

PUBLIKATIONEN

Prof. Dr. med. Stephan Ulmer

Originalarbeiten

Lindner T, Ahmeti H, Juhasz J, Helle M, Jansen O, Synowitz M, **Ulmer S** (2018) A comparison of arterial spin labeling and dynamic susceptibility perfusion imaging for resection control in glioblastoma surgery. *Oncotarget*. 9(26):18570-18577.

Karwacki GM, Benz MR, Tyndall AJ, **Ulmer S** (2017) Hematocrit and Serum Hemoglobin Do Not Influence Values in CT Perfusion of Patients with Acute Ischemic Stroke. *J Comput Assist Tomogr*. 41(4):511-514.

Lindner T, Ahmeti H, Lübbling I, Helle M, Jansen O, Synowitz M, **Ulmer S** (2017) Intraoperative resection control using arterial spin labeling - Proof of concept, reproducibility of data and initial results. *Neuroimage Clin*. 15:136-142.

Krumm S, Kivisaari SL, Monsch AU, Reinhardt J, **Ulmer S**, Stippich C, Kressig RW, Taylor KI (2017) Parietal lobe critically supports successful paired immediate and single-item delayed memory for targets. *Neurobiol Learn Mem*. 141:53-59.

Hensler J, Jensen-Kondering U, **Ulmer S**, Jansen O (2016) Spontaneous dissections of the anterior cerebral artery: a metaanalysis of the literature and three recent cases. *Neuroradiology*. 58(10):997-1004.

Hirni DI, Kivisaari SL, Krumm S, Monsch AU, Berres M, Oeksuez F, Reinhardt J, **Ulmer S**, Kressig RW, Stippich C, Taylor KI (2016) Neuropsychological markers of medial perirhinal and entorhinal cortex functioning are impaired twelve years preceding diagnosis of Alzheimer's dementia. *J Alzheimers Dis*. 52(2):573-80.

Krumm S, Kivisaari SL, Probst A, Monsch AU, Reinhardt J, **Ulmer S**, Stippich C, Kressig RW, Taylor KI (2016) Cortical thinning of parahippocampal subregions in very early Alzheimer's disease. *Neurobiol Aging*. 38:188-96.

Hartwigsen G, Saur D, Price CJ, **Ulmer S**, Baumgaertner A, Siebner HR (2013) Perturbation of the left inferior frontal gyrus triggers adaptive plasticity in the right homologous area during speech production. *Proc Natl Acad Sci U S A*. 110(41):16402-7.

Hartwigsen G, Saur D, Price CJ, Baumgaertner A, **Ulmer S**, Siebner HR (2013) Increased facilitatory connectivity from the pre-SMA to the left dorsal premotor cortex during pseudoword repetition. *J Cogn Neurosci*. 25(4):580-94.

Ulmer S, Stippich C, Jansen O, v. Kummer R, Fesl G, Reiter-Theil S (2012) Häufigkeit und verantwortungsvolles Management von Zufallsbefunden in wissenschaftlichen Neuroimaging Studien [Incidence and responsible management of incidental findings (IF) in neuroimaging research] *Nervenheilkunde* 2012(4): 246-249.

Riedel CH, Zoubie J, **Ulmer S**, Gierthmuehlen J, Jansen O (2012) Thin-slice reconstructions of nonenhanced CT images allow for detection of thrombus in acute stroke. *Stroke*. 43(9):2319-23.

PUBLIKATIONEN

Prof. Dr. med. Stephan Ulmer

Ulmer S, Spalek K, Nabavi A, Schultka S, Mehdorn HM, Kesari S, Dörner L (2012) Temporal changes in magnetic resonance imaging characteristics of Gliadel wafers and of the adjacent brain parenchyma. *Neuro Oncol.* 14(4):482-90.

Jensen-Kondering UR, Ghobadi Z, Wolff S, Jansen O, **Ulmer S** (2012) Acoustically presented semantic decision-making tasks provide a robust depiction of the temporo-parietal speech areas. *J Clin Neurosci.* 19(3):428-33.

