CURRICULUM VITAE

# Chris J. Hass

## ADDRESS

Work Address
Department of Applied Physiology and Kinesiology
University of Florida
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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., Jeff Bauer, 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

**Assistant Professor**
University of Florida, Department of Applied Physiology and Kinesiology
August 2006-

**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

## GRANT ACTIVITY

### Completed and Current Funding

Pollock, M.L., D. L. Lowenthal, **C.J. Hass,** D. Connaughton, L. Garzarella. The effect of NuStep training on aerobic fitness, body composition, and muscular strength and endurance. UPN# 98052670. $12,202.83

Tillman, M.D., J.W. Chow, **C.J. Hass.** The Influence of Joint Position on Lower Extremity Joint Loads and Muscle Activity During Exercise on a Recumbent Stepper and Cycle Ergometer. UPN# 01061905. $11, 542.64

**Hass, C.J.,** J.L. Juncos, M. O'Grady, R.J. Gregor. 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. $36,700

**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 $2500

Tillman, M.D.-P.I**.,** Chow, J.W., Sheu, J., & **Hass, C.J.** (2006). Effects of Whole-body Vibration on Spasticity, Gait, Balance, Flexibility, & Quality of Life in Individuals with Cerebral Palsy. HHP Research Opportunity Fund 2006. (funded, DC=$4,500).

Fernandez, H. The Restore Study,
Michael J. Fox Foundation. 12/06/2006 -9/01/09, $267,703.00
Role: Investigator

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, $249,300**,** 11-1-06 to 10-31-08
Role: Investigator

**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

**Hass, CJ.** Autism Speaks Pilot Grant, 8/07-07/09
"Motor Control in young children with autism" $117,747
Role:PI

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

Student Directed Funding

Gysin, P., T. Kaminski, **C.J. Hass**, A. Gordon. Effects of predictable and unpredictable postural perturbations on grip force coordination of a hand-held object. Spencer Foundation Research Training Grant. $3000 (funded).

Wikstron, E. and **C.J. Hass**. Control strategies during gait termination: Elucidating the mechanism of ankle instability. Southeast Athletic Trainers Association. $2000.

Fournier, K. Static and dynamic balance control in children with Autism. Organization for Autism Research. $2500.

## PUBLICATIONS

- **MANUSCRIPTS**

33. **Hass, C.J**., M. D. Bishop, D. Doidge, E.A. Wikstrom. Chronic Ankle Instability Alters Central Organization of Movement. American Journal of Sports Medicine in press

32. Stewart, K.C, H.H. Fernandez, M. S Okun, J. Alberts, R. L. Rodriguez, I.A. Malaty,**C. J. Hass** Effects of Dopaminergic Medication on Objective Tasks of Deftness, Bradykinesia and Force Control. Journal of Neurology in press.

31. Morishita, T., K.D. Foote, S. S. Wu, C.E Jacobson IV, R. L. Rodriguez, I. U. Haq, M. S. Siddiqui, I. A. Malaty, **C. J. Hass,** M. S. Okun, Brain penetration effects of microelectrodes and DBS leads in ventral intermediate nucleus (Vim). Journal of Neurosurgery, in press

30. Buckley, T., C.Pitskikoulis, E.Barthelemy, **C.J. Hass**. Age Impairs Sit-to Walk Motor Performance. Journal of Biomechanics. In press

29. Wikstrom E.A., A. D. Inamdar, M. Bishop, **C.J. Hass.** Control Strategies during gait termination are altered in subjects with ankle instability. Medicine and Science in Sports and Exercise, in press

28. Stewart, K.C., H. Fernandez, M.S. Okun, R.L. Rodriguez, C. Jacobson, **C.J. Hass**. Side Onset Influences Motor Impairments in Parkinson Disease. Parkinsonism & Related Disorders. In press.

