

# National Bioinformatics Infrastructure Sweden

# The SciLifeLab bioinformatics platform



~100 staff at six different sites across Sweden with expertise in many different omics-related areas



# Core activities

*'To help the Swedish research community build knowledge in analyzing large and complex omics data and to make bioinformatics easily accessible for life science researchers'*



## Support

Support services ranging from short consultations to long-term embedded bioinformaticians.



## Infrastructure

Providing infrastructure in the form of services, computational resources, tools and guidelines to the life science community.



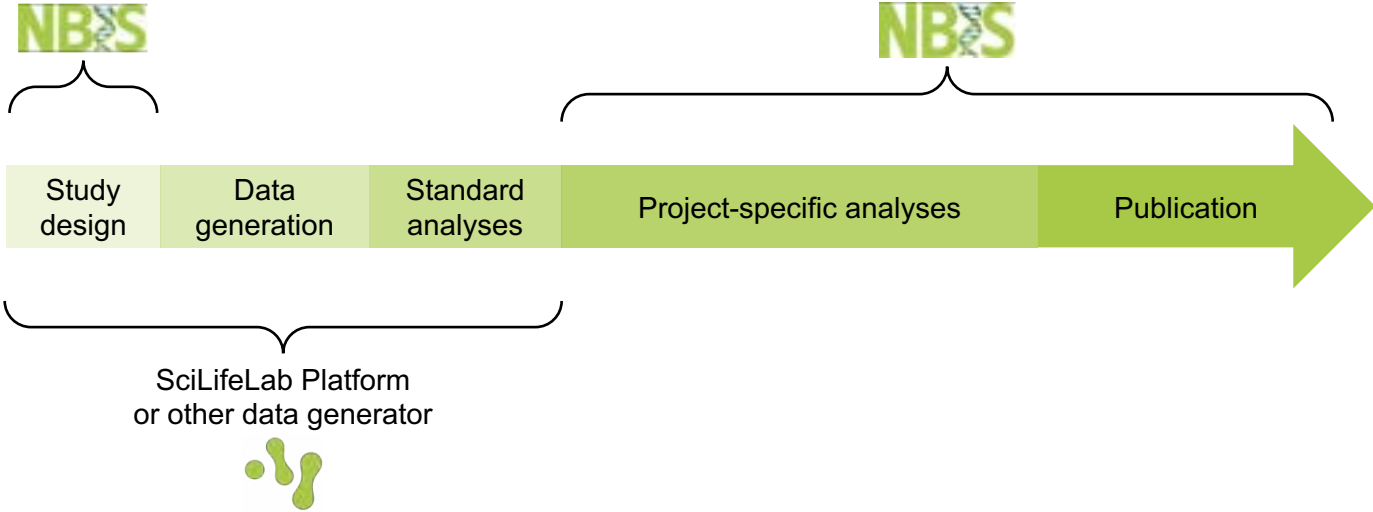
## Training

Training events in advanced and applied bioinformatics.

# Support project stages



Support



# Bioinformatics support options



Support

Study Design & Project Consultation	3 h per project No hands-on work
Fee-for-service: Short- or medium-term support	User fee 800 SEK/h * All projects welcome, queuing system
Peer review: Long-term support	500 h support over ~ 1-2 years, for free Scientific selection by committee, 3 application rounds/year Involvement from research group mandatory
Partner Projects	For projects with large bioinformatic component “Hire” an NBIS bioinformatician Full-cost model: utilize and pay for e.g. 50% of one NBIS FTE



\*The BioImage Informatics Facility has a slightly different financing policy



# Drop-in support



Support

Drop-in sessions

Ask your question!  
Bioinformatics, sequencing, data  
management, and more  
Online - Tuesdays at 14.00



# Fee-for-service



Support

## Fee-for-service support - Short- and medium-term support

- 800 SEK/h
- Typical projects 50-80 h, but many are longer

## Application

- Applications are handled continuously
- All projects are welcome, queuing system
- Data should be available at the time of application
- Project coordinators match projects with NBIS experts based on competence and availability

Apply for hands-on support at [nbis.se/support](https://nbis.se/support)



Eva



Fredrik



Magnus



# Peer review – Long-term support



Support

## Support for free to selected projects

- Typically 500 h
- 1-2 bioinformaticians will work in the project for 1-2 years
- Involvement from the research group is mandatory to ensure knowledge transfer

