

# ChIP-seq data analysis

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



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



Vetenskapsrådet



Linköping University



UNIVERSITY OF  
GOTHENBURG



Karolinska  
Institutet



LUND  
UNIVERSITY



Naturhistoriska  
riksmuseet



Stockholm  
University



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.

NBIS - National Bioinformatics Infrastructure Sweden

SciLifeLab

# 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

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## National Bioinformatics Infrastructure (NBIS)

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

More information

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## BioImage 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/>**