

Kazuki Tanaka-Shin'ya

PHD STUDENT AT DOSHISHA UNIVERSITY

"Only to do my best in any case."

Summary.

I am a PhD student at Doshisha University, supervised by Prof. Kohta I. Kobayasi. My research focuses on exploring the physiological functions of the MAP2, one of the microtubule-associated proteins. This exploration involves studying the effects of MAP2 loss for signal processing in hearing and balance employing range methods including electrophysiological, cell biological and histological observations. Additionally, I have a keen interest in the mechanisms of mother-infant communication via vocalization and behavior.

KEYWORDS: Microtubule-associated protein, MAP2, Genetic hearing loss, Inner ear, Cochlea hair cell, Neuroscience, Hearing physiology

Education _____

Graduate School of Life and Medical Sciences(Doctoral Course), Doshisha University

PhD Engineering

• Supervisor: Prof. Kohta I. Kobayasi

Master of Science in Engineering

Graduate School of Life and Medical Sciences(Master Course), Doshisha University

Supervisor: Prof. Kohta I. Kobayasi

Bachelar of Engineering

Faculty of Life and Medical Sciences, Doshisha University

• Supervisor: Assoc. Prof. Kohta I. Kobayasi

Teaching Experience

Learning Assistant	Kyoto, Japan
Doshisha University	Apr. 2021 - May 2022, Apr. 2024 - present
 Provide advice and consultation to undergraduates on out-of-class learning based on the expertise. Teaching Assistant 	Kyoto, Japan
Doshisha University	Apr. 2020 - Mar. 2022
 MedicalInformation Laboratory, Sensory Information Systems, Bachelor Thesis Supervision of Thesis Research 	Kyoto, Japan
Doshisha University	Apr. 2020 - present
 Supervison of 4 Master Students and 3 Bachelor Students Part-time tutoring 	Kyoto, Japan
Kyosin Co., Ltd.	Jun. 2016 - Apr.2021
 Teaching of mathematics, biology, chemistry, and English for elementary through high school studer teaching materials 	nts, and research and development of
Teaching practice	Kyoto, Japan
Kyoto Board of Education	Jun. 2020
Teaching biology, chemistry, and physics to junior high school students, as well as research and develop	oment of teaching materials

Skills_____

Programming

• MATLAB, R, Python, Neurobs Presentation

Languages

• Japanese, English

Kyoto, Japan Apr. 2022 - present

Kyoto, Japan Apr. 2020 - Mar. 2022

Kyoto, Japan Apr. 2016 - Mar. 2020

Teacher's license

- Junior high school teaching license (Science)
- High school teaching license (Science)

Publications

Published

 Ryo Nishibori, Harutaka Nakagawa, Kazuki Shin'ya, Yuta Tamai, Yuki Ito, Kohya I Kobayasi, "Effects of maternal separation on adult vocal communication: a Mongolian gerbil (Meriones unguiculatus) study", Acoustical Science and Technology, J-stage. (DOI: https://doi.org/10.1250/ast.e24.03)

Fellowships and Grants.

- Japan Society for the Promotion of Science (JSPS) Doctoral Corse (DC) Research Fellowships
- The Japan Science Society, Sasagawa Scientific Rsearch Grant, Department of Biology

Apr. 2022 - Feb. 2023

Apr. 2023 - Mar. 2025

Presentations (International Conference)

- Kazuki Tanaka, Tomohiro Miyasaka, Akihiro Harada, Kohta I Kobayasi., "The effect of MAP2 gene deficiency on hearing", Society for neuroscience Global Connectome: A Virtual Event, Chicago, USA, January 12-14, 2021.
- Emi Fukuzawa, **Kazuki Shin'ya**, Misaki Takaoka, Yuki Ito, Tomohiro Miyasaka, Nobuto Kakuda, Akihiro Harada, Kohta I Kobayasi., "Does loss of MAP2 function affect sound perception? Measuring auditory characteristics using operant conditioning -", XXVIII International Bioacoustics Congress, Japan, October 27-31, 2023.
- Ryo Nishibori, Yume Kinoshita, Harutaka Nakagawa, **Kazuki Shin'ya**, Yuta Tamai, Yuki Ito, and Kohta I. Kobayasi., "Maternal separation affects social communication in juvenile and adult Mongolian gerbils (Meriones unguiculatus)", XXVIII International Bioacoustics Congress, Japan, October 27-31, 2023.
- Harutaka Nakagawa, Ryo Nishibori, **Kazuki Shin'ya**, Kohta I. Kobayasi., "Effects of early life stress experience on vocalization and behavior changes during aggressive encounters in Mongolian gerbils (Meriones unguiculatus).", XXVIII International Bioacoustics Congress, Japan, October 27-31, 2023.
- Mizuki Katayama, Kazuki Tanaka, Yuki Ito, Kohta I Kobayasi., "Importance of mother-infant vocal communication: maternal separation causes prolonged developmental delay and inhibits USVs production in the Mongolian gerbil", The 44th Annual Meeting of the Japan Neuroscience Society The 1st CJK International Meeting, Japan, July 29-31, 2021.

Reference

Prof. Kohta I. Kobayasi, Ph.D.

- University: Doshisha University
- Institute: Department of Biomedical Information
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Prof. Shizuko Hiryu, Ph.D.

- University: Doshisha University
- Institute: Department of Biomedical Information
- Email: shiryu@mail.doshisha.ac.jp

Prof. Tomohiro Miyasaka, Ph.D.

- University: Nihon UniversityInstitute: Department of PharmacyEmail: miyasaka.tomohiro@nihon-u.ac.jp