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Karolinska Institutet
Stockholm, Sweden | Karolinska vägen 37a

Current Position

- 2020/09 – present **Postdoctoral Researcher**
Ivanka Savic Lab
Department of Women's and Children's Health
Karolinska Institute
- 2020/01 – present **Secretary General**
Austrian Neuroscience Association (ANA)

Education

- 2013/03 – 2018/02 **Doctoral Programme Clinical Neurosciences, (PhD)**
Medical University of Vienna, Waehringer Guertel 18-20, 1090 Vienna, Austria
Department of Psychiatry and Psychotherapy
Thesis: Assessing modulatory effects of sex-steroid hormones on the human brain with ultra-high field MR and multimodal neuroimaging (Supervisor: Prof. Rupert Lanzenberger)
- 2010/10 – 2013/03 **Middle European interdisciplinary master programme in Cognitive Science, (MSc)**
University of Vienna, Universitaetsring 1, 1010 Vienna, Austria
Medical University of Vienna, Spitalgasse 4, 1090 Vienna, Austria
University Medical Center Ljubljana, Zaloska cesta 7, 1000 Ljubljana, Slovenia
Thesis: The influence of long-term meditation on attentional engagement: An EEG study (Supervisor: Prof. Grega Repovs)
- 2004/10 – 2010/06 **Philosophy, (MA)**
University of Vienna, Universitaetsring 1, 1010 Vienna, Austria
Thesis: The conception of anatta (not-self) in early Buddhism: Reflections in philosophical anthropology (Supervisor: Univ.-Doz. Hisaki Hashi)
- 2003/03 – 2004/01 **Electrical Engineering**
Vienna University of Technology, Gusshausstrasse 25-29, 1040 Vienna, Austria
- 1997/09 – 2002/06 **Higher Technical College for Computer Engineering, (Ing)**
HTL Donaustadt, Donaustadtstrasse 45, 1220 Vienna, Austria
Thesis: Hard- and software implementation of an autonomous Hexapod based on a peripheral interface controller (PIC)

Research Experience

- 2013/03 – 2020/09 **NEUROIMAGING LABs (NIL) – PET, MRI, EEG, TMS & Chemical Lab**
Medical University of Vienna, Waehringer Guertel 18-20, 1090 Vienna, Austria
Contact: Prof. Rupert Lanzenberger
Scope:
Structural and functional ultra-high field 7T MR and PET imaging in the healthy and diseased human brain.

- 2012/03 – 2013/02 **Mind & Brain Lab in collaboration with the Institute of Clinical Neurophysiology**
 Askerceva cesta 2, 1000 Ljubljana Slovenia; Zaloska cesta 7, 1000 Ljubljana, Slovenia
 Contact: Prof. Grega Repovs
 Scope:
 Assessing the impact of long-term meditation on neurophysiological processes by observing ERP measurements with EEG.
- 2011/10 – 2012/02 **Department of Neurology**
 Zaloska cesta 2, 1000 Ljubljana, Slovenia
 Contact: Prof. Zvezdan Pirtosek
 Scope:
 EEG working memory studies with patients suffering from Schizophrenia and Parkinson's disease.
- 2011/02 – 2011/07 **Center for Brain Research**
 Spitalgasse 4, 1090 Vienna, Austria, Department of Biochemistry and Molecular Biology
 Contact: Prof. Werner Sieghart
 Scope:
 Research on the distribution and composition of GABA_A-receptor subunits in the hippocampus of wild-type mice by applying immunohistological methods and co-localization immunofluorescence studies.

Professional

- 2020/09 – present **Department of Women's and Children's Health, Karolinska Institute**
 Ivanka Savic Lab
 Karolinska vägen 37a, 171 77 Stockholm, Sweden
 Postdoctoral Researcher
- 2018/02 – 2020/09 **Department of Psychiatry and Psychotherapy, Medical University of Vienna**
 NEUROIMAGING LABS (NIL) - PET, MRI, EEG, TMS & Chemical Lab (Head: Prof. R. Lanzenberger)
 Waehringer Guertel 18-20, A-1090 Vienna, Austria
 Postdoctoral Researcher
- 2017/04 – 2019/07 **Karl Landsteiner Institute for Clinical Epilepsy Research and Cognitive Neurology**
 Neurological Center Rosenhugel (Head: Prof. C. Baumgartner)
 Riedelgasse 5, A-1130 Vienna, Austria
 Data Analysis
- 2015/02 – 2020/09 **Deputy Head, Chemical Lab**
 NEUROIMAGING LABS (NIL) - PET, MRI, EEG, TMS & Chemical Lab (Head: Prof. R. Lanzenberger)
 Department of Psychiatry and Psychotherapy, Medical University of Vienna
- 2013/06 – 2018/02 **Department of Psychiatry and Psychotherapy, Medical University of Vienna**
 NEUROIMAGING LABS (NIL) - PET, MRI, EEG, TMS & Chemical Lab (Head: Prof. R. Lanzenberger)
 Waehringer Guertel 18-20, A-1090 Vienna, Austria
 Research Associate
- 2015/10 – 2016/10 **Clinical Research Coordinator**
 Department of Psychiatry and Psychotherapy
 Medical University of Vienna
 Waehringer Guertel 18-20, A-1090 Vienna, Austria
- 2010/04 – 2011/04 **Altstoff Recycling Austria AG**
 Mariahilferstrasse 123, 1060 Vienna, Austria
 Controlling

2008/10 – 2009/09	SE Orbitaltechnique and Weldingsystems Dragonerweg 2, 2301 Gross Enzersdorf, Austria Engineering
2006/05 – 2008/10	Electrovac Ltd. Aufeldgasse 37-39, 3400 Klosterneuburg, Austria Quality and process management
2004/01 – 2004/10	Siemens AG Siemensstrasse 92, 1211 Vienna, Austria Technical Assistant

Funding (Principal Investigator)

2017/10 – 2019/12	Project Title: Optimierung der molekularen Quantifizierung des menschlichen Gehirns – PET in der Psychiatrie Agency: Hochschuljubiläumsstiftung der Stadt Wien Amount: € 8.224.-
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Stipends / Grants / Awards

2020/09	ARS DOCENDI 2020, short list, Federal Ministry of Education, Science and Research of Austria (http://www.bmbwf.gv.at)
2019/06	OEFG (Austrian Research Agency) – Travel Grant
2018/09	Erasmus+ Mobility Grant
2018/06	OEFG (Austrian Research Agency) – Travel Grant
2017/06	OEFG (Austrian Research Agency) – Travel Grant
2017/04	BRAIN & BRAIN PET 2017 – Early Career Investigator Travel Award
2016/12	Featured Research Highlight in Nature Reviews Endocrinology (doi:10.1038/nrendo.2016.177)
2016/06	OEFG (Austrian Research Agency) – Travel Grant
2016/06	12 th Young Scientist Association PhD Symposium – Best Poster Presentation Award
2015/11	OEFG (Austrian Research Agency) – Travel Grant
2015/09	DGBP (German Society for Biological Psychiatry) – Workshop Stipend
2015/09	APHAR (Austrian Pharmacological Society) – Travel Grant
2012/03	Erasmus, European student exchange programme – Mobility Grant 2012
2011/10	Erasmus, European student exchange programme – Mobility Grant 2011
2010/10	Scholarship for excellence awarded by the University of Vienna, Austria

Memberships

2019 – pending	Federation of European Neuroscience Societies (FENS)
2019 – pending	Austrian Neuroscience Association (ANA)
2018 – pending	Medical Imaging Cluster (MIC)
2017 – pending	Austrian Society for functional magnetic resonance imaging (ÖGfMRT)
2017 – pending	Austrian Pharmacological Society (APHAR)

2014 – pending Organization for Human Brain Mapping (OHBM)

Editorial Board / Reviewing Activities

2020 – pending Journal of the Neurological Sciences
2019 – pending European Research Council (ERC) Consolidator Grant panel LS5 (Reviewer)
2019 – pending EClinicalMedicine (Reviewer)
2019 – pending Brain Imaging and Behavior (Reviewer)
2018 – pending The British Journal of Psychiatry (Reviewer)
2018 – pending The Lancet Psychiatry (Reviewer)
2017 – pending Journal of Dementia (Editor)

Chair

2019/09/26 16th ANA - 25th APHAR Meeting, September 25 – 27 2019, Innsbruck, Austria, Chair: Oral Session: “Peripheral nerves and nociception”
2019/06/14 YSA PhD Symposium, June 13 – 14, 2019, Young Scientist Association, MedUni Vienna, Austria, Chair: Poster Session “Neuroscience & Biomedical Engineering & Medical Informatics, Biostatistics & Complex Systems”

