

Marcin Krzysztof Dziuba

Department of Ecology and Evolutionary Biology,
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Education:

- 2014 – 2021 Adam Mickiewicz University in Poznań
Biology; PhD study, thesis: „The impact of increased temperature on life history traits, population dynamics and community structure of *Daphnia* spp.”
Expected defense date: Spring 2021
 - 2012 – 2014 Adam Mickiewicz University in Poznań
Environmental Protection (study in English language); Master’s study, thesis: “Are *Daphnia* from Konin lakes less vulnerable to cyanobacteria?”
 - 2009 – 2012 Adam Mickiewicz University in Poznań
Environmental Protection, specialty: Hydrobiology and Water Protection; Bachelor study, thesis: “Diurnal horizontal migrations of zooplankton in lake Kierskie Małe”
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Projects:

- 2019 – 2020 National Science Center in Poland, *Etiuda* project: “*The impact of increased temperature on life history traits, dynamics of populations and community structure of Daphnia spp.*” – project leader, PLN 124 840 (\$33,000)
 - 2016 – 2020 National Science Center in Poland, *Preludium* project: “*Global warming effects: Adaptive capability of Daphnia longispina complex to elevated temperature*” – project leader, PLN 147 458 (\$38,804)
 - 2016 – 2017 DAAD scholarship: “*Climate change impact on Daphnia-parasite interaction in D. longispina species complex*” – project leader, €6 200 (\$7,400)
 - 2013 – 2017 Polish Ministry of Science and Higher Education, *Diamond Grant* project: “*The role of body size in competition for resources against the background of Global Warming*” – project leader, PLN 193 746 (\$50,985)
 - 2013 – 2016 National Science Center in Poland project: “*Morphological changes of filamentous cyanobacteria induced by Daphnia sp. – their role in defence against grazing and in competition for resources*” under the leadership of Łukasz Wejnerowski
 - 2012 – 2012 National Science Center in Poland project: “*Does invasive cyanobacteria C. raciborskii induce negative responses in zooplankton assemblages?*” under the leadership of Sławomir Cerbin
 - 2011 – 2012 Marii Curie project “*Contrastress – Contradicting responses to multiple stressors reduce the resilience of zooplankton community*”, under the leadership of Sławomir Cerbin
 - 2011 – 2012 Deans Grant (Faculty of Biology, AMU) “*Polish Palm Houses as biodiversity hot spots of small invertebrates*”, under the leadership of Krzysztof Zawierucha
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Experience:

- External employment at North Carolina State University USA (course title: Introductory Biology: Ecology, Evolution and Biodiversity, conducted at AMU Poznań)
 - Reviews for international scientific journals (e.g. *Global Change Biology*, *Proceedings of the Royal Society B*, *Hydrobiologia*)
 - 3-month internship in EAWAG Aquatic Ecology institute (Spaak Group, Dübendorf, Switzerland)
 - 6-month DAAD scholarship at IGB Berlin institute (Wolinska Group, Berlin, Germany)
 - 6-month NCN Etiuda scholarship at IGB Berlin institute (Wolinska Group, Berlin, Germany)
 - Employment at Water and Soil Research Laboratory at Sanitary and Epidemiological Station in Poznań
 - Next Generation Sequencing course (ideas4biology)
 - Environmental expertise concerning ecological state of watercourses of Pichna-Noteć-Kanał-Ślesiński and lake Gopło (Poland)

 - Invited speaker at Aquatic Ecology Department Seminars, EAWAG Aquatic Research, Dübendorf, Switzerland (2014)
 - Invited speaker at Ecological Seminar, University of Cologne, Germany (2015)
 - Invited speaker at Seminars on Evolution, Ecology and Behavior, Adam Mickiewicz University, Poznań, Poland (2016)
 - Invited speaker at Evolutionary Biology and Genetics Colloquium, Potsdam University, Germany (2017)
 - Invited speaker at IVth International Conference on Research and Education, Adam Mickiewicz University, Poznań, Poland (2017)
 - Invited speaker at Department 2 (Ecosystem Research) Seminar in Leibniz Institute of Freshwater Ecology and Inland Fisheries, Berlin, Germany (2020)
 - Talks and posters on international and national (Polish) conferences (e.g. my talk at ESEB 2019: "Expanding thermal breadth facilitates adaptation of *Daphnia* to raising temperature". Link: <https://www.rajulive.fi/streams/session6-thursday-morning/> ; watch from: 2:30:38)
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Awards:

- Best talk prize on World Lake Conference 2018 in Tsukuba, Japan
 - Best talk prize on 4th Evo Eco PhD Meeting 2020 in Lutherstadt Wittenberg, Germany
 - Best talk prize on conference Lakes & Reservoirs: Hot Spots & Topics in Limnology 2019 in Mikorzyn, Poland
 - Best poster prize on BioLOGIES conference 2020 in Poznań, Poland
 - Promotion in excellence scholarship (2014,2015,2016,2017)
 - Rector's scholarship for best PhD students (2015,2016,2017)
 - 1st place in SIL contest for best limnological article of young scientist at national level (2016)
 - Adam Mickiewicz University Foundation scholarship for PhD students
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Publications:

- Dziuba M.K., Kuczyński, L., Wejnerowski, Ł., Cerbin, S., Wolinska, J., 2020. Countergradient variation concealed adaptive responses to temperature increase in *Daphnia* from heated lakes. *Limnology and Oceanography*, <https://doi.org/10.1002/lno.11680>
- Dziuba M.K., Herdegen-Radwan M., Pluta E., Wejnerowski L., Szczuciński W., Cerbin S., 2020. Temperature increase altered *Daphnia* community structure in artificially heated lakes: a potential scenario for a warmer future. *Scientific Reports* 10:13956
- Turko P., Wolinska J., Tellenbach C., Dziuba M.K., Monchamp M.E., Spaak P., 2019. Using DNA from formaldehyde-preserved *Daphnia* to reconstruct past populations. *Hydrobiologia*, 841: 153–161
- Dziuba M.K., Cerbin S., Wejnerowski L., 2017. Is bigger better? A possibility for adaptation of *Daphnia* to filamentous cyanobacteria in the face of global warming. *Hydrobiologia*, 798:105–118
- Wejnerowski L., Cerbin S., Wojciechowicz K., Jurczak T., Glama M., Meriluoto J., Dziuba M.K., 2018. Effects of *Daphnia* exudates and sodium octyl sulphates on filament morphology and cell wall

thickness of *Aphanizomenon gracile* (Nostocales), *Cylindrospermopsis raciborskii* (Nostocales) and *Planktothrix agardhii* (Oscillatoriales). *European Journal of Phycology*, 53: 280-289

- Wejnerowski L., Wojciechowicz K., Glama M., Olechnowicz J., Dziuba M.K., Cerbin S., 2017. Solitary terminal cells of *Aphanizomenon gracile* (Cyanobacteria, Nostocales) can divide and renew trichomes. *Phycological Research*, 65: 248-255
 - Wejnerowski L., Cerbin S., Dziuba M.K., 2017. Setae thickening in *Daphnia magna* alleviates the food stress caused by the filamentous cyanobacteria. *Aquatic Ecology*, 51: 485–498
 - Wejnerowski L., Cerbin S., Wojciechowicz K., Dziuba M.K., 2016. Differences in cell wall of thin and thick filaments of cyanobacterium *Aphanizomenon gracile* SAG 31.79 and their implications for different resistance to *Daphnia* grazing. *Journal of Limnology*, 75(3).
 - Wejnerowski Ł., Cerbin S., Dziuba M.K., 2015. Thicker filaments of *Aphanizomenon gracile* are more harmful to *Daphnia* than thinner *Cylindrospermopsis raciborskii*. *Zoological Studies*. 54. DOI 10.1186/s40555-014-0084-5
 - Koliccka M., Dziuba M.K., Zawierucha K., Kuczyńska-Kippen N., Kotwicki L., 2015. Palm house – biodiversity hotspot or risk of invasion? Aquatic invertebrates: The special case of Monogononta (Rotifera) under greenhouse conditions. *Biologia*, 70: 94-103.
 - Cerbin S., Wejnerowski Ł., Dziuba M., 2013. *Aphanizomenon gracile* increases in width in the presence of *Daphnia*. A defence mechanism against grazing? *Journal of Limnology*, 72: 505-511
 - Dziuba M.K., Cerbin S., Wejnerowski Ł., 2013. Cladocera and Copepoda of the shallow eutrophic lake in Nature 2000 area in Western Poland. *Pakistan J. Zool.*, 45: 653-659
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Skills:

- laboratory techniques: culturing zooplankton, algae and cyanobacteria, molecular analyses (allozymes, barcodes, microsatellites and SNP's), laboratory experiments (strong experience in experimental design), microscopy (mainly plankton samples processing, species determination, detection of parasitic infections, resting eggs processing etc.)
- hydrobiological fieldwork and wet lab techniques, including sediments core collection and processing
- zooplankton taxonomy
- data analysis, analytical skills
- statistical analyses (R)
- molecular analyses (R, Gene Mapper, STRand, Peak Scanner, Mega)
- creating and managing biological databases
- Driver's license
- Scuba diving (P1 CMAS)

Soft skills:

- Team working
- Strong presentation and communication skills
- Experience in training and education (in Polish and English)
- Cooperation in international environment
- Project management
- Work organization and reliability
- Building relationship
- Creativity and adaptability in work
- Problem solving

Languages:

- Polish (native)
 - English
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Scientific interests:

- Evolutionary ecology, freshwater ecology, host-parasite interaction, climate change ecology

Hobby:

- Sports, literature (science-fiction, fantasy), cooking, video and board games, nature (especially aquatic organisms), tea, whisky