

# Certificate

## Julia Hauenstein

has participated in the NBIS workshop **Omics integration and Systems Biology** held online during **8-10 February, 2023**.

The workshop consisted of 15 hours of lectures and practical sessions.  
This included the following topics:

- machine learning for Omics integration
- graphs and networks for Omics integration
- gene set and meta-analysis
- non-negative matrix factorization and similarity network fusion
- dimension reduction, UMAP and deep learning for Omics integration
- single cell Omics integration

Course Leader | **Nikolay Oskolkov, PhD**  
Bioinformatician  
NBIS SciLifeLab | Lund University

This is a certificate of participation. Participants are not evaluated.

**National Bioinformatics Infrastructure Sweden (NBIS)** is a distributed national research infrastructure supported by the Swedish Research Council, Science for Life Laboratory, Knut and Alice Wallenberg Foundation and all major Swedish universities in providing state-of-the-art bioinformatics to the Swedish life science research community.