Clinical Neurosciences (CLINS)

Doctoral Program of Applied Medical Sciences N790, Medical University of Vienna

Version as of June 4, 2008

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Short description of CLINS

Neuroscience is a main focus of research and high-end medicine at the Medical University Vienna. The aim of Clinical Neurosciences is innovation in prevention, diagnosis, and therapy of disorders of the nervous and muscular systems. The professional doctoral program „Clinical Neurosciences“ (CLINS) addresses neurological, psychiatric and neuro-muscular disorders in fetus, children, and adults. Interdisciplinary interaction of diagnostic and therapeutic disciplines is a key element of the program. CLINS will provide students with scientific competence enabling them to improve biomedical practice by means of research. CLINS is complementary to the basic research PhD program „Neuroscience“ (coordinator: Johannes Berger, Brain Research Institute). Mutual guest lectures and translational research projects will link the applied and basic research doctoral programs.
Lectures-schedule of CLINS

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Semester hours</th>
<th>ECTS points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Propedeutics</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Basic lecture</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Journal club</td>
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<tr>
<td>Seminar</td>
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<td>3</td>
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<td><strong>2. Semester</strong></td>
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<tr>
<td>Propedeutics</td>
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<tr>
<td>Basic lecture</td>
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<tr>
<td>Journal club</td>
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<td>2</td>
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<tr>
<td>Seminar</td>
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<td>3</td>
</tr>
<tr>
<td>Practical seminar</td>
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<td>1.5</td>
</tr>
<tr>
<td><strong>3. Semester</strong></td>
<td></td>
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<tr>
<td>Seminar</td>
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<td><strong>4. Semester</strong></td>
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<td><strong>5. Semester</strong></td>
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<tr>
<td>Seminar</td>
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<td>3</td>
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<tr>
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<td>1.5</td>
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<tr>
<td><strong>6. Semester</strong></td>
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<tr>
<td>Seminar</td>
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<tr>
<td>Practical seminar</td>
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<tr>
<td><strong>Dissertation</strong></td>
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<td>134</td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td>38</td>
<td>180</td>
</tr>
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</table>
**Propedeutics**

Propedeutics will introduce students to basic and general principles of biomedical research.

All 6 semester hours of propedeutics have to be completed by the end of the 4th semester.

As a general rule for all doctoral programs at the Medical University of Vienna, the following propedeutics courses are compulsory:

“Ethics and Good Scientific Practice” (1 semester hour)
“Project Management and Patent Affairs” (1 semester hour)

The other courses (4 semester hours) can be chosen from a pool of propedeutics courses (see website of the Medical University of Vienna, section “Doctoral Program of Applied Medical Science N790”).

Selection of courses has to be done under the supervision of the thesis committee and the program coordinator and depends on the student’s undergraduate education.
### Basic lecture

The basic lecture addresses essentials and interrelationships of thematic complexes in which doctoral thesis projects of CLINS are supervised. Frontiers of science will be illustrated and scientific approaches for expanding biomedical knowledge by means of research will be shown.

The themes are presented by experts in diagnostic and therapeutic disciplines in an integrated form.

The basic lecture is held in two blocks, one in the first and one in the second semester (4 semester hours = 60 lecture hours).

