

CURRICULUM VITAE

PERSONAL DATA

Name Inga Katharina Koerte, M.D.
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CURRENT POSITIONS

06/2014 - **Professor of Neurobiological Research** in Child and Adolescent Psychiatry, Department of Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy, Ludwig-Maximilian-University (LMU) Munich, Germany
06/2014 - **Visiting Professor** Harvard Medical School
02/2016 **Research Associate**, Department of Psychiatry, Brigham and Women's Hospital (BWH), Boston

PREVIOUS POSITIONS AND FELLOWSHIPS

06/2013 - 05/2014 **Associate Professor** (Priv.-Doz.), Institute for Clinical Radiology, LMU Munich
08/2011 - 05/2014 **Research Fellow**, Department of Psychiatry, BWH
08/2011 - 05/2014 **Visiting Research Fellow**, Harvard Medical School, Boston
01/2011 - 07/2011 **Fellow** (Neuroradiology), Department of Neuroradiology, LMU Munich
06/2008 - 12/2014 **Medical Resident** (Radiology), Institute for Clinical Radiology, LMU Munich,
10/2009 - 12/2009 **Postdoctoral Research Fellow** (Neuroimaging), Psychiatry Neuroimaging Laboratory, BWH
12/2006 - 05/2008 **Medical Resident** (Pediatrics), Dr. von Hauner Children's Hospital, LMU Munich
12/2006 - 05/2008 **Postdoctoral Research Fellow** (Pediatric Neurophysiology), Dr. von Hauner Children's Hospital, LMU Munich

EDUCATION

10/1999 - 09/2001 **Albert-Ludwigs-University**, Freiburg
Medical school, first and second year
10/2001 - 06/2006 **Ludwig-Maximilian-University (LMU)**, Munich
Medical school, third to sixth year
Practical year:
Harvard Medical School, Boston
Dr. von Hauner's Children's Hospital, Pediatric Surgery, LMU
Universitäts-Kinderspital Beider Basel, Basel, Switzerland
Clinical Electives in Munich, San Diego/USA und Windhoek/Namibia

DISSERTATION

12/2002 - 12/2006 **Department of Surgery**, Experimental Surgery, LMU
Dissertation with magna cum laude, Mentor: Prof. Mutschler
Zytotoxizität bioresorbierbarer Hartgewebekleber in vitro

HABILITATION

06/2013 **Institute for Clinical Radiology, LMU**
Habilitation Experimental Radiology, Venia Legendi LMU

Mentors: Prof. Reiser, Prof. Ertl-Wagner, Prof. Heinen
*Multimodale MR-Evaluation physiologischer und pathologischer
Hirnentwicklungsprozesse*

HONORS AND AWARDS

03/2015 -	Member of the Editorial Board , Journal of Neuroimaging
09/2014 -	Member of the Editorial Board , Brain Imaging and Behavior
07/2011 - 10/2013	Fast Track Program for Excellence and Leadership Skills for Outstanding Women in Science, Robert-Bosch-Foundation, Germany
04/2012	Else Kröner Memorial Award , Else Kröner-Fresenius Foundation, Germany
10/2011	Marc Dünzl Young Investigator Award , Deutsche Gesellschaft für Neuroradiologie, Germany
07/2011	Selected participant of the 61st Meeting of Nobel Laureates , Lindau, Germany
10/2007 - 11/2012	Stipend, "Excellence in Research" LMUexcellent Mentoringprogram, LMU Munich, Germany
12/2010	Stipend, Introduction to Research for Young International Academics , Radiological Society of North America, Chicago, USA
12/2010	Mentor of the Year 2010 , MeCuM Mentor, LMU Munich, Germany
10/2009 - 12/2009	Scholarship for Scientific Education , Society for Neuropediatrics, Europe
10/2007	Travel scholarship , Deutsche Forschungsgemeinschaft
07/2004 - 08/2005	Stipend, Harvard-Munich-Alliance for Medical Education

COMMISSIONS OF TRUST

Ad hoc reviewer for:	Annals of Biomedical Engineering Brain Imaging and Behavior British Journal of Sports Medicine Editorial Concussion Der Radiologe Developmental Medicine and Child Neurology European Journal of Pediatrics Journal of Magnetic Resonance Imaging Journal of Neuroimaging Journal of Neurotrauma Journal of Science and Medicine in Sport Journal of the American Medical Association (JAMA) NeuroImage Neuropediatrics Neuropsychopharmacology Neuroradiology Neurorehabilitation and Neural Repair New England Journal of Medicine Pediatrics Somatosensory and Motor Research The Physician and Sportsmedicine
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ORIGINAL ARTICLES