Jensen-Kondering U, Böhm R, Höcker J, Ruhe R, Brdon J, **Ulmer S**, Herdegen T, Jansen O (2012) Normal values of quantitative T2' in a spontaneously hypertensive stroke prone rat stem at 3T. *Eur J Radiol.* 81(5):985-7.

Dörner L, **Ulmer S**, Rohr A, Mehdorn HM, Nabavi A (**shared first authorship**) (2011) Space-occupying cyst development in the resection cavity of malignant gliomas following Gliadel® implantation--incidence, therapeutic strategies, and outcome. *J Clin Neurosci.* 18(3):347-51.

Hartwigsen G, Baumgaertner A, Price CJ, Koehnke M, **Ulmer S**, Siebner HR (2010) Phonological decisions require both the left and right supramarginal gyri. *Proc Natl Acad Sci U S A.* 107(38):16494-9.

Jox R, **Ulmer S**, Reiter-Theil S (2010) Vom Hirntod zum Hirnchip. Brauchen wir eine Neuroethik? *Swiss Archives of Neurology and Psychiatry* 161 (8):290-295.

Hartwigsen G, Siebner HR, Deuschl G, Jansen O, **Ulmer S** (2010) Incidental findings are frequent in young healthy individuals undergoing magnetic resonance imaging in brain research imaging studies: a prospective single-center study. *J Comput Assist Tomogr.* 34(4):596-600.

Hartwigsen G, Price CJ, Baumgaertner A, Geiss G, Koehnke M, **Ulmer S**, Siebner HR (2010) The right posterior inferior frontal gyrus contributes to phonological word decisions in the healthy brain: evidence from dual-site TMS. *Neuropsychologia.* 48(10):3155-63.

Riedel CH, Jensen U, Rohr A, Tietke M, Alfke K, **Ulmer S**, Jansen O (2010) Assessment of thrombus in acute middle cerebral artery occlusion using thin-slice nonenhanced computed tomography reconstructions. *Stroke.* 41(8):1659-64.

Chen LL, **Ulmer S**, Deisboeck TS (2010) An agent-based model identifies MRI regions of probable tumor invasion in a patient with glioblastoma. *Phys Med Biol.* 55(2):329-38.

Ulmer S, Hartwigsen G, Riedel C, Jansen O, Mehdorn HM, Nabavi A (2010) Intraoperative dynamic susceptibility contrast MRI (iDSC-MRI) is as reliable as preoperatively acquired perfusion mapping. *Neuroimage.* 49(3):2158-62.

Wei SC, **Ulmer S**, Lev MH, Pomerantz SR, González RG, Henson JW (**shared first authorship**) (2010) Value of coronal reformations in the CT evaluation of acute head trauma. *AJNR Am J Neuroradiol.* 31(2):334-9.

PUBLIKATIONEN

Prof. Dr. med. Stephan Ulmer

Jensen UR, Liu JR, Eschenfelder C, Meyne J, Zhao Y, Deuschl G, Jansen O, **Ulmer S** (2009) The correlation between quantitative T2' and regional cerebral blood flow after acute brain ischemia in early reperfusion as demonstrated in a middle cerebral artery occlusion/reperfusion model of the rat. *J Neurosci Methods*. 178(1):55-8.

Ulmer S, Helle M, Jansen O, Mehdorn HM, Nabavi A (2009) Intraoperative dynamic susceptibility contrast weighted magnetic resonance imaging (iDSC-MRI) - Technical considerations and feasibility. *Neuroimage* 45(1):38-43.

Tietke MW, **Ulmer S**, Riedel C, Jansen O (2008) [Carotid artery stenting via transbrachial approach]. *Rofo*. 180(11):988-93.

Ulmer S, Liess C, Kesari S, Otto N, Straube T, Jansen O (2009) Use of dynamic susceptibility-contrast MRI (DSC-MRI) to assess perfusion changes in the ipsilateral brain parenchyma from glioblastoma. *J Neurooncol*. 91(2):213-20.

Ulmer S, Reeh M, Krause J, Herdegen T, Heldt-Feindt J, Jansen O, Rohr A (2008) Dynamic contrast-enhanced susceptibility -weighted perfusion MRI (DSC-MRI) in a glioma model of the rat brain using a conventional receive-only surface coil with a inner diameter of 47 mm at a clinical 1.5 T scanner. *J Neurosci Methods*. 172(2):168-72.

