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Область научных интересов	биоинформатика
Премии и награды (при наличии)	
Избранные публикации	<ol style="list-style-type: none"> 1. Between Lake Baikal and the Baltic Sea: genomic history of the gateway to Europe Petr Triska, Nikolay Chekanov, Vadim Stepanov, Elza K. Khusnutdinova, Ganesh Prasad Arun Kumar, Vita Akhmetova, Konstantin Babalyan, Eugenia Boulygina, Vladimir Kharkov, Marina Gubina, Irina Khidiyatova, Irina Khitrinskaya, Ekaterina E. Khrameeva, Rita Khusainova, Natalia Konovalova, Sergey Litvinov, Andrey Marusin, Alexandr M. Mazur, Valery Puzyrev, Dinara Ivanoshchuk, Maria Spiridonova, Anton Teslyuk, Svetlana Tsygankova, Martin Triska, Natalya Trofimova, Edward Vajda, Oleg Balanovsky, Ancha Baranova, Konstantin Skryabin, Tatiana V. Tatarinova, Egor Prokhortchouk, BMC Genetics 18 (110), http://rdcu.be/DC0g, 2017 2. Nucleotide patterns aiding in prediction of eukaryotic promoters, M Triska, V Solovyev, A Baranova, A Kel, T Tatarinova, PLOS ONE 2017, 10.1371/journal.pone.0187243 3. Clinical utility of the low-density Infinium QC genotyping Array in a genomics-based diagnostics laboratory, P Ponomarenko, A Ryutov, DT Maglinte, A Baranova, TV Tatarinova, X. Gai, BMC Medical Genomics 2017, 10 (57) 4. Evidence-based gene models for structural and functional annotations of the oil palm genome, CK Lim, TV Tatarinova, R Rosli, N Amiruddin, N Azizi, MA Ab Halim, et al. Biology direct 2017, 12 (21),

10.1186/s13062-017-0191-4

5. Seqping: Gene Prediction Pipeline for Plant Genomes using Self-Trained Gene Models and Transcriptomic Data, KL Chan, R Rosli, T Tatarinova, M Hogan, M Firdaus-Raih, ETL Low, BMC Bioinformatics 2017, 18:1426, DOI: 10.1186/s12859-016-1426-6, <https://bmcbioinformatics.biomedcentral.com/articles/10.1186/s12859-016-1426-6>
6. Tatiana V. Tatarinova, Evgeny Chekalin, Yuri Nikolsky, Sergey Bruskin, Dmitry Chebotarov, Kenneth L. McNally & Nickolai Alexandrov, "Nucleotide diversity analysis highlights functionally important genomic regions" Scientific Reports 6, Article number: 35730 (2016) doi:10.1038/srep35730 24 October 2016, <http://www.nature.com/articles/srep35730>
7. L. Li, P. Sanchez.... T. Tatarinova...T. Triche, "Sensitive and Comprehensive Method to Detect Mutations in the RB1 Gene Improves Care for Retinoblastoma Patients and Their Families", Journal of molecular diagnostics, 2016 <http://www.ncbi.nlm.nih.gov/pubmed/27155049>
8. Irina Morozova, Pavel Flegontov, Alexander Mikheyev, Hosseinali Asgharian, Petr Ponomarenko, Sergey Bruskin, Vladimir Klyuchnikov, GaneshPrasad ArunKumar, Egor Prokhortchouk, Yuriy Gankin, Evgeny Rogaev, Yuri Nikolsky, Eran Elhaik and Tatiana V. Tatarinova, "Toward high-resolution population genomics using archaeological samples", DNA Res (2016) 23 (4): 295-310, doi: 10.1093/dnares/dsw029 <http://dnaresearch.oxfordjournals.org/content/23/4/295> (most read article during July-September 2016)
9. A. Zolotarenko, E. Chekalin, A. Mesentsev, L. Kiseleva, E. Gribanova, M. Rohini, A. Baranova, T.V. Tatarinova, E. Pirusian, S. Bruskin, "Transcriptional regulatory networks of psoriasis", 2016, Journal of Molecular Medicine
10. Pavel Flegontov, Piya Changmai, Anastassiya Zidkova, Maria D. Logacheva, Olga Flegontova, Mikhail S. Gelfand, Evgeny S. Gerasimov, Ekaterina E. Khrameeva, Olga P. Konovalova, Tatiana Neretina, Yuri V. Nikolsky, George Starostin, Vita V. Stepanova, Igor V. Travinsky, Martin Tříska, Petr Tříska, Tatiana V. Tatarinova "Genomic study of the Ket: a Paleo-Eskimo-related ethnic group with significant ancient North Eurasian ancestry" Scientific Reports – Nature Publishing Group, 2016, www.nature.com/articles/srep20768

