

# Asako Noguchi, Ph.D.

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## Education

<u>Institution</u>	<u>Date</u>	<u>Degree</u>	<u>Department</u>
University of Tokyo	<b>2013-2017</b>	BA.	Pharmaceutical Sciences
University of Tokyo	<b>2017-2019</b>	MA.	Pharmaceutical Sciences
University of Tokyo	<b>2019-2023</b>	Ph.D.	Pharmacy

## Fellowships

- 4/2023-3/2025      Overseas Research Fellowship, Japan Society for the Promotion of Science (JSPS)  
11/2021                JNS-SfN Travel Award Exchange Program  
4/2020-3/2023        Research Fellowship for Young Scientists (DC1), Japan Society for the Promotion of Science (JSPS)  
4/2019-3/2020        Nagai Memorial Research Scholarship from the Pharmaceutical Society of Japan  
7/2018                JNS-FENS YREP (Young Researcher Exchange Program)

## AWARDS

- 9/2022    L'Oréal-UNESCO For Women in Science Awards, Japan Fellowship  
7/2022    Toshihiko Tokizane Memorial Award for Excellent Graduate Study in Neuroscience

## PUBLICATIONS

### Under Review

1. **Noguchi, A.**, Ikegaya, Y., Postnatal maturation of *in vivo* membrane potential dynamics during hippocampal ripples. *J. Neurosci. Under Review*

### In Press

2. **Noguchi, A.**, Yamashiro, K., Matsumoto, N., Ikegaya, Y., Coherent membrane potential dynamics during hippocampal theta oscillations. *Commun. Biol.*

### Published

3. **Noguchi, A.**, Huszár, R., Morikawa, S., Buzsáki, G., Ikegaya, Y., Inhibition allocates spikes during hippocampal ripples. *Nat. Commun.*, 13:1280, 2022.
4. **Noguchi, A.**, Ikegaya, Y., Matsumoto, N. In vivo whole-cell patch-clamp methods: recent technical progress and future perspectives. *Sensors (Review)*, 21:1448, 2021.
5. **Noguchi, A.**, Sakaguchi, T., Sato, M., Aikawa, H., Matsumoto, N., Ikegaya, Y. Whisker electromyograms signify awake and anesthetized states in mice. *Neurosci. Res.*, 148: 61-65, 2019.
6. **Noguchi, A.**, Matsumoto, N., Morikawa, S., Tamura, H., Ikegaya, Y. Juvenile Hippocampal CA2 Region Expresses Aggrecan. *Front. Neuroanat.*, 11: 41, 2017.
7. Gao, M., **Noguchi, A.**, Ikegaya, Y. The subiculum sensitizes retrosplenial cortex layer 2/3 pyramidal

- neurons. *J. Physiol.*, 599(12):3151-3167. (selected for the cover image)
8. Liu, J., Kashima, T., Morikawa, S., **Noguchi, A.**, Ikegaya, Y., Matsumoto, N. Molecular characterization of superficial layers of the presubiculum during development. *Front. Neuroanat.*, 15:662724, 2021.
  9. Yagishita , H., Nishimura, Y., **Noguchi, A.**, Shikano, Y., Ikegaya, Y., Sasaki, T. Urethane anesthesia suppresses hippocampal subthreshold activity and neuronal synchronization. *Brain Res.*, 1749:147137, 2020.
  10. Kashima, T., **Noguchi, A.**, Ikegaya, Y., Matsumoto, N. Heterogeneous expression patterns of fibronectin in the mouse subiculum. *J. Chem. Neuroanat.*, 98:131-138, 2019.
  11. Sato, Y., Miyawaki, T., Ouchi, A., **Noguchi, A.**, Yamaguchi, S., Ikegaya, Y. Quick visualization of neurons in brain tissues using an optical clearing technique. *Anat. Sci. Int.*, 94:199-208, 2019.
  12. Sato, M., Matsumoto, N., **Noguchi, A.**, Okonogi, T., Sasaki, T., Ikegaya, Y., Simultaneous monitoring of mouse respiratory and cardiac rates through a single precordial electrode. *J. Pharmacol. Sci.*, 137:177-186, 2018.

## **SELECTED PRESENTATIONS**

1. **Noguchi, A.**, Ikegaya, Y. Developmental changes in membrane potential responses of CA1 pyramidal neurons to sharp-wave ripples, *Society for Neuroscience 2022* (San Diego), 16 November 2022, 743.08. *Poster presentation*
2. **Noguchi, A.**, Ikegaya, Y. Preceding inhibition organizes hippocampal spike sequences, *Society for Neuroscience 2021* (Virtual), 11 November 2021, P862.01. *Poster presentation*
3. **Noguchi, A.**, Matsumoto, N., Ikegaya, Y. Subthreshold coherence of multiple CA1 pyramidal cells during in vivo theta oscillations, *Society for Neuroscience 2019* (Chicago), 23 October 2019, 789.01. *Poster presentation*
4. **Noguchi, A.**, Matsumoto, N., Ikegaya, Y. Dynamic coupling of membrane potentials between in vivo hippocampal CA1 pyramidal neurons, *11th FENS Forum of Neuroscience* (Berlin), 10 July 2018, B081. *Poster presentation*
5. **Noguchi, A.**, Matsumoto, N., Ikegaya, Y. Subthreshold relationships between CA1 pyramidal cells in vivo, *Joint symposium of 10th Optogenetic Research Conference and Second International Symposium on Brain Information Dynamics 2018* (Tokyo), 5 July 2018, P14. *Poster presentation*
6. **Noguchi, A.**, Matsumoto, N., Tamura, H., Ikegaya, Y. Developmental formation of perineuronal nets in the mouse hippocampal CA2 area, *Society for Neuroscience 2017* (Washington, D.C.), 15 November 2017, 650. *Poster presentation*