Special Training & Courses

2018/10 **High Density MR-EEG (Advanced Geodesic EEG system, EGI/Philips Neuro) – Application Training**
October 23rd – 25th 2018, Vienna, Austria.
2018/09 **ExploreDTI – Diffusion Weighted Imaging Workshop**
September 10th – 12th 2018, Utrecht, Netherlands. Presenter: A. Leemans
2017/07 **Human Brain Project Curriculum Workshop – Neurobiology**
July 3rd – 5th 2017, Innsbruck, Austria. Presenters: U. Ashery, J. DeFelipe, T. Dickscheid, T. Gilbert and others.
2017/06 **Nilearn Course – Workshop on Pattern Recognition in Neuroimaging (PRNI)**
June 21st 2017, Toronto, Canada. Presenters: D. Bzdok & J. Etzel
2017/06 **UCL Course – Pattern Recognition for Neuroimaging Toolbox (PRoNTo)**
June 1st – 2nd 2017, London, United Kingdom. Presenters: J. Mourao-Miranda, J. Ashburner, C. Phillips, J. Monteiro, M. Rosa, A. Rao
2016/09 **Resting State Workshop**
September 19th – 20th 2016, Vienna, Austria. Presenters: B. Biswal, V. Kiviniemi, P. Taylor, Y. He, A. Razi, M. Walter, C. Windischberger, A. Nieto-Castanon and others.
2016/08 **Voxel-based morphometry (VBM) Workshop**
August 5th – 6th 2016, Giessen, Germany. Presenters: C. Gaser & G. Ziegler
2016/05 **Spectroscopy Workshop**
MAGNETOM PRISMA MR, May 17th 2016, Vienna, Austria.

- 2015/09 **Intensivkurs – Neuroanatomie und Funktion**
Deutsche Gesellschaft für Biologische Psychiatrie (DGBP), September 28th – October 1st 2015, Aachen, Germany. Presenters: F. Schneider, K. Zilles, S. Eickhoff, G. Gruender, S. Caspers, N. Palomero-Gallagher, U. Habel and others.
- 2015/07 **MAGNETOM PRISMA MR – Application Training**
July 27th 2015, Vienna, Austria.
- 2015/07 **PET/MR mMR – Application Training**
July 24th 2015, Vienna, Austria.

Software and Programming Skills

MATLAB, SPM, FSL, FreeSurfer, ExploreDTI, SPSS, Python, TensorFlow, R, EEGLAB, PMOD, LaTeX, Minitab, SAP R/3, Microsoft Dynamics AX, CAQ, Brain Vision Recorder, Microsoft Office, Adobe Photoshop, MRICro, Shell scripting, HTML, CSS, JavaScript, MySQL

Teaching activities

Given courses over the time period 2017 – 2020:

Undergraduate Studies: 8 courses | hours per semester: 22

Graduate Studies: 13 courses | hours per semester: 26

2019/2020 (Summer term)

- Journal Club – Functional and Multimodal Neuroimaging (2 SH^{*})
- Topic Seminar – Functional and Multimodal Neuroimaging II (2 SH)
- Statistics in Biomedicine – Science and Medicine (2.27 SH)
- Project Studies – Diploma thesis seminar (4 SH)

2019/2020 (Winter term)

- Journal Club – Functional and Multimodal Neuroimaging (2 SH)
- Topic Seminar – Functional and Multimodal Neuroimaging II (2 SH)
- Basic Lectures I – Clinical Neurosciences (2 SH)
- Seminar – Science and Medicine (0.5 SH)
- Scientific Seminar – Imaging in Psychiatry (2.5 SH)

2018/2019 (Summer term)

- Journal Club – Functional and Multimodal Neuroimaging I (2 SH)
- Journal Club – Functional and Multimodal Neuroimaging II (2 SH)
- Topic Seminar – Functional and Multimodal Neuroimaging (2 SH)
- Statistics in Biomedicine – Science and Medicine (2.27 SH)
- Project Studies – Diploma thesis seminar (4 SH)

2018/2019 (Winter term)

- Journal Club – Functional and Multimodal Neuroimaging (2 SH)
- Topic Seminar – Functional and Multimodal Neuroimaging (2 SH)
- Scientific Seminar – Imaging in Psychiatry (2.5 SH)
- Basic Lectures – Clinical Neurosciences (2 SH)

2017/2018 (Summer term)

- Journal Club – Radiochemistry and Biomarker Development (2 SH)
- Topic Seminar – Neuroimaging & Genetics (2 SH)
- Project Studies – Diploma thesis seminar (4 SH)

^{*}SH: Semester hours (1 hour per semester = 15 academic hours)
All evaluated courses were rated as 'excellent' by the students
Evaluations available upon request

Thesis Supervision

Supervisor

- 2019 – pending Fabian Peter HAMMERLE, **Diploma thesis (MD)**
Comparison of different automated hippocampal subfield segmentation approaches based on structural magnetic resonance imaging.
Human Medicine (N202), Medical University of Vienna
- 2019 – pending Clemens Dominic SCHMIDT, **Diploma thesis (MD)**
The influence of SSRI treatment on gray matter assessed with diffusion weighted imaging.
Human Medicine (N202), Medical University of Vienna
- 2019 – pending Aydin KUTLAR, **Diploma thesis (MD)**
Effects of escitalopram on blood/serum BDNF levels.
Human Medicine (N202), Medical University of Vienna
- 2019 – pending Samuel Emanuel TILLIAN, **Diploma thesis (MD)**
The relationship between gray matter configuration and associative learning capability in healthy individuals examined with high-resolution MRI.
Human Medicine (N202), Medical University of Vienna
- 2018 – pending Felix OTTI, **Diploma thesis (MD)**
Selective serotonin reuptake inhibitors (SSRIs) enhance neuroplasticity caused by Chinese pseudo-vocabulary learning.
Human Medicine (N202), Medical University of Vienna
- 2018 – pending Valentin SPREITZHOFER, **Diploma thesis (MD)**
SSRI-dependent neuroplasticity measured with resting-state global functional connectivity.
Human Medicine (N202), Medical University of Vienna
- 2018 – 2020 Martin PUCHNER, **Diploma thesis (MD)**
Learning induced, SSRI-dependent gray matter changes measured by structural MRI using voxel-based morphometry.
Human Medicine (N202), Medical University of Vienna (Defense: 01-10-2020)
- 2017 – 2019 Onur KESKIN, **Diploma thesis (MD)**
Differences in brain morphology according to Klein-Grid using structural magnetic resonance imaging.
Human Medicine (N202), Medical University of Vienna (Defense: 19-12-2019)

Co-Supervisor

- 2018 – pending Mathis GODBERSEN, **Doctoral thesis (PhD)**
Investigation of the glymphatic system in the human brain during sleep with multimodal high-field functional and molecular magnetic resonance imaging and spectroscopy.
Clinical Neurosciences (N790), Medical University of Vienna
- 2018 – 2020 Tilman STEUERNAGEL, **Diploma thesis (MD)**
Effects of theta-burst transcranial magnetic stimulation on white matter structural integrity investigated with diffusion tensor imaging.
Human Medicine (N202), Medical University of Vienna (Defense: 23-06-2020)
- 2018 – 2019 Thomas FISCHER, **Diploma thesis (MD)**
Effects of theta-burst transcranial magnetic stimulation on regional grey matter volume in treatment-resistant depression.
Human Medicine (N202), Medical University of Vienna (Defense: 25-03-2019)