11. T. Tatarinova, I. Lysnyansky, Y. Nikolsky, A. Bolshoy, "The mysterious orphans of *Mycoplasmataceae*", *Biol. Direct.* 2016 Jan 8;11(1):2. doi: 10.1186/s13062-015-0104-3.
12. K. Kozlov, D. Chebotaryov, M. Hassan, M. Triska, P. Triska, P. Flegontov, and T. Tatarinova, Differential Evolution Approach to Detect Recent Admixture, *BMC Genomics* 2015, 16(Suppl 8):S9 doi:10.1186/1471-2164-16-S8-S9
13. G. ArunKumar, T. Tatarinova, E. Elhaik, A. Syama, V. Arun, V. Kavitha, R. Spencer Wells, R. Pitchappan, The Genographic Consortium, Genome-wide signatures of male mediated migrations shaping the Indian gene pool, *Journal of Human Genetics* (2015) 60, 493–499; doi:10.1038/jhg.2015.51
14. E. Elhaik, T. Tatarinova, A. Klyosov, D. Graur, "Reply to Mendez et al: the 'extremely ancient' chromosome that still isn't", *European Journal of Human Genetics*, 15 October 2014; doi: 10.1038/ejhg.2014.227
15. T. V. Tatarinova, B. Salih, J. D. Bard, I. Cohen, A. Bolshoy, "Lengths of orthologous prokaryotic proteins are affected by evolutionary factors", *BioMed Research International*, 2 November 2014
16. E. Elhaik, T. Tatarinova, D. Chebotaryov, and Genographic Consortium, "Geographic Population Structure (GPS) of worldwide human populations infers biogeographical origin down to home village", *Nature Communications*, 5, 30 April 2014.
17. A. Bolshoy, B. Saleh, I. Cohen, T. Tatarinova, "Ranking of prokaryotic genomes based on maximization of sortedness of gene lengths", *Journal of Data Mining in Genomics & Proteomics*, 5 (1), 2014.
18. E. Elhaik, T. Tatarinova, A. Klyosov, D. Graur, "The 'Extremely Ancient' Chromosome that Isn't: A Forensic Bioinformatics Investigation of Albert Perry's X-degenerate Portion of the Y Chromosomes" *European Journal of Human Genetics*, January, 2014.
19. E. Elhaik, M. Pellegrini, T. Tatarinova, "Gene expression and nucleotide composition are associated with genic methylation level in *Oryza sativa*" *BMC Bioinformatics*, January, 2014.
20. T. Tatarinova, A. Kryshchenko, M. Triska, M. Hassan, D. Murphy, M. Neely, A. Schumitzky, "NPEST: a novel method and a database for TSS prediction", *Quantitative Biology*, 2014, 10.1007/s40484-013-0022-2

21. T. Tatarinova, E. Elhaik, M. Pellegrini, Cross-species analysis of genic GC₃ content and DNA methylation patterns, *Genome Biology and Evolution*, 2013, 5 (8): 1443-1456.
22. M. Triska, D. Grocutt, J. Southern, D. Murphy, T. Tatarinova, *cisExpress*: Motif Detection in DNA Sequences, *Bioinformatics*, 2013, 29 (17): 2203-2205.
23. D. Sonkin, M. Hassan, D. Murphy, T. Tatarinova, "Tumor Suppressors Status in Cancer Cell Line Encyclopedia", *Molecular Oncology*, Volume 7, Issue 4, August 2013, Pages 791–798.
24. T. Tatarinova, M. Neely, J. Bartroff, M. van Guilder, W. Yamada, D. Bayard, R. Jelliffe, A. Chubatiuk and A. Schumitzky, "Two General Methods for Population Pharmacokinetic Modeling: Non-Parametric Adaptive Grid and Non-Parametric Bayesian", *Journal of Pharmacokinetics and Pharmacodynamics*, 2013 Apr;40(2):189-99. doi: 10.1007/s10928-013-9302-8. Epub 2013 Feb 13.
25. T. Ahmad, G. Sablok, T. Tatarinova, Q. Xu, W-W Guo, "Evaluation of Codon Biology in Citrus and *Poncirus trifoliata* Based on Genomic Features and Frame Corrected Expressed Sequence Tag", *DNA Res* (2013) 20 (2): 135-150. doi: 10.1093/dnares/dss039.
26. Bolshoy and T. Tatarinova, Methods of Combinatorial Optimization to Reveal Factors Affecting Gene Length, *Bioinformatics and Biology Insights* 6, 2012, 317-327.
27. N. de Vere, T. Rich, C. Ford, S. Trinder, Charlotte Long, C. Moore, D. Satterthwaite, H. Davies, J. Allainguillaume, S. Ronca, T. Tatarinova, H. Garbett, K. Walker, M. Wilkinson, "DNA Barcoding the Native Flowering Plants and Conifers of Wales", *PlosOne* 7(6), 2012/6/6
28. Á. L. Pérez-Quintero, T. Tatarinova, A. Conesa, J. Kuo, C. López, G. Sablok, "Mining of miRNAs and potential targets from gene oriented clusters of transcripts sequences of anti-malarial plant - *Artemisia annua*", *Biotechnology Letters*, Dec 9 2011.
29. V. Solovyev and T. Tatarinova, "Towards the integration of genomics, epidemiological and clinical data", *Genome Medicine* 2011, 3:48
30. Sablok, L.W. Sin, F. Rahman, T. Tatarinova, J.A. Harikrishna, Z. Luo (2011) Bioinformatics analysis of fruit specific expressed sequence tag (EST) libraries of *Diospyros kaki* Thunb. - View at the transcriptome at different developmental stages, *3Biotech*, Published

