

## Personal Data

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- **Date of Birth:** 30.05.1994
- **Place of Birth:** Togliatti, Russia

## Education

- **2018 – 2023:** PhD in Medical Neuroscience, Medical University of Vienna – Vienna, Austria
- **2013 – 2018:** Specialist of Bioengineering and Bioinformatics, Immanuel Kant Baltic Federal University – Kaliningrad, Russia

## Articles

- Hevesi Z., Bakker J., [Tretiakov E. O.](#), et al. "Transient expression of the neuropeptide galanin modulates peripheral-to-central connectivity in the somatosensory thalamus during whisker development in mice." *Nature Communication* (2024);15(1):2762. doi:10.1038/s41467-024-47054-5
- Mikhailova A., [Tretiakov E. O.](#), Shamanskiy V., et al., eds. Deamination of adenine to guanine is a signature of oxidative damage in mitochondrial DNA." *European Journal Of Human Genetics*, 31, 648 (2023)
- Shamanskiy, V., Mikhailova, A. A., [Tretiakov, E. O.\\*](#) et al. "Secondary structure of the human mitochondrial genome affects formation of deletions." *BMC Biology*, 21, 103 (2023), doi:10.1186/s12915-023-01606-1
- Zupančič, M., [Tretiakov, E.](#), Máté, Z., Erdélyi, F., Szabó, G., Clotman, F., Hökfelt, T., Harkany, T. & Keimpema, E. "Brain-wide mapping of efferent projections of glutamatergic (Onecut3+) neurons in the lateral mouse hypothalamus." *Acta Physiologica (Oxford, England)* 238(3), e13973 (2023)
- Mikhaylova A. G., Mikhailova A. A., Ushakova K., [Tretiakov E. O.\\*](#) et al. "A mitochondrial-specific mutational signature of aging: increased rate of A > G substitutions on the heavy strand." *Nucleic Acids Research*, V50/I18, P10264–10277 (14 October 2022)
- Ahmed, M. et al. "A hypothalamic pathway for Augmentor  $\alpha$ -controlled body weight regulation." *Proceedings of the National Academy of Sciences* 119, e2200476119 (2022)
- Shamanskiy, V. et al. "Risk of mitochondrial deletions is affected by the global secondary structure of the mitochondrial genome." *European Journal Of Human Genetics*, 30, 438–439 (2022)
- Mikhailova, A. G. et al. "Mitochondrial mutational spectrum in human cancers is sensitive to cellular hypoxia." *European Journal Of Human Genetics*, 30, 413-414 (2022).
- Orthofer M. and Valsesia A. et al. "Identification of ALK in thinness." *Cell* (2020), doi:10.1016/j.cell.2020.04.034
- Romanov R. A. and [Tretiakov E. O.\\*](#) et al. "Molecular design of hypothalamus development." *Nature* (2020)
- Kochynska S., Krassnitzer M., Malenczyk K., et al. "Life-long impairment of glucose homeostasis upon prenatal exposure to psychostimulants." *The EMBO journal*(2020)
- "A global human mitochondrial tree as a resource for population and evolutionary studies." in *Bioinformatics of Genome Regulation and Structure/Systems Biology (Institute of Cytology and Genetics Siberian branch of the Russian Academy of Science, Novosibirsk State University, 2020)*. doi:10.18699/BGRS/SB-2020-409
- "The genetic component of the human embryonic selection: uncovering of the strength and main targets." in *Bioinformatics of Genome Regulation and Structure/Systems Biology (Institute of Cytology and Genetics Siberian branch of the Russian Academy of Science, Novosibirsk State University, 2020)*. doi:10.18699/BGRS/SB-2020-149

- "Heat shock protein 90 as a long-term buffer of mutational burden." in *Bioinformatics of Genome Regulation and Structure/Systems Biology* (Institute of Cytology and Genetics Siberian branch of the Russian Academy of Science, Novosibirsk State University, 2020). doi:10.18699/BGRS/SB-2020-163
- Alpár Alán, et al. "Hypothalamic CNTF volume transmission shapes cortical noradrenergic excitability upon acute stress." *The EMBO journal*(2018)

### Preprints

- Harkany, T., Tretiakov, E. O.\*, Varela, L., Jarc, J., Rebernik, P., Newbold, S., Keimpema, E., Verkhatsky, A., Horvath, T., & Romanov, R. "Molecularly stratified hypothalamic astrocytes are cellular foci for obesity." *Research square* (2024), doi: 10.21203/rs.3.rs-3748581/v1
- Cronin, S. J. F. et al. "Crucial neuroprotective roles of the metabolite BH4 in dopaminergic neurons." *BioRxiv* (2023), doi:10.1101/2023.05.08.539795
- Kuzmin, A. et al. "Improving genome quality through artificial truncating purifying selection using heat shock: case of carps." *BioRxiv* (2023), doi:10.1101/2023.01.20.524958
- Timonina V, Tretiakov E. O.\*, Goncharov A, Gunbin K, Fellay J & Popadin K. "Buffering role of HSP shapes the molecular evolution of mammalian and human genomes at short and long-term scales." *BioRxiv* (2022), doi:10.1101/2022.11.11.516130
- Mikhailova A. G. et al. "A mitochondrial mutational signature of temperature and longevity in ectothermic and endothermic vertebrates." *BioRxiv* (2020), doi:10.1101/2020.07.25.221184

### Honours, Scholarships, Prizes, and Awards

- **Dec 2023:** The International College of Neuropsychopharmacology (CINP) Research Fellowship
- **Jul 2021:** Medical Neuroscience Cluster Seed Grant; project: Genetic determinants of treatment-resistant depression. Supervisors: Prof. Dr. Rupert Lanzenberger, Prof. Dr. Siegfried Kasper, Prof. Dr. Tibor Harkany and Mr. Evgenii O. Tretiakov
- **Apr 2021:** Researcher of the month MedUni Wien
- **Oct 2018:** Austrian Science Fund (FWF)/MedUni Wien grant: DOC 33-B27
- **Oct 2017:** Russian Academic Excellence Project 5-100 group research grant. Supervisor: Roman Romanov.
- **Jan 2017:** The highest state academic scholarship in nomination – science.
- **Sep 2016:** Russian Academic Excellence Project 5-100 individual research grant.
- **Jul 2016:** Travel and accommodation scholarship for Medical Bioinformatics summer school.
- **May 2016:** Individual research grant for NGS 2016 from Genotech company.