

PRANAV J. PARIKH

Department of Health and Human Performance
Center for Neuromotor and Biomechanics Research
University of Houston
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Houston, TX 77204.
pjparikh2@uh.edu

EDUCATION

Postdoctoral Fellowship, Behavioral and Systems Neuroscience Arizona State University, Tempe, AZ	Sep 2012 – July 2015
Doctor of Philosophy, Human Motor Control/Neuroscience University of Iowa, Iowa City, Iowa	Sep 2008 – Aug 2012
Master of Science, Biomedical Engineering and Biotechnology (with a focus on Biomechanics) University of Massachusetts, Lowell, MA	Jan 2007 – May 2008
Bachelor of Medicine and Bachelor of Surgery (MD equivalent) M. S. University of Baroda, India	Aug 1999 – Oct 2005

ACADEMIC POSITIONS

Assistant Professor (tenure-track) of Motor Behavior Department of Health and Human Performance Center for Neuromotor and Biomechanics Research University of Houston, Houston, TX	Aug 2015 - present
Adjunct Professor School of Biological and Health Systems Engineering Arizona State University, Tempe, AZ	Oct 2015 – Aug 2019
Researcher Department of Neurology, Mayo Clinic, Scottsdale, AZ	Mar 2013 – July 2015

HONORS AND AWARDS

Undergraduate Research Mentor (Faculty Excellence) Award, University of Houston (2021)
Reviewer, American Heart Association Career Development Award (2021)
Ad Hoc member, NIH Sensorimotor Integration (SMI) study section (June 2020)
Associate Editor, Frontiers in Aging Neuroscience. (2014 – present)

The Provost's Travel Award, University of Houston. (2015, 2016, 2018)
Force and Motion Foundation travel award, AMTI Inc. (2012)
Research article selected for an editorial review, Journal of Applied Physiology. (2012)
Poster presentation award, Aging, Mind and Brain symposium, Iowa. (2012)
Graduate Student Senate travel award, University of Iowa. (2011)
Executive Council of Graduate and Professional Students travel award, Univ. of Iowa. (2011)
Graduate Student Senate travel award, University of Iowa. (2010)
Louis E. Alley Graduate award, Dept. of Health and Human Physiology. Univ. of Iowa. (2010)
Presidential Graduate Fellowship, University of Iowa. (2008 – 2012)

As a faculty mentor

Society of Neuroscience Trainee Professional Development Award. Nishant Rao. (2021)
Finalist, the 3-minute thesis (3MT), the University of Houston. Nishant Rao. (2020)
HHP Graduate Research Award, Nishant Rao. (2020)
The Cullen Graduate Student Success Fellowship for Academic/Research Projects and Distance Education. Nishant Rao. (2020)
Poster Presentation Award, Third Place, Kentucky Academy of Science, Grace McClurg. (2020)
Summer Undergraduate Research Fellowship. Hiba Rabieh. (2020)
Summer Undergraduate Research Fellowship. Sheel Shah. (2020)
Honorary Mention for Best Poster Award and Graduate School Erhardt Scholarship at UH. Nishant Rao. (2019)
First prize in the Elevator Speech Contest at HHP Research Day. Nishant Rao. (2018)
Audience Choice Poster Award at UH. John Kass. (2018)
Summer Undergraduate Research Fellowship. John Kass. (2018)
Summer Undergraduate Research Fellowship. Eesha Kundra. (2017)
UH Cullen Travel Fellowship. Nishant Rao. (2017)
NSF REU summer internship at the Uni. of Wisconsin Madison. Michelle Constante. (2017)
UH Presidential Fellowship to pursue PhD in my laboratory. Nishant Rao. (2016-2018)
Provost Undergraduate Research Scholarship. Eesha Kundra. (2016)
UH Future Faculty Fellowship. Rahul Goel. (2016)
UH Cullen Travel grant. Rahul Goel. (2016)
Force and Motion Foundation travel grant. Rahul Goel. (2016)

JOURNAL PUBLICATIONS

(* indicates *Parikh* as a lead/senior author)

1. Young DR, **Parikh PJ**, Layne CS (2020b). The posterior parietal cortex is involved in gait adaptation: A bilateral transcranial direct current stimulation study. *Frontiers in Human Neuroscience*. <https://doi.org/10.3389/fnhum.2020.581026>
2. Young DR, **Parikh PJ**, Layne CS (2020a). Non-invasive brain stimulation of the posterior parietal cortex alters postural adaptation. *Frontiers in Human Neuroscience*. <https://doi.org/10.3389/fnhum.2020.00248>.
3. Rao N, Chen Y, Ramirez R, Tran J, Li S, and **Parikh PJ*** (2020). Time-course of Pain Threshold after Continuous Theta Burst Stimulation of Primary Somatosensory Cortex in Pain-free Subjects. *Neuroscience Letters*. (23)722:134760.

doi: 10.1016/j.neulet.2020.134760.

