

Piotr Łukasik – *Curriculum vitae*

Last update: 10th February 2026

Institute of Environmental Sciences
Faculty of Biology, Jagiellonian University
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ACADEMIC APPOINTMENTS

Jagiellonian University, Kraków, Poland

since Jul 2019

Associate Research Professor

- Founder and co-leader of **Symbiosis Evolution Research Group**, coordinating a research program focused on characterizing the diversity, evolution, and functions of the microbial symbioses of insects, and biodiversity more broadly

Swedish Museum of Natural History, Stockholm, Sweden

Oct 2018 – Jun 2019

Researcher. Bioinformatics and Genetics, Insect Biome Atlas

- Led the development of molecular methods for a massive insect biodiversity project

EDUCATION AND TRAINING

Jagiellonian University, Kraków, Poland

28 Jan 2020

Habilitation / Doctor of Sciences degree in Biological Sciences

University of Montana, Missoula, MT, USA

Sep 2014 – Oct 2018

Postdoctoral researcher. Advisor: John McCutcheon

- Studied the genomic evolution of endosymbiotic microorganisms of cicadas

Drexel University, Philadelphia, PA, USA

Sep 2011 – Jul 2014

Postdoctoral researcher. Advisor: Jacob Russell

- Characterized the diversity, distribution, and biological functions of ant-associated microbes

National Institute of Advanced Industrial Science and Technology, Japan

Oct - Dec 2013

Visiting postdoctoral researcher. Advisor: Ryuichi Koga

- Studied the distribution of symbiotic bacteria across insect tissues

University of Oxford, Oxford, United Kingdom

Apr 2008 – Sep 2011

D.Phil. in Zoology. Advisors: Charles Godfray and Julia Ferrari

- Studied biological properties of defensive facultative endosymbiotic bacteria of aphids

Jagiellonian University, Kraków, Poland

Oct 2001 – Sep 2006

Undergraduate studies in Mathematical and Natural Sciences

M.Sc. in Biology. Advisor: Ryszard Laskowski

- Completed M.Sc. thesis project in ecotoxicology of flour beetles
- Research fellowships in invertebrate ecology and evolution at Smithsonian Tropical Research Institute (Panama), Wageningen University (The Netherlands), University of St. Andrews (Scotland) and during the Tropical Biology Association field course (Madagascar)

PEER-REVIEWED PUBLICATIONS

Google Scholar profile - <https://scholar.google.com/citations?user=nqaO1yUAAAAJ>

62 research items cited a total of 2,977 times (as of 10th February 2026)

Shaded – members of the Symbiosis Evolution Group in papers primarily shaped by the lab.

- 60) Michalik A., Franco D.C., Deng J., Prus-Frankowska M., Stroiński A., **Łukasik P.** (2026): Convergent extreme reductive evolution in ancient planthopper symbioses. *Nature Communications* <https://doi.org/10.1038/s41467-026-69238-x> (preprint: <https://doi.org/10.1101/2025.05.16.654412>)
- 59) van Dijk, L.J.A.; Goodsell, R.M.; Andersson, A.F.; Fisher, B.L.; Iwazskiewicz-Eggebrecht, E.; **Łukasik, P.**; Miraldo, A.; Peña-Aguilera, P.; Ronquist, F.; Roslin, T.; Tack, A.J.M. (2026) Spatial overlap and temporal synchrony between guilds of insect hosts and parasitoids. *Journal of Animal Ecology* <https://doi.org/10.1111/1365-2656.70228>

