Curriculum Vitae - Ewald Moser, PhD

Founding and scientific director, MR Centre of Excellence, Medical University of Vienna, AT
Head MR division, Centre for Medical Physics and Biomedical Engineering, MUV, AT;
Adjunct Professor of Physics in Psychiatry, University of Pennsylvania Medical Centre, USA.

Higher Education and Qualifications

1978 Diplomingenieur für Technische Physik, University of Technology, Graz, AT
1981 Doktor der Technischen Wissenschaften, University of Technology, Vienna, AT; Ph.D.
1981-88 Post-doctoral fellowship (Geneva/CH, Graz/AT, Vienna/AT)
1988-90 Post-doctoral fellowship (Philadelphia/USA, Oxford/UK)
1991 Venia Docendi Medical Physics and Biophysics, Medical School, University of Vienna, AT
1999 Medical Physicist License, Austrian Society of Medical Physics, AT

Appointments

2001 - 2016 **Adjunct Professor of Physics in Psychiatry**, University of Pennsylvania Medical Center, Philadelphia, PA, USA
2000 - 2011 Second affiliation: Department of Radiology, General Hospital/MUW, Vienna, AT
1997 - present **Associate Professor Medical Physics and Biophysics** (tenured), Medical University of Vienna, AT
1992 - 1997 **Associate Professor** in Medical Physics and Biophysics, Medical School - University of Vienna, AT
1989 - 99 Head "NMR group", Dept. Medical Physics and MR-unit, Vienna, AT
1989/90 E. Schrödinger fellow, Dpt. Biochemistry, University of Oxford, Oxford, UK
1988 - 1991 **Assistant Professor**, Institute of Medical Physics, Medical School - University of Vienna, AT
1981/82 Postdoctoral Fellow, Institute for Solid State Physics, University of Geneva, CH
1988 E. Schrödinger fellow, Dpt. Biochemistry and Biophysics, University of Pennsylvania – School of Medicine, Philadelphia, USA
1982 - 1988 Research Associate, Institute of Medical Physics, Medical School - University of Vienna, A

Publication Record

> 200 publications in peer-reviewed Journals and > 600 scientific presentations.
Current h-index = 45 with over 5600 citations so far (Scopus Search 8/2014)

Funded projects (ongoing) - Total grant support > 20 Mio. Euro.
2014-17 Neuroimaging (3T Prisma), Intramural grant (MUW/AKH), **PI** (with S. Trattnig), 1.8 M €
2011-14 Vienna Research Studio for Ultra-Highfield Magnetic Resonance Applications, FFG, **PI**, 1.237 M €
2006-14 High-field (TIM Trio) MR tomography, Intramural grant, **PI** (with S. Trattnig), 1.8 M €
2005-14 Ultrahigh-field (7T) MR tomography, BMWF-infrastructure grant, intramural grant & Siemens Healthcare, **PI** (with S. Trattnig), 11 M € (incl. housing & upgrades)

Advisory and Editorial Board membership

2002 - 2003 Member of the Council, European Society of MR in Medicine and Biology (ESMRMB)
2008 - 2010 Editorial Board, Open Spectroscopy Journal
2009 - Editorial Board, MAGMA Magn Reson Mater Phys
2009 - 2013 Member of the Executive Board of ESMRMB
2010 - 2013 Associate Editor-in-Chief, World Journal of Radiology
2013 - Section Editor-in-Chief, Frontiers in Physics – Biomedical Physics

Selected publications (last 5 years, relevant to project, out of > 200 peer-reviewed papers):

U. Rabl, Meyer B, Diers K, Bartova L, Berger A, Mandorfer D, Popovic A, Scharinger C, Huemer J, Kalcher K, Pail G, Haslacher H, Perkmann T, Windischberger C, Brocke B, Sitte HH, Pollack DD, Dreher J-C, Kasper S, **Moser E**, Esterbauer H, Pezawas L. COMT VAL158MET impacts on morphological stress effects in healthy humans. *J Neurosci.* **34** (2014) 9917-26

R. Sladky, A. Höflich, M. Küblböck, C. Kraus, P. Baldinger, **E. Moser**, R. Lanzenberger, C. Windischberger. Disrupted effective connectivity between the amygdala and orbitofrontal cortex in social anxiety disorder during emotion discrimination revealed by dynamic causual modeling for fMRI. *Cerebral Cortex* (2014) EPub October 9, 2013

K. Kalcher, R. N. Boubela, W. Huf, L. Bartova, C. Kronnerwetter, B. Derntl, L. Pezawas, P. Filzmoser, C. Nasel, **E. Moser**. The Spectral Diversity of Resting-State Fluctuations in the Human Brain. *PLoS One* **9** (2014) e93375

R.N. Boubela, Kalcher K, Nasel C, **Moser E**. Scanning fast and slow: Current limitations of 3 Tesla functional MRI and future potential. *Front. Physics* **2** (2014) 1.

K. Kalcher, R. N. Boubela, W. Huf, P. Filzmoser, B. Biswal, P. Baldinger, U. Sailer, S. Kasper, C. Lamm, R. Lanzenberger, **E. Moser**, C. Windischberger. RESCALE: Voxel-specifc Task-fMRI Scaling Using Resting State Fluctuation Amplitude. *Neuroimage* **70** (2013) 80-88

V. Schöpf, Fischmeister FPhS, Windischberger C, Gerstl F, Wolzt M, Karlsson KÆ, **Moser E**. Effects of individual glucose levels on the neuronal correlates of emotions. *Front Human Neurosci* 7 (2013) 212

R.N. Boubela, Huf W, Kalcher K, W. Huf, C. Kronerwetter, P. Filzmoser, **Moser E**. Beyond Noise: Using Temporal ICA to Extract Meaningful Information from High-frequency fMRI Fluctuations. *Front Human Neurosci,* **7** (2013) 168

R. Sladky, P. Baldinger, G. Kranz, J. Troestl, A. Hoeflich, R. Lanzenberger, **E. Moser**, C. Windischberger. High resolution functional MRI of the human amygdala at 7 Tesla. *Eur. J. Radiol.* 82 (2013) 728-33

E. Moser, F. Stahlberg, M. Ladd, S. Trattnig. 7 Tesla MR – from research to clinical applications? *NMR Biomed* 25 (2012) 695-716

R.N. Boubela, W. Huf , K. Kalcher, R. Sladky, P. Filzmoser, L. Pezawas, S. Kasper, C. Windischberger, **E. Moser**. A Highly Parallelized Framework for Computationally Intensive MR Data Analysis. *MAGMA* 25 (2012) 313-20

K.Æ. Karlsson, C. Windischberger, F. Gerstl, W. Mayr, J. M. Siegel, **E. Moser**. Modulation of hypo-thalamus and amygdalar activation levels with stimulus valence. *Neuroimage* 51 (2010) 324-8

B. Derntl, U. Habel, C. Windischberger, S. Robinson, I. Kryspin-Exner, R.C. Gur, **E. Moser**. General and specific responsiveness of the amygdala during explicit emotion recognition. *BMC Neuroscience* 10 (2009) 91