27. Kirsch-Darrow, L., Zahodne, L.B., **Hass, C**., Mikos, A. Okun, M.S., Fernandez, H.H., & Bowers, D. How Cautious Should We Be When Assessing Apathy with the Unified Parkinson's Disease Rating Scale? Movement Disorders, 30;24(5):684-688, 2009

26. Mann, J.' K.D. Foote, C.W. Garvan, H.H. Fernandez, C. Jacobson, R.L. Rodriguez, I. Haq, M.S. Siddiqui, I. Malaty, T.Morishita, **C. J. Hass**, M. S. Okun. Brain Penetration Effects of Microelectrodes and DBS Leads in STN or GPi. Journal of Neurology, Neurosurgery & Psychiatry. Jul;80(7):794-7, 2009

24**.** Alberts, J.L., **C.J. Hass** , J. L. Vitek. M.S. Okun, Are Two DBS Leads Always Better Than One: An Evolving Case for Unilateral Subthalamic Deep Brain Stimulation in Parkinson's disease. Experimental Neurology. In press

25. **Hass C.J.,** B. R. Bloem, M.S. Okun. Pushing or Pulling in Parkinson's disease? Nat Clin Pract

Neurol. Oct;4(10):530-1, 2008.

23. Gysin, P.G., T. Kaminsky, **C.J. Hass**, A. Gordon. Effect of predictable and unpredictable gait perturbations on grip force coordination. J Neurophysiol. Nov;100(5):2477-85, 2008

22. Diermayr, G., P. Gysin, **C.J. Hass**, A. M. Gordon. Grip force modulation during gait initiation with object transport. Experimental Brain Research. 190(3):337-45, 2008.

21. Stewart, K. C., H. Fernandez, M. Okun, C. Jacobson, **C.J. Hass**. Distribution of Motor Impairment Influences Quality of Life in Parkinson's disease. Movement Disorders. 23(10):1466-8, 2008

20. Buckely, T., C. Pitsikoulis, **C.J. Hass**. Dynamic Stability during Sit to Walk transitions in Parkinson's disease. Movement Disorders. 23(9):1274-80, 2008

**19. Hass, C.J**., D.E. Waddell, S.L. Wolf, J.L. Juncos, R.J. Gregor. Gait Initiation in older Adults with Postural Instability. Clinical Biomechanics. 23(6):743-53, 2008

18. Lay A.N., **C.J. Hass**, R. J. Gregor. The Effects of Sloped Surfaces on Locomotion: Backward Walking as a Perturbations. Journal of Biomechanics. 40(13):3050-5, 2007

17. Lay A.N., **C.J. Hass**, R. Nichols, R.J. Gregor. The Effects of Sloped Surfaces on Locomotion: An Electromyographic Analysis. .Journal of Biomechanics. 40(6):1276-85, 2007

**16. Hass, C.J.,** M.A. Collins, J.L. Juncos. Resistance training with creatine monohydrate supplementation improves upper body strength in patients with Parkinson's disease: a randomized trial. Neurorehabilitation and Neural Repair. 21(2):107-15, 2007

15. Lay A.N., **C.J. Hass**, R.J. Gregor. The Effects of Sloped Surfaces on Locomotion: A Kinematic and Kinetic Analysis. Journal of Biomechanics. 39(9):1621-8, 2006

14. M.D. Tillman, **Hass, C.J**., J.W. Chow, D. Brunt. Lower extremity coupling parameters during locomotion and landings. Journal of Applied Biomechanics 21(4), 359-370, 2005

**13. Hass, C.J**, D.E. Waddell, R.P. Fleming, J.L. Juncos, R.J. Gregor. Dynamic Stability and Gait initiation in Parkinson's disease. Archives of Physical Medicine and Rehabilitation 86, 2172-2176, 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. Journal of Applied Biomechanics . 21(2), pp 153-166, 2005

**11. Hass, C.J**., E.A. Schick, J.W. Chow, M.D. Tillman, D. Brunt, J.H. Cauraugh. Knee Biomechanics during Landings: Comparison of Pre- and Postpubescent Females. Medicine and Science in Sport and Exercise. 37(1):100-7, 2005

**10. 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. Archives of Physical Medicine and Rehabilitation. 85: 1593-1598, 2004.

9. Tillman, M.D., **C.J. Hass,** D Brunt, & G.R. Bennett. Jumping and landing strategies in women's volleyball. Journal of Sport Science and Medicine. 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. Journal of Applied Biomechanics. 20

(1): 38-50, 2004.