- 58) Nowak K.H., Hartop E., Prus-Frankowska M., Buczek M., Kolasa M., Roslin T., Ovaskainen O., **Lukasik P.** (2025): What lurks in the dark? - An innovative framework for studying diverse wild insect microbiota. *Microbiome* 13: 186, <https://doi.org/10.1186/s40168-025-02169-9> (preprint: <https://doi.org/10.1101/2024.08.26.609658>)
- 57) Płoszka Z., Nowak K.H., Tischer M., Michalik A., Kolasa M.R., **Lukasik P.** (2025): Dissecting multitrophic interactions: The relationships among *Entomophthora*, their dipteran hosts, and associated bacteria. *Journal of Invertebrate Pathology*, 213: 108425, <https://doi.org/10.1016/j.jip.2025.108425> (preprint: <https://doi.org/10.1101/2025.03.20.644288>)
- 56) Ma M., Michalik A., Deng J., Hu Y., **Lukasik P.** (2025): Contrasting genomic trajectories of *Bartonellaceae* symbionts of planthoppers. *Genome Biology and Evolution* 17(12): evaf216 <https://doi.org/10.1093/gbe/evaf216> (preprint: <https://doi.org/10.1101/2025.08.24.672000>)
- 55) Ma M., Li Q., Wu F., Zhu B. Lu H., Zhang D. **Lukasik P.**, Hu Y. (2025): Symbiotic solutions for colony nutrition: conserved nitrogen recycling within the bacterial pouch of *Tetraponera* ants. *Proceedings of the National Academy of Sciences of the U.S.A* 122 (44): e2514882122, <https://doi.org/10.1073/pnas.2514882122> (preprint: <https://doi.org/10.1101/2025.03.13.643113>)
- 54) Sundh J., Granqvist E., Iwazskiewicz-Eggebrecht E., Manoharan L., van Dijk L.J.A., Goodsell R., Godeiro N.N., Bellini B.C., Orsholm J., **Lukasik P.**, Miraldo A., Roslin T., Tack A.J.M., Andersson A.F., Ronquist F. (2025): HAPP: High-Accuracy Pipeline for processing deep metabarcoding data. *PLOS Computational Biology* 21(11): e1013558, <https://doi.org/10.1371/journal.pcbi.1013558> (preprint: <https://doi.org/10.1101/2024.12.20.629441>)
- 53) Iwazskiewicz-Eggebrecht E., Goodsell R.M., Bengsson B.A., Mutanen M., Klinth M., van Dijk L.J.A., **Lukasik P.**, Miraldo A., Andersson A.F., Tack A.J.M., Roslin T., Ronquist F. (2025): High-throughput biodiversity surveying sheds new light on the brightest of insect taxa. *Proceedings of the Royal Society B* 292: 20242974, <https://doi.org/10.1098/rspb.2024.2974> (preprint: <https://doi.org/10.1101/2024.10.25.620209>)
- 52) Miraldo A., Sundh J., Iwazskiewicz-Eggebrecht E., (+77 authors, incl. 3 from the lab) ... **Lukasik P.**, Tack A.J.M., Andersson A.F., Roslin T., Ronquist F. (2025): Data of the Insect Biome Atlas: a metabarcoding survey of the terrestrial arthropods of Sweden and Madagascar. *Scientific Data* 12: 835, <https://doi.org/10.1038/s41597-025-05151-0> (preprint: <https://doi.org/10.1101/2024.10.24.619818>)
- 51) Deng J., Stroiński A., Szewdo J., Ghanavi R.H., Yapar E., Franco D.C., Prus-Frankowska M., Michalik A., Wahlberg A., **Lukasik P.** (2025) Phylogenomic insights into the relationship and the evolutionary history of planthoppers (Insecta: Hemiptera: Fulgoromorpha). *Systematic Entomology* 50(3): 495-518 <https://doi.org/10.1111/syen.12666> [Preprint]
- 50) Stroiński A., **Lukasik P.**, Bartlett C.R., Pilet F., Rasolondalao H.H., Randretsiferana S.A., Razafindrakotomamonjy A., Bahder B.W. (2025) New planthoppers in the genus *Fescennia* (Hemiptera: Derbidae) from screw palms (*Pandanus* spp.) in eastern Madagascar, with redescription of *F. bivittata* and an updated key to the genus. *Zootaxa* 5729(1): 075-104 <https://doi.org/10.11646/zootaxa.5729.1.3>
- 49) Michalik A., Franco D.C., Szklarzewicz T., Stroiński A., **Lukasik P.** (2024): Facultatively intra-bacterial localization of a planthopper endosymbiont as an adaptation to its vertical transmission. *mSystems* 9(7): e00634-24 <https://doi.org/10.1128/msystems.00634-24> [Preprint]
- 48) **Lukasik P.**, Kolasa M. (2024): With a little help from my friends? The roles of microbial symbionts in insect populations and communities. *Philosophical Transactions of the Royal Society of London B* 379: 20230123 <https://doi.org/10.1098/rstb.2023.0122> [Preprint]
- 47) Andriienko V., Buczek M., Meier R., Srivathsan A., **Lukasik P.**, Kolasa M.R. (2024): Implementing high-throughput insect barcoding in microbiome studies: impact of non-destructive DNA extraction on microbiome reconstruction. *PeerJ* 12:e18025 <https://doi.org/10.7717/peerj.18025> [Preprint]
- 46) Surmacz B., Stec D., Prus-Frankowska M., Buczek M., Michalczyk Ł., **Lukasik P.** (2024): Pinpointing the microbiota of tardigrades: what is really there? *Environmental Microbiology* 26: e16659 <https://doi.org/10.1111/1462-2920.16659> [Preprint]
- 45) Åhlén Mulio S., Zwolińska A., Klejdysz T., Prus-Frankowska M., Michalik A., Kolasa M., **Lukasik P.** (2024): Limited variation in microbial communities across populations of *Macrostelus* leafhoppers (Hemiptera: Cicadellidae). *Environmental Microbiology Reports* 16: e13279 <https://doi.org/10.1111/1758-2229.13279> [Preprint]
- 44) van Dijk L., Fisher B., Miraldo A., Goodsell R.M., Iwazskiewicz-Eggebrecht E., Raharinjanahary D., Rajoelison E.T., **Lukasik P.**, Andersson A.F., Ronquist F., Roslin T., Tack A.J.M. (2024): Temperature and water availability drive insect seasonality across temperate and tropical climates. *Proceedings of the Royal Society B* 291: 20240090 <http://doi.org/10.1098/rspb.2024.0090>

