

Tali Sarah Berman Elport

Department of Animal Sciences, Hula Research Centre, Tel-Hai Academic College
MIGAL—Galilee Research Institute

Education

- 2012-2018 Ph.D. Evolutionary and Environmental Biology, University of Haifa
2009-2012 B.Sc. Biology and Environment, University of Haifa - Oranim
(with distinction)

Academic Positions

- 2023-present Senior lecturer,
Department of Animal Sciences, Tel-Hai Academic College,
MIGAL—Galilee Research Institute

Fellowships

- 2022-2023 Agricultural Research Organization – Volcani Center postdoctoral
fellowship
2021 Tel Aviv University postdoctoral fellowship
2021 George S. Wise Faculty of Life Sciences postdoctoral fellowship,
Tel Aviv University
2019-2020 [MIMSHAK Science and Policy fellowship](#),
Israel Society of Ecology and Environmental Sciences
2018-2019 University of Haifa postdoctoral fellowship

Research funding (as PI or Co-PI)

- 2022 Chief Scientist Grant, Ministry of Agriculture of Israel
“Viruses as modulators of biological control in beneficial mites”
(Co-PI)
2024 German Research Foundation (DFG)
“Deciphering host and symbiont contributions to dietary changes in
bugs (Hemiptera, Miridae)”
(PI)

Honors and Awards

- 2017 The Association for the Study of Animal Behavior (ASAB) travel grant for participation in the 35th International Ethological Conference (Behavior 2017 meeting, Estoril, Portugal)
- 2017 The Zoological Society of Israel travel award for participation in the 35th International Ethological Conference (Behavior 2017 meeting, Estoril, Portugal)
- 2016 First prize for best Ph.D. lecture in the 35th Conference of The Entomological Society of Israel. Title: 'On the goats' table manners: avoiding ingestion of insect herbivores'
- 2016 International Society for Behavioral Ecology 2016 travel award for participation in the 16th Congress of the International Society for Behavioral Ecology (University of Exeter, England)
- 2016 Pick-Melamed foundation travel award for participation in the 16th Congress of the International Society for Behavioral Ecology
- 2013-2017 University of Haifa President's scholarship for outstanding students
- 2013-2014 Department of Evolutionary and Environmental Biology Scholarship for excellent students, University of Haifa
- 2012-2013 Ministry of Agriculture and Rural Development Department: sheep and goat research scholarship for postgraduate education research
- 2012 First prize for poster in the 49th conference of the Israeli Zoological Society (as an undergraduate student). Title: 'Gas exchange patterns in insects: the role of the head ganglia in neural control'
- 2011-2012 Department of Biology and Environment: Annual B.Sc. Scholarship for excellent students, University of Haifa – Oranim

Publications

Peer-Reviewed Journals

1. Forman R, Lalzar M, Inbar M, **Berman TS** (2024). Molecular analysis of feces reveals gastrointestinal nematodes in reintroduced wild asses of the Negev desert. *International Journal for Parasitology: Parasites and Wildlife*, 100980.
2. **Berman TS**, Barnett-Itzhaki Z, Berman T, Marom E (2023). Antimicrobial resistance in food-producing animals: towards implementing a One Health based national action plan in Israel. *Israel Journal of Health Policy Research* 12, 18

3. **Berman** TS, Weinberg M, Moreno KR, Czirják GA, Yovel Y (2023). In sickness and in health: The dynamics of the fruit bat gut microbiota under a bacterial antigen challenge and its association with the immune response. *Frontiers in Immunology* 14: 1152107
4. **Berman** TS, Izraeli Y, Lalzar M, Mozes-Daube N, Lepetit D, Tabic A, Varaldi J, Zchori-Fein E (2023). RNA viruses are prevalent and active tenants of the predatory mite *Phytoseiulus persimilis* (Acari: Phytoseiidae). *Microbial Ecology* 86, 2060–2072
5. **Berman** TS and Inbar M (2023). Molecular identification of individual and seasonal variation in incidental ingestion of arthropods by free-ranging goats. *Frontiers in Ecology and Evolution* 10:1070088
6. **Berman** TS and Inbar M (2022). Revealing cryptic interactions between large mammalian herbivores and plant-dwelling arthropods via DNA metabarcoding. *Ecology* 103(1), e03548. Highlighted in the Bulletin of the Ecological Society of America. 103(1):1-4
7. **Berman** TS, Glasser TA, Inbar M (2019). Goats adjust their feeding behaviour to avoid the ingestion of different insect species. *Canadian Journal of Zoology* 97: 805–811
8. **Berman** TS, Messeri N, Glasser TA, Inbar M (2019). Innate ability of goats to sense and avoid ingestion of noxious insects while feeding. *Royal Society Open Science* 6:181078
9. **Berman** TS, Laviad-Shitrit S, Ofek-Lalzar M, Halpern M, Inbar M (2018). Cascading effects on bacterial communities: Cattle grazing causes a shift in the microbiome of a herbivorous caterpillar. *ISME Journal* 12:1952-1963
10. **Berman** TS, Ben-Ari M, Henkin Z, Inbar M (2018). Immediate and long-term facilitative effects of cattle grazing on a polyphagous caterpillar. *Agriculture, Ecosystems & Environment* 261:45-53
11. **Berman** TS, Ben-Ari M, Glasser TA, Gish M, Inbar M (2017). How goats avoid ingesting noxious insects while feeding. *Scientific Reports* 7.1:14835. Selected as one of the top 100 read ecology papers for Scientific Reports in 2017
12. **Berman** TS, Ayali A, Gefen E (2013). Neural control of gas exchange patterns in insects: locust density-dependent phases as a test case. *PLOS One* 29;8(3):e59967
13. Pick E, **Berman** TS (2013). Formation of alternative proteasomes: Same lady, different cap? *FEBS letters* 1;587(5):389-93