4. **Parikh PJ***, Fine JM, Santello M (2019). Dexterous object manipulation requires context-dependent sensorimotor cortical interactions in humans. *Cerebral Cortex*. 30(5):3087–3101. <https://doi.org/10.1093/cercor/bhz296>.
5. Rao N and **Parikh PJ*** (2019). Fluctuations in Human Corticospinal Activity Prior to Grasp. *Frontiers in Systems Neuroscience*. 13. doi=10.3389/fnsys.2019.00077.
6. Paek A, Gailey A, **Parikh PJ**, Santello M, Contreras-Vidal J (2019). Regression-based reconstruction of human grip force trajectories with noninvasive scalp electroencephalography. *Journal of Neural Engineering*. 16(6):06603. doi: 10.1088/1741-2552/ab4063.
7. Goel R, Nakagome S (co-first author), Rao N, Paloski W, Contreras-Vidal J, **Parikh PJ*** (2019). Fronto-parietal brain areas contribute to the online control of posture during a continuous balance task. *Neuroscience*. (413):135-153. doi: 10.1016/j.neuroscience.2019.05.063.
8. Davare M, **Parikh PJ* (co-first author)**, Santello M (2019). Sensorimotor uncertainty modulates corticospinal excitability during skilled object manipulation. *Journal of Neurophysiology*. 121(4):1162-1170. doi: 10.1152/jn.00800.2018.
9. Goel R, Ozdemir RA, Nakagome S, Contreras-Vidal JL, Paloski WH, **Parikh PJ*** (2018). Effects of speed and direction of perturbation on electroencephalographic and balance responses. *Experimental Brain Research*. (236):2073–83. doi: 10.1007/s00221-018-5284-5.
10. **Parikh PJ*** and Santello M (2017). Role of human dorsal premotor region in learning a conditional visuomotor task. *Journal of Neurophysiology*. 117(1):445-456. doi: 10.1152/jn.00658.2016.
11. **Parikh PJ*** and Cole KJ (2016). Editorial - Effects of Aging: A Hand at Work. *Frontiers in Aging Neuroscience*. 8; 141. doi: 10.3389/fnagi.2016.00141.
12. Paek A, Gailey A, **Parikh PJ**, Santello M, Contreras-Vidal J (2015). Predicting Hand Forces from Scalp Electroencephalography During Isometric Grip and Object Grasping. *IEEE Engineering in Medicine and Biology Society*. 7570-3. doi: 10.1109/EMBC.2015.7320144.
13. **Parikh PJ*** and Cole KJ (2015). Effects of transcranial direct current stimulation on the control of finger force during dexterous manipulation in healthy older adults. *PLOS One*. 10(4): e0124137. doi:10.1371/journal.pone.0124137.
14. **Parikh PJ***, Davare M, McGurrin P, Santello M (2014). Corticospinal excitability underlying digit force planning for grasping in humans. *Journal of Neurophysiology*. 111(12):2560-9. doi: 10.1152/jn.00815.2013.
15. **Parikh PJ*** and Cole KJ (2014). Research Topic - Effects of Aging: A Hand at Work. *Frontiers in Aging Neuroscience*.

16. **Parikh PJ***, Cole KJ (2014). Effects of transcranial direct current stimulation in combination with motor practice on dexterous grasping and manipulation in healthy older adults. *Physiological Reports*. 2(3). doi: 10.1002/phy2.255.

17. **Parikh PJ***, Cole KJ (2013). Transfer of learning between hands to handle a novel object in old age. *Experimental Brain Research*. 227(1):9-18. doi: 10.1007/s00221-013-3451-2.

