## Simone V. Gill, Ph.D., OTR/L, FAOTA

## Mailing Address:

Boston University 677 Beacon Street, Boston, MA 02215

## Phone, email, and website:

Office: (617) 353-7513 Email: <u>simvgill@bu.edu</u> Website: <u>https://www.bu.edu/sargent/profile/simone-gill/</u>

### Education

# New York University, New York, NY

Doctoral of Philosophy, Psychology (Cognition and Perception) May, 2009

## Tufts University, Medford, MA

Master of Science, Occupational Therapy September, 1999

#### Carnegie Mellon University, Pittsburgh, PA

Bachelor of Science, Psychology May, 1997

### **Professional Employment**

2020 – current	Faculty Fellow for Diversity & Inclusion, Graduate Affairs
	Boston University
2018-2019	Interim Program Director, PhD Program in Rehabilitation Sciences
	College of Health and Rehabilitation Sciences: Sargent College
	Boston University
2017-present	Associate Professor, Department of Occupational Therapy
	College of Health and Rehabilitation Sciences: Sargent College
	Boston University
2017-present	Associate Professor, Department of Psychological & Brain Sciences
	College of Arts & Sciences
	Boston University
2014-2017	Assistant Professor, Clinical Epidemiology Research and Training Unit
	Department of Medicine
	Boston University School of Medicine
2014-present	Joint Programmatic Appointment, Department of Psychological & Brain Sciences
	College of Arts & Sciences
	Boston University
2014-present	Joint Programmatic Appointment, Undergraduate Program in Neuroscience
	College of Arts & Sciences
	Boston University
2009-2017	Assistant Professor, Department of Occupational Therapy
	College of Health and Rehabilitation Sciences: Sargent College
	Boston University
2003-2009	Research Assistant/Doctoral Candidate, Department of Psychology
	Infant Action Laboratory

	New York University
2002-2003	Research Assistant, Department of Biobehavioral Sciences
	Center for Cerebral Palsy Research
	Columbia University
1999-2002	Staff Occupational Therapist
	Progressive Therapy Placement Services, Shoreham, NY
	Responsible for evaluating and treating infants and children with physical and
	developmental disabilities in school and home settings
1999-2001	Staff Occupational Therapist
	Kramer Learning Center, Bayshore, NY
	Responsible for evaluating and treating children with physical and developmental disabilities in a preschool setting and supervising occupational therapy students

# Academic and Professional Honors

2022	Recipient, American Occupational Therapy Foundation Meritorious Service Award
2021	Inductee, Associate Member of the American Society for Metabolic and Bariatric Surgery
2021	Chair, American Occupational Therapy Foundation STRIDE Committee
2021	Recipient, American Occupational Therapy Association Roster of Fellows Award
2019	Inductee, Member of the Board of Trustees, American Occupational Therapy Foundation
2018	Inductee, Member of the Board of Trustees, Metrowest Health Foundation
2017	Invited reviewer, American Occupational Therapy Foundation Scientific Review Group
2017	Invited participant, AAAS Communicating Science Workshop
2016	Invited participant, NIH Databrary Research Launch Group
2016	Invited presenter, AOTA Pre-Conference Institute on Childhood Obesity
2015	Inductee, Sargent College Professor of the Semester, Sigma Kappa at Boston University
2015	Recipient, NIH Clinical Loan Repayment Award
2015	Inductee, Associate Member, Eunice Kennedy Shriver Center Healthy Weight Research Network
2014	Inductee, Faculty Advisor, Boston University Graduate Women in Science and Engineering
2013	Recipient, NIH, Comprehensive Opportunities in Rehabilitation Research Training (CORRT) K12 Scholar
2013	Recipient, Service Commendation, American Occupational Therapy Association
2011	Participant, ERRIS Intensive Workshop on Grant Writing, Preparation, and Submission in
-	Rehabilitation Research
2008	Participant, Dynamic Field Theory Summer School
2007	Participant, Nonlinear Methods for Psychological Science Summer School
2006	Recipient, NIH Diversity Supplement
2006	Recipient, International Society for Developmental Psychobiology Student Travel Grant
2006	Participant, Third Motor Control Summer School
2005	Recipient, New York University Student Travel Grant
2003	Recipient, New York University MacCraken Fellowship
2003	Recipient, NIH Kirschstein-NRSA Institutional Pre-Doctoral Research Fellowship
2002	Recipient, Teachers College, Columbia University Graduate Scholarship
1997	Recipient, Tufts University Graduate Scholarship
1997	Recipient, Tufts University Occupational Therapy Scholarship
1997	Recipient, Carnegie Mellon University Undergraduate Travel Award
1996	Recipient, Carnegie Mellon University Undergraduate Travel Award
1996	Recipient, Carnegie Mellon University Dean's List with Honors

1995	Recipient, Carnegie Mellon University Undergraduate Travel Award
1995	Recipient, Carnegie Mellon University Student Undergraduate Research Grant
1993-1997	Recipient, Carnegie Mellon University S. T. Sable Kresser Scholarship

### Publications

## **Peer-Reviewed Publications**

43. Gill, S. V., Ayoub, M. J., Mueser, K. T., & McGurk, S. R. (in press). Motor skill, motor planning,

and motor performance in adults with severe mental illnesses and obesity. *Journal of Motor Behavior.* 

Impact factor: 1.11

- 42. McNutt, E. J., Hatala, K. G., Miller, C., Casana, J., Deane, A. S., Dominy, N., Fabian, K., Fannin, L., <u>Gill, S. V.</u>, Gurtu, J., Gustafson, E., Hill, A. C., Johnson, C., Kallindo, S., Kilham, B., Kilham, P., Kim, E., Liukus-Pierce, C., Maley, B., Prabhat, A., Reader, J., Rubin, S., Thompson, N. E., Thornburg, R., Zimmer, B., Musiba, C., & DeSilva, J. M. (2021). Footprint evidence for early hominin locomotor diversity at Laetoli, Tanzania. *Nature*, 600(7889), 468-71. *Impact factor: 49.96*
- Kim, D., Lewis, C. L., & <u>Gill, S. V.</u> (2021). Effects of obesity and foot arch height on gait mechanics: A cross-sectional study. *PLOS One*, 16: 1-13. *Impact factor: 3.24*
- 40. Desrochers, P. C., Kim, D., Keegan, L., & <u>Gill, S. V.</u> (2021). Association between the functional gait assessment and spatiotemporal parameters in individuals with obesity compared to normal weight controls: A proof-of-concept study. *Journal of Musculoskeletal and Neuronal Interactions*, 21, 335-342. Impact factor: 1.489
- **39.** <u>**Gill, S. V.</u>**, Shin, D., Ayoub, M., Keegan, L., Desrochers, P. C., & Helfrich, C. A. (2021). Pivoting in context: Using the FAIRR model to collaborate during COVID-19. *American Journal* of *Physical Medicine & Rehabilitation*, 100(6): 519-525. *Impact factor: 1.838*</u>
- Desrochers, P. C. & <u>Gill, S. V.</u> (2021). Temporal accuracy of gait across multiple levels of practice. *Human Movement Science*, 77: 1-9. *Impact factor: 2.096*
- 37. Kim, D., Desrochers, P. C., Lewis, C. L., & <u>Gill, S.V.</u> (2021). Effects of obesity on adaptation transfer from treadmill to overground walking. *Applied Sciences*, 11: 2108-2118. *Impact factor: 2.474*
- **36.** <u>**Gill, S. V.</u>**, Abplanalp, S. J., Keegan, L., & Fulford, D. (2020). Effort-based decision making and gross motor performance: Are they linked? *Brain Sciences*, 10: 1-10. *Impact factor: 2.786*</u>
- Kim, D. & <u>Gill, S. V.</u> (2020). Changes in center of pressure velocities during obstacle crossing one year after bariatric surgery. *Gait & Posture*, 76: 377-381. Impact factor: 2.286
- **34.** <u>**Gill, S. V.**</u> (2019). Effects of obesity class on flat ground walking and obstacle negotiation. Journal of Musculoskeletal and Neuronal Interactions, 19: 488-454. Impact factor: 1.489
- **33.** <u>**Gill, S. V.</u>**, Pu, X., Woo, N., & Kim, D. (2018). The effects of practice schedules on the process of adaptation. *Journal of Musculoskeletal and Neuronal Interactions*, 18: 419-426. *Impact factor: 1.489*</u>

```
S. Gill - 4
```

- 32. Kim, D., Pu, X., Woo, N., & <u>Gill, S. V.</u>, (2018). Changes in motor actions in the face of varying task constraints. *Gait & Posture*, 66:1-6. Impact factor: 2.286
- <u>Gill, S. V.</u>, Khetani, M. A., Yinusa-Nyahkoon, L., McManus, B., Gardiner, P. M., & Tickle-Degnen, L. (2017). Forging alliances in interdisciplinary rehabilitation research (FAIRR): A logic model. *American Journal of Physical Medicine & Rehabilitation*, 96: 479-86. *Impact Factor: 2.202*
- <u>Gill, S. V.</u>, Yang, Z., & Hung, Y. C. (2017). Effects of singular and dual task constraints on motor skill variability in childhood. *Gait & Posture*, 53: 121-126. *Impact Factor: 2.286*
- **29.** <u>**Gill, S. V.</u>**, Hicks, G., Zhang, Y., Niu, J, Apovian, C. M., & White, D. K. (2017). The association of waist circumference with community walking ability in knee osteoarthritis: The osteoarthritis initiative. *Osteoarthritis & Cartilage*, 25: 60-66. *Impact factor: 4.535*</u>
- **28.** Hung, Y., Mangiafreno, M.\*, & <u>**Gill, S. V.**</u> (2016). Whole body organization during a symmetric bimanual pick up task in overweight and obese children. *Gait and Posture,* 52: 95-99.

