CURRICULUM VITAE

Christopher J. Hasson, Ph.D.
Department of Physical Therapy, Movement and Rehabilitation Sciences
Northeastern University | 360 Huntington Avenue | 301 Robinson Hall | Boston MA
Phone: 617-373-8745 | E-Mail: c.hasson@northeastern.edu
Lab Website: www.northeastern.edu/neuromotorsystemslab

EDUCATION & TRAINING

Dates	*Degree*	*Field*	*Institution*	*Location*
1997 - 2001	B.S.	Exercise Science	University of Delaware	Newark, DE
2001 - 2003	M.S.	Exercise Science	Ball State University	Muncie, IN
2003 - 2009	Ph.D.	Kinesiology	Univ. of Mass. Amherst	Amherst, MA
2009 - 2012	Postdoctoral	Sensorimotor Control	Northeastern University	Boston, MA

EMPLOYMENT HISTORY

Dates	*Position*	*Institution*
2000 - 2001	Lab Assistant	University of Delaware
2001 - 2003	Research Assistant and Lab Instructor	Ball State University
2003 - 2006	Research Assistant and Lab Instructor	Univ. of Mass. Amherst
2005 (Spring)	Instructor	Univ. of Mass. Amherst
2005 - 2006	Graduate School Fellow	Univ. of Mass. Amherst
2006 (Summer)	Instructor	Univ. of Mass. Amherst
2006 - 2007	Research Assistant	Univ. of Mass. Amherst
2007 - 2009	NIH Predoctoral Fellow (F31)	Univ. of Mass. Amherst
2009 - 2011	Postdoctoral Research Associate	Northeastern University
2011 - 2012	NIH Postdoctoral Fellow (F32)	Northeastern University
2012 - 2020	Assistant Professor, Dept. of Physical Therapy, Movement and Rehabilitation Sciences	Northeastern University
2016 - Present	Affiliate Faculty, Department of Biology	Northeastern University
2017 - Present	Affiliate Faculty, Department of Bioengineering	Northeastern University
2020 - Present	Associate Prof. (Tenured), Dept. of Physical Therapy, Movement and Rehabilitation Sciences	Northeastern University

RESEARCH, SCHOLARSHIP & CREATIVE ACTIVITY

PUBLICATIONS

Refereed Journal Articles

†postdoctoral trainee; ††graduate trainee; †††undergraduate trainee; ♀female trainee; *corresponding and/or senior author; IF = impact factor

1. †Koh MH, Yen SC, Leung LY, Gans S, Sullivan K, Adibnia Y, Pavel M, and ***Hasson CJ.** (submitted). A cyberphysical rehabilitation approach for locomotor training with robotically augmented human trainers. *Journal of NeuroEngineering and Rehabilitation*.

2. Yen SC, Qian S, Folmar E, **Hasson CJ**, and Chou CA. (submitted). Recurrence quantification analysis of ankle kinematics during gait in individuals with chronic ankle instability. *Gait & Posture*.

3. *__Hasson CJ__ and †††♀Jalili PF. (2019). Visual dynamics cues in learning complex physical interactions. *Scientific Reports,* 9(1):13496. *[IF =4.525]*

4. *__Hasson CJ__ and ††♀Goodman SE. (2019). Learning to shape virtual patient locomotor patterns: Internal representations adapt to exploit interactive dynamics. *Journal of Neurophysiology*, 121(1):321-335. *[IF = 2.887; Ranked 12th out of all physiology journals in Google Scholar; in top 20 for journals in neuroscience and behavior via Times Higher Education]*

5. *__Hasson CJ,__ Kent JA, and Caldwell GE. (2018). Magnetic resonance images and measurements of the volume, proportion, and longitudinal distribution of contractile and non-contractile tissue in the dorsi- and plantarflexor muscles of healthy young and older adults. *BMC Research Notes,* 11, 910. *[IF = 1.6]*

6. *__Hasson CJ.__ (2018). An interactive simulator for imposing virtual musculoskeletal dynamics. *IEEE Transactions on Biomedical Engineering*, 65(3), 539-549. *[IF=3.58; Acceptance rate=20%; Ranked 3rd among biomedical technology journals (H5-index)]*

7. ††♀Goodman SE and *__Hasson CJ.__ (*2017*). Elucidating sensorimotor control principles with myoelectric musculoskeletal models. *Frontiers in Human Neuroscience*, 11:531. *[IF=3.63; 1st most-cited journal in Psychology and 8th most cited in Neurosciences]*

8. *__Hasson CJ__, Zhang Z, Abe MO, and Sternad D. (2016). Neuromotor noise is malleable by amplifying perceived errors. *PLoS Computational Biology*, 12(8):e1005044. *[IF=4.59; Ranked 2nd among journals in bioinformatics and computational biology (H5-index)]*

9. *__Hasson CJ__, †††♀Gelina O, and †††Woo G. (2016). Neural control adaptation to motor noise manipulation. *Frontiers in Human Neuroscience*, 10:59. *[IF=3.63]*

10. *__Hasson CJ__ and †††♀Manczurowsky J. (2015). Effects of kinematic vibrotactile feedback on learning to control a virtual prosthetic arm. *Journal of NeuroEngineering and Rehabilitation, 12(1):31. [IF=3.52; Ranked 3rd among journals in rehabilitation therapy (H5-index)]*

11. *__Hasson CJ__, †††♀Manczurowsky J, and Yen SC. (2015). A reinforcement learning approach to gait training improves retention. *Frontiers in Human Neuroscience*, 9:459. *[IF=3.63]*

12. *__Hasson CJ__. (2014). Neural representation of muscle dynamics in voluntary movement control. *Experimental Brain Research,* 232(7):2105-2119. *[IF=2.47]*

13. Nasseroleslami B, **Hasson CJ**, and Sternad D. (2014). Rhythmic manipulation of objects with complex dynamics: predictability over chaos. *PLoS Computational Biology*, 10(10): e1003900. *[IF=4.59]*

14. *__Hasson CJ__, Van Emmerik REA, and Caldwell GE. (2014). Balance decrements are associated with age-related muscle property changes. *Journal of Applied Biomechanics*, 30(4):555-562. *[IF=1.31]*

15. *__Hasson CJ__ and Sternad D. (2014). Safety margins in older adults increase with improved control of a dynamic object. *Frontiers in Aging Neuroscience*, 6:158. *[IF=4.72]*

16. *__Hasson CJ__, Shen T, Sternad D. (2012). Energy margins in dynamic object manipulation. *Journal of Neurophysiology*, 108(5):1349:1365. *[IF=3.30]]*

17. *__Hasson CJ__ and Caldwell GE. (2012). Effects of age on mechanical properties of dorsiflexor and plantarflexor muscles. *Annals of Biomedical Engineering*, 40(5):1088-1101. *[IF=3.22; Acceptance rate=25%]*

18. *__Hasson CJ__, Kent-Braun JA, and Caldwell GE. (2011). Contractile and non-contractile tissue volume and distribution in ankle muscles of young and older adults. *Journal of Biomechanics*, 44(12):2299-2306. *[IF=2.66]*

19. *__Hasson CJ__, Miller RH, and Caldwell GE. (2011). Contractile and elastic ankle joint muscular properties in young and older adults. *PLoS ONE*, 6(1): e15953.

