregor. The relationship between knee extensor strength and balance in Parkinson's disease. *International Society of Biomechanics and the American Society of Biomechanics meetings*. July 2005.
32. Peier, P.G., T. Kaminsky, **C.J. Hass**, & A. Gordon. Effect of predictable and unpredictable gait perturbations on grip force coordination of a hand held object. *International Society for Posture and Gait Research*. May 2005.
31. Collins, M.A., **C.J. Hass**, D. Morris, & J.L. Juncos. The effects of acute creatine supplementation on muscle strength in patients With Parkinson's disease. *College of Sports Medicine*. 2005.
30. **Hass, C.J.**, M.A. Collins, D. Morris, & J.L. Juncos. Resistance training combined with creatine supplementation in patients with Parkinson's disease. *American College of Sports Medicine*. 2005.
29. **Hass, C.J.**, D.E. Waddell, S.L. Wolf, J.L. Juncos, & R.J. Gregor. Comparing momentum and stability tradeoffs during bidirectional gait initiation in older adults and parkinsonism. *Annual Meeting of the American Society of Biomechanics, Portland, OR*. September, 2004.
28. Lay, A.N., **C.J. Hass**, & R.J. Gregor. The role of select biarticular muscles during slope walking. *American Society of Biomechanics*. September 8-11, 2004.



27. Tillman, M.D., J.W. Chow, G.M. Gutierrez, & **C.J. Hass**. Biomechanical comparison of two lower extremity exercise machines used for knee injury rehabilitation. American College of Sports Medicine. 2004.
26. Waddell, D.E., **C.J. Hass**, R.J. Gregor, S.L. Wolf, & J.L. Juncos. Broad peak motor unit synchrony in Parkinson's disease: beyond a tremor index? Society for Neuroscience. November 2003.
25. **Hass, C. J.**, D.E. Waddell, R.P. Fleming, J.L. Juncos, & R.J. Gregor. The influence of the severity of Parkinson's disease on the COP-COM moment arm during gait initiation. American Society of Biomechanics. September 25-28, 2003.
24. Chow, J.W., M.D. Tillman, G.M. Gutierrez, & **C.J. Hass**. An electromyographic comparison of parallel and trap bar squats. American Society of Biomechanics. September 25-28, 2003.
23. Tillman, M.D., J.W. Chow, G.M. Gutierrez, & **C.J. Hass**. A comparison of lower extremity muscle activity during exercise on a cycle ergometer and recumbent stepper. American Society of Biomechanics. September 25-28, 2003.
22. Wolf, S.L., R.J. Gregor, A. Oliver, D. Waddell, & **C.J. Hass**. Why does Tai Chi favorably impact fall related events in older adults: Exploring, findings and mechanisms. International Society of Biomechanics. July 2003.
21. Brunt D., M.D. Tillman, R. Criss, & **C.J. Hass**. Take-off and landing strategies in female volleyball players. Gait and Clinical Movement Analysis Society. May 2003.
20. **Hass, C.J.**, D.E. Waddell, D.W. Smith, J.L. Juncos, S.L. Wolf, & R.J. Gregor. Parkinson's disease affects lower extremity joint moments during gait. American College of Sports Medicine. 2003.
19. Chow, J.W., M.D. Tillman, & **C.J. Hass**. Stability analysis of parallel and trap bar squats. Medicine and Science in Sport and Exercise. 2003.
18. Bishop-Lindsay, K., **C.J. Hass**, S.L. Wolf, M.J. Haber, A. Bush, & J.L. Juncos. The relationship of heart rate and perceived exertion is altered by severity of Parkinson's disease. American College of Sports Medicine. 2003.
17. Tillman, M.D., J.W. Chow, G.M. Gutierrez, & **C.J. Hass**. The influence of seat position on lower extremity mechanics during recumbent stepping. American College of Sports Medicine. 2003.
16. Waddell, D.E., **C.J. Hass**, R.J. Gregor, S.L. Wolf, & J.L. Juncos. Broad peak motor unit synchrony in Parkinson's disease is not solely explained by tremor. American Neurological Association Annual Conference. 2002.
15. **Hass, C.J.**, E.A. Schick, J.W. Chow, M.D. Tillman, D. Brunt, & C. Papangelou. Biomechanics of jump-landings in prepubescent and postpubescent female athletes. American College of Sports Medicine. 2002.
14. Tillman, M.D., J.W. Chow, **C.J. Hass**, K.D. Reisinger, & K. Norris. An evaluation of hip strength in transfemoral amputees. American College of Sports Medicine. 2002.
13. Chow, J.W., W.S. Chae, M.D. Tillman, **C.J. Hass**, & C.I. Akly. Bilateral comparison of patellar mechanism on unilateral ACL-reconstructed individuals. American College of Sports Medicine. 2001.
12. Tillman, M.D., **C.J. Hass**, J.A. Bauer, M.H. Trimble, & J.L. Pattishall. Lower extremity biomechanical alignment does not predict tibial rotation during dynamic activities. American College of Sports Medicine. 2001.
11. Tillman, M.D., **C.J. Hass**, D. Brunt, & J. Miller. Prevalence of jumping and landing techniques in volleyball: An analysis of elite female players. American Society of Biomechanics Meeting. 2001.

