

Publikationsliste von Chefarzt Professor Dr. med. Marcus Michael Unger

Originalarbeiten

Wei J, Blum S, Unger M, Jarmy G, Lamparter M, Geishauser A, Vlastos GA, Chan G, Fischer KD, Rattat D, Debatin KM, Hatzopoulos AK, Beltinger C. Embryonic endothelial progenitor cells armed with a suicide gene target hypoxic lung metastases after intravenous delivery. *Cancer Cell.* 2004;5(5):477-88.

Unger MM, Wahl J, Ushmorov A, Buechele B, Simmet T, Debatin KM, Beltinger C. Enriching suicide gene bearing tumor cells for an increased bystander effect. *Cancer Gene Ther.* 2007;14(1):30-8.

Tackenberg B, Metz A, Unger M, Schimke N, Passow S, Hoeffken H, Hoffmann GF, Müller U, Nolte D, Oertel WH, Eggert K, Möller JC. Nigrostriatal dysfunction in X-linked dystonia-parkinsonism (DYT3). *Mov Disord.* 2007;22(6):900-2.

Unger MM, Möller JC, Stiasny-Kolster K, Mankel K, Berg D, Walter U, Hoeffken H, Mayer G, Oertel WH. Assessment of idiopathic rapid-eye-movement sleep behaviour disorder by transcranial sonography, olfactory function test and FP-CIT-SPECT. *Mov Disord.* 2008;23(4):596-9.

Unger MM, Reese JP, Oertel WH, Eggert KM. Real-life evaluations of compliance with mandatory drug safety monitoring exemplified with tolcapone in Parkinson's disease. *Eur Neurol.* 2008;60:122-126.

Unger MM, Möller JC, Ohletz T, Stiasny-Kolster K, Oertel WH, Mayer G. Transcranial midbrain sonography in narcoleptic subjects with and without concomitant REM sleep behaviour disorder. *Journal of Neurology.* 2009;256(6):874-7.

Unger MM, Belke M, Hattemer K, Heverhagen JT, Keil B, Stiasny-Kolster K, Rosenow F, Diederich NJ, Mayer G, Möller JC, MD, Oertel WH, Knake S. Selective microstructural changes in the brain of patients with idiopathic rapid eye movement (REM) sleep behaviour disorder (RBD). *Sleep.* 2010;33(6):767-73.

Unger MM, Hattemer K, Möller JC, Schmittinger K, Mankel K, Eggert K, Tebbe JJ, Keil B, Oertel WH, Heverhagen JT, Knake S. Real-time visualization of altered gastric motility by magnetic resonance imaging in patients with Parkinson's disease. *Mov Disord.* 2010;25(5): 623-628.

Bodden ME; Mollenhauer B, Trenkwalder C, Schimke N, Eggert KM, Unger MM, Oertel WH, Kessler J, Dodel R, Kalbe E. Affective and cognitive theory of mind in patients with Parkinson's disease. *Parkinsonism Relat Disord.* 2010;16(7):466-70

Unger MM, Möller JC, Mankel K, Eggert KM, Bohne K, Bodden M, Stiasny-Kolster K, Kann PH, Mayer G, Tebbe JJ, Oertel WH. Postprandial ghrelin response is reduced in patients with

Parkinson's disease and idiopathic REM sleep behaviour disorder: a peripheral biomarker for early Parkinson's disease? *J Neurol.* 2011;258(6):982-90.

Unger MM, Möller JC, Mankel K, Schmittinger K, Eggert KM, Stamelou M, Stiasny-Kolster K, Bohne K, Bodden M, Mayer G, Oertel WH and Tebbe JJ Patients with idiopathic rapid-eye-movement sleep behaviour disorder show normal gastric motility assessed by the 13C-octanoate breath test. *Mov Disord.* 2011;26(14):2559-63.

Postuma RB, Montplaisir J, Pelletier A, Dauvilliers Y, Oertel WH, Iranzo A, Ferini-Strambi L, Arnulf I, Högl B, Manni R, Miyamoto T, Mayer G, Stiasny-Kolster K, Puligheddu M, Ju Y, Jennum P, Sonka K, Santamaria J, Fantini ML, Zucconi M, Leu-Semenescu S, Frauscher B, Terzaghi M, Miyamoto M, Unger M, DeCock VC and Wolfson C. Environmental Risk Factors for REM sleep behavior disorder: A multicentre case-control study. *Neurology.* 2012;79(5):428-34.