20. __Hasson CJ__ and Heffernan KS. (2011). Dynamic factor analysis and the exercise sciences. *Pediatric Exercise Science*, 23(1):17-22.

21. __Hasson CJ__, Caldwell GE, and Van Emmerik REA. (2009). Scaling of plantarflexor muscle activity and postural time-to-contact in response to upper-body perturbations in young and older adults. *Experimental Brain Research*, 196(3):1432-1106.

22. __Hasson CJ__, Caldwell GE, and Van Emmerik REA. (2008). Changes in muscle and joint coordination in learning to direct forces. *Human Movement Science*, 27(4):590-609.

23. __Hasson CJ__, Van Emmerik REA, and Caldwell GE. (2008). Predicting dynamic postural instability using center of mass time-to-contact information. *Journal of Biomechanics,* 41(10):2121-2129.

24. __Hasson CJ__, Van Emmerik REA, Caldwell GE, Haddad JM, Gagnon JL, and Hamill J. (2008). Influence of embedding parameters and noise in center of pressure recurrence quantification analysis. *Gait & Posture,* 27(3):416-422.

25. Haddad JM, Gagnon JL, __Hasson CJ__, van Emmerik REA, and Hamill J. (2006). Evaluation of time-to-contact measures for assessing postural stability. *Journal of Applied Biomechanics*, 22(2):155-161.

26. __Hasson CJ__, Dugan EL, Doyle TLA, Humphries B, and Newton RU. (2004). Neuromechanical strategies employed to increase jump height during the initiation of the squat jump. *Journal of Electromyography and Kinesiology,* 14:515-521.

27. Dugan EL, Doyle TLA, Humphries B, __Hasson CJ__, and Newton RU. (2004). Determining the optimal load for jump squats: A review of methods and calculations. *Journal of Strength and Conditioning Research*, 18(3): 668-674.

Refereed Conference Full Papers

1. Franchi G, Viereck U, Platt R, Yen SC, and **Hasson, CJ.** (2015). An arm for a leg: Adapting a robotic arm for gait rehabilitation. In: *Engineering in Medicine and Biology Society (EMBC); 37th Annual International Conference of the IEEE* (pp. 3929-3932).

2. **Hasson CJ.** (2014). Influence of actuator properties on learning to control a virtual limb. *40th Annual Northeast Bioengineering Conference*, Boston MA.

3. __Hasson CJ__, Hogan N, and Sternad D. (2012). Human control of dynamically complex objects. *Fourth IEEE RAS/EMBS International Conference on Biomedical Robotics and Biomechatronics (Organized Session on Computational Principles of Motor Control)*. June 24-28, 2012 Roma, Italy.

Refereed Book Chapters

1. Sternad D and **Hasson CJ.** (2016). Predictability and robustness in the manipulation of dynamically complex objects. In: *Progress in Motor Control: Theories and Translations* (vol. 957, Advances in Experimental Medicine and Biology, pp. 55-77). Editors: Laczko J. and Latash ML., ISBN: 978-3-319-47313-0 (eBook); 978-3-319-47312-3 (hardcover).

Refereed Conference Abstracts

1. **Hasson CJ**, Koh MH, Yen SC, Gans S, Sullivan K, Badadhe M, Pavel MP, and Leung LY. Robotic Augmentation of Human Trainers to Investigate the Role of Trainer Manipulative Variability on Patient Learning. *44th Annual Meeting of the American Society of Biomechanics*, Atlanta, Georgia, August 4-7.
2. Koh HM, Yen SC, Leung LY, Gans S, Sullivan K, Adibnia Y, Pavel M, and **Hasson CJ**. (2020). Cyberphysical Rehabilitation for Enhanced Neuromotor Recovery after Stroke. *Translational Research Day 2020: Broadly-Engaged Team Science*, Tufts Medical Center, Boston, MA, March 6.
3. Koh MH, Yen SC, Leung LY, Gans S, Adibnia Y, Pavel M, and **Hasson CJ**. (2019). Minimizing sensorimotor encumbrances for human facilitators in locomotor rehabilitation. *Society for Neuroscience 49th Annual Meeting*, Chicago, October 19-23.
4. Koh MH, Yen SC, Pavel M, and **Hasson CJ**. (2019). Robotic locomotor training with Heuristic and deterministic assistance. *Joint ISB XXVII Congress of the International Society of Biomechanics and 43rd Annual Meeting of the American Society of Biomechanics*, Calgary, Canada, July 31 – Aug. 4.
5. Jalili, PF, Goodman SE, **Hasson CJ.** (2018). Value of segmental kinematic information for learning external locomotor dynamics. *Society for Neuroscience 48th Annual Meeting*, San Diego, Nov. 3-7.
6. Goodman SE and **Hasson CJ.** (2018). Internal representation of external patient dynamics during locomotor rehabilitation. *American Society of Biomechanics 42nd Annual Meeting*. August 8-11, Rochester, Minnesota.
7. Lunardini F, Sternad D, and **Hasson CJ**. (2017). Probing motor priorities with electrical manipulation of neural noise scaling. *Society for Neuroscience 47th Annual Meeting*, Washington D.C., October 11-15.
8. **Hasson CJ** and Goodman SG. (2017). Adaptation to artificial spasticity induced by a neuromuscular simulator. *Neural Control of Movement 27th Annual Conference*, Dublin, Ireland SC, May 2-5.
9. Maurice P, Ye F, **Hasson CJ**, and Sternad D. (2016). Predictability and effort in complex object control. *Annual Conference of the Society for Neuroscience*, San Diego, Nov. 12-16.
10. **Hasson CJ.** (2016). Replacing the musculoskeletal dynamics of the human arm by means of trickery. *Biomechanics and Neural Control of Movement 2016 Meeting,* Mt. Sterling, OH, June 12-17-.
11. **Hasson CJ**, Gelina O, and Woo G. (2015). Adaptation to neural noise manipulation in voluntary movement control. *Society for Neuroscience 45th Annual Meeting*, Chicago IL, October 17-21.

