

Anna Górska

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Degrees

Feb 2019 **Ph.D. degree with Summa cum laude in Bioinformatics**, *Center for Bioinformatics, Faculty of Science, University of Tübingen, Germany.*

Nov 2013 **M.Sc. degree with Very Good in Macro-field of Study, Bioinformatics and Systems Biology**, *Faculty of Mathematics, Informatics and Mechanics, University of Warsaw, Poland.*

Sep 2011 **B.Sc. degree in Macro-field of Study, Bioinformatics and Systems Biology**, *Faculty of Mathematics, Informatics and Mechanics, University of Warsaw, Poland.*

Work experience

Apr 2019 **Postdoctoral researcher in Infectious Diseases, ValueDX project in group of Prof. Evelina Tacconelli**, *University of Verona, Italy.*

Sep 2013 - Mar 2019 **Ph.D. student in Algorithms for Bioinformatics group supervised by Prof. Daniel Huson**, *Center for Bioinformatics Tuebingen.*

Sep 2013 - Jan 2019 **Ph.D. program International Max Planck Research School From Molecules to Organisms**, *Max Planck Institute for Developmental Biology and University of Tübingen, Germany.*

14 Mar - 20 Apr 2016 **Internship in Prof. Mihai Pop's group**, *Center for Bioinformatics and Computational Biology, University of Maryland, USA.*

Jul – Sep 2012 **Internship in Prof. Andrew J. McCammon's group**, *University of California San Diego, USA, (mccammon.ucsd.edu).*

Jun 2011 - Sep 2013 **Graduate student fellowship in the TEAM project, co-founded by The Foundation for Polish Science at Biomolecular Machines Laboratory, supervised by Prof. Joanna Trylska**, *Centre of New Technologies "Ochota", University of Warsaw, Poland.*

2009 - 2010 **Internship in Prof. Janusz Bujnicki's group at Laboratory of Bioinformatics and Protein Engineering**, *International Institute of Molecular and Cell Biology, Warsaw, Participated in a project concerning RNA structure modeling.*

Main conferences and workshops

15 – 17 Jan 2018 **Asia Pacific Bioinformatics Conference**, *Oral presentation about Phageome project, Yokohama, Japan.*

12 – 15 Sep 2016 **German conference in Bioinformatics**, *Oral presentation about Tübiom project, Berlin, Germany.*

18 – 20 May 2016 **Congress: Personalised Medicine - Data - Diagnosis - Decisions**, *Best poster award for SATURN machine learning project, Tübingen, Germany.*

22 – 27 Nov 2015 **Biological Data Visualization Workshop**, *Leuven, Belgium.*

25 - 28 Apr 2015 **European Congress of Clinical Microbiology and Infectious Disease**, *Oral presentation about SATURN machine learning project, Copenhagen, Denmark.*

Main publications

2019 Tacconelli, E., Górska A., Angelis, G., Lammens, C., Restuccia, G., Huson, D. H., ... Kazma, M. Estimating the Association between Antibiotic Exposure and Colonisation with Antibiotic-resistant Bacteria using Machine-learning Methods, *Journal of Antimicrobial Chemotherapy*.

2019 Arumugam K., Bağcı, C., Bessarab, I., Beier, S., Buchfink, B., Górska, A., Qiu, G., Huson, D. H., Williams R., Annotated bacterial chromosomes from frame-shift-corrected long read metagenomic data, *Microbiome*, 7 (2019).

2018 Górska, A., Peter, S., Willmann, M., Autenrieth, I., Schlaberg, R., Huson, D.H., 2018. Dynamics of the human gut phageome during antibiotics treatment., *Comput. Biol. Chem.*.

2016 Huson D., Beier S., Flade I., Górska A., El-Hadidi M., Mitra S., and others, MEGAN Community Edition - Interactive Exploration and Analysis of Large-Scale Microbiome Sequencing Data, *PLoS Comput Biol*, 12 (2016), 4–12.

2016 Górska A., Markowska-Zgrajek A., Równicki M., Trylska J. Scanning of 16S ribosomal RNA for peptide nucleic acid and targets, *J Phys Chem B*. (2016).

2015 Górska A., Jasiński M., and Trylska J., MINT: Software to Identify Motifs and Short-Range Interactions in Trajectories of Nucleic Acids, *NAR*, 43 (2015).

Main projects

ValueDX: MI2-funded project whose focus is the value of diagnostics to combat antimicrobial resistance (AMR) by optimising antibiotic use. .

Bloomy: developing ML tools to diagnose sepsis, and reduce antibiotic use..

Phageome and its role in antibiotics resistance, Collaboratos: PD. Dr. med. Silke Peter, Prof. Dr. med. Matthias Willmann Universitätsklinikum Tübingen.

Tübiom community gut microbiome project, Presented in GCB 2016.

Long reads and metagenomics assembly analysis in MEGAN..

Impact of antibiotics on a probability of MRSA/ESBL acquisition: Data mining model for SATURN project, Collaborator: Prof. Dr. med. Evelina Tacconelli, Universitätsklinikum Tübingen.

Assembly and comparison of genomes of the hospital-acquired MRSA strains: continuation of the SATURN project, Collaborator: Prof. Dr. med. Surbhi Malhotra-Kumar, University of Antwerp.

Phase the turtle! Haplotype phasing of Diamondback terrapin genome, Collaborators: Professors Mihai Pop, Michael Cummings, Steven Mount, Center for Bioinformatics and Computational Biology, University of Maryland.

Inhibition of bacterial translation by Peptide Nucleic Acid oligomers targeting the ribosomal RNA, University of Warsaw.

Webservers

- 2018 **AskSaturn**, *asksaturn.informatik.uni-tuebingen.de*.
- 2016 **RiboScanner**, *riboscanner.cent.uw.edu.pl*.
- 2015 **MINT**, *mint.cent.uw.edu.pl*.

Teaching

- 2017 **Bioinformatics pro-seminar.**
- 2017, 2018 **Vorkurs Informatics für Biologie.**
- 2016, 2017 **Visualization of Biological Data.**
- 2016 **Programming Projects in Python and Java.**
- 2014, 2016 **Bioinformatics I.**
- 2015 **Advanced Java for Bioinformatics.**
Supervising bachelor students.