

Dr. Carsten Calaminus

Personal Data

Status/Function: Animal Care, Teaching, Safety
Scientific focus: Neurology, Small animal imaging, Behavioral studies
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Education and qualifications

04/2005 – 03/2008 Stipendiary of the Friedrich-Naumann-Foundation
05/2002 – 05/2003 Diploma at the institute of immunology at the Universität Stuttgart.
Title: „*Fluoreszenz-Mikroskopische Charakterisierung der Fas-FasL-Interaktion*“
10/1996 – 03/2003 Diploma study of Technical Biology at the University of Stuttgart.
Qualification: „gut“ (1,7)
Main subject: Genetics/Virology; Minor subject: Bioengineering, immunology, biochemistry.

Work Experience

02/2009 – today Head of LAS, Leader Animal Facility, Radiation Safety Officer and Research Scientist (PostDoc) in the Department of Preclinical Imaging and Radiopharmacy, University of Tübingen
07/2004 – 12/2008 Research associate (PhD) at the Dept. of Animal Physiology at the Universität Stuttgart. Title: „*Die neuropharmakologische Steuerung von instrumentellen Lernvorgängen der Ratte durch Dopamin.*“
Qualification: „magna cum laude“ (1,0)

Additional Qualifications and Skills

03/2016 – today Deputy Member of the local ethical committee regarding Animal Welfare (“Tierschutz-Ethik-Kommission”)
04/2015 – today Member of the Advisory Board of Study Affairs (“Studienkommission”) Medical Technologies
03/2014 – today Member of the local “Tierschutzausschuss” of the University Tübingen
11/2014 – today Radiation Safety Officer
11/2010 – today Head of Animal Facility (rats, mice, gerbils, guinea pigs, rabbits)
07/2009 – today Head of LAS and supervisor of Animal Care protocols
02/2004 – 12/2008 Network administrator at the dept. of Tierphysiologie at the Universität Stuttgart
- Setup and supervision of Windows operating system as well as the used software (Office, Statistica, Adobe Photoshop, Sigma Plot
- Homepage management

Publications

- 2016 Niessner H, Schmitz J, Tabatabai G, Schmid AM, Calaminus C, Sinnberg T, Weide B, Eigentler TK, Garbe C, Schitteck B, Quintanilla-Fend L, Bender B, Mai M, Praetorius C, Beissert S, Schackert G, Muders MH, Meinhardt M, Baretton GB, Dummer R, Flaherty K, Pichler BJ, Kulms D, Westphal D, Meier F. „PI3K Pathway Inhibition Achieves Potent Antitumor Activity in Melanoma Brain Metastases In Vitro and In Vivo.“ Clin Cancer Res. 2016 Dec 1;22(23):5818-5828.
- 2016 Chen H, Fajol A, Hoene M, Zhang B, Schleicher ED, Lin Y, Calaminus C, Pichler BJ, Weigert C, Häring HU, Lang F, Föller M. “PI3K-resistant GSK3 controls adiponectin formation and protects from metabolic syndrome.” Proc Natl Acad Sci U S A. 2016 May 17;113(20):5754-9.
- 2016 Teo RT, Hong X, Yu-Taeger L, Huang Y, Tan LJ, Xie Y, To XV, Guo L, Rajendran R, Novati A, Calaminus C, Riess O, Hayden MR, Nguyen HP, Chuang KH, Pouladi MA. “Structural and molecular myelination deficits occur prior to neuronal loss in the YAC128 and BACHD models of Huntington disease.” Hum Mol Genet. 2016 Jul 1;25(13):2621-2632.
- 2015 Clemens LE, Weber JJ, Wlodkowski TT, Yu-Taeger L, Michaud M, Calaminus C, Eckert SH, Gaca J, Weiss A, Magg JC, Jansson EK, Eckert GP, Pichler BJ, Bordet T, Pruss RM, Riess O, Nguyen HP. “Olesoxime suppresses calpain activation and mutant huntingtin fragmentation in the BACHD rat.” Brain. 2015 Dec;138(Pt 12):3632-53.
- 2015 Weini C, Castaneda Vega S, Riehle H, Stritt C, Calaminus C, Wolburg H, Mauer S, Breithaupt A, Gruber AD, Wasylyk B, Olson EN, Adams RH, Pichler BJ, Nordheim A. “Endothelial depletion of murine SRF/MRTF provokes intracerebral hemorrhagic stroke.” Proc Natl Acad Sci U S A. 2015 Aug 11;112(32):9914-9.
- 2015 Cristofanon S, Abhari BA, Krueger M, Tchoghandjian A, Momma S, Calaminus C, Vucic D, Pichler BJ, Fulda S. “Identification of RIP1 as a critical mediator of Smac mimetic-mediated sensitization of glioblastoma cells for Drozitumab-induced apoptosis.” Cell Death Dis. 2015 Apr 16;6:e1724.
- 2014 Maier FC, Wehrli HF, Schmid AM, Mannheim JG, Wiehr S, Lerdkrai C, Calaminus C, Stahlschmidt A, Ye L, Burnet M, Stiller D, Sabri O, Reischl G, Staufenberg M, Garaschuk O, Jucker M, Pichler BJ. “Longitudinal PET-MRI reveals β -amyloid deposition and rCBF dynamics and connects vascular amyloidosis to quantitative loss of perfusion.” Nat Med. 2014 Dec;20(12):1485-92.
- 2013 Kelp A, Koeppen AH, Petrasch-Parwez E, Calaminus C, Bauer C, Portal E, Yu-Taeger L, Pichler B, Bauer P, Riess O, Nguyen HP. „A novel transgenic rat model for spinocerebellar ataxia type 17 recapitulates neuropathological changes and supplies in vivo imaging biomarkers.” J Neurosci. 2013 May 22;33(21):9068-81.
- 2013 Nuber S, Harmuth F, Kohl Z, Adame A, Trejo M, Schöning K, Zimmermann F, Bauer C, Casadei N, Giel C, Calaminus C, Pichler BJ, Jensen PH, Müller CP, Amato D, Kornhuber J, Teismann P, Yamakado H, Takahashi R, Winkler J, Masliah E, Riess O. “A progressive dopaminergic phenotype associated with neurotoxic conversion of α -synuclein in BAC-transgenic rats.”
- 2012 Yu-Taeger L, Petrasch-Parwez E, Osmand AP, Redensek A, Metzger S, Clemens LE, Park L, Howland D, Calaminus C, Gu X, Pichler B, Yang XW, Riess O, Nguyen HP. „A Novel

