CURRICULUM VITAE OF NIKOLAY OSKOLKOV

Nikolay Oskolkov, PhD, **Group Leader** (PI) at the Latvian Institute of Organic Synthesis (LIOS)

LIOS Targetwise: https://targetwise.osi.lv/

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Education and Career

1. 2025 – present, **Group Leader** of the Metabolic Research Group, Latvian Institute of Organic Synthesis (LIOS), TARGETWISE EU-funded project

2. 2016-2025, NBIS SciLifeLab, Lund University, Biology department, Sweden, **Senior Bioinformatician**

3. 2012-2016, Clinic Research Centre, Lund University Diabetes Centre, Department of Clinical Sciences, Sweden, **Associate Researcher**

4. 2010-2011, DTU Nanotech, Technical University of Denmark, Denmark, **Postdoctoral Fellow**

5. 2009-2010, Chemistry Department, University of North Carolina, USA, **Postdoctoral Fellow**

6. 2007-2009, Physical Chemistry Department, University of Lund, Sweden, **Postdoctoral Fellow**

7. 2004-2007, Lomonosov Moscow State University (MSU), Russia, and University of Ulm, Germany, **PhD in Theoretical Physics**

8. 1998-2004, Lomonosov Moscow State University (MSU), Russia, **Master of Sciences in Statistical Physics**

Achievements

50+ scientific articles (24% first author, 10% last author, and 10% corresponding author), h-index: 23, i10-index: 35, 3909 citations, 80+ oral and invited talks at scientific conferences

Google Scholar: https://scholar.google.ca/citations?user=0DnwWQIAAAAJ&hl=en

Funding and Grants

Diabetesfonden research grant (2016), Crafoord Foundation research grant (2016), Hjärt och Lungfonden research grant (2015), Sydvästra Skåne Diabetes Föreningen research grant (2015), Lindhes Advokatebyrå AB research grant (2015), Swedish Diabetes Society grant (2014)

Distinctions and Awards

Best talk award EAA2024 (2024), Helmholtz Zentrum Muenchen Award for Interdisciplinary Cooperation (2017), Young Investigator Award of European Diabetes Association (2015), Danish Diabetes Academy Award (2014), DAAD Leonard Euler Stipendium (2005), Garant grant (2004)

Professional skills

1. Computational approaches: mathematical statistics and machine learning
2. Programming languages: R, Python, Bash, C++
3. Languages: Russian (native), English, Swedish, German

Marital status

Married. Wife: Malin Zackrisson Oskolkova, PhD in Chemistry. Three children: Anton (16 y), Vera (14 y), and Alexander (10 y)

Teaching experience

Bioinformatics mentor for 7 PhD students, "Omics Integration" course leader, https://github.com/NBISweden/workshop_omics_integration, teaching scRNAseq, Advanced R, PopGen and Deep Learning NBIS courses

Research experience

1. Precision medicine, cell biology, microbiome, evolutionary research

2. Genomics, transcriptomics and epigenomics: array and sequencing data

3. Single cell Omics data analysis: scRNAseq, scBSseq, scATACseq

4. Multi-Omics analysis, data integration and systems biology

5. Genome-Wide Associations Studies (GWAS) and eQTL analysis

6. Sedimentary and environmental DNA metagenomic analysis

7. Ancient genomics, population genomics, metagenomics and proteomics

8. Microscopy imaging: deep learning cell detection and segmentation

9. Atomistic molecular dynamics computer simulation: GROMACS

Board participation

COMPUTE Lund University research school https://www.compute.lu.se/ steering group member, statistics help leader at Lund University https://www.biology.lu.se/internal/support-and-tools/statistics-help, opponent and examiner at >10 MSc and PhD defenses

Scientific blogging

1. "Mathematical statistics and machine learning for Life Sciences" at Towards Data Science: https://medium.com/tag/stats-ml-life-sciences

2. "Deep learning for Life Sciences" scientific blog at Medium / Towards Data Science: https://medium.com/tag/dl-for-life-sciences