Impact Factor: 2.286

 <u>Gill, S. V.</u>, Walsh, M. K., Pratt, J. A., Toosizadeh, N., Najafi, B., & Travison, T. G. (2016). Changes in spatio-temporal gait patterns during flat ground walking and obstacle crossing one year after bariatric surgery. *Surgery for Obesity and Other Related Diseases, 12,* 1080-5. DOI: 10.1016/j.soard.2016.03.029
 Impact Factor: 4.942: Surgery for Obesity and Related Diseases is ranked 7<sup>th</sup> of 202 journals in

Impact Factor: 4.942; Surgery for Obesity and Related Diseases is ranked 7<sup>th</sup> of 202 journals in the area of surgery.

- <u>Gill, S. V.</u>, Ogamba, M.\*, & Lewis, C. L. (2016). Effects of Additional Anterior Body Mass on Spatio-Temporal Gait Parameters. *BMC Pregnancy & Childbirth*, 16: 109. *Impact Factor: 2.180*
- Ogamba, M. I., Loverro, K. L.\*, Laudicina, N. M., <u>Gill, S. V.</u> & Lewis, C. L. (2016). Changes in gait with anteriorly added mass: A pregnancy simulation study. *Journal of Applied Biomechanics*, 32: 378-87. *Impact Factor: 0.984*
- 24. Heller Murray, E. S.\*, Mendoza, J. O., <u>Gill, S. V.</u>, Perkell, J. S., Stepp, C. E. (2016). Effects of biofeedback on control and generalization of nasalization in typical speakers. *Journal of Speech, Language, and Hearing Research*, 59: 1025-34. *Impact Factor: 2.07; The Journal of Speech, Language, and Hearing Research ranks 5th of 24 journals in the Audiology and Speech-Language Pathology.*
- **23.** <u>**Gill, S. V.</u>**, Keimig, S\*, Kelty-Stephen, D., Hung, Y. C., & DeSilva, J. M. (2016). The relationship between foot arch measurements and walking parameters in children. *BMC Pediatrics, 16,* 1-8. *Impact Factor: 1.813*</u>
- **22.** <u>**Gill, S. V.</u>**, Vessali, M.\*, Pratt, J. A., Watts\*, S., Pratt, J. S., Raghavan, P., & DeSilva, J. M. (2015). The importance of interdisciplinary research training and community dissemination. *Clinical and Translational Science*, *8*, 611-14. *Impact Factor: 1.43*</u>
- **21.** <u>Gill, S. V.</u> (2015). Walking to the beat of their own drum: How children and adults meet task constraints. *PLoS One*, 10, e0127894. *Impact Factor:* 3.057
- DeSilva, J. M., Bonne-Annee, R.\*, Swanson, Z.\*, Gill, C. M.\*, Sobel, M.\*, Uy, J.\*, & Gill, S. V. (2015). Midtarsal break variation in modern humans: functional causes, skeletal correlates, and paleontological implications. *American Journal of Physical Anthropology*, 156, 543-52.

S. Gill - 5

Impact Factor: 2.402

- **19.** <u>**Gill, S. V.**</u> (2015). The impact of weight classification on safety: Timing steps to adapt to external constraints. *Journal of Musculoskeletal and Neuronal Interaction, 15,* 103-8. *Impact Factor: 1.60*
- Gill, S. V., Lewis, C. L., & DeSilva, J. M. (2014). Arch height mediation of obesity-related walking in adults: Contributors to physical activity limitations. *Biomed Research International: Physiology*. Special Issue on Motor functional evaluation from physiology and biomechanics to clinical and training, 2014, 1-8.

Impact Factor: TBD

- Lick, D. J.\*, Johnson, K. L., & <u>Gill, S. V.</u> (2014). Why do they have to flaunt it? Perceptions of communicative intent predict antigay prejudice based upon brief exposure to nonverbal cues. Social Psychology & Personality Science, 5, 927-935. Impact Factor: 2.325
- **16.** Cole, W. G.\*, **Gill, S. V.**, Vereijken, B., & Adolph, K. E. (2014). Coping with asymmetry: How infants and adults walk with one elongated leg. *Infant Behavior & Development 37*, 305-314. *Impact Factor: 1.515*
- Ben-Sasson & <u>Gill, S. V.</u> (2014). Motor and language abilities from early to late toddlerhood: Using formalized assessments to capture continuity and discontinuity in development. *Research in Developmental Disabilities*, 35, 1425-32. *Impact Factor: 1.877*
- Gill, S. V. & Hung, Y. (2014). Effects of overweight and obese body mass on motor planning and motor skills during obstacle crossing in children. *Research in Developmental Disabilities*, 35, 46-53.

Impact Factor: 1.877

- Lick, D. J.\*, Johnson, K. L., & <u>Gill, S. V.</u> (2013). Deliberate changes to gendered body motion influence basic social perceptions. *Social Cognition*, 31, 656-671. *Impact Factor: 1.532*
- DeSilva, J. M. & <u>Gill, S. V.</u> (2013). A midtarsal break in the human foot. *American Journal of Physical Anthropology*, 151, 495-9. Impact Factor: 2.402
- Hung, Y., Meredith, G. S.\*, & <u>Gill, S. V.</u> (2013). Influence of task constraints during walking for children. *Gait and Posture*, 38, 450-4. *Impact Factor: 2.286*
- Forhan, M. & <u>Gill, S. V.</u> (2013). Obesity, functional mobility, and quality of life. *Best Practice and Research: Clinical Endocrinology & Metabolism*. Special issue on complications of obesity, 27, 129-137.

Impact Factor: 5.070

- Hung, Y., <u>Gill, S. V.</u> & Meredith, G. S.\* (2013). Influence of dual task constraints on whole body organization during walking in overweight and obese children. *American Journal of Physical Medicine and Rehabilitation*, 92, 461-471. *Impact Factor: 2.202*
- <u>Gill, S. V.</u>, May-Benson, T., Teasdale, A., & Munsell, E.\* (2013). Birth and developmental correlates of birth weight in a sample of children with potential sensory processing disorder. BMC Pediatrics, 13, 13-29. Impact Factor: 1.813
- <u>Gill, S. V.</u> & Walsh, M. K. (2012). Use of motor learning principles to improve motor adaptation in adult obesity. *Health*, 4, 1428-1433. *Impact factor: 0.65*

- S. Gill 6
- 6. <u>Gill, S. V.</u> & Hung, Y. C. (2012). Influence of weight classification on children stepping over obstacles. *American Journal of Physical Medicine and Rehabilitation, 91,* 625-630. *Impact Factor: 2.202*
- <u>Gill, S. V.</u> & Narain, A.\* (2012) Quantifying the effects of body mass index on safety: Reliability of a video coding procedure and utility of a rhythmic walking task. *Archives of Physical Medicine and Rehabilitation*, 93, 728-730.
   Impact factor: 3.045; Archives of Physical Medicine and Rehabilitation is the most highly cited
- journal in Rehabilitation, has the highest Eigenfactor in the category.
   Gill, S. V. (2011). Optimizing motor adaptation in childhood obesity. Australian Occupational Therapy Journal, 58, 386-389.
   Impact factor: 1.404; The Australian Journal of Occupational Therapy is ranked 5<sup>th</sup> out of 15 occupational therapy journals.
- <u>Gill, S. V.</u>, Adolph, K. E., & Vereijken, B. (2009). Change in action: How infants learn to walk down slopes. *Developmental Science*, *12*, 888-902. *Impact factor: 3.982; Developmental Science is ranked 5<sup>th</sup> out of 69 developmental psychology journals.*
- Gordon, A. M., Chinnan, A., <u>Gill, S. V.</u>, Petra, E., Hung, Y., & Charles, J. (2008). Both constraint-induced movement therapy and bimanual training lead to improved performance of upper extremity function in children with hemiplegia. *Developmental Medicine & Child Neurology*, 50, 957-958.

Impact factor: 3.615; Developmental Medicine & Child Neurology is the top journal in the field of pediatric rehabilitation.

 Johnson, K. L., <u>Gill, S. V.</u>, Reichman, V., & Tassinary, L. G. (2007). Swagger, sway, and sexuality: Judging sexual orientation from body motion and morphology. *Journal of Personality* and Social Psychology, 93, 321-334.

Impact factor: 4.736; The Journal of Personality and Social Psychology is the top journal in the field of social psychology.

# Chapters

 Adolph, K. E., Joh, A. S., Franchak, J. M., Ishak, S., & <u>Gill, S. V.</u> (2008). Flexibility in the development of action. In E. Morsella, J. A. Bargh, & P. M. Gollwitzer (Eds.), *The psychology of action, Vol 2.* (pp. 399-426). New York: Oxford University Press.

