

Dr. Anela Tosevska

Experience

- 01.2021-present **Senior Scientist in Bioinformatics**, *Division of Rheumatology*, Medical University of Vienna, Vienna, Austria.
* Analysis of NGS data
* Lecturer: Introduction to Bioinformatics for Immunology, Clinical and basic research in rheumatology
- 08.2020-12.2020 **Scientist - part time**, *Institute for Digital Health and Patient Safety*, Ludwig Boltzmann Institute, Vienna, Austria.
* Bibliometric analyses
* Content creation for the DHPS Platform <https://digitalpatientsafety.com>
- 11.2016-12.2020 **Postdoctoral Researcher**, *Matteo Pellegrini's lab*, Department of Molecular, Cell, and Developmental Biology, University of California Los Angeles, USA.
* Bioinformatics and biostatistics analyses on 15+ projects
* Methyloomics and transcriptomics in disease and aging, cell-free DNA and RNA
- since 07.2019: NGS analyst and consultant, QCBio Cellaboratory at UCLA
- since 07.2019: Instructor, QCBio Cellaboratory at UCLA; Design and teaching quarterly workshop on DNA methylation analysis
- 02.2012-03.2016 **Scientific Assistant**, *Research Platform Active Ageing*, University of Vienna, Austria.
* Characterization of the role of bilirubin on aging and telomere length
- 04.2016-08.2016: Visiting Graduate Researcher in Matteo Pellegrini's lab at UCLA; Project: Comprehensive NGS analysis and integration of high throughput data in ageing and disease
- 03.2014-11.2015: Lecturer in Practical course in human nutrition I and II at the Department of Nutritional Sciences, University of Vienna
- 04.2013-05.2013: Visiting Researcher in Michael Fenech's lab at CSIRO, Australia; Project: Techniques for measurement of telomere length
- 04.2011-10.2011 **Scientific Personnel**, *Andrea Barta's lab*, Max F. Perutz Laboratories, Department of Medical Biochemistry, Medical University of Vienna, Austria.
*Characterisation of CYP59 protein in Arabidopsis Thaliana
- 09.2010-01.2011 **Intern**, Faculty of Pharmacy, Ss. Cyril and Methodius University, Skopje, Macedonia.
*Probiotics formulation and bioavailability

Education

- 03.2012-09.2016 **PhD studies in Natural Sciences, with distinction**, *Faculty of Life Sciences, University of Vienna, Austria*.
PhD thesis: Telomere length and bilirubin metabolism in ageing and disease.
Supervisors: Prof. Dr. Karl-Heinz Wagner, Prof. Dr. Verena Dirsch.
- 10.2005-05.2010 **Integrated Bachelor and Master (Diploma equivalent) studies in Pharmaceutical Sciences, with highest distinction**, *Faculty of Pharmacy, Ss. Cyril and Methodius University, Skopje, Macedonia*.

Skills

Project-related skills	Project management, Scientific writing, Clinical study management, Clinical and NGS data analysis, Machine Learning, Mentoring.
Computer skills	Unix, R, HPC, Python, LaTeX.
Laboratory skills	DNA/RNA, qPCR, Sequencing Libraries preparation and QC, Cell culture screens, HPLC, Blood preparation, ELISA, Flow Cytometry, Microscopy.
Languages	Macedonian, English, German, Serbo-Croatian, Spanish.

Volunteering and professional activities

- 06.2019 **Organizer**, *Inaugural Los Angeles Postdoctoral Research Symposium, University of California Los Angeles, USA.*
- 03.2019 **UCLA Grad Slam judge**, *Graduate division at the University of California Los Angeles, USA.*
- 01.2019-06.2019 **Vice Chair of Advocacy and Campus Relations**, *PDA-Postdoctoral association at the University of California Los Angeles, USA.*
- 12.2017 **Undergraduate Research Fellow Program Review Committee member**, *University of California Los Angeles, USA.*
- 07.2015 **Volunteer organizer**, *12th Symposium of the International Society of Exercise and Immunology (ISEI): Cells Meet Function in Exercise Immunology, Vienna, Austria.*
- 12.2013 **Volunteer organizer**, *TEDxVienna UNLIMITED, Vienna, Austria.*
- 12.2009-08.2010 **Main organizer**, *Academic summer course: Traditional food and drinks from the land of the sun, Board of European students of technology, Skopje, Macedonia.*

Scholarships and Awards

- **Collaboratory Fellowship Award** from the Institute for Quantitative and Computational Biosciences, University of California Los Angeles, 2019
- **Marshall Plan Fellowship** for academic exchange between Austria and the USA, 2016
- **Bronze Best Presentation Award**, seminar Cell Signalling 2013 contest.
- **Max F. Perutz Laboratories PhD Studentship**, 2011.
- **Foundation "Trajce Mukaetov" Award** for the best student of the generation in Pharmacy, 2010.
- **DAAD Group Study Trip Scholarship** (Clinical Pharmacy), 10/2010.
- **Foundation "Trajce Mukaetov" Scholarship** for Excellent Students in Pharmacy 2007-2010.