- 43) Parmentier T., Molero-Baltanás R., Valdivia C., Gaju-Ricart M., Boeckx P., **Lukasik P.**, Wybouw N. (2024): Co-habiting ants and silverfish display a converging feeding ecology. *BMC Biology* 22: 123 <https://doi.org/10.1186/s12915-024-01914-0> [Preprint]
- 42) Bahder B.W., Stroiński A., **Lukasik P.**, Bartlett C.R., Pilet F., Rasolondalao H.H. (2024) A new species of planthopper in the genus *Paraphenice* (Hemiptera: Derbidae: Otiocerinae) from palms in eastern Madagascar. *Zootaxa* 5406(3): 461–473 <https://doi.org/10.11646/zootaxa.5406.3.5>
- 41) Bahder B.W., Randretsiferana S.A., Randretsiferana A., Stroiński A., **Lukasik P.**, Bartlett C.R., Pilet F. & Rasolondalao H.H. (2024): A new species of planthopper in the genus *Eumyndus* (Hemiptera: Cixiidae) from palms in eastern Madagascar and molecular evidence for the synonymy of *Eumyndus kraussi* and *Eumyndus metcalfi*. *Zootaxa* 5514 (4): 338–352 <https://doi.org/10.11646/zootaxa.5514.4.3>
- 40) Valdivia C., Newton J.A., O'Donnell S., von Beeren C., Kronauer D.J.C., Russell J.A., **Lukasik P.** (2023): Microbial symbionts are shared between ants and their associated beetles. *Environmental Microbiology* 25(12): 3466–3483 <https://doi.org/10.1111/1462-2920.16544> [Preprint]
- 39) Kolasa M., Kajtoch Ł., Michalik A., Maryńska-Nadachowska A., **Lukasik P.** (2023): Till evolution do us part: The diversity of symbiotic associations across populations of *Philaenus* spittlebugs. *Environmental Microbiology* 25(11): 2431–2446 <https://doi.org/10.1111/1462-2920.16473> [Preprint]
- 38) Deng J., Bennett G.M., Franco D.C., Prus-Frankowska M., Stroiński A., Michalik A., **Lukasik P.** (2023): Genome comparison reveals inversions and alternative evolutionary history of nutritional endosymbionts in planthoppers (Hemiptera: Fulgoromorpha). *Genome Biology and Evolution* 15(7): evad120 <https://doi.org/10.1093/gbe/evad120> [Preprint]
- 37) Spencer N., **Lukasik P.**, Meyer M., Veloso C., McCutcheon J.P. (2023): No transcriptional compensation for extreme gene dosage imbalance in fragmented bacterial endosymbionts of cicadas. *Genome Biology and Evolution* 15(6): evad100 <https://doi.org/10.1093/gbe/evad100> [Preprint]
- 36) Michalik A., Franco D.C., Deng J., Szklarzewicz T., Stroiński A., Kobiałka M., **Lukasik P.** (2023): Variable organization of symbiont-containing tissue across planthoppers hosting different heritable endosymbionts. *Frontiers in Physiology* 14: 1135346 <https://doi.org/10.3389/fphys.2023.1135346> [Preprint]
- 35) Iwaszkiewicz-Eggebrecht E., **Lukasik P.**, Buczek M., Deng J., Hartop E.A., Havnås H., Prus-Frankowska M., Ugarph C.R., Viteri P., Andersson A.F., Roslin T., Tack A.J.M., Ronquist F., Miraldo A. (2023): FAVIS: Fast And Versatile protocol for non-destructive metabarcoding of bulk Insect Samples. *PLoS One* 18(7): e0286272 <https://doi.org/10.1371/journal.pone.0286272> [Protocol @ protocols.io]
- 34) Iwaszkiewicz-Eggebrecht E., Granqvist E., Buczek M., Prus-Frankowska M., Roslin T., Tack A.J.M., Andersson A.F., Miraldo A., Ronquist F., **Lukasik P.** (2023): Optimizing insect metabarcoding using replicated mock communities. *Methods in Ecology and Evolution* 14(4): 1130–1146 <https://besjournals.onlinelibrary.wiley.com/doi/10.1111/2041-210X.14073> [Preprint]
- 33) Hu Y., D'Amelio C.L., Béchade B., Cabuslay C.S., **Lukasik P.**, Sanders J.G., Price S., Fanwick E., Powell S., Moreau C.S., Russell J.A. (2023): Partner fidelity and environmental filtering preserve stage-specific turtle ant gut symbioses for over 40 million years. *Ecological Monographs* 93(1): e1560 <https://doi.org/10.1002/ecm.1560>
- 32) Mendoza-Guido B., Rodríguez-Hernández H., Ivens A., von Beeren C., Murillo-Cruz C., Zuniga-Chaves I., **Lukasik P.**, Sanchez E., Kronauer D.J.C., Pinto-Tomás A.A. (2023): Low diversity and host specificity in the gut microbiome community in species of *Eciton* army ants (Formicidae: Dorylinae) in a Costa Rican rainforest. *Myrmecological News* 33: 19–34 https://doi.org/10.25849/myrmecol.news_033:019
- 31) Béchade B., Hu Y., Sanders J.G., Cabuslay C.S., **Lukasik P.**, Williams B.R., Fiers V.J., Lu R., Wertz J.T., Russell J.A. (2022): Turtle ants harbor metabolically versatile microbiomes with conserved functions across development and phylogeny. *FEMS Microbiology Ecology* 98 (8): fiac068 <https://doi.org/10.1093/femsec/fiac068>
- 30) Marquina D., Roslin T., **Lukasik P.**, Ronquist F. (2022): Evaluation of non-destructive DNA extraction protocols for insect metabarcoding: gentler and shorter is better. *Metabarcoding and Metagenomics* 6: e78871 <https://doi.org/10.3897/mbmg.6.78871>
- 29) Sanborn A.F., Cole J.A., Stukel M., **Lukasik P.**, Veloso C., Gonzalez V.A., Karkar J.B., Simon C. (2021): Thirteen new species of Chilecicada Sanborn, 2014 (Hemiptera: Auchenorrhyncha: Cicadidae: Tibiciniinae) expand the highly endemic cicada fauna of Chile. *Zootaxa* 5078(1): 1–70 <https://doi.org/10.11646/zootaxa.5078.1.1>

