Next generation sequencing analysis

PhD course, 5 ECTS, June 23-27, 2014, each day 9 am to 4 pm
Location: Aarhus University, Fredrik Nielsens Vej 2-4, Building 1421
Teachers: Mikkel H. Schierup (mheide@cs.au.dk) and Stig U. Andersen (sua@mb.au.dk)
Sign up by email to teachers, deadline **May 15, 2014**

Aim:

Learning the basics of next generation sequencing analysis in practice

Topics:

De novo assembly
Reference based mapping
Transcriptomics
Epigenomics

Exercises:

Introduction to Galaxy, GATK, Samtools
Grooming of reads
Mapping of Illumina reads to reference
SNP/indel calling, filtering and annotation
Gene models and transcript quantification

Bring your own data! – or use our examples

No prior experience with next generation sequencing analysis needed