12. **Hasson CJ** and Yen S. (2015). Gait training through reinforcement. *Neural Control of Movement 25th Annual Conference*, Charleston SC, April 20-24.
13. Park S, **Hasson CJ** and Caldwell GE. (2015). Subject-specific adaptations in muscle synergies while learning to direct pedal forces. *Neural Control of Movement 25th Annual Conference*, Charleston SC, April 20-24.
14. Zhang Z, **Hasson CJ**, Abe MO, and Sternad D. (2015). Error amplification improves performance by reducing motor noise. *Neural Control of Movement 25th Annual Conference*, Charleston SC, April 20-24.
15. **Hasson CJ**, Manczurowsky J, and Rogazzo M (2014). Effect of vibrotactile kinematic feedback on learning to control a myoelectrically controlled virtual arm. *Society for Neuroscience 44th Annual Meeting*, Washington D.C., November 15-19.
16. Hoyt C, Wang S, **Hasson CJ**, and Yen S (2014). A reinforcement approach to gait training. *Society for Neuroscience 44th Annual Meeting*, Washington D.C., November 15-19.
17. **Hasson CJ**, Wang S, Hoyt S, and Yen S. (2014). Effectiveness of a reinforcement learning approach for gait training. *7th World Congress of Biomechanics*, Boston MA.
18. Caldwell GE, **Hasson CJ**, and Miller RH (2014). Age-related changes in muscle mechanical properties. *7th World Congress of Biomechanics*, Boston MA.
19. Park S, **Hasson CJ**, and Caldwell GE (2014). Adaptation of muscle synergies while learning to direct pedal forces. *7th World Congress of Biomechanics*, Boston MA.
20. **Hasson CJ** (2013). Does the nervous system account for muscle dynamics in voluntary movement control? *Society for Neuroscience 43nd Annual Meeting*, San Diego, CA, November 9-13 [Abstract No. 471.03].
21. Sternad D and **Hasson CJ** (2013). Older adults learn to increase safety margins in dynamic object manipulation. *Society for Neuroscience 43nd Annual Meeting*, San Diego, CA, November 9-13 [Abstract No. 471.28].
22. Nasseroleslami B, **Hasson CJ,** Sternad D (2013). Chaotic object behavior as a source of variability in a discrete manipulation task. *Society for Neuroscience 43nd Annual Meeting*, San Diego, CA, November 9-13 [Abstract No. 650.21].
23. **Hasson CJ**, Abe MO, Zhang Z, Sternad D (2013). Error amplification improves performance by reducing motor noise. *Neural Control of Movement 23rd Annual Conference*, San Juan, Puerto Rico, April 26-30.
24. Nasseroleslami B, **Hasson CJ**, and Sternad D (2013). Dynamic predictability in rhythmic object manipulation. *Neural Control of Movement 23rd Annual Conference*, San Juan, Puerto Rico, April 26-30.
25. **Hasson CJ**, Abe MO, Sternad D (2012). How does error amplification improve task performance? *Satellite Workshop on Computational Neuroscience, Society for Neuroscience 42nd Annual Meeting*, New Orleans, LA, October 13-17.
26. **Hasson CJ**, Nasseroleslami B, Krakauer, JW and Sternad D (2012). Comparing haptic and visual feedback control of an object with complex dynamics. *Society for Neuroscience 42nd Annual Meeting*, New Orleans, LA, October 13-17 [Abstract No. 581.10].

27. Sternad D, Abe MO, and **Hasson CJ** (2012). Deterministic and stochastic error amplification and skilled performance. *Society for Neuroscience 42nd Annual Meeting*, New Orleans, LA, October 13-17 [Abstract No. 88.18].
28. Nasseroleslami B, **Hasson CJ**, and Sternad D (2012). Dynamic predictability in the manipulation of complex objects. *Society for Neuroscience 42nd Annual Meeting*, New Orleans, LA, October 13-17 [Abstract No. 791.21].
29. **Hasson CJ** and Sternad D (2012). Safety margins and variability in a redundant object manipulation task. *Neural Control of Movement 22nd Annual Conference*, Venice, Italy, April 23-29.
30. **Hasson CJ** and Sternad D (2012). Variability, safety margins, and redundancy in a timing task. *New England Sequencing and Timing Annual Meeting*, Amherst, MA.
31. **Hasson CJ** and Sternad D (2011). Controlling an oscillatory system near its resonant frequency. *Society for Neuroscience 41st Annual Meeting*, Washington, DC [Abstract No. 82.05].
32. **Hasson CJ**, Shen T, Sternad D (2011). Seeking safe strategies for transporting complex objects. *Satellite Workshop on Computational Neuroscience, Society for Neuroscience 41st Annual Meeting*, Washington, DC, November 11.
33. **Hasson CJ**, Shen T, Sternad D (2011). Continuous energy margins and end-state accuracy in the control of objects with complex dynamics. *Progress in Motor Control VII*, Cincinnati, Ohio, July 21-23.
34. **Hasson CJ**, Shen T, Sternad D (2011). Learning to control dynamic objects with time-varying energy constraints. *Neural Control of Movement 21st Annual Conference*, San Juan, Puerto Rico, April 26-May 1.
35. **Hasson CJ**, Shen T, Abe MO, and Sternad D. (2010). Taking advantage of a "free lunch" when transporting dynamic objects. *Society for Neuroscience 40th Annual Meeting*, San Diego, CA [Abstract No. 493.3]
36. Sternad D, **Hasson CJ**, Abe MO, and Huang X. (2010). Enhanced motor adaptation with stochastic error amplification. *Society for Neuroscience 40th Annual Meeting*, San Diego, CA [Abstract No. 292.10].
37. **Hasson CJ**, van Emmerik REA, and Caldwell GE. (2010). A musculoskeletal model of postural control: simulated aging of muscle mechanical properties. *The American Society of Biomechanics Annual Meeting*, Brown University, Providence, Rhode Island, August 18-21.
38. LaBoda MD, Gidley AD, **Hasson CJ**, Caldwell GE, and Umberger BR. (2010). Subject-specific, group-mean, and generic musculoskeletal models for predicting isometric ankle dorsiflexion torque. *The American Society of Biomechanics Annual Meeting*, Brown University, Providence, Rhode Island, August 18-21.
39. **Hasson CJ**, Van Emmerik REA, and Caldwell GE. (2009). Structural changes in muscle activity patterns while learning to direct pedal forces. *Journal of Sport & Exercise Psychology*, 31 (Supplement): S67. [*North American Society for the Psychology of Sport and Physical Activity Annual Conference*, Austin, Texas, June 11-13].

40. **Hasson CJ**, Miller, RH, Foulis SA, Kent-Braun J, and Caldwell GE. (2009). Application of musculoskeletal models to aging: obtaining subject-specific measures of muscle volume using MRI. *The American Society of Biomechanics Annual Meeting,* State College, Pennsylvania, August 26-29.

41. **Hasson CJ**, Caldwell GE, and Van Emmerik REA. (2008). Using time-to-contact to predict stepping behavior after postural perturbations in older adults. *Journal of Sport & Exercise Psychology*, 30 (Supplement): S88. [*North American Society for the Psychology of Sport and Physical Activity Annual Conference*, Niagara Falls, Ontario, June 5-7].

42. **Hasson CJ**, Van Emmerik REA, and Caldwell GE. (2008). Age-related adaptability of postural control as assessed by recurrence quantification analysis. *Journal of Sport & Exercise Psychology*, 30 (Supplement): S87. [*North American Society for the Psychology of Sport and Physical Activity Annual Conference*, Niagara Falls, Ontario, June 5-7].

43. **Hasson CJ**, Miller RH, and Caldwell GE. (2008). Determination of subject-specific mechanical properties of individual ankle joint muscles. *Fourth North American Congress on Biomechanics*, Ann Arbor, Michigan, Aug. 5-9.

44. Miller RH, **Hasson CJ**, and Caldwell GE. (2008). Subject-specific plantarflexor muscle model parameters in healthy active young adults. *Fourth North American Congress on Biomechanics*, Ann Arbor, Michigan, August 5-9.

45. Rosado L, **Hasson CJ**, Van Emmerik REA, and Caldwell GE. (2008). Age-related changes in postural muscle responses with increasing perturbations to the upper-back. *Fourth North American Congress on Biomechanics*, Ann Arbor, Michigan, August 5-9.

46. **Hasson CJ**, Van Emmerik REA, and Caldwell GE. (2008). Adaptations in mono- and bi-articular muscle coordination with motor learning. *National Institute of Biomedical Imaging and BioEngineering (NIBIB) Biennial Training Grantees Meeting*, Bethesda, Maryland, June 19-20.