1. Berweck S, Walther M, Brodbeck V, Wagner N, **Koerte I**, Henschel V, Juenger H, Staudt M, Mall V. Abnormal motor cortex excitability in congenital stroke. *Pediatr Res*. 2008 Jan;63(1):84-8. [IF 2008 2.604]
2. **Koerte I**, Heinen F, Fuchs T, Pomschar A, Stahl, R, Berweck S, Winkler P, Hufschmidt A, Reiser M, Ertl-Wagner B. Anisotropy of Callosal Motor Fibers in Combination with Transcranial Magnetic Stimulation in the Course of Motor Development. *Invest Radiol*. 2009 May;44(5):279-84. [IF 2009 4.85]
3. Schroeder S, Ertl-Wagner B, Schröder M, Britsch S, Weis J, Müller-Felber W, Nikolin S, Berweck S, **Koerte I** Borggraefe I, Heinen F. Muscle biopsy substantiates long-term MRI alterations one year after a single dose of Botulinum toxin injected into the lateral gastrocnemius muscle of healthy volunteers. *Mov Disord*. 2009 Jul 30;24(10):1494-503. [IF 2009 4.014]
4. Borggraefe I, Kiwull L, Schaefer JS, **Koerte I**, Blaschek A, Meyer-Heim A, Heinen F. Sustainability of motor performance after robotic-assisted treadmill therapy in children: an open, non-randomized baseline-treatment study. *Eur J Phys Rehabil Med*. 2010 Jun;46(2):125-31 [IF 2010 2.246]
5. **Koerte I**, Eftimov L, Laubender R, Esslinger O, Schroeder S, Ertl-Wagner B, Wahllaender-Danek U, Heinen F, Danek A. Mirror movements in healthy humans across the lifespan: effects of development and ageing. *Dev Med Child Neurol*. 2010 Dec;52(12):1106-12 [IF 2010 3.264]
6. **Koerte I**, Pelavin P, Kirmess B, Fuchs T, Berweck S, Laubender R, Borggraefe I, Schroeder S, Danek A, Rummeny C, Reiser M, Kubicki M, Shenton M, Ertl-Wagner B, Heinen F. Anisotropy of transcallosal motor fibers indicates functional impairment in children with periventricular leukomalacia. *Dev Med Child Neurol*. 2011 Feb;53(2):179-86 [IF 2011 2.918]
7. Milde-Busch A, Blaschek A, Heinen F, Borggräfe I, **Koerte I**, Straube A, Schankin C, von Kries R. Associations between stress and migraine and tension-type headache: results from a populationschool-based study in adolescents from grammar schools in Germany. *Cephalalgia*. 2011 May;31(7):774-85. [IF 2011 3.430]
8. **Koerte I**, Schankin C, Immler S, Lee SH, Laubender R, Grosse C, Eftimov L, Milde-Busch A, Reiser M, Straube A, Heinen F, Alperin N, Ertl-Wagner B. Altered Cerebrovenous Drainage in Patients with Migraine as Assessed by Phase-contrast MR Imaging. *Invest Radiol*. 2011 Jul;46(7):434-40. [IF 2011 4.593]
9. Connell L*, **Koerte I***, Laubender RP, Morhard D, Linn J, Becker HC, Reiser, M, Brueckmann H, Ertl-Wagner B. Hyperdense Basilar Artery Sign - A Reliable Sign of Basilar Artery Occlusion? *Neuroradiology*. 2012 Apr;54(4):321-7. Epub 2011 May 17. * authors contributed equally. [IF 2011 2.824]
10. Ertl-Wagner B, **Koerte I**, Laubender RP, Kümpfel T, Blaschek A, Alperin N, Hohlfeld R. Non-specific alterations of craniocervical venous drainage in multiple sclerosis revealed by cardiac-gated phase-contrast MR imaging. *Mult Scler*. 2012 Jul;18(7):1000-7. Epub 2011 Dec 22. [IF 2011 4.255].
11. Schroeder AS, Kling T, Huß K, Borggraefe I, **Koerte IK**, Blaschek A, Jahn K, Heinen F, Berweck S. Botulinum Toxin Type A and B for the Reduction of Hypersalivation in Children with Neurological Disorders: A Focus on Effectiveness and Therapy Adherence. *Neuropediatrics*. 2012 Feb;43(1):27-36. Epub 2012 Mar 19. PMID: 22430158 [IF 2011 2.87]
12. Muehlmann M, Steffinger D, Peraud A, Lehner M, Heinen F, Alperin N, Ertl-Wagner B, **Koerte IK**. Non-invasive estimation of intracranial pressure: MR-based evaluation in children with hydrocephalus. *Radiologe*. 2012 Sep;52(9):827-32. [IF 2011 0.611]
13. Pomschar A, **Koerte I**, Peraud A, Heinen F, Herber-Jonat S, Reiser M, Ertl-Wagner B. Hydrocephalus in childhood: Causes and imaging patterns. *Radiologe*. 2012 Sep;52(9):813-20. [IF 2011 0.611]

