



The Faculty of Medicine of Harvard University
Curriculum Vitae

Date Prepared: October 2024
Name: Heena Manglani-Terranova
Work Email: Hmanglani-terranova@mgh.harvard.edu

Education:

08/2010- 05/2013	B.A. <i>Magna cum laude</i>	Psychology	Rutgers University
08/2015- 07/2018	M.A.	Psychology	The Ohio State University
08/2018- 08/2022	Ph.D.	Clinical Psychology	The Ohio State University

Postdoctoral Training:

07/21- 06/22	Predocotoral Internship	Clinical Fellow in Psychology <u>Track:</u> Integrated Brain Health	Harvard Medical School/Massachusetts General Hospital
07/22-	T32 Postdoctoral Fellow	Integrative Medicine Multidisciplinary Research Training in Psychiatry, Multiple Sclerosis Clinic	Harvard Medical School/Massachusetts General Hospital

Appointments at Hospitals/Affiliated Institutions:

09/23-	Clinical Psychologist	Department of Psychiatry	Massachusetts General Hospital
--------	--------------------------	--------------------------	--------------------------------

Other Professional Positions:

2011-2013	Research Assistant	The Social and Affective Neuroscience Lab <u>PI:</u> Mauricio Delgado, Ph.D.	Rutgers University, Newark, NJ
2013-2015	Lab Manager	The Social and Affective Neuroscience Lab <u>PI:</u> Mauricio Delgado, Ph.D.	Rutgers University, Newark, NJ
2015-2021	Research Assistant	Clinical Neuroscience Lab <u>PI:</u> Ruchika Prakash, Ph.D.	The Ohio State University, Columbus, OH

Committee Service:

Local

2022	Mock K Review	Mongan Institute
------	---------------	------------------

2023	Education and Training Core	Center for Health Outcomes and Interdisciplinary Research
------	-----------------------------	---

National

2023 –	Consortium of Multiple Sclerosis Centers (CMSC) Annual Mentorship Forum
2023 –	National Multiple Sclerosis Society Psychosocial Wellness Group

Professional Societies:

2015-2018	American Psychological Association (APA)	Member
2022-2023	Association for Behavioral and Contextual Sciences	Member
2022-	International Neuropalliative Care Society (INPCS)	Member, Abstract Reviewer
2023-	Society of Behavioral Medicine	Member

Editorial Activities:

Ad hoc Reviewer

Mindfulness
Scientific Reports
Journal of Experimental Psychology: General
Journal of Psychiatric Research
Annals of Behavioral Medicine
Global Advances in Integrative Medicine and Health

Honors and Prizes:

2012	Dean's Undergraduate Research Fellowship	Rutgers University, Newark
2012-2013	Honors in Psychology	Rutgers University, Newark
2015-2016	Graduate Fellowship	The Ohio State University, Columbus, OH
2016	College of Social and Behavioral Sciences (SBS) Fellowship	The Ohio State University, Columbus, OH
2018	Summer Research Excellence Award	The Ohio State University, Columbus, OH
2019	Summer Teaching Excellence Award	The Ohio State University, Columbus, OH
2019	1st place Research Presentation, Graduate Student Research Forum	The Ohio State University, Columbus, OH
2020	Summer Teaching Excellence Award	The Ohio State University, Columbus, OH
2021	Psychology Department 2020-2021 Teaching Excellence Award for Graduate Students	The Ohio State University, Columbus, OH
2021	The John Whitaker Prize	Consortium of Multiple Sclerosis Centers (CMSC)

2022	Credentialing Scholarship	National Register of Health Service Psychologists
2022	PROMIS International Conference Scholarship	PROMIS Health Organization
2023	MS Mentorship Forum Scholarship	Consortium of Multiple Sclerosis Centers (CMSC)
2021-2023	NIH T32 National Research Service Award	Harvard Medical School

Report of Funded and Unfunded Projects

Current Funded

2023- *The first year of multiple sclerosis: Identifying predictors of chronic emotional distress in patients and care partners*
International Neuropalliative Care Society (INPCS) Seed Funding Award
Role: Principal Investigator (Direct Costs Requested = \$10,000)
Aims to quantify emotional distress in newly diagnosed people with multiple sclerosis and partners in the first year after MS diagnosis. Goals are to integrate quantitative and qualitative data to inform the development of a resiliency intervention in MS.

