

Mizuki Yoshida

Sex: Female

Marital status: Unmarried

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Education

- 2023 Doctor of Science, Graduate School of Science, Osaka City University, Japan
2020 M.S., Graduate School of Science, Osaka City University, Japan
2018 B.S., Faculty of Science, Osaka City University, Japan

Major Honor and fellowship

- 2020-2023 Research Fellowship (Program of Developing Human Resource for Rhizome-based Research, Pioneering Research Initiated by the Next Generation (Japan Science and Technology Agency))
2014 Student outstanding presentation award (Department of Biology, Faculty of Science, Osaka City University)

Scholarships:

- 2023 Participation in the subsidy system for ICE 2024 supported by The Japanese Society of Applied Entomology and Zoology
2023 Travel award supported by The Japanese Society of Applied Entomology and Zoology
2022 Travel award supported by The Entomological Society of Japan
2020-2023 Student scholarship supported by ONO-SYOUNGAKUKAI
2018-2020 Student scholarship supported by ONO-SYOUNGAKUKAI
2014-2018 Student scholarship supported by Funai Shougakukai

Research Publication: Yoshida has published one original paper related to the molecular mechanism of stress tolerance in an insect.

1. Yoshida, M., Goto, S.G. 2023. Thermal responses of the embryos and early instar larvae of the Antarctic midge *Belgica antarctica* (Insecta: Diptera). *Polar Biology*. 46:539-544.
2. Yoshida, M., Lee, R.E., Denlinger, D.L., Goto, S.G. 2021. Expression of aquaporin in response to distinct dehydration stress that confer stress tolerance in the Antarctic midge *Belgica antarctica*. *Comparative Biochemistry and Physiology Part A*. 256, 110928.

Conference Presentations:

- Yoshida, M., Goto, S.G., “Obligate diapause and its termination in a frozen state are essential for the seasonal life cycle in the Antarctic midge” XII European Congress of Entomology, Crete, Greece, 18, October 2023.
- Yoshida, M., Goto, S.G., “The seasonality in the life cycle of the Antarctic midge is produced by obligate diapause and its termination by freeing” The 83rd Annual Meeting of the Entomological Society of Japan, Saga, Japan, 16, September 2023
- Yoshida, M., Goto, S.G., “Freezing is essential for adaptation to the Antarctic environment in the Antarctic midge *Belgica antarctica*” The 94th Annual Meeting of the Zoological Society of Japan, Yamagata, Japan, 9, September 2023.
- Yoshida, M., Lee, R., Denlinger, D.L., Goto, S.G. “Seasonal adaptation of embryos and larvae of the Antarctic midge” XXVI International Congress of Entomology, Helsinki, Finland, 19, July 2022
- Yoshida, M., Teets, N.M., Goto, S.G. “Long winter breaks obligatory diapause in the Antarctic midge” 9th International Symposium on the Environmental Physiology of Ectotherms and Plants, Rennes, France, 12, July 2022
- Yoshida, M., Goto, S.G. “Larval oogenesis in the Antarctic midge, *Belgica antarctica*” 21st International Symposium on Chironomidae, Online, 4, July 2022
- Yoshida, M., Goto, S.G. “Seasonal adaptation of embryos and larvae in the Antarctic midge” Annual Seasonality Symposium, Online, 10, December 2021
- Yoshida, M., Goto, S.G. “The developmental arrest of larvae and induction of pupation and adult emergence in the Antarctic midge”, The 81st Annual Meeting of the Entomological

- Society of Japan, Tokyo, Japan, 5, September 2021
- Yoshida, M. “Oogenesis in the final instar larvae of the Antarctic midge”, The 31st Annual Meeting of Japanese Association for Chironomidae Studies, Online, 28, August 2021
- Yoshida, M., Goto, S.G. “A laboratory rearing of the Antarctic midge, *Belgica antarctica*: effect of the temperature and diet and possible seasonal adaptation” The 10th Symposium on Polar Science, Tachikawa, Japan, 4, December 2019
- Yoshida, M., Goto, S.G. “Laboratory rearing and induction of pupation of the Antarctic midge”, The 79th Annual Meeting of the Entomological Society of Japan, Hirosaki, Japan, 15, September 2019
- Yoshida, M., Goto, S.G. “Laboratory rearing and induction of pupation of the Antarctic midge”, The 30th Annual Meeting of Japanese Association for Chironomidae Studies, Otsu, Japan, 18, May 2019
- Yoshida, M., Goto, S.G. “Gene expression of aquaporins under dehydration stresses in the Antarctic midge”, The 63rd Annual Meeting of the Japanese Society of Applied Entomology & Zoology, Tsukuba, Japan, 26, March 2019
- Yoshida, M. “Analysis of gene expression of aquaporins inducing stress tolerant in the Antarctic midge, *Belgica antarctica*”, The 9th Symposium on Polar Science, Tachikawa, Japan, 5, December 2018
- Yoshida, M. “A study of the rearing of the Antarctic midge”, The 29th Annual Meeting of Japanese Association for Chironomidae Studies, Hiroshima, Japan, 27, May 2018
- Yoshida, M., Denlinger, D.L., Lee, R.E., Goto, S.G. “The thermal response of the embryos and larvae of the Antarctic midge”, The 62nd Annual Meeting of the Japanese Society of Applied Entomology & Zoology, Kagoshima, Japan, 26, March 2018

Academic and Professional Membership:

2022-present	The Zoological Society of Japan
2019-present	The Entomological Society of Japan
2018-present	Japanese Association for Chironomidae Studies
2017-present	The Japanese Society of Applied Entomology & Zoology

Research interest:

Studying on the mechanism of environmental adaptation of the Antarctic midge, with Entomology, Insect Physiology, Polar Biology, Bioinformatics.

Synergistic Activities:

Teaching Assistant: Training Class for Biological Experiments B (2018-2021), Training Class for Biological Experiments S (2021), Advanced Class for Biological Experiments A (2018-2021).

Public Science Education and Outreach: During the past 8 years, Yoshida assisted the classes entitled “Giant Impact -Training Class for gene manipulation” for high school students at Osaka University (2014-2019), “Hirameki-Tokimeki Science” by *Japan Society for the Promotion of Science* (JSPS) training class on protein function for high school students in Osaka University (2014-2019), “Hirameki-Tokimeki Science” by JSPS training class on forest ecology for high school students in Osaka City University (2015-2016), public lectures at a botanical garden affiliated Osaka City University (2015-2017), “Kansai-Kagaku-juku” a lecture on scientific career for high school girls and junior high school girls at Osaka City University as a chairwoman (2019). Yoshida taught a special class “Study life in the university and graduate university -why did I become a doctor” for high school students at Osaka Jogakuin Senior High School (2023). In this class, Yoshida taught about what I did at Osaka City University and her study on the Antarctic midge *Belgica antarctica*. Yoshida also taught on her study of aquaporins and thermal reaction of the Antarctic midge for undergraduate students at The Ohio State University (2023).