- 28) Michalik A., Franco D.C., Kobińska M., Szklarzewicz T., Stroiński A., **Lukasik P.** (2021). Alternative transmission patterns in independently acquired nutritional co-symbionts of Dictyopharidae planthoppers. *mBio* 12(4):e01228-21 <https://doi.org/10.1128/mbio.01228-21> [Preprint]
- 27) Marquina D., Buczek M., Ronquist F., **Lukasik P.** (2021). The effect of ethanol concentration on the morphological and molecular preservation of insects for biodiversity studies. *PeerJ* 9:e10799 <https://doi.org/10.7717/peerj.10799> [Preprint]
- 26) Macias A.M., Geiser D.M., Stajich J.E., **Lukasik P.**, Veloso C., Bublitz D.C., Berger M.C., Boyce G.R., Hodge K. & Kasson, M.T. (2020). Evolutionary relationships among *Massospora* spp. (Entomophthorales), obligate pathogens of cicadas. *Mycologia* 112:1060-1074 <https://doi.org/10.1080/00275514.2020.1742033> [Preprint]
- 25) Simon C., Gordon E.R.L., Moulds M.S., Cole J.A., Haji D., Lemmon A.R., Lemmon E.M., Kortyna M., Nazario K., Wade E.J., Meister R.C., Goemans G., Chiswell S.M., Pessacq P., Veloso C., McCutcheon J.P., **Lukasik P.** (2019): Off-target capture data, endosymbiont genes and morphology reveal a relict lineage that is sister to all other singing cicadas. *Biological Journal of the Linnean Society* 128: 865–886 <https://doi.org/10.1093/biolinnean/blz120>
- 24) **Lukasik P.**, Chong R.A., Nazario K., Matsuura Y., Bublitz D.A.C., Campbell M.A., Meyer M.C., Van Leuven J.T., Pessacq P., Veloso C., Simon C., McCutcheon J.P. (2019): One hundred mitochondrial genomes of cicadas. *Journal of Heredity* 110(2): 247-256 <https://doi.org/10.1093/jhered/esy068>
- 23) Campbell M.A.*, **Lukasik P.***, Meyer M., Buckner M., Simon C., Veloso C., Michalik A., McCutcheon J.P. (2018): Changes in endosymbiont complexity drive host-level compensatory adaptations in cicadas. *mBio* 9(6): e02104-18 <https://doi.org/10.1128/mbio.02104-18> [Preprint]
*contributed equally
- 22) **Lukasik P.**, Nazario K., Van Leuven J.T., Campbell M.A., Meyer M., Michalik A., Pessacq P., Simon C., Veloso C., McCutcheon J.P. (2018): Multiple origins of interdependent endosymbiotic complexes in a genus of cicadas. *Proceedings of the National Academy of Sciences of the U.S.A.* 115(2): E226-E235 <https://doi.org/10.1073/pnas.1712321115>
- 21) Bisch G., Neuvonen M.M., Pierce N.E., Russell J.A., Koga R., Sanders J.G., **Lukasik P.**, Anderson S.G.E. (2018): Genome evolution of Bartonellaceae symbionts of ants at the opposite ends of the trophic scale. *Genome Biology and Evolution* 10(7):1687-1704 <https://doi.org/10.1093/gbe/evy126>
- 20) Matsuura Y., Moriyama M., **Lukasik P.**, Vanderpool D., Tanahashi M., Meng X.-Y., McCutcheon J.P., Fukatsu T. (2018) Recurrent symbiont recruitment from fungal parasites in cicadas. *Proceedings of the National Academy of Sciences of the U.S.A* 115(26): E5970-E5979 <https://doi.org/10.1073/pnas.1803245115>
- 19) Hu Y., Sanders J.G., **Lukasik P.**, D'Amelio C.L., Millar J.S., Vann D.R., Lan Y., Newton J.A., Schotanus M., Kronauer D.J.C., Pierce N.E., Moreau C.S., Wertz J.T., Engel P. Russell J.A. (2018): Herbivorous turtle ants obtain essential nutrients from a conserved nitrogen-recycling gut microbiome. *Nature Communications* 9: 964 <https://doi.org/10.1038/s41467-018-03357-y> [Preprint]
- 18) Campbell M.A., **Lukasik P.**, Simon C., McCutcheon J.P. (2017): Idiosyncratic genome degradation in a bacterial endosymbiont of periodical cicadas. *Current Biology* 27(22): 3568–3575 <https://doi.org/10.1016/j.cub.2017.10.008> [Preprint]
- 17) **Lukasik P.**, Newton J.A., Sanders J.G., Hu Y., Moreau C.S., Kronauer D.J.C., O'Donnell S., Koga R., Russell J.A. (2017): The structured diversity of specialized gut symbionts of the New World army ants. *Molecular Ecology* 26(14): 3808–3825 <https://doi.org/10.1111/mec.14140> [Preprint]
- 16) Sanders J.G., **Lukasik P.**, Frederickson M.E., Russell J.A., Koga R., Knight R., Pierce N.E. (2017): Dramatic differences in gut bacterial densities correlate with diet and habitat in rainforest ants. *Integrative and Comparative Biology* 57(4): 705-722 <https://doi.org/10.1093/icb/ix088> [Preprint]
- 15) Hu Y., Holway D.A., **Lukasik P.**, Chau L., Kay A.D., LeBrun E.G., Miller K.A., Sanders J.G., Suarez A.V., Russell J.A. (2017): By their own devices: invasive Argentine ants have shifted diet without clear aid from symbiotic microbes. *Molecular Ecology* 26(6): 1608–1630. [Abstract]
- 14) **Lukasik P.**, Guo H., van Asch M., Henry L.M., Godfray H. C. J. & Ferrari J. (2015): Horizontal transfer of facultative endosymbionts is limited by host relatedness. *Evolution* 69(10): 2757-2766. [Abstract]
- 13) Smith A.H., **Lukasik P.**, O'Connor M., Lee A., Mayo G., Drott M., Doll S., Tuttle R., DiSciullo R., Messina A., Oliver K.M. & Russell J.A. (2015): Patterns, causes, and consequences of defensive microbiome dynamics across multiple scales. *Molecular Ecology* 24(5): 1135-1149. [Abstract]