# Manuscripts Under Review

- Desrochers, P. C. & <u>Gill, S. V.</u> (under review). Factors mediating or moderating the effects of obesity on walking: Targeting areas for rehabilitation. *Archives of Physical Medicine & Rehabilitation.*
- 2. Shin, D., Keegan, L., & <u>Gill, S. V.</u> (under review). Changes in psychosocial and physical factors four and eight months after bariatric surgery. *Surgery for Obesity and Related Disorders*.
- 3. Kim, D., Lewis, C. L., & <u>Gill, S. V.</u> (under review). The effect of obesity on whole-body angular momentum during steady-state walking. *Gait & Posture.*

## Peer-reviewed Conference Presentations & Abstracts International

 Desrochers, P.C., Kim, D., Keegan, L., Ayoub, M., Shin, D., & <u>Gill, S.V.</u> (2020, May). Association between the Functional Gait Assessment and spatiotemporal gait parameters in individuals with obesity compared to normal weight controls. Online Poster Presentation for the North American Society for the Psychology of Sport and Physical Activity Conference. Vancouver, Canada.

- 2. <u>**Gill, S. V.**</u> (2018, July). Use of an obstacle avoidance task to improve motor control before weight loss surgery. Presented at the International Society for Physical Rehabilitation and Medicine. Paris, France.
- 3. <u>**Gill, S. V.**</u> & Kim, D. (2018, July). Effects of obesity and knee osteoarthritis on gait and postural stability in pre-bariatric surgery candidates. Presented at the International Society for Physical Rehabilitation and Medicine. Paris, France.
- 4. DeSilva, J. M., Gill, C. M., Swanson, Z., Bonne-Annee, R., & **Gill, S. V.** (2014, April). Reconstructing foot form and function in early hominins using modern human models. *American Association of Physical Anthropologists Conference*. Calgary, Alberta, Canada.
- 5. <u>**Gill, S. V.</u>** & Hung, Y. (2012, October). Body coordination in children: How development and weight classification affect adaptation. *American Congress for Rehabilitation Medicine.* Vancouver, British Columbia.</u>
- Forhan, M. & <u>Gill, S. V.</u> (2011, April). Cross border contributions to obesity research and interventions: A north american review of occupational therapy. *Canadian Obesity Summit.* Montreal, Canada.
- Vereijken, B. V., Adolph, K. E., & <u>Gill, S. V.</u> (2009, June). The development of adaptation: How infants and adults modify their walking steps. *International Society for Posture & Gait Research*. Bologna, Italy.
- 8. <u>**Gill, S. V.</u>**, Charles, J., & Gordon, A. M. (2003, August). Use of accelerometers to measure upper extremity movement in children with hemiplegic cerebral palsy. *American Academy of Cerebral Palsy Meeting*. Montreal, Canada.</u>
- 9. <u>**Gill, S. V.</u>** (1999, November). The role of occupational therapy in feeding and oral-motor dysfunction. *Conference on Occupational Therapy in Motion*. Vienna, Austria.</u>
- Vereijken, B., Adolph, K. E., Denny, M. A., Fadl, Y., Gill, S. V., & Lucero, A. (1995, July). Development of infant crawling: Balance constraints on interlimb coordination. *International Society for Event Perception and Action*. Marseilles, France.

# National

- 51. DiMeo, C., DeSantis, C., <u>Gill, S. V.</u>, & McConnico (2022, March). Addressing family social participation in caregiver-child dyads exposed to trauma: A sensory and psychoeducational group approach. Poster Presentation at the American Occupational Therapy Association Conference.
- **50.** DiMeo, C., DeSantis, C., <u>**Gill, S. V.</u></u>, & McConnico (2021, Dec.). Sensory and psychoeducational group approaches for family social participation. Workshop for the American Occupational Therapy Association Children & Youth Specialty Conference.</u>**

49. DiMeo, C., DeSantis, C., Gill, S. V., & McConnico (2021, Oct.). Group approaches for family

social participation in child-caregiver dyads exposed to trauma. Poster Presentation at the Massachusetts Occupational Therapy Association Conference.

- **48.** Shin, D., Keegan, L., & <u>**Gill, S. V.</u></u> (2021, June). Beyond weight loss: Changes in psychosocial and physical factors four and eight months after bariatric surgery. Online Poster Presentation for the OT Summit of Scholars.</u>**
- **47.** Desrochers, P. C., Ayoub, M. J., <u>**Gill, S. V.**</u> (2021, Mar.). Depressed mood and physical health moderate the effect of obesity on gait. Online Poster Presentation for the North American Society for the Psychology of Sport and Physical Activity Conference.
- **46.** Ayoub, M., Keegan, L., & <u>**Gill, S. V.</u>** (2021, Mar.). Adapting to COVID-19 constraints: Assessing motor development in a virtual research setting. Online Poster Presentation for the North American Society for the Psychology of Sport and Physical Activity Conference.</u>
- **45.** Ayoub, M., Mueser, K. T., <u>**Gill, S. V.**</u>, & McGurk, S. R. (2021, Mar.). Motor skill, motor planning, and motor performance in adults with several mental illnesses and obesity. Online Poster

Presentation for the North American Society for the Psychology of Sport and Physical Activity Conference.

- **44.** Halverstadt, A., Chavva, S., <u>**Gill, S. V**</u>., & Lewis, C. (2021, Feb.). Effect of Trunk and Shank Position on Hip-to-Knee Moment Ratio. Online Poster Presentation for the Combined Sections Meeting for the American Physical Therapy Association.
- **43.** Shin, D., Kim, T., Magane, K., Sweek, E., Hereen, T., Winter, M., Saitz, R., & <u>Gill, S.V.</u> (2020, June) Factors Contributing to Falls in People Living with HIV. Poster Presentation at the 2020 Occupational Therapy Summit of Scholars. Fort Collins, Colorado. Accepted (not presented due to quarantine).
- **42.** Kim, D & <u>**Gill, S. V.**</u> (2019, May). Changes in gait patterns during obstacle crossing following bariatric surgery: A comparison of pre- and one-year post-surgery groups. Presented at the Gait & Clinical Movement Analysis Society Conference. Frisco, TX.
- 41. Shin, D. & <u>Gill, S. V.</u> (2019, May). Changes in gait kinematics and self-efficacy before and after bariatric surgery. Presented at the Gait & Clinical Movement Analysis Society Conference. Frisco, TX.
- **40.** Shin, D. & <u>**Gill, S. V.**</u> (2018, June). The role of practice schedules on motor adaptation and self-efficacy. Presented at the Occupational Therapy Summit of Scholars. Kansas City, KS.
- **39.** <u>**Gill, S. V.**</u> (2018, June). Utility of an obstacle task to improve gait pre-bariatric surgery. Presented at the Occupational Therapy Summit of Scholars. Kansas City, KS.
- 38. Kim, D. & <u>Gill, S. V.</u> (2018, May). Effects of obesity and knee osteoarthritis on gait and stability In pre-bariatric surgery candidates. Presented at the Gait & Clinical Movement Analysis Society Conference. Indianapolis, IN.
- **37. Shin, D., Kim, D., & <u>Gill, S. V.</u>** (2018, May). Timing steps to adapt to external constraints. Presented at the Gait & Clinical Movement Analysis Society Conference. Indianapolis, IN.
- 36. <u>Gill, S. V.</u> (2017, August). How children and adults adapt walking to meet temporal constraints. Presented at the Comprehensive Opportunities in Rehabilitation Research Training Retreat. Newark, DE.
- **35.** <u>**Gill, S. V.**</u> (2016, May). Tracking fall risk indicators after bariatric surgery: changes in performance. Presented at the Occupational Therapy Summit. Pittsburgh, PA.
- **34.** <u>**Gill, S. V.**</u> (2016, April). Changes in motor performance: Indicators of fall risks after bariatric surgery. Presented at the American Occupational Therapy Association. Chicago, IL.
- Munoz, M. A., Crouter, S. E., Coster, W. J., Orsmond, G. I., & Gill, S. V. (2015, May). Association between parents' perception of weight and behavior change and activity in Puerto Rican children. *American College of Sports Medicine.* San Diego, CA.
- **32.** <u>**Gill, S. V.**</u> (2015, May). Identifying fall risks for pre-bariatric surgery candidates: Capturing performance. *Occupational Therapy Summit.* Los Angeles, CA.
- **31.** <u>**Gill, S. V.</u>**, Yinusa-Nyahkoon, L., & Khetani, M. (2015, April). Benefits and realities of engaging in interdisciplinary research relevant to pediatric occupational therapy practice. *American Occupational Therapy Association Conference*. Nashville, TN.</u>
- **30.** Suarez-Balcazar, Y., Orloff, S., Pizzi, M., Vroman, K., Collins, K., Kuo, F., Lau, C., & <u>Gill, S. V.</u> (2015, April). Primary care in children and youth with obesity: A call for action. *American Occupational Therapy Association Conference*. Nashville, TN.
- **29.** <u>**Gill, S. V.</u></u>, Bashinskaya, B., Woo, N., & Pu, X. (2015, April). Supporting safety for pre-bariatric surgery candidates: Effects of obesity and degenerative joint disease on movement. Primary care in children and youth with obesity: A call for action.** *American Occupational Therapy Association Conference***. Nashville, TN.</u>**
- **28.** Bashinskaya, B. & <u>Gill, S. V.</u> (2015, March). Effects of practice on walking patters in prebariatric surgery candidates. *Boston University Graduate Research Symposium.* Boston, MA.
- 27. Gill, S. V. & Saudino, K. J. (2015, March). Walking skill and its relationship to toddlers' physical

S. Gill - 9

growth and cognitive ability. Society for Research in Child Development. Philadelphia, PA.

