Francesca Morfini

Postdoctoral Research Fellow
McLean Hospital
Harvard Medical School
Department of Psychiatry
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Appointments

2025 - Present **Research Fellow**
Department of Psychiatry — Harvard Medical School, USA
Advisor: Christian A. Webb, Ph.D.

2025 - Present **Postdoctoral Research Fellow**
Center for Depression, Anxiety and Stress Research — McLean Hospital, USA
Advisor: Christian A. Webb, Ph.D.

2016 - 2018 **Research Assistant** — UCLA, USA
Semel Institute for Neuroscience and Human Behavior
Mentor: Jamie Feusner, M.D.

Education

2019 - 2025 **Ph.D. in Psychology** (Cognitive Psychology) — Northeastern University, USA
Advisors: Susan Whitfield-Gabrieli, Ph.D.
Randy P. Auerbach (Columbia University), Ph.D., ABPP
Juliet Y. Davidow, Ph.D.

2018 - 2019 **Visiting Scholar** — Harvard University, USA
Department of Psychology
Mentor: Jill M. Hooley, Ph.D.

2014 - 2015 **Post-Graduate Clinical Internship** — San Raffaele Hospital, Italy
Center for Anxiety and Eating Disorders
Supervisor: Laura Bellodi, M.D.

2011 - 2014 **M.S. in Psychology** (Clinical) — San Raffaele University, Italy
Advisor: Laura Bellodi, M.D.

2008 - 2011 **B.S. in Psychology and Neuroscience** — San Raffaele University, Italy
Advisor: Clelia DiSerio, Ph.D.

Research interests

I am a Postdoctoral Research Fellow Harvard Medical School and McLean Hospital, specializing in cognitive and clinical psychology. My research employs advanced machine learning and integrates multimodal data—including magnetic resonance imaging, ecological momentary assessment, and passive sensing—to investigate the neural and cognitive mechanisms underlying depression and anxiety in adolescents. I am particularly interested in how cognitive processes and brain function interact to influence mental health outcomes.

Licensure

2016 - Present Licensed Psychologist, Board of Psychologists of Lombardy, Italy
License #18591

Honors and Awards

Society of Biological Psychiatry (SOBP)	Pre-Doc Travel Award	2025
Psychology Department Northeastern University	Travel Award	2020, '21, '22, '23, '24, '25
PhD Network Northeastern University	Travel Award	2020, '21, '22, '23, '24
College of Science Northeastern University	Travel Award	2020, '21, '22, '23, '24
International OCD Foundation	Travel Award	2017
European Union, ERASMUS Study Abroad	Scholarship	2010

Past Research Grants and Fellowships

2024 - 2025 **Center for Cognitive and Brain Health at Northeastern University**
Interdisciplinary Graduate Student Fellowship
Title: *Cognitive control, brain maturation, and their relationship with concurrent and longitudinal depression and anxiety in adolescence*
Summary: This project seeks to prospectively predict depression and anxiety symptoms severity in adolescents leveraging baseline multimodal neuroimaging features.
Role: Principal Investigator
Award: $42,781

Pending Research Grants and Fellowships

Submitted 3/2026 **Brain and Behavioral Research Foundation (BBRF)**
Title: *Neural and Real-World Correlates of Rumination versus Mind-wandering in Adolescents with Major Depressive Disorder*
Role: Principal Investigator
Award: $70,000

Submitted 3/2026 **MGB Clinical Research Fellowship Award**
Title: *Understanding Contextual Patterns of Repetitive Negative Thinking in Adolescents at Risk for Depression*
Role: Principal Investigator
Award: $71,750

Submitted 2/2026 **L'Oréal USA For Women in Science and American Association for the Advancement of Science (AAAS)**
Title: *Connecting Corticostriatal Neurobiology to Real-World Vulnerability in Adolescent Depression*
Role: Principal Investigator
Award: $75,000

Submitted 1/2026 **McLean Internal Fellowships**
Title: *Why Ruminative Thoughts Fail to End: Neural and Real-World Correlates of Thought Termination in Adolescence*
Role: Principal Investigator
Award: $50,000

Publications

20 published manuscripts (16 peer-reviewed, 4 preprints). Google Scholar h-index = 10, i10-index = 10 and Scopus h-index 9.
† denotes preprint

[20] Qu, Y. L., Chopra, S., Qu, S., Cocuzza, C. V., Labache, L., Bauer, C. C. C., **Morfini, F.**, Whitfield-Gabrieli, S., Slavich, G. M., Joormann, J., Holmes, A. J. (2026). Life experiences of humiliation, entrapment and frontoparietal-cerebellar connectivity predict adolescent anxiety and depression symptoms. *Psychological Medicine*. 56:e84. https://doi.org/10.1017/S0033291726103699

