# **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-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**

Talk for Neurobiology departmental seminar, Harvard Medical School, MA, US	2019
Investigating the computation of the striatal indirect pathway (Lee, J.*, Sabatini, B.)	
Talk at Tiago Branco's lab, Sainsbury Wellcome Centre, London, United Kingdom	2019
Investigating the computation of the striatal indirect pathway (Lee, J.*, Sabatini, B.)	
Poster presentation for Society for Neuroscience 2018, San Diego, US	11/2018
Mapping the basal ganglia topography (Lee, J.*, Wang, W., Sabatini, B.)	

#### **PUBLICATIONS**

Lee, J.\*, Sabatini, B. Striatal D2 pathway mediates competition between lateralized actions. biorxiv (2020).

**Lee, J.\***, Wang, W., Sabatini, B. Anatomically segregated basal ganglia pathways allow parallel behavioral modulation. *Nat. Neurosci.* 1–11 (2020) doi:10.1038/s41593-020-00712-5.

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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