

This is to certify that  
Andrey Höglund  
has successfully taken part in

## Biostatistics Essentials: a blackboard approach

Held in Uppsala, 21-23 May 2019

The course consisted of lectures, exercises and group discussions. The following subjects were covered in the lectures and exercises:

- Basic statistical theory and concepts incl. stochastic variables, density and distribution functions, central limit theorem, confidence intervals
- Hypothesis testing
- Resampling
- Linear regression methods
- Model selection and regularization
- Unsupervised learning, incl. clustering and dimension reduction methods
- Experimental design

Examination:

Presence during all the lectures and computer/practical exercises

The course was arranged by the National Bioinformatics Infrastructure Sweden (NBIS) and Science for Life Laboratory (SciLifeLab).

Uppsala, 23 May 2019

Eva Freyhult, PhD  
National Bioinformatics Infrastructure Sweden  
Science for Life Laboratory  
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