Report of Local Teaching and Training

Clinical Supervisory and Training Responsibilities:

2023- Present	Clinical supervision of advanced practicum students, interns, and post-docs on NIH trials	Massachusetts General Hospital 1 hour / week
------------------	---	---

Research Supervisory and Training Responsibilities:

2017-2021	Research and training supervision of undergraduate, post-baccalaureate, and graduate students in neuropsychological research	Ohio State University (2 hours / week)
-----------	--	--

Mentored Trainees and Faculty:

2018-2022	Elizabeth Duraney, MA. Ph.D. Student in Clinical Psychology <u>Institution:</u> The Ohio State University <u>Mentoring Role:</u> Research and Training Advisor <u>Mentee Accomplishments:</u> Secured practicum position, co-authored several manuscripts; delivered presentations at national conferences
2021-2023	Millan Kanaya, BA Clinical Research Coordinator <u>Institution:</u> Massachusetts General Hospital <u>Mentoring Role:</u> Research and Training Advisor <u>Mentee Accomplishments:</u> Learned clinical trials coordination; led poster presentation; co-authoring several manuscripts; supervising research coordinators; Graduate Student at University of Miami
2021-2023	Ellie Briskin, B.S. Clinical Research Coordinator

Institution: Massachusetts General Hospital
Mentoring Role: Research and Training Advisor
Mentee Accomplishments: Learned statistical coding and regression analyses; co-authoring manuscripts; leading poster presentation

- 2021-2023 Nate Choukas, B.A.
 Clinical Research Coordinator
Institution: Massachusetts General Hospital
Mentoring Role: Research and Training Advisor
Mentee Accomplishments: Learned quantitative data analyses; developed clinical skills recruiting patients in inpatient units; co-authoring several manuscripts
- 2022- Anastasia Prussakova
 Undergraduate Research Volunteer
Institution: Massachusetts General Hospital
Mentoring Role: Research and Training Advisor
Mentee Accomplishments: Co-authored conference presentation; developed research skills using RedCap; co-authoring manuscripts
- 2022- Ariel Emrani
 Undergraduate Research Volunteer
Institution: Massachusetts General Hospital
Mentoring Role: Research and Training Advisor
Mentee Accomplishments: Co-authored conference presentation; developed research skills using RedCap; co-authoring manuscripts

Local Invited Presentations:

No presentations below were sponsored by 3rd parties/outside entities

- 2019 A Connectome-Based Biomarker of Working Memory in Multiple Sclerosis / Invited Symposium
 Eighth Annual Midwest Cognitive Science Conference, The Ohio State University
- 2021 Lifestyle Interventions in Multiple Sclerosis / Invited Lecture
 Integrated Brain Health Clinical & Research Program
 Massachusetts General Hospital
- 2022 Asking All Multiple Sclerosis Stakeholders / Invited Lecture
 Integrated Brain Health Seminar, Massachusetts General Hospital
- 2024 Case Conceptualization Workshop
 Center for Health Outcomes and Interdisciplinary Research
- 2024 The “Invisible” Mental Health Symptoms of Multiple Sclerosis
 McCourt Foundation Neurological Symposium
- 2024 The “Invisible” Mental Health Symptoms of Multiple Sclerosis
 3rd Annual Spaulding Community Event for People with MS

Report of Regional, National and International Invited Teaching and Presentations

No presentations below were sponsored by 3rd parties/outside entities

National

- 2019 Does 4-week cognitive rehabilitation improve processing speed and working memory in MS? Results of mindfulness training vs. adaptive computerized training / Invited Symposium Consortium of Multiple Sclerosis Centers, Seattle, WA
- 2020 Development of a Diabetes Self-Care Outreach (DiSCO) Program for Bhutanese Nepali Patients / Invited Symposium North American Refugee Health Conference, Virtual
- 2021 Utility of the NIH toolbox cognition battery in multiple sclerosis / Invited Symposium Consortium of Multiple Sclerosis Center, Orlando, FL.
- 2023 Physical activity and sedentary behavior as a signature of cognition in multiple sclerosis: A closer look at accelerometry metrics / Symposium Society of Behavioral Medicine convention, Phoenix, AZ
- 2024 High demand and low supply? Research and clinical insights from mind-body program development in multiple sclerosis / Invited Talk, Vanderbilt Osher Center, Nashville TN

International

- 2023 The First Year of Multiple Sclerosis: Identifying Predictors of Chronic Emotional Distress in Patients and Care Partners / Invited Lecture International Neuropalliative Care Society, Virtual
- 2023 Breaking the Silos of Psychiatry and Neurology: Practical Lessons from Building and Piloting an Embedded Psychology Clinic in Multiple Sclerosis. International Congress on Integrative Medicine and Health. Chicago, IL.

