

# ChIP-seq data analysis

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SciLifeLab

<https://nbis.se/about/staff/>



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# NBIS

## NATIONAL BIOINFORMATICS INFRASTRUCTURE SWEDEN

NBIS is a distributed national bioinformatics infrastructure, supporting life sciences in Sweden




Vetenskapsrådet

SciLifeLab



Linköping University



CHALMERS



UNIVERSITY OF  
GOTHENBURG



Karolinska  
Institutet



KTH  
VETENSKAP  
OCH KONST



LUND  
UNIVERSITY



Naturhistoriska  
riksmuseet



SLU



Stockholm  
University



UMEÅ  
UNIVERSITET



UPPSALA  
UNIVERSITET

Knut and Alice  
Wallenberg  
Foundation



### Support

Support services ranging from short consultation, consultancy 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.

# INFRASTRUCTURE SERVICES


Infrastructure units A-Z ▾

Genomics 

Proteomics 

Metabolomics 

Single Cell Biology 

Bioimaging and Molecular Structure 

Chemical Biology and Genome Engineering 

Drug Discovery 

Diagnostics 

Bioinformatics 

## National Bioinformatics Infrastructure (NBIS)

Provides custom-tailored support with data analysis, computational tools, systems development and training.

[More information](#)

## Biolmage Informatics

Provides support and education in image analysis. Develops methods for analysis of images of biological processes and give advice on best-practice.

[More information](#)



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# Wednesday 2018-11-07

Room: Fire, Gamma 2

08.45 - 09.00 pre-course coffee

09:00 - 09.15 Welcome (Olga, Agata)

09.15 - 10.15 Lecture: ChIP-seq data analysis principles (Agata)

10.15 - 10.30 Discussion: getting to know each other (Agata, Jakub, Olga)

10.15 - 10.45 Introduction to practicals I: data processing (Agata, Jakub, Olga)

10.30 - 12.00 Practicals: ChIP-seq data processing (Agata, Jakub, Olga, John/Diana)

12.00 - 13.30 *lunch*

13.30 - 17.00 Practicals: ChIP-seq data processing (Agata, Jakub, Olga, John/Diana)

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# Thursday 2018-11-08

Room: Fire, Gamma 2

**09:00 - 09.30** Discussion: ChIP-seq data processing (Agata, Jakub, Olga)

**09.30 - 10.30** Introduction to practicals II:

- differential binding (Olga)
- functional annotations (Olga)
- motifs (Jakub)
- broad peaks (Agata)

**10.30 - 12.00** Practicals: downstream analysis (Agata, Jakub, Olga, John/Diana)

**12.00 - 13.30** *lunch*

**13.00 - 14.00** Lecture: case study and beyond (all the interesting things) (Jakub, Agata)

Parallel session

**13.30 - 17.10** Practicals: downstream analysis (John/Diana)

**13.30 - 17.00** Discussion: bring your own project (Agata, Jakub, Olga)

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# Friday 2018-11-09

Room: Fire, Gamma 2

**09.00 - 10.00** Introduction to SciLifeLab NGI ChIP-seq pipeline (Phil Ewels)

**10.00 - 10.30** Discussions: downstream analysis

**10.30 - 11.00** Introduction to practicals III

- exo-spike (Agata)
- public data resources (Jakub)

**11.00 - 12.00** Practicals: downstream analysis (Agata, Jakub, Olga, John/Diana)

**12.00 - 13.30** *lunch*

**13.30 - 14.30** Practicals: downstream analysis (Agata, Jakub, Olga, John/Diana)

**14.30 - 17.00** Discussion & wrap-up (**Agata, Jakub, Olga**)

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*coffee and snacks will arrive twice a day*

*lunch will be at: Svarta Räfven*

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**<https://nbisweden.github.io/workshop-ChIP-seq/>**