

Anna Karnkowska, PhD

EDUCATION

- 2021 **Habilitation**
University of Warsaw, Poland
- 2011 **PhD in Molecular Evolution and Taxonomy**
Faculty of Biology, University of Warsaw, Poland
Thesis: *Phylogeny and taxonomy of autotrophic euglenids (Eugleena) based on molecular and morphological data*
Supervisor: Prof. Bożena Zakryś
- 2006 **MSc (Hons) in Biology of the cell and organism**
Faculty of Biology, University of Warsaw, Poland
- 2004 **BSc (Hons) in Biology of the cell and organism**
Faculty of Biology, University of Warsaw, Poland

CURRENT POSITION

- 2023-present **Associate Professor**
Institute of Evolutionary Biology, University of Warsaw, Poland
- 2017-2023 **Assistant Professor**
Institute of Evolutionary Biology, University of Warsaw, Poland

PROFESSIONAL EXPERIENCE

- 2022-2023 **Visiting researcher**
Institute of Evolutionary Biology, CSIC-UPF, Barcelona, Spain (6 months)
- 2021 **Visiting researcher**
Roscoff Marine Station, Sorbonne University, France (1 month)
- 2016 **Postdoctoral research fellow**
Botany Department, University of British Columbia, Vancouver, Canada
Supervisor: Prof. Patrick Keeling
- 2013–2015 **Postdoctoral research fellow**
Parasitology Department, Charles University in Prague, Czech Republic
Supervisor: Prof. Vladimír Hampl
- 2014 **Visiting researcher**
Department of Cell Biology, University of Alberta, Canada (6 months)
Supervisor: Prof. Joel B. Dacks
- 2014 **Visiting researcher**
Dept. of Biochemistry & Molecular Biology, Dalhousie University, Canada (2 weeks),
Supervisor: Prof. Andrew J. Roger
- 2009 **Visiting researcher**
Ehrenberg collection, Museum für Naturkunde, Germany (2 weeks)
- 2006 **Visiting researcher**
Dept. of Plant Biology, Michigan State University, USA (2 months)
Supervisor: Prof. Richard E. Triemer
- 2004 **Student volunteer**
Laboratory of Bioinformatics and Protein Engineering, International Institute of
Molecular and Cell Biology, Poland (3 months)

RESEARCH GRANTS

AS A PRINCIPAL INVESTIGATOR

- 2022-2026 *Photosymbiosis in freshwater ciliates: elucidating its diversity, functioning and evolution with single-cell sequencing*, **Preludium BIS grant**, Polish National Science Center
- 2021-2025 *Freshwater microbial communities in the eutrophication gradient: diversity and interactions of protists and bacteria (MicroDivEr)*, **OPUS grant**, Polish National Science Center
- 2021 *Inverted light microscope for the single-cell isolation of microbial eukaryotes*
EMBO Small Grant
- 2020 *Establishing protocols for the long-read sequencing of microbial eukaryotes*
EMBO Small Grant
- 2019 -2023 *Evolution of phototrophy in eukaryotes*
EMBO Installation Grant
- 2017-2020 *Plastid evolution and functions of colourless algae within the Euglenophytes and Dictyochophyceae*, **SONATA grant**, Polish National Science Center
- 2012-2013 *Occurrence and distribution of conventional and non-conventional introns in tubB gene of heterotrophic euglenids*, University of Warsaw intramural grant
- 2009 *Taxonomy of green euglenids - insight into the Ehrenberg Collection*, UE grant in Synthesys program, Museum für Naturkunde, Berlin
- 2009-2010 *Origin of the chloroplast of green euglenids based on the phylogeny of psbO gene*, University of Warsaw intramural grant
- 2008-2009 *Evolution of gapC gene in Euglenida*, University of Warsaw intramural grant
- 2007-2008 *Analysis of value of cox1 sequence in taxonomy and phylogeny of euglenids*, University of Warsaw intramural grant