Thesis

- 2018. **Berman** TS. ‘The prevalent and complex interactions between mammalian and insect herbivores’. PhD Dissertation, Department of Evolutionary and Environmental Biology, Faculty of Natural Sciences, University of Haifa

Reports

1. **Berman** Elport T, Van der Hal N, Krigel K, Boulogne O, Behar A, Berman T, Gottlieb Y, Weinberg T, Zagron G, Zask A, Milo R, Milstein D, Stambler N, Sarfati M and Levi A. [Aedes albopictus mosquito – Mapping public health risks, mosquito monitoring, available solutions and public awareness – Experts’ opinion](#). The Israel Society of Ecology and Environmental Sciences pp.38
2. **Berman** TS (2021). [Enhancing antimicrobial stewardship in veterinary medicine in Israel: Literature review, regulatory processes and recommendations for action](#). Ministry of Health
3. **Berman** TS and Krigel K (2020). [Health and Climate Change: literature review and recommendations for preparedness and adaptation](#). Ministry of Environmental Protection
4. **Berman** TS (2020). Climate change. [Environmental Health in Israel 2020](#). Environment and Health Fund and Ministry of Health

Research Talks

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| 2024 | The 40th Conference of the Entomological Society of Israel. Hebrew University, Rehovot. Oral presentation: ‘The plant as a site for interactions between insects and large mammalian herbivores’ |
| 2024 | The 19th Congress of the International Society for Behavioral Ecology (ISBE 24). Melbourne, Australia. Oral presentation: ‘Predatory ungulates: Revealing cryptic interactions between large mammalian herbivores and plant-dwelling arthropods using molecular tools’ |
| 2024 | The 60th Conference of the Zoological Society of Israel. Open University, Ra’anana. Oral presentation: ‘The dynamics of the fruit-bat gut microbiota under a bacterial antigen challenge’ |
| 2023 | The 4th Research Workshop of the Israel Science Foundation on "Insect symbiosis: Plasticity in confronting environmental challenges". |

- Hebrew University, Rehovot. Oral presentation: “Viruses as modulators of biological control: Characterizing the virome of the predatory mite, *Phytoseiulus persimilis*”
- 2022 The 59th Conference of the Zoological Society of Israel. Tel Hai Academic College, Kiryat Shmona. Oral presentation: ‘Revealing cryptic interactions between large mammalian herbivores and plant-dwelling arthropods via DNA metabarcoding’
- 2022 The 40th Conference of the Entomological Society of Israel. Hebrew University, Rehovot. Oral presentation: ‘Symbiont viruses and biological pest control: the virome of the predatory mite *Phytoseiulus persimilis* (Acari: Phytoseiidae)’
- 2018 The 55th Conference of the Zoological Society of Israel. Bar-Ilan University. Oral presentation: ‘Encounters between mammal and insect herbivores: ecological mechanisms and consequences’
- 2018 The 37th Conference of the Entomological Society of Israel. Hebrew University, Rehovot. Oral presentation: ‘Immediate and long-term facilitative effects of cattle grazing on a polyphagous caterpillar’
- 2017 The 36th Conference of the Entomological Society of Israel. ARO Volcani Center. Oral presentation: ‘Cattle grazing causes a shift in the microbiome of a herbivorous caterpillar’
- 2017 The 35th International Ethological Conference - Behavior 2017 meeting. Estoril, Portugal. Oral presentation: ‘Table manners matter: how ungulates avoid ingesting insects while feeding’
- 2016 The 53rd Conference of the Zoological Society of Israel. Hebrew University, Rehovot. Oral presentation: ‘On the goats’ table manners: avoiding ingestion of insect herbivores’
- 2016 The 35th Conference of the Entomological Society of Israel. Hebrew University of Jerusalem. Oral presentation: ‘On the goats’ table manners: avoiding ingestion of insect herbivores’
- 2016 The 16th Congress of the International Society for Behavioral Ecology. University of Exeter, England. Oral presentation: ‘The goat’s table manners: avoiding ingestion of herbivore insects’
- 2015 The 52nd Conference of the Zoological Society of Israel. Ruppin Academic Center. Oral presentation: ‘The hungry caterpillar and the

