

*Core Facility Computational Bioanalytics*

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## Statistical data analysis with SPSS for Life Science Researchers

### *Analysis of Variance and Regression analysis*

This course is an introduction to statistical methods and statistical software in the field of Analysis of Variance and Regression analysis. On the basis of various practical examples, the participants learn to analyse and visualize data and how to interpret results. A main goal is to show participants the importance of quality control, assessing assumptions and ensuring adequate sample size. Upon successful completion of this course, participants will be familiar with the statistical methods covered in this two days and will be able to interpret statistical results. The participants will have the ability to choose the suitable statistical analysis method for different data sets.

**Analysis of Variance (Day 1)** : one-way ANOVA, factorial ANOVA, repeated measures ANOVA, MANOVA, ANCOVA, scientific presentation of results

**Regression analysis (Day 2)** : Pearson, Spearman, Partial correlations, simple linear regression, multiple linear regression, binary logistic regression, scientific presentation of results

**Teaching and learning method:** 20% lecture and 80% interactive

**Languages of instruction:** English or German

**Target audience:** PhD students, technicians and researchers

**Entrance qualifications:** SPSS basics course

**Costs:** 150 Euro (University)/ 300 Euro (Company) per day; Each day can be booked separately.

**Registration:** [zmf-sekretariat@medunigraz.at](mailto:zmf-sekretariat@medunigraz.at) (deadline: February 16<sup>th</sup> 2018)

As the number of participants is limited (min. 3 and max. 8), please register early to confirm your seat!

**DFP: 7-Points per day**  
**Total: 14-Points**

**Day 1:** February 26<sup>th</sup> 2018 (9 am - 4 pm)

**Day 2:** February 27<sup>th</sup> 2018 (9 am - 4 pm)

**ZMF seminar room ground floor EG-086 (day1)**  
**and 3rd floor O3-012 (day2)**

Contact: [zmf-sekretariat@medunigraz.at](mailto:zmf-sekretariat@medunigraz.at)  
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