Report of Clinical Activities and Innovations

Current Licensure and Certification:

- 2023- Licensed Psychologist (#PSY10000255), Health Service Provider, State of Massachusetts

Practice Activities:

- 2023- Psychotherapist Outpatient Psychiatry, Massachusetts General Hospital 8 hours / week

Report of Education of Patients and Service to the Community

Those presentations below sponsored by outside entities are so noted and the sponsor(s) is (are) identified.

Activities

- 2022- The Family Dinner Project / Sponsored by this non-profit.
Meet with organizations to plan events for distribution of food, recipes, and information about importance of family dinner conversations.

Educational Material for Patients and the Lay Community:

Patient educational material

- 2022 Resources for Psychological Well-being in Multiple Sclerosis
Developed a pamphlet with local and national resources on information about MS, tools for accepting diagnosis, coping with depression, anxiety, stress, and shared an existing MS podcast with latest research on MS

Report of Scholarship

ORCID: 0000-0001-8078-6389; *Co-first author

Peer-Reviewed Scholarship in print or other media:

*Manglani, H.R. is the previously held name of Manglani-Terranova, H.

Research Investigations

1. **Manglani, H.R.**, Lewis, A.H., Wilson, S.J., and Delgado, M.R. (2017). Pavlovian-to-Instrumental Transfer of Nicotine and Food Cues in Deprived Cigarette Smokers. *Nicotine and Tobacco Research*, 19(6), 670-676. PMID: 28486716 <https://doi.org/10.1093/ntr/ntx007>
2. Schirda, B., Duraney, E., Lee, H.K., **Manglani H.R.**, Andridge R.R., Plate, A., Nicholas J.A., & Prakash R.S. (2020). Mindfulness Training for Emotion Dysregulation in Multiple Sclerosis: A Pilot Randomized Controlled Trial. *Rehabilitation Psychology*, 65(3), 206. PMID: 32378922. <https://doi.org/10.1037/rep0000324>
3. **Manglani, H.R.**, Samimy, S., Schirda, B., Nicholas, J. A., & Prakash, R. S. (2020). Four weeks of mindfulness training vs. adaptive cognitive training in multiple sclerosis: Effects on processing speed and working memory. *Neuropsychology*, 34(5), 591. PMID: 32352832. <https://doi.org/10.1037/neu0000633>
4. **Manglani, H. R.**, Fountain-Zaragoza, S., Shankar, A., Nicholas, J. A., & Prakash, R. S. (2021). Employing Connectome-Based Models to Predict Working Memory in Multiple Sclerosis. *Brain Connectivity*. PMID: 34309408. <https://doi.org/10.1089/brain.2021.0037>
5. Samimy, S., **Manglani, H.R.**, Fountain-Zaragoza, S., Andridge R.R., & Prakash, R.S. (2022). Impact of mindfulness training on in-the-moment attentional control and emotion dysregulation in older adults: Secondary analysis of a pilot, placebo-controlled randomized controlled trial. *Aging & Mental Health*, 1–9. PMID: 34894884. <https://doi.org/10.1080/13607863.2021.1998348>
6. **Manglani, H. R.**, Healy, B. C., & Vranceanu, A.M. (2022). Demand with low supply: A pipeline for personalized integrative medicine in multiple sclerosis. *Multiple Sclerosis and Related Disorders*, 58, 103493. PMID: 35030367. <https://doi.org/10.1016/j.msard.2022.103493>
7. Bannon, S., Grunberg, V.A., **Manglani, H.R.**, Lester, E.G., Ritchie, C., & Vranceanu, AM. (2022). Together from the start: A transdiagnostic framework for early dyadic interventions for neurodegenerative diseases. *Journal of the American Geriatrics Society*. PMID: 35435998. <https://doi.org/10.1111/jgs.17801>
8. Prakash, R. S., Fountain-Zaragoza, S., Fisher, M., Gbadeyan, O., Andridge, R., Kiecolt-Glaser, J., **Manglani, H. R.**, Duraney, E. J., Shankar, A., McKenna, M. R., Teng, J., Phansikar, M., & Canter, R. (2022). Protocol for a randomized controlled trial of mindfulness-based stress reduction to improve attentional control in older adults (HealthyAgers trial). *BMC Geriatrics*, 22(1), 666. PMID: 35964000. <https://doi.org/10.1186/s12877-022-03334-7>
9. Duraney, E. J., Fisher, M. E., **Manglani, H. R.**, Andridge, R. R., Nicholas, J. A., & Prakash, R. S. (2022). Impact of mindfulness training on emotion regulation in multiple sclerosis: Secondary analysis of a pilot randomized controlled trial. *Rehabilitation Psychology*. PMID: 35901401. <https://doi.org/10.1037/rep0000456>
10. **Manglani, H.R.**, Fisher, M.F., Duraney, E.J., Nicholas, J.A., & Prakash R.S. (2022). A promising cognitive screener in multiple sclerosis: The NIH toolbox cognition battery concords with gold standard neuropsychological measures. *Multiple Sclerosis Journal*. PMID: 35531593. <https://doi.org/10.1177/13524585221088731>
11. Prakash, R.S., **Manglani, H.R.**, Duraney, E.J., Shankar, A., Fisher, M.F., Janssen, A., Cea L., Petosa, R., Andridge, R., & Nicholas, J.A. (2022). TRACkING Health Behavior in People with Multiple