- **26.** <u>**Gill, S. V.**</u> (2015, March). The relationship between the foot arch and walking. Society for Research in Child Development. Philadelphia, PA.
- **25.** Ogamba, M., **Gill, S. V.,** & Lewis, C. L. (2015, February). Changes in gait with anteriorly added mass: A pregnancy simulation study. *Midwest American Society of Biomechanics Regional Meeting*. Akron, OH.
- 24. <u>Gill, S. V.</u> (2014, November). How children and adults alter their walking patterns to meet timing constraints. *International Society for Developmental Psychobiology.* Washington, D. C.
- **23.** <u>**Gill, S. V.</u>** & DeSilva, J. M. (2014, July). Arch height mediation of obesity-related walking in adults. *World Congress of Biomechanics.* Boston, MA.</u>
- **22.** Ogamba, M., **Gill, S. V.**, & Lewis, C. L. (2014, July). Changes in gait with anteriorly added mass: A pregnancy simulation study. *World Congress of Biomechanics.* Boston, MA.
- 21. <u>Gill, S. V.</u> & Vora, I. (2014, June). Influence of temporal constraints on spatio-temporal gait parameters in children and adults. *Gait & Clinical Movement Analysis Society.* Newark, Delaware.
- <u>Gill, S. V.</u>, Ogamba, M., & Lewis, C. L. (2014, June). Effects of additional anterior body mass on spatio-temporal gait parameters. *Gait & Clinical Movement Analysis Society*. Newark, Delaware.
- 19. Ben-Sasson, A. & <u>Gill, S. V.</u> (2014, May). How Do Early ASD Screening Scores Relate with Motor and Language Development in a Community Sample? *International Meeting for Autism Research.* Atlanta, Georgia.
- <u>Gill, S. V.</u>, DeSilva, J. M., Kelty-Stephen, D., & Keimig, S. (2013, November). The medial longitudinal arch as an adaptation to increase step length in children. *International Society for Developmental Psychobiology Conference*. San Diego, California.
- 17. <u>Gill, S. V.</u>, Vora, I., & Kelty-Stephen, D. (2013, November). Walking to the beat of their own drum: Differences in how children and adults meet task constraints. *International Society for Developmental Psychobiology Conference*. San Diego, California.
- Vroman, K., Gill, S. V., Pizzi, M., Schriber-Orloff, S. N., Suarez-Balcazar, Y., Kuo, F., & Lau, C. (2013, April). Occupational therapy child and family centered interventions for obesity and health in multiple clinical settings. *American Occupational Therapy Conference*. San Diego, California.
- 15. <u>Gill, S. V.</u> & Forhan, M. (2012, April). Cross border contributions to obesity research and interventions: A north american review of occupational therapy. *American Occupational Therapy Association.* Indianapolis, IN.
- 14. Schefkind, S., Pizzi, M. A., **Gill, S. V.**, Orloff, S., Suarez-Balcazar, Y., Bazyk, S., Lau, C., & Vroman, K. (2012, April). Occupational therapy role in obesity prevention: A national priority. *American Occupational Therapy Association.* Indianapolis, IN.
- Keimeg, S., DeSilva, J. M., & Gill, S. V. (2011, October). A new method of measuring arch height in humans. *Boston University Undergraduate Research Opportunity Symposium*. Boston, MA.
- 12. Schweiger, E. G. & <u>Gill, S. V.</u> (2011, October). Effects of structured and unstructured practice on motor outcomes. *American Congress in Rehabilitation Medicine and the American Society for Neurorehabilitation Conference*. Atlanta, GA.
- 11. <u>Gill, S. V.</u> (2011, October). Impact of overweight on safety: Timing steps to adapt to external constraints. *Obesity Society*. Orlando, FL.
- 10. <u>Gill, S. V.</u> & Narain, A. (2011, October). Use of a video coding system to identify the effects of body mass index on safety. *Obesity Society.* Orlando, FL.

- Johnson, K. L. & Gill, S. V. (2011, May). The role of gender-typed body motion in perceptions of others' intent to communicate sexual orientation. *International Communication Association*. Boston, MA.
- 8. <u>**Gill, S. V.</u>** & Hauff, S. E. (2010, October). The effects of overweight BMI on adaptive motor patterns. *Obesity Society.* San Diego, CA.</u>
- 7. <u>Gill, S. V.</u> & Johnson, K. L. (2010, May). Personal characteristics and adaptation: How social constraints elicit adaptive motor responses. *American Psychological Society.* Boston, MA.
- 4. <u>**Gill, S. V.</u>** & Adolph, K. E. (2006, October). Emergence of flexibility: How infants learn a braking strategy. *International Society for Developmental Psychobiology*. Atlanta, Georgia.</u>
- 5. <u>Gill, S. V.</u> & Adolph, K. E. (2005, April). Flexibility in infant skill acquisition: How infants learn a stepping strategy. *Society for Research in Child Development.* Atlanta, Georgia.
- Yanez, B. R., Domakonda, K. V., <u>Gill, S. V.</u>, Adolph, K. E., & Vereijken, B. (2004, May). Automaticity and plasticity in infant and adult walking. *International Conference on Infant Studies*. Chicago, IL.
- **3.** Adolph, K. E., <u>**Gill, S. V.**</u>, Lucero, A. A, Mathur, P., & Murray, A. (1997, April). Specificity and transfer in infant locomotion: Learning to detect balance requirements. *Society for Research in Child Development*. Washington, D. C.
- <u>Gill, S. V.</u>, Lucero, A., & Fadl, Y. (1996, April). Mechanisms of motor learning: How infants learn to modify their gait. Poster presented at the student chapter of Sigma Xi, Carnegie Mellon University.
- Adolph, K. E., Vereijken, B., Denny, M. A., Fadl, Y., <u>Gill, S. V.</u>, & Lucero, A. A. (1995, June). Changing balance requirements constrain variability in infant crawling. *American Psychological Society*. NY, NY.

## Invited Workshop Leadership

1. **Gill, S. V.**, Little, L., & Skidmore, E. R. (May, 2016). Summer institute for future scientists in occupational therapy. Role: Course faculty member. Pittsburgh, PA.

# **Invited Presentations**

- **41.** <u>**Gill, S. V.**</u> (2021). Movement as a door to participation. Virtual presentation for the University of Florida Rehabilitation Science Seminar Series.
- **40.** Shin, D., <u>**Gill, S. V.,</u>** Helfrich, C. A. (2020). Medically complex client interventions. *Webinar for OT.com.*</u>
- **39.** <u>**Gill, S. V.**</u> (2020). Bodies in motion tell a story. Virtual talk for the Perception-Action-Cognition group in the Department of Psychology at the *University of Cincinnati*, Cincinnati, OH.
- **38.** <u>**Gill, S. V.**</u> (2020). Everyday movement with everyday items. Virtual talk for the *Renaissance Charter School,* Queens, NY.
- 37. Gill, S. V. (2019). Parent professions and passions. Gardengate Academy. Natick, MA.
- **36.** <u>**Gill, S. V.**</u> (2019). Motor adaptation over the lifespan. *American Physical Therapy Association Pediatric Summit V. Alexandria, VA.*
- 35. Gill, S. V. (2019). The importance of movement. Renaissance Charter School, Queens, NY.
- **34**. <u>**Gill, S. V.**</u> (2018). Viewing body, function, and structure through the eyes of movement. *University of Southern California*, Los Angeles, CA.
- 33. <u>**Gill, S. V.</u>** (2018). Implementation science and obesity: Steps to facilitating a new system of care. *University of Pittsburgh,* Pittsburgh, PA.</u>
- 32. Rodakowski, J., Blackwell, A., <u>Gill, S. V.</u>, & Proffitt, R. (2018). The life and times of a scientist. *Future Scientist Panel at the Occupational Therapy Summit of Scholars.*