18. **Parikh PJ***, Cole KJ (2012). Handling objects in old age: forces and moments acting on the object. *Journal of Applied Physiology*. 112 (7):1095-104. doi: 10.1152/jappphysiol.01385.2011.

Selected for an editorial review. Latash and Johnston (2012). Why did grandpa drop the glass? Journal of Applied Physiology. 112: 1093-1094.

19. **Parikh PJ***, Cole KJ (2011). Limited persistence of the sensorimotor memory when transferred across prehension tasks. *Neuroscience Letters*. 494(2):94-8. doi: 10.1016/j.neulet.2011.02.066.

JOURNAL MANUSCRIPTS UNDER REVISION

20. Rao N, Mehta N, Patel P, **Parikh PJ**. Modulation of Digit Position based on Explicit Cues about Object Property for Dexterous Manipulation is affected in Old Age. To be resubmitted in June 2021.

JOURNAL MANUSCRIPTS UNDER PREPARATION

21. Goel R, Nakagome S, Ozdemir RA, Contreras-Vidal JL, Paloski WH, **Parikh PJ**. Center of pressure velocity is most informative of fronto-central negativity (N1) during continuous regulation of balance.

22. Rao N, Kass J, Skinner L, **Parikh PJ**. Continuous Theta Burst Stimulation over M1 alters the structure of force variability.

PREPRINT (THESE MANUSCRIPTS HAVE NOT BEEN CERTIFIED BY PEER REVIEW)

(* indicates *Parikh* as a lead/senior author)

1. Rao N, Mehta N, Patel P, **Parikh PJ** (2020). Modulation of Grasp Parameters using Arbitrary Cues about Object Property in Older Adults. <https://doi.org/10.1101/2020.10.19.344457>.

2. Rao N and **Parikh PJ*** (2019). Intertrial variability in human corticospinal activity during grasp force planning. bioRxiv (the preprint server for Biology). <https://doi.org/10.1101/676833>.

3. **Parikh PJ***, Fine JM, Santello M (2019). Choice of contact points modulates sensorimotor cortical interactions for dexterous manipulation. *bioRxiv* (the preprint server for Biology). <https://doi.org/10.1101/621466>.
4. Rao N, Cheng Yen-Ting, Ramirez R, Tran J, Li S, and **Parikh PJ*** (2019). Persistent elevation of electrical pain threshold following continuous theta burst stimulation over primary somatosensory cortex in humans. *bioRxiv* (the preprint server for Biology). <https://doi.org/10.1101/724344>.

CONFERENCE PUBLICATIONS (PEER-REVIEWED)

1. Paek A, **Parikh PJ**, Gailey A, Santello M, Contreras-Vidal J (2015). Predicting hand forces from scalp electroencephalography during isometric grip and object grasping. *International Graphonomics Society*.
2. Jing X, **Parikh PJ**, Yuan L, Trudeau M, Dennerlein JT, Buchholz B (2009). Biomechanical evaluation of the air stretcher as an alternative for the carpet knee kicker. *Proceedings of the 17th World Congress on Ergonomics*, Beijing, China.

RESEARCH SUPPORT

Active – External grants

1. Neuromodulation to Improve Dynamic Balance in Stroke
National Institutes of Health National Center of Neuromodulation for Rehabilitation, NIH/NICHHD Grant Number P2CHD086844
Parikh PJ (PI), Contreras-Vidal JL (co-I)
July 2019 – April 2022 (NCE)
2. A Broad-Spectrum Method for Evaluation of Dexterity in Children
C-STAR grant, NIH/NICHHD Grand Number P2CHD101899
Parikh PJ (PI), O'Connor D (co-I), Johnston C (co-I)
April 2021 – March 2022
3. Neuromodulation Examining the effects of operant conditioning of wrist extensor MEP on arm intermuscular coordination after stroke
National Institutes of Health National Center of Neuromodulation for Rehabilitation, NIH/NICHHD Grant Number P2CHD086844
Roh Jinsook (PI), **Parikh PJ (co-I)**, Thompson A (co-I)
July 2021 – June 2022
4. REU Site: Neurotechnologies to Help the Body Move, Heal, and Feel Again
National Science Foundation
Contreras-Vidal JL and Long S (co-PIs)

