

GGNB Methods Courses 2015/16: Overview September 2015 - February 2016

Short Methods Courses & Method Seminars; Extended Methods Courses Sep 2015 - Feb 2016 (B)

Department/Group	Supervisor(s)	UniVZ	ID	Title of Course	Credits	Date B
Biochemistry						
Höbartner, Claudia	Höbartner, Claudia	340005	A 032	Chemical synthesis and enzymatic ligation of RNA and DNA oligonucleotides	1.0	19-20 Nov 2015
Rodnina, Marina	Holtkamp, Wolf	340010	A 081	Introduction to transient kinetic methods	1.0	12-13 Oct 2015
Schmitt, Hans Dieter	Beckmann, Sabine	340015	A 034	BiFC (bimolecular fluorescence complementation) in yeast and image analysis with CellProfiler	1.0	<i>tba</i>
Tittmann, Kai	Sautner, Viktor / v. Pappenheim, Fabian R. / Brodhun, Florian	340018	A 064	Principles and methods of protein purification by chromatography	1.0	9-10 Nov 2015
Jahn, Reinhard	Witkowska, Agata / Jakhanwal, Shrutee	340046	A 033	Reconstitution of neuronal exocytosis	1.0	15-16 Oct 2015
Rehling, Peter	Römpler, Katharina	340074	A 053	Blue-native PAGE analysis of membrane protein complexes	1.0	16-17 Feb 2016
Lührmann, Reinhard	Hartmuth, Klaus	340075	A 093	The application of RNA structure determination methodology to the analysis of RNA-protein interactions in RNP complexes	1.0	23-25 Feb 2015
Tittmann, Kai	Tietzel, Michael / Kupski, Oliver / Sabin Prajapati	340077	A 071	Thermodynamic characterization of biomolecular interactions by isothermal titration calorimetry	1.0	12-13 Nov 2015
Jahn, Reinhard	Halder, Partho/ Perez Lara, Angel	340171	A 146	Reconstitution of membrane fusion by proteoliposomes	1.0	4-5 Feb 2016
Walter, Lutz	Walter, Lutz / Zaitseva, Olena	340184	A 138	High-throughput single-cell quantitative microfluidic RT-PCR	1.0	19-20 Nov 2015
Konrad, Manfred	N.N.	340200	A 151	Introduction to steady-state kinetics	1.0	19-20 Nov 2015
Urlaub, Henning	Chernev, Aleksandar / Karaca, Samir / Qamar, Saadia / Mandad,	340201	A 177	Sequence analysis of proteins and their post-translational modifications by electrospray ionization (ESI) mass spectrometry	1.0	2-4 Nov 2015
Rehling, Peter	Levchenko, Maria / Lorenzi, Isotta	340211	A 163	Native membrane protein complex isolation	0.5	12 Nov 2015
Rehling, Peter	Schendzielorz, Alexander / Naumenko, Natalia	340212	A 164	<i>In vitro</i> import into purified mitochondria	1,0	5-6 Nov 2015
Tittmann, Kai	Brodhun, Florian / N.N.	340238	E 02	Bioanalytics (Extended methods course)	4.0	two weeks in Sep 2015

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Molecular Biology & Genetics						
Gruber, Jens	Gruber, Jens	340022	A 068	Mechanisms of RNA silencing	1.0	19-20 Nov 2015
Brenig, Bertram	Schütz, Ekkehard	340098	A 113	NGS and HTP SNP typing	1.0	16-18 Nov 2015
Brenig, Bertram	Schütz, Ekkehard	340170	A 006	Genotyping using FRET on the LightCycler	1.0	2-3 Nov 2015
Jakobs, Stefan	Jensen, Nickels	340226	A 173	Strategies to design photoswitchable fluorescent proteins and their application in nanoscopy	1.0	13-14 Oct 2015
Cell Biology & Microbiology, Imaging						
Tarantola, Marco / Olympus	Tarantola, Marco	340027	A 046	Theory and basics of fluorescence microscopy and imaging / Introduction to life science research applications FRET, FRAP, FLIM, caging-uncaging, GFP, Fluorescence microscopy of living cells	1.0	<i>tba</i>
Kehlenbach, Ralph	Kehlenbach, Ralph	340081	A 039	Analysis of nucleocytoplasmic transport by flow cytometry	0.5	20 Jan 2016
Pöhlmann, Stefan	Winkler, Michael / Hoffmann, Markus	340221	A 171	Viral transduction systems	1,0	17-19 Nov 2015
Nave, Klaus-Armin	Möbius, Wiebke	340222	A 044	Subcellular localization of proteins by immunoelectron microscopy of cryosections	1.0	16-17 Nov 2015
Enderlein, Jörg	Li, Weixing	340239	A 186	Building a wide-field epi-fluorescence microscope for single molecule detection	1.0	<i>tba</i>
Developmental Biology, Anatomy & Histology						
Eichele, Gregor	Joshi, Parth / Teller, Christina	340029	A 013	Mouse histology & <i>in situ</i> expression analyses	1.0	2-3 Nov 2015
Stadelmann-Nessler, Christine	Schulz, Katja	340033	A 060	Non-radioactive <i>in situ</i> hybridization	1.0	16-18 Nov 2015
Bucher, Gregor	Bucher, Gregor	340083	A 145	Orthologs and Paralogs – how they evolve and how to distinguish them	0.5	9 Oct 2015
Shcherbata, Halyna	Shcherbata, Halyna	340085	A 056	Introduction to basic histology techniques	1.0	17-18 Nov 2015
Pieler, Tomas	Henningfeld, Kristine	340236	A 185	Microinjection in <i>Xenopus</i> embryos	1.0	23-25 Nov 2015

