

## GGNB Methods Courses 2013 - Overview Mar-Aug 2013 & Sep 2013 - Feb 2014

Last Update: 12 February 2013

### Short Methods Courses & Method Seminars; Extended Methods Courses Mar-Aug 2013 (A) & Sep 2013 - Feb 2014 (B)

A/B: indicates whether the course is offered b/w Mar-Aug 2013 (A) and/or between Sep 2013 - Feb 2014 (B)

Department/Group	Supervisor(s)	UniVZ	ID	A/B	Title of Course	Credits	Date A	Date B
<b>Biochemistry</b>								
Rehling, Peter	Melin, Jonathan	340002	A 091	A	Activity measurements of respiratory chain enzymes	0.5	Aug 2013 (tba)	-
Schmitt, Hans Dieter	Schröter, Saskia/ Beckermann, Sabine	340015	A 034	A/B	BiFC (bimolecular fluorescence complementation) in yeast	1.0	May 2013 (tba)	Nov 2013 (tba)
Rehling, Peter	Bareth, Bettina/ Römpler, Katharina	tba	A 053	B	Blue-native PAGE analysis of membrane protein complexes	1.0	-	01 Feb 2014
Höbartner, Claudia	Höbartner, Claudia	340005	A 032	A/B	Chemical synthesis and enzymatic ligation of RNA and DNA oligonucleotides	1.0	16-17 May 2013	21-22 Nov 2013
Fischle, Wolfgang/ Hamada, Kyoko		340044	A 075	A/B	Chromatin Immunoprecipitation (ChIP)	1.0	25-27 Mar 2013	28-30 Oct 2013
Wintermeyer, Wolfgang	Bornemann, Thomas	tba	A 105	B	Equilibrium studies of protein-ligand interactions using fluorescence techniques	1.0	-	14 Oct 2013
Tittmann, Kai	Tittmann, Kai / Schröder-Tittmann, Kathrin	340158	A 125	A	Fed-batch fermentation of an <i>E. coli</i> strain in a fully automated bioreactor	1.5	14-16 May 2013	-
Walter, Lutz	Walter, Lutz/ Zeitseva, Olena	340184	A 138	A/B	High-throughput single-cell quantitative microfluidic RT-PCR	1.0	4-5 Jul 2013	24-25 Oct 2013
Fischle, Wolfgang	Dutta, Samrat	340113	A 074	A/B	Hydrodynamic analysis of proteins and protein complexes by analytical ultracentrifugation	1.0	6-7 Aug 2013	Feb 14
Feußner, Ivo	Herrfurth, Cornelia	340045	A 016	A	Introduction to lipid analysis	1.0	6-8 Mar 2013	-
Konrad, Manfred	Karamitros, Christos	340200	A 151	A/B	Introduction to steady-state kinetics	1.0	13-14 Jun 2013	9-10 Jan 2014
Rodnina, Marina	Holtkamp, Wolf	tba	A 081	B	Introduction to transient kinetic methods	1.0	-	21-22 Oct 2013
Görllich, Dirk	Frey, Steffen	tba	A 131	A/B	Methods in bacterial protein expression and purification	0.5	23 Apr 2013	03 Dez 2013
Tittmann, Kai	Wechsler, Cindy/Schröder-Tittmann, Kathrin	340018	A 064	A/B	Principles and methods of protein purification by chromatography	1.0	11-12 Mar 2013	11-12 Nov 2013
Jahn, Reinhard	Kühnel, Karin /Scacioc, Andrea	340004	A 036	A/B	Protein purification and characterization	1.0	25-26 Apr 2013	tba
Görllich, Dirk	Frey, Steffen	tba	A 132	A/B	Purification of recombinant proteins from <i>E. coli</i>	1.0	23-24 Apr 2013	3-4 Dez 2013
Jahn, Reinhard	Halder, Partho/ Angel Perez Lara	340171	A 146	A/B	Reconstitution of membrane fusion by proteoliposomes	1.0	5-6 Mar 2013	tba