Talks / Oral Communications

- 2019/10/25 Hippocampal subfields and Psychiatry. 5th Organization for Human Brain Mapping (OHBM) Alpine Chapter Symposium, October 25th 2019, Lausanne, Switzerland.
- 2019/06/24 Neurobiological underpinnings of Sex, Sexual Orientation and Gender. Brainstorm #10 - The LGBT+ Brain, June 24th 2019, Vienna, Austria.
- 2019/03/19 The influence of anti-depressive therapy on white matter in the brain. 46. Winterseminar „Biologische Psychiatrie“, March 16th – 20th 2019, Oberlech, Austria.
- 2019/03/13 Memory, personality and free will in brain research. Brain Awareness Week (Initiative by Dana Foundation), March 11th – 17th 2019, Vienna, Austria.
- 2018/12/06 Emotions, free will and decision making. Menopause Congress, December 6th – 8th 2018, Vienna, Austria.
- 2018/11/22 Brain Connectivity. ÖGPB Congress, November 22nd – 23rd 2018, Vienna, Austria.
- 2018/06/14 Surface-based and volume-based analyses in Alzheimer's disease using structural magnetic resonance imaging. MIC Festival - Medizinische Bildgebung in der personalisierten Medizin, June 14th 2018, Vienna, Austria.
- 2018/03/17 Optimized quantification of PET data and its use in Psychiatry. 45. Winterseminar „Biologische Psychiatrie“, March 17th – 21st, 2018, Oberlech, Austria.
- 2018/03/12 How does consciousness evolve? Brain Awareness Week (Initiative by Dana Foundation), March 12th – 18th, 2018, Vienna, Austria.
- 2017/11/03 Multimodal Pharmaco-Imaging in PET/MR. 3rd Organization for Human Brain Mapping (OHBM) Alpine Chapter Symposium, November 3rd – 4th 2017, Bern, Switzerland.
- 2017/04/03 Association between cortical thickness and MAO-A binding in subjects suffering from seasonal affective disorder. 28th Symposium on Cerebral Blood Flow, Metabolism and Function and 13th Conference on Quantification of Brain Function with PET, April 1st – 4th 2017, Berlin, Germany.
- 2017/03/27 Assessing brain atrophy in people with Alzheimer's disease utilizing two different analysis techniques – A comparison of FreeSurfer and the CAT12 toolbox. 6th European Conference on Clinical Neuroimaging (ECCN), March 27th – 28th 2017, Rome, Italy.
- 2017/03/20 Evaluation of cortical thickness measurements in neurodegenerative diseases. 44. Winterseminar „Biologische Psychiatrie“, March 18th – 22nd 2017, Oberlech, Austria.
- 2017/03/14 Interesting cases in brain research – From iron rods and seahorses. Brain Awareness Week (Initiative by Dana Foundation), March 13rd – 19th 2017, Vienna, Austria.
- 2016/11/26 Hormonal-induced gray matter alterations in transgender people. 2nd Organization for Human Brain Mapping (OHBM) Alpine Chapter Symposium, November 25th – 26th 2016, Salzburg, Austria.
- 2016/11/24 Multimodal neuroimaging in gender dysphoria before and after hormonal treatment. DGPPN Kongress – Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde, November 24th – 26th 2016, Berlin, Germany.
- 2016/10/12 Modulatory effects of sex-steroid hormones on the human brain. NeuroCluster IG-Meeting "Emotion & Cognition", October 12 2016, Vienna, Austria.
- 2016/09/10 Fluctuating estradiol levels in female controls correlate with white matter microstructure. 22nd Scientific Symposium of the Austrian Pharmacological Society APHAR, September 08-10 2016, Vienna, Austria.

- 2016/04/04 Surface-based strategies for PET data analysis. 43. Winterseminar „Biologische Psychiatrie“, April 2nd – 6th 2016, Oberlech, Austria.
- 2015/09/18 Changes in progesterone levels correlate with changes in subcortical brain structures in male-to-female transgender subjects after acute high-dose cross-sex hormone administration. 21st Scientific Symposium of the Austrian Pharmacological Society APHAR, September 16th – 18th 2015, Graz, Austria.
- 2015/03/24 Gray matter volume changes after long-term testosterone administration in transgender people. 4th European Conference on Clinical Neuroimaging (ECCN), March 23rd – 24th 2015, Rome, Italy.
- 2015/03/14 The influence of cross-sex hormonal treatment on brain structure. 42. Winterseminar „Biologische Psychiatrie“, March 14th – 18th 2015, Oberlech, Austria.
- 2014/12/13 Voxel-based morphometry and diffusion-weighted imaging in pharmacological studies. „Symposium der Österreichischen Gesellschaft für funktionelle Magnetresonanztomografie (ÖGfMRT)“, December 13th 2014, Graz, Austria.
- 2014/03/25 Voxel-based morphometry at ultra-high fields of 7 Tesla. 41. Winterseminar „Biologische Psychiatrie“, March 22nd – 26th 2014, Oberlech, Austria.
- 2012/06/22 Meditation and the Brain. The Impact of Long-Term Meditation on Attentional Engagement. The sixth MEi:CogSci Conference, June 22nd – 23rd 2012, Bratislava, Slovakia.

Poster Presentations

- 2020/07/13 The influence of human hippocampal subfield volume configuration on memory capacity. 12th FENS Forum of Neuroscience, July 11-15 2020, Glasgow, United Kingdom (Virtual Meeting).
- 2019/09/25 Decreased white matter diffusivity metrics after acute SSRI challenge in depressed patients and healthy controls. 16th ANA - 25th APHAR Meeting, September 25-27 2019, Innsbruck, Austria.
- 2019/06/13 Mean diffusivity changes after acute SSRI administration in a major depressive patient cohort. 25th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 09 – 13 2019, Rome, Italy.
- 2019/06/06 Surface-based versus volume-based assessment of the 5-HT_{1A} receptor using Positron Emission Tomography (PET). MIC Festival 2019 – Digital Revolution in Medical Imaging (<https://cluster.meduniwien.ac.at/mic/mic-festival-2019/>), June 06 2019, Vienna, Austria.
- 2019/06/06 The influence of selective serotonin reuptake inhibitor (SSRI) administration on white matter microstructure. MIC Festival 2019 – Digital Revolution in Medical Imaging (<https://cluster.meduniwien.ac.at/mic/mic-festival-2019/>), June 06 2019, Vienna, Austria.
- 2018/06/19 Measuring the periaqueductal gray in people with gender dysphoria and controls using VBM. 24th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 17 – 21 2018, Singapore, Republic of Singapore.
- 2018/06/14 Surface-based and volume-based analyses in Alzheimer's disease using structural magnetic resonance imaging. MIC Festival – Medizinische Bildgebung in der personalisierten Medizin, June 14th 2018, Vienna, Austria.
- 2018/06/14 Differences in midbrain structures between cisgender and transgender persons. MIC Festival – Medizinische Bildgebung in der personalisierten Medizin, June 14th 2018, Vienna, Austria.

- 2017/06/28 Evaluating cortical thickness estimations of FreeSurfer and the CAT12 toolbox for SPM. 23rd Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 25 – 29 2017, Vancouver, Canada.
- 2017/06/08 A comparison of ROI-based MRI analysis strategies in dementia. 13th YSA PhD-Symposium, June 08 – 09 2017, Vienna, Austria.
- 2016/09/22 Hormonal-induced resting-state functional connectivity alterations in transgender people measured with ultra-high field 7T MRI. 5th Biennial Conference on Resting State and Brain Connectivity, September 21-23 2016, Vienna, Austria.
- 2016/09/19 Estradiol level changes correlate with changes in mean diffusivity and fractional anisotropy values in Female-to-Male transsexuals. 29th ECNP Congress September 17-20 2016, Vienna, Austria.
- 2016/06/28 Surface-based PET analysis of the 5-HT_{1A} serotonin receptor and quantitative assessment of smoothing. 22nd Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 26-30 2016, Geneva, Switzerland.
- 2016/06/10 Resting-state functional connectivity changes in Male-to-Female transsexuals after hormonal treatment. 12th YSA PhD-Symposium, June 09-10 2016, Vienna, Austria.
- 2015/11/27 The influence of high-dose estradiol administration on subcortical brain structures and the ventricular system. DGPPN Kongress – Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde, November 25-28 2015, Berlin, Germany.
- 2015/06/11 Test-retest variability of human brain gray matter voxel-based morphometry at ultra-high fields of 7 Tesla. 11th YSA PhD-Symposium, June 10-11 2015, Vienna, Austria.
- 2014/10/19 Modulatory effects of cross-sex steroid hormones in the adult human brain: a voxel-based morphometry study. 27th European College of Neuropsychopharmacology (ECNP) Congress, October 18 – 21 2014, Berlin, Germany.
- 2014/06/10 Assessing the human brain at ultra-high fields – Comparing 7T and 3T MRI voxel-based morphometry. 20th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 08 – 12 2014, Hamburg, Germany.
- 2011/06/17 Characterization of parvalbumin-expressing interneurons in the dentate gyrus. 5th MEi:CogSci Conference, June 17 – 18 2011, Ljubljana, Slovenia.

Peer-reviewed Journal Articles

22 articles | cumulative IF: 110.8 | h-index: 12 | citations: 484 (Google Scholar)

First author

1. **Seiger R**, Ganger S, Kranz GS, Hahn A, Lanzenberger R. Cortical thickness estimations of FreeSurfer and the CAT12 toolbox in patients with Alzheimer's disease and healthy controls. *Journal of Neuroimaging* 2018;28(5):515-523. [2019, IF: 2.321]
2. **Seiger R**, Hahn A, Hummer A, Kranz GS, Ganger S, Woletz M, Kraus C, Sladky R, Kautzky A, Kasper S, Windischberger C, Lanzenberger R. Subcortical gray matter changes in transgender subjects after long-term cross-sex hormone administration. *Psychoneuroendocrinology* 2016; 74:371-379. [2019, IF: 4.732]
3. **Seiger R**, Hahn A, Hummer A, Kranz GS, Ganger S, Küblböck M, Kraus C, Sladky R, Kasper S, Windischberger C, Lanzenberger R. Voxel-based morphometry at ultra-high fields. A comparison of 7 T and 3 T MRI data. *NeuroImage* 2015;113:207-16. [2019, IF: 5.902]

In revision

Seiger R, Gryglewski G, Klöbl M, Kautzky A, Godbersen GM, Rischka L, Vanicek T, Hienert M, Unterholzner J, Silberbauer LR, Michenthaler P, Handschuh P, Hahn A, Kasper S, Lanzenberger R. The influence of acute SSRI administration on white matter microstructure in patients suffering from major depressive disorder and healthy controls.

