

GeneCore Facility: Advanced Transcriptomics Analysis At Any Scale

Lukas Valihrach

Institute of Biotechnology of Czech Academy of Sciences

Vestec, Czech Republic

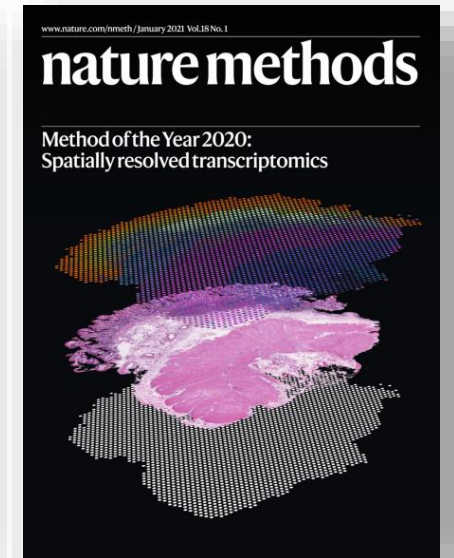
lukas.valihrach@ibt.cas.cz | www.ibt.cas.cz/genecore

Topics of Interest

- **HORIZON-HLTH-2026-01-DISEASE-11:**
Understanding sex/gender-specific mechanisms of CVD.
- **HORIZON-HLTH-2026-01-TOOL-03:**
Integrating New Approach Methodologies (NAMs) for biomedical research.
- **Open to other consortia** requiring advanced transcriptomics expertise.



Method of the
Year 2013:
Single-Cell
Transcriptomics



Method of the
Year 2020:
Spatial
Transcriptomics

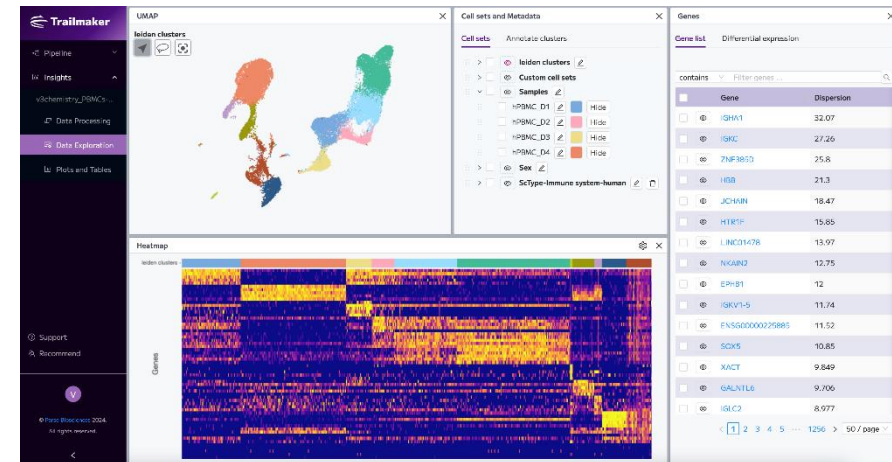
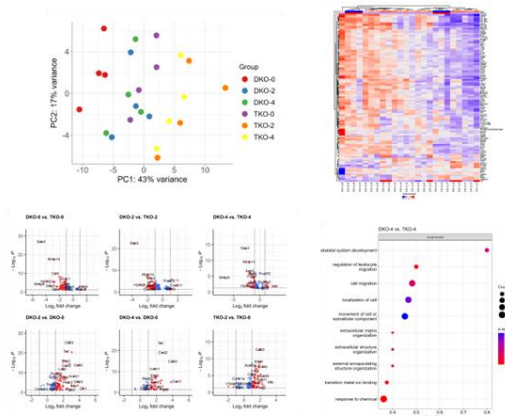
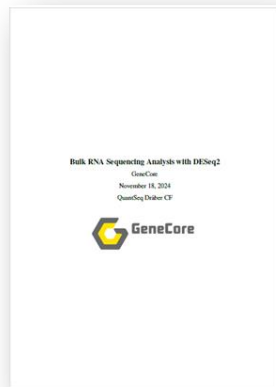
State-of-the-Art Transcriptomics Services

- **Single-Cell Experts:** From targeted plate-based (Smart-seq3xpress) to high-throughput (10x Genomics, Parse, ScaleBio).
- **Spatial Transcriptomics:** Sequencing-based platforms (Visium, STOmics) for tissue context.
- **High-Throughput Screening (NAMs focus):** Scalable in-vitro screening without RNA isolation (DRUG-seq workflows).
- **Challenging Samples:** Proven success with low-input, FFPE, and small RNA/biomarker discovery (RNA Fragmentomics).



Your Ideal Consortium Partner

- **Experience:** 18+ years as a core facility; 10+ years in transcriptomics.
- **End-to-End Service:** Experimental design -> QC -> Sequencing -> Bioinformatic Analysis.
- **Interactive Data:** We provide "point-and-click" visualization tools for biologists (not just data).
- **Cost-Effective Sequencing:** Access to the latest instruments.



Proven Track Record

- Experienced in supporting diverse biological applications:
 - Neurobiology, Cancer, Developmental Biology etc.
 - Disease modelling (Animals, Organoids)
 - Biomarkers
 - Benchmarking & QC tools
- EU Project Experience:
 - FP7 (Pre-analytical tools), EJPRD (Alexander Disease).



My Google
Scholar profile

Nucleic Acids
Research

nature
COMMUNICATIONS

Cell Reports

Clinical
Chemistry

Neuron

PNAS
Proceedings of the
National Academy of Sciences
of the United States of America

JCI
The Journal
of Clinical Investigation

Let's Collaborate

We offer: A holistic transcriptomic analysis partner for your consortium.

We look for: A consortium coordinator in CVD or NAMs research.

Contact: Lukas Valihrach

Email: lukas.valihrach@ibt.cas.cz

