



## COURSE CERTIFICATE

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### NEXT GENERATION SEQUENCING ANALYSIS

This is to certify that

**Judit Kisistók**

has successfully completed the PhD course: **Next Generation Sequencing Analysis**. The course was held at the Bioinformatics Research Centre, Aarhus University, on June 26-30, 2017. It consisted of preparation in the form of paper readings and production of a poster presentation of own research (30 hours), 40 hours of teaching and exercises during the course week, and a written report of 5-10 pages (30 hours) which has been passed. Thus, a total of 100 hours, which at Aarhus University corresponds to 5 ECTS.

#### **Course description:**

The course consisted of lectures introducing students to the most important sequencing technologies (ChIP-seq, genetic mapping, metagenomics, comparative genomics), mapping of reads, denovo assembly, visualisation of NGS data, quality control, SNP calling and structural variation calling, RNAseq analysis, chipSEQ analysis. Paper reading further introduced students to some of the main applications of NGS data, and two dedicated poster sessions were used for discussion of own NGS related research.

The practical exercises introduced the students to the GALAXY platform for handling data and analyzing all the above aspects of NGS data using a real data set as well as their own data when available.

#### **Course providers:**

Stig Uggerhøj Andersen, Department of Molecular Biology and Genetics, Aarhus University and Mikkel Heide Schierup, Bioinformatics Research Centre, Aarhus University.

Yours sincerely,

Mikkel Heide Schierup

Stig Uggerhøj Andersen