Parikh PJ (co-I)
May 2018 – April 2021

5. Dynamic Balance Control in Stroke
Mission Connect COVID-19 Relief funding, The Institute for Rehabilitation and Research (TIRR) Foundation
Parikh PJ (PI)
July 2020 – June 2021

Active – Internal grant

6. Transcranial Direct Current Stimulation to Reduce Motor Variability in Aging
High Priority Area Research Seed Grant
Parikh PJ (PI)
February 2018 – December 2021
University of Houston DOR/Provost Faculty research invigoration program

Completed External and Internal grants

7. Neural mechanisms underlying age-related decline in dexterous manipulation
CAMRI Baylor College of Medicine
Parikh PJ (PI)
December 2015 – December 2017
(Center for Advanced Magnetic Resonance Imaging (CAMRI), Baylor College of Medicine, Houston, TX)
8. Hand Control in Alzheimer's Disease
CLASS Research Progress Grant
Parikh PJ (PI)
February 2017 – February 2019
9. Effects of Transcutaneous Electrical Nerve Stimulation on sensorimotor functions of the hand and cortical plasticity in healthy old adults
American Society of Biomechanics, Graduate Student Grant-in-Aid,
Parikh PJ (PI)
June 2011 – May 2012
10. Transcutaneous Electrical Nerve Stimulation on manual dexterity and cortical plasticity in healthy old adults
EMPI, Inc., Equipment grant
Parikh PJ (PI)
February 2011 – August 2012
11. Effects of Peripheral Electrical Nerve Stimulation on sensorimotor functions of the hand and cortical plasticity in healthy old adults
Executive Council of Grad. and Prof. Students, University of Iowa, Graduate Research grant
Parikh PJ (PI)
December 2011 – December 2012

INVITED TALKS

1. *A Broad-Spectrum Method for Evaluation of Dexterity in Children*. The Shirley Ryan AbilityLab. (Feb 2021)
2. *Non-invasive brain stimulation to improve clinical outcomes*. NSF REU seminar series, University of Houston. (July 2020)
3. *Neural mechanisms underlying motor control*. The *Quantitative Physiology* course offered by Dr. Jinsook Roh in the department of Biomedical Engineering at the University of Houston. (Oct 2019)
4. *Sensorimotor mechanisms for dexterous manipulation and balance*. The Neurorecovery Research Center (NRRC) at TIRR Memorial Hermann, Houston, TX. (June 2019)
5. *Neural mechanisms underlying dexterous manipulation*. the 6th Annual Gulf Coast NeuroEngineering Symposium, Rice University, Houston, TX. (Oct 2016)
6. *Neural mechanisms underlying dexterous manipulation*. Baylor College of Medicine, Houston, TX. (Sept 2015)
7. *Neural mechanisms underlying dexterous manipulation*. Department of Health and Human Performance, the University of Houston, Houston, TX. (Feb 2015)
8. *Neural mechanisms underlying dexterous manipulation*. Department of Physical Therapy, Temple University, Philadelphia, PA. (Dec 2014)
9. *Handling objects in old age*. Department of Neuroscience, Kennedy Krieger Institute, Johns Hopkins University, Baltimore, MD. (June 2012)
10. *Handling objects in old age*. School of Biological and Health Systems Engineering, Arizona State University, Tempe, AZ. (June 2012)

CONFERENCE PRESENTATIONS

1. Goel R and **Parikh PJ** (2021). Interpretable machine learning models for prediction of imminent falls. NASA HRP conference (virtual).
2. Rao N, Rabieh H, Mutnick M, Shah S, Chaudhari S, Mehta N, Todd E, Gale M, Contreras-Vidal JL, **Parikh PJ** (2021). Alterations in the Fronto-Parietal Brain Network for Balance Control in Chronic Stroke Patients. Society for Neuroscience Global Connectome (virtual).
3. Mutnick M, Rao N, and **Parikh PJ** (2020). Functional brain connectivity for balance control in stroke. NSF REU *virtual* meeting at UH.