#### First Semester (2 hours per week = 30 lecture hours)

<table>
<thead>
<tr>
<th>Thematic complex</th>
<th>Contents</th>
<th>Lecturers (alphabetical order)</th>
<th>Lecture hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epilepsy in children and adults</td>
<td>Classification Pathophysiology Diagnostic concepts Therapeutic concepts</td>
<td>Baumgartner Christoph Feucht Martha Czech Thomas Pataka Ekaterina Prayer Daniela</td>
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</tr>
<tr>
<td>Brain function in pediatric critical care patients</td>
<td>Diagnostic concepts and therapeutic considerations</td>
<td>Klebermasz Katrin Trittenwein Gerhard Weninger Manfred</td>
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</tr>
<tr>
<td>Brain tumours in children and adults</td>
<td>Classification and epidemiology Neuroradiology and bioimaging Neurosurgical approaches Biomarkers Cell biology and experimental models Radiotherapeutic concepts Chemotherapeutic concepts</td>
<td>Czech Thomas Dieckmann Karin Hainfellner Johannes Marosi Christine Prayer Daniela Preusser Matthias Slavc Irene Ströbel Thomas Wolfsberger Stefan</td>
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<tr>
<td>Neurodegenerative disorders</td>
<td>Classification Diagnostic concepts</td>
<td>Budka Herbert Kovacs Gabor Pirker Walter</td>
<td>4</td>
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<tr>
<td>Cerebrovascular disorders</td>
<td>Classification Diagnostic concepts Therapeutic concepts</td>
<td>Budka Herbert Lang Wilfried</td>
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<tr>
<td>Affective disorders</td>
<td>Alterations of the serotonergic system in depression and anxiety disorders. Studies of the Serotonin Transporter in Depression and Treatment: Therapeutic Implications for Depression. Multimodal neuroimaging in depression and anxiety disorders by combining functional MRI and PET/SPECT, phfMRI, phMRI Psychopharmacology, therapeutic doses and evaluations with PET, SPECT.</td>
<td>Lanzenberger Rupert Praschak-Rieder Nicole Willeit Matthäus</td>
<td>6</td>
</tr>
<tr>
<td>Thematic complex</td>
<td>Contents</td>
<td>Lecturer</td>
<td>Lecture hours</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
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</tr>
<tr>
<td>Infectious and transmissible diseases of the nervous system</td>
<td>Etiology Pathogenesis Diagnostic concepts</td>
<td>Budka Herbert Kovacs Gabor</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Molecular imaging of the dopaminergic system, challenge procedures (Amphetamine, Ketamine), and therapeutic approaches</td>
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<tr>
<td></td>
<td>Neurocognition and functional imaging in schizophrenia</td>
<td>Sachs Gabriele</td>
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</tr>
<tr>
<td>Schizophrenia</td>
<td>Classification Pathogenesis Diagnostic and therapeutic concepts</td>
<td>Lanzenberger Rupert Willeit Matthäus</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Neurocognition and functional imaging in schizophrenia</td>
<td>Sachs Gabriele</td>
<td>1</td>
</tr>
<tr>
<td>Clinical Neuroimmunology</td>
<td>Classification Pathogenesis Diagnostic and therapeutic concepts</td>
<td>Höftberger Romana Lassmann Hans</td>
<td>4</td>
</tr>
<tr>
<td>Neuromuscular diseases</td>
<td>Classification Etiology Pathogenesis Diagnostic concepts</td>
<td>Budka Herbert Grisold Wolfgang Kovacs Gabor Oberndorfer Stefan</td>
<td>4</td>
</tr>
<tr>
<td>Neurometabolic disorders, orphan diseases</td>
<td>Genetics Neurochemistry Diagnostic concepts Therapeutic considerations</td>
<td>Berger Johannes Regelsberger Günther Voigtländer Till</td>
<td>4</td>
</tr>
<tr>
<td>Developmental diseases of the nervous system</td>
<td>Classification Diagnostic concepts MRI investigations</td>
<td>Budka Herbert Czech Thomas Kasprian Gregor Prayer Daniela</td>
<td>4</td>
</tr>
<tr>
<td>Transcranial Magnetic Stimulation in Psychiatric Diseases</td>
<td>Pharmacovigilance - Clinical Trials - Psychometric Scales</td>
<td>Konstantinidis Aanastasios</td>
<td>2</td>
</tr>
<tr>
<td>Psychopharmacotherapy</td>
<td>Psychotropics-Basics I – III: Classification and Mechanism of action</td>
<td>Konstantinidis Aanastasios</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>– Antidepressants</td>
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<td></td>
<td>– Neuroleptics</td>
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<td></td>
<td>– Tranquilizers, Mood Stabilisers</td>
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</table>
Journal Clubs

In the Journal Clubs students are instructed in critical reading of recently published scientific papers relevant for the respective field of research.