AS A TEAM MEMBER OR CO-PI

- 2022-2025 *Structure and evolution of mitochondrial genomes in Euglenids*, PRELUDIUM grant, Polish National Science Center, supervisor
- 2019-2022 *Evolution and function of inverted repeats (IR) in the plastid genomes of Euglenophyta*, Preludium Grant, Polish National Science Center, supervisor
- 2017-2022 *Life without mitochondrion*, ERC Consolidator grant (Co-PI). Vladimir Hampl, Charles University in Prague, Czech Republic.
- 2013-2015 *Genome sequencing of oxymonad and Trimastix*. PI: Dr Vladimir Hampl, Charles University in Prague, Czech Republic
- 2011-2014 *Distribution of conventional and non-conventional introns in nuclear genes of photosynthetic euglenids*, Polish National Science Center grant. PI: Dr Rafał Milanowski, University of Warsaw, Poland
- 2011-2014 *Molecular identification of green euglenids and taxonomic verification of cryptic species*, Ministry of Science and Higher Education grant. PI: Prof. Bożena Zakryś, University of Warsaw, Poland
- 2011-2013 *The potential and realized toxicity of cyanobacteria in the waters of the Great Mazurian Lakes on the basis of molecular markers analysis, concentrations of toxins and environmental analysis*, Polish Ministry of Science and Higher Education grant. PI: Dr Iwona Jasser, University of Warsaw, Poland
- 2007-2010 *Phylogeny and taxonomy of euglenids (Euglenaceae) based on molecular and morphological data*, Ministry of Science and Higher Education grant. PI: Prof. Bożena Zakryś, University of Warsaw, Poland

AWARDS AND FELLOWSHIPS

2021	The Bekker Programme scholarship, Polish National Agency for Academic Exchange
2021	L'Oréal-UNESCO For Women in Science Award
2020	Professor Stefan Pieńkowski Award
2020	University of Warsaw Rector Individual Award for Research Achievement
2020	University of Warsaw Rector Team Award for Research Achievement
2019	University of Warsaw Rector Individual Award for Research Achievement
2018-2020	Ministry of Science Scholarship for outstanding young scientists
2017	University of Warsaw Rector Individual Award for Research Achievement
2017	Prize of Bedřich Hrozný for a major scientific achievement, Charles University in Prague
2016	University of Warsaw Rector Team Award for Research Achievement
2016	Postdoctoral Research Fellowship of Centre for Microbial Diversity and Evolution
2015	Phylogenetically informed curation of Eukaryotic 18S rDNA (EukRef) workshop fellowship (Vancouver, Canada).
2015	Holz-Conner Travel Award from ISOP for ISOP Conference (Sevilla, Spain)
2015	FEMS Young Scientists Meeting Grant for European Phycological Congress (London, United Kingdom)
2013	Eukaryotic Cell Journal Outstanding Young Investigator Award at the EMBO Comparative Genomics of Eukaryotic Microorganisms conference (San Feliu de Guixols, Spain)
2013-2015	Postdoctoral Research Fellowship funded by European Social Fund and the state budget of the Czech Republic
2013-2014	Young Scientist Award of the Foundation for Polish Science
2012-2013	Award for the best young PhDs of the University of Warsaw
2012-2013	Polish Prime Minister Award for the doctoral thesis
2012	Holz-Conner Travel Award from ISOP for Protist2012 Conference (Oslo, Norway)
2011	University of Warsaw Rector Award for the doctoral thesis
2011	Foundation for Polish Science Travel Award for VI European Congress of Protistology (Berlin, Germany)
2009	University of Warsaw Rector Award for Research Achievement
2009	Travel Award from 9th International Phycological Congress organizers (Tokyo, Japan)
2006-2010	PhD scholarship funded by Faculty of Biology, University of Warsaw

LIST OF PUBLICATIONS

1. **Karnkowska A**, Yubuki N, Maruyama M, Yamaguchi A, Kashiyama Y, Suzaki T, Keeling PJ, Hampl V, Leander BS (2023) **Euglenozoan kleptoplasty illuminates the early evolution of photoendosymbiosis**. *Proceedings of the National Academy of Sciences* 120 (12): e2220100120
2. Žárský V, **Karnkowska A**, Boscaro V, Trznadel M, Whelan TA, Hiltunen-Thorén M, Onut-Brännström I, Abbott CL, Fast NM, Burki F, Keeling PJ (2023) **Contrasting outcomes of genome reduction in mikrocytids and microsporidians**. *BMC Biology* 21 (1): 137.
3. Hehenberger E, Boscaro V, James ER, Hirakawa Y, Trznadel M, Mtawali M, Fiorito R, Del Campo J, **Karnkowska A**, Kolisko M, Irwin NAT, Mathur V, Scheffrahn RH, Keeling PJ (2023) **New Parabasalia symbionts *Snyderella* spp. and *Daimonympha* gen. nov. from South American *Rugitermes* termites and the parallel evolution of a cell with a rotating “head”**. *Journal of Eukaryotic Microbiology* 70 (5): e12987.
4. Maciszewski K, Fells A, **Karnkowska A** (2022) **Challenging the importance of plastid genome structure conservation: new insights from euglenophytes**. *Molecular Biology and Evolution*, 39(12): msac255.
5. Ebenezer TE, Low RS, O'Neill EC, Huang I, DeSimone A, Farrow SC, Field RA, Ginger ML, Guerrero SA, Hammond M, Hampl V, Horst G, Ishikawa T, **Karnkowska A**, Linton EW, Myler P, Nakazawa N, Cardol P,