>>>[20.1] † *BioRxiv*: https://doi.org/10.1101/2024.10.25.620373

[19] Wang L., Zhou, N., Jaffe, N. M., Pidvirny, K., Tierney, A. O., Fisher, H. B., **Morfini, F.**, Forbes, E. E., Pizzagalli, D. A., Cai, T., Webb, C. A. (2025). Multimodal Prediction of Future Depressive Symptoms in Adolescents. *BMC Psychiatry*. https://doi.org/10.1186/s12888-025-07665-8

[18] **Morfini, F.**, Kucyi, A., Zhang, J., Bauer, C. C. C., Bloom, P. A., Pagliaccio, D., Hubbard, N., Rosso, I. M., Yendiki, A., Ghosh, S. S., Pizzagalli, D. A., Gabrieli, J. D., Whitfield-Gabrieli, S., Auerbach, R. P. (2025). Brain functional connectivity predicts depression and anxiety during childhood and adolescence: a connectome-based predictive modeling approach. *Imaging Neuroscience*, 3, https://doi.org/10.1162/IMAG.a.145

[17] Bauer, C. C. C., Zhang, J., **Morfini, F.**, Hinds, O., Wighton, P., Lee, Y., Stone, L. M. D., Awad, A. I., Okano, K., Hwang, M., Hammoud, J., Nestor, P., Whitfield-Gabrieli, S., Shinn, A. K., Niznikiewicz, M. A. (2025). Real-time fMRI neurofeedback modulates auditory cortex activity and connectivity in schizophrenia patients with auditory hallucinations: A controlled study. *Psychiatry Research: Neuroimaging*. 353, 112050. https://doi.org/10.1016/j.pscychresns.2025.112050

>>>[17.1] † *BioRxiv*: https://doi.org/10.1101/2025.01.13.632809

[16] Zhang, J., Tusuzian, E., **Morfini, F.**, Bauer, C. C. C., Stone, L. M. D., Awad, A. I., Shinn, A., Niznikiewicz, M. A., Whitfield-Gabrieli, S. (2025). Brain structural and functional neuroimaging features are associated with improved auditory hallucinations in patients with schizophrenia after real-time fMRI neurofeedback. *Depression and Anxiety,* 2025(1), 2848929. https://doi.org/10.1155/da/2848929

[15] † Zhang, J., Bauer, C. C. C., **Morfini, F.,** Lee, Y., Stone, L. M. D., Awad, A. I., Okano, K., Hwang, M., Shinn, A. K., Niznikiewicz, M. A., Whitfield-Gabrieli, S. (2025). Real-time fMRI neurofeedback reduces default mode network and auditory cortex functional connectivity in schizophrenia. https://doi.org/10.1101/2025.01.02.631107

[14] † Bloom, P. A., Pagliaccio, D., Bajwa, Z., Wool, E., Zhang, J., Bauer, C. C. C., Kyler, M., Greene, K. D., Treves, I., **Morfini, F.,** Durham, K., Kirshenbaum, J.S., Kim, N., Galfalvy, H., Simpson, B. H., Whitfield-Gabrieli, S., Auerbach, R. P. (2025). Impact of mindfulness-based real-time fMRI neurofeedback on self-referential processing in depressed adolescents: a dosing study. https://doi.org/10.31234/osf.io/dshcm

[13] **Morfini, F.**, Bauer, C. C. C., Zhang, J., Whitfield-Gabrieli, S., Shinn, A. K., Niznikiewicz, M. A., (2024). Targeting the superior temporal gyrus with real-time fMRI neurofeedback: a pilot study of the indirect effects on self-referential processes in schizophrenia. *Schizophrenia Research*, *270*, 358-365. https://doi.org/10.1016/j.schres.2024.06.036

[12] † Zhang, J., Bloom, P. A., Pagliaccio, D., Bauer, C. C. C., Greene, K. D., **Morfini, F.,** Treves, I., Durham, K., Cherner, R., Bajwa, Z., Wool, E., Kyler, M., Kim, N., Simpson, B. H., Auerbach, R. P., Whitfield-Gabrieli, S. (2024). Mindfulness-based real-time fMRI neurofeedback for depressed adolescents: a randomized controlled dosing trial. https://doi.org/10.31234/osf.io/sj236

[11] Cline, T. L., **Morfini, F.**, Tinney, E. M., Makarewycz, E., Lloyd, K., Olafsson, V., Bauer, C. C. C., Kramer, A. F., Raine, L. B., Gabbard-Durnam, L. J., Whitfield-Gabrieli, S., Hillman, C. H. (2024). Resting-state functional connectivity change in frontoparietal and default mode networks after acute exercise in youth. *Brain Plasticity*. https://doi.org/10.3233/BPL-240003

[10] Bloom, P. A., Pagliaccio, D., Zhang, J., Bauer, C. C. C., Kyler, M., Greene, K. D., Treves, I., **Morfini, F.,** Durham, K., Cherner, R., Bajwa, Z., Wool, E., Olfsson, V., Lee, R. F., Bidmead, F., Cardona, J., Kirshenbaum, J. S., Ghosh, S., Hinds, O., Wighton, P., Galfalvy, H., Simpson, H. B., Whitfield-Gabrieli, S., & Auerbach, R. P. (2023). Mindfulness-based real-time fMRI neurofeedback: a randomized controlled trial to optimize dosing for depressed adolescents. *BMC Psychiatry*. https://doi.org/10.1186/s12888-023-05223-8