- 12) Hu Y., **Lukasik P.**, Moreau C.S. & Russell J.A. (2014): Correlates of gut community composition across an ant species (*Cephalotes varians*) elucidate causes and consequences of symbiotic variability. *Molecular Ecology* 23(6): 1284-1300. [\[Abstract\]](#)
- 11) **Lukasik P.**, van Asch M., Guo H., Ferrari J. & Godfray H.C.J. (2013): Unrelated facultative endosymbionts protect aphids against a fungal pathogen. *Ecology Letters* 16(2): 214-218. [\[Abstract\]](#)
- 10) **Lukasik P.**, Guo H., van Asch M., Ferrari J. & Godfray H. C. J. (2013): Protection against a fungal pathogen conferred by the aphid facultative endosymbionts *Rickettsia* and *Spiroplasma* is expressed in multiple host genotypes and species and is not influenced by co-infection with another symbiont. *Journal of Evolutionary Biology* 26(12): 2654-2661. [\[Full text\]](#)
- 9) **Lukasik P.**, Dawid M.A., Ferrari J. & Godfray H.C.J. (2013): The diversity and fitness effects of infection with facultative endosymbionts in the grain aphid, *Sitobion avenae*. *Oecologia* 173: 985-996. [\[Abstract\]](#)
- 8) Russell J.A., Weldon S., Smith A.H., Kim K.L., Hu Y., **Lukasik P.**, Doll S., Anastopoulos I., Novin M. & Oliver K.M. (2013): Uncovering symbiont-driven genetic diversity across North American pea aphids. *Molecular Ecology* 22(7): 2045-2059. [\[Abstract\]](#)
- 7) **Lukasik P.**, Hancock E.L., Ferrari J. & Godfray H.C.J. (2011): Grain aphid clones vary in frost resistance, but this trait is not influenced by facultative endosymbionts. *Ecological Entomology* 36: 790-793. [\[Abstract\]](#)
- 6) **Lukasik P.** (2010): Trophic dimorphism in alternative male reproductive morphs of the acarid mite *Sancassania berlesei*. *Behavioral Ecology* 21: 270-274. [\[Full text\]](#)
- 5) **Lukasik P.**, Zygadlo M. & Radwan J. (2009): The effect of a phosphogluconate dehydrogenase genotype on sperm competitiveness in the bulb mite, *Rhizoglyphus robini*. In: Sabelis M.W., Bruin J. (Eds.): *Trends in Acarology – Proceedings 12th International Congress of Acarology*, Springer, Dordrecht: pp. 295-297. [\[Abstract\]](#)
- 4) **Lukasik P.** & Laskowski R. (2007): Increased respiration rate as a result of adaptation to copper in the confused flour beetle, *Tribolium confusum* Jacquelin du Val. *Bulletin of Environmental Contamination and Toxicology* 79(3): 311-314. [\[Abstract\]](#)
- 3) **Lukasik P.** & Johnson T. (2007): Arthropod communities and succession in baobab, *Adansonia rubrostipa*, fruits in a dry deciduous forest in Kirindy Forest Reserve, Madagascar. *African Entomology* 15(1): 214-220. [\[Abstract\]](#)
- 2) **Lukasik P.**, Radwan J. & Tomkins J.L. (2006): Structural complexity of the environment affects the survival of alternative male reproductive tactics. *Evolution* 60(2): 399-403. [\[Abstract\]](#)
- 1) **Lukasik P.** (2004): Aphally in the land snail *Chondrina clienta* (Gastropoda: Chondrinidae) from Kraków-Częstochowa Upland, Poland. *Malakologische Abhandlungen* 22: 67-76.

