

Prof. Dr. med. Imke Puls

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	YEAR	FIELD OF STUDY
University of Wuerzburg, Germany	MD	1996	Medicine
University of Wuerzburg, Germany	Dr. med.	1997	Neurobiochemistry
University of Frankfurt, Germany	USMLE	1998	Medicine
Charité, Berlin, Germany	Board Exam	2006	Neurology

POSITIONS and HONORS

Positions

- 1996-1998 Internship in Neurology, University of Wuerzburg, Germany
- 1998-2000 Residency in Neurology, University of Wuerzburg, Germany
- 2000-2003 Postdoctoral Fellowship, Neurogenetics Branch, NINDS, NIH
- 2004- Residency in Psychiatry, Research Fellowship, Charité, Berlin, Germany

Research Awards

- 2002 Fellows Award for Research Excellence, NIH
- 2003 NINDS Retreat Award Winner, NIH

PUBLICATIONS

- Lang UE, Puls I, Muller DJ, Strutz-Seebohm N, Gallinat J (2007) Molecular mechanisms of schizophrenia. *Cell Physiol Biochem* 20(6): 687-702
- Heinz A, Friedel E, Müller DJ, Puls I, Wrase J (2007) Genetic research with intermediate phenotypes: phenocopies, perspectives and pitfalls. *Addiction* 102(11): 1696-7
- Wrase J, Reimold M, Puls I, Kienast T, Heinz A (2006) Serotonergic dysfunction: brain imaging and behavioral correlates. *Cogn Affect Behav Neurosci* 6(1): 53-61

- Mohr J, Puls I, Wrase J, S. Hochreiter, A. Heinz and K. Obermayer (2006) P-SVM Variable selection for discovering dependencies between genetic and brain imaging data. IJCNN Conference Proceedings 10119-26
- Levy JR, Sumner CJ, Caviston JP, Tokito MK, Ranganathan S, Ligon LA, Wallace KE, LaMonte BH, Harmison GG, Puls I, Fischbeck KH, Holzbaur EL (2006) A motor neuron disease-associated mutation in p150Glued perturbs dynactin function and induces protein aggregation. *J Cell Biol* 172(5): 733-45
- Sivakumar K, Kyriakides T, Puls I, Nicholson GA, Funalot B, Antonellis A, Sambuughin N, Christodoulou K, Beggs JL, Zamba-Papanicolaou E, Ionasescu V, Dalakas MC, Green ED, Fischbeck KH, Goldfarb LG (2005) Phenotypic spectrum of disorders associated with glycyl-tRNA synthetase mutations. *Brain* 128(Pt 10): 2304-14
- Puls I, Oh SJ, Sumner CJ, Wallace KE, Floeter MK, Mann EA, Kennedy WR, Wendelschafer-Crabb G, Vortmeyer A, Powers R, Finnegan K, Holzbaur EL, Fischbeck KH, Ludlow CL (2005) Distal spinal and bulbar muscular atrophy caused by dynactin mutation. *Ann Neurol* 57(5): 687-94
- Heinz A, Braus DF, Smolka MN, Wrase J, Puls I, Hermann D, Klein S, Grüsser SM, Flor H, Schumann G, Mann K, Büchel C (2005) Amygdala-prefrontal coupling depends on a genetic variation of the serotonin transporter. *Nat Neurosci* 8(1): 20-1
- Heinz A, Braus DF, Romero B, Gallinat J, Puls I, Juckel G, Weinberger DR (2004) Genetic and pharmacological effects on prefrontal cortical function in schizophrenia. *Nervenarzt* 75 (9): 845-56
- Heinz A, Goldman D, Gallinat J, Schumann G, Puls I (2004) Pharmacogenetic insights to monoaminergic dysfunction in alcohol dependence. *Psychopharmacology (Berl)* 174 (4): 561- 70
- Chen YZ, Bennett CL, Huynh H, Blair IP, Puls I, Nelis E, Abel A, Kennerson ML, Rabin BA, Nicholson GA, Auer-Grumbach M, Wagner K, De Jonghe P, Griffin JW, Fischbeck KH, Timmerman V, Cornblath DR, Chance PF (2004) DNA/RNA helicase gene mutations in a form of juvenile amyotrophic lateral sclerosis (ALS4). *Am J Hum Genet* 74 (6): 1128-35
- Antonellis A, Ellsworth RE, Sambuughin N, Puls I, Abel A, Lee-Lin SQ, Jordanova A, Kremensky I, Christodoulou K, Middleton LT, Sivakumar K, Ionasescu V, Funalot B, Vance JM, Goldfarb LG, Fischbeck KH, Green ED (2003) Glycyl tRNA synthetase mutations in Charcot-Marie-Tooth disease type 2D and distal spinal muscular atrophy type V. *Am J Hum Genet* 72 (5): 1293-9
- Puls I, Jonnakuty C, LaMonte BH, Holzbaur EL, Tokito M, Mann E, Floeter MK, Bidus K, Drayna D, Oh SJ, Brown RH, Ludlow CL, Fischbeck KH (2003) Mutant dynactin in motor neuron disease. *Nat Genet* 33 (4): 455-6
- Ruprecht-Dörfler P, Brechtelsbauer D, Schließer M, Puls I, Becker G (2002) Cerebral transit time and global cerebral blood flow volume in acute ischemic stroke. *Ultrasound Med Biol* 28 (11-12): 1405-11
- Beck M, Giess R, Magnus T, Puls I, Reiners K, Toyka KV, Naumann M (2002) Progressive sudomotor dysfunction in amyotrophic lateral sclerosis. *J Neurol Neurosurg Psychiatry*. 2002 Jul;73(1):68-70