[9] † Bauer, C. C. C., Zhang, J., Raya, J., **Morfini, F.,** Pagliaccio, D., Yendiki, A., Auerbach, R. P., Niznikiewicz, M., A., Whitfield-Gabrieli, S. (2023). Rewiring neural circuits: meditation-based neurofeedback and its neuroplastic effects on the pathological brain. *AIP Conference Proceedings* (Vol. 2947, No. 1). https://doi.org/10.1063/5.0161404

[8] **Morfini, F.**, Whitfield-Gabrieli, S. and Nieto-Castañón, A. (2023) Functional connectivity MRI quality control procedures in CONN. *Frontiers in Neuroscience*. 17:1092125. https://doi.org/10.3389/fnins.2023.1092125

[7] Zhang, J., Raya, J., **Morfini, F.**, Urban, Z., Pagliaccio, D., Yendiki, A., Auerbach, R. P., Bauer, C. C. C., Whitfield-Gabrieli, S. (2023). Reducing default mode network connectivity with mindfulness-based fMRI neurofeedback: a pilot study among adolescents with affective disorder history. *Molecular Psychiatry*, 1-9. https://doi.org/10.1038/s41380-023-02032-z

[6] Moody, T. D., **Morfini, F.**, Cheng, G. K., Sheen, C., Kerr, W. T., Strober, M., Feusner, J. D. (2020). Brain activation and connectivity in anorexia nervosa and body dysmorphic disorder when viewing bodies: relationships to clinical symptoms and perception of appearance. *Brain Imaging and Behavior*, 7(9). https://doi.org/10.1007/s11682-020-00323-5

[5] Vaughn, D.A., Kerr, W. T., Moody, T. D., Cheng, G. K., **Morfini, F.**, Zhang, A., Leow, A. D., Strober, M., Cohen, M. S., Feusner, J. D. (2019). Differentiating weight-restored anorexia nervosa and body dysmorphic disorder using neuroimaging and psychometric markers. *PLOS ONE*, 14(5), p.e0213974. https://doi.org/10.1371/journal.pone.0213974

[4] Reggente, N., Moody, T. D., **Morfini, F.**, Sheen, C., Rissman, J., O'Neill, J., Feusner, J. D. (2018). Multivariate resting-state functional connectivity predicts response to cognitive behavioral therapy in obsessive–compulsive disorder. *Proceedings of the National Academy of Sciences*,115(9), pp.2222–2227. https://doi.org/10.1073/pnas.1716686115

[3] Rangaprakash, D., Bohon, C., Lawrence, K. E., Moody, T. D., **Morfini, F.**, Khalsa, S. S., Strober, M., Feusner, J. D. (2018). Aberrant dynamic connectivity for fear processing in anorexia nervosa and body dysmorphic disorder. *Frontiers in Psychiatry*, 9. https://doi.org/10.3389/fpsyt.2018.00273

[2] Moody, T. D., **Morfini, F.**, Cheng, G. K., Sheen, C., Tadayonnejad, R., Reggente, N., O'Neill, J., Feusner, J. D. (2017). Mechanisms of cognitive-behavioral therapy for obsessive-compulsive disorder involve robust and extensive increases in brain network connectivity. *Translational Psychiatry*, 7(9), p.e1230. https://doi.org/10.1038/tp.2017.192

[1] Tadayonnejad, R., Deshpande, R., Ajilore, O., Moody, T. D., **Morfini, F.**, Ly, R., O'Neill, J., Feusner, J. D. (2017). Pregenual anterior cingulate dysfunction associated with depression in OCD: an integrated multimodal fMRI/1H MRS study. *Neuropsychopharmacology*, 43(5), pp.1146–1155. https://doi.org/10.1038/npp.2017.249

Thesis

Morfini, F., (2025). Neural Correlates of Future Depression and Anxiety in Adolescence (Doctoral dissertation, Northeastern University)

Morfini, F., (2014). Neurocognitive impulsivity and compulsivity in pathological gambling: a pilot study. Original title: "*Impulsività e compulsività neurocognitiva nel gioco d'azzardo patologico: uno studio pilota*". (Master's thesis, San Raffaele University, advisor Laura Bellodi, M.D.)

Morfini, F., (2011). Violation of decision-making principles in risk evaluation among individuals with pathological addictions. Original title: "*Violazione dei principi decisionali di valutazione del rischio nei soggetti con dipendenze patologiche*". (Bachelor's thesis, San Raffaele University, advisor Clelia DiSerio, Ph.D.)

