PVS0141 Introduction to bioinformatics, 10 credits

PhD course arranged by Graduate School for Veterinary Medicine and Animal Sciences (GS-VMAS)

Course date: January 15 – March 20, 2018
Location: Uppsala

Content

The course aims to give the student a solid foundation in the basic methods of bioinformatics. It will cover the theories, algorithms and practical applications of computer-based methods for analysis of DNA sequences and protein structures. The topics to be covered include:
- biological databases
- homology analysis
- sequence analysis (with emphasis on the package EMBOSS and UGENE)
- statistics and R introduction
- web-based tools for analysis
- the Unix operating system
- phylogeny
- comparative genomics
- functional genomics
- Next Generation Sequencing (NGS)

Prerequisites

Admitted to a postgraduate program in animal science, biology, veterinary medicine, food science, nutrition, nursing, bioinformatics or similar subjects, or to a residency program in veterinary science. Some knowledge in biology or cell biology/molecular genetics.

Information and application: http://www.slu.se/gs-vmas-courses
Course leader: Erik Bongcam-Rudloff, Erik.Bongcam@slu.se

Last date for application: January 8th, 2018