

TAKAMITSU OHIGASHI

HOKKAIDO UNIVERSITY • GRADUATE SCHOOL OF GLOBAL FOOD RESOURCES

Kita 9 Nishi 9, Sapporo, Hokkaido, Japan, 060-8589 | E-mail: tkmtohgs1031@gmail.com

Website: <https://otfight67.wixsite.com/researchprofile> | GitHub: <https://github.com/taka-ohi>

EDUCATION HISTORY

- 2021 – present **Ph.D. candidate in Food Resources**, Environmental Biogeochemistry, Hokkaido University, Japan
Advisor: Dr. Yoshitaka Uchida
Preliminary Thesis Title: Impacts of anthropogenic disturbances on soil microbial communities and nutrient cycling functions
- 2019 – 2021 **M.A. in Food Resources**, Environmental Biogeochemistry, Hokkaido University, Japan
Advisor: Dr. Yoshitaka Uchida
Thesis: Effects of cultivation on soil microbial community structures and functions in sub-Saharan Africa
- 2015 – 2019 **B.A. in Agriculture**, Food Biochemistry, Hokkaido University, Japan
Advisor: Dr. Kei Sonoyama

EMPLOYMENT & APPOINTMENT RECORD

- 2022 **Visiting Scholar**, The University of Minnesota, MN, USA
Advisor: Dr. Satoshi Ishii

PUBLICATIONS

**Corresponding author*

PEER-REVIEWED PRIMARY RESEARCH PUBLICATIONS

1. **Ohigashi, T.**, Schloter, M., Schulz, S., Munthali, K., & Uchida, Y.* (2021). Changes in Soil Prokaryotic Diversity in Response to Land-Use Changes in Sub-Saharan Africa. *Soil Systems*, 5(4), 62.
<https://doi.org/10.3390/soilsystems5040062>

FUNDING

FELLOWSHIP

- 2021 – 2024 Hokkaido Univ. & HITACHI collaborative education and research program, JPY 7,200,000

RESEARCH GRANT

- 2021 – 2024 **Ohigashi, T.**, Hokkaido Univ. & HITACHI collaborative education and research program, JPY 4,800,000

OTHER FUNDING

- 2018 **Ohigashi, T.**, Support for Travel Expenditure on HU-NUS Summer Program in Singapore, JPY 80,000

AWARDS

**Awardee*

PRESENTATION AWARD

- 2021 **Ohigashi, T.***, Uchida, Y., **English Presentation Audience Award**, The 68th Annual Meeting of Ecological Society of Japan, Okayama, Japan, March 2021
- 2020 **Ohigashi, T.***, Uchida, Y., **Excellent Student Presentation Award**, The International Symposium on A Green Recovery from COVID-19, Sapporo, Japan, November 2020

PRESENTATION AWARD TO COLLABORATORS

- 2021 Takahashi, G.*, Tatsumi, C., **Ohigashi, T.** Madegwa, Y., Uchida, Y., **Poster Presentation Award -Excellent Award**. The 68th Annual Meeting of Ecological Society of Japan, Okayama, Japan. March 2021

PRESENTATIONS

**Presenter*

CONTRIBUTED CONFERENCE ORAL PRESENTATIONS

1. **Ohigashi, T.***, Yoo, K., Venterea, R., Uchida, Y., Ishii, S., "Impacts of earthworm invasion on nitrification in a northern hardwood forest in Minnesota", The 82nd American Society for Microbiology North Central Branch Annual Meeting, Iowa, the USA, October 2022
2. **Ohigashi, T.***, Tatsumi, C., Yamamoto, T., Soe, N., Nakata, H., Nakayama, S., Ishizuka, M., Uchida, Y., "Changes in the soil microbial-driven nitrogen cycle by the presence of mice in heavy metal contaminated and organic amended soils", The 69th Annual Meeting of Ecological Society of Japan, Fukuoka (Online), Japan, March 2022
3. **Ohigashi, T.***, Uchida, Y., "Can soil microbes increase their diversity despite nutrient loss? —study on effects of cultivation in sub-Saharan Africa—", The 68th Annual Meeting of Ecological Society of Japan, Okayama (Online), Japan, March 2021
4. **Ohigashi, T.***, Uchida, Y., "Can soil microbes increase their diversity despite soil degradation?", The International Symposium on A Green Recovery from COVID-19, Sapporo, Japan, November 2020
5. **Ohigashi, T.***, Uchida, Y., "Influence of cultivation on soil microbial diversity and composition of nitrification-related microbes in sub-Saharan Africa", Soil Science Society of America International Annual Meeting, Online, November 2020
6. **Ohigashi, T.***, Uchida, Y., "Effects of cultivation on nitrogen cycle-related function of soil microbes in sub-Saharan Africa", The 67th Annual Meeting of Ecological Society of Japan (Canceled due to the COVID-19), Nagoya, Japan, March 2020
7. **Ohigashi, T.***, Sonoyama, K., "Hypoxia and inflammation in browning induction in murine white adipose tissues", The 73rd Japan Society of Nutrition and Food Science, Shizuoka, Japan, May 2019

