

This is to certify that  
María José Pino  
has successfully completed the course

## Introduction to biostatistics and machine learning

Held in Uppsala, 7th-11th April 2025

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

- Descriptive statistics (Pass)
- Probability theory (Pass)
- Statistical inference (Pass)
- Linear regression methods (Pass)
- Unsupervised learning: PCA and clustering (Pass)
- Introduction to supervised learning (Pass)
- Model selection and regularization (Pass)
- Random Forest (Pass)

Examination:

Active participation during lectures, group sessions and practical exercises. Grading system: Pass/Fail, ABS, absence.

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

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