- Sánchez-Thomas R, Saville BJ, Shah MR, Simpson AGB, Sur A, Suzuki K, Tyler KM, Zimba PV, Hall N, Field MC (2022) [Euglena International Network \(EIN\): Driving euglenoid biotechnology for the benefit of a challenged world](#). *Biology Open*, 11 (11): bio059561.
6. Rackevei AS, **Karnkowska A**, Wolf M (2022) [18S rDNA sequence-structure phylogeny of the Euglenophyceae \(Euglenozoa, Euglenida\)](#). *Journal of Eukaryotic Microbiology*, e12959
 7. Hałakuc P, **Karnkowska A**, Milanowski R (2022) [Typical structure of rRNA coding genes in diplomonads points to two independent origins of the bizarre rDNA structures of euglenozoans](#). *BMC Ecology and Evolution*, 22 (1): 59.
 8. Kaszecki E, Kennedy V, Shah M, Maciszewski K, **Karnkowska A**, Linton, E. Ginger M L, Farrow S, Ebenezer, TE (2022). [Meeting report: Euglenids in the age of symbiogenesis: Origins, innovations, and prospects, November 8–11, 2021](#). *Protist*, 173(4): 125894
 9. Cho A, Tikhonenkov DV, Hehenberger E, **Karnkowska A**, Mylnikov AP, Keeling PJ (2022). [Monophyly of diverse bigyromonads and their impact on phylogenomic relationships within stramenopiles](#). *Molecular Phylogenetics and Evolution*, 171: 107468.
 10. Maciszewski K, Dabbagh N, Preisfeld A, **Karnkowska A** (2022). [Maturyoshka: A maturase inside a maturase, and other peculiarities of the novel chloroplast genomes of marine euglenophytes](#). *Molecular Phylogenetics and Evolution*, 170: 107441.
 11. Karlicki M, Antonowicz S, **Karnkowska A** (2022) [Tiara: deep learning-based classification system for eukaryotic sequences](#). *Bioinformatics*, 38: 344-350.
 12. Treitli SC, Pena-Diaz P, Hałakuc P, **Karnkowska A**, Hampl V (2021). [High quality genome assembly of the amitochondriate eukaryote *Monocercomonoides exilis*](#). *Microbial Genomics*, 7(12): 000745
 13. Soukal P, Hrdá Š, **Karnkowska A**, Milanowski R, Szabová J, Hradilová M, Strnad H, Vlcek C, Cepicka I, Hampl V. (2021). [Heterotrophic euglenid *rhabdomonas costata* resembles its phototrophic relatives in many aspects of molecular and cell biology](#). *Sci Report*, 11, 13070
 14. Singh R, Boscaro V, James ER, **Karnkowska A**, Kolisko M, Gavelis GS, Okamoto N, Del Campo J, Fiorito R, Hehenberger E, Irwin NAT, Mathur V, Scheffrahn RH, Keeling PJ (2021) [Characterization of new cristamonad species from kalotermitid termites including a novel genus, *Runanympha*](#). *Sci Report* 11, 7270.
 15. Kostygov AY, **Karnkowska A**, Votýpka J, Tashyreva D, Maciszewski K, Yurchenko V, Lukeš J (2021) [Euglenozoa: taxonomy, diversity and ecology, symbioses and viruses](#). *Open Biol.* 11, 200407.
 16. Lax G, Kolisko M, Eglit Y, Lee WJ, Yubuki N, **Karnkowska A**, Leander BS, Burger G, Keeling PJ, Simpson AGB (2021) [Multigene phylogenetics of euglenids based on single-cell transcriptomics of diverse phagotrophs](#), *Molecular Phylogenetics and Evolution*, 159:107088.
 17. Kayama M, Maciszewski K, Yabuki A, Miyashita H, **Karnkowska A**, Kamikawa R (2020). [Highly reduced plastid genomes of the non-photosynthetic dictyochophyceans *Pteridomonas* spp. \(Ochrophyta, SAR\) are retained for tRNA-Glu-based organellar heme biosynthesis](#). *Front Plant Sci*, doi: 10.3389/fpls.2020.602455.
 18. Kolisko M, Flegontova O, **Karnkowska A**, Lax G, Maritz JM, Pánek T, Táborský P, Carlton JM, Čepička I, Horák A, Lukeš J, Simpson AGB, Tai V (2020) [EukRef-Excavates: Seven curated SSU ribosomal RNA gene databases](#). *DATABASE*: baaa080
 19. Bakula Z, Gromadka R, Gawor J, Siedlecki P, Pomorski J, Maciszewski K, Gromadka A, **Karnkowska A**, Jagielski T (2020) [Sequencing and analysis of the complete organellar genomes of *Prototheca wickerhamii*](#). *Frontiers in Plant Science*: doi: 10.3389/fpls.2020.01296
 20. Lukesova S, Karlicki M, Hadariova L, Szabova J, **Karnkowska A**, Hampl V (2019). [Analyses of SSU rRNAs and two regions of chloroplast genomes revealed unexpected diversity of photosynthetic euglenids in marine environments](#). *Environ Microbiol Rep*, 12(1):78-91.
 21. Jagielski T, Bakula Z, Gawor J, Maciszewski K, Kusber W-H, Dyląg M, Nowakowska J, Gromadka R, **Karnkowska A** (2019) [Prototheca \(Trebouxiophyceae, Chlorophyta\) revisited: Implications from molecular taxonomic studies](#). *Algal Res*, 43: 101639.
 22. Maciszewski K, **Karnkowska A** (2019) [Should I stay or should I go? Retention and loss of components in vestigial endosymbiotic organelles](#). *Curr Opin Genet Dev*, 58-59: 33-39.
 23. Han KY, Maciszewski K, Graf L, Yang JH, Andersen AA, **Karnkowska A**, Yoon HS (2019) [Dictyochophyceae plastid genomes reveal unusual variability of their organization](#). *J Phycol*, 55: 1166-1180.
 24. **Karnkowska A**, Treitli SC, Brzoň O, Novák L, Vacek V, Soukal P, Barlow LD, Herman EK, Pipaliya SV, Pánek T, Žihala D, Petrželková R, Butenko A, Eme L, Stairs CW, Roger AJ, Eliáš M, Dacks JB, Hampl V. (2019) [The](#)