47. Gariépy C, **Hasson CJ**, Van Emmerik REA, and Caldwell GE. (2008). Age-related decrease in degrees of freedom in postural control during quiet stance. *16th Congress of the European Society of Biomechanics*, Lucerne, Switzerland, July 6-9.

48. **Hasson CJ**, Van Emmerik REA, Caldwell GE, McDermott WJ, and Hamill J. (2007). Recurrence quantification analysis of upright stance with postural and respiratory challenges. Motor Control, 11 (Supplement): S155. [*Progress in Motor Control VI*, Santos, Brazil, August 9-12].

49. **Hasson CJ**, Caldwell GE, Van Emmerik REA, and Gariepy C. (2007). Postural corrections in response to increasing pendulum perturbations. *Motor Control*, 11 (Supplement): S165. [*Progress in Motor Control VI*, Santos, Brazil, August 9-12].

50. **Hasson CJ**, Gariépy C, Caldwell GE, Van Emmerik REA, and McDermott WJ. (2007). Critical time-to-contact after postural perturbations. *The American Society of Biomechanics 31st Meeting,* Stanford, California, August 22-25.

51. TenBroek TM, Van Emmerik REA, **Hasson CJ**, and Hamill J. (2007). Lyapunov exponent estimation for human gait acceleration signals. *International Society of Biomechanics XXIth Congress*, Taipei, Taiwan, July 1-5.

52. **Hasson CJ**, Van Emmerik REA, and Caldwell GE. (2006). Alterations in mono- and biarticular muscle activity patterns after learning to direct pedal forces. *The American Society of Biomechanics 30th Meeting,* Blacksburg, Virginia, September 6-9.

53. **Hasson CJ**, Van Emmerik REA, and Caldwell GE. (2006). Changes in pedal and joint kinetics after learning to direct pedal forces. *The American Society of Biomechanics 30th Meeting,* Blacksburg, Virginia, September 6-9.

54. **Hasson CJ**, Van Emmerik REA, and Caldwell GE. (2006). Changes in force directing ability after training to direct pedal forces. *The 14th Biennial Conference for the Canadian Society for Biomechanics*. Waterloo, Ontario, August 16-19.

55. Haddad JM, Gagnon J, **Hasson CJ**, Van Emmerik REA, and Hamill H. (2006). The use of time-to-contact measures in assessing postural stability. *5th World Congress of Biomechanics.* Munich, Germany, July 29 - Aug. 4.

56. **Hasson CJ**, Gagnon J, van Emmerik REA, and Caldwell GE. (2005). A musculoskeletal model of postural control at the ankle. *International Society of Biomechanics XXth Congress* & American Society of Biomechanics 29th Meeting*,* Cleveland, Ohio, USA, July 31-Aug. 5.

57. **Hasson CJ**, Merrell RE, van Emmerik REA, and Caldwell GE. (2004). Changes in mono- and biarticular muscle activation patterns while learning to direct pedal forces. *13th Biennial Conference for the Canadian Society for Biomechanics*. Halifax, Nova Scotia, August 4-7.

58. **Hasson CJ**, Merrell RE, van Emmerik REA, and Caldwell GE. (2004). Do mono- and biarticular muscles function differently while learning to direct pedal forces? *Student Poster Session*, University of Massachusetts, Amherst, Massachusetts, March 21.

59. **Hasson CJ**, Swanson SC, and Caldwell GE. (2004). Three-dimensional joint kinematics and ground reaction forces during repeated single-leg vertical jumps in female high school athletes. *National Strength and Conditioning Association Conference*, Minneapolis, Minnesota, July 14-17.

60. **Hasson CJ**, Dugan EL, Doyle TLA, Humphries B, and Newton RU. (2003). Neural and mechanical influences on the initiation of the squat jump. *International Society of Biomechanics XIXth Congress,* Dunedin, New Zealand. July 6-1.

CREATIVE ACTIVITY

Patent Applications / Invention Disclosures

1. **Hasson CJ** and Goodman SG (2018). Interactive Locomotor Simulator (ILS). Northeastern invention disclosure # INV-18058.

2. **Hasson CJ**, Franchi, G, Yen S-C, Platt R (Date of Filing: September 30, 2014). A system for attachment/detachment of a robotic arm to the human body. US Provisional Application No. 62/057,959.

Invited Presentations

1. Hasson CJ. "Uncommon approaches to improving dexterous motor function." *Faculty Spotlight Speaker; Northeastern University Parent and Family Weekend*, Boston MA. October 27, 2017.

2. Hasson CJ. “Improving dexterous motor function by reducing neuromotor noise.” *Tufts CTSI - NEU Joint Research Summit: Exercise, Aging, and Cognitive Function*, Boston MA. September 15, 2017.
3. Hasson CJ. “Virtual aging of muscle dynamics and motor function.” *Boston Action Club Symposium*, Boston MA. April 21, 2016.
4. Hasson CJ. “Careful control of dynamic objects.” *New England Manipulation Symposium*, Boston MA. May 23, 2015.
5. Hasson CJ. “Influence of actuator properties on learning to control a virtual limb.” *40th Annual Northeast Bioengineering Conference*, Boston MA. April 27, 2014.
6. Hasson CJ. “The joys of research.” Northeastern University, Stetson West Residence Hall. Sept. 16, 2012.
7. Hasson CJ. “Control of dynamically complex objects.” The Newman Laboratory for Biomechanics and Human Rehabilitation, MIT. Sept. 15, 2012.
8. Hasson CJ. “Mechanical and neural influences on movement control in young and older adults.” Department of Kinesiology, University of Maryland, College Park, Maryland. March 8, 2012.
9. Hasson CJ. “Mechanical and neural influences on movement control in young and older adults.” Department of Human Physiology, University of Oregon. March 3, 2012.
10. Hasson CJ. “Mechanical and neural influences on movement control in young and older adults.” Department of Physical Therapy, Northeastern University, Boston, Massachusetts. Jan. 24, 2012.
11. Hasson CJ. “Seeking safe strategies for transporting complex objects.” Egan Research Center, Northeastern University. Lab Advance of the Action Lab and Newman Lab. Aug. 25, 2011.
12. Hasson CJ. “Understanding human movement from the ground up: integrating biomechanics, sensorimotor control, and motor learning.” Department of Nutrition and Health Sciences, University of Nebraska-Lincoln. April 19, 2011.
13. Hasson CJ. “Error tolerant strategies for flexible object control.” The Newman Laboratory for Biomechanics and Human Rehabilitation, MIT. July 12, 2010.
14. Hasson CJ. “Research adventures in biomechanics and sensorimotor control: From the 'car' to the 'driver'.” Biomedical Engineering Club for Undergraduates, Northeastern University, Massachusetts. April 1, 2010.
15. Hasson CJ. “An ‘upwards' journey: from directing forces to predicting postural stability.” Sensorimotor Control Group, University of Cambridge, England. Oct. 20, 2009.
16. Hasson CJ. “Funding your doctoral education: A perspective from below.” Departmental Graduate Seminar, University of Massachusetts Amherst, Massachusetts. Nov. 17, 2008.
17. Hasson CJ. “Muscular properties and balance control in older adults.” Biological Sciences Talent Advancement Program, University of Massachusetts Amherst, MA. March 31, 2008.