Jahn, Reinhard	Park, Yongsoo /Yavuz, Halenur	340046	A 033	A/B	Reconstitution of neuronal exocytosis	1.0	18-19 Apr 2013	tba
Urlaub, Henning	Atanassov, Ilian / Hofele, Romina / Karaca, Samir / Qamar, Saadia / Deckers, Markus	340020 340021	A 065 A 092	A/B B	Sequence analysis of proteins and their post-translational modifications by MALDI-ToF and electrospray ionization (ESI) mass spectrometry Subcellular fractionation	1.0 0.5	tba -	tba Nov 2013 (tba)
Lührmann, Reinhard	Hartmuth, Klaus	tba	A 093	B	The application of RNA structure determination methodology to the analysis of RNA-protein interactions in RNP complexes	1.0	-	5-7 Feb 2014
Tittmann, Kai	Tietzel, Michael	340077	A 071	A/B	Thermodynamic characterization of biomolecular interactions by isothermal titration calorimetry	1.0	14-15 Mar 2013	14-15 Nov 2013

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<b>Molecular Biology &amp; Genetics</b>								
Dobbelstein, Matthias	Jagannathan, Veena/ Krönung, Sonja	340003	A 010	A/B	Assessing promoter activity by luciferase assays	1.0	tba	tba
Fischer, André	Stilling, Roman / Agbemenyah, Hope / Bahari Javan, Sanaz	340049	A 084	A	Chromatin-immunoprecipitation and epigenomic gene-profiling in the adult brain	1.0	18-21 Jun 2013	-
Brenig, Bertram	Schütz, Ekkehard	340170	A 006	B	Genotyping using FRET on the LightCycler	1.0	-	tba
Gruber, Jens	Gruber, Jens	340022	A 068	A/B	Mechanisms of RNA silencing	1.0	Jun 2013 (tba)	Nov 2013 (tba)
Jakobs, Stefan	Jensen, Nickels	340191	A 147	A/B	Mutagenesis and screening strategies to design photoswitchable fluorescent proteins	1.0	12-13 Mar 2013	22-23 Oct 2013
Brenig, Bertram	Schütz, Ekkehard	340098	A 113	A	NGS and HTP SNP typing	1.0	tba	-
Dobbelstein, Matthias	Landmann, Hannes / Wienken, Magdalena	340017	A 011	A/B	Polymerase Chain Reaction I and advanced applications	1.0	Apr 2013 (tba)	Oct 2013 (tba)
<b>Cell Biology &amp; Microbiology, Imaging</b>								
Kehlenbach, Ralph	Kehlenbach, Ralph	tba	A 039	B	Analysis of nucleocytoplasmic transport by flow cytometry	0.5	-	01 Jan 2014
Simons, Mikael	Mitkovski, Miso	tba	A 059	B	GFP proteins and their application (FRAP, FRET, photo activation)	1.0	-	4-5 Nov 2013
Jakobs, Stefan	Kummer, Susann	340182	A 134	A/B	Imaging Mitochondria in Eukaryotic Cells	1.0	23-24 Apr 2013	10-11 Sep 2013
Großhans, Jörg	Gummalla, Mahesh	tba	A 124	B	Live imaging and laser ablation	1.0	-	9-10 Nov 2013
Cordes, Volker	Cordes, Volker	340110	A 009	A/B	Preparation of <i>Xenopus laevis</i> nuclear envelopes and their analysis by field emission scanning electron microscopy	1.0	7-8 Aug 2013	5-7 Feb 2014
Nave, Klaus-Armin	Möbius, Wiebke	340025	A 044	A/B	Subcellular localization of proteins by immunoelectron microscopy of cryosections	1.0	22-23 Apr 2013	11-12 Nov 2013
Olympus / Bodenschatz	Tarantola, Marco	340027	A 046	A/B	Theory and basics of fluorescence microscopy and imaging / Introduction to life science research applications FRET, FRAP, FLIM,	1.0	Aug 13	Feb 2014