14. **Koerte IK**, Kaufmann D, Hartl E, Bouix S, Pasternak O, Kubicki M, Forwell LA, Johnson AM, Echlin PS, Shenton ME. A Prospective Study of Physician-Observed Concussion during a Varsity University Hockey Season: Part 2 of 4: White Matter Integrity in Ice Hockey Players. *Neurosurgical Focus*. Dec;33(6):E3. doi: 10.3171/2012.10.FOCUS12303. PMID: 23199426 [IF 2011 2.867]
15. **Koerte IK**, Ertl-Wagner B, Reiser M, Zafonte R, Shenton ME. White Matter Integrity in the Brains of Professional Soccer Players Without Symptomatic Concussion. *JAMA*. 2012 Nov 14;308(18):1859-61. doi: 10.1001/jama.2012.13735. PMID: 23150002 [IF 2011 30.026]
16. **Koerte IK**, Schroeder AS, Borggraefe I, Fietzek U, Kerscher M, Berweck S, Reiser M, Ertl-Wagner B, Heinen F. Muscle atrophy lasts beyond the clinical effect after a single dose of OnabotulinumtoxinA injected in the procerus muscle: A study with magnetic resonance imaging. *Dermatol Surg*. 2013 May;39(5):761-5. doi: 10.1111/dsu.12125. Epub 2013 Feb 4. PMID: 23379599 [IF 2011 1.798]
17. **Koerte IK**, Haberl C, Schmidt M, Pomschar A, Lee S, Rapp P, Steffinger D, Tain RW, Alperin N, Ertl-Wagner B. Inter- and intra-rater reliability of blood and CSF flow quantification by phase-contrast MRI. *J Magn Reson Imaging*. 2013 Sep;38(3):655-62. doi: 10.1002/jmri.24013. Epub 2013 Jan 31. PMID: 23371821 [IF 2011 2.7]
18. Blaschek A, Keeser D, Müller S, **Koerte IK**, Schroeder AS, Müller-Felber W, Heinen F, Ertl-Wagner B. Early white matter changes in childhood multiple sclerosis: A diffusion tensor imaging study. *AJNR Am J Neuroradiol*. 2013 Oct;34(10):2015-20. doi: 10.3174/ajnr.A3581. Epub 2013 May 16. PMID: 23681354 [IF 2011 2.928]
19. Pomschar A*, **Koerte IK***, Lee S, Laubender RP, Straube A, Heinen F, Ertl-Wagner B, Alperin N. MRI Evidence for Altered Venous Drainage and Intracranial Compliance in Mild Traumatic Brain Injury. *PLoS One*. 2013;8(2):e55447. doi: 10.1371/journal.pone.0055447. Epub 2013 Feb PMID: 23405151. [IF 2011 4.092] * shared first authorship
20. Muehlmann M*, **Koerte I***, Laubender RP, Steffinger D, Lehner M, Peraud A, Heinen F, Kiefer M, Reiser M, Ertl-Wagner B. MR-based Estimation of Intracranial Pressure Correlates with VP-Shunt Valve Opening Pressure Setting in Children with Hydrocephalus. *Invest Radiol*. 2013 Jul;48(7):543-7. doi: 10.1097/RLI.0b013e31828ad504. PMID: 23695081. [IF 2011 4.593] * shared first authorship
21. Juenger H, Kuhnke N, Braun C, Ummenhofer F, Wilke M, Walther M, **Koerte I**, Delvendahl I, Jung NH, Berweck S, Staudt M, Mall V. Two types of exercise-induced neuroplasticity in congenital hemiparesis: a transcranial magnetic stimulation, functional MRI, and magnetoencephalography study. *Dev Med Child Neurol*. 2013 Oct;55(10):941-51. doi: 10.1111/dmcn.12209. Epub 2013 Aug 13. PMID: 23937719
22. Helmer K, Pasternak O, Mayinger M, Sasaki T, **Koerte I**, Shenton M, Echlin P. Susceptibility-Weighted Imaging Study in Male and Female Ice Hockey Players Over a Single Season. *Journal of Neurosurgery*. Accepted for publication November 2013
23. Sasaki T, Pasternak O, Mayinger M, Muehlmann M, Savadjiev P, Bouix S, Kubicki M, Fredman E, Dahlben B, Helmer K, Johnson A, Holmes J, Forwell LA, Skopelja E, Shenton M, Echlin P, **Koerte IK**. Changes in white matter microstructure in ice hockey players with a history of concussion: a diffusion tensor imaging study. *Journal of Neurosurgery*. Accepted for publication November 2013
24. Pasternak O, **Koerte I**, Bouix S, Fredman E, Sasaki T, Mayinger M, Helmer K, Johnson A, Holmes JD, Forwell LA, Skopelja E, Shenton M, Echlin P. Microstructural White Matter Alterations in Acutely Concussed Ice Hockey Players - A Longitudinal Free-Water MRI Study. *Journal of Neurosurgery*. Accepted for publication November 2013
25. Schroeder AS, Homburg M, Warken B, Auffermann H, Koerte I, et al. Prospective controlled cohort study to evaluate changes of function, activity and participation in patients with bilateral spastic cerebral palsy