Kuhtz-Buschbeck JP, Gilster R, Wolff S, **Ulmer S**, Siebner H, Jansen O (2008) Brain activity is similar during precision and power gripping with light force: an fMRI study. *Neuroimage*. 40(4):1469-81.

Ulmer S, Schulz E, Moeller B, Krause UR, Nabavi A, Mehdorn HM, Jansen O (2007) Radiation dose of the lens in transsphenoidal pituitary surgery: pros and cons of a conventional setup using fluoroscopic guidance and CT-based neuronavigation. *AJNR Am J Neuroradiol*. 28(8):1559-64.

Ulmer S, Braga TA, Barker FG 2nd, Lev MH, Gonzalez RG, Henson JW (2006) Clinical and radiographic features of peritumoral infarction following resection of glioblastoma. *Neurology*. 67(9):1668-70.

Brockmann MA, **Ulmer S**, Leppert J, Nadrowitz R, Wuestenberg R, Nolte I, Petersen D, Groden C, Giese A, Gottschalk S (2006) Analysis of mouse brain using a clinical 1.5 T scanner and a standard small loop surface coil. *Brain Res*. 1068(1):138-42.

Möller F, **Ulmer S**, Wolff S, Stephani U, Jansen O (2005) [Cortical reorganization in children with connatal spastic hemiparesis -- a functional magnetic resonance imaging (fMRI) study]. *Rofo*. 177(11):1552-61.

Brockmann MA, **Ulmer S**, Lamszus K, Giese A, Petersen D (2004) Technical note: A toy as tool: a low-cost image analysis system for the evaluation of tumor size in experimental small animal models. *Microsc Res Tech*. 63(5):306-9.

Kuhtz-Buschbeck JP, Mahnkopf C, Holzknacht C, Siebner H, **Ulmer S**, Jansen O (2003) Effector-independent representations of simple and complex imagined finger movements: a combined fMRI and TMS study. *Eur J Neurosci*. 18(12):3375-87.

Nimsky C, Ganslandt O, Kober H, Moller M, **Ulmer S**, Tomandl B, Fahlbusch R (1999) Integration of functional magnetic resonance imaging supported by magnetoencephalography in functional neuronavigation. *Neurosurgery*. 44(6):1249-55; discussion 1255-6.

Case reports / Reviews

Ahlhelm F, Shariat K, Götschi S, **Ulmer S** (2017) [Intracranial Editorials (Peer reviewed) cystic lesions]. *Radiologe*.

Ulmer S, Backens M, Ahlhelm FJ (2016) Basic Principles and Clinical Applications of Magnetic Resonance Spectroscopy in Neuroradiology. *J Comput Assist Tomogr*. 40(1):1-13.

Ulmer S (2014) Intraoperative perfusion magnetic resonance imaging: Cutting-edge improvement in neurosurgical procedures. *World J Radiol*. 6(8):538-43 (invited)

Müller U, **Ulmer S**, Schlaeger R, Ahlhelm F (2014) [Pediatric intraspinal neoplasms]. *Radiologe*. 54(8):792-9.

Ahlhelm F, Müller U, **Ulmer S** (2014) [Typical tumors of the petrous bone]. *Radiologe*. 54(4):346-55.

Ahlhelm F, Benz RM, **Ulmer S**, Lyrer P, Stippich C, Engelter S (2013) Endovascular treatment of cervical artery dissection: ten case reports and review of the literature. *Interv Neurol*. 1(3-4):143-50.

Ahlhelm F, Lieb J, Schneider G, Müller U, **Ulmer S** (2013) [Osler's disease]. *Radiologe*. 53(12):1084-90.

Papadopoulou A, Ahlhelm FJ, **Ulmer S**, Kappos L, Sprenger T (2013) Detection of cerebrospinal fluid leaks by intrathecal contrast-enhanced magnetic resonance myelography. *JAMA Neurol*. 70(12):1576-7.

