

**GGNB: Short Methods Courses & Method Seminars October 2016 - March 2017 (B)**

Department/Group	Supervisor(s)	UniVZ	ID	Title of Course	Credits	Date A
Biochemistry						
Höbartner, Claudia	Höbartner, Claudia	340005	A 032	Chemical synthesis and enzymatic ligation of RNA and DNA oligonucleotides	1.0	09-10 Nov 2016
Rodnina, Marina	Holtkamp, Wolf	340010	A 081	Introduction to transient kinetic methods	1.0	17-18 Oct 2016
Schmitt, Hans Dieter	Schmitt, Hans Dieter	340015	A 034	BiFC (bimolecular fluorescence complementation) in yeast and image analysis with CellProfiler	1.0	tba (Nov 2016)
Tittmann, Kai	Sautner, Viktor	340018	A 064	Principles and methods of protein purification by chromatography	1.0	09-10 Nov 2016
Feußner, Ivo	Herrfurth, Cornelia	340045	A 016	Introduction to lipid analysis	1.0	13-15 Mar 2017
Jahn, Reinhard	Jakhanwal, Shrutee / Vasic, Vedran	340046	A 033	Reconstitution of neuronal exocytosis in a liposome fusion assay	1.0	tba
Rehling, Peter	Naumenko, Natalia	340074	A 053	Blue-native PAGE analysis of membrane protein complexes	1.0	14-15 Feb 2017
Tittmann, Kai	Rindfleisch, Sören	340077	A 071	Thermodynamic characterization of biomolecular interactions by isothermal titration calorimetry	1.0	10-11 Nov 2016
Jahn, Reinhard	Halder, Partho / Perez Lara, Angel	340171	A 146	Reconstitution of membrane fusion by proteoliposomes	1.0	02-03 Mar 2017
Walter, Lutz	Walter, Lutz	340184	A 138	High-throughput single-cell quantitative microfluidic RT-PCR	1.0	16-17 Mar 2017
Konrad, Manfred	Konrad, Manfred	340200	A 151	Introduction to steady-state kinetics	1.0	tba (Feb 2017)
Urlaub, Henning	Chernev, Aleksandar / Stützer, Alexandra / Lee, Chung-Tien / Corso, Jasmin	340201	A 177	Sequence analysis of proteins and their post-translational modifications by electrospray ionization (ESI) mass spectrometry	1.0	31 Oct-02 Nov 2016
Rehling, Peter	Müller, Tobias / Richter, Frank	340211	A 163	Native membrane protein complex isolation	0.5	06 Oct 2016

Department/Group	Supervisor(s)	UniVZ	ID	Title of Course	Credits	Date A
Biochemistry (continued)						
Rehling, Peter	Schendzielorz, Alexander / Naumenko, Natalia	340212	A 164	<i>In vitro</i> import into purified mitochondria	1.0	27-28 Oct 2016
Ischebeck, Till	Ischebeck, Till	340243	A 198	Metabolite profiling (GC-MS)	1.0	01-02 Dec 2016
Molecular Biology & Genetics						
Gruber, Jens	Gruber, Jens	340022	A 068	Mechanisms of RNA silencing	1.0	<i>tba (2nd half of Nov 2016)</i>
Brenig, Bertram	Schütz, Ekkehard	340098	A 113	NGS and HTP SNP typing	1.0	14-16 Nov 2016
Brenig, Bertram	Schütz, Ekkehard	340170	A 006	Genotyping using FRET on the LightCycler	1.0	31 Oct - 1 Nov 2016
Fischer, André	Urbanke, Hendrik / Halder, Rashi / Irniger, Stefan	340218	A 084	Chromatin-immunoprecipitation and epigenomic gene-profiling in the adult brain	1.0	<i>tba</i>
Jakobs, Stefan	Jensen, Nickels	340226	A 173	Strategies to design photoswitchable fluorescent proteins and their application in nanoscopy	1.0	18-19 Oct 2016
Cell Biology & Microbiology, Imaging						
Pöhlmann, Stefan	Winkler, Michael / Hofmann-Winkler, Heike / Gnirß, Kerstin	340221	A 171	Viral transduction systems	1.0	15-17 Nov 2016
Nave, Klaus-Armin	Möbius, Wiebke	340222	A 044	Subcellular localization of proteins by immunoelectron microscopy of cryosections	1.0	21-22 Nov 2016
Kehlenbach, Ralph	Kehlenbach, Ralph	340081	A 039	Analysis of nucleocytoplasmic transport by flow cytometry	0.5	18 Jan 2017