POPULAR SCIENCE PUBLICATIONS

Iwaszkiewicz-Eggebrecht E., **Lukasik, P.** (2022): Utrata bioróżnorodności, in: Jasikowska, K., Pałasz, M. (red.), *Za pięć dwunasta koniec świata. Kryzys klimatyczno-ekologiczny głosem wielu nauk*. Kraków: Uniwersytet Jagielloński w Krakowie, Biblioteka Jagiellońska, s. 115–152. [za512.uj.edu.pl](https://doi.org/10.2478/9788374424444_00005)

PUBLICATIONS UNDER EVALUATION OR IN REVISION

Rojas-Guerrero D., Roslin T., Ovaskainen O., Kolasa M., Gårdman V., Nowak K.H., Prus-Frankowska M., Buczek M., Michalik A., **Lukasik P.** (submitted): Cold and lonely: low microbial abundance and no core microbiota in mosquito populations across Greenland. *bioRxiv* <https://doi.org/10.1101/2024.08.27.609970v3>

Buczek M., Kolasa M., Prus-Frankowska M., Lipowska M., Nowak K.H., Azarbad H., Franco D.C., Marszałek M., Roslin T., Michalik A., **Lukasik P.** (preprint-2024): A new tool in a toolbox: Addressing challenges in high-throughput microbiota surveys across diverse wild insects. *bioRxiv* <https://doi.org/10.1101/2024.08.26.609764>

van Dijk L.J.A., Miraldo A., Raharinjanahary D., Rajoelison E.T., Fisher B.L., Goodsell R.M., Iwaszkiewicz-Eggebrecht E., Åhlén D., Högvall J., Lundberg E., Rova E., **Lukasik P.**, Ronquist F., Roslin T., Tack A.J.M. (preprint-2024) Biotic and abiotic drivers of ecosystem functioning differ between a temperate and a tropical region. *bioRxiv* <https://doi.org/10.1101/2024.02.28.582312>

Michalik A., Majewska E., Andrienko V., Nowak K.H., Stroński A., **Lukasik P.** (submitted): Stable nutritional endosymbiosis across cryptic diversity of a leafhopper species complex

CONFERENCE PRESENTATIONS (AS A PRESENTING AUTHOR, LAST 5 YEARS)