Mahta A, Buhl R, Huang H, Jansen O, Kesari S, **Ulmer S** (2013) Sellar and supra-sellar glioblastoma masquerading as a pituitary macroadenoma. *Neurol Sci* 34(4):605-7

Ahlhelm F, Naumann N, **Ulmer S**, Benz R, Nern C, Wetzel S (2012) [Neuroradiological focus on stroke imaging]. *Ther Umsch*. 69(9):543-8.

Naumann N, Shariat K, **Ulmer S**, Stippich C, Ahlhelm FJ (2012) [Spinal cord infarction]. *Radiologe*. 52(5):442-50.

Ahlhelm FJ, Lieb JM, **Ulmer S**, Sprenger T, Stippich C, Kelm J (2011) [Inflammatory diseases of the spinal column and the myelon]. *Radiologe*. 51(9):763-71.

Lieb JM, **Ulmer S**, Kelm J, Shariat K, Stippich C, Ahlhelm FJ (2011) [Postoperative findings in the spinal column]. *Radiologe*. 51(9):784-90.

Ulmer S (2010) Forty years of technological evolution in image-guided neurosurgery. Past, present and future aspects. *Curr Med Imaging Rev* 6(4):198-199. (Editorial; invited)

Brockmann MA, **Ulmer S**. (2010) Early post-operative neuroimaging after surgery for malignant glioma. *Curr Med Imaging Rev* 6(4):278-284. (invited)

Ulmer S. (2010) Advanced intraoperative MR imaging. *Curr Med Imaging Rev* 6(4):273-277. (invited)

PUBLIKATIONEN

Prof. Dr. med. Stephan Ulmer

Jensen U, Pötter-Nerger M, **Ulmer S** (2009) [Unusual speech dominance in a stroke patient]. *Rofo*. 181(9):896-7.

Ulmer S, Jensen UR, Jansen O, Mehdorn HM, Schaub J, Deuschl G, Siebner HR (2009) Impact of incidental findings on neuroimaging research using functional MR imaging. *AJNR Am J Neuroradiol*. 30(4):E55.

Jensen U, **Ulmer S**, Tietke M, Jansen O (2009) Case of the month. Double vision. Differentials please! *Br J Radiol*. 82(974):173-174.

Nabavi A, Goebel S, Doerner L, Warneke N, **Ulmer S**, Mehdorn M (2009) Awake craniotomy and intraoperative magnetic resonance imaging: patient selection, preparation, and technique. *Top Magn Reson Imaging*. 19(4):191-6.

Henson JW, **Ulmer S**, Harris GJ (2008) Brain tumor imaging in clinical trials. *AJNR Am J Neuroradiol*. 29(3):419-24.

Ulmer S, Moeller F, Brockmann MA, Kuhtz-Buschbeck JP, Stephani U, Jansen O (2005) Living a normal life with the nondominant hemisphere: magnetic resonance imaging findings and clinical outcome for a patient with left-hemispheric hydranencephaly. *Pediatrics*. 116(1):242-5.

Ulmer S, Jansen O (2005) Hemispherical dominance? Authors Reply. *Pediatrics* 116(6):1604.

Jansen O, **Ulmer S**, Alfke K, Straube T (2003) Advances in brain tumor imaging. *Klin Neuroradiol* 13:15-19.

Flemming K, **Ulmer S**, Duisberg B, Hahn A, Jansen O (2002) MR spectroscopic findings in a case of Alpers-Huttenlocher syndrome. *AJNR Am J Neuroradiol*. 23(8):1421-3.

Ulmer S, Engellandt K, Stiller U, Nabavi A, Jansen O, Mehdorn MH (2002) Chronic subdural hemorrhage into a giant arachnoidal cyst (Galassi classification type III). *J Comput Assist Tomogr*. 26(4):647-53.

Ulmer S, Flemming K, Hahn A, Stephani U, Jansen O (2002) Detection of acute cytotoxic changes in progressive neuronal degeneration of childhood with liver disease (Alpers-Huttenlocher syndrome) using diffusion-weighted MRI and MR spectroscopy. *J Comput Assist Tomogr*. 26(4):641-6.

