Title: Chemometrics – How to analyze your multivariate data

Organizers	ISB - National Doctoral Programme in Informational and Structural Biology
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Lecturer	Åsmund Rinnan (aar@life.ku.dk)
Time and place	18th – 21st of October 2011
	Computer class 3rd floor, Bio-City
	Tykistökatu 6 A III
	Åbo Akademi University
	Turku, Finland
ECTS credits	2 with exercises and report, 1 without the report

Description
This four day course (9am – 5 pm) will give a general introduction to chemometrics and provide valuable tools for scientists to analyze their own multivariate data, which is often derived from complex datasets. The participants will learn how to use basic chemometric techniques; such as preprocessing your data, and data analytical techniques for exploratory data analysis – Principal Component Analysis as well as for prediction/ classification analysis – Partial Least Squares Regression. Furthermore the participant will learn how to interpret the results and how a model can be used for future studies.

There will be a lunch break between 12.15 and 13.45 and a shorter afternoon brake when coffee and small snack will be served. Otherwise the course will be intensive.

Target audience
The course is open to all researchers in academic field free of charge. Priority is given to students and researchers at ISB and to students from institutes connected to the Nordic Network in Biological Informatics.

Level
Ph.D. student level. Suitable also to advanced master students and experienced scientist with interest in multivariate data analysis.

Registration
Open from 1st of August 2011 to 30th of September 2011. Only 15 participants can be taken to the course. Register by sending an e-mail to address isb@abo.fi. Please send a short description of your data (proteomics, HPLC-data, in vitro – in vivo potency, SAR etc.) that you would like to analyze during this course. You may be asked to provide an example of your data and send them to the lecturer prior to the course. This is in order to ensure that the course is more relevant to you and optimized for your type of data.

Requirements   Completion of the course with 2 credits requires attendance and completion of the exercises given during the class (return date 31st of October, 2011). Participants are advised to read through the preliminary reading package prior to course.

Travel and accommodation   The participants need to arrange their own arrival and accommodation during the course, but Ph.D. students can apply funding from ISB for the expenses.