The papers are discussed under supervision within the group.

Journal Clubs are a continuous activity on a weekly basis.

Journal Clubs are related to research activities of the respective group, but are open for students of all participating research groups.

Journal Clubs are held from the beginning until the end of the doctoral studies, in each semester 2 hours per week (12 semester hours = 180 lecture hours).

<table>
<thead>
<tr>
<th>Title</th>
<th>Hours per week</th>
<th>Supervisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomarker research in Clinical Neurosciences (analysis of the current literature)</td>
<td>2</td>
<td>Biomarker consortium: Budka Herbert, Heinzl Harald, Kovacs Gabor, Hainfellner Johannes, Preusser Matthias, Ströbel Thomas, Waldhör Thomas, Wolfsberger Stefan</td>
</tr>
<tr>
<td>Brain function and epilepsy in children and adults (analysis of the current literature)</td>
<td>2</td>
<td>Elektrophysiology consortium: Baumgartner Christoph, Czech Thomas, Feucht Martha, Klebermasz Katrin, Pataraia Ekaterina, Trittenwein Gerhard, Weninger Manfred</td>
</tr>
<tr>
<td>Neuroimaging (PET, SPECT, fMRI, pHMRI, phfMRI, VBM, neuroimaging genetics – analysis of the current literature)</td>
<td>2</td>
<td>Neuroimaging consortium: Lanzenberger Rupert, Praschak-Rieder, Prayer Daniela, Willeit Matthäus</td>
</tr>
</tbody>
</table>
Seminars

In the seminars scientific and methodological problems related to the research work of the students are systematically addressed.

Doctoral students and thesis supervisors tightly interact in small groups.

At the end of each semester all students participating in CLINS have a common seminar and present their research work to the whole group.

The seminars are a continuous activity on a weekly basis and are held from the beginning until the end of the studies (2 hours each semester = 12 semester hours = 180 lecture hours).

<table>
<thead>
<tr>
<th>Title</th>
<th>Hours per week</th>
<th>Supervisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomarker research in Clinical Neurosciences (biomedical approaches to address scientific problems)</td>
<td>2</td>
<td>Biomarker consortium: Budka Herbert Heinzl Harald Kovacs Gabor Hainfellner Johannes Preusser Matthias Ströbel Thomas Waldhör Thomas Wolfsberger Stefan</td>
</tr>
<tr>
<td>Brain function and epilepsy in children and adults (biomedical approaches to address scientific problems)</td>
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<td>Elektrophysiology consortium: Baumgartner Christoph Czech Thomas Feucht Martha Klebermasz Katrin Patariaia Ekaterina Trittenwein Gerhard Weninger Manfred</td>
</tr>
<tr>
<td>Neuroimaging (PET, SPECT, fMRI, phMRI, phfMRI, VBM, neuroimaging genetics) (biomedical approaches to address scientific problems)</td>
<td>2</td>
<td>Neuroimaging consortium: Lanzenberger Rupert Praschak-Rieder Prayer Daniela Willeit Matthäus</td>
</tr>
</tbody>
</table>
Practical seminars

In the practical seminars, students are introduced to the practice of high-end medicine in clinical neurosciences and to the implementation procedures of biomedical innovations into medical practice.

Further, students are introduced to the integration of diagnostic and therapeutic information for optimized patient management in interdisciplinary fora.

Students attend practical seminars from the third to the sixth semester, in each semester 1 hour per week (4 semester hours = 60 lecture hours).

