

Neues aus der Zellbiologie - WS 2018/19

Seminar des Vertiefungsmoduls "Biochemie und Molekulare Zellbiologie" für Studenten der Humanbiologie im 5. Semester und der Biochemie (Wahlmodul W3)

Mo 10:00-11:00 Uhr

SR 4 – UPS-Gebäude

Prof. Dr. K. Endlich, Prof. Dr. N. Endlich, Prof. Dr. J. Giebel, Dr. H. Junker, Prof. Dr. U. Lendeckel, PD Ch. H. Lillig

Datum	Nr.	Dozent	Thema
15.10.18		KE/EK	Einführung
22.10.18		HJ	Methoden der Molekular-und Zellbiologie (60 – 90 Min.)
29.10.18	1	FE	Name: Immunoproteasomes preserve protein homeostasis upon interferon-induced oxidative stress. Seifert U. et al., Cell. 2010 Aug 20;142(4):613-24. doi: 10.1016/j.cell.2010.07.036. Name: Additive loss-of-function proteasome subunit mutations in CANDLE/PRAAS patients promote type I IFN production. Brehm A. et al. J Clin Invest. 2015 Nov 2;125(11):4196-211. doi: 10.1172/JCI81260. Epub 2015 Oct 20
05.11.18	3	UL	Name: Human epicardial adipose tissue induces fibrosis of the atrial myocardium through the secretion of adipo-fibrokines. Venteclaf N et al. Eur Heart J. 2015;36:795-805a. Name: Transfer of mitochondria from astrocytes to neurons after stroke. Hayakawa K. et al., Nature 535: 551-555, 2016; doi: 10.1038/nature18928
12.11.18	5	FE	Name: Mixed proteasomes function to increase viral peptide diversity and broaden antiviral CD8+ T cell responses. Zanker D. et al., J Immunol. 2013 Jul 1; 191(1):52-9. Name: Long-Peptide Cross-Presentation by Human Dendritic Cells Occurs in Vacuoles by Peptide Exchange on Nascent MHC Class I Molecules. Ma W, Zhang Y. et al, J Immunol. 2016 Feb 15;196(4):1711-20.
19.11.18	7	NE	Name: Loss of the podocyte-expressed transcription factor Tcf21/Pod1 results in podocyte differentiation defects and FSGS. Maezawa et al., J. Am. Soc. Nephrol. 25: 2459-2470, 2014. Name: The Wilms tumor genes wt1a and wt1b control different steps during formation of the zebrafish pronephros. Perner et al., Dev. Biol. 309: 87-96, 2007.
26.11.18	9	CL	Name: Semaphorin3A signalling is mediated via sequential Cdk5 and GSK3beta phosphorylation of CRMP2: implication of common phosphorylating mechanism underlying axon guidance and Alzheimer's disease. Uchida Y, Ohshima T, Sasaki Y, Suzuki H, Yanai S et al. Genes Cells. 2005 Feb; 10(2):165-79. Name: Vertebrate-specific glutaredoxin is essential for brain development. Bräutigam L, Schütte LD, Godoy JR, Prozorovski T, Gellert M, Hauptmann G, Holmgren A, Lillig, C.H.* and Berndt C.* Proc. Natl. Acad. Sci. USA 108: 20532-20537 (2011)

03.12.18	11 12	KE	Name: Focal segmental glomerulosclerosis is induced by microRNA-193a and its downregulation of WT1. Gebeshuber et al., Nat. Med. 19: 481-487, 2013. Name: Integration of Cistromic and Transcriptomic Analyses Identifies Nphs2, Mafb, and Magi2 as Wilms' Tumor 1 Target Genes in Podocyte Differentiation and Maintenance. Dong et al., J. Am. Soc. Nephrol. 26: 2118-2128, 2015.
10.12.18	13 14	HJ	Name: : MiR-139-5p is increased in the peripheral blood of patients with prostate cancer. Cell Physiol Biochem 2016;39: 1111-1117 Cheng Pang et al. Name: Reversing effect and mechanism of soluble resistance-related calcium-binding protein on multidrug resistance in human lung cancer A549/DDP cells. MOLECULAR MEDICINE REPORTS 11: 2118-2124, 2015 Yanyan Gao et al.
17.12.19	15 16	NE	Name: Cofilin cooperates with fascin to disassemble filopodial actin filaments. Breitsprecher et al., J. Cell Sci. 124: 3305-3318, 2011. Name: Non-muscle myosin IIA is required for the development of the zebrafish glomerulus. Müller et al., Kidney Int. 80: 1055-1063, 2011.
07.01.19	17 18	KE	Name: Podocyte-specific loss of Cdc42 leads to congenital nephropathy. Scott et al., J. Am. Soc. Nephrol. 23: 1149-1154, 2012. Name: Podocyte-associated talin1 is critical for glomerular filtration barrier maintenance. Tian et al., J. Clin. Invest. 124: 1098-1113, 2014.
14.01.19	19 20	JG	Name: A possible role for integrin signaling in diffuse axonal injury. Hemphill et al., PLoS One 6: e22899, 2011. Name: Mechanotransduction activates $\alpha(5)\beta(1)$ integrin and PI3K/Akt signaling pathways in mandibular osteoblasts. Watabe et al., Exp. Cell Res. 317: 2642-2649, 2011.
21.01.19	21 22	JG	Name: Roles of fluid shear stress and retinoic acid in the differentiation of primary cultured human podocytes. <u>Exp Cell Res.</u> 2017 May 1;354(1):48-56. doi: 10.1016/j.yexcr.2017.03.026. Epub 2017 Mar 16. Name: Rac1 activation in podocytes induces the spectrum of nephrotic syndrome. <u>Kidney Int.</u> 2017 Aug; 92(2):349-364. doi: 10.1016/j.kint.2017.03.010. Epub 2017 May 6.

Vortragsdauer bei zwei Referaten 10(-12) min, bei einem Referat 20(-25) min. Format der Präsentation: PowerPoint oder PDF. Bitte Computer mit VGA-Anschluss mitbringen bzw. mit dem Betreuer absprechen.

Vor Beginn der Referatserstellung, jedoch spätestens zwei Wochen vor dem Referat, ist mit dem Betreuer (nach rechtzeitiger Terminvereinbarung) das Thema durchzusprechen.

Die Themen werden im Losverfahren (1 – 22) vergeben!