- [oxymonad genome displays canonical eukaryotic complexity in the absence of a mitochondrion.](#) *Mol Biol Evol*, 36(10): 2292-2312.
25. Adl, S.M., Bass, D., Lane, C.E., Lukeš, J., Schoch, C.L., Smirnov, A., Agatha, S., Berney, C., Brown, M.W., Burki, F., Cárdenas, P., Čepička, I., Chistyakova, L., Del Campo, J., Dunthorn, M., Edvardsen, B., Eglit, Y., Guillou, L., Hampl, V., Heiss, A.A., Hoppenrath, M., James, T.Y., **Karnkowska, A.**, Karpov, S., Kim, E., Kolisko, M., Kudryavtsev, A., Lahr, D.J.G., Lara, E., Le Gall, L., Lynn, D.H., Mann, D.G., Massana, R., Mitchell, E.A.D., Morrow, C., Park, J.S., Pawlowski, J.W., Powell, M.J., Richter, D.J., Rueckert, S., Shadwick, L., Shimano, S., Spiegel, F.W., Torruella, G., Youssef, N., Zlatogursky, V., Zhang, Q. (2019) [Revisions to the Classification, Nomenclature, and Diversity of Eukaryotes.](#) *J Eukaryot Microbiol*, 66: 4–119.
 26. **Karnkowska A**, Bennett MS, Trimer RE (2018) [Dynamic evolution of inverted repeats in Euglenophyta plastid genomes.](#) *Sci Reports*, 8:16071.
 27. Jagielski T, Gawor J, Bakula Z, Decewicz P, Maciszewski K, **Karnkowska A** (2018) [cytb as a new genetic marker for differentiation of *Prototheca* species.](#) *J Clin Microbiol*, 56(10):e00584-18.
 28. Leander BS, Lax G, **Karnkowska A**, Simpson AGB. [Euglenida.](#) Handbook of the Protists, J.M. Archibald et al. (Eds.), Springer-Verlag, Wien. 2017, 1047-1088.
 29. Zakryś B, Milanowski R, **Karnkowska A** (2017) [Evolutionary origin of *Euglena*.](#) *Euglena: Biochemistry, Cell and Molecular Biology.* Schwartzbach, S. Shigeoka (Eds.) *Advances in Experimental Medicine and Biology* 979 p. 3-17.
 30. Strasser JFH, **Karnkowska A**, Hehenberger E, del Campo J, Kolisko M, Okamoto N, Burki F, Janouškovec J, Poirier C, Leonard G, Hallam SJ, Richards TA, Worden AZ, Santoro AE, Keeling PJ. (2018) [Single cell genomics shows uncultured Marine Alveolates \(MALVs\) represent multiple independent lineages in early dinoflagellate evolution.](#) *ISME Journal*, 12: 304–308.
 31. del Campo J, James ER, Hirakawa Y, Fiorito R, Kolisko M, Irwin NAT, Mathur V, Boscaro V, Hehenberger E, **Karnkowska A**, Scheffrahn RH, Keeling PJ (2017) [Pseudotriconympha leei, Pseudotriconympha lifesoni, and Pseudotriconympha pearti, new species of parabasalian flagellates and the description of a novel rotating organelle.](#) *Sci Reports*, 7: 16349.
 32. Boscaro V, James ER, Fiorito R, Hehenberger E, **Karnkowska A**, del Campo J, Kolisko M, Irwin NAT, Mathur V, Scheffrahn, RH & Keeling PJ (2017) [Molecular characterization and phylogeny of four new Triconympha \(Parabasalia, Triconympha\) species from lower termite hindguts.](#) *Int J Syst Evol Microbiol*, 67: 3570-3575.
 33. Klinger CM, **Karnkowska A**, Herman EK, Hampl V, Dacks JB. [Phylogeny and Evolution.](#) Molecular Parasitology – Protozoan Parasites and their Molecules. Julia Walochnik J and Michael Duchêne (Eds). Springer-Verlag, Wien. 2016, 383-408.
 34. Novak L, Zubáčová Z, **Karnkowska A**, Kolisko M, Hroudová M, Stairs CW, Simpson AGB, Keeling PJ, Roger AJ, Čepička I, Hampl V (2016) [Arginine deiminase pathway enzymes: evolutionary history in metamonads and other eukaryotes.](#) *BMC Evol Biol*, 16:197.
 35. **Karnkowska A**, Hampl V (2016) [The curious case of vanishing mitochondria.](#) *Microbial Cell*, 3(10):361-364.
 36. Łukomska-Kowalczyk M*, **Karnkowska A***, Krupska M, Milanowski R, Zakryś B (2016) [DNA Barcoding In Autotrophic Euglenids: Evaluation of COI and 18S rDNA.](#) *J Phycol*, 52: 951-60. *both authors contributed equally
 37. **Karnkowska A**, Vacek V., Zubacova Z., Treitli SC., Petrzalkova R., Eme L., Novak L., Zarsky V., Barlow LD., Herman EK., Soukal P., Hroudova M., Dolezal P., Stairs CW., Roger AJ., Elias M, Dacks JB., Vlcek C. and Hampl V. (2016) [A Eukaryote without a Mitochondrial Organelle.](#) *Curr Biol*, 26: 1274–1284.
 38. Milanowski R, Gumińska N, **Karnkowska A**, Ishikawa T, Zakryś B (2016) [Intermediate introns in nuclear genes of euglenids - are they a distinct type?](#) *BMC Evol Biol*, 16:49.
 39. Łukomska-Kowalczyk M, **Karnkowska A**, Milanowski R, Łach Ł, Zakryś B (2015). [Delimiting species in the Phacus longicauda complex \(Euglenida\) through morphological and molecular analyses.](#) *J Phycol*, 51: 1147-57.
 40. **Karnkowska A**, Bennett MS, Watza D, Kim JI, Zakryś B, Triemer RE. (2015) [Phylogenetic relationships and morphological character evolution of photosynthetic euglenids \(Excavata\) inferred from taxon-rich analyses of five genes.](#) *J Euk Microbiol*, 62: 362-73.
 41. Bukowska A, Bielczyńska A, **Karnkowska A**, Chróst RJ, Jasser I (2014) [Calibration of the analyses of taxonomic composition of potentially toxic cyanobacteria in freshwater lakes using a molecular approach based on DGGE and classical microscopic observations.](#) *Aquatic Biosystems*, 10: 2.