4. McGlurg G, Rao N, and **Parikh PJ** (2020). The complexity of force output following transcranial magnetic stimulation of primary motor cortex. NSF REU *virtual* meeting at UH.
5. Rao N, Kass J, Skinner L, and **Parikh PJ** (2019). Contribution of human primary motor cortex to force variability during precision grasping presented at the annual Society for Neuroscience conference held in Chicago, IL.
6. Rao N, Cheng Yen-Ting, Ramirez R, Tran J, Li S, and **Parikh PJ** (2019). Theta burst stimulation over human primary somatosensory cortex elevates electrical pain perception threshold presented at the GCC Translational Pain Research Symposium held in Houston.
7. Skinner L, Rao N, and **Parikh PJ** (2019). Effects of Theta-Burst Stimulation over Primary Motor Cortex on Cortico-spinal and Intracortical Excitability in Healthy Adults. NSF REU meeting at UH. August 2019.
8. Rao N, Cheng Yen-Ting, Ramirez R, Tran J, Li S, and **Parikh PJ** (2019). Combating Pain using Noninvasive Brain Stimulation presented at the UH Graduate Research Showcase.
9. Rao N and **Parikh PJ** (2019). Neural Correlates of Human Digit Force Variability during Grasping presented at the IUCRC BRAIN 19.
10. **Parikh PJ** and Rao N (2018). Variability in Corticospinal Excitability During Digit Force Planning for Grasping in Humans. Clinical Motor Control Conference, July 2018, held at Penn State University.
11. Rao N, Ting Y, Ramirez R, Li S, and **Parikh PJ** (2018). Time Course of the Effects of Continuous Theta Burst Stimulation over Primary Somatosensory Cortex on Sensory and Pain Perception. Annual Society for Neuroscience meeting, Neuroscience 2018, held in San Diego, CA.
12. **Parikh PJ**, Mehta N, Patel P, Nguyen K, Rao N (2018). Aging impairs the use of explicit cues for anticipatory modulation of digit contact points for dexterous manipulation. Annual Society for Neuroscience meeting, Neuroscience 2018, held in San Diego, CA.
13. Rao N, Ting Y, Ramirez R, Li S, and **Parikh PJ** (2018). Time Course of the Effects of Continuous Theta Burst Stimulation over Primary Somatosensory Cortex on Sensory and Pain Perception. UH BRAIN Center meeting. December 2018.
14. Kass J, Rao N, and **Parikh PJ** (2018). Effects of Brain Stimulation on Cortical Excitability in Healthy Adults: A Validation Study. UH Undergraduate Research Day. October 2018.
15. Ramirez R, Rao N, and **Parikh PJ** (2018). Effects of Continuous Theta Burst Stimulation over Primary Somatosensory Cortex on Electrical Pain and Sensory Thresholds in Healthy Adults. NSF REU meeting at UH. August 2018.
16. Rao N and **Parikh PJ** (2017). Variability in Corticospinal Excitability During Digit Force Planning for Grasping in Humans. Annual Society for Neuroscience meeting, Neuroscience 2017, to be held in Washington DC.

17. Goel R, Nakagome S, Rao R, Contreras-Vidal J, **Parikh PJ** (2017). Role of Supplementary Motor Area in Postural Control. Annual Society for Neuroscience meeting, Neuroscience 2017, to be held in Washington DC.
18. **Parikh PJ**, Zhang W, Grimm K, Ross M, Santello M (2016). Sensorimotor deficits in Carpal Tunnel Syndrome: Relation between electrodiagnostic and grasp behavioral measures. Annual Society for Neuroscience meeting, Neuroscience 2016, San Diego, CA.
19. Hing PB, **Parikh PJ**, Yau JM (2016). Force production and sensorimotor learning: Developing a novel paradigm for understanding motor function in amputees. Baylor College of Medicine.
20. **Parikh PJ** and Santello M (2015d). Associative sensorimotor learning: the role of human premotor dorsal region. *Neuroscience 2015*, October, Chicago, IL, USA.
21. McGurrin P, **Parikh PJ**, Santello M (2015c). Context-dependent role of primary motor cortex in dexterous manipulation. *Neuroscience 2015*, October, Chicago, IL, USA.
22. **Parikh PJ**, Davare M, Santello M (2015b). Role of contralateral anterior intraparietal sulcus in coordinating digit force to position for dexterous manipulation. *Neural Control of Movement Conference, Charleston, SC, USA*.
23. Santello M, Ross M, Light J, **Parikh PJ** (2015a). Effects of carpal tunnel release surgery on recovery of sensorimotor hand function. *Neural Control of Movement Conference, Charleston, SC, USA*.
24. **Parikh PJ**, Davare M, Santello M (2014a). Role of contralateral anterior intraparietal sulcus in coordinating digit force to position for dexterous manipulation. *Neuroscience 2014* in November, Washington DC, USA.
25. Santello M, Ross M, Light J, **Parikh PJ** (2014b). Effects of carpal tunnel release surgery on recovery of sensorimotor hand function. *Neuroscience 2014* in November, Washington DC, USA.
26. **Parikh PJ**, McGurrin P, Davare M, Santello M (2013a). Corticospinal excitability during reach to grasp tasks. *Neuroscience 2013* in November, San Diego, USA.
27. Davare M, **Parikh PJ**, McGurrin P, Santello M (2013b). Probing corticospinal excitability at the point of object contact during constrained vs. unconstrained grasps. *Neuroscience 2013* in November, San Diego, USA.
28. **Parikh PJ** and Cole KJ (2012). Effect of cortical stimulation on sensorimotor functions of the hand in healthy old adults. *Neuroscience 2012* in October, New Orleans, USA.
29. **Parikh PJ** and Cole KJ (2012). Effect of cortical stimulation on sensorimotor functions of the hand in healthy old adults. *American Society of Biomechanics* annual conference, August 17, Gainesville, FL.
30. **Parikh PJ** and Cole KJ (2012). Grasp kinematics and kinetics during functionally relevant tasks in healthy elderly individuals. *Aging, Mind and Brain* symposium, March 23, IA.

