

<http://www.slu.se/sv/centrumbildningar-och-projekt/ny-centrum-for-reproduktionsbiologi/>

## Introduction to multivariate data analysis (MVDA) in biological research

As a part of the CRU postgraduate research school in  
Reproductive Biology, 3 ECTS

23-27 May 2011

SLU, Clinical centre, Ulls väg 12, Uppsala

<http://kartor.eniro.se/m/pG95C>

### Objective

The course offers an introduction to multivariate data analysis, what multivariate data is and how to generate and correctly evaluate multivariate data. After the course each participant will be familiar with several different techniques through hands-on practices using data from biological research as well as your own. The course includes *e.g* the projection techniques; principal component analysis (PCA), partial least squares regression (PLS), orthogonal PLS (OPLS), and PLS discriminant analysis (PLS DA) and you will learn what type of questions that can be answered with each method. No specific requirements are needed, but basic statistical knowledge is advantageous.

### Programme

The course will be based on lectures and practical exercises. The students will be given literature that they are expected to study beforehand. During the course, the students will be given the possibility to run analyses on their own data. Special data sets for practicing will also be available. The course programme will be available on the CRU webpage: <http://www.slu.se/sv/centrumbildningar-och-projekt/ny-centrum-for-reproduktionsbiologi/>.

### Lecturer

PhD Katrin Lundstedt-Enkel, biologist with more than 15 years of practical experience of multivariate data analyses techniques. She has been running projects within the field of environmental toxicology as well as being a statistical consultant in numerous other diverse biological areas.

### Registration

Register by sending an e-mail to [Anette.Forsberg@slu.se](mailto:Anette.Forsberg@slu.se), including your name, position, affiliation, a short description (max. half an A4 page) of your project and research area, and why you think that this course would be beneficial to you. **Deadline April 28**. The course is open for university affiliated scientists with priority given to postgraduate students. The participants cover their own travel and living expenses. We will not be able to assist in booking hotel rooms and travel tickets, please see <http://www.uppsala.to/en/> for advice. The number of participants is limited.

*On behalf of the organizing committee I welcome you to participate in this course!*

*Bodil Ström Holst, [Bodil.Strom-Holst@slu.se](mailto:Bodil.Strom-Holst@slu.se)*