BACHD Transgenic Rat Exhibits Characteristic Neuropathological Features of Huntington Disease." J Neurosci. 32(44):15426-15438.

- 2012 Marx C, Lex B, Calaminus C, Hauber W, Backes H, Neumaier B, Mies G, Graf R, Endepols H. "Conflict Processing in the Rat Brain: Behavioral Analysis and Functional μ PET Imaging Using [F]Fluorodeoxyglucose." Front Behav Neurosci. 2012;6:4.
- 2011 S. Nuber, E. Petrasch-Parwez, O. Arias-Carrión, L. Koch, Z. Kohl, J. Schneider, C. Calaminus, R. Dermietzel, A. Samarina, J. Boy, H. P. Nguyen, P. Teismann, T. P. Velavan, P. J. Kahle, S. von Hörsten, M. Fendt, R. Krüger, O. Riess: "Olfactory neuron-specific expression of A30P alpha-synuclein exacerbates dopamine deficiency and hyperactivity in a novel conditional model of early Parkinson's disease stages" Neurobiol Dis. 44(2):192-204
- 2011 D. Kukuk, G. Reischl, O. Raguin, S. Wiehr, C. Calaminus, V. Honndorf, L. Fend, T. Schönberger, O. Duchamp, H.-J. Machulla and B.J. Pichler: "Assessment of PET Tracer Uptake in Hormone-Independent and Hormone- Dependent Xenograft Prostate Cancer Mouse Models." J Nucl Med. 52(10):1654-63
- 2010 Nuber S, Franck T, Wolburg H, Schumann U, Casadei N, Fischer K, Calaminus C, Pichler BJ, Chanarat S, Teismann P, Schulz JB, Luft AR, Tomiuk J, Wilbertz J, Bornemann A, Krüger R, Riess O: "Transgenic overexpression of the alpha-synuclein interacting protein synphilin-1 leads to behavioral and neuropathological alterations in mice." [Neurogenetics](#) 11(1):107-120
- 2009 Calaminus C, Hauber W: "Modulation of behavior by expected reward magnitude depends on dopamine in the dorsomedial striatum" Neurotox Res 15(2):97-110.
- 2008 Calaminus C, Hauber W: "Discrimination reversal learning in rats requires dopamine D1 and D2 receptor activation in the orbitofrontal cortex." Neuroscience 154(4):1195-1204.
- 2007 Calaminus C, Hauber W: "Intact discrimination reversal learning but slowed responding to reward-predictive cues after dopamine D1 and D2 receptor blockade in the nucleus accumbens of rats." Psychopharmacology (Berl) 191: 551-566
- 2002 Trott S, Burger S, Calaminus C, Stolz A: "Cloning and heterologous expression of an enantioselective amidase from Rhodococcus erythropolis strain MP50." Appl Environ Microbiol 68: 3279-3286

Conferences and Courses attended

- 2011 Calaminus C, M. Koenig, M. Lehnhoff, J.G. Mannheim, L. Yu, O. Riess, Huu Phuc Nguyen, B. J. Pichler: "Multimodal characterization of transgenic BACHD rats with full-length human mutant huntingtin." European Society for Molecular Imaging, Köln, Germany
- 2010 C. Calaminus, C. Kesenheimer, C. Griessinger, S. Wiehr, J.G. Mannheim, A. Melms, B.J. Pichler. "In vivo biodistribution of the anti α 4 integrin antibody Natalizumab in a longitudinal study of multiple sclerosis using an EAE mouse model." Society for Molecular Imaging, Omnipress (eds.), Madison, USA

- 2010 Marx C, Lex B, Calaminus C, Hauber W, Backes H, Graf R, Mies G, Endepols H.: "Combining an Operant Chamber Paradigm with [¹⁸F]Fluorodeoxyglucose MicroPET Imaging: A Study on Conflict Processing in the Rat." *Proceedings of Measuring Behavior 2010 (Eindhoven, The Netherlands, August 24-27, 2010)* Eds. A.J. Spink, F.Grieco, O.E. Krips, L.W.S. Loijens, L.P.J.J. Noldus, and P.H. Zimmerman
- 2009 Marx C, Lex B, Calaminus C, Hauber W, Backes H, Graf R, Mies G, Endepols H. "The Simon Effect in Rats: A combined behavioral and PET study, In: K.-P. Hoffmann," K. Krieglstein (eds.) Göttingen Neurobiology Report, Thieme Verlag, Stuttgart, New York.
- 2007 Calaminus C, Hauber W: "NMDA- but not D1- or D2-Receptors in the Orbitofrontal Cortex Are Involved in Reversal Learning." K.-P. Hoffmann, K. Krieglstein (eds.) Göttingen Neurobiology Report, Thieme Verlag, Stuttgart, New York