

Dr. Nataša Puzović

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🔍 Google Scholar
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Education

2020 – 2023 **PhD Evolutionary Biology (magna cum laude)**, Christian-Albrechts-Universität zu Kiel, Germany
2017 – 2019 **MSc Molecular Biology and Evolution**, Christian-Albrechts-Universität zu Kiel, Germany
2012 – 2017 **BSc Molecular Biology and Physiology**, Faculty of Biology, University of Belgrade, Serbia
2014 – 2016 **BSc Applied Mathematics (unfinished)**, Faculty of Mathematics, University of Belgrade, Serbia

Publications

- 1 **Puzović, N. & Dutheil, J. Y. (2023).** When is gene expression noise advantageous? bioRxiv Preprint.
<https://doi.org/10.1101/2023.12.04.569843>
- 2 **Puzović, N., Madaan, T. & Dutheil, J. Y. (2023).** Being noisy in a crowd: Differential selective pressure on gene expression noise in model gene regulatory networks. PLOS Computational Biology.
<https://doi.org/10.1101/2022.08.01.502352>
- 3 Nisioti, E., Clark, C., Kunal Das, K., Ekkehard, E., Friedenberg, N. A., Gates, E., Lambros, M., Lazurko, A., **Puzović, N. & Salas, I. (2023).** Resilience—towards an interdisciplinary definition using information theory. Frontiers in Complex Systems.
<https://doi.org/10.3389/fcpxs.2023.1236406>
- 4 V. Barroso, G., **Puzović, N. & Dutheil, J. Y. (2019).** Inference of recombination maps from a single pair of genomes and its application to ancient samples. PLOS Genetics, 15(11), 1–21.
<https://doi.org/10.1371/journal.pgen.1008449>
- 5 Barroso, G. V., **Puzovic, N. & Dutheil, J. Y. (2018).** The evolution of gene-specific transcriptional noise is driven by selection at the pathway level. Genetics, 208(1), 173–189.
<https://doi.org/10.1534/genetics.117.300467>

Research Experience

2020 – 2023 **Molecular Systems Evolution Research Group**, PhD researcher
Department of Theoretical Biology, Max Planck Institute for Evolutionary Biology, Plön

2019 **Genomic Microbiology Group**, PhD rotation
Institute of General Microbiology, Kiel University, Kiel
Stochastic Evolutionary Dynamics Research Group, PhD rotation
Department of Evolutionary Theory, Max Planck Institute for Evolutionary Biology, Plön
Molecular Systems Evolution Research Group, Master's thesis project
Department of Evolutionary Genetics, Max Planck Institute for Evolutionary Biology, Plön

2018 – 2019 **Laboratoire Matière et Systèmes Complexes (Laboratory for Matter and Complex Systems)**, Internship
UMR 7057 CNRS, Université Paris 7 Diderot, Université Sorbonne Paris Cité

2018 **Tautz Research Group**, Internship
Department of Evolutionary Genetics, Max Planck Institute for Evolutionary Biology, Plön

2017 – 2018 **Molecular Systems Evolution Research Group**, Research Assistant
Department of Evolutionary Genetics, Max Planck Institute for Evolutionary Biology, Plön

2015, 2016 **Molecular Systems Evolution Research Group**, Internship
Department of Evolutionary Genetics, Max Planck Institute for Evolutionary Biology, Plön

Awards and Honors

2023	Magna cum laude honors for the PhD dissertation , graded 1.0/1.0 (scale 1.0-4.0, best 1.0), awarded by Christian-Albrechts-Universität zu Kiel, Germany
2019	International Max Planck Research School for Evolutionary biology PhD grant , granted by the Max Planck Society and the Max Planck Institute for Evolutionary Biology
2018	ERASMUS+ Internship Scholarship , granted by ERASMUS+ of European Union
2010, 2011	Fellowship of the City of Belgrade , granted by the City Administration of Belgrade

Conferences (selected)

2023	Society for Molecular Biology & Evolution Annual Meeting (SMBE) , oral presentation (see talk recording) Ferrara, Italy, 23-27 Jul 2023
2022	55th annual Population Genetics Group Meeting , oral presentation (see talk recording) Norwich, UK, 05-07 Jan 2022
2019	Society for Molecular Biology & Evolution Annual Meeting (SMBE) , oral presentation Manchester, UK, 21-15 Jul 2019
2022	21st International Conference on Systems Biology , poster presentation (see poster) Berlin, Germany, 08-12 Oct 2022
	Evolutionary Systems Biology , virtual poster presentation Wellcome Genome Campus, UK, 09-11 Feb 2022
2021	Society for Molecular Biology & Evolution Annual Meeting (SMBE) , virtual poster presentation Society for Molecular Biology & Evolution, 03-08 Jul 2021
	CSHL Probabilistic Modeling in Genomics , virtual poster presentation Cold Spring Harbor Laboratory, New York, USA, 14-16 Apr 2021
	CSHL Network Biology Meeting , virtual poster presentation Cold Spring Harbor Laboratory, New York, USA, 16-19 Mar 2021
2020	Interdisciplinary Approach to Molecular Evolution , virtual poster presentation Approche Interdisciplinaire de l'Evolution Moléculaire (AIEM), CNRS, France, 15-17 Dec 2020

Press

1	Being noisy in a crowd: How gene interactions shape the evolution of cell-to-cell variation. Max Planck Society Press Release (20. April 2023) https://www.evolbio.mpg.de/3672888/being-noisy-in-a-crowd?c=15503
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Skills

Programming	C++, R, MATLAB, Python, Linux, Bash, git, high performance computing (SLURM)
Data analysis	descriptive and inferential statistics, generalized linear models, mixed-effects linear models, network analysis, dimensionality reduction, Monte Carlo simulations, data visualization
Office	Latex, MS Office, Libre Office, Inkscape
Spoken Languages	English (C2), German (B1), Serbian-Croatian-Bosnian-Montenegrin (native)
Social	teamwork, adaptability, problem-solving, effective communication and presentation skills

Miscellaneous

Summer schools	Santa Fe Institute Complexity Interactive 2021 (3 week course on complexity science)
Supervision experience	supervised two undergraduate internships and one PhD rotation
Community service	PhD student representative 2020-2021
Reviewer for journals	<i>Bioinformatics</i> , <i>PeerJ</i>
Event organizing	organizer of Aquavit 2021, IMPRS Retreat 2021
Hobbies	reading, playing with my pet rats, cooking for my loved ones