<b>Developmental Biology, Anatomy &amp; Histology</b>								
Pieler, Tomas	Henningfeld, Kristine	tba	A 051	B	Gene regulation in <i>Xenopus</i>	1.0	-	18-20 Nov 2013
Hahn, Heidi	Nitzki, Frauke / Becker, Marco	340084	A 028	A/B	<i>In situ</i> hybridization of paraffin embedded tissue sections	1.0	Jun/Jul 2013 (tba)	Jan/Feb 2014 (tba)
Shcherbata, Halyna	Shcherbata, Halyna	340085	A 056	A	Introduction to basic histology techniques	1.0	15-19 Apr, 22-27 Apr, 22-27 May	-
Eichele, Gregor / Geffers, Lars	Miletic, Helena	tba	A 013	B	Mouse histology & <i>in situ</i> expression analyses	1.0	-	4-5 Nov 2013
Stadelmann-Nessler, Christine	Stadelmann-Nessler, Christine/ Kowatsch, Olga	340033	A 060	A/B	Non-radioactive <i>in situ</i> hybridization	1.0	tbd	tbd
Bucher, Gregor	Bucher, Gregor	340083	A 145	A/B	Orthologs and Paralogs – how they evolve and how to distinguish them	0.5	29 Apr 2013	25 Oct 2013
Dobbelstein, Matthias	Lizé, Muriel	tba	A 129	A/B	Preparation of mouse embryonic fibroblasts (culture of primary cells)	1.0	tba	tba
<b>Vertebrate Animal Models</b>								
Bayer, Thomas A.	Wirths, Oliver	340034	A 002	A/B	Alzheimer's disease: Behavioural and neuropathological analysis of transgenic mouse models	1.0	10-11 Jun 2013	tba
Bähr, Mathias	Lingor, Paul	tba	A 139	B	<i>In vitro</i> and <i>in vivo</i> for Parkinson's disease research	0.5	-	Fall 2013 (tba)

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Bähr, Mathias	Lingor, Paul	340032	A 001	A	Introduction to animal experiments	0.5	Spring 2013 (tba)	-
Schraeppler, Anke / Reupke, Felix	Schraeppler, Anke	tba	A 101	B	Introduction to laboratory animal science	1.5	-	Feb 2014 (tba)
	Bunzendahl, Jens	340086	A 107	A/B	Tissue processing and immunohistochemistry on tissue sections of genetically engineered mouse models	1.0	Jun 2013 (tba)	Dec 2013 (tba)
<b>Molecular &amp; Cellular Neuroscience, Electrophysiology</b>								
Moser, Tobias	Wichmann, Carolin / Chakrabarti, Rituparna	340196	A 149	A	Basic methods of transmission electron microscopy - from tissue preparation to 3D reconstruction	1.0	Jul/Aug 2013 (tba)	-
Fiala, André / Göpfert, Martin		340087	A 083	A/B	Drosophila Neurogenetics	1.0	25-27 Mar 2013	9-11 Sep 2013
Rizzoli, Silvio	Revelo, Natalia/ Saka, Sinem/ Vreja, Ingrid	340039	A 089	A	High resolution microscopy in synapses	1.0	19-20 Mar 2013	tba
Gollisch, Tim	Kühn, Norma/ Rozenblit, Fernando	340185	A 140	A	Multielectrode Array Recordings from the Retina	1.0	25-27 Mar 2013	-
Rhee, JeongSeop	Rhee, JeongSeop	340038	A 096	A/B	Nerve cell culture and patch-clamp recordings from nerve cells	1.0	29-30 Apr 2013	23-24 Sep 2013
Bringmann, Henrik	Spies, Jan / Turek, Michal / Schwarz, Juliane	tba	A 137	B	Neurobiology of <i>C. elegans</i>	0.5	-	17 Oct 2013