31. **Parikh PJ** and Cole KJ (2011). Transfer of sensorimotor memory between hands to handle a novel object in old age. *Neuroscience 2011*, November 13, Washington DC, USA.
32. **Parikh PJ** and Cole KJ (2010). Age-related changes in digit-tip force directions during grasp and manipulation. *Neuroscience 2010*, November 14, San Diego, CA.
33. Jing X, **Parikh PJ**, Yuan L, Trudeau M, Dennerlein JT, Buchholz B (2008). Biomechanical evaluation of the air stretcher as an alternative for the carpet knee kicked. *Harvard-NIOSH Education and Research Center Pilot Project Symposium*, Boston, MA.

PROFESSIONAL AFFILIATIONS

Member

American Heart Association (2018-present)
American College of Sports Medicine (2016-present)
American Physiological Society (2011-present)
American Society of Biomechanics (2010-present)
Society for Neuroscience. (2008-present)
Registered Medical Practitioner, Gujarat Medical Council, India (2005-present)

TEACHING EXPERIENCE

Instructor

PEP 7397, Advanced Topics in Neurophysiology
(Spring 2021)
PEP 8304, HHP Journal Colloquium (motor behavior track – 5 times)
(Fall 2017, Fall 2018, Spring 2019, Fall 2019, Spring 2020)
KIN 4315, Motor Learning and Control (Face to Face – 6 times)
(Fall 2016, Spring 2017, Summer 2017, Fall 2017, Spring 2018, Fall 2018)
KIN 4310, Measurement in Human Performance (Face to Face – 2 times)
(Fall 2020, Spring 2020)

Guest lecturer

Research Seminar in HHP, PEP 7397
(one lecture per semester; Fall 2015, 2016, 2017, 2018, 2019)

Journal club facilitator

Neural Control of Movement laboratory, Arizona State University. (2012 – 2015)

Guest lecturer

Motor Control I: Neurophysiological basis of movement, Health and Human Physiology, Univ. of Iowa. (March 2011)
Human Anatomy, Dept. of Health and Human Physiology, Univ. of Iowa. (twice, 2010)

Teaching assistant

Motor Control I: Neurophysiological basis of movement, Univ. of Iowa. (2010)

Biomechanics of Human Motion lecture and laboratory, Univ. of Iowa. (2010)
Human Anatomy lecture and laboratory, Univ. of Iowa. (2009)

MENTORING EXPERIENCE

PhD students

Nishant Rao, BTech. Dept. of Health and Human Performance. (Fall 2016 – present)
Vivian Rose, CPO, MSPO, Dept. of Health and Human Performance (Spring 2021 – present)
Rahul Goel, MS. Dept. of Health and Human Performance. (Fall 2015 – graduated Dec 2017)
Current position: Research Associate, NASA Ames Research Center