Open science contributions

[**Software Manual**] Bauer, C. C. C., Zhang, J., **Morfini, F.**, Kucyi, A., Raya, J., Urban, Z., Ghosh, S., Hinds, O., Auerbach, R. P., Pagliaccio, D., Whitfield-Gabrieli, S. (2022). Multivariate and Univariate Real-Time Functional Imaging (MURFI) User Manual. A manual for the installation and use of MURFI, a software package for real-time processing of functional brain images for neuroscience applications. https://doi.org/10.17504/protocols.io.b5afq2bn

Selected conference presentations (first author)

[19] **Morfini, F.**, Kucyi, A., Zhang, J., Bauer, C.C.C., Bloom, P.A., Pagliaccio, D., Whitfield-Gabrieli, S., Auerbach, R.P. (2025). Brain Functional Connectivity Predicts Depression and Anxiety During Childhood and Adolescence: A Connectome-Based Predictive Modeling Approach. *Trends in Psychology Summit*.

[18] **Morfini, F.**, Kucyi, A., Zhang, J., Bauer, C.C.C., Bloom, P.A., Pagliaccio, D., Whitfield-Gabrieli, S., Auerbach, R.P. (2025). Brain Functional Connectivity Predicts Depression and Anxiety During Childhood and Adolescence: A Connectome-Based Predictive Modeling Approach. *Cognitive Neuroscience Society*.

[17] **Morfini, F.**, Kucyi, A., Zhang, J., Bauer, C.C.C., Bloom, P.A., Pagliaccio, D., Whitfield-Gabrieli, S., Auerbach, R.P. (2025). Brain Functional Connectivity Predicts Depression and Anxiety During Childhood and Adolescence: A Connectome-Based Predictive Modeling Approach. *Society for Biological Psychiatry*.

[16] **Morfini, F.**, Kucyi, A., Zhang, J., Bauer, C.C.C., Bloom, P.A., Pagliaccio, D., Whitfield-Gabrieli, S., Auerbach, R.P. (2025). Brain Functional Connectivity Predicts Depression and Anxiety During Childhood and Adolescence: A Connectome-Based Predictive Modeling Approach. *Harvard Psychiatry Mysell Research Day*.

[15] **Morfini, F.**, Auerbach, R. P., Kramer, A. F., Davidow, Y., Whitfield-Gabrieli, S. (2024). Neuro-correlates of depression and anxiety in adolescents. *Flux International Society for Developmental Cognitive Neuroscience*.

[14] **Morfini, F.**, Kucyi, A., Zhang, J., Bauer, C. C. C., Bloom, P.A., Pagliaccio, D., Auerbach, R. P., Whitfield-Gabrieli, S. (2023). Brain Functional Connectivity Predicts Depression and Anxiety During Childhood and Adolescence: A Connectome-based Predictive Modeling Approach. *Society of Biological Psychiatry*.

[13] **Morfini, F.**, Zhang, J., Bauer, C.C., Stone, L. M. D., Shinn, A. K., Whitfield-Gabrieli, S., Niznikiewicz, M. A. (2022). Real-Time fMRI Neurofeedback from the Superior Temporal Gyrus Modulates Functional Connectivity Related to Self-Referential Processes in Schizophrenia. *Real-Time Functional Imaging and Neurofeedback Meeting.*

[12] **Morfini, F.**, Zhang, J., Bauer, C.C., Stone, L. M. D., Shinn, A. K., Whitfield-Gabrieli, S., Niznikiewicz, M. A. (2022). Real-Time fMRI Neurofeedback from the Superior Temporal Gyrus Modulates Functional Connectivity Related to Self-Referential Processes in Schizophrenia. *International Consortium for Schizotypy Research*.

[11] **Morfini, F.**, Zhang, J., Bauer, C.C., Shinn, A. K., Lee, Y., Awad, A. I., Stone, L. M. D., Northoff, G., Niznikiewicz, M. A., Whitfield-Gabrieli, S. (2022). Real-Time fMRI Neurofeedback for Auditory Hallucinations in Schizophrenia Reduces Aberrant Auditory Cortex Activity and Connectivity with the Default Mode Network. *Harvard Psychiatry Mysell Research Day*.

[10] **Morfini, F.**, Bauer, C. C. C., Zhang, J., Lee, Y., Raya, J., Awad, A. I., Stone, L. M. D., Shinn, A. K., Whitfield-Gabrieli, S., Niznikiewicz, M. A. (2021). Real-time fMRI neurofeedback from the superior temporal gyrus modulates self-referential processes in schizophrenia. *Society of Biological Psychiatry*.

[9] **Morfini, F.**, Bauer, C. C. C., Zhang, J., Lee, Y., Raya, J., Awad, A. I., Stone, L. M. D., Shinn, A. K., Whitfield-Gabrieli, S., Niznikiewicz, M. A. (2021). Real-time fMRI neurofeedback from the superior temporal gyrus modulates self-referential processes in schizophrenia. *Harvard Psychiatry Mysell Research Day*.