- Magnus T, Beck M, Giess R, Puls I, Naumann M, Toyka, KV (2002) Disease progression in amyotrophic lateral sclerosis: Predictors of survival. *Muscle Nerve* 25 (5): 709-14
- Puls I, Liebermann AP, Fischbeck KH (2001) Impact of the human genome sequence on neurology and neuroscience. *Arch Neurol* 58 (11): 1750-1
- Liebermann AP, Puls I, Fischbeck KH (2001) Mining the genome for causes and cures of neurological disease. *Trends Pharmacol Sci* 22 (4): 161-2
- Mäurer M, Becker G, Wagner R, Woydt M, Hofmann E, Puls I, Lindner A, Krone A (2000) Early postoperative transcranial sonography (TCS), CT, and MRI after resection of high grade glioma: evaluation of residual tumour and its influence on prognosis. *Acta Neurochir* 142 (10): 1089-97
- Dörfler P, Puls I, Schliesser M, Maurer M, Becker G (2000) Measurement of cerebral blood flow volume by extracranial sonography. *J Cereb Blood Flow Metab* 20 (2): 269-71
- Giess R, Naumann M, Werner E, Riemann R, Beck M, Puls I, Reiners C, Toyka KV (2000) Injections of Botulinum Toxin A into the salivary glands improves sialorrhea in amyotrophic lateral sclerosis. *J Neurol Neurosurg Psychiatry* 69 (1): 121-3
- Puls I, Berg D, Mäurer M, Schließer M, Hetzel G, Becker G (2000) Transcranial sonography of the brain parenchyma: comparison of B-mode imaging and tissue harmonic imaging. *Ultrasound in Med Biol* 26 (2): 189-94
- Scheel P, Puls I, Becker G, Schoning M (1999) Volume reduction in cerebral blood flow in patients with vascular dementia. *Lancet* 354 (9196): 2137
- Puls I, Hauck K, Demuth K, Horowski A, Schließer M, Dörfler P, Scheel P, Toyka KV, Reiners K, Schöning M, Becker G (1999) Diagnostic impact of cerebral transit-time (cTT) in the differential diagnosis of dementia: a transcranial ultrasound study. *Stroke* 30 (11): 2291-5
- Puls I, Beck M, Giess R, Magnus T, Ochs G, Toyka KV (1999) Clenbuterol in amyotrophic lateral sclerosis: no evidence for therapeutic efficacy. *Nervenarzt* 70 (12): 1112-5
- Puls I, Becker G, Mäurer M, Müllges W (1999) Cerebral arteriovenous Transit-Time: A sonographic assessment of cerebral microcirculation using ultrasound contrast enhancers. *Ultrasound Med Biol* 25 (4): 503-7