PUBLIKATIONEN

Prof. Dr. med. Stephan Ulmer

Buchkapitel

Ulmer S (2016) Ethische Fragen in der Neuroradiologie. In Erbguth F, Jox R (eds.) *Praktische Ethik der Neuromedizin*. Springer, Heidelberg, New York, Tokio.

F. Moeller F, **Ulmer S** (2015) Functional MRI in MRI-negative refractory focal epilepsy. In So EL, Ryvlin P (eds.) *MRI Negative Epilepsy: Evaluation and Surgical Management*. Cambridge University Press.

Ulmer S, Ahlhelm FJ (2015) MR Spectroscopy in Neuroradiology. In Rahman AU, Choudhary MI (eds.) *Applications of NMR Spectroscopy. Volume 2. e-book*. Bentham Science.

Ulmer S (2013) Neuroanatomy and cortical landmarks of functional areas. In **Ulmer S**, Jansen O (eds.) *fMRI – Basics and Clinical Applications*, second edition. Springer, Heidelberg, New York, Tokio.

Ulmer S, Booth TC, Widdershoven G, Jansen O, Fesl G, von Kummer R, Reiter-Theil S (2013) Incidental findings in neuroimaging research. Ethical considerations. In **Ulmer S**, Jansen O (eds.) *fMRI: Basics and Clinical Applications*, second edition. Springer, Heidelberg, New York, Tokio.

Schmidt K, **Ulmer S** (2009) Press button solutions. In **Ulmer S**, Jansen O (eds.) *fMRI – Basics and Clinical Applications*. Springer, Heidelberg, New York, Tokio.

Ulmer S (2009) Neuroanatomy and cortical landmarks of functional areas. In **Ulmer S**, Jansen O (eds.) *fMRI – Basics and Clinical Applications*. Springer, Heidelberg, New York, Tokio.

Ulmer S, Brynne T (2008) Lymphocytic hypophysitis and inflammatory disease. In Swearingen B and Biller BMK (eds) *Diagnosis and management of pituitary disorders*. Humana Press.

Kuhtz-Buschbeck JP, **Ulmer S** (2008) Cortical control of hand function. In Eliasson AC, Burtner PA (eds) *Improving hand function in children with cerebral palsy: theory, evidence and intervention*. Mac Keith Press, London.

Jansen O, Jensen U, **Ulmer S** (2007) Hemihydranencephalie. In Forsting M (ed.) *Neuroradiologie zum Umblättern*. ABW Wissenschaftsverlag.

Ulmer S, Harris G, Henson JW (2007) Neuroimaging issues in Brain Tumor therapy. In Newton HB and Jolesz FA (eds) *Textbook of neuro-oncology neuro-imaging*. Elsevier, New York, NY.

Ulmer S, Jassoy A, Schmid UD, Eisner W, Ilmberger J, Heiss D, Yousry T (1995) Functional imaging of the brain using MRI as non-invasive method to identify the cortical areas of perioral motor functions. In Siegenthaler W und Haas R (eds.) *Publikationen der Jung-Stiftung für Wissenschaft und Forschung. The Decade of the Brain*. Georg Thieme Verlag, Stuttgart.

PUBLIKATIONEN

Prof. Dr. med. Stephan Ulmer

Editorials

Ulmer S, Jansen O (eds): fMRI – Basics and Clinical Applications. 2nd edition,
Springer (2013) Heidelberg, New York, Tokio.

Ulmer S (guest editor): Gliomas: Current Issues in Diagnosis and Treatment. Current medical imaging reviews.
Bentham Publisher (2010)

Ulmer S, Jansen O (eds): fMRI – Basics and Clinical Applications.
Springer (2009) Heidelberg, New York, Tokio.

Diskussion / Kommentar (invited)	Neuroradiologie Scan (2018) Georg Thieme Verlag KG. Stuttgart, New York.
	Neuroradiologie Scan (2015) 4 Georg Thieme Verlag KG. Stuttgart, New York.
	Neuroradiologie Scan (2012) 3 Georg Thieme Verlag KG. Stuttgart, New York.
	Radiologe (2010) 50(11) Springer. Heidelberg, New York, Tokio.