[8] **Morfini, F.**, Bauer, C. C. C., Zhang, J., Lee, Y., Raya, J., Awad, A. I., Stone, L. M. D., Shinn, A. K., Whitfield-Gabrieli, S., Niznikiewicz, M. A. (2021). Real-time fMRI neurofeedback from the superior temporal gyrus modulates self-referential processes in schizophrenia. *Schizophrenia International Research Society*.

[7] **Morfini, F.**, Lee, Y., Hirshfeld-Becker, D., Cutting, L., Bunge, S., Biederman J., & Whitfield-Gabrieli, S., (2020). Association of Intrinsic Brain Architecture with Changes in Attentional and Mood Symptoms During Development. *Massachusetts General Hospital Clinical Research Day.*

[6] **Morfini, F.**, Zhang, J., Lee, Y., Nieto-Castañón, A., Hubbard, N., Siless, V., Goncalves, M., Frosch, I., Lo, N., Hofmann, S. G., Auerbach, R. P., Pizzagalli, D. A., Yendiki, A., Gabrieli, J. D., Whitfield-Gabrieli, S. (2020). Resting State Connectivity Associated with Changes in Anxiety Symptoms in Adolescence over One Year. *Research Innovation Scholarship Entrepreneurship.*

[5] **Morfini, F.**, Zhang, J., Lee, Y., Nieto-Castañón, A., Hubbard, N., Siless, V., Goncalves, M., Frosch, I., Lo, N., Hofmann, S. G., Auerbach, R. P., Pizzagalli, D. A., Yendiki, A., Gabrieli, J. D., Whitfield-Gabrieli, S. (2020). Resting State Connectivity Associated with Changes in Anxiety Symptoms in Adolescence over One Year. *Society of Biological Psychiatry*.

[4] **Morfini, F.**, Greco, R., Naman, K., Feusner, J. D., Motivala, S. J. (2017). Cross-sectional and Longitudinal Relationships Between Poor Sleep and Symptom Severity in Obsessive-Compulsive Disorder. *UCLA Brain Research Institute*.

[3] **Morfini, F.**, Moody, T. D., Cheng, G. K., Feusner, J. D. (2017). Brain Activation and Connectivity in Body Dysmorphic Disorder and Anorexia Nervosa when Viewing Bodies. *UCLA Brain Research Institute*.

[2] **Morfini, F.**, Moody, T. D., Cheng, G. K., Strober, M., Feusner, J. D. (2017). Abnormal Brain Activation and Connectivity in Body Dysmorphic Disorder and Anorexia Nervosa When Viewing Bodies. *American College of Neuropsychopharmacology*.

[1] **Morfini, F.**, Casero, F., Bassetti, E., Galimberti, E., Baud-Bovy, G., Tettamanti, A., Gatti, R. (2015). Body schema and body image in anorexia nervosa patients: action- oriented protocol. *European Congress of Psychology*.

Selected conference presentations (co-authored)

[28] Niemiec, E., van Rijn, R., Hennessy, R. R., Olafsson, V., Kathios, N., Lopez, K. L., Aubrey, B. M., Hegefeld, H. M., **Morfini, F.**, Gabard-Durnam, L. J., Loui, P., Braams, B. R., Davidow, J. Y. (2026) Associations between Prosocial Risk-Taking and Striatal Tissue Iron: An Exploratory Analysis in Adolescents. *Flux International Society for Developmental Cognitive Neuroscience.*

[27] Aubrey, B. M., Kathios, N., Lopez, K. L., Niemiec, E., Hegefeld, H. M., Olafsson, V., **Morfini, F.**, Hennessy, R. R., Gabard-Durnam, L. J., Loui, P., Davidow, J. Y. (2026). Associations between motivated learning and iron in brain tissue across adolescence. *Cognitive Neuroscience Society.*

[26] Greene, K. D., Zhang, J., **Morfini, F.**, Lee, Y. J., Castañón, A. N., Yendiki, A., Hubbard, N. A., Siless, V., Frosch, I., Goncalves, M., Lo, N., Hoffmann, S. G., Auerbach, R. P., Pizzagalli, D. A., Gabrieli, J. D., & Whitfield-Gabrieli, S. (2025). Functional connectivity between the anterior cingulate cortex and dorsolateral prefrontal cortex as a marker for depression in adolescents. *Society of Biological Psychiatry*.

[25] Hennessy, R., **Morfini, F.**, Cohen, A. O., Casey, B. J., Galván, A., Shoham, D., Davidow, J. Y., (2024). Adolescent memory-driven value integration differs by valence. *Flux International Society for Developmental Cognitive Neuroscience.*

[24] Cline, T. L., Watrous, J. N. H., Nwakamma, M., Tinney, E. M., McDonald, K. M., **Morfini, F.**, Raine, L. B., Gabbard-Durnam, L. J., Kramer, A. F., Whitfield-Gabrieli, S., Hillman, C. H. (2023). Acute Effects of a Single Bout of Exercise on Functional Brain Networks in Children. *Society for Prevention Research.*

[23] Tusuzian, E., Firlie, B., Akoh, N., Zhang, J., Bauer, C. C. C., **Morfini, F.,** Shinn, A. K., Niznikiewicz, M. A., Whitfield-Gabrieli, S., (2023). Cortical Thickness Predictors of Neurofeedback Success in Reducing Auditory Hallucinations in Schizophrenia. *Society of Biological Psychiatry*.

