Benjamin Lipkin
Curriculum Vitae
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Contact:

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Education:

2022 – Present	Massachusetts Institute of Technology, Cambridge, MA Degree: Ph.D. Cognitive Science Advisor: Dr. Evelina Fedorenko
2016 – 2020	University of Michigan, Ann Arbor, MI Degree: B.Sc. Computational Neuroscience Advisor: Dr. David Brang
2012 – 2016	Bronx High School of Science, Bronx, NY

Research:

2023 – Present	Ph.D. Student Researcher, MIT Advisor: Dr. Evelina Fedorenko
2022 – 2023	Ph.D. Student Researcher (Rotational), MIT Advisors: Dr. Roger Levy, Dr. Joshua Tenenbaum, Dr. Edward Gibson
2020 – 2022	Technical Research Associate, MIT Advisor: Dr. Evelina Fedorenko
2018 – 2020	Research Assistant, University of Michigan, Ann Arbor, MI Advisor: Dr. David Brang
2016 – 2018	Research Assistant, University of Michigan, Ann Arbor, MI Advisor: Dr. Jill Becker
2014 – 2015	Research Assistant, Columbia University, New York, NY Advisor: Dr. Eric Kandel

Published Manuscripts & Preprints:

2022	Srikant S*, **Lipkin B***, Ivanova A, Fedorenko E, O'Reilly, UM. (2022). Convergent representations of computer programs in human and artificial neural networks. *Advances in Neural Information Processing Systems (NeurIPS).*
2022	**Lipkin B**, Tuckute G, Affourtit J, Small H, Mineroff Z, Kean H, Jouravlev O, Rakocevic L, Pitchett B, Siegelman M, Hoeflin C, Pongos A, Blank I, Kline M, Ivanova A, Shannon S, Sathe A, Hoffman M, Nieto-Castañón A, and Fedorenko E. (2022). Probabilistic atlas for the language network based on precision fMRI data from >800 individuals. *Nature Scientific Data*, 9(1), 1-10.
2022	Shain C*, Paunov A*, Chen X*, **Lipkin B**, Fedorenko E. (preprint). No evidence of theory of mind reasoning in human language network. https://doi.org/10.1101/2022.07.18.500516
2022	Aabedi A, **Lipkin B**, Young JS, Hinkley L, Findlay A, Daniel A, Krishna S, Umbach G , Kaur J, Berger MS, Molinaro A, Brang D, Nagarajan S, Hervey-Jumper SL. (2022). Electrophysiological patterns of glioma-induced neural network remodeling are conserved across tumor subtype. *Neuro-Oncology*, 24(7): vii22.
2021	Shain C, Kean H, **Lipkin B**, Affourtit J, Siegelman M, Mollica F, Fedorenko E. (preprint). Constituent length effects do not support syntactic abstraction in the human language network. https://doi.org/10.1101/2021.11.12.467812
2021	Aabedi A*, **Lipkin B***, Kaur J, Kakaizada S, Reihl S, Young JS, Lee AT, Krishna S, Chang EF, Brang D, Hervey-Jumper SL. (2021). Functional alterations in cortical processing of speech in glioma-infiltrated cortex. *PNAS*, 118(46): e2108959118.
2021	Malik-Moraleda S, Cucu T, **Lipkin B**, Fedorenko, E. (2021). The domain-general Multiple Demand system is more active in bilinguals than monolinguals during executive processing. *Neurobiology of Language*, 2(4): 647-664.
2021	Aabedi A, **Lipkin B**, Young JS, Krishna S, Kakaizada S, Kaur J, Berger M, Brang D, Hervey-Jumper SL. (2021). Spectro-temporal encoding of speech responses in glioma-infiltrated cortex. *Journal of Neurosurgery*, 135(2): 15.

Invited Talks:

2022	Optimization pressures on the neural representational geometry of language. Cog Lunch, MIT, Cambridge, MA.
2022	Brain-behavior correlations: Low reliability and statistical power. TEvLab, MIT, Cambridge, MA.
2022	Probabilistic atlases of functional brain networks. Software Tools for Open Science Workshop, NIH Office of Data Science Strategy, Bethesda, MD.
2021	Human and artificial neural representations of computer programs. TEvLab, MIT, Cambridge, MA.
2020	The neural encoding of speech errors in patients with perisylvian brain tumors. Phonetics and Phonology Forum, UC Berkeley, Berkeley, CA.

Conference Presentations:

2022	Srikant S*, **Lipkin B***, Ivanova A, Fedorenko E, O'Reilly, UM. (2022). Convergent representations of computer programs in human and artificial neural networks. *Neural Information Processing Systems*, New Orleans, LA
2021	Small H*, **Lipkin B***, Affourtit J, Pongos A, Fedorenko E. Differential selectivity of the left and right hemisphere language regions for non-linguistic processing. *Society for Neurobiology of Language.*
2019	**Lipkin B**, Plass J, Kakaizada S, Valdivia C, Sagher O, Hervey-Jumper SL, Brang D. Electrocorticographic recordings enable intraoperative language network mapping. *Society for Neuroscience*, Chicago, IL

Awards & Fellowships:

2022	MIT Presidential Graduate Fellowship.
2022	Computationally Enabled Integrative Neuroscience Fellowship.
2019	MCubed Scholars Research Fellowship.

Media Coverage:

2022	"This is your brain. This is your brain on code." *MIT News.*

Ad Hoc Reviewing:

2023	International Conference on Machine Learning (ICML).
2022	Conference on Neural Information Processing Systems (NeurIPS).
2022	Nature Scientific Data.
2022	International Conference on Machine Learning (ICML) **[Top 10%]**.

Mentorship:

2021	Elsa Engeriser (UROP).

Volunteer:

2022	MIT BCS Graduate Application Assistance Program. Cambridge, MA.
2021 – Present	Greater Boston Food Bank. Boston, MA.
2018 – 2019	FEMMES Workshop. Ann Arbor, MI.
2017	Eisenhower Center for TBI. Ann Arbor, MI.

Affiliations:

2020 – Present	Society for the Neurobiology of Language (SNL).
2019 – Present	Cognitive Neuroscience Society (CNS).
2018 – Present	Society for Neuroscience (SfN).

References:

Evelina Fedorenko, Ph.D.
Associate Professor, Brain & Cognitive Sciences
Massachusetts Institute of Technology
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Roger Levy, Ph.D.
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David Brang, Ph.D.
Assistant Professor, Psychology
University of Michigan, Ann Arbor
530 Church Street, Ann Arbor, MI 48109
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Shawn Hervey-Jumper, MD.
Associate Professor, Neurological Surgery
University of California, San Francisco
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