

Justė Aželytė

CONTACT INFORMATION

Address Akademijos Str. 2, Vilnius LT-08412, Lithuania
Tel. no.: +370 5 272 92 69
E-mail: juste.azelyte@gamtc.lt
<https://orcid.org/0000-0002-6171-6913>

EDUCATION AND ACADEMIC DEGREE

2021 – 2025 Ph.D. student, Zoology, 2021-2025, Nature Research Centre, Vilnius, Lithuania.
2019 – 2021 M.Sc., Biodiversity, 2021, Vilnius University, Vilnius, Lithuania.
2015 – 2019 B. Sc., Biology, 2019, Vilnius University, Vilnius, Lithuania.

PROFESSIONAL EXPERIENCE

2021 – present Junior Researcher, Nature Research Centre, Vilnius, Lithuania.
2020 – 2022 Biologist, Nature Research Centre, Vilnius, Lithuania.

RESEARCH INTERESTS

Studies concerning the specificity, virulence and identification of avian malaria parasites. Genetic variation and phylogeny of haemosporidians. Application and development of PCR based methods for identification of avian malaria parasites. Microbiota studies, genomic analysis.

PUBLICATIONS

Scientific articles published in journals (books), indexed in „Clarivate Analytics Web of Science“ database (with citation index):

1. **Aželytė, J.**, Platonova, E., Bensch, S., Hellgren, O., & Palinauskas, V. (2022). A comparative analysis of the dynamics of *Plasmodium relictum* (GRW4) development in the blood during single and co-infections. *Acta tropica*, 226, 337-342. doi:10.1016/j.actatropica.2021.106247
2. **Aželytė, J.**, Wu-Chuang, A., Žiegytė, R., Platonova, E., Mateos-Hernandez, L., Maye, J., Obregon, D., Palinauskas, V., & Cabezas-Cruz, A. (2022). Anti-microbiota vaccine reduces avian malaria infection within mosquito vectors. *Frontiers in immunology*, 13, 1-16. doi:10.3389/fimmu.2022.841835
3. Maitre, A., Wu-Chuang, A., **Aželytė, J.**, Palinauskas, V., Mateos-Hernández, L., Obregon, D., Hodžić, A., Valiente Moro, C., Estrada-Peña, A., Paoli, J. C., Falchi, A., & Cabezas-Cruz, A. (2022). Vector microbiota manipulation by host antibodies: the forgotten strategy to develop transmission-blocking vaccines. *Parasites and vectors*, 15(1), 1-12. doi:10.1186/s13071-021-05122-5
4. Palinauskas, V., Mateos-Hernandez, L., Wu-Chuang, A., De La Fuente, J., **Aželytė, J.**, Obregon, D., & Cabezas-Cruz, A. (2022). Exploring the ecological implications of microbiota diversity in birds: Natural barriers against avian malaria. *Frontiers in immunology*, 13(807682), 1-14. doi:10.3389/fimmu.2022.807682

5. Platonova, E., **Aželytė, J.**, Iezhova, T., Ilgūnas, M., Mukhin, A., & Palinauskas, V. (2021). Experimental study of newly described avian malaria parasite *Plasmodium* (*Novyella*) *collidatum* n. sp., genetic lineage pFANTAIL01 obtained from South Asian migrant bird. *Malaria Journal*, vol. 20 (iss. 1), 1-3. doi:10.1186/s12936-021-03588-3

PARTICIPATION IN INTERNATIONAL AND NATIONAL SCIENTIFIC PROGRAMMES AND PROJECTS

- 2020 – 2022 European Union Structural Funds “Virulence of avian malaria: untangling genetic players for infection severity”. Award No 09.3.3-LMT-K-712-01-0016, (2017–2021). **Investigator.**
- 2020 – 2021 Research Council of Lithuania. “Investigation of factors limiting the spread of avian haemosporidian infections”. Award No S-MIP-20-25, (2020–2022). **Investigator.**
- 2020 – 2021 European Research Council (ERC Advanced Grant). “Immunity in Ecology and Evolution: 'Hidden' costs of disease, immune function and their consequences for Darwinian fitness”. Award No 742646, (2017-2021). **Investigator.**
- 2022 – till now Research Council of Lithuania. “Natural anti- α -Gal antibodies and the protection against avian malaria”. Award No S-MIP-22-52, (2022-2025). **Investigator.**
- 2022 Research Council of Lithuania. “Molecular diagnostics and epidemiology of neglected avian blood parasites”. Award No S-MIP-22-50, (2022-2025). **Investigator.**

INTERNSHIP AND TRAINING

- 2020-01-13 – 2020-07-10 Internship at Lund University (Lund, Sweden) under ERASMUS+ program. A participation of 10 weeks course of Molecular ecology and evolution. The purpose of the internship at Lund University Molecular Ecology and Evolution laboratory was to learn the application and development of qPCR methods for haemosporidian parasite studies.
- 2021-09-14 – 2021-10-13 Internship at National Research Institute for Agriculture, Food and Environment (Paris, France). The purpose of the internship was to learn new methods used in research: application of serological methods, analysis of sequenced genomic data using bioinformatic programs.