[22] Tusuzian, E., Firlie, B., Akoh, N., Zhang, J., Bauer, C. C. C., **Morfini, F.,** Shinn, A. K., Niznikiewicz, M. A., Whitfield-Gabrieli, S., (2023). Cortical Thickness Predictors of Neurofeedback Success in Reducing Auditory Hallucinations in Schizophrenia. *Research Innovation Scholarship Entrepreneurship.*

[21] Bauer, C. C. C., Zhang, J., **Morfini, F.,** Shinn, A., Stone, L. M. D., Awad, A. I., Quin, E., Andrikidis, E., Lee, Y., Nestor, P., Whitfield-Gabrieli, S. & Niznikiewicz, M. A. (2023). fMRI feedback reduces

auditory hallucinations and regulates akin network activation and connectivity. *Organization for Human Brain Mapping.*

[20] Cline, T. L., Watrous, J. N. H., Tinney, E. M., Nwakamma, M., McDonald, K. M., **Morfini, F.**, Raine, L. B., Gabbard-Durnam, L. J., Kramer, A. F., Whitfield-Gabrieli, S., Hillman, C. H. (2023). Multivariate Pattern Analysis of Functional Brain Network Connectivity after Acute-to-Vigorous Physical Activity in Children. *American College of Sports Medicine.*

[19] Bauer, C.C., Zhang, Shaffer, C., **Morfini, F.**, Niznikiewicz, M. A., Kucyi, A., Akoh, N., Whitfield-Gabrieli, S. (2022). Mindful or Mind Full? Ask Your Participants. *Real-Time Functional Imaging and Neurofeedback Meeting.*

[18] Shaffer, C., Zhang, Raya, J., **Morfini, F.**, Auerbach, R. P., Bauer, C.C., Whitfield-Gabrieli, S. (2022). Baseline Connectivity of Key Self-Reference Nodes Predicts Real-Time Neurofeedback Performance in Adolescents with a History of Affective Disorders. *Real-Time Functional Imaging and Neurofeedback Meeting.*

[17] Zhang, J., **Morfini, F.**, Lee, Y., Stone, Awad, A. I., L. M. D., Shinn, A. K., Niznikiewicz, M. A., Urban, Z., Raya, J., Kim, M., Jones, R. J., Yendiki, A., Pagliaccio, D., Auerbach, R. P., Ghosh, S., Bauer, C.C., Whitfield-Gabrieli, S. (2022). Mindfulness-Based Real-Time fMRI Neurofeedback Targeting the Default Mode Network in *Schizophrenia* and Depression. *Real-Time Functional Imaging and Neurofeedback Meeting.*

[16] Zhang, J., **Morfini, F.**, Lee, Y., Stone, Awad, A. I., L. M. D., Shinn, A. K., Niznikiewicz, M. A., Urban, Z., Raya, J., Kim, M., Jones, R. J., Yendiki, A., Pagliaccio, D., Auerbach, R. P., Bauer, C.C., Whitfield-Gabrieli, S. (2022). Mindfulness-Based Real-Time fMRI Neurofeedback Targeting the Default Mode Network in Schizophrenia and Depression. *McGovern Institute Annual Symposium*.

[15] Kucyi, A., **Morfini, F.**, Whitfield-Gabrieli, S. (2022). Connectome-based predictive modeling of spontaneous experiences during resting state fMRI. *Society of Biological Psychiatry*.

[14] Shinn, A. K., Zhang, J., Bauer, C.C., **Morfini, F.**, Lee, Y., Awad, A. I., Stone, L. M. D., Northoff, G., Niznikiewicz, M. A., Whitfield-Gabrieli, S. (2022). Real-Time fMRI Neurofeedback for Auditory Hallucinations in Schizophrenia Reduces Aberrant Auditory Cortex Activity and Connectivity with the Default Mode Network. *American College of Neuropsychopharmacology*.

[13] Zhang, J., Bauer, C.C., Shinn, A. K., **Morfini, F.**, Lee, Y., Stone, L. M. D., Y., Awad, A. I., Northoff, G., Whitfield-Gabrieli, S., Niznikiewicz, M. A. (2021). Real-Time fMRI Neurofeedback for Auditory Hallucinations in Schizophrenia Reduces Aberrant Auditory Cortex Activity and Connectivity with the Default Mode Network. *American College of Neuropsychopharmacology*.

[12] Zhang, J., Bauer, C.C., **Morfini, F.**, Lee, Y., Awad, A. I., Stone, L. M. D., Northoff, G., Shinn, A. K., Niznikiewicz, M. A., Whitfield-Gabrieli, S. (2021). Baseline functional connectivity between default mode network and auditory cortex predicts improvement in auditory hallucination following real-time neurofeedback in schizophrenia. *Society of Biological Psychiatry*.