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Vertebrate Animal Models						
Bayer, Thomas A.	Wirths, Oliver	340199	A 175	Neurodegenerative Diseases: Behavioral and neuropathological analysis of transgenic mouse models	1.0	11-12 Nov 2015
Bähr, Mathias	Lingor, Paul	340219	A 139	<i>In vitro</i> and <i>in vivo</i> models for Parkinson's disease research	0.5	13 Oct 2015
Steinbrecher, Julia		340246	A 191	Tierversuchskundlicher Kurs: Theorie (<i>in German</i>)	0.5	12-16 Oct 2015
Molecular & Cellular Neuroscience, Electrophysiology						
Rhee, JeongSeop	Rhee, JeongSeop	340038	A 096	Nerve cell culture and patch-clamp recordings from nerve cells	1.0	21-22 Sep 2015
Stühmer, Walter	Pardo, Luis	340040	A 063	Patch clamp	1.0	16-18 Sep 2015
Fiala, André / Göpfert, Martin	Riemensperger, Thomas / Geurten, Bart	340087	A 083	<i>Drosophila</i> Neurogenetics	1.0	14-16 Sep 2015
Moser, Tobias	Wichmann, Carolin / Chakrabarti, Rituparna	340196	A 149	Basic methods of transmission electron microscopy - from tissue preparation to 3D reconstruction	1.0	24-25 Nov 2015
Brose, Nils	Krüger, Dilja	340234	A 153	Isolation of synaptic compartments for quantitative biochemical analysis	1,0	17-18 Sep 2015
Theoretical, Systems & Behavioral Neuroscience						
Geisel, Theo / Timme, Marc / Wolf, Fred	Geisel, Theo / Timme, Marc / Wolf, Fred	530170	A 021	Theoretical and Computational Neuroscience: Collective Dynamics Biological Neural Networks I	2.0	Fridays
Structural Biology						
Bennati, Marina	Liu, Guoquan / Kasanmascheff, Müge	340055	A 003	EPR-Spectroscopy	1.5	16-18 Sep 2015
Pena, Vlad	Ponce Salvatierra, Almudena / Cretu, Constantin / Kibedi, Csaba	340059	A 102	Crystallization of biological macromolecules	1.0	7-9 Sep 2015
Stark, Holger	Fischer, Niels	340060	A 061	3D structure determination of macromolecular complexes by single particle cryo-EM	1.0	<i>tba</i>

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Biophysics, Bioinformatics and Statistics						
Friede, Tim	Röver, Christian	340061	A 100	Basic statistics for graduate students in the life sciences	1.0	19-22 Oct 2015
Mitkovski, Mišo	Mitkovski, Mišo / Alexopoulos, Ioannis	340066	A 098	Introduction to image processing in biology with ImageJ and Fiji	1.0	10-11 Dec 2015
Steinem, Claudia	Hubrich, Raphael / Mey, Ingo	340067	A 133	Using biosensors to study analyte-ligand interactions: basic principles and applications	0,5	10 Dec 2015
Burg, Thomas P.	Burg, Thomas P.	340135	A 121	Micropatterning and Microfluidics	1.0	11-12 Jan 2016
Grubmüller, Helmut / Schmidt, Christoph F.	Grubmüller, Helmut / Schmidt, Christoph F.	340166	A 025	Current Topics in Biophysics – Lecture Series	1.0	Fridays
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	24-26 Nov 2015
Grubmüller, Helmut / de Groot, Bert / Groenhof, Gerrit	Grubmüller, Helmut / de Groot, Bert / Hub, Jochen	340227	A 143	Theoretical and Computational Biophysics	1.5	Mondays
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	10-11 Dec 2015
Enderlein, Jörg	Zhou, Man / Cheng, Hao	340237	A 184	Study nanosecond protein folding dynamics at single-molecule level by Fluorescence Correlation Spectroscopy (FCS)	1.0	10-11 Sep 2015
Tarantola, Marco	Turco, Laura	340240	A 187	Introduction to Electric Cell-substrate Impedance Sensing (ECIS) and applications	1.0	25-27 Nov 2015
Beißbarth, Tim	Wolff, Alexander	440727	A 176	Introduction to R and RNA-Seq analysis	1.0	2-4 Dec 2015
Hörandl, Elvira	Appelhans, Marc	340241	A 188	Introduction into the bioinformatic analysis of next generation sequence data	1.0	16-18 Sep 2015
Hörandl, Elvira	Appelhans, Marc	340242	A 189	Next generation sequencing: Methods, Data Analysis and Applications	0.5	14 Sep 2015
Hörandl, Elvira	Appelhans, Marc	340243	A 190	Reduced-representation NGS methods in phylogenomics and biogeography: RADseq & RNAseq	0.5	15 Sep 2015
Extended Methods Courses						
Tittmann, Kai	Brodhun, Florian / N.N.	340238	E 02	Bioanalytics (Extended methods course)	4.0	2 weeks in Sep 2015