- picky goat: direct interactions between mammalian herbivores and Lepidoptera larvae’
- 2013 The 23rd Annual Memorial Day of Yaakov Golan. ARO Volcani Center. Oral presentation: ‘Direct interactions between goats and insects living on plants’
- 2012 The 14th Annual Scientific Conference "Research and Creativity". Oranim Academic College. Oral presentation: ‘Gas exchange patterns in insects: the role of the head ganglia in neural control ’
- 2012 The 49th Conference of the Zoological Society of Israel. Ben Gurion University of the Negev. Poster: ‘Gas exchange patterns in insects: the role of the head ganglia in neural control’
- 2012 The 31st Conference of the Entomological Society of Israel. Hebrew University of Jerusalem. Oral presentation and poster: ‘Gas exchange patterns in insects: the role of the head ganglia in neural control’

Invited Lectures

- 2021 The 27th Conference of The Israeli society for the study of grazing sciences. Ohalo College of Education. Topic of lecture: ‘The complex interactions between grazing cattle and spring webworm caterpillars’
- 2020 ILANIT 2020 Conference of the Federation of all the Israel Societies for Experimental Biology (FISEB). Eilat, Israel. Topic of lecture: ‘There’s a bug in my salad: assessing the ingestion of insects by ungulates using DNA metabarcoding ’
- 2016 Ramat HaNadiv Forum. Ramat HaNadiv nature park, Israel. Topic of lecture: ‘On the goats’ table manners: avoiding ingestion of insect herbivores ’
- 2014 The 31st Annual Conference of the Lepidopterists Society in Israel. Ramat HaNadiv nature park, Israel. Topic of lecture: ‘Goats and caterpillars meet on plants’

Graduate Students Advised

- 2024-present Dan Szklowin, ‘Trophic and microbe-host interactions of migratory insectivorous birds’.
- 2021-2024 Ro’i Forman, ‘Direct effects of mammalian grazing on insect communities’. Co-supervised with Prof. Moshe Inbar, Department of Evolutionary and Environmental Biology, University of Haifa

Undergraduate Project Students Advised

- 2024-present Barak Ben Harush, “Examining the composition of the microbiome of migrating birds during spring and winter migrations”
- 2023-2024 Daniella Alpert, “Examining trophic interactions of migratory insect-eating birds in the Hula Valley stopover site using molecular methods”
- 2017-2018 Noa Messeri, ‘How naïve goat kids avoid insect ingestion while feeding’. Co-supervised with Prof. Moshe Inbar, Department of Evolutionary and Environmental Biology, University of Haifa

Teaching

- 2024-present Introduction to Ecology (undergraduate), Departments of Animal Science, Faculty of Sciences and Technology, Tel Hai College
- 2024 Basic concepts in ecology (undergraduate), Departments of Environmental Sciences, Faculty of Sciences and Technology, Tel Hai College
- 2024-present 1st-year seminar (undergraduate), Departments of Animal Science, Faculty of Sciences and Technology, Tel Hai College
- 2024-present Big Questions in Ecology (undergraduate), Departments of Animal Science, Faculty of Sciences and Technology, Tel Hai College
- 2011-2021 Co-lecturer with Prof. Elah Pick, Molecular Biology (undergraduate), Department of Biology and Environment, University of Haifa- Oranim campus

Additional Scientific Activities

- 2024. Chairman of the session on “Behavior” in the 40th Conference of the Entomological Society of Israel. Hebrew University, Rehovot.
- 2020. Organizer of the Israel Society of Ecology and Environmental Sciences Expert Committee on *Aedes albopictus* Mosquitos in Israel
- 2022. Chairman of the session on “Animal-Plant Interactions” in the 59th Conference of the Zoological Society of Israel. Tel Hai Academic College, Kiryat Shmona
- I served as a reviewer for: Proceedings of the Royal Society B, Molecular Ecology, Microbial Ecology