- Sclerosis (TRAC-MS): Study Protocol and Description of the Baseline Sample. *Contemporary Clinical Trials Communications*, 30, 101006. PMID: 36203849. <https://doi.org/10.1016/j.conctc.2022.101006>
12. Vranceanu, A.-M., Woodworth, E.C., Kanaya, M., Bannon, S., Mace, R.A., **Manglani, H.M.**, Duarte, B., Rush, C.L., Choukas, N.R., Briskin, E.A., Cohen, J., Parker, R., Macklin, E., Lester, E., Traeger, L., Rosand, J., The Neuro ICU Recovering Together Team & Grunberg, V.A. (2022). The Recovering Together study protocol: A single-blind RCT to prevent chronic emotional distress in patient-caregiver dyads in the Neuro-ICU. *Contemporary Clinical Trials*, 123, 106998. PMID: 36368480. <https://doi.org/10.1016/j.cct.2022.106998>
 13. Rush, C. L., Lester, E. G., **Manglani, H.**, Woodworth, E., Vitolo, O., Fava, M., Berry, J. D., Brizzi, K., Babu, S., Lindenberger, E. C., Curtis, J. R., & Vranceanu, A.-M. (2023). Resilient together-ALS: Leveraging the NDD transdiagnostic framework to develop an early dyadic intervention for people with amyotrophic lateral sclerosis and their informal care-partners. *Amyotrophic Lateral Sclerosis & Frontotemporal Degeneration*, 1–8. PMID: 37345437. <https://doi.org/10.1080/21678421.2023.2224400>
 14. Vranceanu, A.-M., Manglani, H. R., Choukas, N. R., Kanaya, M. R., Lester, E., Zale, E. L., Plotkin, S. R., Jordan, J., Macklin, E., & Bakhshaie, J. (2023). Effect of Mind-Body Skills Training on Quality of Life for Geographically Diverse Adults With Neurofibromatosis: A Fully Remote Randomized Clinical Trial. *JAMA Network Open*, 6(6), e2320599. PMID: 37378983 <https://doi.org/10.1001/jamanetworkopen.2023.20599>
 15. **Manglani, H. R.**, Phansikar, M., Duraney, E. J., McKenna, M. R., Canter, R., Nicholas, J. A., Andridge, R., & Prakash, R. S. (2023). Accelerometry measures of physical activity and sedentary behavior: Associations with cognitive functioning in MS. *Multiple Sclerosis and Related Disorders*, 79, 104963. PMID: 37690438. <https://doi.org/10.1016/j.msard.2023.104963>
 16. Grunberg V.A., Bakhshaie J., **Manglani H.R.**, Hooker J., Rochon E.A., Vranceanu AM. Mindfulness, coping, and optimism as mechanisms of change in the 3RP-NF intervention. (2023). *Journal of Clinical Psychology*. 1-15. PMID: 38009710. <http://doi.org/10.1002/jclp.23623>
 17. Rush, C. L., Lester, E. G., **Manglani, H.**, Woodworth, E., Vitolo, O., Fava, M., Berry, J. D., Brizzi, K., Babu, S., Lindenberger, E. C., Curtis, J. R., & Vranceanu, A.M. (2023). Resilient together-ALS: Leveraging the NDD transdiagnostic framework to develop an early dyadic intervention for people with amyotrophic lateral sclerosis and their informal care-partners. *Amyotrophic Lateral Sclerosis & Frontotemporal Degeneration*, 1–8. <https://doi.org/10.1080/21678421.2023.2224400>
 18. **Manglani, H. R.**, Lovette, B. C., Grunberg, V. A., Frieder, J., Vranceanu, A.-M., & Greenberg, J. (2024). “I Wish I Had That!”: A Qualitative Analysis of Psychosocial Treatment Preferences Among Young Adults With Recent Concussion and Anxiety. *Archives of Physical Medicine and Rehabilitation*, 0(0). <https://doi.org/10.1016/j.apmr.2024.01.024>
 19. Phansikar, M., Duraney, E. J., **Manglani, H. R.**, Shankar, A., Roberts, C., Andridge, R., Nicholas, J. A., Petosa, R., & Prakash, R. S. (2024). TRACking health behavior in people with multiple sclerosis: Effects of a randomized trial on physical activity and working memory. *Rehabilitation Psychology*. <https://doi.org/10.1037/rep0000578>
 20. Choukas, N. R., Woodworth, E. C., **Manglani, H. R.**, Greenberg, J., & Mace, R. A. (2024). A Meta-Regression of psychosocial factors associated with sleep outcomes in mindfulness-based intervention trials. *Behavioral Sleep Medicine*, 0(0), 1–14. <https://doi.org/10.1080/15402002.2024.2401457>
 21. Hooker J., Doorley, J., Greenberg, J., **Manglani, H.**, & Vranceanu, A.-M. (2024). Improvements in Pain Interference among Geographically Diverse Adults with Neurofibromatosis: Results from a Fully-Powered Randomized Controlled Trial. *Neuro-oncology Practice*.