Menzler K, Belke M, Unger MM, Ohletz T, Keil B, Heverhagen JT, Rosenow F, Mayer G, Oertel WH, Möller JC, Knake S. DTI reveals hypothalamic and brainstem white matter lesions in patients with idiopathic narcolepsy. *Sleep Med.* 2012;13(6):736-42.

Postuma RB, Arnulf I, Högl B, Iranzo A, Miyamoto T, Dauvilliers Y, Oertel W, Ju YE, Puligheddu M, Jennum P, Pelletier A, Wolfson C, Leu-Semenescu S, Frauscher B, Miyamoto M, Cochen De Cock V, Unger MM, Stiasny-Kolster K, Livia Fantini M, Montplaisir JY. A single-question screen for rapid eye movement sleep behavior disorder: A multicenter validation study. *Mov Disord.* 2012;27(7):913-6.

Unger MM, Ekman R, Björklund AK, Karlsson G, Andersson C, Mankel K, Bohne K, Tebbe JJ, Stiasny-Kolster K, Möller JC, Mayer G, Kann, Oertel WH. Unimpaired postprandial pancreatic polypeptide secretion in Parkinson's disease and REM sleep behaviour disorder. *Mov Disord.* 2013 Apr;28(4):529-33.

Unger MM, Oertel WH, Tackenberg B. Cerebrospinal fluid concentrations of ghrelin in patients with multiple sclerosis. *Neuro Endocrinol Lett.* 2013 Feb 25;34(4):14-17.

Dauvilliers Y, Postuma RB, Ferini-Strambi L, Arnulf I, Högl B, Manni R, Miyamoto T, Oertel W, Fantini ML, Puligheddu M, Jennum P, Sonka K, Zucconi M, Leu-Semenescu S, Frauscher B, Terzaghi M, Miyamoto M, Unger M, Desautels A, Wolfson C, Pelletier A, Montplaisir J. Family history of idiopathic REM behavior disorder: A multicenter case-control study. *Neurology.* 2013 Jun 11;80(24):2233-2235.

Frauscher B, Jennum P, Ju YE, Postuma RB, Arnulf I, Cochen De Cock V, Dauvilliers Y, Fantini ML, Ferini-Strambi L, Gabelia D, Iranzo A, Leu-Semenescu S, Mitterling T, Miyamoto M, Miyamoto T, Montplaisir JY, Oertel W, Pelletier A, Prunetti P, Puligheddu M, Santamaria J, Sonka K, Unger M, Wolfson C, Zucconi M, Terzaghi M, Högl B, Mayer G, Manni R. Comorbidity and medication in REM sleep behavior disorder: a multicenter case-control study. *Neurology.* 2014;82(12):1076-9.

Ferini-Strambi L, Oertel W, Dauvilliers Y, Postuma RB, Marelli S, Iranzo A, Arnulf I, Birgit H, Manni R, Miyamoto T, Fantini ML, Puligheddu M, Jennum P, Sonka K, Santamaria J, Zucconi M, Rancoita PM, Leu-Semenescu S, Frauscher B, Terzaghi M, Miyamoto M, Unger M, Stiasny-Kolster K, Desautels A, Wolfson C, Pelletier A, Montplaisir J. Autonomic symptoms in idiopathic REM behavior disorder: a multicentre case-control study. *J Neurol.* 2014;261(6):1112-8.

Kadas G, Klotz M, Schäfer KH, Fassbender K, Thomi D, Oertel WH, Unger MM. Do different assays for human acylated ghrelin concentrations provide comparable results? Neuro Endocrinol Lett. 2014;35(1):37-41.

Doss S, Wandinger KP, Hyman BT, Panzer JA, Synofzik M, Dickerson B, Mollenhauer B, Scherzer CR, Ivinson AJ, Finke C, Schöls L, Müller Vom Hagen J, Trenkwalder C, Jahn H, Höltje M, Biswal BB, Harms L, Ruprecht K, Buchert R, Höglinder GU, Oertel WH, Unger MM, Körtvélyessy P, Bittner D, Priller J, Spruth EJ, Paul F, Meisel A, Lynch DR, Dirnagl U, Endres M, Teegen B, Probst C, Komorowski L, Stöcker W, Dalmau J, Prüss H. High prevalence of NMDA receptor IgA/IgM antibodies in different dementia types. Ann Clin Transl Neurol. 2014;1(10):822-32.