10. **Hass, C.J.**, L.M. Moore, M.D. Tillman, J.A. Bauer, & B.C. Focht. The influence of short-term maximal exercise on the mechanics of running on different surfaces. American College of Sports Medicine. 2000.
9. Bauer, J.A., **C.J. Hass**, K.R. Vincent, L.M. Moore, & J.L. Pattishall. Plantar pressure assessment of healthy elderly during quiet stance. American College of Sports Medicine. 2000.
8. de la Pena, D., C. Janelle, **C. J. Hass**, & B. Ellis. Video modeling of a self-paced task: Attentional considerations. AAPHERD. 2000.
7. **Hass, C.J.**, L. Garzarella, D. De Hoyos, D. Connaughton, & M. Pollock. Increases in cardiovascular and muscular fitness in response to total body recumbent stepping. American College of Sports Medicine. 1999.
6. **Hass, C.J.**, L. Garzarella, D. V. De Hoyos, & M.L. Pollock. Effects of resistance training volume on muscular strength and endurance in experienced resistance trained adults. American College of Sports Medicine. 1998.
5. De Hoyos, D., T. Abe, L. Garzarella, **C.J. Hass**, M. Nordman, & M. Pollock. Effects of 6 months of high- or low-volume resistance training on muscular strength and endurance. American College of Sports Medicine. 1998.
4. Pollock, M.L., T. Abe, D.V. De Hoyos, L. Garzarella, **C.J. Hass**, & G. Werber. Muscular hypertrophy responses to 6 months of high- or low-volume resistance training. American College of Sports Medicine. 1998.
3. Vincent, K., D. De Hoyos, L. Garzarella, **C.J. Hass**, M. Nordman, & M. Pollock. Relationship between indices of knee extension strength before and after resistance training. American College of Sports Medicine. 1998.
2. Nordman, M.L., M.L. Pollock, M.N. Fulton, S.F. Ayers, & **C.J. Hass**. Comparison of the isometric strength curves between two lumbar extension machines with different counterbalancing systems. American College of Sports Medicine. 1998.
1. Abe, T., D.V. De Hoyos, L. Garzarella, **C.J. Hass**, M.L. Nordman, & M.L. Pollock. The time course for strength and muscle thickness change in total body resistance training. American College of Sports Medicine. 1997.

## INVITED PRESENTATIONS

34. "Move more or move less", Villages PD Day, April 2017.
33. "Biomechanical Insights from Locomotor Adaptation", Korea National Sport University, March 2017.
32. "Gait Impairment in Parkinson's Disease: Can we restore the spring in your step?", Alzheimer & Parkinson Association of Indian River County, March 2017.
31. "Gait Impairment in Parkinson's Disease: Can we restore the spring in your step?", Center for Movement Variability, University of Nebraska- Omaha, October 2016.
30. "Exercise is Vitally Important", Mayo Jacksonville, Seminar Talk, September, 2016.
29. "Enhancing mobility in Parkinson's disease" University Luthern Church, January 2016.
28. "Keeping Step with Parkinson's: Balance, Posture, and Gait. MJFox Foundation Podcast, November 2015.
27. "Walking and the Basal Ganglia." University of St. Augustine, April 2015.
26. "Empowering the Fight Against Parkinson's disease One Step at a Time." TEDx Talk, March 2015.