GRANTS

External

Funded

1. MathWorks
   Title*: A Simulink-Based Myoelectrically-Driven Musculoskeletal Model for Experiential Learning and Research*
   PI: Christopher J. Hasson
   Role: PI (Principal Investigator)
   Direct: $24,804 | Duration: 5/1/20 - 4/30/21

2. NIH (National Center for Advancing Translational Sciences; Tufts CTSI)
   Title: *Cyberphysical Therapy for Enhanced Neuromotor Recovery in Stroke Survivors*
   PI: Christopher J. Hasson
   Role: Principal Investigator
   UL1TR002544 | Total Cost: $45,000 (direct costs) | Duration: 5/1/18 - 4/30/19

3. NIH R01 (Research Project Grant)
   Title: *Predictability in Complex Object Control*
   PI: Dagmar Sternad
   Role: Co-Investigator
   1R01HD087089-01 | Direct: $1,343,325; Total: $1,835,863 | Duration: 10/1/15 - 9/30/2020

4. NIH Loan Repayment Program
   Title: *Robust Control of Complex Objects in Older Adults*
   PI: Christopher J. Hasson
   $26,000 (total applied to student loan) | Duration: 07/01/12 - 06/30/14

5. NIH Ruth L. Kirschstein National Research Service Award for Individual Postdoctoral Fellows
   Title: *Learning to Control Flexible Objects Using Error-Tolerant Movement Strategies*
   PI: Christopher J. Hasson
   1F32AR061238 | Direct Cost: $98,000 | Duration: 1/17/11 - 8/31/12

6. NIH Ruth L. Kirschstein National Research Service Award for Individual Predoctoral Fellows
   Title: *Roles of Mono- and Biarticular Muscles in Motor Learning*
   PI: Christopher J. Hasson
   1F31EB005073 | Direct Cost: $51,000 | Duration: 5/18/07 - 5/17/09

Pending

3. NIH R21 (NIBIB Trailblazer Award)
   Title: A Physically Interactive Telerehabilitation Framework for Motor Learning at Home
   PI: Christopher J. Hasson
   Role: Principal Investigator
   Direct: $400,000; Total: $628,000 | Duration: 4/1/21 - 3/31/23

4. NSF SCH:INT (National Science Foundation; Submitted 12/11/19)
   Title*: Technology-Based Assessment of Mobility and Cognition at Home for patients with ALS*

PI: Misha Pavel
Role: Co-PI
Direct: $383,868; Total: $591,495 | Duration: 9/1/20 - 8/31/23

5. American Heart Association Innovative Project Award (LOI: Submitted 10/22/19)
   Title: *Personalized Robotic Therapists for Improved Stroke Survivor Rehabilitation*
   PI: Christopher J. Hasson
   Direct: $200,000 | Total: $220,000 | Duration: 7/1/20-6/30/22

6. NIH R01 (Research Project Grant; Submitted 6/4/19)
   Title: *Cyberphysical Augmentation of Therapist Sensorimotor Capabilities for Enhanced Neuromotor Recovery in Stroke Survivors*
   PI: Christopher J. Hasson
   Role: Principal Investigator
   1R01NS116022-01 | Direct: $2,248,869; Total: $3,098,545 | Duration: 4/1/20 - 3/31/25

7. NIH R01 (Research Project Grant; Submitted 2/5/19)
   Title: *Neuromuscular Interactions and Motor Function in Aging*
   PI: Christopher J. Hasson
   Role: Principal Investigator
   1R01AG065286-01 | Direct: $1,592,474; Total: $2,191,195 | Duration: 9/1/19 - 8/31/23

Not Funded

1. American Heart Association Innovative Project Award (LOI: Submitted 10/29/18)
   Title: *Leveraging Nudge Theory and Robotics to Accelerate Neuromotor Recovery in Stroke Survivors*
   PI: Christopher J. Hasson
   Direct: $200,000 | Total: $220,000 | Duration: 7/1/19-6/30/21

2. NIH R01 (Research Project Grant; Resubmission 7/3/18)
   Title: *Optimizing Interactive Neuromuscular Dynamics for Improved Dexterous Motor Function in Older Adults*
   PI: Christopher J. Hasson
   Role: Principal Investigator
   1R01AG059680-01| Direct: $ 1,919,231; Total: $ 2,529,250 | Duration: 4/1/19 - 3/31/24

3. Michael J. Fox Foundation: Non-Pharmacological Interventions for Gait and Balance Disturbances (Pre-Proposal; Submitted: 5/30/18)
   Title: *Improving Gait Training Outcomes in Patients with Parkinson's Disease using Cyberphysical Rehabilitation*
   PI: Christopher J. Hasson
   Role: Principal Investigator
   Total Cost: $500,000 | Duration: 11/1/18 - 10/31/20

4. NSF CISE Research Infrastructure (CRI; Submitted: 1/11/18)
   Title: CRI: II-New: *Development of a Testbed for the Convergence of Human Augmentation, Movement, Biology and Experimental Robotics (CHAMBER)*
   PI: Taskin Padir
   Role: Co-Investigator
   NSF# 1823312 | Direct: $785,550 | Total: $1,000,000 | Duration: 9/1/18 - 8/31/21

5. NIH R01 (Research Project Grant; New Application Submitted 10/5/17)
   Title: *Optimizing Interactive Neuromuscular Dynamics for Improved Dexterous Motor Function in Older Adults*
   PI: Christopher J. Hasson
   Role: Principal Investigator
   1R01AG059680-01 | Direct: $1,258,331 | Total: $1,744,029 | Duration: 7/1/18 - 6/30/23

6. NSF Faculty Early Career Development Program (CAREER) (Submitted: 7/20/17)
   Title: *CAREER: Optimizing Interactive Neuromuscular Dynamics for Improved Motor Function*
   PI: Christopher J. Hasson
   Role: Principal Investigator
   Total Cost: $503,255 | Duration: 1/1/18 -12/31/22

7. DOD Neuromuscular Injuries Rehabilitation Research Award (Submitted: 11/16/16)
   ***Proposal was given the highest overall rating of "**Outstanding**".*
   Title: *Cyberphysical Therapy for Enhanced Neuromotor Recovery in Veterans*
   PI: Christopher J. Hasson
   Role: Principal Investigator
   DM170360 | Total Cost: $600,000 | Duration: 1/1/17 -12/31/19

8. NIH R01 (Research Project Grant; New Application Submitted 6/6/16)
   Title: *Tuning Neuromuscular Dynamics for Healthy Aging*
   PI: Christopher J. Hasson
   Role: Principal Investigator
   1R01AG055569-01 | Direct: $1,906,566; Total: $2,522,281 | Duration: 4/1/17 - 3/31/22

9. NSF: Cyber-Physical Systems (Submitted: 6/7/16)
   Title: Supplemental Funding – CPS: Synergy: *Home-based Rehabilitation with Fatigue Awareness from Quantitative Visual and Muscle Sensing*
   PI: Yun Fu
   Role: Co-Investigator
   Direct Cost: $651,676.00 | Total Cost: $1,000,000 | Duration: 01/01/2017 – 12/31/2020