42. Milanowski R, **Karnkowska A**, Ishikawa T, Zakryś B (2014) **Distribution of conventional and non-conventional introns in tubA and tubB genes of euglenids.** *Mol Biol Evol* 31: 584-93. (IF: 10,353.
43. Zakryś B, **Karnkowska-Ishikawa A**, Łukomska-Kowalczyk M, Milanowski R (2013) **New photosynthetic euglenoid isolated in Poland: *Euglenaria clepsydroides* sp. nova (Euglenea).** *Eur J Phycol*, 48: 260-7.
44. Jasser I, **Karnkowska-Ishikawa A**, Chróst RJ (2013) **Do acid-tolerant picocyanobacteria exist? A study of two strains isolated from humic lakes in Poland.** *Hydrobiologia*, 707: 209-18.
45. **Karnkowska-Ishikawa A**, Milanowski R, Triemer RE, Zakryś B. (2013) **A redescription of morphologically similar species from the genus *Euglena*: *E. laciniata*, *E. sanguinea*, *E. sociabilis* and *E. splendens*.** *J Phycol*, 49: 616-26.
46. **Karnkowska-Ishikawa A**, Milanowski R, Triemer RE & Zakryś B (2012) **Taxonomic revisions of morphologically similar species from two genera: *Euglena* (*E. granulata* and *E. velata*) and *Euglenaria* (*Eu. anabaena*, *Eu. caudata*, *Eu. clavata*).** *J Phycol*, 48: 729-39.
47. **Karnkowska-Ishikawa A**, Milanowski R, Zakryś B (2011) **The species *Euglena deses* (Euglenaceae) revisited: new morphological and molecular data.** *J Phycol*, 47: 653-61.
48. Jasser I, Królicka A, **Karnkowska-Ishikawa A** (2011) **A novel phylogenetic clade of picocyanobacteria from the Mazurian lakes (Poland) reflects the early ontogeny of glacial lakes.** *FEMS Microbiology Ecology*, 75(1):89-98.
49. Linton EW, **Karnkowska-Ishikawa A**, Kim JI, Ciugulea I, Shin W, Bennett M, Kwiatowski J, Zakryś B, Triemer RE (2010) **Reconstructing euglenoid evolutionary relationships using three genes: nuclear SSU and LSU, and chloroplast 16S rDNA sequences and the description of *Euglenaria* gen. nov. (Euglenophyta).** *Protist*, 161:603-19.
50. Jasser I, **Karnkowska-Ishikawa A**, Kozłowska E, Królicka A, Łukomska-Kowalczyk M. (2010) **Composition of picocyanobacteria community in The Great Mazurian Lakes: isolation of phycoerythrin-rich and phycocyanin-rich ecotypes from the system - comparison of two methods.** *Pol J Microbiol*, 59 (1):21-31.
51. **Karnkowska-Ishikawa A**, Milanowski R, Kwiatowski J, Zakryś B. (2010) **Taxonomy of the *Phacus oscillans* and its close relatives - balancing morphological and molecular features.** *J Phycol*, 46:172-82.
52. Kosmala S, **Karnkowska-Ishikawa A**, Milanowski R, Kwiatowski J, Zakryś B (2009) **Phylogeny and systematics of *Euglena* (Euglenaceae) species with axial, stellate chloroplasts based on morphological and molecular data - new taxa, emended diagnoses and epityfication.** *J Phycol*, 45:464-81.
53. Kosmala S, **Karnkowska A**, Milanowski R, Kwiatowski J, Zakryś B (2005) **The phylogenetic and taxonomic position of *Lepocinclis fusca* comb. nova (= *Euglena fusca*) (Euglenaceae). Morphological and molecular justification.** *J Phycol*, 41:1258-67.