CONTRIBUTED CONFERENCE POSTER PRESENTATIONS

8. **Ohigashi, T.***, Mori, S., Tago, K., Uchida, Y., "Changes in community structures and activities of soil ammonia-oxidizing bacteria and archaea by land-use changes in multiple sites in Zambia", The 22nd World Congress of Soil Science, Glasgow (Online), the UK, August 2022
9. Soe, N.*, **Ohigashi, T.**, Nakata, H., Tatsumi, C., Uchida, Y., Mufalo, W., Ito, M., Sato, T., Igarashi, T., Yohannes, Y., Ikenaka, Y., Ishizuka, M., Nakayama, S., "In vivo accumulation of different lead species in mice under environmentally relevance circumstance", The 49th Annual Meeting of Japanese Society of Toxicology, Poster, Sapporo, Japan, July 2022
10. Takahashi, G.*, Tatsumi, C., **Ohigashi, T.**, Madegwa, Y., Uchida, Y., "Impact of earthworms and plants on fungal and bacterial diversity in the area of soil compartments", The 69th Annual Meeting of Ecological Society of Japan, Fukuoka (Online), Japan, March 2022

11. **Ohigashi, T.***, Mori, S., Uchida, Y., "Site-dependent and land-use effects on community structures and activities of ammonia-oxidizing bacteria and archaea in Zambian soils", The Annual Meeting of Japanese Society of Soil Science and Plant Nutrition, Sapporo (Online), Japan, September 2021
12. **Ohigashi, T.***, Uchida, Y., "Effects of cultivation on soil microbial community structures and functions related to nitrogen cycle in sub-Saharan Africa", Eurosoil2021, Geneva (Online), Switzerland, August 2021
13. Mori, S.*, **Ohigashi, T.**, Uchida, Y., "Evaluation of the effect of cultivation on nitrification potential and on the nitrifier abundance and community structure in Zambia", Ecological Society of Japan, Okayama (Online), Japan, March 2021
14. **Ohigashi, T.***, Uchida, Y., "Changes in the microbial diversity and the abundances of nitrification-related microbes by the cultivation in sub-Saharan Africa", The Annual Meeting of Japanese Society of Soil Science and Plant Nutrition, Okayama (Online), Japan, September 2020
15. **Ohigashi, T.***, Uchida, Y., "Effects of cultivation on soil microbial function in sub-Saharan Africa", The Annual Meeting of Ecological Society of Japan Hokkaido district, Tomakomai, Japan, November 2019
16. **Ohigashi, T.***, Uchida, Y., "Effects of cultivation on microbial community structures and functions in sub-Saharan Africa", International Symposium on Biodiversity in the Global Food System, Poster, Sapporo, Japan, July 2019

OTHER CONTRIBUTED PRESENTATIONS

17. **Ohigashi, T.***, "Relation between cultivation and changes in soil microbial communities in sub-Saharan Africa", Soil microbe × Nutrient cycling workshop, Poster, Sapporo (Online), Japan, January 2021

TEACHING

TEACHING ASSISTANT

- 2021 Wandervogel Study in Global Food Resources, Graduate School of Global Food Resources, Hokkaido University
- 2021 Inorganic Chemistry, School of Agriculture, Hokkaido University
- 2019 Support for an International Student, Hokkaido University

MENTORING EXPERIENCE

- 2020 Suzumi Mori, Undergraduate student, Hokkaido University

SERVICE

PROFESSIONAL SERVICE

- 2023 – present Reviewer, scientific manuscripts:
Microbial Ecology (1)
- 2022 – present Organizer, EZO zemi Seminar, Hokkaido, Japan

MEMBERSHIP

- Ecological Society of Japan (2019 – present)
- Japanese Society of Soil Science and Plant Nutrition (2020 – present)
- Japanese Society of Microbial Ecology (2022)
- eDNA Society (2023 – present)