10. NIH R01 (Research Project Grant; Resubmission Application; Submitted 11/4/15)
    Title: *Virtual Aging of Muscle Dynamics and Motor Function*
    PI: Christopher J. Hasson
    Role: Principal Investigator
    1R01AG051627-01A1 | Direct: $1,858,248; Total: $2,439,387 | Duration: 9/1/16 - 8/31/21

11. NSF Smart and Connected Health (Submitted: 10/13/15)
    Title: *Enhancing Motor Learning with a CAT (Computer-Aided Therapist)*
    PI: Christopher J. Hasson; Co-PIs: Sheng-Che Yen; Misha Pavel; Robert Platt
    Grant ID: #1602234 | Direct: $490,395 | Total: $757,661 | Duration: 5/1/2016 - 4/30/2019

12. NIH R03 (Small Research Grant Program; Submitted: 6/12/15)
    Title: *A Reinforcement Learning Approach to Gait Rehabilitation*
    PIs: Christopher J. Hasson (Contact); Sheng-Che Yen (Co-PI)
    Role: Contact Principle Investigator (Multi-PI)

1R03HD087518-01 | Direct: $99,712 | Total: $147,816 | Duration: 4/1/16 - 3/31/18

13. NIH R01 (Research Project Grant; New Application; Submitted: 2/13/15)
    Title: *Virtual Aging of Muscle Dynamics and Motor Function*
    PI: Christopher J. Hasson
    Role: Principal Investigator
    1R01AG051627-01 | Direct: $1,373,150 | Total: $1,808,541 | Duration: 9/1/15 - 8/31/20

14. American Federation for Aging Research (Submitted: 3/3/15)
    Title: *Virtual Aging of Muscle Dynamics and Motor Function*
    PI: Christopher J. Hasson
    Duration: 2015-2017

15. NIH SBIR (Exploratory/Developmental Research Grant; Submitted: 11/13/14)
    Title: *Accelerating Mobility Recovery Following Stroke with iDART: an interactive Daily Activity Robotic Therapist*
    PIs: Christopher J. Hasson, Ariel Dowling, and Sheng-Che Yen
    Role: Contact Principal Investigator (Multi-PI)
    1R43HD085333-01 | Direct: $30,000 | Total: $150,000 | Duration: 8/1/15 - 1/31/16

16. NIH R01 (Research Project Grant; Revision; Submitted: 7/5/14; **19th Percentile**)
    Title: *Virtual Aging of Muscle Dynamics and Motor Function*
    PI: Christopher J. Hasson
    Role: Principal Investigator
    1R01AG048116-01A1 | Direct: $1,370,256 | Total: $1,807,161 | Duration: 4/1/15 - 3/31/20

17. NIH R21 (Exploratory/Developmental Research Grant; Submitted: 6/16/14)
    Title: *A New Reinforcement Learning-Based Approach to Robotic Gait Rehabilitation*
    PIs: Christopher J. Hasson (Contact); Sheng-Che Yen
    R21HD083923-01 | Direct: $274,008 | Total: $403,803 | Duration: 7/1/15 - 6/30/17

18. NIH F32 (NRSA for Individual Postdoctoral Fellows; Submitted: 12/09/13)
    Title: *The Dynamics of Visually Guided Walking.*
    PI: John Matthis
    Role: Co-Mentor
    1F32AG047000 | Direct Cost: $149,000 | Duration: 9/1/14 - 8/31/17

19. NIH R01 (Research Project Grant; Submitted: 10/7/13; 38th Percentile)
    Title: *Virtual Aging of Muscle Dynamics and Motor Function*
    PI: Christopher J. Hasson
    1R01AG048116-01 | Direct: $813,104 | Total: $1,245,345 | Duration: 7/1/14 - 6/30/18

20. American Federation for Aging Research (Submitted: 12/17/12)
    Title: *Virtual Aging: An Original Approach to Understanding How Altered Muscle Dynamics Affects Movement Control in Older Adults*
    PI: Christopher J. Hasson
    Direct: $92,593 | Duration: 2013-2014

21. National Science Foundation (National Robotics Initiative; Submitted: 12/11/12)
    Title: *Robotic Reinforcement: A New Approach for Robotic Gait Rehabilitation After Stroke*
    PI: Christopher J. Hasson, Co-PI: Sheng-Che Yen

Direct: $1,070,362 | Total: $1,664,413 | Duration: 10/01/13 - 9/30/18

Internal

Funded

1. Northeastern Research Vision 2025
   Title: *The Institute for Cognizant Robotics*
   PI: Taskin Padir
   Role: Team Member
   Total Cost: $10,000,000 | Duration: 2018 - 2023
2. Northeastern University: Mentored TIER 1 Seed Grant (Submitted: 1/22/18; one of 5 awarded university-wide)
   Title: *Cyberphysical Therapy for Enhanced Neuromotor Recovery*
   PI: Christopher J. Hasson
   Role: Principal Investigator
   Direct: $47,837 | Duration: 7/1/18 - 9/30/19
3. Northeastern University Office of Undergraduate Research & Fellowships Honors Conference Travel Fund Award (Fall 2018)
   Title: *Value of segmental kinematic information for learning external locomotor dynamics*
   Student Recipient: Paneed Jalili
   Faculty Mentor: Christopher J. Hasson
   Direct Cost: $480
4. Undergraduate Early Research/Creative Endeavors Grant; Fall 2015 - Spring 2016 ($1500)
5. Northeastern University: TIER 1 Seed Grant/Proof of Concept (Submitted: 2/3/14)
   Title: *A New Paradigm for Robotic Gait Rehabilitation Based on Reinforcement Learning*
   PI: Christopher J. Hasson (Co-PIs: Sheng-Che Yen, and Robert Platt Jr.)
   Direct Cost: $50,000 | Duration: 7/1/14 - 6/30/15
6. Bouvé College of Health Sciences Award to Support Co-Op Student
   PI: Christopher J. Hasson
   Direct Cost: $6,000 | Duration: January – June 2015
7. Provost Award for Undergraduate Student Research
   Title: *Improving Control of a Virtual Arm with Vibrotactile Feedback*
   Student Recipient: Meredith Rogazzo
   Faculty Mentor: Christopher J. Hasson
   Direct Cost: $1,000 | Duration: 2013-2014
8. Provost Award for Undergraduate Student Research
   Title: *Learning from Exploration: A Reinforcement Approach to Gait Rehabilitation*
   Student Recipients: Christine Hoyt and Stephanie Wang
   Faculty Mentors: Christopher J. Hasson and Sheng-Che Yen
   Direct Cost: $2,000 | Duration: 2013-2014

TEACHING AND ADVISING

Courses

2019-2020 Academic Year

Fall
1. Motor Control, Development, and Learning (PT 5150); 4 credits; 93 students
2. Motor Control Lab (PT 5151); 2 sections; 2 credits; 34 students
3. Physical Therapy Project 1 (PT 5227); no credits; 3 students

2018-2019 Academic Year

Fall
1. Motor Control, Development, and Learning (PT 5150); 4 credits; 100 students
2. Motor Control Lab (PT 5151); 2 sections; 2 credits; 37 students
3. Physical Therapy Project 1 (PT 5227); no credits; 2 students

Spring
1. Physical Therapy Project 2 (PT 5229); 2 credits; 2 students

2017-2018 Academic Year

Fall
1. Motor Control, Development, and Learning (PT 5150); 4 credits; 101 students
2. Motor Control Lab (PT 5151); 2 sections; 2 credits; 38 students
3. Physical Therapy Project 1 (PT 5227); no credits; 2 students