**7. 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. Journal of Applied Biomechanics. 19(2):139-152, 2003.

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. Tillman, M.D., **C.J. Hass**, D. Brunt. Volleyball landings may explain ACL gender gap. BioMechanics, 9(3):87-93, 2002.

**4. Hass, C.J**., M.S. Feigenbaum, B.A. Franklin. Prescription of Resistance Training for Healthy Populations. Sports Medicine,31(14): 953-964, 2001.

**3. Hass, C.**, L. Garzarella, D. De Hoyos, D. Connaughton, and M. Pollock. Concurrent increases in cardiovascular and muscular fitness in response to total body recumbent stair stepping. European Journal of Applied Physiology, 85(1-2):157-163, 2001.

2. Bauer, J.A., T.S. Thomas, J.H. Cauraugh, T.W. Kaminski, **C.J. Hass**. Biomechanics of Soccer Heading: Impact forces and neck muscles' activity in intercollegiate female soccer players. Journal of Sports Sciences. 19,171-179, 2001.

**1. Hass, C. J.**, L. Garzarella, D.V. De Hoyos, and M.L. Pollock. Single versus multiple sets in long term recreational weightlifters. Medicine and Science in Sport and Exercise.32:1, 235-242, 2000.

*In review*

**Hass, C.J**., L. Cherry, M. N. Bartels, R.E. DeMeersman. The effects of Parkinson's disease on Autonomic Modulation and Ratings of Perceived Exertion. Journal of Applied Physiology.

Figueroa, M. **C. Hass**, M. N. Bartels, R.E. DeMeersman. Effects of Tai Chi and Chi Kung on Rate Pressure Product and Autonomic Modulation. Journal of Applied Physiology.

**Hass,C.J.,** T.Buckley, C.Pitsikoulis, E. Barthelemy. Obstacle Crossing Behavior is Affected by Parkinson's disease. Journal of Biomechanics.

Nocera,J., LJ.P. Altmann, C.Sapienza, M.S. Okun, **C.J. Hass** .Can Exercise improve language and cognition in Parkinson's disease?: A Case Study. Neurocase

Nocera,J T.Buckley, D. Waddell, M.S. Okun, **C. J. Hass**. The relationships of knee extensor strength and function in Parkinson's disease. Archives of Physical Medicine.

Gamble, K.M., J. Joyner, S.A. Coombes, C.J. Hass, C.M. Janelle. Emotional State affects the initiation of forward gait. Emotion.

Fournier, K.A., C. I. Kimberg, K. J. Radonovich, M.D. Tillman, J.W. Chow, M.H. Lewis, J. W. Bodfish, C.J. Hass. Static and Dynamic Postural control in Children with Autism Spectrum Disorders. Gait and Posture.

- **ABSTRACTS / PRESENTATIONS**

Wikstrom, E.A., C.J. Hass. Control strategies during gait termination differ among, control, coper, and chronic ankle instability subjects. Annual Meeting of the National Athletic Trainers' Association Annual Meeting. June 2009 *J Athl Train* 2009;44(3): S-13.

Doidge, D., E.A. Wikstrom, S. Amano, C.J. Hass. The influence of ankle instability on the kinetics of gait termination. Annual Meeting of the American College of Sports Medicine. May 2009 *Med Sci Sport Exer* 2009; 41(5): S-519.

Gamble, K.M., J. Joyner, K. Fournier, C.J. Hass, C. Janelle. Emotional Influences on the Center of Pressure Trajectory during Gait Initiation. Annual Meeting of the American Society of Biomechanics August 2009.

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.

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.

S. Amano, 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.

**C.J. Hass,** E.Wikstrom, K. Fournier, A. Inamdar, M. Bishop. Locomotor Initiation: Influence of Functional Ankle Instability. American Society of Biomechanics Meeting, August 2008.

**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

Fournier, K. **Hass, C,** Tillman, M, Radonovich, K, Lewis, M & Chow, J And Dynamic Balance Control In Children With Autism: A Pilot Study. Gait and Clinical Movement Analysis Society, April 2008.