Co-author

4. Riederer F, **Seiger R**, Lanzenberger R, Pataraja E, Kasprian G, Michels L, Beiersdorf J, Kollias S, Czech T, Hainfellner J, Baumgartner C. Voxel-Based Morphometry-from Hype to Hope. A Study on Hippocampal Atrophy in Mesial Temporal Lobe Epilepsy. *American Journal of Neuroradiology* 2020. Jun;41(6):987-993 [2019, IF: 3.381]
5. Unterholzner J, Gryglewski G, Philippe C, **Seiger R**, Pichler V, Godbersen GM, Berroteran-Infante N, Murgas M, Hahn A, Wadsak W, Mitterhauser M, Kasper S, Lanzenberger R. Topologically guided prioritization of candidate gene transcripts coexpressed with the 5-HT1A receptor by combining in vivo PET and Allen Human Brain Atlas data. *Cerebral Cortex* 2020. Epub ahead of print [2019, IF: 5.043]
6. Gryglewski G, **Seiger R**, Baldinger-Melich P, Unterholzner J, Spurny B, Vanicek T, Hahn A, Kasper S, Frey R, Lanzenberger R. Changes in white matter microstructure after electroconvulsive therapy for treatment resistant depression. *International Journal of Neuropsychopharmacology* 2019. Epub ahead of print [2019, IF: 4.333]
7. Spurny B, **Seiger R**, Moser P, Vanicek T, Reed M, Heckova E, Michenthaler P, Basaran A, Gryglewski G, Klöbl M, Trattinig S, Kasper S, Bogner W, Lanzenberger R. Hippocampal GABA levels correlate with retrieval performance in an associative learning paradigm. *NeuroImage* 2019;204:116244. [2019, IF: 5.902]
8. Baldinger-Melich P*, Urquijo MF*, **Seiger R**, Ruef A, Dwyer DB, Kranz GS, Klöbl M, Kambeitz J, Kaufmann U, Windischberger C, Kasper S, Falkai P, Lanzenberger R#, Koutsouleris N (*contributed equally, #corresponding author). Sex matters – a multivariate pattern analysis of sex- and gender-related neuroanatomical differences in cis- and transgender individuals using structural magnetic resonance imaging. *Cerebral Cortex* 2019 Epub ahead of print [2019, IF: 5.043]
9. Kraus C, **Seiger R**, Pfabigan DM, Sladky R, Tik M, Paul K, Woletz M, Gryglewski G, Vanicek T, Komorowski A, Kasper S, Lamm C, Windischberger C, Lanzenberger R. Hippocampal Subfields in Acute and Remitted Depression—an Ultra-High Field Magnetic Resonance Imaging Study. *International Journal of Neuropsychopharmacology* 2019;22(8):513-522 [2019, IF: 4.333]
10. Spurny B, Heckova E, **Seiger R**, Moser P, Kloebel M, Vanicek T, Spies M, Bogner W, Lanzenberger R. Automated ROI-based labeling for multi-voxel magnetic resonance spectroscopy data using FreeSurfer. *Frontiers in Molecular Neuroscience* 2019;12:28. [2019, IF: 4.057]
11. Kautzky A, **Seiger R**, Hahn A, Fischer P, Krampla W, Kasper S, Kovacs GG, Lanzenberger R. Prediction of Autopsy Verified Neuropathological Change of Alzheimer’s Disease Using Machine Learning and MRI. *Frontiers in Aging Neuroscience* 2018;10:406. [2019, IF: 4.362]
12. Gryglewski G, Baldinger-Melich P, **Seiger R**, Godbersen GM, Michenthaler P, Klöbl M, Spurny B, Kautzky A, Vanicek T, Kasper S, Frey R, Lanzenberger R. Structural changes in amygdala nuclei, hippocampal subfields and cortical thickness following electroconvulsive therapy in treatment resistant depression: longitudinal analysis. *British Journal of Psychiatry* 2019;214(3):159-167. [2019, IF: 7.850]
13. James GM*, Gryglewski G*, Vanicek T, Berroteran-Infante N, Philippe C, Kautzky A, Nics L, Vracka C, Godbersen GM, Unterholzner J, Sigurdardottir LH, Spies M, **Seiger R**, Kranz GS, Hahn A, Mitterhauser M, Wadsak W, Bauer A, Hacker M, Kasper S, Lanzenberger L. (*contributed equally) Parcellation of the human cerebral cortex based on molecular targets in the serotonin system quantified by positron emission tomography in vivo. *Cerebral Cortex* 2019;29(1):372-382. [2019, IF: 5.043]
14. Gryglewski G, **Seiger R**, James GM, Godbersen GM, Komorowski A, Unterholzner J, Michenthaler P, Hahn A, Wadsak W, Mitterhauser M, Kasper S, Lanzenberger R. Spatial analysis and high resolution mapping of the human brain transcriptome for integrative analysis in neuroimaging. *NeuroImage* 2018;176:259-267 [2019, IF: 5.902]
15. Kranz GS, Hahn A, Kaufmann U, Tik M, Ganger S, **Seiger R**, Hummer A, Windischberger C, Kasper S, Lanzenberger R. Effects of testosterone treatment on hypothalamic neuroplasticity in female-to-male transgender individuals. *Brain Structure & Function* 2018;223(1):321-328. [2019, IF: 3.298]

16. Kranz GS, **Seiger R**, Kaufmann U, Hummer A, Hahn A, Ganger S, Tik M, Windischberger C, Kasper S, Lanzenberger R. Effects of sex hormone treatment on white matter microstructure in individuals with gender dysphoria. *NeuroImage* 2017;150:60-67. [2019, IF: 5.902]
17. Hahn A, Gryglewski G, Nics L, Hienert M, Rischka L, Vranka C, Sigurdardottir H, Vanicek T, James GM, **Seiger R**, Kautzky A, Silberbauer L, Wadsak W, Mitterhauser M, Hacker M, Kasper S, Lanzenberger R. Quantification of task-specific glucose metabolism with constant infusion of [¹⁸F]FDG. *Journal of Nuclear Medicine* 2016;57(12):1933-1940. [2019, IF: 7.887]
18. Spies M, Hahn A, Kranz G, Sladky R, Kaufmann U, Hummer A, Ganger S, Kraus C, Winkler D, **Seiger R**, Comasco E, Windischberger C, Kasper S, Lanzenberger R. Gender transition affects neural correlates of empathy: A resting state functional connectivity study with ultra high-field 7T MR imaging. *NeuroImage* 2016;138:257-265. [2019, IF: 5.902]
19. Hahn A, Kranz G, Sladky R, Kaufmann U, Ganger S, Hummer A, **Seiger R**, Spies M, Winkler D, Kasper S, Windischberger C, Swaab D, Lanzenberger R. Testosterone affects language areas of the adult human brain. *Human Brain Mapping* 2016;37(5):1738-48. [2019, IF: 4.421]
20. Ganger S, Hahn A, Küblböck M, Kranz GS, Spies M, **Seiger R**, Sladky R, Windischberger C, Kasper S, Lanzenberger R. Comparison of continuously acquired resting state and extracted analogues from active tasks. *Human Brain Mapping* 2015;36(10):4053-63. [2019, IF: 4.421]
21. Kranz GS, Hahn A, Kaufmann U, Küblböck M, Hummer A, Ganger S, **Seiger R**, Winkler D, Swaab DF, Windischberger C, Kasper S, Lanzenberger R. White matter microstructure in transsexuals and controls investigated by diffusion tensor imaging. *Journal of Neuroscience* 2014;34(46):15466-75. [2019, IF: 5.673]
22. Hahn A, Kranz GS, Küblböck M, Kaufmann U, Ganger S, Hummer A, **Seiger R**, Spies M, Winkler D, Kasper S, Windischberger C, Swaab D, Lanzenberger R. Structural Connectivity Networks of Transgender People. *Cerebral Cortex* 2015;25(10):3527-34. [2019, IF: 5.043]