Bringmann, Henrik	Spies, Jan / Turek, Michal / Schwarz, Juliane / Judith	340187	A 144	A	Optogenetics and Calcium Imaging	1.0	24-25 Apr 2013	-
Stühmer, Walter	Pardo, Luis	340040	A 063	A/B	Patch clamp	1.0	21-23 Aug 2013	22-24 Jan 2014
Stegmüller, Judith	Matz, Annika	340199	A 150	A	Survival Assay	0.5	tba	-
<b>Theoretical, Systems &amp; Behavioral Neuroscience</b>								
Antal, Andrea	Strenzke, Nicola / Hoch, Gerhard	340054	A 041	A	Auditory and visual evoked potentials	1.0	11-12 Apr 2013	-
Gail, Alexander / Glaser, Beatrix		340043	A 073	A/B	Introduction to Matlab in Systems Neuroscience	1.0	12, 19, 26 Apr 2013	14, 21, 28, Sep 2013
Gail, Alexander / Treue, Stefan	Gail, Alexander / Treue, Stefan	tba	A 018	B	Non-invasive probing of brain function – Advanced Methods Course in Psychophysics	1.0	-	tba
Geisel, Theo / Timme, Marc / Wolf, Fred /	Geisel, Theo / Timme, Marc / Wolf, Fred / Battaglia, Demian	tba	A 021	B	Theoretical and Computational Neuroscience: Collective Dynamics Biological Neural Networks I	2.0	-	Fridays WiSe 2013/14
Geisel, Theo / Timme, Marc / Wolf, Fred	Geisel, Theo / Timme, Marc / Wolf, Fred	530399	A 022	A	Theoretical and Computational Neuroscience: Collective Dynamics Biological Neural Networks II	1.0	Fridays SoSe 2013	-
Antal, Andrea	Paulus, Walter	tba	A 048	B	Transcranial magnetic- and electrical stimulation	1.0	-	20-22 Feb 2014
Ehrenreich, Hannelore	Begemann, Martin / Bartels, Claudia	340137 (A)	A 012	A/B	Translational Neuroscience: (A) Schizophrenia, (B) Multiple Sclerosis	2.0 / module	(A) 14-16 Jun 2013	(B) Nov 2013
<b>Structural Biology</b>								
Stark, Holger	N.N.	340060	A 061	A/B	3D structure determination of macromolecular complexes by single particle cryo-EM	1.0	tba	tba
Pena, Vlad	Schmitzova, Jana / Steuerwald, Ulrich / De, Inessa / de Moura,	340059	A 102	A/B	Crystallization of biological macromolecules	1.0	17-18 Jun 2013	20-21 Jan 2014
Bennati, Marina	Türke, Maria Teresa / Tkach, Igor / Argirevic, Tomislav	340055	A 003	A/B	EPR-Spectroscopy	1.5	11-13 Mar 2013	25-27 Sep 2013
Griesinger, Christian / Zweckstetter, Markus	Griesinger, Christian / Zweckstetter, Markus	340132	A 118	A	NMR-based structural biology	tba	tba	-
Ficner, Ralf	Neumann, Piotr	340130	A 103	A	X-ray crystallography	2.5	15-19 Apr 2013	-

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<b>Biophysics, Bioinformatics and Statistics</b>								
Wolf, Fred	Florez, Juan	340190	A 148	A	Algorithm thinking: An introduction to programming logic	1,0	3-5 Jun 2013	-
Friede, Tim	Konietsche, Frank / Lange, Katharina	340061	A 100	A/B	Basic statistics for graduate students in the life sciences	1.0	5, 7, 11, 13 Mar 2013	tba (first week of October 2013)
Grubmüller, Helmut / Schmidt, Christoph F.	Grubmüller, Helmut / Schmidt, Christoph F.	340166	A 025	A/B	Current Topics in Biophysics – Lecture Series	1.0	Fridays	Fridays