<table>
<thead>
<tr>
<th>Title</th>
<th>Hours per week</th>
<th>Lecturer</th>
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</thead>
<tbody>
<tr>
<td>Practical seminar in Clinical Neuropathology (interactive clinico-neuropathological case discussions, implementation procedures for new diagnostics)</td>
<td>1</td>
<td>Lecturers of the Institute of Neurology</td>
</tr>
<tr>
<td>Practical seminar in Clinical Neuroimaging (interactive case discussions, implementation procedures for new diagnostics)</td>
<td>1</td>
<td>Lecturers of the Department of Neuroradiology, Department of Nuclear Medicine, Department of Pediatrics, Department of Psychiatry and cooperating partners</td>
</tr>
<tr>
<td>Interdisciplinary neurooncological case discussions</td>
<td>1</td>
<td>Lecturers of the Departments of Neurosurgery, Oncology, Radiotherapy, Neuroradiology, and the Institute of Neurology</td>
</tr>
<tr>
<td>Interdisciplinary perinatal case discussion</td>
<td>1</td>
<td>Lecturers of the Department of Pediatrics, Department of Neuroradiology, and the Institute of Neurology,</td>
</tr>
</tbody>
</table>
## Investigational techniques

<table>
<thead>
<tr>
<th>Techniques and Methods</th>
<th>Applications at</th>
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</thead>
<tbody>
<tr>
<td>EEG recordings</td>
<td>Department of Pediatrics</td>
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<tr>
<td>Visual evoked potential recording</td>
<td>Department of Neurology</td>
</tr>
<tr>
<td>Near infrared spectroscopy</td>
<td>Department of Psychiatry and Psychotherapy</td>
</tr>
<tr>
<td>Neuropsychological assessment</td>
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<tr>
<td>Structural, functional and molecular neuroimaging in vivo</td>
<td>Department of Neuroradiology</td>
</tr>
<tr>
<td>Structural, functional and molecular neuroimaging in vivo</td>
<td>Department of Nuclear Medicine</td>
</tr>
<tr>
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<td>Department of Psychiatry and Psychotherapy and cooperating partners</td>
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<td>Near infrared spectroscopy</td>
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<td>Department of Pediatrics</td>
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<tr>
<td>Department of Neurology</td>
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<tr>
<td>Department of Psychiatry and Psychotherapy</td>
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</tr>
<tr>
<td>Image-guided neurosurgery, intraoperative neurophysiology</td>
<td>Department of Neurosurgery</td>
</tr>
<tr>
<td>Neurohistological techniques, microdissection, immunohistochemistry, in situ hybridization, confocal laser scanning microscopy, electron microscopy, morphometry, cytogenetics, PCR, real time PCR</td>
<td>Institute of Neurology, Neuropathology unit</td>
</tr>
<tr>
<td>ELISA, immunoblotting, immunofluorescence</td>
<td>Institute of Neurology, Neurochemistry unit</td>
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<tr>
<td>Neurochemical analytical methods (enzyme analytics, thin-layer chromatography, mass/gas spectrometry)</td>
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<tr>
<td>Cell culture techniques, FACS-analysis, immunoblotting, PCR, Real-time PCR, methylation-specific PCR (MSP), DNA-sequencing</td>
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<tr>
<td>Biostatistical methods</td>
<td>Department of Clinical Biometry</td>
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</table>
## Participating lecturers (alphabetical order)

