JAEEON LEE

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EDUCATION

Harvard University, Department of Neurobiology, MA — 09/2015-Present
Ph. D. Candidate in Neuroscience
Advisor: Prof. Bernardo Sabatini

KAIST, Department of Bio and Brain Engineering, Korea — 02/2015
B. S. in Bio and Brain Engineering (*Magnum cum laude*)

RESEARCH

Harvard University, Sabatini Lab — 05/2016-Present

- Investigating the computation of the striatal indirect pathway during lateralized decision making via tapered fiber optogenetics combined with in-vivo recording in superior colliculus
- Mapping topography of basal ganglia output nuclei using an anterograde tracer (AA1.Cre) and functional mapping of striatal regions for distinct behavior using tapered fiber stimulation
- Development of simultaneous depth dependent photometry using tapered fibers, and simultaneous dLight imaging in dorsal/ventral striatum

KAIST, Jung Lab — 02/2014-06/2015

- Investigating the effect of dopamine 6-OHDA lesion on striatal value coding during classical conditioning.

HONORS & AWARDS

Harvard Brain Initiative Travel Award (visit to Branco's lab)	2019
Iljou foundation Scholarship (5 years)	2015-present
National Excellence Scholarship	2010-2014
Research Internship Scholarship (OIST internship, 6 months)	2013-2014
Exchange Program Scholarship (EPFL Exchange program)	2013
International Internship Program Scholarship (Upenn Summer Computational Neuroscience course)	2013
Honors Student	2012
Best Paper Award, Introduction to Design and Communication	2011

CONFERENCES & TALKS

Cosyne 2021, Poster, Virtual Conference 2021

Striatal indirect pathway mediates exploration via modulation of collicular dynamics (**Lee, J.***, Sabatini, B.)

Neurobiology Departmental Seminar, Talk, Harvard Medical School, MA, US 2019

Investigating the computation of the striatal indirect pathway (**Lee, J.***, Sabatini, B.)

Tiago Branco's lab, Talk, Sainsbury Wellcome Centre, London, United Kingdom 2019

Investigating the computation of the striatal indirect pathway (**Lee, J.***, Sabatini, B.)

Society for Neuroscience 2018, Poster, San Diego, US 11/2018

Mapping the basal ganglia topography (**Lee, J.***, Wang, W., Sabatini, B.)

PUBLICATIONS

Lee, J.*, Sabatini, B. Striatal indirect pathway mediates action switching via modulation of collicular dynamics. *biorxiv* (2020).

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

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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