# **JAEEON LEE**

Department of Neurobiology

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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

05/2016-07/2021

- Investigating the function of the striatal indirect pathway during cue-lick tasks. Performed optogenetic perturbation with in vivo recording.
- 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

VIDA Dopamine conference 2021, Poster, Virtual Conference	2021
Striatal indirect pathway mediates exploration via modulation of collicular dynamics ( <b>Lee, J.*</b> , Sabatini, B.)	
Brain Initiative Meeting 2021, Poster, Virtual Conference	2021
Striatal indirect pathway mediates exploration via modulation of collicular dynamics (Lee, J.*, Sabatini,	
B.) Course 2021 Poster Virtual Conference	2021
Cosyne 2021, Poster, Virtual Conference  Striatal indirect pathway mediates exploration via modulation of collicular dynamics (Lee, J.*, Sabatini, B.)	2021
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 exploration via collicular competition. *Nature*. (accepted).

**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**

### Bernardo Sabatini, MD, PhD

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### Mark Anderman, PhD

Associate Professor in Medicine

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# Naoshige Uchida, PhD

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# Wade Regehr, PhD

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