Peer-reviewed Conference Papers (Abstracts and Proceedings)

First author

1. **Seiger R**, Hammerle FP, Godbersen GM, Reed MB, Michenthaler P, Spurny B, Handschuh P, Klöbl M, Unterholzner J, Ritter V, Kautzky A, Gryglewski G, Kraus C, Vanicek T, Lanzenberger R. The influence of human hippocampal subfield volume configuration on memory capacity. 12th FENS Forum of Neuroscience, July 11-15 2020, Glasgow, United Kingdom (Virtual Meeting).
2. **Seiger R**, Hammerle FP, Godbersen GM, Reed MB, Michenthaler P, Spurny B, Handschuh P, Klöbl M, Unterholzner J, Basaran A, Kautzky A, Gryglewski G, Kraus C, Vanicek T, Lanzenberger R. Hippocampal subfield volume estimations utilizing multispectral MR information within FreeSurfer. 26th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 26-30 2020, Montreal, Canada (Virtual Meeting).
3. **Seiger R**, Hippocampal subfields and Psychiatry. 5th Organization for Human Brain Mapping (OHBM) Alpine Chapter Symposium, October 25th 2019, Lausanne, Switzerland.
4. **Seiger R**, Gryglewski G, Kautzky A, Klöbl M, Godbersen GM, Rischka L, Vanicek T, Hienert M, Unterholzner J, Silberbauer L, Michenthaler P, Handschuh P, Hahn A, Kasper S, Lanzenberger R. Decreased white matter diffusivity metrics after acute SSRI challenge in depressed patients and healthy controls. 16th ANA - 25th APHAR Meeting, September 25-27 2019, Innsbruck, Austria. *Intrinsic Activity*, 2019; 7 (Suppl.1): A3.44 (<http://www.intrinsicactivity.org/2019/7/S1/A3.44>)
5. **Seiger R**, Gryglewski G, Kautzky A, Klöbl M, Godbersen GM, Rischka L, Vanicek T, Hienert M, Unterholzner J, Silberbauer L, Michenthaler P, Handschuh P, Hahn A, Kasper S, Lanzenberger R. Mean diffusivity changes after acute SSRI administration in a major depressive patient cohort. 25th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 09-13 2019, Rome, Italy.
6. **Seiger R**, Murgas M, Pichler V, Michenthaler P, Berroteran-Infante N, Godbersen GM, Unterholzner J, Silberbauer L, Basaran A, Rischka L, Kranz GS, Wadsak W, Hahn A, Hacker M, Kasper S, Lanzenberger R. Surface-based versus volume-based assessment of the 5-HT1A receptor using Positron Emission Tomography (PET). MIC Festival 2019 – Digital Revolution in Medical Imaging (<https://cluster.meduniwien.ac.at/mic/mic-festival-2019/>), June 06th 2019, Vienna, Austria.

7. **Seiger R**, Gryglewski G, Rischka L, Klöbl M, Godbersen GM, Unterholzner J, Silberbauer L, Michenthaler P, Handschuh P, Vanicek T, Hahn A, Kasper S, Lanzenberger R. The influence of selective serotonin reuptake inhibitor (SSRI) administration on white matter microstructure. MIC Festival - Digital Revolution in Medical Imaging, June 6th 2019, Vienna, Austria.
8. **Seiger R**, Kranz GS, Hahn A, Klöbl M, Kaufmann U, Hummer A, Windischberger C, Kasper S, Lanzenberger R. Measuring the periaqueductal gray in people with gender dysphoria and controls using VBM. 24th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 17-21 2018, Singapore, Republic of Singapore.
9. **Seiger R**, Kranz GS, Hahn A, Klöbl M, Kaufmann U, Hummer A, Windischberger C, Kasper S, Lanzenberger R. Differences in midbrain structures between cisgender and transgender persons. MIC Festival - Medizinische Bildgebung in der personalisierten Medizin, June 14th 2018, Vienna, Austria.
10. **Seiger R**, Ganger S, Kranz, GS Hahn A, Lanzenberger R. Surface-based and volume-based analyses in Alzheimer's disease using structural magnetic resonance imaging. MIC Festival - Medizinische Bildgebung in der personalisierten Medizin, June 14th 2018, Vienna, Austria.
11. **Seiger R**, Kranz GS, Hahn A, Klöbl M, Kaufmann U, Hummer A, Windischberger C, Kasper S, Lanzenberger R. Volume differences in the periaqueductal gray between male-to-female subjects and male controls. 7th European Conference on Clinical Neuroimaging (ECCN), March 26-27 2018, Brussels, Belgium.
12. **Seiger R**, Hahn A, Ganger S, Kasper S, Lanzenberger R. Evaluating cortical thickness estimations of FreeSurfer and the CAT12 toolbox for SPM. 23rd Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 25-29 2017, Vancouver, Canada.
13. **Seiger R**, Hahn A, Ganger S, Kasper S, Lanzenberger R. A comparison of ROI-based MRI analysis strategies in dementia. 13th YSA PhD-Symposium, June 08-09 2017, Vienna, Austria.
14. **Seiger R**, James GM, Spies M, Vranka C, Nics L, Hienert M, Philippe C, Baldinger-Melich P, Wadsak W, Mitterhauser M, Kasper S, Winkler D, Lanzenberger R. Association between cortical thickness and MAO-A binding in subjects suffering from seasonal affective disorder. 28th Symposium on Cerebral Blood Flow, Metabolism and Function and 13th Conference on Quantification of Brain Function with PET, April 1-4 2017, Berlin, Germany.
15. **Seiger R**, Hahn A, Ganger S, Kasper S, Lanzenberger R. Assessing brain atrophy in people with Alzheimer's disease utilizing two different analysis techniques – A comparison of FreeSurfer and the CAT12 toolbox. 6th European Conference on Clinical Neuroimaging (ECCN), March 27-28 2017, Rome, Italy.
16. **Seiger R**, Hahn A, Sladky R, Kranz GS, Ganger S, Hummer A, Spies M, Windischberger C, Kasper S, Lanzenberger R. Hormonal-induced resting-state functional connectivity alterations in transgender people measured with ultra-high field 7T MRI. 5th Biennial Conference on Resting State and Brain Connectivity, September 21-23 2016, Vienna, Austria. <http://www.restingstate.com/2016/abstracts/>
17. **Seiger R**, Kranz GS, Kaufmann U, Tik M, Hahn A, Ganger S, Woletz M, Kasper S, Windischberger C, Lanzenberger R. Fluctuating estradiol levels in female controls correlate with white matter microstructure. 22nd Scientific Symposium of the Austrian Pharmacological Society APHAR, September 08-10 2016, Vienna, Austria.
Intrinsic Activity, 2016; 4 (Suppl.3): A1.7 <http://www.intrinsicactivity.org/2016/4/S3/A1.7>
18. **Seiger R**, Kranz GS, Kaufmann U, Hummer A, Hahn A, Ganger S, Sladky R, Windischberger C, Kasper S, Lanzenberger R. Estradiol level changes correlate with changes in mean diffusivity and fractional anisotropy values in Female-to-Male transsexuals. 29th ECNP Congress September 17-20 2016, Vienna, Austria.
19. **Seiger R**, Hahn A, Spurny B, Mitterhauser M, Baldinger-Melich P, Spies M, Wadsak W, Hacker M, Kasper S, Lanzenberger R. Surface-based PET analysis of the 5-HT_{1A} serotonin receptor and quantitative assessment of smoothing. 22nd Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 26-30 2016, Geneva, Switzerland.
20. **Seiger R**, Hahn A, Sladky R, Kranz GS, Ganger S, Hummer A, Spies M, Windischberger C, Kasper S, Lanzenberger R. Resting-state functional connectivity changes in Male-to-Female transsexuals after hormonal treatment. 12th YSA PhD-Symposium, June 09-10 2016, Vienna, Austria.
21. **Seiger R**, Hahn A, Hummer A, Kranz GS, Ganger S, Woletz M, Kraus C, Sladky R, Kasper S, Windischberger C, Lanzenberger R. The influence of high-dose estradiol administration on limbic brain

structures and the ventricular system. DGPPN Kongress – Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde, November 25-28 2015, Berlin, Germany.