<table>
<thead>
<tr>
<th>Lecturer</th>
<th>Department/Clinic</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berger, Johannes</td>
<td>Institute of Brain Research</td>
<td><a href="mailto:Johannes.Berger@meduniwien.ac.at">Johannes.Berger@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Baumgartner, Christoph</td>
<td>Department of Neurology, KH Hietzing Wien</td>
<td><a href="mailto:Christoph.Baumgartner@wienkav.at">Christoph.Baumgartner@wienkav.at</a></td>
</tr>
<tr>
<td>Budka, Herbert</td>
<td>Institute of Neurology</td>
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<td>Czech, Thomas</td>
<td>Department of Neurosurgery</td>
<td><a href="mailto:Thomas.Czech@meduniwien.ac.at">Thomas.Czech@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Feucht, Martha</td>
<td>Department of Pediatrics</td>
<td><a href="mailto:Martha.Feucht@meduniwien.ac.at">Martha.Feucht@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Grisold, Wolfgang</td>
<td>Department of Neurology, Kaiser Franz Josef Spital</td>
<td><a href="mailto:Wolfgang.Grisold@meduniwien.ac.at">Wolfgang.Grisold@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Hainfellner, Johannes</td>
<td>Institute of Neurology</td>
<td><a href="mailto:Johannes.Hainfellner@meduniwien.ac.at">Johannes.Hainfellner@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Heinzl, Harald</td>
<td>Department of Clinical Biometry</td>
<td><a href="mailto:Harald.Heinzl@meduniwien.ac.at">Harald.Heinzl@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Kasprian, Gregor</td>
<td>Department of Radiodiagnostics</td>
<td><a href="mailto:Gregor.Kasprian@meduniwien.ac.at">Gregor.Kasprian@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Klebermasz, Katrin</td>
<td>Department of Pediatrics</td>
<td><a href="mailto:Katrin.Klebermasz@meduniwien.ac.at">Katrin.Klebermasz@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Konstantinidis, Anastasios</td>
<td>Department of Psychiatry</td>
<td><a href="mailto:Anastasios.Konstantinidis@meduniwien.ac.at">Anastasios.Konstantinidis@meduniwien.ac.at</a></td>
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<tr>
<td>Kovacs, Gabor</td>
<td>Institute of Neurology</td>
<td><a href="mailto:Gabor.Kovacs@meduniwien.ac.at">Gabor.Kovacs@meduniwien.ac.at</a></td>
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<tr>
<td>Lang, Wilfried</td>
<td>Department of Neurology, KH Barmherzigé Brüder Wien</td>
<td><a href="mailto:Wilfried.Lang@meduniwien.ac.at">Wilfried.Lang@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Lanzenberger, Rupert</td>
<td>Department of Psychiatry</td>
<td><a href="mailto:Rupert.Lanzenberger@meduniwien.ac.at">Rupert.Lanzenberger@meduniwien.ac.at</a></td>
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<tr>
<td>Lassmann, Hans</td>
<td>Institute of Brain Research</td>
<td><a href="mailto:Hans.Lassmann@meduniwien.ac.at">Hans.Lassmann@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Marosi, Christine</td>
<td>Department of Oncology</td>
<td><a href="mailto:Christine.Marosi@meduniwien.ac.at">Christine.Marosi@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Mitterhauser, Markus</td>
<td>Department of Nuclear Medicine</td>
<td><a href="mailto:Markus.Mitterhauser@meduniwien.ac.at">Markus.Mitterhauser@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Oberndorfer, Stefan</td>
<td>Department of Neurology, Kaiser Franz Josef Spital</td>
<td><a href="mailto:Stefan.Oberndorfer@wienkav.at">Stefan.Oberndorfer@wienkav.at</a></td>
</tr>
<tr>
<td>Pataraia, Ekaterina</td>
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<td><a href="mailto:Ekaterina.Pataraia@meduniwien.ac.at">Ekaterina.Pataraia@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Pirker, Walter</td>
<td>Department of Neurology</td>
<td><a href="mailto:Walter.Pirker@meduniwien.ac.at">Walter.Pirker@meduniwien.ac.at</a></td>
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<tr>
<td>Praschak-Rieder, Nicole</td>
<td>Department of Psychiatry</td>
<td><a href="mailto:Nicole.Praschak-Rieder@meduniwien.ac.at">Nicole.Praschak-Rieder@meduniwien.ac.at</a></td>
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<td>Prayer, Daniela</td>