Stewart KC, Fernandez, HH, Okun SE, Jacobson CE, **Hass CJ** . Correlating Upper Extremity and Lower Extremity Motor Impairment in Parkinson Disease to Quality of Life: Which Has the Stronger Influence? ANA Meeting April 12-19, 2008

Stewart, H. H. Fernandez, M. S. Okun, C. E. Jacobson, R. L. Rodriguez , **C. J. Hass** Does Parkinson's Disease Alter that Natural Ipsilateral Influence of the Dominant Left Hemisphere? Movement Disorders Society Meeting, June 2008.

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.

**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.

Darrow, L.K., L. Zahodne, A. Mikos, B. Skoblar, **C.Hass**, C. Jacobson, M.S. Okun, H.H. Fernandez, R. Rodriquez, D.Bowers. Assessing Apathy with the UPDRS:Comparison to the

Apathy Evaluation Scale. Parkinsons Study Group, October 2007

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.

**Hass, C.J.**, T. Buckley, C. Pitsikoulis. Obstacle Crossing Behavior is Affected by Parkinson's disease. American Society of Biomechanics Meeting, August 2007.

Waddell, D.W., **C.J. Hass**, R. Gregor, S. Wolf. Intense Tai Chi Training and its Effects on Gait in Older, Transitionally Frail Adults. 18th Conference of the International Society for Posture and Gait Research, July 2007.
Buckley, T.A., C. Pitsikoulis, E. Barthelemy, **C.J. Hass.** Progressive Resistance Training Improves Strength and Sit-to-Stand Performance in Parkinson Disease: A Pilot Study. Annual Meeting of the American College of Sports Medicine 2007.

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

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

**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 Meeting, Sept 2006.

Lay, A.N., **C.J. Hass**, R.J. Gregor. Backward Upslope Walking: Implications for the Knee Joint. Accepted for presentation at the combined XXth International Society of Biomechanics and the 29th American Society of Biomechanics meetings. July 2005.

Lay, A.N., D. Lai, **C.J. Hass**, R.J. Gregor. Control Strategy Transitions during Slope Walking. Accepted for presentation at the combined XXth International Society of Biomechanics and the 29th American Society of Biomechanics meetings. July 2005.

**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. XXth International Society of Biomechanics and the 29th American Society of Biomechanics meetings. July 2005.

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. Annual Meeting of the American College of Sports Medicine 2005.

**Hass, C.J**., M.A. Collins, D. Morris, J.L. Juncos. Resistance training combined with creatine supplementation in patients with Parkinson's disease. Accepted for presentation at the Annual Meeting of the American College of Sports Medicine 2005.

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. Marseille, France May 2005.

**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 8-11, 2004.

Lay AN, **C.J. Hass**, R.J. Gregor. The Role of Select Biarticular Muscles During Slope Walking

Annual Meeting of the American Society of Biomechanics, Portland, OR, September 8-11, 2004.

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. Medicine and Science in Sport and Exercise, 35(5):S, 2004

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.

**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. Annual Meeting of the American Society of Biomechanics, Toledo, OH, September 25-28, 2003.
Chow, J.W., M.D. Tillman, G.M. Gutierrez, **C.J. Hass.** An electromyographic comparison of parallel and trap bar squats. Annual Meeting of the American Society of Biomechanics, Toledo, OH, September 25-28, 2003.

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. Annual Meeting of the American Society of Biomechanics, Toledo, OH, September 25-28, 2003.

Wolf, S.L., R.J. Gregor, A. Oliver, D. Waddell, **C. Hass**. Why Does Tai Chi Favorably Impact Fall Related Events in Older Adults: Exploring Findings and Mechanisms. Invited Lecture, XIXth Congress of the International Society of Biomechanics. July 2003, Dunedin, New Zealand.

**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. Medicine and Science in Sport and Exercise, 34(5):S, 2003

Chow, J.W., M.D. Tillman, **C.J. Hass**. Stability analysis of parallel and trap bar squats. Medicine and Science in Sport and Exercise, 34(5):S, 2003

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. Medicine and Science in Sport and Exercise, 34(5):S, 2003

Tillman, M.D., J.W. Chow, G.M. Gutierrez, **C.J. Hass.** The influence of seat position on lower extremity mechanics during recumbent stepping. Medicine and Science in Sport and Exercise, 34(5):S, 2003