22. **Seiger R**, Hahn A, Hummer A, Kranz GS, Ganger S, Woletz M, Kraus C, Sladky R, Kasper S, Windischberger C, Lanzenberger R. Changes in progesterone levels correlate with changes in subcortical brain structures in male-to-female transgender subjects after acute high-dose cross-sex hormone administration. 21st Scientific Symposium of the Austrian Pharmacological Society APHAR, September 16-18 2015, Graz, Austria. *Intrinsic Activity*, 2015; 3(Suppl.2): A2.28 (<http://www.intrinsicactivity.org/>)
23. **Seiger R**, Hahn A, Hummer A, Köck P, Ganger S, Küblböck M, Hienert M, Sladky R, Kasper S, Windischberger C, Lanzenberger R. Test-retest variability of human brain gray matter voxel-based morphometry at ultra-high fields of 7 Tesla. 11th YSA PhD-Symposium, June 10-11 2015, Vienna, Austria.
24. **Seiger R**, Hahn A, Küblböck M, Kranz GS, Hummer A, Ganger S, Spies M, Kasper S, Windischberger C, Lanzenberger R. Gray matter volume changes after long-term testosterone administration in transgender people. 4th European Conference on Clinical Neuroimaging (ECCN), March 23-24 2015, Rome, Italy.
25. **Seiger R**, Hahn A, Küblböck M, Kranz GS, Hummer A, Ganger S, Spies M, Windischberger C, Kasper S, Lanzenberger R. Modulatory effects of cross-sex steroid hormones in the adult human brain: a voxel-based morphometry study. 27th European College of Neuropsychopharmacology (ECNP) Congress, October 18-21 2014, Berlin, Germany.
26. **Seiger R**, Hahn A, Küblböck M, Sladky R, Ganger S, Kranz GS, Winkler D, Kasper S, Windischberger C, Lanzenberger R. Assessing the human brain at ultra-high fields – Comparing 7T and 3T MRI voxel-based morphometry. 20th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 08-12 2014, Hamburg, Germany.
27. **Seiger R**. Meditation and the Brain. The Impact of Long-Term Meditation on Attentional Engagement. 6th MEi:CogSci Conference, June 22-23 2012, Bratislava, Slovakia.
28. **Seiger R**, Milenkovic I, Sieghart W. Characterization of the GABA_A receptor delta subunit in the dentate gyrus. 5th MEi:CogSci Conference, June 17-18 2011, Ljubljana, Slovenia.

Co-author

29. Reed MB, Vanicek T, **Seiger R**, Klöbl M, Spurny B, Handschuh P, Ritter V, Unterholzner J, Godbersen GM, Gryglewski G, Kraus C, Winkler D, Hahn A, Lanzenberger R. Neuroplastic effects of SSRIs evaluated with learning tasks and fMRI. MIC Festival – Driving the Evolution of Medicine with Imaging, December 10th 2020 (Virtual Meeting).
30. Kraus C, Höflich A, Pfeiffer R, **Seiger R**, Rujescu D, Zarate C, Kasper S, Winkler D, Lanzenberger R. Explorative analysis of cross-correlations between hippocampal subfield volumes in healthy subjects after ketamine vs. placebo. 59th American College of Neuropsychopharmacology Congress, December 6-9 2020 (Virtual Meeting).
31. Kraus C, Höflich A, **Seiger R**, Pfeiffer R, Kasper S, Winkler D, Lanzenberger R. Effects of BDNF Val66Met genotype status on hippocampal subfield volumes during ketamine and placebo in healthy subjects. 33rd European College of Neuropsychopharmacology (ECNP) Congress, September 12-15 2020 (Virtual Meeting).
32. Reed MB, Vanicek T, **Seiger R**, Kautzky A, Klöbl M, Michenthaler P, Spurny B, Handschuh P, Ritter V, Unterholzner J, Basaran A, Godbersen GM, Gryglewski G, Kraus C, Winkler D, Hahn A, Lanzenberger R. Neuroplastic effects of SSRI evaluated with learning tasks and fMRI 26th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 26-30 2020 (Virtual Meeting).
33. Spurny B, Kranz GS, Spies M, **Seiger R**, Klöbl M, Handschuh P, Konadu M, Silberbauer L, Michenthaler P, Reed M, Moser P, Baldinger-Melich P, Bogner W, Lanzenberger R. Investigating differences in neurotransmitter levels of transgender female-to-male patients and healthy controls. 26th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 26-30 2020 (Virtual Meeting).
34. Kraus C, Höflich A, **Seiger R**, Kasper S, Winkler D, Lanzenberger R. Translating Immediate Effects of Ketamine on Dentate Gyrus Structure in Healthy Human Subjects. Society of Biological Psychiatry (SOBP) 75th Anniversary Meeting, April 30-May 02 2020 (Virtual Meeting).

35. Vanicek T, Gryglewski G, **Seiger R**, Kautzky A, Klöbl M, Godbersen GM, Unterholzner J, Rischka L, Michenthaler P, Kasper S, Lanzenberger R. Brain Structure was not Altered by 12 weeks of Antidepressant Treatment in Patients with MDD – A Longitudinal Structural MR Investigation applying FreeSurfer Parcellation. ECNP workshop for junior scientists, March 05-08 2020, Nice, France.
36. Gryglewski G, **Seiger R**, Környei Z, Michenthaler P, Rischka L, Reed MB, Silberbauer L, Godbersen GM, Unterholzner J, Komorowski A, Mikics E, Dénes A, Lanzenberger R. Cross-sectional analysis of plasma cytokines and brain structure in untreated major depressive disorder. 49th Society for Neuroscience (SfN) annual meeting, October 19-23 2019, Chicago, USA.
37. Unterholzner J, Gryglewski G, Philippe C, **Seiger R**, Pichler V, Godbersen GM, Hahn A, Wadsak W, Mitterhauser M, Kasper S, Lanzenberger R. Topological co-expression of AGL1, ANXA8 and BDNF with the serotonin-1A receptor quantified by PET in the human brain. 32nd CIMP World Congress of Neuropsychopharmacology October 03-05 2019, Athens, Greece.
38. Godbersen GM, Vraka C, Gryglewski G, **Seiger R**, Berroterán-Infante N, Unterholzner J, Michenthaler P, Handschuh P, Hahn A, Mitterhauser M, Wadsak W, Kasper S, Lanzenberger R. Spatial co-expression of genes with the enzyme monoamine oxidase A in the human cerebral cortex: a PET and AHBA study. 32nd CIMP World Congress of Neuropsychopharmacology October 03-05 2019, Athens, Greece.
39. Vanicek T, Kautzky A, Gryglewski G, **Seiger R**, Klöbl M, Rischka L, Godbersen GM, Unterholzner J, Reed MB, Michenthaler P, Hahn A, Kasper S, Lanzenberger R. Classification in MDD using RandomForest (RF) and various Cortical and Subcortical Gray Matter Measures. 16th ANA - 25th APHAR Meeting, September 25-27 2019, Innsbruck, Austria.
40. Handschuh PA, Klöbl M, **Seiger R**, Spurny B, Godbersen M, Gryglewski G, Hahn A, Kasper S, Vanicek T, Lanzenberger R. Associative learning and resting-state connectivity changes in the adult brain. 32nd European College of Neuropsychopharmacology (ECNP) Congress, September 7-10 2019, Copenhagen, Denmark.
41. Handschuh PA, Klöbl M, **Seiger R**, Spurny B, Godbersen M, Gryglewski G, Hahn A, Kasper S, Vanicek T, Lanzenberger R. Global functional connectivity changes induced by standardized associative learning measured with resting-state fMRI. 15th YSA PhD-Symposium, June 13-14 2019, Vienna, Austria.
42. Vanicek T, Kautzky A, Gryglewski G, **Seiger R**, Klöbl M, Rischka L, Godbersen GM, Unterholzner J, Reed MB, Michenthaler P, Hahn A, Kasper S, Lanzenberger R. Machine learning prediction of MDD using multiple volumetric measures, subcortical regions and subdivisions of the hippocampal and amygdala. 25th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 09-13 2019, Rome, Italy.
43. Spurny B, Moser P, **Seiger R**, Heckova E, Godbersen GM, Michenthaler P, Handschuh P, Unterholzner J, Reed MB, Kranz GS, Baldinger P, Kasper S, Bogner W, Lanzenberger R. Elevated cortical glutamate levels after theta burst stimulation in TRD: A surface-based MRS analysis approach. 25th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 09-13 2019, Rome, Italy.
44. Godbersen GM, **Seiger R**, Reed MB, Klöbl M, Michenthaler P, Fischer T, Kranz GS, Kasper S, Lanzenberger R. Effects of Theta Burst Transcranial Magnetic Stimulation on Grey Matter Volume. MIC Festival - Digital Revolution in Medical Imaging, June 6th 2019, Vienna, Austria.
45. Spurny B, **Seiger R**, Moser P, Vanicek T, Reed MB, Heckova E, Michenthaler P, Basaran AE, Kautzky A, Kasper S, Trattnig S, Bogner W, Lanzenberger R. Correlation of hippocampal GABA levels with learning performance in an associative learning paradigm. MIC Festival - Digital Revolution in Medical Imaging, June 6th 2019, Vienna, Austria.
46. Vanicek T, Kautzky A, **Seiger R**, Kranz G, Gryglewski G, Höflich A, Hahn A, Kasper S, Lanzenberger R. Prediction of ADHD based on subcortical brain regions and subdivisions of the hippocampus and amygdala. 7th World Congress for ADHD, April 25-28 2019, Lisbon, Portugal.
47. Mueller SC, Lueders E, Thompson P, ENIGMA working group (Lanzenberger R, **Seiger R**, Kranz, GS et al.). An initiative to combine MRI data in transgender persons to examine structural brain differences: preliminary findings from the ENIGMA transgender persons working group. 3rd EPATH conference 2019 (<https://epath.eu/conference-2019>), Apr 11-13, 2019, Rome, Italy.
48. Riederer F, **Seiger R**, Lanzenberger R, Patariaia E, Kasprian G, Michels L, Kollias S, Czech T, Hainfellner J, Beiersdorf J, Baumgartner C. Automated volumetry of hippocampal subfields in temporal

lobe epilepsy. 16th Annual Meeting of the Austrian Society of Neurology (OEGN), March 20-22 2019, Eisenstadt, Austria.

