GS-VMAS Newsletter

November, 2018

2018 is rapidly coming to an end and looking back at the year we at GS-VMAS have organised around 15 different PhD courses as well as a number of seminars and workshop for both PhD students and other members at the faculty that we hope that you have enjoyed and benefited from. We are now in the progress of organising next year and you are all welcome to contact us about ideas for different activities etc. A new possibility for 2019 is the ability to apply for economic support for participating in postgraduate courses outside of SLU - apply by deadline 31/12 - 2018.

Planned courses 2019

- Quality assurance for laboratory work in PhD-projects
- Introduction to Bioinformatics
- Big data and machine learning (BDML)
- Statistical Analysis of laboratory and clinical studies
- Introduction to programming in R
- Advanced use in Excel
- Molecular infection biology
- Animal locomotion- physiology, pathology, diagnostics and treatments
- Questionnaire design and management
- Animal Welfare and the UN Sustainable Development Goals
- Animal ethics
- Environmental impact from animal production
- How to read and write a scientific paper
- Genome Analysis
- Introduction to qualitative research methods
- Pain and Physical dysfunction
- Camelid Reproduction and Reproductive Biotechnologies

Apply for Mobility Support 2019

It can sometimes be hard to find suitable PhD courses in ones subject and therefore we at GS-VMAS want to, apart from supporting PhD courses arranged at our faculty, also support PhD students that have found post-graduate courses at other universities both inside and outside of Sweden. During 2019 GS-VMAS will fund approximate 5-6 PhD students from the VH-faculty participating in postgraduate courses outside of SLU.

GS-VMAS Mobility Support 2019
*Financial support to PhD students
for taking courses outside of SLU*

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To apply for support send us an email (gs-vmas@slu.se) with the following information no later than 31/12-2018:
• Detailed description of the course, include link to course page if available.
• Motivation to why this course is important for the postgraduate studies.
• Certificate from the main supervisor supporting the importance of the visit for the applicant's education.
• A budget clearly stating all the costs (maximum 10 000 can be applied for per student)

In January GS-VMAS and its steering board will go through all the different applications and make the selection. The ones who receive funds are expected to provide GS-VMAS with a short report at the end of the course.

Information and application: gs-vmas@slu.se

Last date for application: December 31st, 2018

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Upcoming PhD courses early 2019

During early 2019 we have the following upcoming courses:

PVG0041 Quality assurance for laboratory work in PhD-projects, 2 credits

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

Course date: January 7th – 18th, 2019
Location: Uppsala

Content
The course contains lectures, theoretical and practical exercises, as well as time for preparing and discussing lab quality aspects in the student's own lab work. The purpose of the course is to gain knowledge about quality assurance aspects in laboratory work to avoid or minimize laboratory errors.

After completing the course the student should be able to:
• Perform their laboratory work with knowledge of quality assurance.
• Do a basic validation of a laboratory method, for example an ELISA, including determination of inter- and intra-assay variation, linearity and recovery and be able to interpret the results.
• Explain and evaluate relevance of limit of detection, limit of quantification, limit of blank of an assay.
• Describe how their study design and laboratory work should be planned to minimize the effects of inter/intra assay imprecision and/or limited linearity.
• Use common laboratory equipment in a correct way, for example use of pipettes and scales.
• Write a good standard operation procedure (SOP) and "Lab Diary" and describe the purpose and effects these routines may have on their laboratory work.

Prerequisites
Admitted to a postgraduate program in veterinary medicine, animal science, biology, medicine or related subjects, or admitted to other training program in veterinary medicine.

Information and application: http://www.slu.se/gs-vmas-courses
Course leader: Inger Lilliehöök, inger.lilliehook@slu.se

Last date for application: December 3rd, 2018

PVS0141 Introduction to bioinformatics, 10 credits

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

Course date: January 21 – March 25, 2019
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 6th, 2018

PVG0033 Big data and machine learning (BDML), 3.0 credits

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

Course date: February 25th – March 1st, 2019
Location: Uppsala

Content
• Introduction to big data
• Databases using NoSQL with a focus on MongoDB
• The Hadoop framework for distributed storage and computing
• The Spark cluster computing environment
• Introduction to R
• Unsupervised machine learning in R
• Supervised machine learning in R

During the course the participants will practice data management and analyses on their own data with plenty of opportunities to discuss the methodology and gain useful advice. Each day starts with lectures regarding theory, methods and their application on biological data. In addition to the lectures the course participants will work with data analysis of either provided data sets or using their own data. These laboratory exercises provide an important part of the course and students are reqired to submit lab reports that will be evaluated by the teachers. Before the course participants will have read several papers and texts regarding big data and machine learning as well as organizing their own data that they will be using during the course.

Prerequisites
Admitted to a postgraduate program in animal science, biology, veterinary medicine, informatics or related subjects, or to a residency program in veterinary science. The course is primarily intended for graduate students, but post-doctoral researchers are also welcome to attend.

Information and application: http://www.slu.se/gs-vmas-courses
Course leader: Patrik Waldmann, patrik.waldmann@slu.se

Last date for application: January 28th, 2019

For more information and on-line application to courses, please visit: www.slu.se/gs-vmas-courses.

Upcoming seminars/workshops early 2019

We also have a couple of upcoming seminars:

- How to write your first grant application, January 30, 2019

Please visit www.slu.se/gs-vmas-planned-courses for information on upcoming courses and other activities.

Do you have an idea for a seminar or a workshop?

GS-VMAS have funds available to grant money for seminars and/or workshops. If you have a visiting research partner or an opponent present for a dissertation it may be a great opportunity to combine this with arranging a seminar or workshop.

Please contact us at gs-vmas@slu.se and we will let you know whether there are funds available for your idea.

Administration of your PhD studies

If you have any questions regarding the administration of your PhD studies, such as registration, crediting for courses, all courses completed in Ladok, you may use Education Services' joint e-mail address for PhD matters: us-phd-vh@slu.se

We are three administrators handling PhD students within the Education Services. We handle all PhD students within VH's departments with the exception of HMH, BT and NJV.
AFB, BVF – Susanna Hallgren
HUV, HGEN – Marianne Lövgren
KV – Susanne Pettersson

All the best from the coordinators and administrators for GS-VMAS

Miia, Anne-Lie, Kjell and Susanna