Online, April, 21,2011.

- 31.G. Sablok, A.L. Perez-Quintero, M. Hassan, T. Tatarinova, C. Lopez (2011) Artificial microRNAs (amiRNAs) engineering - On how microRNA-based silencing methods have affected current plant silencing research. *Biochemical and Biophysical Research Communications*, 2011 Mar 18; 406(3):315-9.
- 32.G. Sablok, K.C. Nayak, F. Vazquez, T. Tatarinova (2011) Synonymous codon usage, GC₃ and Evolutionary patterns across plastomes of three pooid model species - Emerging grass genome models for monocots. *Molecular Biotechnology*, 2011, Feb. 11
- 33.T. Tatarinova, N. Alexandrov, J. Bouck, K. Feldman (2010) GC₃ biology in corn, rice, sorghum and other grasses, *BMC Genomics* 2010, 11:308.
- 34.M. Troukhan, T. Tatarinova, J. Bouck, R. Flavell, N. Alexandrov (2009) Genome-wide discovery of cis-elements in promoter sequences using gene expression data, *OMICS: A Journal of Integrative Biology*, 2009, 13(2).
- 35.N. Alexandrov, V. Brover, S. Freidin, M. Troukhan, T. Tatarinova, H. Zhang, T. Swaller, Y.P. Lu, J. Bouck, R. Flavell, K. Feldmann (2009) Insights into Corn Genes Derived from Large-Scale cDNA Sequencing, *Plant Molecular Biology*, 2009, 69 (1-2).
- 36.T. Tatarinova, J. Bouck, A. Schumitzky (2008) Kullback-Leibler Markov Chain Monte Carlo - A New Algorithm for Finite Mixture Analysis and its Application to Gene Expression Data, *Journal of Bioinformatics and Computational Biology*, 2008, 6(4).
- 37.Alexandrov, N.N., Troukhan, M.E., Brover, V.V., Tatarinova, T., Flavell, R.B., Feldmann, K.A.; Features of Arabidopsis genes and genome discovered using full-length cDNAs, *Plant molecular biology*, 60(1), pp 69-85, 2006.
- 38.Tatarinova, T.; Schumitzky, A.; Multiple Collapse Clustering, *Proceedings of Fifth International Conference on Bioinformatics of Genome Regulation and Structure*, pp. 184-187, 2006
- 39.Schneeberger, R.G.; Zhang, K.; Tatarinova, T.; Troukhan, M.; Kwok, S.F.; Drais, J.; Klinger, K.; Orejudos, F.; Macy, K.; Bhakta, A.; Agrobacterium T-DNA integration in Arabidopsis is correlated with DNA sequence compositions that occur frequently in gene promoter regions, *Functional & integrative*

	<p><i>genomics</i>,5(4),240-253, 2005.</p> <p>40.Tatarinova, T.; Brover, V.; Troukhan, M.; Alexandrov, N.; Skew in CG content near the transcription start site in <i>Arabidopsis thaliana</i>, <i>Bioinformatics</i>,19, Suppl 1, i313-i314, 2003.</p> <p>41.Tatarinova, TV; Rashba, EI; Efros, AL; Continuum excitons in the fractional-quantum-Hall-effect regime: Steps in the filling-factor dependence of the energy, <i>Physical Review B</i>, 50(23), 17349, 1994.</p>
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Общий стаж работы, лет	20
Стаж работы по специальности, лет	20