S. Gill - 10

- S. Gill 11
- Hastings, M., Christiansen, C., <u>Gill, S. V.</u>, & Skidmore, B. (2017). Enhancing and growing your lab. CORRT Panel for the Comprehensive Opportunities in Rehabilitation Research Training Retreat.
- 30. Khetani, M., <u>Gill, S. V.</u>, Yinyusa-Nyahkoon, L. (2016). Forging researcher-clinical alliances to advance interdisciplinary rehabilitation research. *Webinar for OT.com.*
- **29.** <u>**Gill, S. V.**</u> (2016). Unexpected opportunities: Research profile of a junior faculty member. CORRT Talk Webinar for the Comprehensive Opportunities in Rehabilitation Research Training group.
- **28.** <u>**Gill, S. V.**</u> (2016). Behavioral flexibility. *Boston University Division of Clinical Psychology*, Boston, MA.
- **27.** <u>**Gill, S. V.**</u> (2016). My career trajectory as an occupational therapy researcher. *Massachusetts General Hospital Institute for Health Professions*, Boston, MA.
- 26. <u>**Gill, S. V.</u>** (2016). Behavioral flexibility: Adapting to changing body and task constraints. *Washington University at St. Louis,* St. Louis, IL.</u>
- 25. <u>Gill, S. V.</u> (2016). What does movement have to do with it? Insights on fall risks in obesity. *American Occupational Therapy Association Pre-Conference Institute*, Chicago, IL.
- **24.** <u>**Gill, S. V.**</u> (2016). Tapping into function: How obesity impacts movement. *University of Alberta*, Edmonton, Canada.
- **23.** <u>**Gill, S. V.**</u> (2015). Obesity and fall risk in children and adults. University of Massachusetts, Boston Exercise Science Program. Boston, MA.
- 22. <u>**Gill, S. V.</u>** (2015). Getting moving: Why it's easier said that done. *Health Matters Conference*, Boston University, Boston, MA.</u>
- 21. <u>**Gill, S. V.**</u> (2015). The influence of body and task constraints on motor actions. *Perception-Action Workshop*, University of Connecticut, Storrs, CT.
- <u>Gill, S. V.</u> (2014). Motor function in the face of changing bodies and task constraints. Department of Anatomy & Neurobiology Research Seminar, Boston University Medical Center, Boston, MA.
- <u>Gill, S. V.</u> (2014). Body and task constraints on action: How obesity influences function. Interdisciplinary Research Seminar, Massachusetts General Hospital Institute for Health Professions, Boston, MA.
- <u>Gill, S. V.</u> & Shutrump, S. E. (2013). Call to action for emerging niche practice areas: OT's role in addressing childhood obesity and supporting mobility and transport to School. *Specialty Conference on Advancing School-Based Practice*, American Occupational Therapy Association, Minneapolis, MN.
- 17. <u>**Gill, S. V.</u>** (2013). Birth history and birth weight: Use of clinical retrospective data. *Spiral Foundation Symposium*, Spiral Foundation, Newton, MA.</u>
- 16. <u>**Gill, S. V.</u>** (2011). The development of motor adaptation. Developmental Science Colloquium Series, Boston University Department of Psychological and Brain Sciences, Boston, MA.</u>
- 15. Kramer, J. M. & **Gill, S. V.** (2011). Using sensory integration strategies in the classroom. *Teacher In-Service*, Boston University Children's Center, Boston, MA.
- 14. <u>**Gill, S. V.</u>** (2011). Walking the walk: What movement can tell us about adapting to change. *Keynote Presentation*, Boston University Lead the Way Symposium, Boston, MA.</u>
- <u>Gill, S. V.</u> (2010). Walking the walk: Adapting to varying environments & task constraints. Vision & Cognition Laboratory, Boston University Department of Psychological and Brain Sciences, Boston, MA.
- 12. <u>Gill, S. V.</u> (2010). Meeting task demands: Effects of BMI on adaptation. *Center for Neurorehabilitation*, Boston University, Boston, MA.
- 11. <u>Gill, S. V.</u> (2010). Adapting to changing environments. *Health Quality of Life Labo*ratory. Tufts University, Medford, MA.

- 10. Kramer, J. M. & Gill, S. V. (2010). Using sensory integration strategies in the classroom. Teacher In-Service, Boston University Children's Center, Boston, MA.
- 9. Gill, S. V. (2010). Using blackboard for exam making. Faculty Development Series, Department of Occupational Therapy, Boston University, Boston, MA.
- 8. Kramer, J. M. & Gill, S. V. (2009). Sensory integration in the classroom. Teacher In-Service, Boston University Children's Center, Boston, MA.
- 7. Gill, S. V. (2007). Flexibility in the development of walking. Perception-Action Workshop, University of Connecticut, Storrs, CT.
- 6. Gill, S. V. (2002). Quantitative measures of upper extremity use in children with hemiplegic cerebral palsy. Occupational Therapy Colloquium, Dominican College, Orangeburg, NY.
- 5. Gill, S. V. (2003) Development of fine motor skills. Occupational Therapy Colloquium, Dominican College, Orangeburg, NY.
- 4. Gill, S. V. (2001) Fine motor development in children: Anatomy & intervention. Occupational Therapy In-Service, New York State Occupational Therapy Association, Bayshore, NY.
- 3. Okoye, R., Okoye, R. O., Gill, S. V., Mattheson, G., Rutledge, P., Torre, S. (2001). Use of sensory tools for teaching at home and at school: Motor skills and learning. Community Forum for Teachers and Parents of Children at Risk for Learning Disabilities, Dove Rehabilitation Services, Wantagh, NY.
- 2. Gill, S. V. (2000). Feeding and oral-motor dysfunction: Indication for treatment and techniques for intervention. Occupational Therapy In-Service, Kramer Learning Center, Bayshore, NY.
- 1. <u>Gill, S. V.</u>, Lucero, A. A., & Fadl, Y. (1996). Emergence of stepping strategy: How infants learn to walk down slopes. Developmental Discussion Group Colloquium, Carnegie Mellon University, Pittsburgh, PA.

# **Research Funding**

# Grants Funded (Active)

1. Boston alcohol research collaboration on HIV/AIDS – Comorbidity Center (Boston ARCH CC) NIH P01AA029546 (PI: Richard Saitz) 9/22/21 - 8/31/26 Unhealthy drinking can exacerbate two highly prevalent HIV-related comorbidities/co-occurring conditions, chronic pain and physical inactivity, which in turn, can intensify alcohol use and affect physical and mental function in people living with HIV (PLWH). In this Program Project, we will conduct state-of-the-art e-health clinical trials research on scalable approaches to address the HIV-associated conditions chronic pain and physical inactivity in PLWH with unhealthy alcohol use. We will also support secondary analyses of the existing Boston ARCH cohort of PLWH with unhealthy drinking, and provide support and mentoring to trainees and investigators accessing the cohort data. Role: Co-I

Award Amount: \$7,113,473

2. Flexibility in infant skill acquisition

NIH R01HD033486 (PI: Karen E. Adolph) The proposed work on infant walking tests critical hypotheses about the development of behavioral flexibility, a fundamental hallmark of motor skill. Flexibility is the ability to tailor motor actions to changes in body-environment relations. Flexibility is essential to functional, adaptive action because the body and environment are always in flux. Changes in local conditions—body growth, variations in clothing/footgear, carrying objects, variations in ground surfaces, elevations, and obstacles in the path— alter the biomechanical constraints on action.

## 7/12/18 - 4/30/23

One theory of flexibility claims that learning particular solutions to particular motor problems cannot ensure the ability to cope with the novelty and variability that characterize everyday activity. Rather, infants must learn how to solve new motor problems by exploring the current body-environment relations, discerning the critical information regarding which actions are possible, and assembling appropriate solutions in the moment. The proposed experiments will test critical hypotheses generated by this theory. Role: Consultant

Award Amount: \$612,351 in direct support

3. Play and learning across a year (PLAY)

NIH R01HD094830 (PI: Karen Adolph) The overall goal of the PLAY (Play & Learning Across a Year) project is to catalyze discovery about behavioral development in infancy. PLAY will focus on the critical period from 12 to 24 months of age when infants show remarkable advances in language, object interaction, locomotion, and emotion regulation. PLAY will leverage the joint expertise of 63 "launch group" researchers, and capitalize on the Databrary video-sharing library and Datavyu video-coding tool to exploit the power of video to reveal the richness and complexity of behavior. Together, PLAY researchers will collect, transcribe, code, share, and use a video corpus of infant and mother naturalistic activity in the home to test behavioral, developmental, and environmental cascades. The project will demonstrate the value and feasibility of a cross-domain synergistic approach, and advance new ways to use video as documentation to facilitate discovery and ensure transparency and reproducibility. Role: Launch group researcher

Award Amount: \$930,859 in direct support

4. Predicting and optimizing language outcomes in minimally verbal children with autism spectrum disorder

NIH P50DC018006 (PI: Tager-Flusberg) 9/1/2019 - 8/31/2024 The goals of this Center, located at Boston University and University of California Los Angeles, are to build on earlier work addressing a central theme: Which young minimally verbal children with ASD make gains acquiring language during the early school years and how can we facilitate such progress? We approach these questions from a multidisciplinary perspective, employing tools, methods, and approaches drawn from communication disorders, speech and motor science, developmental neuroscience, genetics and interventions research. Role: Co-I

Award Amount: \$12,139,641

5. URBAN ARCH (5/5) Boston Cohort - Alcohol and HIV-associated comorbidity and complications: Frailty, Functional impairment, Falls, and Fractures (the 4F study) NIAAA U01AA020784 (PI: Richard Saitz) 09/01/2016 - 08/31/2022 Alcohol, other drug use, use of many medications, underlying inflammation, other diseases and impairments related to HIV infection lead to people with HIV infection having a high risk of falling, even at a relatively young age. This project aims to study people with HIV infection to understand and test how to better prevent falls. Role: Co-I

