

## 4th Spring School Dahlem Research School Biomedical Sciences, 1st week (26.2. - 2.3.2018) Current Program

	Monday, 26 <sup>th</sup> February		Tuesday, 27 <sup>th</sup> February		Wednesday, 28 <sup>th</sup> February		Thursday, 1st March		Friday, 2nd March
8.00 – 11.30 (incl. Coffee break)	<b>Quality Assessment in Research: Of Factors and Facts</b> (4 h), Prof. B. Kaufer	8.30 – 10.30	<b>General principles, rules and practical procedures to ensure good scientific practice</b> Prof. Dr. J. R. Aschenbach	8:30 – 10:30	<b>Open Access, copy right and plagiarism</b> Dr. T. Rip	8.45 – 10.45  Coffee break)  11.00 – 12.30 -	<b>„Bacterial Infections of the neonate host“*</b> , Prof. M. Fulde  <b>Ancient DNA and parasites (Christmas Island talk)* + Cross species herpesvirus jumps in wildlife (Death of Knut and other polar bear diseases)*</b> , 2 Talks by Prof. A. Greenwood	8.30 – 12.15 (Incl. Coffee break)	<b>Validation of diagnostic tests I</b>  <b>Validation of diagnostic tests II</b> Prof. Dr. M. Doherr (IVEB)
11.30 – 12.30	Lunch break	10.30 – 12.30	<b>Fundamentals of laboratory safety and genetic engineering</b> Dr. S. Sharbati	10.30 – 12.30	<b>Antivirale Vaccine and Drugs</b> Dr. M. Veit	12.30 – 13.30	Lunch break	12.30 – 13.30	Lunch break
12.30 – 15.45 (Incl. Coffee break)	<b>How to Write and Publish a Scientific Paper, Seminar,</b> Prof. Dr. A. Gruber	12.30 – 13.30	Lunch break	12.30 – 13.30  13.30 – 13.45	Lunch break  <b>Networking in Natural Sciences</b> Prof. Dr. B. Kaufer	13.30 – 15.00	<b>Basics of antimicrobial susceptibility testing of bacteria from animals: New developments and how to prevent commonly made mistakes</b> Prof. Dr. S. Schwarz	13.15 – 16:00 (Incl. Coffee break)	<b>Application for animal trials, considerations, planning and legal prerequisites</b> Prof. Dr. C. Thoene- Reineke
		13.30 – 16.00 (Incl. Coffee break)	<b>Guidelines in Application for Third Party Financing in Germany/Europe</b> Prof. Dr. P.-H. Clausen /Dr. M. Lukowiak	14.00 – 14.45  15.00 – 16.30	<b>„About Patents and Spin-offs“,</b> Abteilung Forschung <b>FU Berlin</b> Dr. C. Reuter  <b>Molecular Basis of Cancer, Seminar, 2 h</b> Prof. Dr. A. Gruber	15.15. – 16.45	<b>Bacterial resistance to antimicrobial agents: Resistance mechanisms and dissemination of resistance</b> Prof. Dr. S. Schwarz		

## "From research idea to scientific publication - basics of clinical and observational study design"

**2nd week (5. - 9.3.2018)** Prof. Dr. M. Doherr and co-workers, location: Veterinarium Progressum, Oertzenweg 19b, Düppel

	Monday, 5 <sup>th</sup> March	Tuesday, 6 <sup>th</sup> March	Wednesday, 7 <sup>th</sup> March	Thursday, 8 <sup>th</sup> March	Friday, 9 <sup>th</sup> March
8.30 – 10.00	EPI00: Course opening, introduction, administrative issues, reporting guidelines, formulation of epidemiological research questions Prof. M. Doherr (IVEB)	EPI04: Data tables, data bases, variables, measures, questionnaires / forms as data collection tools Prof. M. Doherr (IVEB)	STAT03: Parameter estimation from samples, confidence intervals based on SD and SEM, comparison of 2 sample means Dr. Laura Pieper (IVEB)	STAT05: From 2-sample T-Test to One Way ANOVA, 2-way ANOVA with and without interaction, repeated measures ANOVA Prof. M. Doherr (IVEB)	EPI07: Critical paper discussion, use of STROBE or CONSORT/REFLECT checklist Dr. Laura Pieper (IVEB)
Coffee break					
10.30 – 12.00	EPI01: Generic issues regarding epidemiology, (V)PH, causality, measures of disease frequency Prof. M. Doherr (IVEB)	EPI05: Diagnostic test evaluation using the concept of 2x2 tables Prof. M. Doherr (IVEB)	STAT04: Frequencies and cross tables with their analyses; concept of multiple comparison and Bonferroni adjustment Prof. M. Doherr (IVEB)	STAT06: Correlation and linear regression Dr. Laura Pieper (IVEB)	EPI07 cont.: Paper discussion exercise – small group work Dr. Laura Pieper (IVEB)
Lunch break	Possibility to eat your lunch at the Mensa Düppel				
13.00 – 14.30	EPI02: Observational study designs and measures of association (RR, OR) Dr. Laura Pieper (IVEB)	STAT01: Introduction to statistical software packages & features, basics of statistical hypothesis testing Prof. M. Doherr	EPI05: Clinical / experimental studies, CONSORT, blinding, random allocation Prof. M. Doherr	STAT07: From 2x2 table and Odds Ratios (OR) to logistic regression Prof. M. Doherr (IVEB)	EPI07 cont.: Paper discussion presentation in auditorium Prof. M. Doherr (IVEB)
Coffee break					
14.45 – 16.15	EPI03: Concept of bias including confounding, stratification and matching in observational studies Dr. Laura Pieper (IVEB)	STAT02: Basic descriptive analysis for various data formats, tests for normality Dr. Laura Pieper (IVEB)	EPI06: Sample sizes for statistical hypothesis testing in observational and clinical studies Prof. M. Doherr	STAT08: Multivariable models and model building concepts Dr. Laura Pieper	EPI07 cont.: Paper discussion presentation in auditorium (cont.) Prof. M. Doherr (IVEB)
Coffee break					
16.30 – 18.00	Extended exercises, reading assignment / self-study	Extended exercises, reading assignment / self-study	Extended exercises, reading assignment / self-study	Extended exercises, reading assignment / self-study	Module conclusion and wrap up discussion Prof. M. Doherr (IVEB)