Undergraduate students

Anaga Ajoy, UH BME (2021 – present)
Sheel Shah, UH. (2020 – present)
Hiba Rabieh, UH. (2019 – present)
Pujan Patel, Texas A&M. (2018 – present)
Sampada Chaudhari, UH. (2019 – 2020)
Neha Mehta, UH. (2018 – 2021)
John Kass, UH. (2018 – 2019)
Eesha Kundra, UH. (2016 – 2017)
Michelle Constante, UH. (2016 – 2018)
John Tran, UH. (2016 – 2018)
Deandra Wright, NYU Tandon School of Engineering. (2015)
Umair Siddiqi, UH. (2015 – 2018)
Ahmed Kayode Michael, University of Lagos, Lagos Nigeria. (2015 – 2016)
Jonathan Brown, UH. (2015 – 2016)

NSF Research Experience for Undergraduates (REU)

Kennedy Leonard, Johns Hopkins University. (Summer 2021)
Mira Mutnick, Georgia Institute of Technology. (Summer 2020)
Grace McClurg, Western Kentucky University. (Summer 2020)
Landon Skinner, Villanova University. (Summer 2019)
Regan Ramirez, Trinity University. (Summer 2018)

High School Students

Khaleeq Rahman, Klein Cain High School, North Houston, TX. (2020 – present)
Roshini Thiagarajan, Seven Lakes High School, Katy, TX. (2015)

Visiting Students

Patrick Hing, BS, Baylor College of Medicine. (2015-2016)
Deandra Wright, NYU Tandon School of Engineering. (2016-2017)
Ahmed Kayode Michael, MD, University of Lagos, Idi-Araba, Lagos Nigeria. (2015-2016)

Dissertation/thesis committees for students not in my laboratory

Andrew Paek, Electrical and Computer Engineering, UH. (PhD committee)
Taruna Yadav, Biomedical Engineering, UH. (PhD committee)
David Young, Health and Human Performance, UH. (PhD committee)

Lauren Gulley, Health and Human Performance, UH. (PhD committee)
Ram Kinker Mishra, Health and Human Performance, UH. (PhD committee)
Hidetaka Hibino, Health and Human Performance, UH. (PhD Candidacy paper committee)
Hao Meng, Health and Human Performance, UH. (PhD committee)
Yoshimi Lu, Biomedical Sciences, UH. (Honors thesis committee member)
Patrick Hing, Orthotics and Prosthetics, Baylor College of Medicine. (MS thesis committee)

SERVICES

University of Houston

College of Medicine Scholarly Project Mentor. (2020 – present)
Faculty member of the BRAIN (Building Reliable Advances and Innovations in Neurotechnology) center, an NSF-sponsored center, at the University of Houston. (2018 – present)
Academic advisor for a student-led organization, *Aspiring American Medical Professionals*. (2016 – present)

Department

Dietetic Internship Application Review committee (8 times). (2016 – present)
DPT Program Director Search committee. (2016-2017)

Graduate program in Kinesiology

Graduate Research Degree Membership committee. (2019 – present)
APAR subcommittee. (2016)

Local Foundation

Judge at Mission Connect symposium. (2017)
Member of Mission Connect – TIRR Foundation. (2016 – present)

Journal Editor

Associate Editor at *Frontiers in Aging Neuroscience*. (Upon invitation; 2014 – present)

Journal manuscript reviewer

Journal of Neurophysiology.
Cerebral Cortex.
npj Microgravity (nature partner journals).
Neuropsychologia.
Journal of Neuroscience.
Neuroscience Letters.
Frontiers in Neuroscience.
Neurobiology of Aging.

Journal of Applied Biomechanics.
Cognition.
AGE.
Frontiers in Aging Neuroscience.
Frontiers in Human Neuroscience.
IEEE Transactions in Human-Machine Systems
IEEE Transactions on Haptics.
PLoS One.
Experimental Brain Research.
Journal of Motor Behavior.
Journal of Neurology, Neurosurgery, and Psychiatry.
Neuroscience.
Brain Sciences

National

NIH Sensorimotor Integration Study Section – research grant applications (R series) reviewer.
(June 2020)

IEEE/RAS-EMBS International Conference on Rehabilitation Robotics. (2015)

American Society of Biomechanics Annual Conference – abstract reviewer. (2012)