49. Riederer F, **Seiger R**, Lanzenberger R, Pataria E, Kasprian G, Michels L, Kollias S, Czech T, Hainfellner J, Baumgartner C. Morphing the brain voxels – From hype to hope. A study on hippocampal atrophy in mesial temporal lobe epilepsy. 16th Annual Meeting of the Austrian Society of Neurology (OEGN), March 20-22 2019, Eisenstadt, Austria.
50. Kraus C, **Seiger R**, Pfabigan DM, Sladky R, Gryglewski G, Vanicek T, Auer S, Tik M, Komorowski A, Paul K, Woletz M, Kasper S, Lamm C, Windischberger C, Lanzenberger R. Hippocampal Subfields in Acute and Remitted Depression – A Longitudinal 7T MRI Study. American College of Neuropsychopharmacology (ACNP) Congress, December 9-13 2018, Florida, USA.
51. Vanicek T, **Seiger R**, Gryglewski G, Kautzky A, Klöbl M, Godbersen GM, Rischka L, James GM, Silberbauer L, Michenthaler P, Kranz GS, Hahn A, Winkler D, Kasper S, Lanzenberger R. Segmentation of Hippocampal Subfields and Nuclei of the Amygdala in Patients with Major Depressive Disorder and Healthy Controls – Preliminary Findings. 31th European College of Neuropsychopharmacology (ECNP) Congress, October 6-9 2018, Barcelona, Spain.
52. James GM, Gryglewski G, Vanicek T, Berroteran-Infante N, Philippe C, Kautzky A, Nics L, Vranka C, Godbersen GM, Unterholzner J, Sigurdardottir LH, Spies M, **Seiger R**, Kranz GS, Hahn A, Mitterhauser M, Wadsak W, Bauer A, Hacker M, Kasper S, Lanzenberger R. Parcellation of the cortical serotonergic neurotransmitter system using positron emission tomography and FreeSurfer 31th European College of Neuropsychopharmacology (ECNP) Congress, October 6-9 2018, Barcelona, Spain.
53. Baldinger-Melich P, Urquijo Castro MF, **Seiger R**, Kranz GS, Kaufmann U, Windischberger C, Kasper S, Falkai P, Koutsouleris N, Lanzenberger R. The neuroanatomical pattern of sex and gender in cis- and transgender individuals revealed by machine learning-based pattern recognition with NeuroMiner. 31th European College of Neuropsychopharmacology (ECNP) Congress, October 6-9 2018, Barcelona, Spain.
54. Godbersen GM, James GM, Vranka C, Gryglewski G, **Seiger R**, Berroterán-Infante N, Unterholzner J, Komorowski A, Hahn A, Mitterhauser M, Wadsak W, Kasper S, Lanzenberger R. Co-expression of 2 genes with the enzyme monoamine oxidase A quantified by PET in the human brain. The 12th International Symposium of Functional Neuroreceptor Mapping of the Living Brain, July 09-12 2018, London, United Kingdom.
55. Unterholzner J, Gryglewski G, Philippe C, **Seiger R**, James GM, Pichler V, Godbersen GM, Komorowski A, Hahn A, Wadsak W, Mitterhauser M, Kasper S, Lanzenberger R. Co-expression of fourteen genes with the serotonin-1A receptor quantified by PET in the human brain. The 12th International Symposium of Functional Neuroreceptor Mapping of the Living Brain, July 09-12 2018, London, United Kingdom.
56. Gryglewski G, **Seiger R**, James GM, Godbersen GM, Komorowski A, Unterholzner J, Michenthaler P, Hahn A, Wadsak W, Mitterhauser M, Kasper S, Lanzenberger R. Prediction of the human whole-brain transcriptome for integrative analysis in brain imaging. The 12th International Symposium of Functional Neuroreceptor Mapping of the Living Brain, July 09-12 2018, London, United Kingdom.
57. Spurny B, Moser P, **Seiger R**, Heckova E, Klöbl M, Vanicek T, Spies M, Bogner W, Lanzenberger R. Introducing automated ROI-based analysis for 3D-multivoxel magnetic resonance spectroscopy. 24th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 17-21 2018, Singapore, Republic of Singapore.
58. Gryglewski G, **Seiger R**, James GM, Godbersen GM, Komorowski A, Michenthaler P, Hahn A, Kasper S, Lanzenberger R. Prediction of the whole human brain transcriptome for hypothesis generation and drug development. 31th CINP World Congress of Neuropsychopharmacology June 16-19 2018, Vienna, Austria.
59. James GM, **Seiger R**, Mitterhauser M, Wadsak W, Kasper S, Lanzenberger R. Social anxiety disorder patients exhibit reduced 5-HT_{1A} receptor binding across the cerebral cortex – Improved cortical quantitative analysis of positron emission tomography data using FreeSurfer. 31st CINP World Congress of Neuropsychopharmacology June 16-19 2018, Vienna, Austria.
60. Handschuh PA, Klöbl M, **Seiger R**, Spurny B, Godbersen M, Gryglewski G, Kranz GS, Hahn A, Lanzenberger R, Kasper S, Vanicek T. Brain connectivity changes by associative learning measured with resting-state fMRI as an approach to investigate treatment-induced neuroplastic changes. 31st CINP World Congress of Neuropsychopharmacology June 16-19 2018, Vienna, Austria.