## Application

- Projects are selected by an external committee based on scientific value
- Three application rounds each year
- Application form at [nbis.se/support](https://nbis.se/support)

Funded by Knut and Alice  
Wallenberg Foundation

Also known as Wallenberg  
Advanced Bioinformatics  
Infrastructure (WABI)





# Partner projects



Support

## For projects with large bioinformatic component

- Requiring NBIS support staff of at least 12 person months
- Running over 2-5 years calendar time

## Full cost model

- NBIS will apply a standardised salary level and indirect cost model for the NBIS staff

## Application

- Applications are handled continuously; [nbis.se/support](https://nbis.se/support)

"Hire" an NBIS bioinformatician, utilize and pay for e.g. 50% of one NBIS FTE



# Applying for support



Support



# Infrastructure

Systems Development	Create tools for efficient research and sharing of results
Support for Computational Resources (SCoRe)	Linking NBIS with UPPMAX Application experts
Data Management	Data Management support to projects Data stewards
AIDA Data Hub	Compute service for sensitive personal data Data sharing services for citable datasets



# Data management support

Data management plans Data publishing FAIR data
Sensitive data - FEQA helpdesk Good DM practice Data handling
Courses Guidelines Templates & Tools



NBIS Drop-in support and consultation <https://meet.nbis.se/dropin>

SciLifeLab RDM Guidelines [data-guidelines.scilifelab.se](https://data-guidelines.scilifelab.se)

Meet a Data Steward Q&A [scilifelab.se/event/meet-a-data-steward/](https://scilifelab.se/event/meet-a-data-steward/)

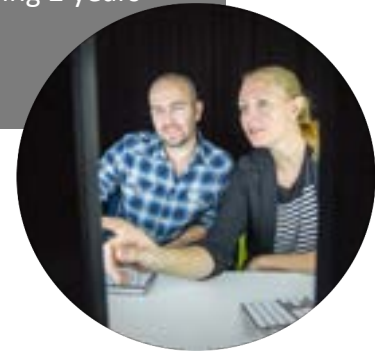
# Training

## Courses

- Several courses, mainly for PhD students and PostDocs
- Led by experienced bioinformaticians
- Teacher-dense
- Theory and practice of state-of-the art methods
- International courses together with Elixir

## Advisory program

- PhD students get a bioinformatician as advisor during 2 years
- New students accepted once per year



## Courses catalogue

- Introduction to bioinformatics using NGS data
- Data management practices
- Bulk and single-cell RNA-seq
- Python and R programming
- Tools for reproducible research
- Omics integration and systems biology
- Biostatistics and machine learning
- Epigenomics data analysis
- ... and more!

Course calendar: <https://nbis.se/training/events.html>



# Bioinformatics advisory program

## The Swedish Bioinformatics Advisory program

### Idea

- PhD students get a bioinformatician as a personal advisor for 2 years
- Complementing PhD supervisors with technical expertise

### How

- Monthly meetings with advisor
- Grand meetings with all students and PIs

### Apply

- One application round per year, usually in December



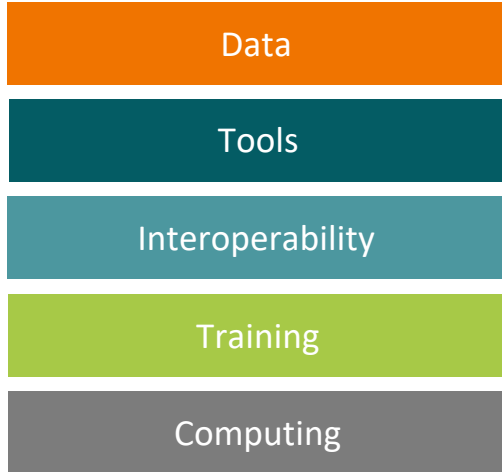
<https://www.scilifelab.se/training/the-swedish-bioinformatics-advisory-program>



# Elixir

ELIXIR is the European infrastructure for biological information

- 23 member nations, >250 research institutes
- NBIS coordinates the Swedish ELIXIR node





# Welcome to contact us!

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[www.nbis.se](http://www.nbis.se)