ZMF - ACADEMY

Medical University of Graz

Core Facility Computational Bioanalytics

Statistical data analysis for qPCR

Learn how appropriate statistics are selected and applied correctly to get the most out of your qPCR data. This one-day course teaches statistical principles and tools that are used in qPCR data analysis. The course includes practical computer based exercises to help you choose the correct analysis as well as how to best design your experiment.

The hands-on workshop contains:

- Experimental design (factors, groups and sample size)
- Basic principles of statistics (statistical hypothesis testing, Gaussian statistics, central limit theorem, p-values, outlier detection)
- Descriptive statistics (mean, SD, percentiles, coefficient of variation, confidence interval)
- Statistical tests (Gaussian vs. non-Gaussian methods, one-tailed or two tailed tests, false discovery rate, Benjamini Hochberg and Bonferroni correction)
- Comparison of two groups and time points (paired and unpaired studies)
- Multivariate data analysis and data visualization
- Guideline for publication of qPCR data analysis (MIQE)
- Additionally you have the opportunity to analyze your own data.

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

DFP: 7-Points

Languages of instruction: English or German

Target audience: PhD students, technicians and researchers

Entrance qualifications: SPSS basic knowledge (e.g. SPSS course day 1 and day 2) and basic statistics

Costs: 150 Euro (University)/ 300 Euro (Company)

Registration: zmf-sekretariat@medunigraz.at (deadline: November, 27th 2017)

As the number of participants is limited (min. 3 and max. 12), please register early to confirm your seat!

December 4th 2017 (9 am - 4 pm)

ZMF seminar room ground floor EG-086

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ZMF

CENTER FOR MEDICAL RESEARCH

Know How