Award Amount: \$2,022,285

6. Increasing physical activity in adults following bariatric surgery 8/15/2020 - 9/30/2022 Sargent College Faculty Research Grant

4/01/18 - 3/31/23

Bariatric surgery improves motor capacity. However, persistent deficits jeopardize patients' participation in physical activity after surgery. For this proposal, we will demonstrate the feasibility of a sensor-based interactive program, which permits modification and improvement, consistent with NIH Stage I (Stage IA) protocol. We will use outcome assessments to permit baseline characterization of participants and track their trajectory of change over the course of 8 weeks. We will also obtain preliminary evidence of the efficacy and effectiveness of PEO Move: a multi-factorial behavioral intervention designed to improve physical activity and motor function in adults undergoing bariatric surgery. Role: PI

Award Amount: \$8,000

## Grants Funded (Completed)

Massive weight loss and its effects on postural stability and fall risks
 NIH R03AR066344 (PI: Simone V. Gill)
 9/12/14 – 8/31/19
 The objective of this study is to test if massive weight loss after bariatric surgery in adults with knee osteoarthritis is sufficient to improve key factors contributing to postural instability and fall risks: knee pain, atypical gait, and a decreased ability to control the center of mass.
 Role: PI

Award Amount: \$150,000 in direct costs

2. Genetic influences on the development of walking skill in toddlers NIH K12HD055931 (PI: Michael Mueller)

9/01/13 - 8/31/18

Comprehensive Opportunities in Rehabilitation Research Training (CORRT) is a Multicenter Career Development Program for Physical and Occupational Therapists. It provides funding for new investigators to acquire the research skills necessary to become independent investigators in rehabilitation approaches. It is funded by the National Center Medical Rehabilitation Research, National Institute of Child Health and Human Development / National Institute Neurological Disorders and Stroke, National Institutes of Health (K12 HD055931). The grant covers 75% effort of the scholar up to \$75,000 for both salary and fringe benefits. Each scholar also receives \$20,000 for research and miscellaneous supplies, and \$5,000 for travel. Scholars are selected by a Selection and Review Committee based on prior training, research, and commitment to a clinical research career, as well as potential to excel in the program. The goal of my project for this grant is to examine genetic and environmental links between child characteristics and walking skill in 312 same-sex twin pairs at 2 and 3 years of age. Role: Scholar

Award Amount: \$161,028 in direct support

3. Use of motor learning principles to reduce fall risks after surgical weight loss American Occupational Therapy Foundation 55203488 (PI: Simone V. Gill) 7/01/15 – 6/30/16 Identifying and remediating mechanisms underlying fall risks due to obesity relates to occupational therapy's focus on supporting clients to engage in everyday occupations. The purpose of this study is to implement a motor learning intervention in adults after bariatric surgery. Role: PI

Award Amount: \$50,000 in direct costs

4. Genetic influences on walking skill in early childhood Dudley Allen Research Fund (PI: Simone V. Gill)

9/01/13 - 8/31/14

The purpose of this study was to gain a greater understanding of the mechanisms that underlie walking skill and its development by identifying factors responsible for individual differences in children's walking skill. Role: PI

Award Amount: \$7,000 in direct costs

- The midtarsal break and locomotor diversity in early hominins Leakey Foundation 55201501 (PI: Jeremy M. DeSilva) 12/31/12 – 11/30/14 The goal of this study was to determine skeletal correlates of foot function to more precisely reconstruct locomotor mechanics in early humans. Role: Co-PI Award Amount: \$17,000 in direct costs
- 6. The human foot in action

Clarks Corporation (PI: Jeremy M. DeSilva) 9/01/11 – 8/31/12 This study investigated the form of the arch in humans to create a model of the link between foot form and walking. Data were collected on visitors to the Boston Museum of Science as part of their NSF funded Living Laboratory project. Role: Co-PI Award Amount: \$15,000 in direct costs

7. The effects of body mass index on adaptive motor patterns

Mary Erskine Faculty Grant (PI: Simone V. Gill) 9/01/10 - 8/31/11This study examined how obesity affected adults' ability to adapt their gait patterns to meet task constraints. The overall goal was to study how obesity affected clients' ability to safely navigate around the world everyday and to determine their readiness to participate in physical activity interventions.

Role: PI

Award Amount: \$2,000 in direct costs

 8. Flexibility of learning in infant skill acquisition NIH R37 HD033486-12S1 (PI: Karen E. Adolph) 9/01/06 – 8/31/08 The study for this Diversity Supplement examined infants' ability to modify their walking patterns to cope with slopes of varying degrees. The overall goal was to investigate infant motor skill acquisition. Role: Doctoral student

Award Amount: \$93,138 in direct support

## **Occupational Therapy License**

Board of Allied Health Professions: 10006

## **Research Mentoring Experience**

Post Doctoral Fellows; Co-authors are indicated with an asterisk.

Phillip Desrochers (Boston University, Rehabilitation Sciences, Primary mentor 2019-2021) Received 2020 mini-sabbatical grant from Boston University CTSI to develop a task utilizing wearable sensor technology that will evaluate how people with Parkinson's disease (PD) make online corrections during lower limb movements when faced with obstacles in their environment.

2021-present) 2021-present) Marc Maffei (MGH Institute of Health Professions, collaborator on F31 proposal) 2018-present) 2017-present) Analysis Society Conference 2015-2020) Analysis Society Conference Received 2019 Dudley Allen Sargent Grant University Member, 2019-present) 2014-2017) Member, 2015-2018) Member, 2015-2018) study. Journal of Applied Biomechanics. \*Elizabeth Heller Murray (Boston University, Speech, Language, and Hearing Sciences, Dissertation Committee Member, 2014-present) Co-author: Heller Murray, E. S.\*, Mendoza, J. O., Gill, S. V., Perkell, J. S., Stepp, C. typical speakers. Journal of Speech, Language, and Hearing Research.

#### Entry-level Doctor of Occupational Therapy Students (OTD)

Ashton Anderson (Boston University, Occupational Therapy Program, 2021-current) Mary Walker (Boston University, Occupational Therapy Program, 2021-current) Haley Lawlor (Boston University, Occupational Therapy Program, 2021-current) Madison Buck (Boston University, Occupational Therapy Program, 2021-current) Samantha Davis (Boston University, Occupational Therapy Program, 2021-current) Katie Dahlerbruch (Boston University, Occupational Therapy Program, 2020-2021) Carli DeMeo (Boston University, Occupational Therapy Program, 2020-2021) Lucy Tamberrino (Boston University, Occupational Therapy Program, 2020-2021)

Currently a Physiological Systems Scientist III in the Sensing, Perception, and Applied Robotics Division at Charles River Analytics

- Doctoral Students (PhD, ScD); Co-authors are indicated with an asterisk.
  - Chiwhan Choi (Boston University, Rehabilitation Sciences, Dissertation Committee Chair,
  - Laura Keegan (Boston University, Rehabilitation Sciences, Dissertation Committee Chair,
  - Maria Ayoub (Boston University, Rehabilitation Sciences, Dissertation Committee Chair,
  - Danny Shin (Boston University, Rehabilitation Sciences, Dissertation Committee Chair,

Received 2019 Student Travel Award to present at the Gait & Clinical Movement

Daekyoo Kim (Boston University, Rehabilitation Sciences, Dissertation Committee Chair,

Received 2018 Student Travel Award to present at the Gait & Clinical Movement

Currently Postdoctoral Fellow with Dr. Ronald Triolo at Case Western Reserve

- Joshua Tanor (Boston University, Rehabilitation Sciences, Dissertation Committee
- Anne Khuu (Boston University, Rehabilitation Sciences, Dissertation Committee Member,
- Jing-Sheng Li (Boston University, Rehabilitation Sciences, Dissertation Committee
- \*Kari Loverro (Boston University, Rehabilitation Sciences, Dissertation Committee

Co-author: Ogamba, M. I., Loverro, K. L.\*, Laudicina, N. M., Gill, S. V. & Lewis, C. L. (in press). Changes in gait with anteriorly added mass: A pregnancy simulation

E. (in press). Effects of biofeedback on control and generalization of nasalization in

Mario Munoz (Boston University, Rehabilitation Sciences, Dissertation Committee Member, 2010-2015)

Carson DeSantis (Boston University, Occupational Therapy Program, 2020-2021) Mara Mladenovski (Boston University, Occupational Therapy Program, 2020-2021) Hayley McConnell (Boston University, Occupational Therapy Program, 2019-2020) Reed Kotz (Boston University, Occupational Therapy Program, 2019-2020) Cole Korber (Boston University, Occupational Therapy Program, 2019-2020) Katherine Appelbee (Boston University, Occupational Therapy Program, 2019-2020) Kristen Layo (Boston University, Occupational Therapy Program, 2018-2019) Nicole Murgas (Boston University, Occupational Therapy Program, 2018-2019)