25. "Walking around the basal ganglia". Villages Parkinson's and Alzheimer's Support Group meeting, October 2014.
24. "Rehabilitation Insights from Locomotor Adaptation Paradigms." 2014 Incheon Asian Games International Sports Science Congress. Incheon, South Korea, August 2014.
23. Interventions for Persons with Parkinson's disease, Iowa State University, April 2014.  
Symposium "Parkinson's disease: Physical/Occupational Therapy for Fall Prevention" Victory Summit, Davis Phinney Foundation, January 2014.
22. "Exercise and Parkinson's disease"; Invited talk. Furman University, Greenville, SC., February 2013.
21. Symposium "The Beneficial Effects of Exercise in Individuals with Parkinson's disease." Annual Meeting of South East Region Chapter of ACSM, February 2013.
20. "Novel Targeting of Mobility Disability". Oak Hammock / Institute of Aging Seminar Series, November 2012
19. "Split-Belt treadmill training induces locomotor plasticity in PD" UF Center for Movement Disorders and Neurorestoration, October 2011.
18. "Splitting Hairs: Optimizing the Exercise Stimulus for Neuroplasticity" UF Brain Imaging Rehabilitation and Cognition Lecture, September 2011.
17. "Tai chi and Dual Task interference". UF Movement Disorders Seminar Series, December 2010.
16. "Parkinson's Disease – Manifestations and Adaptations in Gait and Postural Control" Translational Neuroscience Research Lecture, February 2010.
15. "Taking the PARK out of Parkinson's disease" UF Alumni Lecture Series Naples, FL, March 4, 2008.
14. "On the Issue of Clumsiness: Postural and Locomotor Control in Autism Spectrum Disorders" UF Physical Therapy Seminar Series, April 2008.
13. "Biomechanics, Exercise and Parkinson's disease" University of Florida Movement Disorders Center, April 19, 2007.
12. "Treating Parkinson's disease Pedaling over Pills?" Emerson Alumni Distinguished Lecture Series. University of Florida, April 2007.
11. "Locomotor and Postural Control in Age and Disease" Symposium: Adaptations of Neuromuscular Control with Disuse, Aging, and Training. 35<sup>th</sup> Annual Meeting of the Southeast Chapter of the American College of Sports Medicine, February 8-10<sup>th</sup>, 2007.
10. "Evaluation of Interventions for Special Populations Using Biomechanical Outcomes" Symposium, 53<sup>rd</sup> Annual Meeting of the American College of Sports Medicine, May 31- June 3, 2006.
9. "Dynamic Balance Control during the Initiation of Locomotion" 28th Annual Conference in Movement Sciences Teachers College Columbia University, April 2005.
8. "Understanding the Physiology of EMG" Symposium: Recent development in electromyographic theories and techniques for sports medicine. 32<sup>nd</sup> Annual Meeting of Southeast Chapter of the American College of Sports Medicine, January 29-31<sup>st</sup>, 2004.
7. "Falls in the Elderly: the Role of Biomechanics Research" R.J. Gregor, **C.J. Hass**, S.L. Wolf Special Topics Lecture: Biomechanics 31<sup>st</sup> Annual Meeting of Southeast Chapter of the American College of Sports Medicine, January 30-February 1<sup>st</sup>, 2003.

6. "Creatine monohydrate supplementation: Not just for muscle-heads anymore." Guest Lecture: Center for Research on Complementary and Alternative Medicine in Neurodegenerative diseases, Emory University, Atlanta, GA, Fall 2002.
5. "Running Injuries: Intrinsic and Extrinsic Considerations" Guest Lecture: Special Topics in Biomechanics, Stetson University, DeLand, FL, Spring 2000.
4. "Running Mechanics" Guest Lecturer / teaching assistant: Advanced Kinesiology, Department of Physical Therapy University of Florida, Gainesville, FL, Spring 2000.
3. "Biomechanics of Baseball Pitching" Guest Lecturer/ teaching assistant: Biomechanics, Department of Physical Therapy University of Florida, Gainesville, FL, Fall 1999.
2. "Biomechanics of Track and Field" Guest Lecturer: Coaching Track and Field, University of Florida, Gainesville, FL, Fall 1999.
1. "Biomechanics: Movement Terminology and Skeletal Considerations for Movement" Guest Lecturer: Graduate Biomechanics University of Florida, Gainesville, FL.

