

This is to certify that  
Pascal Pucholt  
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  
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Science for Life Laboratory  
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