Brunt D, M. Tillman, R. Criss, **C. Hass**. Take-Off and Landing Strategies in Female Volleyball Players. Gait and Clinical Movement Analysis Society, University of Delaware, DE, May 2003

Waddell, D.E, **C.J. Hass**, R.J. Gregor, S.L. Wolf, and J.L. Juncos. Broad peak motor unit synchrony in Parkinson's disease is not solely explained by tremor. Presented at the American Neurological Association Annual Conference, 2002

**Hass, C.J.,** E. A. Schick, J.W. Chow, M.D. Tillman, D. Brunt, and C. Papangelou. Biomechanics of jump-landings in prepubescent and postpubescent female athletes. Medicine and Science in Sport and Exercise, 33(5):S, 2002.

Tillman, M.D., J.W. Chow, **C.J. Hass**, K.D. Reisinger, and K. Norris. An evaluation of hip strength in transfemoral amputees. Medicine and Science in Sport and Exercise, 32(5):S, 2002.

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. Medicine and Science in Sport and Exercise, 32(5):S, 2001.

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. Medicine and Science in Sport and Exercise, 32(5):S, 2001.

Tillman, M.D., **C. J. Hass**, D. Brunt, J. Miller. Prevalence of jumping and landing techniques in volleyball: An analysis of elite female players. Presented at the American Society of Biomechanics Meeting, 2001.

**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. Medicine and Science in Sport and Exercise, 31(5):S, 2000

Bauer, J.A., **C.J. Hass,** K.R. Vincent, L.M. Moore, J.L. Pattishall. Plantar pressure assessment of healthy elderly during quiet stance. Medicine and Science in Sport and Exercise, 30(5):S, 2000.

de la Pena, D.,C. Janelle, **C. Hass**, B. Ellis. Video Modeling of a Self-Paced Task: Attentional Considerations. Presented at AAPHERD national convention 2000.

**Hass, C.**, L. Garzarella, D. De Hoyos, D. Connaughton, and M. Pollock. Increases in cardiovascular and muscular fitness in response to total body recumbent stepping. Medicine and Science in Sport and Exercise, 30(5):S, 1999.

**Hass, C.J.**, L. Garzarella, D.V. De Hoyos, and M.L. Pollock. Effects of resistance training volume on muscular strength and endurance in experienced resistance trained adults. Medicine and Science in Sport and Exercise, 30(5):S, 1998.

De Hoyos, D., T. Abe, L. Garzarella, **C. Hass**, M. Nordman, and M. Pollock. Effects of 6 months of high- or low-volume resistance training on muscular strength and endurance. Medicine and Science in Sport and Exercise, 29(5): S, 1998.

Pollock, M.L., T. Abe, D.V. De Hoyos, L. Garzarella, **C.J. Hass**, and G. Werber. Muscular hypertrophy responses to 6 months of high- or low-volume resistance training. Medicine and Science in Sport and Exercise, 29(5): S, 1998

Vincent, K., D. De Hoyos, L. Garzarella, **C. Hass**, M. Nordman, and M. Pollock. Relationship between indices of knee extension strength before and after resistance training. Medicine and Science in Sport and Exercise, 29(5): S, 1998.

Nordman, M.L., M.L. Pollock, M.N. Fulton, S.F. Ayers, and **C. Hass**. Comparison of the isometric strength curves between two lumbar extension machines with different counterbalancing systems. Medicine and Science in Sport and Exercise, 29(5) S, 1998.

Abe, T., D.V. De Hoyos, L. Garzarella, **C.J. Hass**, M.L. Nordman, and M.L. Pollock. The time course for strength and muscle thickness change in total body resistance training. Medicine and Science in Sport and Exercise, 29(5): S, 1997.

