

JAEON LEE

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EDUCATION & RESEARCH

Harvard University , Department of Molecular & Cellular Biology, MA Postdoctoral Research Fellow Advisors: Naoshige Uchida, Samuel Gershman	10/2022~Present
Columbia University , Zuckerman Institute, NY Postdoctoral Research Fellow Advisor: Rui Costa	10/2021 ~ 9/2022
Harvard University , Department of Neurobiology, MA Ph. D. in Neuroscience, Advisor: Bernardo Sabatini	09/2015 ~ 9/2021
KAIST , Department of Bio and Brain Engineering, Korea B. S. in Bio and Brain Engineering (<i>Magnum cum laude</i>)	09/2010 ~ 02/2015

HONORS & AWARDS

K99/R00 Pathway to Independence award	2026
Astera Essay Competition Winner	2026
Harold M. Weintraub Graduate Student Award	2022
Harvard Brain Initiative Travel Award (visit to Branco's lab)	2019
Iljou foundation Scholarship for Ph.D (5 years)	2015-2022

CONFERENCES & TALKS

Basal Ganglia GRC 2026 , Poster Presentation <i>Emergence of rapid value inference via meta-RL</i>	2026
Cosyne Meeting 2026 , Poster Presentation <i>Emergence of rapid value inference via meta-RL</i>	2026
Sfn meeting San Diego , Poster presentation <i>Emergence of rapid value inference via meta-RL</i>	2025
VIDA Dopamine conference 2021 , Poster, Virtual Conference <i>Striatal indirect pathway mediates exploration via modulation of collicular dynamics</i>	2021
Brain Initiative Meeting 2021 , Poster, Virtual Conference <i>Striatal indirect pathway mediates exploration via modulation of collicular dynamics</i>	2021
Cosyne 2021 , Poster, Virtual Conference <i>Striatal indirect pathway mediates exploration via modulation of collicular dynamics</i>	2021
Neurobiology Departmental Seminar , Talk, Harvard Medical School, MA, US	2019

<i>Investigating the computation of the striatal indirect pathway</i>	
Tiago Branco's lab , Talk, Sainsbury Wellcome Centre, London, United Kingdom	2019
<i>Investigating the computation of the striatal indirect pathway</i>	
Society for Neuroscience 2018 , Poster, San Diego, US	2018
<i>Mapping the basal ganglia topography</i>	

PUBLICATIONS

Lee, J*, Hennig, J., Frelih, V., Gershman, Sam., Uchida, N. *Emergence of rapid value inference through meta-reinforcement learning*. (2026, *Biorxiv*) (In Review)

Lee, J.*, Sabatini, B.L. From avoidance to new action: the multifaceted role of the striatal indirect pathway. *Nat. Rev. Neurosci.* 26, 438–449 (2025).

Lee, J.*, Sabatini, B. Striatal indirect pathway mediates exploration via collicular competition. *Nature*. (2021).

Lee, J.*, Wang, W., Sabatini, B. Anatomically segregated basal ganglia pathways allow parallel behavioral modulation. *Nat. Neurosci.* 1–11 (2020).

Pisano, F.*, Pisanello, M.*, Lee, S.J. **Lee, J., et al.**. Depth-resolved fiber photometry with a single tapered optical fiber implant. *Nat Methods* 16, 1185–1192 (2019).

TEACHING

Black Undergraduate Mentorship Program (BUMP) mentor	2/2022
Teaching assistant for Matlab Bootcamp (assisted programming in Matlab)	6/2019
Teaching assistant for Thinking about Data (assisted programming in Matlab/statistical analysis)	9/2018

REFERENCES

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