61. Gryglewski G, **Seiger R**, James GM, Godbersen GM, Komorowski A, Unterholzner J, Michenthaler P, Hahn A, Wadsak W, Mitterhauser M, Kasper S, Lanzenberger R. High-resolution mapping of the human whole-brain transcriptome. MIC Festival - Medizinische Bildgebung in der personalisierten Medizin, June 14th 2018, Vienna, Austria.
62. Unterholzner J, Gryglewski G, Philippe C, **Seiger R**, James GM, Pichler V, Godbersen GM, Komorowski A, Hahn A, Wadsak W, Mitterhauser M, Kasper S, Lanzenberger R. An explorative approach to define new protein interactions using positron emission tomography and the Allen Human Brain Atlas. MIC Festival - Medizinische Bildgebung in der personalisierten Medizin, June 14th 2018, Vienna, Austria.
63. Vanicek T, **Seiger R**, Auer B, Tik M, Kraus C, Pfabigan DM, Geissberger N, Unterholzner J, Paul K, Woletz M, Kasper S, Lamm C, Windischberger C, Lanzenberger R. Reduced gray matter in subcortical brain regions in MDD: preliminary results of an ultra-high field 7 Tesla MRI study. 30th European College of Neuropsychopharmacology (ECNP) Congress, September 2-5 2017, Paris, France.
64. Kautzky A, **Seiger R**, Hahn A, Fischer P, Krampla W, Kasper S, Kovacs GG, Lanzenberger R. Classification and prediction of neuropathological change of Alzheimer's disease using machine learning and MRI. 30th European College of Neuropsychopharmacology (ECNP) Congress, September 2-5, 2017, Paris, France.
65. James GM, **Seiger R**, Spies M, Vranka C, Philippe C, Hienert M, Gryglewski G, Komorowski A, Kautzky A, Silberbauer L, Pichler V, Kranz GS, Nics L, Balber T, Baldinger-Melich P, Vanicek T, Winkler-Pjrek E, Wadsak W, Mitterhauser M, Hacker M, Kasper S, Lanzenberger R, Winkler D. Cortical monoamine oxidase - a distribution in seasonal affective disorder compared to healthy controls. 30th European College of Neuropsychopharmacology (ECNP) Congress, September 2-5 2017, Paris, France.
66. James GM, Gryglewski G, Vranka C, **Seiger R**, Pichler V, Silberbauer L, Nics L, Spurny B, Spies M, Mitterhauser M, Hahn A, Wadsak W, Hacker M, Kasper S, Lanzenberger R. Clustering serotonergic key players of the human cortex using positron emission tomography and FreeSurfer. 28th Symposium on Cerebral Blood Flow, Metabolism and Function and 13th Conference on Quantification of Brain Function with PET, April 1-4 2017, Berlin, Germany.
67. Kranz GS, **Seiger R**, Kaufmann U, Hummer A, Hahn A, Ganger S, Sladky R, Windischberger C, Kasper S, Lanzenberger R. The influence of androgen and estrogen on white matter microstructure investigated using diffusion tensor imaging. 29th ECNP Congress September 17-20 2016, Vienna, Austria.
68. Kranz GS, **Seiger R**, Kaufmann U, Hummer A, Hahn A, Ganger S, Sladky R, Windischberger C, Kasper S, Lanzenberger R. Effects of sex hormone treatment on white matter microstructure in patients with gender dysphoria. 30th CINP World Congress of Neuropsychopharmacology, July 3-5 2016, Seoul, South Korea.
69. Gryglewski G, **Seiger R**, James GM, Kasper S, Lanzenberger R. Surface-based clustering of serotonergic and adrenergic receptor mRNA expression in the human cortex. ECNP workshop for junior scientists, March 17-20 2016, Nice, France.
70. Kranz GS, Hahn A, Kaufmann U, Küblböck M, Hummer A, Ganger S, **Seiger R**, Windischberger C, Kasper S, Lanzenberger R. Effects of testosterone treatment on hypothalamic microstructure in female-to-male transsexuals. 21st Scientific Symposium of the Austrian Pharmacological Society APHAR, September 16-18 2015, Graz, Austria.
Intrinsic Activity, 2015; 3(Suppl.2): A2.27 (<http://www.intrinsicactivity.org/>)
71. Hahn A, Kranz GS, Sladky R, Kaufmann U, Ganger S, Hummer A, **Seiger R**, Spies M, Vanicek T, Winkler D, Kasper S, Windischberger C, Swaab DF, Lanzenberger R. Neuronal plasticity of language-related brain regions induced by long-term testosterone treatment. 28th European College of Neuropsychopharmacology (ECNP) Congress, August 29 – September 1 2015, Amsterdam, Netherlands.
72. Sladky R, Hahn A, Stürkat IL, Hoffmann A, Kranz GS, Tik M, **Seiger R**, Pfabigan D, Lanzenberger R, Lamm C, Windischberger C. Modelling effective connectivity in the extended emotion processing network using DCM at 7T. 21st Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 14-18 2015, Honolulu, Hawaii, USA.
73. Küblböck M, Woletz M, Kranz G, Hoffmann A, Hahn A, **Seiger R**, Lanzenberger R, Windischberger C. Effect of despiking on fMRI results in groups showing differing head motion behaviour. 21st Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 14-18 2015, Honolulu, Hawaii, USA.

74. Kranz GS, Hahn A, Kaufmann U, Küblböck M, Hummer A, Ganger S, **Seiger R**, Windischberger C, Kasper S, Lanzenberger R. Microstructural changes in the hypothalamus after testosterone treatment in female-to-male transsexuals. 21st Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 14-18 2015, Honolulu, Hawaii, USA.
75. Hahn A, Kranz GS, Sladky R, Kaufmann U, Ganger S, Hummer A, **Seiger R**, Spies M, Vanicek T, Winkler D, Kasper S, Windischberger C, Swaab D, Lanzenberger R. Continuous testosterone administration affects language-specific brain structures and function. 21st Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 14-18 2015, Honolulu, Hawaii, USA.
76. Spies M, Hahn A, Küblböck M, Kranz GS, Hummer A, Ganger S, **Seiger R**, Windischberger C, Kasper S, Lanzenberger R. The influence of cross-sex hormone therapy in transsexuals on fractional anisotropy and grey matter volume. 27th European College of Neuropsychopharmacology (ECNP) Congress, October 18-21 2014, Berlin, Germany.
77. Spies M, Kranz GS, Ganger S, Sladky R, Küblböck M, Komorowski A, **Seiger R**, Hahn A, Windischberger C, Kasper R, Lanzenberger R. Gender-identity related regional brain activation assessed using 7-Tesla functional magnetic resonance imaging. The CINP 29th World Congress, June 22-26 2014, Vancouver, Canada.
78. Woletz M, Hoffmann A, Ganger S, Seidel EM, **Seiger R**, Pfabigan D, Hahn A, Sladky R, Lamm C, Lanzenberger R, Windischberger C. Slice-timing correction for multi-band images in SPM. 20th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 08-12 2014, Hamburg, Germany.
79. Kranz GS, Hahn A, Küblböck M, Sladky R, Ganger S, **Seiger R**, Kasper S, Windischberger C, Lanzenberger R. White matter microstructure in transsexuals and controls investigated by diffusion tensor imaging. 20th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 08-12 2014, Hamburg, Germany.

Conferences

- Mei:CogSci Conference 2011
- Mei:CogSci Conference 2012
- ESMRMB 2013
- ANA / APHAR 2013
- 41. Winterseminar "Biologische Psychiatrie" 2014
- OHBM 2014
- ECNP 2014
- ÖGPB 2014
- IFMAD 2014
- ÖGFMRT Symposium 2014
- 42. Winterseminar "Biologische Psychiatrie" 2015
- ECCN 2015
- XXI. Update in Psychiatrie 2015
- 11th YSA PhD Symposium 2015
- 21st APHAR Symposium 2015
- 3rd Vienna Conference on Consciousness 2015
- ÖGPB 2015
- DGPPN 2015
- 43. Winterseminar "Biologische Psychiatrie" 2016
- 12th YSA PhD Symposium 2016
- OHBM 2016
- 22nd APHAR Symposium 2016
- ECNP 2016
- Resting State and Brain Connectivity 2016
- DGPPN 2016
- 2nd OHBM Alpine Chapter Symposium 2016
- 44. Winterseminar "Biologische Psychiatrie" 2017
- ECCN 2017
- BRAIN & BRAIN PET 2017
- 13th YSA PhD Symposium 2017
- 7th PRNI Workshop 2017

- June 17 – 18, Ljubljana, Slovenia
- June 22 – 23, Bratislava, Slovakia
- September 2 – 4, Vienna, Austria
- September 16 – 18, Vienna, Austria
- March 22 – 26, Oberlech, Austria
- June 08 – 12, Hamburg, Germany
- October 18 – 21, Berlin, Germany
- November 20 – 21, Vienna, Austria
- December 10 – 12, Vienna, Austria
- December 13, Graz, Austria
- March 14 – 18, Oberlech, Austria
- March 23 – 24, Rome, Italy
- May 28 – 29, Vienna, Austria
- June 10 – 11, Vienna, Austria
- September 16 – 18, Graz, Austria
- November 06 – 07, Vienna, Austria
- November 12 – 13, Vienna, Austria
- November 25 – 28, Berlin, Germany
- April 02 – 06, Oberlech, Austria
- June 09 – 10, Vienna, Austria
- June 26 – 30, Geneva, Switzerland
- September 08 – 10, Vienna, Austria
- September 17 – 20, Vienna, Austria
- September 21 – 23, Vienna, Austria
- November 24 – 25, Berlin, Germany
- November 24 – 26, Salzburg, Austria
- March 18 – 22, Oberlech, Austria
- March 27 – 28, Rome, Italy
- April 01 – 04, Berlin, Germany
- June 08 – 09, Vienna, Austria
- June 21 – 23, Toronto, Canada

- OHBM 2017
- 3rd OHBM Alpine Chapter Symposium 2017
- Medical Imaging Cluster Festival 2018
- OHBM 2018
- ÖGPB 2018
- Menopause Congress 2018
- 46. Winterseminar "Biologische Psychiatrie" 2019
- OHBM 2019
- 16th ANA - 25th APHAR Meeting Innsbruck 2019
- 5th OHBM Alpine Chapter Symposium 2019
- FENS Forum 2020

June 25 – 29, Vancouver, Canada
 November 03 – 04, Bern, Switzerland
 June 14, Vienna, Austria
 June 17 – 21, Singapore, Singapore
 November 22 – 23, Vienna, Austria
 December 06 – 08, Vienna, Austria
 March 16 – 20, Oberlech, Austria
 June 09 – 13, Rome, Italy
 September 25 – 27, Innsbruck, Austria
 October 25th, Lausanne, Switzerland
 July 11 – 15, *Virtual Meeting*