



PVS0137 Genome analysis, 10 credits

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

Course date: November 1, 2019 – January 17, 2020

Location: Uppsala

Content

The contents of the course are to a large extent built upon recent advances within the field of genome analyses in humans, animals and plants. A large part of the course is applicable also in e.g. human genetics. Genome science is evolving rapidly and the course is based on recent research developments in methodologies and theories.

The following group discussions or computer-based exercises are included in the course:

- Genetic diversity and polymorphisms
- Molecular phylogenomics (computer exercise)
- Structural and comparative genomics
- Gene mapping and functional genomics
- Genome-wide association analysis (GWAS) (computer exercise)
- Genome-wide association and quantitative trait loci (QTL) analysis
- High throughput genome sequencing
- High throughput genome sequencing (computer exercise)
- Epigenetics and epigenomics
- Genome editing and transgenic animals

Prerequisites

Admitted to a postgraduate program in animal science, biology, veterinary medicine, food science, nutrition, nursing, or related subjects, or to a residency program in veterinary science.

Information and application: www.slu.se/gs-vmas-courses

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Last date for application: October 4, 2019