Post-professional and Transitional Doctor of Occupational Therapy Students (OTD) Inbal Lavy (Boston University, Occupational Therapy Program, 2017-2019) Catlin Jensen (Boston University, Occupational Therapy Program, 2016-2019) Ali Rebels (Boston University, Occupational Therapy Program, 2016-2019) Lauren Cassel (Boston University, Occupational Therapy Program, 2015-2017) Lowana Lee (Boston University, Occupational Therapy Program, 2013-2015) Julie Kunisch (Boston University, Occupational Therapy Program, 2013-2014)

#### Masters Students (MSOT, MS)

Broni Bashinskaya (Boston University Medical Center, Medical Sciences Program, 2014-2015)

Isha Vora (Boston University, Occupational Therapy Program, 2012-2013) Elizabeth Munsell (Boston University, Occupational Therapy Program, 2011-2012) Larissa Sachs (Boston University, Occupational Therapy Program, 2010-2011)

#### Level I Fieldwork Research Experience (MSOT)

Catlin Jensen (Boston University, Occupational Therapy Program, Fall 2015) Elizabeth Valeri (Boston University, Occupational Therapy Program, Fall 2015) Fiona Egan (Boston University, Occupational Therapy Program, Fall 2015) Rachel Heidling (Boston University, Occupational Therapy Program, Fall 2015) Dahlia Dodson (Boston University, Occupational Therapy Program, Spring 2015) Adena Feitelson (Boston University, Occupational Therapy Program, Spring 2015) Kimberly Salloum (Boston University, Occupational Therapy Program, Spring 2015) Molly Trillo (Boston University, Occupational Therapy Program, Spring 2015) Ann McCullough (Boston University, Occupational Therapy Program, Fall 2014) Audrey Joo (Boston University, Occupational Therapy Program, Fall 2014) Vanessa Grijalba (Boston University, Occupational Therapy Program, Fall 2014) Jeffrey Chan (Boston University, Occupational Therapy Program, Fall 2014)

Undergraduate Students (Co-authors are indicated with an asterisk. Award winners are italicized) Nikita Chou (Boston University, Health Science Program, 2021-present) Jyothika De (Boston University, Behavior & Health Program, 2021-present) Miu Kikuchi (Boston University, Behavior & Health Program, 2021-present) Raghu Nema (Boston University, Neuroscience Program, 2021-present) Sean Rhee (Boston University, Behavior & Health Program, 2021-present) Rochana Wiyathunge (Boston University, Neuroscience Program, 2021-present) Xiaouy Yan (Boston University, Behavior & Health Program, 2021-present) Michele Luo (Boston University, Neuroscience Program, 2021-present) Christina Shin (Boston University, Behavior & Health Program, 2021-present) Aesha Gandhi (Boston University, Biomedical Engineering Program, 2017-2020) Maria Gomez (Boston University, Behavior & Health Program, 2017-2019) Sydney Gullett (Boston University, Human Physiology Program, 2017-2018) Josie Oullette (Boston University, Human Physiology Program, 2017-2018) Elizabeth Kappes (Boston University, Behavior & Health Program, 2017-2018) Julia Barruga (Boston University, Neuroscience Program, 2017-2018) Joshua Smith-Sreen (Boston University, Biology Program, 2015-2016) Martinelli Valcin (Boston University, Undergraduate Neuroscience Program, 2016-2017) Jacqueline Valenzuela (Boston University, Human Physiology Program, 2016-2017) Tiffany Huynh (Boston University, Behavior & Health Program, 2016-2017) Ethan Sweeting (Boston University, Undergraduate Neuroscience Program, 2016-2017) Zhe Zhao (Boston University, Economics Program, 2016-2017) Inga Wu (Boston University, Human Physiology Program, 2016-2017) Trisha Katz (Boston University, Behavior and Health Program, 2016-2017) Joshua Smith-Sreen (Boston University, Biology Program, 2016-2017) Anna Lourdes Cruz (Boston University, Neuroscience Program, 2016-2017) Maggie Wu (Boston University, Human Physiology Program, 2016-2017) Xenia Chan (Boston University, Biology Program, 2016-2017) Elana Lowell (Boston University, Behavior and Health Program, 2016-2017) Paloma Sierra (Boston University, Behavior and Health Program, 2016-2017) Victoria Cahill (Boston University, Human Physiology Program, 2015-2016) Austin Liou (Boston University, Human Physiology Program, 2015-2016)

- Recipient of Summer 2016 Undergraduate Research Opportunities Program award for summer stipend (\$4,000)

Reuben Horace (Boston University, Health Science Program, 2015-2016) Grace Chang (Boston University, Behavior and Health Program, 2015-2016) May Eiampikul (Boston University, Behavior and Health Program, 2015-2016) Sarah Lukose (Boston University, Behavior and Health Program, 2015-2016) Mia Gonzalez (Boston University, Health Science Program, 2015-2016) \*Samantha Watts (Boston University, Biology Program, 2014-2016)

Co-author: <u>**Gill, S. V.</u>**, Vessali, M.\*, Pratt, J. A., Watts\*, S., Pratt, J. S., Raghavan, P., & DeSilva, J. M. (2015). The importance of interdisciplinary research training and community dissemination. *Clinical and Translational Science*, *8*, 611-14.</u>

\*Misha Vessali (Boston University, Business Concentration, 2014-2017)

Co-author: <u>**Gill, S. V.</u>**, Vessali, M.\*, Pratt, J. A., Watts\*, S., Pratt, J. S., Raghavan, P., & DeSilva, J. M. (2015). The importance of interdisciplinary research training and community dissemination. *Clinical and Translational Science*, *8*, 611-14.</u>

Lena Huang (Boston University, Human Physiology Program, 2014-2016)

- Recipient of Summer 2015 Undergraduate Research Opportunities Program award for summer stipend (\$4,000)
- Recipient of Fall 2015 Undergraduate Research Opportunities Program award for fall stipend (\$2,000)
- Recipient of 2015 UROP Outstanding Student Award
- Recipient of Spring 2016 Undergraduate Research Opportunities Program award for fall stipend (\$2,000)

Nicole Woo (Boston University, Psychology Program, 2012-2015)

- Recipient of Summer 2014 Undergraduate Research Opportunities Program award for summer stipend (\$4,000)

Xia Pu (Boston University, Biochemistry Program, 2012-2015)

- Recipient of Summer 2014 Undergraduate Research Opportunities Program award for summer stipend (\$4,000)

Vincent Debitetto (Boston University, Psychology Program, 2014-2015) Jiaxu Guo (Boston University, Psychology Program, 2012-2015) Parvati Dhurvas (Boston University, Psychology Program, 2012-2014) Ganesh Balaji (Boston University, Biology Program, 2012-2014) Denis Nakkeeran (Boston University, Human Physiology Program, 2012-2013) John Usseglio (Boston University, Human Physiology Program, 2012-2013) \**Archana Narain (Boston University, Biology Program, 2010-2012)* 

- Recipient of Summer 2011 Undergraduate Research Opportunities Program award for summer stipend (\$4,000)
- Recipient of Undergraduate Research Opportunities Program Travel Grant (\$500)
- Co-author: <u>**Gill, S. V.</u>** & Narain, A.\* (2012) Quantifying the effects of body mass index on safety: Reliability of a video coding procedure and utility of a rhythmic walking task. *Archives of Physical Medicine and Rehabilitation, 93,* 728-730.</u>

Thomas Azeizat (Boston University, Biology Program, 2011-2012)

Christopher Fundora (Boston University, History Program, 2011-2012)

- Recipient of Spring 2012 Undergraduate Research Opportunities Program award for spring stipend (\$2,000)

### High School Students

Jeffrey Poomkudy (Boston University Research Internship in Science and Engineering, RISE Program, Summer 2015)

Andrew Yu (Boston University Academy, 2010-2011)

### Visiting Students

Mael Thievent (Aix-Marseille University in France, Master's in Neuroscience, Spring 2022) Samantha Davis (Clark University, Undergraduate Psychology Program, Summer 2018) Amy Jobling (University of Bath in UK, Undergraduate Psychology Program, 2015-2016) Amelia Stuart (University of Bath in UK, Undergraduate Psychology Program, 2015-2016)

### **External PhD Dissertation Reviewer**

Mostafa Yahgoubi (Massey University, Wellington, New Zealand): Biomechanics of stationary exercise: an option for weight management (November 2018)

### Membership in Professional Societies

International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO) American Occupational Therapy Association (AOTA) American Society for Metabolic and Bariatric Surgery (ASMBS) Society for Research in Child Development (SRCD) Obesity Society American Psychological Association (APA)

### **Teaching Experience**

RS 650: Foundations of Rehabilitation Sciences (2 credits) Fall 2021 OT 520: Evidence-based Practice I (2 credits) Fall 2020, Fall 2021

- OT 943: Professional Development Seminar (4 credits) Spring 2018, 2019, 2021
- OT 526: Functional Movement Analysis and Assessment (4 credits) Fall 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018
- OT 502: Integrative Seminar III (4 credits) Fall 2020
- OT 501: Integrative Seminar II (2 credits) Spring 2010, 2013, 2016, 2018, 2019, 2021, 2022
- RS 890: Rehabilitation Sciences Doctoral Seminar (2 credits) Spring 2013
- OT 570: Laboratory in Motor Development Research (4 credits) Fall & Spring 2013, 2014, 2015, 2016
- HP 905 Master's Thesis (variable) Fall 2012, Spring 2013
- OT 736 Directed Study (variable) Fall 2010, Spring 2011, Fall 2012