Publications

- Full publication list can be found on <https://orcid.org/0000-0002-0892-7068>

Patents

- Tosevska, Anela, et al. "Methods concerning ongoing treatment for cancer." U.S. Patent Application No. 17/609,985.

Selected Talks and Posters

- Data4Omics Symposium, Tulln, Austria, Jun 1, 2023
Talk: Cytokine-derived transcriptomic signatures, cellular crosstalk and synovial pathotypes in rheumatoid arthritis
- Bruins-In-Genomics (B.I.G.) Summer Undergraduate Research Program Lunch talk series, Los Angeles, USA, Jul 5, 2019
Talk: Circulating cell-free nucleic acid sequencing for disease diagnostics and monitoring
- EACR-ESMO Joint Conference on Liquid Biopsies, Bergamo, Italy, May 15-17, 2019
Poster: Using circulating plasma cell free RNA as a diagnostic biomarker for anti-cancer treatment effectiveness
- MCDB research conference, Lake Arrowhead, CA, USA, Nov 30 - Dec 2, 2018
Talk: Distinct patterns of DNA methylation and gene expression in hyperbilirubinemia
- International Conference on Systems Biology of Human Disease (SBHD), Los Angeles, CA, USA, Jun 4 - Jun 6, 2018
Poster: Analysis of cell-free DNA for biomarkers of Preeclampsia and Gestational Diabetes
- 33rd TBI Winterseminar on Computational Biology, Computational Mathematics, Cheminformatics, Theoretical Biology, Bioinformatics, Biological Networks, Lake Bled, Slovenia, Feb 11 - Feb 18, 2018
Talk: Age-associated DNA methylation drift
- MCDB research conference, Lake Arrowhead, CA, USA, Dec 1 - Dec 3, 2017
Talk: Delayed age-related DNA methylation drift in hyperbilirubinemia
- ASHG Annual meeting, Orlando, FL, USA, Oct 17 - Oct 21, 2017
Poster: Exploratory transcriptome and methylome analysis in Gilbert's syndrome
- Don Ostrow Trieste Yellow Retreat, Trieste, Italy, Sep 6 - Sep 7, 2017
Talk: Bilirubin decreases macrophage cholesterol efflux and ABCA1 protein expression
- OEGE Annual meeting, Vienna, Austria, Nov 24 - Nov 25, 2016
Poster: Effects of exercise and nutrition on gene expression in the skeletal muscle of older women
- 21st APHAR Symposium, Graz, Austria, Sep 16 - Sep 18, 2015
Poster: Effect of plasma from high- and low- serum unconjugated bilirubin (UCB) individuals on cholesterol efflux
- Don Ostrow Trieste Yellow Retreat, Trieste, Italy, Sep 2 - Sep 3, 2015
Talk: Telomere attrition in Gilbert's syndrome: a link to longevity and cardiovascular health
- CSHL Conference on Telomeres and Telomerase, Cold Spring Harbor, NY, USA, Apr 28 - May 2, 2015
Poster: Telomere length and bilirubin in gender dimorphism: an unexpected collaboration
- 30th Ernst Klenk Symposium in Molecular Medicine, DNA Damage Response and Repair Mechanisms in Aging and Disease, Cologne, Germany, Sept. 21 - 23, 2014
Poster: Oxidative DNA damage and repair capacity in a primary cell model of Diabetes Mellitus
- NIH, NIA, Laboratory of molecular gerontology, Baltimore, MA, USA, Aug 5, 2014
Talk: Oxidative stress and telomere stability in aging and disease.
- EMBO Conference on Telomeres, Telomerase and Disease, Brussels, Belgium, Apr 30 - May 4, 2014
Poster: Effects of Bilirubin on telomere integrity and dynamics

Hackathons

- Citizen Science meets Societal Challenges Hackathon; Topic: Flaschenpost, connecting isolated individuals through technology; Vienna, Austria, September 15 - 16, 2020 - 2nd place.
- QCBio Python Hackathon; Topic: Automated submission of analyses to online servers; Institute for Quantitative and Computational Biosciences, UCLA, Los Angeles, CA, USA, December 08, 2017.
- NCBI BioFrontiers Hackathon; Topic: Creation of a Python Package That Provides Utilities to Summarize RNA-Seq Experiments; UC Boulder, Boulder, CO, USA, May 22 - 24, 2017.