Department/Group	Supervisor(s)	UniVZ	ID	Title of Course	Credits	Date A
Developmental Biology, Anatomy & Histology						
Eichele, Gregor	Joshi, Parth / Teller, Christina	340029	A 013	Mouse histology & <i>in situ</i> expression analyses	1.0	tba (20-21 or 27-28 Feb 2017)
Stadelmann-Nessler, Christine	Stadelmann-Nessler, Christine / Schulz, Katja	340033	A 060	Non-radioactive <i>in situ</i> hybridization	1.0	7-9 Nov 2016
Bucher, Gregor	Bucher, Gregor	340083	A 145	Orthologs and Paralogs – how they evolve and how to distinguish them	0.5	21 Oct 2016
Hahn, Heidi	Nitzki, Frauke / Pyczek, Joannna	340084	A 028	<i>In situ</i> hybridization of paraffin embedded tissue sections	1.0	17-20 Oct 2016
Shcherbata, Halyna	Shcherbata, Halyna	340085	A 056	Introduction to basic histology techniques	1.0	14-15 Feb 2017
Pieler, Tomas	Henningfeld, Kristine	340236	A 185	Microinjection in <i>Xenopus</i> embryos	1.0	15-17 Nov 2016
Vertebrate Animal Models						
Bähr, Mathias	Lingor, Paul	340219	A 139	<i>In vitro</i> and <i>in vivo</i> models for Parkinson's disease research	0.5	01 Nov 2016
Wirths, Oliver	Wirths, Oliver	340223	A 175	Neurodegenerative Diseases: Behavioral and neuropathological analysis of transgenic mouse models	1.0	25-26 Jan 2017
Molecular & Cellular Neuroscience, Electrophysiology						
Rhee, JeongSeop	Rhee, JeongSeop	340038	A 096	Nerve cell culture and patch-clamp recordings from nerve cells	1.0	23-24 Mar 2017
Stühmer, Walter	Pardo, Luis	340040	A 063	Patch clamp	1.0	26-28 Oct 2016
Fiala, André / Göpfert, Martin	Riemensperger, Thomas / Geurten, Bart	340087	A 083	<i>Drosophila</i> Neurogenetics	1.0	04-06 Oct 2016
Moser, Tobias	Wichmann, Carolin / Chakrabarti, Rituparna	340196	A 149	Basic methods of transmission electron microscopy - from tissue preparation to 3D reconstruction	1.0	15-16 Nov 2016
Brose, Nils	Krüger, Dilja	340236	A 153	Isolation of synaptic compartments for quantitative biochemical analysis	1.0	24-25 Nov 2016



Department/Group	Supervisor(s)	UniVZ	ID	Title of Course	Credits	Date A
Theoretical, Systems & Behavioral Neuroscience						
Geisel, Theo / Gollisch, Tim / Gütig, Robert / Wolf, Fred	Geisel, Theo / Gollisch, Tim / Gütig, Robert / Wolf, Fred	530170	A 021	Theoretical and Computational Neuroscience: Collective Dynamics Biological Neural Networks I	2.0	Fridays, WiSe 2016/17
Structural Biology						
Bennati, Marina	Liu, Guoquan / Müge Kasanmascheff	340055	A 003	EPR-Spectroscopy	1.5	19-21 Oct 2016
Pena, Vlad	Almudena Ponce Salvatierra, Almudena / Cretu, Constantin /	340059	A 102	Crystallization of biological macromolecules	1.0	03-04 Oct 2016
Stark, Holger	Fischer, Niels	340060	A 061	3D structure determination of macromolecular complexes by single particle cryo-EM	1.0	tba
Biophysics, Bioinformatics and Statistics						
Friede, Tim	Röver, Christian	340061	A 100	Basic statistics for graduate students in the life sciences	1.0	26/27/29/30 Sep 2016
Mitkovski, Mišo	Mitkovski, Mišo / Ioannis Alexopoulos	340066	A 098	Introduction to image processing in biology with ImageJ	1.0	24-25 Nov 2016
Steinem, Claudia	Gleisner, Martin / Mey, Ingo, Jonas Schäfer	340067	A 133	Using biosensors to study analyte-ligand interactions: basic principles and applications	0,5	01 Dec 2016
Burg, Thomas P.	Burg, Thomas P.	340135	A 121	Micropatterning and Microfluidics	1.0	12-13 Dec 2016
Grubmüller, Helmut / Schmidt, Christoph F.	Grubmüller, Helmut / Schmidt, Christoph F.	340166	A 025	Current Topics in Biophysics – Lecture Series	1.0	Fridays, WiSe 2016/17
Beißbarth, Tim/ Bonn, Stefan / Posnien, Nico	Beißbarth, Tim/ Bonn, Stefan / Posnien, Nico	340208	A 157	Next Generation Sequencing (NGS) – Analysis of RNAseq and ChIP-seq data	1.5	22-24 Nov 2016
Grubmüller, Helmut / de Groot, Bert / Groenhof, Gerrit	Grubmüller, Helmut / de Groot, Bert / Groenhof, Gerrit	340227	A 143	Theoretical and Computational Biophysics	1.5	Mondays, WiSe16/17



Department/Group	Supervisor(s)	UniVZ	ID	Title of Course	Credits	Date A
Biophysics, Bioinformatics and Statistics (continued)						
Steinem, Claudia / Janshoff, Andreas	Mey, Ingo / Henrik Neubacher	340235	A 169	Atomic Force Microscopy vs. Scanning Ion Conductance Microscopy; versatile tools to study surfaces and surface properties	1.0	16-17 Nov 2016
Enderlein, Jörg	Cheng, Hao	340238	A 196	Fluorescence Correlation Spectroscopy: the technique and its biological applications	1.0	tba
Neef, Andreas	Cheng, Hao	340239	A 197	Single-Molecule localization microscopy for superresolution imaging and its biological applications	1.0	tba
Hörandl, Elvira	Appelhans, Marc	340241	A 188	Introduction into the bioinformatic analysis of next generation sequence data	1	12-14 Oct 2016
Hörandl, Elvira	Appelhans, Marc	340242	A 189	Next generation sequencing: Methods, Data Analysis and Applications	0.5	10 Oct 2016
Hörandl, Elvira	Appelhans, Marc	340243	A 190	Reduced-representation NGS methods in phylogenomics and biogeography: RADseq & RNAseq	0.5	11 Oct 2016
Beißbarth, Tim	Perera Bel, Julia	440727	A 176	Introduction to R and RNA-Seq analysis	1.0	09-11 Nov 2016