

Introduction to Bioinformatics using NGS data

Martin Dahlö

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SciLifeLab, NBIS and NGI

SciLifeLab services

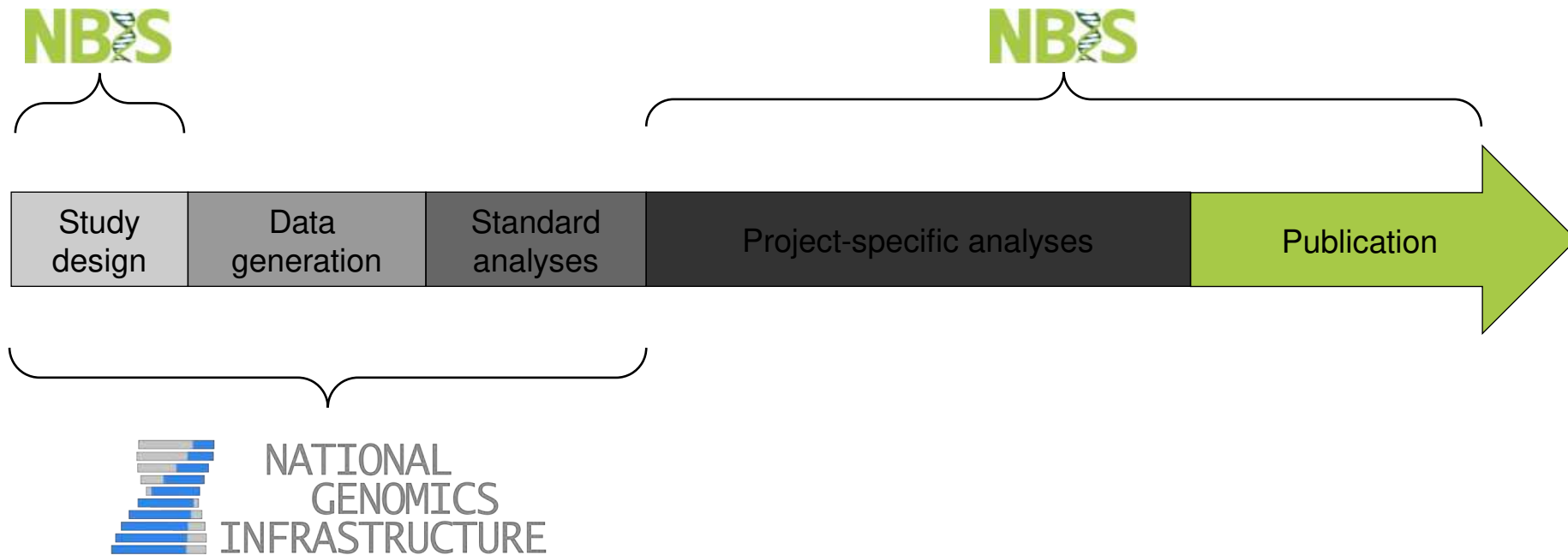
Genomics	→
Metabolomics	→
Spatial Omics	→
Proteomics	→
Single Cell Biology	→
Bioimaging And Molecular Structure	→
Chemical Biology And Genome Engineering	→
Drug Discovery	→
Diagnostics	→
Bioinformatics	→



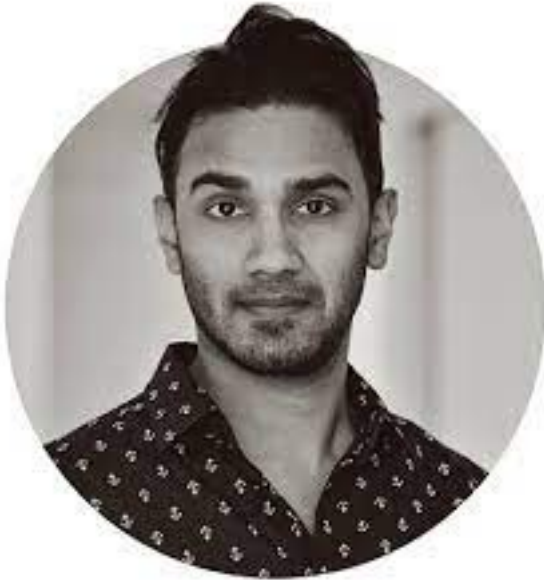
Staff at six different sites across Sweden with expertise in many different omics-related areas



Teachers on this workshop are from NBIS and NGI



Workshop organizers



Roy Francis



Malin Larsson



Martin Dahlö

NBIS Bioinformatic Support

- **Drop-in sessions** every week @ all 6 sites
 - Online (Zoom) Tuesdays at 14.00, for free
- Study design and project **consultation**
 - Three hours per project, for free
- Fee-for-service **support**
 - User fee 800 SEK per hour, however many hours you may need
 - No selection process, all project are welcome
- Long-term **support**
 - Selection process based on scientific peer-review
 - A total of 500 hours, for free
- **Partner Projects**
 - Full-cost model: utilize and pay for 50% of one NBIS FTE

NBIS Training

Some example NBIS courses

- Introduction to bioinformatics using NGS data
- Bulk and single-cell RNA-seq
- Python and R programming
- Tools for reproducible research
- Omics integration and systems biology
- Biostatistics and machine learning

Check out our training catalogue:

<https://uppsala.instructure.com/courses/48087/pages/nbis-training-catalogue>

**More information about NBIS on
Friday!**

Practical information

Lectures

- Live in zoom
- Please have camera on during lectures
- Have sound muted (except when asking questions)
- Tuesday 13:15 – 15:15: We will watch a pre-recorded video. Questions can be asked in the main zoom window at 15:15.

Labs

- Work in breakout rooms in zoom
- Work in pairs because it improves the learning
- New pair each day / module
- When you need help: Type “Need help in room xx” in this document:
- https://hackmd.io/KUSIRPLaRP2vvpyPC_QYyw
- Then a teacher will come to you room and help out

Open session on Friday afternoon

Opportunity to discuss your research projects

Discussion topic survey: <https://www.menti.com/qz4xgxnym3>

We will try to arrange groups according to your preferred topics

Questions?

Please ask questions and take part in discussions through out the workshop!