Postuma RB, Iranzo A, Hogl B, Arnulf I, Ferini-Strambi L, Manni R, Miyamoto T, Oertel W, Dauvilliers Y, Ju YE, Puligheddu M, Sonka K, Pelletier A, Santamaria J, Frauscher B, Leu-Semenescu S, Zucconi M, Terzaghi M, Miyamoto M, Unger MM, Carlander B, Fantini ML, Montplaisir JY. Risk factors for neurodegeneration in idiopathic rapid eye movement sleep behavior disorder: A multicenter study. Ann Neurol. 2015;77(5):830-9.

Unger MM, Spiegel J, Dillmann KU, Grundmann D, Philippeit H, Bürmann J, Faßbender K, Schwierz A, Schäfer KH. Short chain fatty acids and gut microbiota differ between patients with Parkinson's disease and age-matched controls. Parkinsonism Relat Disord. 2016;32:66-72.

Boura E, Stamelou M, Vadasz D, Ries V, Unger MM, Kägi G, Oertel WH, Möller JC, Mylius V. Is increased spinal nociception another hallmark for Parkinson's disease? J Neurol. 2017;264(3):570-575.

Kalampokini S, Lyros E, Luley M, Schöpe J, Spiegel J, Bürmann J, Dillmann U, Fassbender K, Unger MM. Facial emotion recognition in Parkinson's disease: Association with age and olfaction. J Clin Exp Neuropsychol. 2017;21:1-11.

Yilmaz U, Körner H, Mühl-Benninghaus R, Simgen A, Kraus C, Walter S, Behnke S, Faßbender K, Reith W, Unger MM. Acute Occlusions of Dual-Layer Carotid Stents After Endovascular Emergency Treatment of Tandem Lesions. Stroke. 2017;48(8):2171-2175.

Wagner J, Vulinović F, Grünwald A, Unger MM, Möller JC, Klein C, Michel PP, Ries V, Oertel WH, Alvarez-Fischer D. Acylated and unacylated ghrelin confer neuroprotection to mesencephalic neurons. Neuroscience. 2017 pii: S0306-4522(17)30698-X.

Schwierz A, Spiegel J, Dillmann U, Grundmann D, Bürmann J, Faßbender K, Schäfer KH, Unger MM. Fecal markers of intestinal inflammation and intestinal permeability are elevated in Parkinson's disease. Parkinsonism Relat Disord. 2018;50:104-107. doi: 10.1016/j.parkreldis.2018.02.022.

Behnke S, Pilotto A, Liepelt-Scarfone I, Yilmaz R, Pausch C, Dieterich S, Bürmann J, Spiegel J, Dillmann U, Unger M, Posner I, Berg D. Third ventricular width assessed by transcranial ultrasound correlates with cognitive performance in Parkinson's disease. Parkinsonism Relat Disord. 2019;66:68-73. doi: 10.1016/j.parkreldis.2019.07.005.

Grün D, Unger MM, Kauffmann J, Zimmer V, Fassbender K, Fousse M. Legionnaire's-disease-associated meningoencephalitis: A case report. Pulmonology. 2019;25(2):128-130. doi: 10.1016/j.pulmoe.2018.12.006.

Grün D, Zimmer VC, Kauffmann J, Spiegel J, Dillmann U, Schwierz A, Faßbender K, Fousse M, Unger MM. Impact of oral COMT-inhibitors on gut microbiota and short chain fatty acids in Parkinson's disease. *Parkinsonism Relat Disord.* 2020;70:20-22. doi: 10.1016/j.parkreldis.2019.11.020.

Weis S, Schwierz A, Unger MM, Becker A, Faßbender K, Ratering S, Kohl M, Schnell S, Schäfer KH, Egert M. Effect of Parkinson's disease and related medications on the composition of the fecal bacterial microbiota. *NPJ Parkinsons Dis.* 2019;5:28. doi: 10.1038/s41531-019-0100-x..

Ruck L, Unger MM, Spiegel J, Bürmann J, Dillmann U, Faßbender K, Reith W, Backens M, Mühl-Benninghaus R, Yilmaz U. Gastric Motility in Parkinson's Disease is Altered Depending on the Digestive Phase and Does Not Correlate with Patient-Reported Motor Fluctuations. *J Parkinsons Dis.* 2020;10(4):1699-1707. doi: 10.3233/JPD-202144.

Becker A, Behnke S, Walter S, Fousse M, Buob A, Bürmann J, Faßbender K, Unger MM. Consecutive Eyeball Pressure Tests Reflect Clinically Relevant Vagal Dysfunction and Recovery in a Patient With Guillain-Barré-Syndrome With Tenacious Cardiac Dysautonomia. *Front Neurol.* 2020;11:483653. doi: 10.3389/fneur.2020.483653.