**JOURNAL / GRANT REVIEWER**

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
Medicine and Science in Sports in Exercise
Research Quarterly for Exercise and Sport
Sports Medicine
Physical Therapy
Neuroscience Letters
Journal of Biomechanics
Journal of Applied Biomechanics
Human Movement Science
Gait Posture
Movement Disorders
Neurorehabilitation and Neural Repair
Journal of Sports Science and Medicine
Parkinson's Disease Society

**PRESENTATIONS/SYMPOSIUMS**

"Locomotor and Postural Control in Age and Disease"
Symposium: Adaptations of Neuromuscular Control with Disuse, Aging, and Training.
35th Annual Meeting of the Southeast Chapter of the American College of Sports Medicine, February 8-10th, 2007

"Evaluation of Interventions for Special Populations Using Biomechanical Outcomes"
Symposium, 53rd Annual Meeting of the American College of Sports Medicine
May 31- June 3, 2006

"Dynamic Balance Control during the Initiation of Locomotion"
28th Annual Conference in Movement Sciences
Teachers College Columbia University
April 2005

"Understanding the Physiology of EMG"
Symposium: Recent development in electromyographic theories and techniques for sports medicine.
32nd Annual Meeting of Southeast Chapter of the American College of Sports Medicine
January 29-31st, 2004.

"Falls in the Elderly: the Role of Biomechanics Research"
R.J.Gregor, **C.J. Hass**, S.L. Wolf
Special Topics Lecture: Biomechanics
31st Annual Meeting of Southeast Chapter of the American College of Sports Medicine
January 30-Febuary 1st, 2003.

"Creatine monohydrate supplementation: Not just for muscle-heads anymore."
Guest Lecture: Center for Research on Complementary and Alternative Medicine in Neurodegenerative diseases. Fall 2002
Emory University, Atlanta, GA

"Running Injuries: Intrinsic and Extrinsic Considerations"
Guest Lecture: Special Topics in Biomechanics, Spring 2000
Stetson University, DeLand, FL

"Running Mechanics"
Guest Lecturer / teaching assistant: Advanced Kinesiology, Spring 2000
Department of Physical Therapy
University of Florida, Gainesville, FL

"Biomechanics of Baseball Pitching"
Guest Lecturer/ teaching assistant: Biomechanics, Fall 1999
Department of Physical Therapy
University of Florida, Gainesville, FL

"Biomechanics of Track and Field"
Guest Lecturer: Coaching Track and Field, Fall 1999
University of Florida, Gainesville, FL

"Biomechanics: Movement Terminology and Skeletal Considerations for Movement"
Guest Lecturer: Graduate Biomechanics
University of Florida, Gainesville, FL

**PROFESSIONAL AFFILIATIONS**

American Society of Biomechanics
American Society of Biomechanics- Membership Committee
American College of Sports Medicine- Board Biomechanics Interest Group
Society for Neuroscience.

**GRADUATE COMMITTEE ACTIVITIES**

| Applicant's Role | Student | Research Topic | Home Department | Complete Date |
|---|---|---|---|---|
| Chair, 1 Ph.D. Dissertation Committees | Buckley, Thomas | Functional Mobility in Patients with Parkinson's disease | Biobehavioral Sciences Columbia Univ. | 12/2006 |
| | Fournier, Kim | Static and dynamic balance control in children with Autism | APK- UF | 5/2008 |
| | Stewart, Kim | Side onset influence on upper extremity motor functioning in Parkinson disease | APK-UF | 8/2008 |
| Member, Ph.D. Dissertation Committees | Gates, Greg | Motor changes in the lesser involved upper extremity post constraint induced movement therapy | Biobehavioral Sciences Columbia Univ. | 1/2006 |
| | Guarrera-Bowlby, Phyllis L. | Developmental Changes in Movement Organization of Standing Up | Biobehavioral Sciences Columbia Univ. | ongoing |
| | Gyesin, Priska | Effects of predictable and unpredictable postural perturbations on grip force coordination of a hand-held object | Biobehavioral Sciences Columbia Univ. | 07/2008 |
| | Diermayr, Gudrun | Development of the coupling of grip and inertial forces during gait initiation while holding an object | Biobehavioral Sciences Columbia Univ. | ongoing |
| | George, Barbara | Cardiovascular Reactivity after Spinal Chord Injury | Biobehavioral Sciences Columbia Univ. | 2004 |
| | Muratori, Lisa | Coordination of Grip and Posture in Parkinson's disease | Biobehavioral Sciences Columbia Univ. | 2004 |
| | Lay, Andrea | Neuromuscular Coordination during Slope Walking | Bioengineering, Georgia Institute of Technology | 2005 |
| Adjunct Member, Dissertation Committee | | | | |