CONFERENCES AND WORKSHOPS ORGANIZER

- | | |
|------|---|
| 2023 | EMBO Young Investigator Network on ecology and evolutionary biology of microbes Symposium, Chęciny, Poland |
| 2022 | EMBO Young Investigator Network on computational methods in ecology and evolutionary biology of microbes Symposium, Chęciny, Poland |
| 2021 | EMBO Young Scientists' Forum 2021, Warsaw, Poland |
| 2020 | 4th Polish EMBO workshop on computational and structural biology and chemistry, Waplewo, Poland |
| 2019 | Workshop on Phylogenomics, Cesky Krumlov, Czechia |
| 2018 | 6 th Polish Evolutionary Conference, Warsaw, Poland |
| 2015 | Phylogenomics: new approaches to solving old problems in algal evolution Symposium, 6th European Phycological Congress, London, England |
| 2014 | Protist 2014, Banff, Canada |
| 2011 | 54th Workshop: Evolutionary Biology and Related Topics |
| 2010 | 16th European Meeting of PhD Students in Evolutionary Biology |

INVITED PRESENTATIONS

- 09/2023 International Society of Endocytobiology Conference, Chicago, US
- 09/2023 Seminar speaker, Max Planck Institute for Marine Microbiology, Bremen, DE
- 04/2023 Seminar speaker, Research Centre for Geosciences, Helmholtz Centre, Potsdam, DE
- 03/2023 Seminar speaker, Max Planck Institute for Interdisciplinary Sciences, Gottingen, DE
- 09/2022 EMBO Conference: Comparatives genomics of unicellular eukaryotes: Interactions and symbioses, Saint Feliu de Guilox, ES
- 12/2021 EMBO Sectorial meeting Microbiology, Bordeaux, FR
- 06/2021 EMBO Annual Young Investigators Meeting, Heidelberg, DE
- 07/2021 International Society of Protistology virtual conference
- 04/2019 49th Jírovec's Protozoological Days, Kostelec nad Černými lesy, CZ
- 03/2019 Seminar speaker, Center for New Technologies, University of Warsaw, PL
- 11/2017 The Company of Biologists Workshop: Symbiosis in the microbial world: from ecology to genome evolution, UK
- 10/2017 EMBO Conference: Comparative genomics of eukaryotic microbes: Dissecting sources of evolutionary diversity, ES
- 05/2017 Ecology and Evolution seminars at University of Warsaw, PL
- 03/2017 115th International Titisee Conference on Evolutionary mitochondrial biology: molecular, biochemical, and metabolic diversity, DE
- 11/2016 Centre for Microbial Diversity and Evolution annual meeting, CAD
- 11/2015 Seminar speaker, Life Science Research Centre, University of Ostrava, CZ
- 09/2014 Seminar speaker, Department of Cell Biology Seminar, University of Alberta, CAD
- 09/2012 53th meeting of the Czech Phycological Society, Ostrava, CZ
- 02/2012 Kužela seminar speaker, Comenius University in Bratislava, SK
- 09/2011 52th meeting of the Czech Phycological Society, Prague, CZ

TEACHING EXPERIENCE

- 2020- Teacher at Modern biology course for the third year of Bsc in Biology, University of Warsaw
- 2020- Teacher at Publication strategy in a discipline for PhD students, University of Warsaw
- 2020- Teacher and coordinator of Applied bioinformatics, University of Warsaw
- 2018-2021 Teacher at Biodiversity course, University of Warsaw
- 2017- 2021 Teacher at Evolutionary biology course, University of Warsaw
- 2017 Teaching assistant at the Workshop on Genomics, Cesky Krumlov, Czechia