after Robot-enhanced repetitive treadmill therapy. *Eur J Paediatr Neurol*. 2014 Jul;18(4):502-10. PMID: 24821475 [IF 2014 2.301]

26. Juenger H*, Koerte IK*, Muehlmann M, et al. Microstructure of transcallosal motor fibers reflects type of cortical (re-)organization in congenital hemiparesis. *Eur J Paediatr Neurol*. 2014 May 28. pii: S1090-3798(14)00085-3. doi: 10.1016/j.ejpn.2014.05.006. PMID: 24993149. *shared first authors. [IF 2014 2.301]
27. Meinel FG, Fischer J, Pomschar A, Wöhrle N, Koerte IK, et al. MRI evidence for preserved regulation of intracranial pressure in patients with cerebral arteriovenous malformations. *Eur J Radiol*. 2014 83(8):1442-7. PMID: 24932847 [IF 2014 2.369]
28. Echlin PS, Johnson AM, Holmes JD, Tichenoff A, Gray S, Gatavackas H, Walsh J, Middlebro T, Blignaut A, MacIntyre M, Anderson C, Fredman E, Mayinger M, Skopelja EN, Sasaki T, Bouix S, Pasternak O, Helmer KG, Koerte IK, Shenton ME, Forwell LA. The Sport Concussion Education Project. A brief report on an educational initiative: from concept to curriculum. *J Neurosurg*. 2014 Dec;121(6):1331-6. PMID: 25280091 [IF 2014 3.737]
29. Koerte IK*, Lin AP*, Muehlmann M, et al. Altered Neurochemistry in Former Professional Soccer Players without a History of Concussion. *J Neurotrauma*. 2015 1;32(17):1287-93. PMID: 25843317.*shared 1st authors. [IF 2014 3.714]
30. Landgraf MN, Ertl-Wagner B, Koerte IK, et al. Alterations in the trapezius muscle in young patients with migraine - A pilot case series with MRI. *Eur J Paediatr Neurol*. 2015 19(3):372-6. PMID: 25596902 [IF 2014 2.301]
31. Koerte IK, Mayinger M, Muehlmann M, et al. Cortical thinning in former professional soccer players. *Brain Imag Behav*. 2015 Aug 19. [Epub ahead of print] PMID: 26286826 [IF 2014 4.598]
32. Koerte IK*, Willems A*, Muehlmann M, et al. Mathematical abilities in dyslexic children: a diffusion tensor imaging study. *Brain Imag Behav*. 2015 Aug 19. [Epub ahead of print] PMID: 26286825. *shared 1st authors. [IF 2014 4.598]
33. Stamm JM, Koerte IK, Muehlmann M, et al. Age at First Exposure to Football Is Associated with Altered Corpus Callosum White Matter Microstructure in Former Professional Football Players. *J Neurotrauma*. 2015 Sep 23. [Epub ahead of print] PMID: 26200068 [IF 2014 3.737]
34. Koerte IK*, Hufschmidt J*, Muehlmann M, et al. Cavum Septi Pellucidi in Symptomatic Former Professional Football Players. *J Neurotrauma*. 2015 [Epub ahead of print] PMID: 26414478. *shared 1st authors. [IF 2014 3.737]
35. Seitz J, Zuo JX, Lyall AE, Makris N, Kikinis Z, Bouix S, Pasternak O, Fredman E, Duskin J, Goldstein JM, Petryshen TL, Meshulam-Gately RI, Wojcik J, McCarley RW, Seidman LJ, Shenton ME, Koerte IK, Kubicki M. Tractography Analysis of 5 White Matter Bundles and Their Clinical and Cognitive Correlates in Early-Course Schizophrenia. *Schizophr Bull*. 2016 May;42(3):762-71. PMID: 27009248