[11] Lee, Y., Zhang, J., **Morfini, F.**, Raya, J., Hubbard, N., Ghosh, S., Auerbach, R. P., Hofmann, S. G., Henin, A., Yendiki, A., Gabrieli, J. D., Whitfield-Gabrieli, S. (2021). Baseline functional connectivity predicts changes in attentional and mood symptoms in adolescents with depression and/or anxiety. *Society of Biological Psychiatry*.

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[6] Cheng, G. K., **Morfini, F.**, Moody, T. D., Feusner, J. D. (2017). Brain Activation and Connectivity in BDD and Anorexia Nervosa when Viewing Bodies. *International OCD Foundation*.

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Invited talks

3/2026 **Tufts University**, Tufts NeuroNetwork, Boston, MA, USA
"Neuroscience Career Pathways Panel"

2/2026 **University of Cambridge**, Dr. Bossaerts Laboratory, Cambridge, UK
"Real-time fMRI neurofeedback as a neuromodulation intervention for clinical symptoms"

10/2025 **Northeastern University**, Research on Iron group, Boston, MA, USA
"Brain-tissue iron for depression: new insights from (B)OLD fMRI data"

6/2025 **University of Rhode Island**, Dr. Logan Laboratory, Kingston, RI, USA
"*Neural correlates of future severity of anxiety and depression in adolescence*"

3/2025 **McLean Hospital / Harvard Medical School**, Dr. Webb Laboratory, Boston, MA, USA
"*Neural correlates of future severity of anxiety and depression in adolescence*"

11/2024 **Harvard University**, Dr. Somerville Laboratory, Boston, MA, USA
"*Neural correlates of future severity of anxiety and depression in adolescence*"

11/2024 **Northeastern University**, Neuroscience Seminar Series, Boston, MA, USA
"*Neural correlates of future severity of anxiety and depression in adolescence*"

11/2024 **Columbia University**, Dr. Auerbach Laboratory, New York, NY, USA
"*Neural correlates of future severity of anxiety and depression in adolescence*"

10/2024 **MGH / Harvard Medical School**, Dr. Choi Laboratory, Boston, MA, USA
"Brain features associated with prospective severity of anxiety and depression in adolescence"

7/2022 **Columbia University**, Dr. Auerbach Laboratory, New York, NY, USA
"Brain Functional Connectivity Predicts Anxiety and Depression in Children and Adolescents: A Machine-Learning Study of Independent Longitudinal Samples"

6/2021 **Northeastern University**, Research on Adolescence group, Boston, MA, USA
"Multimodal Prediction of Depressive Symptom Improvement in Adolescence"

3/2021 **Northeastern University**, Master's Convention, Boston, MA, USA
"Understanding Depressive Symptoms Change in Adolescence"

2/2021 **Northeastern University**, Center for Cognitive and Brain Health, Boston, MA, USA
"Understanding Depressive Symptoms Change Over Time in Adolescence"

5/2020 **Northeastern University**, Boston Psychology Graduate Symposium, Boston, MA, USA
"Resting-State Connectivity Associated with Changes in Anxiety Symptoms in Adolescence"

3/2020 **Northeastern University**, Provost and Board of Directors (with advisor), Boston, MA, USA
"What Northeastern should do next for PhD education and increase success in research. The importance of the matching process between Faculty Mentor and Ph.D. student"
(Canceled due to COVID)

2/2020 **Northeastern University**, Research on Adolescence group, Boston, MA, USA
"Brain Connectomics Predict Longitudinal Symptom Change in Depression"

11/2018 **Harvard University**, Dr. Hooley Laboratory, Cambridge, MA, USA
"Abnormal Brain Activation and Connectivity in Anorexia Nervosa and Body Dysmorphic Disorder"

Invited lectures

2024, 2022 **Harvard-MIT**, Health Sciences and Technology Program, Boston, MA, USA
Functional Magnetic Resonance Imaging: Data Acquisition and Analysis
Directors: Anastasia Yendiki, Jonathan Polimeni

2023 **Organization for Human Brain Mapping**, Educational Course, Montreal, Canada
Making Quality Control Part of Your Analysis: Learning with the FMRI Open QC Project
"Functional Connectivity MRI Quality Control Procedures in CONN"

2021 **Northeastern University**, Boston, MA, USA
MRI Users Group Workshop Series
"Optimization of BIDS-App on High Performance Computing Clusters"

Teaching experience

Teaching assistant for international workshops (I), doctoral (PhD), and undergraduate (U) courses.

