

CURRICULUM VITAE OF NIKOLAY OSKOLKOV



Nikolay Oskolkov, PhD, **Group Leader** (PI) at the National Institute of Research and Innovation (NIRI)

NIRI Targetwise: <https://targetwise.osi.lv/>

ORCID: <https://orcid.org/0000-0001-5326-8893>

Personal homepage: <https://nikolay-oskolkov.com/>

Metabolic Research Group, National Institute of Research and Innovation (NIRI), Aizkraukles street 21, LV-1006, Riga, Latvia

Email: nikolay.oskolkov@niri.lv
Nikolay.Oskolkov@biol.lu.se

Education and Career

1. 2025 - present, **Group Leader** of the Metabolic Research Group, National Institute of Research and Innovation (NIRI), TARGETWISE
2. 2016-2025 NBIS SciLifeLab, Lund University, Biology department, Sweden, **Core Facility 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 Moscow State University, Russia, and University of Ulm, Germany, **PhD in Theoretical Physics**

Scientific merits

>60 **scientific articles** (24% first author, 10% last author, and 10% corresponding author), **h-index: 27**, i10-index: 38, 4345 citations, >80 oral and invited talks at scientific conferences

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

Funding and Grants

TARGETWISE EU scientific excellence grant (2025), 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

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

Supervision experience (leading Metabolic Research Group at NIRI)

1. Kristina Grausa, PhD student in the Metabolic Research Group
2. Daniel Rivas, PostDoc in the Metabolic Research Group
3. Mohammad Banabazi, PosDoc in the Metabolic Research Group

Group webpage: <https://nikolay-oskolkov.com/metabolic-research-group/>

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. Epidemiology: causal inference and Mendelian randomization

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 >20 MSc and PhD defenses

Scientific outreach

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>