Becker A, Grunwald IQ, Unger MM, Behnke S, Spiegel J, Yilmaz U, Walter S, Faßbender K. Progressive Cerebral Small Vessel Disease Caused by an Autoimmune Response to Intravesical Bacille-Calmette-Guérin Treatment. *Front Neurol.* 2020;11:484282. doi: 10.3389/fneur.2020.484282.

Becker A, Abuazab M, Schwierz A, Walter S, Faßbender K, Fousse M, Unger MM. Short-chain fatty acids and intestinal inflammation in multiple sclerosis: modulation of female susceptibility by microbial products? *Autoimmun Highlights* (2021) 12:7, <https://doi.org/10.1186/s13317-021-00149-1>

Gries M, Christmann A, Schulte S, Weyland M, Rommel S, Martin M, Baller M, Röth R, Schmitteckert S, Unger M, Liu Y, Sommer F, Mühlhaus T, Schroda M, Timmermans JP, Pintelon I, Rappold GA, Britschgi M, Lashuel H, Menger MD, Laschke MW, Niesler B, Schäfer KH. Parkinson mice show functional and molecular changes in the gut long before motoric disease onset. *Mol Neurodegener.* 2021 Jun 2;16(1):34. doi: 10.1186/s13024-021-00439-2. PMID: 34078425; PMCID: PMC8170976.

Kauffmann J, Grün D, Yilmaz U, Wagenpfeil G, Faßbender K, Fousse M, Unger MM. Acute stroke treatment and outcome in the oldest old (90 years and older) at a tertiary care medical centre in Germany-a retrospective study showing safety and efficacy in this particular patient population. *BMC Geriatr.* 2021 Oct 29;21(1):611. doi: 10.1186/s12877-021-02566-3. PMID: 34715796; PMCID: PMC8556881.

Weis S, Meisner A, Schwierz A, Unger MM, Becker A, Faßbender K, Schnell S, Schäfer KH, Egert M. Association between Parkinson's disease and the faecal eukaryotic microbiota. *NPJ Parkinsons Dis.* 2021 Nov 18;7(1):101. doi: 10.1038/s41531-021-00244-0. PMID: 34795317; PMCID: PMC8602383.

Becker A, Pierre Schmartz G, Gröger L, Grammes N, Galata V, Philippeit H, Weiland J, Ludwig N, Meese E, Tierling S, Walter J, Schwierz A, Spiegel J, Wagenpfeil G, Faßbender K, Keller A, Unger MM. Effects of Resistant Starch on Symptoms, Fecal Markers and Gut Microbiota in Parkinson's

Disease - the RESISTA-PD Trial. Genomics Proteomics Bioinformatics. 2021 Nov 25:S1672-0229(21)00245-X. doi: 10.1016/j.gpb.2021.08.009. Epub ahead of print. PMID: 34839011.

Editorials in wissenschaftlichen Zeitschriften

Unger MM, Sakakibara R. Does REM sleep behavior disorder have the guts to be Parkinson disease? Neurology. 2015;85(20):1732-3.

Das RR, Unger MM. Diabetes and Parkinson disease: A sweet spot? Neurology. 2018;90(19):869-870.

Übersichtsarbeiten

Unger MM, Eggert KM, Hoeffken H, Mayer G, Möller JC, Schimke N, Oertel WH. Rapid eye movement sleep behaviour disorder a predictor for a subgroup of α -synucleinopathies? CNS Drugs 2007; 21 Spec. Issue 1: 39-50.

Möller JC, Eggert KM, Unger M, Odin P, Chaudhuri KR, Oertel WH. Clinical risk-benefit assessment of dopamine agonists. Eur J Neurol. 2008 Sep;15 Suppl 2:15-23.

Möller JC, Unger M, Stiasny-Kolster K, Oertel WH. Restless Legs Syndrome (RLS) and Parkinson's disease (PD) - Related disorders or different entities? J Neurol Sci. 2010;289(1-2):135-7.

Schenck CH, Montplaisir JY, Frauscher B, Hogl B, Gagnon JF, Postuma R, Sonka K, Jennum P, Partinen M, Arnulf I, Cochen de Cock V, Dauvilliers Y, Luppi PH, Heidbreder A, Mayer G, Sixel-Döring F, Trenkwalder C, Unger M, Young P, Wing YK, Ferini-Strambi L, Ferri R, Plazzi G, Zucconi M, Inoue Y, Iranzo A, Santamaria J, Bassetti C, Moeller JC, Boeve BF, Lai YY, Pavlova M, Saper C, Schmidt P, Siegel JM, Singer C, St Louis E, Videnovic A, Oertel W. Rapid eye movement sleep behavior disorder: devising controlled active treatment studies for symptomatic and neuroprotective therapy-a consensus statement from the International Rapid Eye Movement Sleep Behavior Disorder Study Group. Sleep Med. 2013;14(8):795-806.