# Teaching Mentoring Experience

Doctoral Students (PhD)

Jasin Wong (Boston University, PhD Rehabilitation Sciences Program, Spring 2017) – served as teaching mentor for Jasin Wong's teaching practicum for OT 501

## Service

Occupational Therapy Department

Evidence-based Practice Committee (2022-present) Capstone Committee (2021-2022) Search Committee Chair to OT Chair/Senior Professor (2020-2021) Search Committee Chair for Assistant Professor of Occupational Therapy (2018-2019) Search Committee Member for Clinical Assistant Professor in Occupational Therapy (2018) Search Committee Member for Assistant Professor Occupational Therapy position (2013-2014; 2014-2015) Primary Master's Thesis advisor for Isha Vora (2012-2013) Graduate Admissions – Committee member (2010 – 2013) Graduate advisor for Master's students (2010-11, 2012-13, 2014-15) Attended Master's students' presentation at the Boston State House (2009, 2010)

Doctoral Program in Rehabilitation Sciences

Interim PhD Program Director (2018-2019) Steering Committee – Committee member (2011 – 2013) Founder and Organizer of the Rehabilitation Sciences Colloquium Series (2011-2013)

# Sargent College

Committee Member for the Sargent Core Strategic Planning Group (2018-2019) Search Committee Member for 2 Assistant Professor Health Sciences positions (2017-2018) Member – Dudley Allen Sargent Review Committee (Spring 2013) Search Committee Member for Senior Rehabilitation Sciences position (2012-2013)

Boston University College of Arts & Sciences

Search Committee Member for Assistant Professor position for the Developmental Science Program in the Department of Psychological and Brain Sciences (2015-2016)

#### Boston University

Search Advisory Committee for the Dean of the Goldman School of Dental Medicine (Spring 2021-Fall 2021) Boston University Council Grievance Committee (2021-2022) Recruitment Committee – Committee member (2018-present) Multi-cultural Advisory Committee – Committee member (2011) Minority Faculty Working Group – Committee member (2010-2011) Faculty advisor for the BU Graduate Women in Science and Engineering (GWISE) (2014- 2017) Faculty Innovation Network (FIN) – Committee member (2017-present)

#### Professional Service

Nominated and inducted as inaugural Chair of the American Occupational Therapy Foundation Standing for Research Inclusion, Diversity, and Equity (STRIDE) Committee (2021-present)

Nominated and inducted as a member of the Board of Trustees for the American Occupational Therapy Foundation (2018-2021)

#### Community Outreach

Nominated and inducted as a member of the Board of Trustees for the Metrowest Health Foundation (<u>https://www.mwhealth.org/</u>), Framingham, MA (2018-present)

Invited presentation on the importance of movement to the Renaissance Charter School, Queens, NY (October 16, 2019).

Invited presentation on research and walking to Gardengate Academy, Natick, MA (October 23, 2019).

#### Diversity Outreach

In July 2020, I was invited to be one of two Faculty Fellows for Diversity, Equity, & Inclusion for PhD Education at Boston University; I represent the Boston University Charles River Campus. In this role, I helped to build on nascent initiatives to enhance diversity and inclusion in PhD recruitment, admissions, and retention and helped to coordinate and collaborate with BU schools and colleges with doctoral programs and, as appropriate, with individual departments and faculty members within those departments. I also worked to facilitate community among underrepresented PhD students.

I co-led and participated in the following events in my role as a Faculty Fellow for Diversity, Equity, and Inclusion for PhD Education

- Recruitment
  - o Presentation at the Black Doctoral Network Recruiting event (Oct. 2020)
  - Presentation at the San Diego State University Initiative for Maximizing Student Development Program/Maximizing Access to Research Careers (MARC) Recruiting event (Sept. 2020)

S. Gill - 22

- o Co-led virtual visit for underrepresented students interested in graduate programs at Boston University: UR BU Visit (Aug. 2020)
- Retention
  - o Co-hosted Boston University virtual on-boarding event for first-year PhD students from underrepresented groups
- Dissemination of DEI efforts
  - o Presentation to the Boston University cohort for the Association of American Universities Initiative on PhD Education (Sept. 2020)
  - o Presentation to the Boston University Academic Affairs group (July 2020)
  - o Presentation to the Provost's Cabinet at Boston University (Oct. 2020)

#### **Journal Editorial Board Membership**

OTJR: Occupation, Participation and Health (Associate Editor) Frontiers in Psychology (Developmental Psychology section) PTJ: Physical Therapy & Rehabilitation Journal

#### **Article Editor**

Sage Open

#### **Manuscript Reviewer**

American Journal of Physical Medicine & Rehabilitation American Journal of Occupational Therapy Anatomical Record Archives of Physical Medicine & Rehabilitation BMC Pediatrics BMC Public Health BMC Research Notes **Brain Sciences** Child Development **Developmental Psychobiology Developmental Science** Frontiers in Developmental Psychology Gait & Posture Gerontology International Journal of Behavioral Nutrition and Physical Activity International Journal of Environmental Research and Public Health Journal of Experimental Child Psychology Journal of Motor Learning and Development Journal of Perceptual and Motor Skills OTJR: Occupation, Participation and Health Pediatric Exercise Science Physical and Occupational Therapy in Pediatrics Physical Therapy **Physiotherapy & Practice** PLOS ONE **Research in Developmental Disabilities** Scientifica Social Cognition Somatosensory & Motor Research

### **Grant Reviewer**

NIH Study Section, Motor, Function & Speech Rehabilitation – ad hoc member (2018) Member of American Occupational Therapy Foundation Scientific Review Group (2017-2020)

NIH Study Sensory and Motor Neuroscience/Cognition & Perception – ad hoc member (2020, 2021)

### **Conference Abstract Reviewer**

American Occupational Therapy Association – 2017, 2018

#### American Occupational Therapy Association (AOTA) Workgroup Activities

AOTA annual conference – Abstract reviewer (2014, 2015, 2016, 2017) Obesity Workgroup – Member (2013-2016)

"OT obesity tip sheet" http://www.aota.org/Fact-Sheets/obesity.aspx - Co-developer AOTA online in-service "Recess: An important school routine" - Contributor/reviewer

#### **Research Features in Public Media**

Fossil footprints puzzle scientists: Bear or ancient human? (December, 2021) Article on *ABC News* 

<u>https://abcnews.go.com/Technology/wireStory/fossil-footprints-puzzle-scientists-bear-ancien</u> <u>t-human-81495992</u>

Ancient footprints hint at mysterious human relative with a strange walk Article in *National Geographic* 

https://www.nationalgeographic.com/science/article/ancient-footprints-hint-at-mysterious-hu man-relative-with-a-strange-walk

Sargent associate professor added to AOTA Roster of Fellows (November, 2020) Article in Daily Free Press

https://dailyfreepress.com/2020/11/12/sargent-associate-professor-added-to-aota-roster-of-fellows/

Arch height and obesity-related walking limitations (January, 2015) Podcast on *Super Human Radio* at

http://superhumanradio.com/shr-1569-arch-height-and-obesity-related-walking-limita tions-calling-out-the-usda-and-dhhs-on-the-creation-of-the-2015-dietary-guidelines-f or-americans.html

Funny Feet (January, 2015) New Scientist

When every step is an obstacle (December, 2014) *BU Research Website.* http://www.bu.edu/research/articles/when-every-step-is-an-obstacle/

- OT in the News. (2013, June) American Occupational Therapy Association Website. http://www1.aota.org/1MinUpdate/links/6-18-13gen.htm
- A new feet in primate research (June, 2013). *National Geographic*. <u>http://news.nationalgeographic.com/news/2013/06/130606-feet-primates-science-research-anthropology-study-apes-humans/</u>
- CORRT awards funding for occupational therapy faculty. (June, 2013). OT Practice. http://www.aota.org/Pubs/OTP/2013/OTP-060313/OTP-18-10.aspx?FT=.pdf

One in 13 of us share the same bendy, tree-climbing feet as chimps but scientists can't decide if it's down to evolution or our SHOES! (2013, May). *Daily Mail.* <u>http://www.dailymail.co.uk/sciencetech/article-2333543/One-13-share-bendy-tree-climbing-feet-chimps-scientists-decide-evolution-SHOES.html?ito=feeds-newsxml</u>

- Study: Eight percent of humans have chimp-like feet structure (2013, May). *Wired.* <u>http://www.wired.co.uk/news/archive/2013-05/30/bendy-chimp-feet</u>
- One in 13 people have bendy chimp-like feet. (2013, May). *New Scientist.* <u>http://www.newscientist.com/article/mg21829194.700-1-in-13-people-have-bendy-ch</u> <u>implike-feet.html</u>
- Health and Wellness: Obesity, Get Involved! (2011, June) American Occupational Therapy Association Website.
- Arch Support: BU Profs Seek to Unlock Mysteries of the Human Foot (2011, November) BU Today (<u>http://www.bu.edu/today/2011/arch-support/</u>).
- Take it outside: Occupational therapy's role in making the most of recess (2013, March). *OT Practice.*