Spring
1. Physical Therapy Project 2 (PT 5229); 2 credits; 2 students

2016-2017 Academic Year

Fall
1. Motor Control, Development, and Learning (PT 5150); 4 credits; 96 students
2. Motor Control Lab (PT 5151); 2 sections; 2 credits; 36 students
3. Physical Therapy Project 1 (PT 5227); no credits; 2 students
4. Thesis Supervision (BIOE 7990); 4 credits, 1 student

Spring
1. Health Care Research Recitation (HLTH 5451); 2 sections; 2 credits; 31 students
2. Physical Therapy Project 2 (PT 5229); 2 credits; 3 students

2015-2016 Academic Year

Fall
1. Motor Control, Development, and Learning (PT 5150); 4 credits; 95 students
2. Motor Control Lab (PT 5151); 2 sections; 2 credits; 33 students
3. Physical Therapy Project 1 (PT 5227); no credits; 2 students

Spring
1. Health Care Research Recitation (HLTH 5451); 2 sections; 2 credits; 31 students
2. Physical Therapy Project 2 (PT 5229); 2 credits; 3 students

2014-2015 Academic Year

Fall
1. Motor Control, Development, and Learning (PT 5150); 4 credits; 110 students
2. Motor Control Lab (PT 5151); 2 sections; 2 credits; 36 students
3. Physical Therapy Project 1 (PT 5227); no credits; 3 students

Spring
1. Health Care Research Recitation (HLTH 5451); 2 sections; 2 credits; 40 students
2. Physical Therapy Project 2 (PT 5229); 2 credits; 3 students

2013-2014 Academic Year

Fall
1. Motor Control, Development, and Learning (PT 5150); 4 credits; 102 students
2. Motor Control Lab (PT 5151); 2 sections; 2 credits; 38 students
3. Physical Therapy Project 1 (PT 5227); no credits; 4 students

Spring
1. Health Care Research Recitation (HLTH 5451); 2 sections; 2 credits; 39 students

2. Physical Therapy Project 2 (PT 5229); 2 credits; 3 students

2012-2013 Academic Year

Fall
1. Motor Control (PT 5170); 4 credits; 109 students
2. Motor Control Lab (PT 5151); 2 sections; no credits; 38 students
3. Physical Therapy Project 1 (PT 5227); no credits; 3 students

Spring
1. Health Care Research Recitation (HLTH 5451); 2 sections; 2 credits; 35 students
2. Physical Therapy Project 2 (PT 5229); 2 credits; 3 students

Supervision of Graduate Students & Postdoctoral Research Associates

2018-2019
1. Min Hyong Koh (postdoctoral research associate; Physical Therapy)
2. Frederick Sebastian (Ph.D.student; Bioengineering)

2017-2018
1. Sarah Goodman (masters student; Bioengineering)
2. Rashida Nayeem[1] (Ph.D. student; Electrical and Computer Engineering)

2016-2017
1. Sarah Goodman (masters student; Bioengineering)
2. Ulrich Viereck[2] (Ph.D. student; Computer & Information Science)
3. Meghan Huber[1] (PhD. Student; Bioengineering)

2015-2016
1. Pauline Maurice[1] (Postdoctoral research associate; Biology)
2. Ulrich Viereck[2] (Ph.D. student; Computer & Information Science)
3. Meghan Huber[1] (PhD. student; Bioengineering)

2014-2015
1. Hariharan Ragothaman (masters student; Computer & Information Science)
2. Ulrich Viereck[2] (Ph.D. student; Computer & Information Science)
3. Giulia Franchi[2] (visiting student from Italy; Computer & Information Science)
4. Meghan Huber [1](PhD. student; Bioengineering)

[1]Co-supervised with Dagmar Sternad; [2]Co-supervised with Robert Platt

Supervision of Undergraduate Students & Professional Degree Students

2019-
Taylor Hayamoto, Grace Taylor, Alexander Bruskin (PT Capstone)

2018-2019
Lisanne Horwitz and Jennifer Komosinski (PT Capstone)
Paneed Jalili (Honors Thesis; Behavioral Neuroscience)
Kevin Considine**,** Jack Mammen, Samuel Davidovich, Elmer Figueroa, Daniel Condon (Bioengineering Capstone)

2017-2018
Jonathan Elcock and Tess Hixon (PT Capstone)
Paneed Jalili (Honors Thesis; Behavioral Neuroscience)
Kaleb Noruzi (Bioengineering)

2016-2017
Samantha Ernst (Behavioral Neuroscience)
Joe Merullo and Edward Pizzo (PT Capstone)
Paneed Jalili (Behavioral Neuroscience) and Bridget Jenal (Bioengineering)

2015–2016
Joshua Michael (Honors Early Research Assistantship)
Michelle Wangrow and Rachel O Montenegro (PT Capstone)
Thomas Reilly (PT Capstone)

2014–2015 Garrett Woo, Olga Gelina, and Zachary Gordon (PT Capstone)

2013–2014 Brendan Gibson, Julia Manczurowsky, Meredith Rogazzo, and Brittany O'Reiley
Eleanor Ames and Thaisa Nakano
Christine Hoyt and Stephanie Wang (Co-Advised with Sheng-Che Yen)

2012–2013 Conor Bray and Annalisa Hamel-Smith (PT Capstone)
Best Uduh (PT Capstone)

Qualifying Exam & Dissertation Committees

Ian Zuzarte (Current PhD. Student; Bioengineering; Northeastern University)
Zhaoran Zhang (Graduated 2018; PhD. Student; Bioengineering; Northeastern University)
Meghan Huber (Graduated 2017; PhD. Student; Bioengineering; Northeastern University)

SERVICE AND PROFESSIONAL DEVELOPMENT

Service to the Institution

Department Service (by academic year)

2018-2019
1. Academic Affairs Committee Member
2. Research Committee Member
3. Committee to Draft PTMRS Ph.D. Program Proposal
4. Ergo, Masters, and PhD Admissions Committee

2017-2018
1. Academic Affairs Committee Member
2. Research Committee Member
3. Ergonomics Admissions Committee Member
4. Committee to Draft PTMRS Ph.D. Program Proposal

2016-2017
1. Outcomes Committee Chair
2. Research Committee Member
3. Faculty Search Committee Member
4. Brought daughter to interact with students for the laboratory sessions for the Motor Control, Development, and Learning class.

2015-2016
1. Outcomes Committee Member
2. Research Committee Member
3. Brought daughter to interact with students for the laboratory sessions for the Motor Control, Development, and Learning class.

2014-2015
1. Outcomes Committee Member
2. Research Committee Member
3. Brought daughter to interact with students for the laboratory sessions for the Motor Control, Development, and Learning class.

2013-2014
1. Merit Committee Chair
2. Research Committee Member
3. Faculty Search Committee Member (participated in two searches)

4. Participated in the department review by The Commission on Accreditation in Physical Therapy Education (CAPTE).
5. Bouvé Open House (10/26/13)

2012-2013 1. Merit Committee Member
2. Research Committee Member
3. Participated in the department review by The Commission on Accreditation in Physical Therapy Education (CAPTE).
4. Bouvé Welcome Day for Admitted Students and Families (4/13/13)

University/College Service (by academic year)

2019- 1. Undergraduate Commencement Faculty Marshal (5/3/19)
2. Reviewer for TIER 1 Applications
3. Participant in SOURCE (Showcase of Opportunities for Undergraduate Research and Creative Endeavors; 9/25/19).