BOOK CHAPTERS

1. Scheidler J and **Koerte I**. Kapitel: Wirbelsäule und Spinalkanal. In: Maximilian Reiser, Fritz-Peter Kuhn und Jürgen Debus. *Duale Reihe Radiologie 3. Auflage*. Thieme Verlag 2011
2. Ertl-Wagner B and Koerte I. *Fetale Magnetresonanztomographie*. In: Jorch; *Fetoinfantile Neurologie*, 1. Auflage, 2012. Thieme Verlag.

3. Ertl-Wagner B and **Koerte I**. Magnetresonanztomographie (MRT). In: Jorch; Fetoinfantile Neurologie, 1. Auflage, 2012. Thieme Verlag.
4. **Koerte I** and Muehlmann M. Diffusion Tensor Imaging. In: Mulert, Shenton (Eds) MRI in Psychiatry. Springer Verlag 2013.
5. **Koerte I**, Lin A, Mayinger M, Rauchmann B, Stern R, and Shenton M. Imaging of post-traumatic cognitive disorders. In: Sangam: Imaging of neurodegenerative diseases. Thieme Verlag 2014.
6. **Koerte I**, Hufschmidt J, Muehlmann M, Lin AP, and Shenton M. Advanced Neuroimaging of Mild Traumatic Brain Injury. In: Grant G and Laskowitz D: Frontiers in Neuroscience, Translational Research in Traumatic Brain Injury. Thieme Verlag 2015.

REVIEW ARTICLES, CASE REPORTS AND LETTERS

1. Shenton ME, Hamoda HM, Schneiderman JS, Bouix S, Pasternak O, Rathi Y, Vu MA, Purohit MP, Helmer K, **Koerte I**, Lin AP, Westin CF, Kikinis R, Kubicki M, Stern RA, Zafonte R. A review of magnetic resonance imaging and diffusion tensor imaging findings in mild traumatic brain injury. *Brain Imaging Behav.* 2012 Jun;6(2):137-92. doi: 10.1007/s11682-012-9156-5. Review. PMID: 22438191
2. **Koerte I**. Schädigt Kopfballspiel das Gehirn? 2013 in MedicalSportsNetwork
3. **Koerte I**, Nicolai T, Joppich I, von Schweinitz D, Dietz HG. Type IV laryngotracheo-esophageal cleft associated with microgastria and left lung hypoplasia: report of a long-term survivor. (Case report) *Eur J Pediatr Surg.* 2009 Apr;19(2):120-1. Klinischer Fallbericht [IF 2009 0.743]
4. Schroeder S, **Koerte I**, Berweck S, Ertl-Wagner B, Heinen F. How doctors think - and treat with botulinum toxin. (Letter). *Dev Med Child Neurol.* 2010 Sep;52(9):875-6. Letter [IF 2010 3.264]
5. Ertl-Wagner B und **Koerte I**. Fehlbildungen der hinteren Schädelgrube in: *Radiologie up2date* 1/2012. Thieme Verlag 2012. Übersichtsartikel
6. Ng TS, Lin AP, Koerte IK, Pasternak O, Liao H, Merugumala S, Bouix S, Shenton ME. Neuroimaging in repetitive brain trauma. *Alzheimers Res Ther.* 2014 Feb 24;6(1):10. Review. PMID: 25031630.
7. Wintermark M, Coombs L, Druzgal TJ, et al. American College of Radiology Head Injury Institute. Traumatic brain injury imaging research roadmap. *AJNR* 2015 Mar;36(3):E12-23. Review. PMID: 25655872.
8. Koerte IK*, Lin AP*, Willems A, et al. A review of neuroimaging findings in repetitive brain trauma. *Brain Pathol.* 2015 May;25(3):318-49. Review. PMID: 25904047. *shared 1st authors.