## SERVICE

### Professional Affiliations

National Association of Kinesiology in Higher Education  
 Society for Neuroscience  
 American Society of Biomechanics  
 American College of Sports Medicine  
 Editorial Board, Medicine and Science in Sports and Exercise  
 Associate Editor, Medicine and Science in Sports and Exercise

### Journal / Grant Reviewer (20-30 reviews per year)

American Journal of Physical Medicine and Rehabilitation  
 Archives of Physical Medicine and Rehabilitation  
 British Journal of Sports Medicine  
 Journal of Aging and Physical Activity  
 Journal of Sports Science and Medicine  
 Journal of Geriatrics  
 Journal of Gerontology: Medical Sciences  
 Medicine and Science in Sports in Exercise (Associate Editor)  
 Research Quarterly for Exercise and Sport  
 Sports Medicine  
 Sports Biomechanics  
 Physical Therapy  
 Neuroscience Letters  
 Journal of Biomechanics  
 Journal of Applied Biomechanics  
 Human Movement Science  
 Gait Posture  
 Movement Disorders  
 Parkinsonism Related Disorders  
 Neurorehabilitation and Neural Repair  
 Journal of Sports Science and Medicine  
 PM, & R Journal  
 Research Quarterly  
 Journal of Neuroscience Methods  
 Current Ageing Science  
 ACSM Health and Fitness

### Grant Reviews

Parkinson's Disease Society  
 National Strength and Conditioning Association  
 New York University / Polytechnic Institute of New York Seed Grant Program  
 NIH NINDS G78, special panel, June 2014  
 NIH MRS Study Section Feb 2013, June 2014, October 2015  
 NIH FO2B Study Section Feb 2014, June 2015, June 2016  
 VARRD Scientific Merit Review Board Feb 2014, August 2014

#### Abstract Reviewer

2010, 2012-2018: American Society of Biomechanics Meeting  
 2008, 2010-2018: Gait and Clinical Movement Analysis Society  
 2013-2015: ACSM

#### National Committees

2018- American Society of Biomechanics, Hay Award Committee  
 2016- present MJ. Fox Gait Advisory Committee  
 2015-2018 Executive Board American Society of Biomechanics  
 2012: American Society of Biomechanics, Meeting Co-Chair  
 2012-2013: American Society of Biomechanics, program committee  
 2009: Southeast American Society of Biomechanics, Meeting Co-Chair  
 2006-2010: American College of Sports Medicine, Biomechanics Interest Group (2010: Chair)  
 2011- present ACSM Interest Group Forums Committee  
 2003-2008: 2012-Present: American Society of Biomechanics, Membership Committee.  
 2010-Present: Parkinson's Study Group, Functional Neurosurgical Workgroup

#### University of Florida Service

2006: Chair Stanley Lecture Committee  
 2006-Present: Graduate Faculty.  
 2007: Chair, HHP Graduate Faculty Council  
 2008-2009: APK Grade Appeals / Petitions  
 2008-2012: APK Graduate Curriculum  
 2008-2009: BioBehavioral Search Committee  
 2006-2008: APK Merit Evaluation Committee  
 2008-Present: GatorStrong Faculty Advisor  
 2007, 2010-2013: Preview Freshman Orientation Faculty Advisor  
 2009-2010: HHP Undergraduate Curriculum Task Force  
 2009-2010: Neurology Faculty Practice Search Committee  
 2009-2010: UF Movement Disorders Center Search Committee  
 2010-2014, 2015-: APK Graduate Fellowship Committee  
 2010-2011: Biobehavioral Search and Screen Committee  
 2010-2012: APK Graduate Curriculum Committee  
 2010-2011: HHP Teacher of the Year Selection Committee  
 2011-2013: 2015-Present: Faculty Senator  
 2012-2014: Faculty Senate Welfare Council  
 2013-2014: APK Preeminence Search Committee (chair)  
 2013-2014: Common reading Program Committee  
 2013-2016: General Education Committee  
 2013-2017: APK Undergraduate Curriculum Committee  
 2013- Present Advisory Board, Office of Postdoctoral Affairs  
 2014-2016: General Education Assessment Subcommittee  
 2014-2015: Faculty Senate Welfare Council Chair  
 2014-2015 Faculty Senate Steering Committee  
 2014-2015 HHP Faculty Advisory Council (chair)  
 2014-2015 HHP Graduate Faculty Council (chair)  
 2014-2015: Athletic Training Faculty Search and Screen committee  
 2015- present UF Graduate Council  
 2015-present APK Graduate Curriculum Committee  
 2015-present HHP College Curriculum Committee  
 2015- present HHP College Assessment Committee

2015-2016 UF Faculty Senate SCORS committee  
2016-Experiential Learning Task Force Chair  
2016- present Faculty Senator  
2016,2017 Graduation Marshal  
2017-present Faculty Senate Academic Policy Counsel  
2017- APK Search and Screen committee for 2 lecturers.