- Lukasik P.** (Apr 2025): How to study *Wolbachia* across diverse multi-species insect communities? Oral presentation, *Wolbachia 2025 Meeting*, Okinawa, Japan
- Lukasik P.** (Sep 2023): Surveying microbial symbionts' roles in insect adaptation and response to the challenges of the Anthropocene. Oral presentation, *9th Polish Evolutionary Conference*, Kraków, Poland.
- Michalik A. & **Lukasik P.** (Sep 2023): The diversity, distribution, and organization of insect-associated microbes. Invited oral presentation, *100-year Anniversary Meeting of the Polish Entomological Society*, Jelenia Góra, Poland.
- Nowak K.H., Valdivia C., Kolasa M., **Lukasik P.** (Jun 2023): How to track a facultative endosymbiont across multi-species insect communities. Poster presentation, *Gordon Research Conference Animal-Microbe Symbioses*, Lucca, Italy.
- Lukasik P.** (Jun 2023): Insect-bacterial symbioses - crossing evolutionary boundaries. Plenary oral presentation, *28th European Meeting for PhD Students in Evolutionary Biology*, Millport, Scotland.
- Lukasik P.** (Jul 2022): Microbial symbioses as a critical aspect of insect community ecology. Oral presentation, *XXVI International Congress in Entomology 2022*, Helsinki, Finland. Part of a symposium "Insect microbial symbiont diversity, distribution, roles, and localizations within host cells/tissues/structures" that I co-organized.
- Lukasik P.** (Jul 2022): Abundance as a critical aspect of insect-bacterial symbioses. Oral presentation, *10th Congress of the International Symbiosis Society and the 3rd International Conference on Holobionts*, Lyon, France
- Lukasik P.**, Buczek M., Prus M., Kolasa M.R. (Oct 2021): High-throughput insect microbiome surveys: challenges, solutions, and the new workflow. Poster presentation, *Gutenberg Workshop: The Rise and Fall of Mutualisms - Ecological and Evolutionary Dynamics of Host-Microbe Symbioses*. Ingelheim, Germany
- Lukasik P.** (Sep 2021): Insects, their microbiomes, and research priorities in the rapidly changing world. Opening plenary speech, *Conference of Young Ecologists & Evolutionary Biologists 2021*, Kraków, Poland

RESEARCH GRANTS AND AWARDS (1000 USD or more)

- National Science Centre of Poland (NCN), Opus 26 program, research grant "*The interplay between pathogens pressure, microbiome composition, and host hybridization in the survival rate of western honey bees (Apis mellifera)*" no. 2023/51/B/NZ9/02724 (**co-PI, with PI Michał Kolasa**). 2024-2027; PLN 2 069 076 ≈ USD 480,000
- National Science Centre of Poland (NCN), Opus 22 program, research grant "*Micro-allies during mega-crisis? The role of the microbiome in insect community responses to climate change*" no. 2021/43/B/NZ8/03376 (**PI**). 2022-2026; PLN 2,997,790 ≈ USD 650,000
- National Science Centre of Poland (NCN), Opus 21 program, research grant "*The patterns, processes, and drivers of insect microbiome variability*" no. 2021/41/B/NZ8/04526 (**named co-Investigator, with PI Anna Michalik**). 2022-2026; PLN 2,053,028 ≈ USD 450,000
- INTERACT Transnational Access grant 2021, project "*Insect microbiome diversity and dynamics in the High Arctic*". (**PI**) 2021; EUR 10,670.
- The Prime Minister's of Poland award for a highly rated habilitation achievement in Biological Sciences in 2020.
- National Science Centre of Poland (NCN), Opus 16 program, research grant "*Insect microbiome dynamics in time and space*" no. 2018/31/B/NZ8/01158 (**PI**). 2019-2022; PLN 2,132,854 ≈ USD 560,000
- National Science Centre of Poland (NCN), Sonata Bis 8 program, research grant "*The evolutionary dynamics of the symbioses of Auchenorrhyncha*" no. 2018/30/E/NZ8/00880 (**PI**). 2019-2024; PLN 3,498,144 ≈ USD 920,000
- Polish National Agency for Academic Exchange (NAWA), Polish Returns program, grant "*Insect Microbiomics*" no. PPN/PPO/2018/1/00015 (**PI**). 2019-2023; PLN 1,723,000 ≈ USD 450,000
- Knut and Alice Wallenberg Foundation (Sweden): Project Grant 2017, "*Insect Biome Atlas*", no. KAW 2017.088 (**co-PI – joined the project once awarded**). 2018-2024, SEK 31 million ≈ USD 3,000,000
- National Science Centre of Poland (NCN), Sonata 13 program, research grant "*The evolution of the symbiotic systems of Fulgoromorpha*" no. 2017/26/D/NZ8/00799 (**named co-Investigator, with PI Anna Michalik**). 2018-2022; PLN 829,200 ≈ USD 250,000

National Geographic Society Committee for Research and Exploration grant “*The ecological genomics of symbiotic complexity in cicadas*” no. 9760-15 (PI). Oct 2015-Sep 2017; USD 25,000

American Genetics Association Ecological, Evolutionary and Conservation Genomics Award “*Inter-generation transmission of a complex symbiotic consortium*” (PI). Apr 2015-Dec 2017; USD 10,000