- 2014 Guest lecturer on Molecular taxonomy course, Charles University in Prague
- 2013- Teacher and coordinator of Biology of microbial eukaryotes, University of Warsaw
- 2006-2019 Teacher at Botany course, University of Warsaw
- 2006-2012 Teacher at Flora of Poland field course, University of Warsaw

SUPERVISION OF INTERNS

- 2023 Bariş Çağrı Tosun – Erasmus PhD student
- 2023 Alessandro Culicchi – Erasmus PhD student
- 2022 Josiah Grzywacz - Fulbright U.S. Student Researcher

2019 Dominika Vešelényiová - Erasmus PhD student

2019 Martina Kešeláková - Erasmus PhD student

SUPERVISION OF STUDENTS

- 2022 Master student at Biophysics, Małgorzata Malczewska
- 2022 Master student at Biotechnology, Metody Hollender
- 2021 Master student at Biotechnology, Weronika Popławska
- 2021-2022 Master student at Bioinformatics and Systems Biology, Julia Gołębiowska
Predicting absorption wavelengths of rhodopsins using machine learning-based methods
- 2021-2022 Bachelor student at Biotechnology, Metody Hollender
Identification and metabolism analysis of chosen protists symbionts from single-cell data
- 2020-2022 Master student at Biology, Małgorzata Chwalińska
Comparing short vs long 18S rDNA gene amplicons for elucidating freshwater protists diversity
- 2020-2021 Bachelor student at Biotechnology, Weronika Popławska
Analysis of occurrence and diversity of Archaea in the pelagic zone of selected Mazurian lakes based on molecular data
- 2019-2022 Master student at Bioinformatics and Systems Biology, Stanisław Antonowicz
Workflow for microbial interaction network inference using high-throughput sequencing data
- 2019-2021 Master student at MiSMAP, Julia Gołębiowska
Analysis of the microbial rhodopsins occurrence and diversity in the Lake Roś based on the metatranscriptomic and amplicon data
- 2019-2021 Master student at Biotechnology, Gabriela Wilga
Evolution of plastid genomes in the secondarily non-photosynthetic genus Prototheca
- 2019-2020 Bachelor student at Bioinformatics and Systems Biology, Julia Różycka
Prediction and analysis of spliceosomal and nonconventional introns in the genomes of non-model eukaryotes
- 2019-2020 Bachelor student at Biology, Małgorzata Chwalińska
18S rDNA amplicon-based analysis of diversity of microbial eukaryotes' communities in the salinity gradient of Świna river estuary
- 2019-2020 Bachelor student at Bioinformatics and Systems Biology, Julia Rymuza
Metagenomic data utilization for phylogenomic analyzes: evaluation of existing approaches and development of a pipeline
- 2018-2019 Bachelor student at Bioinformatics and Systems Biology, Stanisław Antonowicz
Evaluation of the machine learning-based data representation and classification methods on the example of function assignment in a particular protein family
- 2017-2018 Master student at Bioinformatics and Systems Biology, Michał Karlicki
Mining metagenomic data for organellar genomes of microbial eukaryotes
- 2011-2012 Bachelor student at Biology, Magdalena Jabłońska
Cyanotoxins - effects on organisms and their occurrence in Polish surface waters
- 2011-2013 Master student at Biotechnology, Małgorzata Korzeniecka
Assessment of two molecular markers (cox1 and 18S rDNA) as potential DNA barcodes for autotrophic euglenids (Euglena)