* = Co-first authors

Professional educational materials or reports, in print or other media

1. Mindfulness meditation may boost cognition in MS. (2019). *MDEdge Neurology*.
<https://www.mdedge.com/neurology/page/about-mdedge-neurology>.
2. Brief, Automated Cognitive Test May Offer Key Advantages in MS. (2021). *Medscape*.
<https://www.medscape.com/viewarticle/962332>
3. Publication “A Meta-Regression of psychosocial factors associated with sleep outcomes in mindfulness-based intervention trials” featured in Mindfulness Research Monthly, *American Mindfulness Research Association (AMRA)*. Volume 15, Issue 78.

Thesis:

1. **Manglani HR.** The Influence of Affective Conditioned Stimuli on Instrumental Behavior. Undergraduate Honors Thesis, Rutgers University, Newark, New Jersey; 2013.
2. **Manglani HR.** A neural network analysis of sedentary behavior and information processing speed in multiple sclerosis. Master Thesis, The Ohio State University; 2018.
3. **Manglani HR.** Leveraging multimodal neuroimaging and machine learning to predict processing speed in multiple sclerosis. Doctoral Thesis, The Ohio State University; 2021.

Abstracts, Poster Presentations, and Exhibits at Presented Professional Meetings (selected):

- Manglani, H.R.,** Lewis, A.H., Wilson, S.J., Delgado, M.R. (2015). Pavlovian-to-instrumental transfer of cigarette and food cues during abstinence in smokers. *Social and Affective Neuroscience Society*. Boston, MA.
2. Speer, M.E., **Manglani, H.R.,** Delgado M.R. (2015). Reminiscing about positive memories buffers acute stress responses and engages the prefrontal cortex. *Society for Neuroscience*. Chicago, IL.
3. **Manglani, H.R.,** Janssen, A., Prakash R.S. (2017). Sedentary Behavior in People with MS: Impact on Cognitive Functioning. *Consortium of Multiple Sclerosis Centers*. New Orleans, LA.
4. **Manglani, H.R.,** Fountain-Zaragoza, S., Prakash, R.S. (2019). Connectome-based predictive modeling of working memory in multiple sclerosis. *Cognitive Neuroscience Society*. San Francisco, CA.
5. **Manglani, H.R.,** Fountain-Zaragoza, S., Rosenberg, M., Prakash, R.S. (2020). Characterizing the Generalizability of an Attention Neuromarker in Healthy Aging. *Organization for Human Brain Mapping*. Virtual.
6. **Manglani, H.R.,** Lester, E.G., Klawiter, E., Yeh, G., & Vranceanu, AM (2023). Breaking the Silos of Psychiatry and Neurology: Practical Lessons from Building and Piloting an Embedded Psychology Clinic in Multiple Sclerosis. *Integrative Medicine and Health Symposium*. Chicago, IL.
7. Buttolph, L., Villanueva, J., **Manglani, H.R.,** Snyder, T., Yeh, G., Wooliscroft, L., Bradley R., & Zwickey, H. (2023). Perceptions of people with multiple sclerosis who practice Qigong or Tai Chi: A qualitative study using focus groups. *Consortium of Multiple Sclerosis Centers*. Aurora, CO.