Japanese Society for the Promotion of Science Postdoctoral Fellowship for Foreign Researchers (Short-term) “*Histological characterization of gut microbiota of social insects*” no. PE13061 (PI, with **Ryuichi Koga as the second PI**). Oct-Nov 2013; approx. JPY 1,200,000 ≈ USD 12,000

Jesus College Writing-Up Scholarship – May-Aug 2011; GBP 1,500 ≈ USD 2,400

Sir Richard Southwood Graduate Scholarship for doctoral study at the Department of Zoology/Jesus College, University of Oxford, UK – Apr 2008-Apr 2011; approx. GBP 70,000 ≈ USD 135,000

Smithsonian Tropical Research Institute Short-Term Fellowship for research in Panama – Dec 2005-Feb 2006; USD 3,550

Socrates-Erasmus grant for research and study at Wageningen University, Netherlands – Jan-Sep 2005; EUR 2,305 ≈ USD 3,200

The Gibson-Sykora Foundation grant for research at the University of St. Andrews, Scotland – Jun-Oct 2004; GBP 2,500 ≈ USD 4,500

Polish Ministry of National Education Scholarship for Outstanding Academic Performance – 2004/05 and 2005/06; in total 26,000 PLN ≈ USD 8,000

‘Sapere Auso’ Scholarship for Outstanding Academic Performance – 2003/04, 2004/05 and 2005/06; in total 9,500 PLN ≈ USD 2,900

First class stipend for biology students at Jagiellonian University – 2002/03 and 2003/04; in total 8,200 PLN ≈ USD 2,500

Laureate of the Polish Biology Olympiad for high school students (2001)

Laureate of the Polish Ecology Olympiad for high school students (2000)

TEACHING EXPERIENCE

Leads an active research group including postdocs, Ph.D., M.Sc. and B.Sc. Students, a lab manager, and research specialists (Jagiellonian University, since 2019)

Supervises three active Ph.D. Students (Jagiellonian University, as of Feb 2026),

Supervised one completed Ph.D. degree (Junchen Deng, 2025), two completed M.Sc. theses (2020-25) and three B.Sc. theses (2011 - Oxford University; 2024-25 – Jagiellonian University), with further students approaching graduation

Mentored visiting researchers, junior postdocs, and graduate students, supervised research technicians and undergraduate volunteers at the University of Oxford (2010-2011), Drexel University (2011-2014), the University of Montana (2015-2018), and Jagiellonian University (2019-)

Co-designed and co-taught undergraduate class “Microbiome: Introduction” (Jagiellonian University, 2023-25)

Guest lectures in symbiosis, molecular ecology, insect biology, and biodiversity declines at Drexel University (2013-14), University of Montana (2015-2017), and Jagiellonian University (2019-)

Assisted in invertebrate biology and molecular ecology labs, at the University of Oxford (2010) and Drexel University (2012-2014)

Worked as a dive guide and scuba diving instructor in commercial and university club environments in Egypt, Poland, and England (2007-2011)

PEER REVIEW ACTIVITIES

- Web of Science reviewer profile: <https://www.webofscience.com/wos/author/record/469946>

Journals – Molecular Ecology, Molecular Ecology Resources, Environmental Microbiology, Ecological Monographs, Nature Reviews Genetics, The ISME Journal, Proceedings of the Royal Society of London B, Genome Biology and Evolution, Oecologia, mSystems, Journal of Animal Ecology, Journal of Evolutionary Biology, Biology Letters, Applied and Environmental Microbiology, Microbial Ecology, ISME Communications, FEMS Microbiology Ecology, Frontiers in Microbiology, Ecology and Evolution, Insect Science, Journal of Insect Science, Arthropod-Plant Interactions, Myrmecological News, Ecological Entomology, Insect Molecular Biology, Insectes Sociaux, Neotropical Entomology, Zoological Journal of the Linnean Society, Behavioral Ecology, PLoS Genetics, PLoS One, Scientific Reports, STAR Protocols, Critical Reviews in Microbiology, Environmental Microbiology Reports, Wellcome Open Research

Grants – U.S. National Science Foundation, U.S.-Israel Binational Agricultural Research Development Fund, Austrian Science Fund, Marsden Fund (New Zealand), Czech Science Foundation, Dutch Research Council, German Research Foundation, Israel Science Foundation, Fund for Scientific Research - FNRS (Belgium), Research Foundation – Flanders (FWO, Belgium), Swiss National Science Foundation

Academic Degrees – reviewer of one doctoral thesis (University of Warsaw, 2024), one habilitation application (University of Warsaw, 2024), an external member and coordinator of doctoral mid-term evaluation committee (University of Łódź, 2025), a Ph.D. defense opponent (Univ. of Uppsala, 2025).

LANGUAGES

Polish – native

English – fluent

Spanish – advanced (speaking, reading), intermediate (writing)

French – intermediate