2017-2016 1. Faculty Spotlight Presenter; Parent and Family Weekend (10/27/17)
2. Bouve College Workload Taskforce

2015-2016 1. Graduate Commencement Faculty Marshal (5/6/16)
2. Presenter for Health Science Day (8/8/16)

Service to the Discipline/Profession

Editorial Boards

Associate Editor for *Frontiers in Human Neuroscience* (Since 2016)
Editorial Board Member for *Scientific Reports*; Neuroscience Section (Since 2017)
Editorial Board Member for the *Journal of Motor Behavior* (Since 2017)

Grant Reviewer

Junior Faculty Research Award for American Society of Biomechanics (2018)
National Science Foundation (NSF) Panelist (2017)

Ad Hoc Reviewer (Journals Alphabetically Listed)

AGE (Since 2013)
Annals of Biomedical Engineering (Since 2012)
Biomechanics and Modeling in Mechanobiology (Since 2015)
Gait & Posture (Since 2011)
Human Factors (Since 2014)
Journal of Applied Physiology (Since 2011)
Journal of Biomechanics (Since 2011)
Journal of Motor Behavior (Since 2011)
Journal of NeuroEngineering and Rehabilitation (Since 2011)
Journal of Experimental Psychology: Human Perception and Performance (Since 2016)
Journal of Sport and Health and Science (Since 2015)
Medical & Biological Engineering & Computing (Since 2010)
PLoS ONE (Since 2012)
IEEE Transactions on Biomedical Engineering (Since 2018)

IEEE Transactions on Neural Systems & Rehabilitation Engineering (Since 2016)
Trends in Neurosciences (Since 2018)

Conference Paper Ad Hoc Reviewer
IEEE RAS/EMBS International Conference on Biomedical Robotics and Biomechatronics (Since 2015)

Other Service
Student Mentor at the American Society of Biomechanics 2018 Meeting

Service to the Community/Public
Science Fair Judge, Edward M. Kennedy Academy for Health Careers, Boston MA (1/23/17)
Ambassador for NIH Loan Repayment Program

Professional Development

Membership in Scientific/Professional Organizations
Society for Neuroscience (Since 2010)
Society for the Neural Control of Movement (Since 2011)
American Physiological Society (Since 2012)

Grantsmanship Activities & Workshops Attended
- Training in Grantsmanship for Rehabilitation Research (TIGRR; application submitted)
- LGBTQ+ Inclusivity Training, 5-Hour Workshop, Northeastern (12/13/19)
- Interfolio Training Workshop; Northeastern University (3/22/19)
- Tenure Process Workshop; Northeastern; Senior Vice Provost for Academic Affairs (1/24/19)
- Tenure and Promotion Workshop; Northeastern; Dean Parish (1/18/19)
- Tenure and Promotion Workshop; Northeastern; Dean Parish (4/26/18)
- NSF CAREER Project Summary Workshop; Northeastern (6/13/18)
- Traveled to Washington DC to meet with Program Officers from three NIH institutes (NIA, NICHD, and NIBIB). Sponsored by the Bouve College of Health Sciences and Lewis-Burke Associates LLC (On 4/30/15).
- Attended coaching session to prepare for meetings with NIH program officers (4/13/15).
- Lewis-Burke Associates LLC workshop on funding opportunities for junior faculty (10/9/13)
- 2013 Northeastern ADVANCE workshop for NSF CAREER awards (5/14/13)
- Northeastern University's (NEU) Bouve College of Health Sciences "Workshops on Grantsmanship" (March 14 and April 5, 2013)
- Workshop entitled "Writing Successful Grant Proposals" sponsored by NEU and The Tufts Clinical and Translational Science Institute (Monday, April 8, 2013).

Conferences Attended

March 6, 2020	Translational Research Day; Tufts Medical Center, Boston, MA
October 19-23, 2019	Neuroscience 49th Annual Meeting; Chicago, IL
July 1-4, 2019	Joint ISB XXVII Congress & 43rd ASB Meeting, Calgary, Canada
November 3-7, 2018	Neuroscience 48th Annual Meeting; San Diego, CA
August 8-11, 2018	American Society of Biomechanics 42nd Meeting; Rochester, MN
November 11-15, 2017	Neuroscience 47th Annual Meeting; Washington, DC
May 2-5, 2017	Neural Control of Movement 24th Conference; Dublin, Ireland

June 12-17, 2016	Biomech. & Neural Control of Movement Conf., Mt. Sterling, OH
October 17-21, 2015	Neuroscience 44th Annual Meeting; Chicago, IL
May 23, 2015	New England Manipulation Symposium; Boston MA
April 21-24, 2015	Neural Control of Movement 24th Conference; Charleston, SC
November 15-19, 2014	Neuroscience 43rd Annual Meeting; Washington, DC
August 6-11, 2014	7th World Congress of Biomechanics; Boston, MA
April 25-27, 2014	40th Northeast Bioengineering Conference; Boston, MA
November 9-13, 2013	Neuroscience 42nd Annual Meeting; San Diego, CA
April 16-20, 2013	Neural Control of Movement 23rd Conference; Puerto Rico
October 13-17, 2012	Neuroscience 42nd Annual Meeting; New Orleans, LA
October 12, 2012	Translational and Computational Motor Control; New Orleans, LA
April 23-29, 2012	Neural Control of Movement 22nd Conference; Venice, Italy
March 10, 2012	New England Sequencing and Timing (NEST); Amherst, MA
November 12-16, 2011	Neuroscience 41st Annual Meeting; Washington, DC
July 21-23, 2011	Progress in Motor Control VIII; Cincinnati, OH
April 26 - May 1, 2011	Neural Control of Movement 21st Conference; Puerto Rico
November 13-17, 2010	Neuroscience 40th Annual Meeting; San Diego, CA
August 18-21, 2010	American Society of Biomechanics 34th Meeting; Providence, RI
June 5-7, 2009	NASPSPA Annual Conference; Austin, TX
August 26-29, 2009	American Society of Biomechanics 33nd Meeting; State College, PA
August 5-9, 2008	4th North American Congress on Biomechanics; Ann Arbor, MI
June 5-7, 2008	NASPSPA Annual Conference; Niagara Falls, Ontario
August 22-25, 2007	American Society of Biomechanics 31st Meeting; Stanford, CA
August 9-12, 2007	Progress in Motor Control VI ; Santos, Brazil
September 6-9, 2006	American Society of Biomechanics 30th Meeting; Blacksburg, VA
August 16-19, 2006	14th Canadian Society for Biomech. Conf.; Waterloo, Ontario.
July 31- Aug 5, 2005	ISB XXth Congress & ASB 29th Meeting; Cleveland, Ohio
Aug 4-7, 2004	Thirteenth Biennial Conference for the CSB; Halifax, Nova Scotia
July 14 -17, 2004	NSCA National Conference and Exhibition; Minneapolis, MN
Sept 25-27, 2003	American Society of Biomechanics 27th Meeting, Toledo, OH
July 6-1, 2003	International Society of Biomech. Congress; Dunedin, New Zealand