PARTICIPATION IN SCIENTIFIC CONFERENCES

International scientific conferences:

1. **Aželytė, J.**, Platonova, E., Bensch, S., Hellgren, O., Palinauskas, V. “A comparative analysis of the dynamics of *Plasmodium relictum* (GRW4) development in single and mixed infections“. Oral presentation at the International Online Conference on Blood Parasites of Wildlife, 2020.09.14 – 09.15, Bielefeld, Germany.
2. **Aželytė, J.**, Platonova, E., Bensch, S., Hellgren, O., Palinauskas, V. “A new protocol to distinguish morphologically identical avian malaria parasites in co-infection“. Oral

- presentation at The 9th Conference of the Scandinavian-Baltic Society for Parasitology (CSBSP9), 2021.04.21 – 04.23, Vilnius, Lithuania. <http://sbsp.eu>
3. Platonova, E., **Aželytė, J.**, Iezhova, T., Ilgūnas, M., Mukhin, A., Palinauskas, V. “Experimental study on development and virulence of tropical avian malaria parasite *Plasmodium collidatum* (genetic lineage pFANTAIL01) in a local European bird species” Oral presentation at The 9th Conference of the Scandinavian-Baltic Society for Parasitology (CSBSP9), 2021.04.21 – 04.23, Vilnius, Lithuania. <http://sbsp.eu>
 4. **Aželytė, J.**, Bernotienė, R., Palinauskas, V., Platonova, E., Šengaut, J., Žiegytė, R. “Experimental studies on avian *Plasmodium* co-infections“. Oral presentation at the 5th International Conference on Malaria and Related Haemosporidian Parasites of Wildlife, 2022.09.05 – 09.08, Bielefeld, Germany. <https://www.uni-bielefeld.de/fakultaeten/biologie/forschung/veranstaltungen/malariaconference/>
 5. **Aželytė, J.**, Bernotienė, R., Palinauskas, V., Platonova, E., Šengaut, J., Žiegytė, R. “Avian *Plasmodium* co-infections: development and induced disease”. Poster presentation at the 15th International Congress of Parasitology (ICOPA2022), 2022.08.21 – 08.26, Copenhagen, Denmark. <https://icopa2022.org>
 6. **Aželytė, J.**, Cabezas-Cruz, A., de la Fuente, J., Mateos-Hernandez, L., Obregon, D., Palinauskas, V., Wu-Chuang, A. „Can gut microbiota enhance immunity against avian malaria?“. Poster presentation at the 5th International Conference on Malaria and Related Haemosporidian Parasites of Wildlife, 2022.09.05 – 09.08, Bielefeld, Germany. <https://www.uni-bielefeld.de/fakultaeten/biologie/forschung/veranstaltungen/malariaconference/>
 7. **Aželytė, J.**, Cabezas-Cruz, A., Mateos-Hernandez, L., Maye, J., Obregon, D., Palinauskas, V., Platonova, E., Žiegytė, R., Wu-Chuang, A. „Microbiota modulation reduces *Plasmodium relictum* infection in mosquitoes *Culex quinquefasciatus*“ “. Oral presentation at the 15th International Congress of Parasitology (ICOPA2022), 2022.08.21 – 08.26, Copenhagen, Denmark. <https://icopa2022.org>
 8. **Aželytė, J.**, Iezhova, T., Ilgūnas, M., Mukhin, A., Palinauskas, V., Platonova, E. „Experimental study on development of tropical-origin *Plasmodium collidatum* (lineage pFANTAIL01)“. Poster presentation at the 5th International Conference on Malaria and Related Haemosporidian Parasites of Wildlife, 2022.09.05 – 09.08, Bielefeld, Germany. <https://www.uni-bielefeld.de/fakultaeten/biologie/forschung/veranstaltungen/malariaconference/>

National scientific conferences:

1. **Aželytė, J.**, Cabezas-Cruz, A., Mateos-Hernandez, L., Maye, J., Obregon, D., Palinauskas, V., Platonova, E., Žiegytė, R., Wu-Chuang, A. „Uodų mikrobiotos įtaka paukščių maliarinių parazitų sporogonijai“. Oral presentation at the national 15th Lithuanian Young Scientists' Conference „Biofuture: perspectives of nature and life sciences“. 2022.11.24, Vilnius, Lithuania. https://www.lma.lt/uploads/LMA%20leidyba/BIOATEITIS%20prane%C5%A1im%C5%B3%20tez%C4%97s_2022.pdf

OTHERS

Scholarships, awards and recognitions:

Scholarship from Vilnius University, Lithuania (ERASMUS+ programme, 2020).

A grant for (doctoral) academic visits from the Research Council of Lithuania (2022).

A travel grant from organizers to attend the 5th International Conference on Malaria and related Haemosporidian Parasites of Wildlife in Bielefeld (2022).

An award for the best poster at the 5th International Conference on Malaria and Related Haemosporidian Parasites of Wildlife (2022).

An award for the best oral presentation at the 15th Lithuanian Young Scientists' Conference „Biofuture: perspectives of nature and life sciences“ (2022).

External academic activities:

Member of the Scandinavian – Baltic Society for Parasitology (2019–present).

Other competences:

Completion of the course "LABORATORY (TEST) ANIMALS" and competence to work with animals (Certificate 2021-02-05 No 527).