Walter, Lutz	Brameier, Markus	340068	A 067	A/B	Introduction to Bioinformatics Methods	1.0	Apr 2013 (tba)	Oct 2013 (tba)
Mitkovski, Mišo	Mitkovski, Mišo	340066	A 098	A/B	Introduction to image processing in biology with ImageJ	1.0	27-28 May 2013	4-5 Dec 2013
Meyer, Ralph	Meyer, Ralph	340188	A 115	A	Introduction to LaTeX	1.0	25-26 May 2013	-
Flórez Weidinger, Juan Daniel / Gabrielaitis, Mantas / Chou, Wen-Baret, Jean-Christophe	Flórez Weidinger, Juan Daniel / Gabrielaitis, Mantas / Chou, Wen-Gruner, Philipp/ Riechers, Birte	340133	A 119	A	Introduction to MATLAB	1.0	3 days in SoSe (tba)	-
		340179	A 128	A	Introduction to Microfluidics	1.5	15-16 Apr 2014	-
Grubmüller, Helmut	Kaptan, Shreyas	340168	A 024	A/B	Introduction to molecular dynamic simulation	1.0	SoSe 2013	WiSe 2013/14
Beißbarth, Tim	Bayerlova, Michaela	340172	A 126	A	Introduction to R and microarray analysis	1.0	17-19 Apr 2013	-
Köster, Sarah	Dammann, Christian/ Saldanha, Oliva	340169	A 117	A	Microfluidics	1.0	4-5 Jun 2013	14-15 Oct 2013 und 20-21 Oct 2013
Burg, Thomas P.	Burg, Thomas P.	340135	A 121	A	Micropatterning and Microfluidics	1.5	3-5 Apr 2013	-
Morgenstern, Burkhard	Landesfeind, Manuel/ Al Ait, Loyal	340186	A 141	A	Paper-writing with LaTeX	1.0	17-19 Apr 2013	-
Kollmar, Martin	Mühlhausen, Stefanie	340131	A 116	A/B	Protein family analysis as basis for experiments and experimental data interpretation	1.0	11-12 Apr 2013	9-10 Oct 2013
Helmer,Markus/ Jahnke, Sven/ Kühn, Norma/ Steinem, Claudia / Janshoff, Andreas	Helmer,Markus/ Jahnke, Sven/ Kühn, Norma/ Rozenblit, Mey, Ingo / Neubacher, Henrik	340156	A 123	A	Python programming introductory course	2.0	15, 16, 17, 22, 23 Apr 2013	-
		340065	A 062	A/B	Scanning Ion Conductance Microscopy, a versatile tool to study surfaces and surface properties	1.0	11-12 Apr 2013	14-15 Nov 2013
Grubmüller, Helmut / de Groot, Bert / Groenhof, Bert	Grubmüller, Helmut / de Groot, Bert	340189	A 142	A	Theoretical and Computational Biophysics: Concepts and Methods	1.5	Mondays	-
Grubmüller, Helmut / de Groot, Bert / Groenhof, Bert	Grubmüller, Helmut / de Groot, Bert	tba	A 143	B	Theoretical and Computational Biophysics: Introduction	1.5	-	Mondays
Steinem, Claudia / Janshoff, Andreas	Schatz, Michaela	340067	A 133	A/B	Using biosensors to study analyte-ligand interactions: basic principles and applications	0.5	5 Apr 2013	29 Nov 2013
<b>Extended Methods Courses</b>								
Hell, Stephan / Egner, Alexander	Hell, Stephan / Egner, Alexander	tba	E 01	B	Advanced Light Microscopy	3.0	-	16-20 Sep 2013 (tbc)
Tittmann, Kai	Kühnel, Karin / Urlaub, Henning / Lange, Adam	340186	E 02	A	Bioanalytics	4.0	27 May-07 Jun 2013 (schedule might be shifted by a week)	-
Stühmer, Walter / Hörner, Michael / Schlüter, Oliver	Stühmer, Walter / Hörner, Michael / Schlüter, Oliver	340095	E 03	A	ENI Electrophysiology Training (ENI-ELECTRAIN)	4.0	6-17 May 2013	-