Institution and Semester	Title	Course Level	Professor
Massachusetts General Hospital / Harvard Medical School			
9/2025	Predictive Models in Neuroimaging	I	Nieto-Castañón
Martinos Center / Massachusetts General Hospital / Harvard Medical School Joint Program			
10/2022	fMRI Connectivity Analysis with CONN	I	Nieto-Castañón
10/2021	fMRI Connectivity Analysis with CONN	I	Nieto-Castañón
3/2021	fMRI Connectivity Analysis with CONN	I	Nieto-Castañón
Northeastern University			
2024 (Spring)	Laboratory in Cognition	U	Eidson
2023 (Spring)	Graduate Quantitative Methods II	PhD	DeSteno
2022 (Fall)	Statistics in Psychological Research	U	Eidson
2022 (Spring)	Statistics in Psychological Research	U	Halko
2021 (Fall)	Statistics in Psychological Research	U	Halko
2020 (Fall)	Statistics in Psychological Research	U	Halko
2020 (Spring)	Laboratory in Cognition	U	Baker

Mentoring experience

Semester	Name	Institution	Subsequent Position
2021 - 2022	Tanushka Dewan	Northeastern University	Continued Undergraduate Studies
2021	Chelsea Ajunwa	MIT	PhD in Psychology, Northeastern University
2021	Arjun Valay	Northeastern University	Continued Undergraduate Studies
2021 - 2022	Emma Tusuzian	Northeastern University	Clinical Research Assistant II, McLean Hospital
2020	Kathryn Margiotta	Northeastern University	Clinical Research Assistant II, McLean Hospital

Leadership and service

2025 **Abstract Reviewer**, Flux International Society for Developmental Cognitive Neuroscience
2024 **Editor**, Application Statement Feedback Program (ASFP) for underrepresented communities
2021 **Organizer** and **Founder** (with Dr Davidow), MRI Group Seminars, Northeastern University
2020 - present **Mentor** (2-3 students/semester), Graduate Mentoring Program, Northeastern University
2020 - 2025 **Graduate Guide**, Prospective PhD Interview Weekend, Northeastern University
2019 - 2020 **Organizer**, Seminars for Center for Cognitive and Brain Health, Northeastern University

Ad hoc reviewer (alphabetical order)

ORCID https://orcid.org/0000-0002-0330-6131

- Biological Psychiatry
- BMC Medical Imaging
- BMC Medicine
- BMC Psychiatry
- Brain Imaging and Behavior
- Brain Research
- Child and Adolescent Psychiatry and Mental Health
- Child Psychology and Psychiatry, (J. of)
- Developmental Cognitive Neuroscience
- Frontiers in Neuroimaging
- Frontiers in Psychiatry
- Imaging Neuroscience
- European (J. of) Medical Research
- Molecular Neurobiology
- NeuroImaging: Clinical
- Neuropsychopharmacology
- Neurophysiology
- Nature Partner (NPJ) Digital Public Health
- Open Research Europe
- Psychiatry Research Communications
- Psychiatric Research, (J. of)
- Psychiatric and Brain Science, (J. of)
- Psychopathology and Clinical Science, (J. of)
- Psychophysiology Practice and Research, (J. of)
- Quantitative Imaging in Medicine and Surgery
- Schizophrenia Research
- Scientific Reports
- Translational Psychiatry

Professional associations

Anxiety and Depression Association of America (ADAA)
American Psychological Association (APA)
Flux Society
Organization for Human Brain Mapping (OHBM)
Society of Biological Psychiatry (SOBP)

Outreach

2026 **Invited panelist at Tufts NeuroNetwork at Tufts University**
"Neuroscience Career Pathways Panel"

2024 **Presenter at the high school lecture series at Northeastern University**
"*Introductory demonstration on brain functional connectivity*"

2022 **Speaker for Grad School Mentoring Program at Northeastern University**
"Degree Programs in Psychology: PhD vs PsyD"

2020 **Speaker for ABCT Think Tank on Neuroscience**
"How Clinicians Can Use Contemporary Neurocognitive Research in the Real World"

2011 - 2016 **Fundraiser, Center for Research and Innovation in Neurological Disorders, Italy**

Selected skills

Programming languages	Python, MATLAB, R, Unix bash, HTML
Magnetic resonance imaging (MRI)	**Software**: FSL, CONN Toolbox, SPM, BIDS-App, fMRIprep, MRIQC, MURFI system for real-time fMRI neurofeedback, BrainNetViewer; **Python packages**: nipype, nilearn, statsmodels, pandas, ...
Electroencephalogram (EEG)	HAPPE, MNE-Python

Statistical modeling	**Machine learning**: scikit-learn, multivariate pattern analysis (MVPA), connectome-based predictive modelling (CPM); **Bayesian statistics**: pyJags, pyStan; **Misc**: R, SPSS, python-packages (NumPy, SciPy, ...)
Reproducible science	Git/Github, JupyterLab, Singularity, SLURM HPC systems
Stimuli preparation	PsychoPy, PsychToolbox, Presentation NBS, E-Prime, ImageMagick, FantaMorph, ImageJ
Laboratory	Eye-tracking, BIOPAC, BIAS, CANTAB
Clinical	Licensed clinical psychologist for: diagnostic interviews, psychological and counseling support for individuals and groups, neurocognitive testing, psychological testing

Languages

Italian: Native
English: Fluent
Spanish: Fluent

References

Available upon request