SUPERVISION OF PhD STUDENTS

- 2022- Małgorzata Chwalińska
- 2021- Valentina Smacchia
- 2020- Marta Sałek

2018- Paweł Hałakuc, co-supervisor
2018- Michał Karlicki
2017-2022 Kacper Maciszewski
Evolution of genome structure and function in secondary plastids

SUPERVISION OF POST-DOCS

2023- Dr Ivan Garcia Cunchillos
2023- Dr Anhelina Kyrychenko

EDITORIAL BOARDS

- Protist Special Issue Editor
- Open Biology

REVIEWING ACTIVITIES

2023 PhD Thesis Katarzyna Sidorczuk, University of Wrocław, PL
2023 L'oreal for Woman in Science Program, PL
2022 Evaluating committee member of PhD school, Jagiellonian University, PL
2022 Evaluating committee member of PhD school, University of Wrocław, PL
2022 PhD Thesis Aleksandra Krocak, University of Wrocław, PL
2020 Grant reviewer, Czech Science Foundation, CZ
2019 Research proposals' reviewer, Polish Ministry of Higher Education, CZ
2017 PhD Thesis, Tomáš Skalický, University of South Bohemia, CZ
2016 PhD Thesis, Kristína Záhonová, University of Ostrava, CZ

MANUSCRIPT REVIEWER (52)

eLife (1); Nature Microbiology (1); Nature communications (2), Current Biology (2), Molecular Biology and Evolution (1), BioEssays (2), Scientific Reports (2), Plos Biology (1), BMC Biology (2), BMC Ecology and Evolution (1), Biological Reviews (1), Bioinformatics (1), Philosophical Transactions of the Royal Society B (1), Environmental Microbiology (1), Open Biology (1), Genome Biology and Evolution (1); Journal of Eukaryotic Microbiology (4), Journal of Phycology (3), European Journal of Protistology (3), Polish Journal of Microbiology (1), Journal of Molecular Sciences (1); *G3: Genes, Genomes, Genetics* (1), Nova Hedwigia (1), Frontiers in Ecology and Evolution (1), Frontiers Plant Science (4), Current Genetics (1), Protist (4), PeerJ (1), Diversity (1), Mitochondrial DNA Part B: Resources (1), Acta Societatis Botanicorum Poloniae (1), Kosmos (2)

SCIENTIFIC SOCIETY MEMBERSHIPS

2021 Member of Scientific Committee of the Euglena International Network (EIN)
2018 Member of the EMBO Young Investigator Network
2010 International Society for Evolutionary Protistology (ISEP); European Councillor (2014-2016)
2006 International Society for Protistology (ISOP), Nominating Committee member (2015), Vice-President (2017), **President (2023)**

UNIVERSITY SERVICE

2023 PhD school evaluation committee, University of Warsaw, PL
2023- PhD Committee University of Barcelona, ES
2022 PhD school evaluation committee, University of Wrocław, PL

2022 PhD school evaluation committee, Jagiellonian University, PL

2022 Doctoral Thesis Advisory Committee at Institute of Molecular Mechanisms and Machines, PL

2021- Chairwoman of Scientific Council of Institute of Evolutionary Biology

2020- Member of the Committee for student and teaching affairs at Bioinformatics and Systems
Biology

2020-2021 Member of the Biology Discipline Board

2017-2020 Member of the University Centre for Environmental Studies and Sustainable Development Board

2008-2013 Member of the Faculty of Biology Board

2007-2011 Member of the Senate Committee for student and teaching affairs

2008-2011 PhD student member of the Institute of Botany board, Faculty of Biology

2008-2011 Head of PhD Students Council at Faculty of Biology

2008-2011 Vice-president of PhD Students Council at University of Warsaw