Unger MM, Fassbender K. Relevance of Long QT in clinical neurology. World Journal of Neurology 2013;3(3):25-28.

Unger MM, Ries V, Thomi D, Vadasz D, Krenzer M, Zoche M, Oertel WH. Die Rolle neuroendokriner Peptidhormone für REM-Schlaf-Verhaltensstörung und Morbus Parkinson. Somnologie 2014;18(3):166-71.

Becker A, Faßbender K, Oertel WH, Unger MM. A punch in the gut - Intestinal inflammation links environmental factors to neurodegeneration in Parkinson's disease. Parkinsonism Relat Disord. 2019;60:43-45. doi: 10.1016/j.parkreldis.2018.09.032.

Kalampokini S, Becker A, Fassbender K, Lyros E, Unger MM. Nonpharmacological Modulation of Chronic Inflammation in Parkinson's Disease: Role of Diet Interventions. Parkinsons Dis. 2019;7535472. doi: 10.1155/2019/7535472. eCollection 2019.

Kalampokini S, Lyros E, Lochner P, Fassbender K, Unger MM. Effects of Subthalamic Nucleus Deep Brain Stimulation on Facial Emotion Recognition in Parkinson's Disease: A Critical Literature Review. Behav Neurol. 2020:4329297. doi: 10.1155/2020/4329297.

Unger MM, Becker A, Keller A, Schäfer KH, Schwiertz A, Oertel WH. [The role of the gut microbiome in idiopathic Parkinson's disease]. Nervenarzt. 2020;91(12):1085-1095. doi: 10.1007/s00115-020-01011-x.

Buchkapitel

MM Unger, WH Oertel. Fluctuations in motor performance - wearing-off
in: Parkinsonian Disorders in Clinical Practice. Schapira, Hartmann, Agid (Hrsg.)
John Wiley & Sons, 2009, ISBN-13: 978-1405196017

MM Unger, WH Oertel et al. Lesions associated with sleep disturbances
in: Non-Dopamin Lesions in Parkinson's Disease. Halliday, Barker, Rowe (Hrsg.)
Oxford University Press, 2010, ISBN-13: 978-0195371086

A Matusch, JC Möller, MM Unger, WH Oertel. Treatment-related non-motor symptoms in
Parkinson's disease
in: Non motor symptoms in Parkinson disease. Tolosa, Chaudhuri, Poewe (Hrsg.)
Oxford University Press, 2009, ISBN-13: 978-0199237234

MM Unger und B Högl. REM-Schlaf-Verhaltensstörung
in: Parkinson-Syndrome und andere Bewegungsstörungen. Oertel, Deuschl, Poewe (Hrsg.)
Thieme Verlag, 2011, ISBN-13: 978-3131487810

MM Unger, WH Oertel. Ghrelin: a gastric peptide linking sleep and energy balance.
in: Handbook of nutrition, diet and sleep. Preedy (Hrsg.)
Wageningen Academic Publishers, 2013, ISBN-13: 978-9086862085

MM Unger, WH Oertel. Ghrelin and Parkinson's disease
in: Central functions of the ghrelin receptor. Portelli, Smolders (Hrsg.)
Springer, 2014, ISBN-13: 978-1493908226

MM Unger, WH Oertel. RBD, Gastric Peptides, and Gastric Motility
in: Rapid-Eye-Movement Sleep Behavior Disorder. Schenck, Högl, Videnovic (Hrsg.)
Springer, Cham. https://doi.org/10.1007/978-3-319-90152-7_37, ISBN-13: 978-3-319-90151-0

MM Unger. «Irgendetwas stimmt nicht ...»
in: Fälle Palliativmedizin. Patientenzentrierte, multiprofessionelle Empfehlungen aus der Praxis,
Gottschling, Gronwald, Welsch (Hrsg.)
Elsevier, ISBN-13: 978-3437228711

SHG-Kliniken Sonnenberg
Klinik für Neurologie
Sonnenbergstraße 10
D-66119 Saarbrücken
Telefon +49(0)681/889-2410
Fax +49(0)681/889-2458
www.sb.shg-kliniken.de