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<td><a href="mailto:Daniela.Prayer@meduniwien.ac.at">Daniela.Prayer@meduniwien.ac.at</a></td>
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<tr>
<td>Preusser, Matthias</td>
<td>Department of Oncology</td>
<td><a href="mailto:Matthias.Preusser@meduniwien.ac.at">Matthias.Preusser@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Regelsberger, Günther</td>
<td>Institute of Neurology</td>
<td><a href="mailto:Guenther.Regelsberger@meduniwien.ac.at">Guenther.Regelsberger@meduniwien.ac.at</a></td>
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<tr>
<td>Sachs, Gabrielle</td>
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<td><a href="mailto:Gabriele.Sachs@meduniwien.ac.at">Gabriele.Sachs@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Slavc, Irene</td>
<td>Department of Pediatrics</td>
<td><a href="mailto:Irene.Slavc@meduniwien.ac.at">Irene.Slavc@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Ströbel, Thomas</td>
<td>Institute of Neurology</td>
<td><a href="mailto:Thomas.Stroebel@meduniwien.ac.at">Thomas.Stroebel@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Trittenwein, Gerhard</td>
<td>Department of Pediatrics</td>
<td><a href="mailto:Gerhard.Trittenwein@meduniwien.ac.at">Gerhard.Trittenwein@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Voigtländer, Till</td>
<td>Institute of Neurology</td>
<td><a href="mailto:Till.Voigtlaender@meduniwien.ac.at">Till.Voigtlaender@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Wadsak, Wolfgang</td>
<td>Department of Nuclear Medicine</td>
<td><a href="mailto:Wolfgang.Wadsak@meduniwien.ac.at">Wolfgang.Wadsak@meduniwien.ac.at</a></td>
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<tr>
<td>Waldhör, Thomas</td>
<td>Department of Epidemiology</td>
<td><a href="mailto:Thomas.Waldhoer@meduniwien.ac.at">Thomas.Waldhoer@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Weninger, Manfred</td>
<td>Department of Pediatrics</td>
<td><a href="mailto:Manfred.Weninger@meduniwien.ac.at">Manfred.Weninger@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Willett, Matthäus</td>
<td>Department of Psychiatry</td>
<td><a href="mailto:Matthaeus.Willett@meduniwien.ac.at">Matthaeus.Willett@meduniwien.ac.at</a></td>
</tr>
<tr>
<td>Wolfsberger, Stefan</td>
<td>Department of Neurosurgery</td>
<td><a href="mailto:Stefan.Wolfsberger@meduniwien.ac.at">Stefan.Wolfsberger@meduniwien.ac.at</a></td>
</tr>
</tbody>
</table>
Description of thesis project topics and profiles of project supervisors
(alphabetical order of supervisors)

BAUMGARTNER, Christoph ................................................................. 13
FEUCHT, Martha ................................................................. 22
HAINFELLNER, Johannes ............................................................. 29
KOVACS, Gabor ................................................................. 40
LANZENBERGER, Rupert .............................................................. 47
PRAYER, Daniela ................................................................. 57
PREUSSER, Matthias ............................................................... 69
TRITTENWEIN, Gerhard ............................................................. 76
WENINGER, Manfred ............................................................... 80
WOLFSBERGER, Stefan ............................................................. 85
Thesis project topic:
Clinical and translational epilepsy research

Project supervisor:
BAUMGARTNER, Christoph
2nd Neurological Department, General Hospital Hietzing with Neurological Center Rosenhuegel

Brief description of the field of research:
Goal: to localize the epileptogenic zone, the functional deficit zone and essential brain regions in patients with medically refractory epilepsy
Techniques: neurophysiological techniques (EEG, evoked potentials), brain imaging (MRI, fMRI, MRS, SPECT, PET), neuropsychological assessment
Approach: compare and correlate these techniques with clinical variables and outcome after epilepsy surgery
Deliverables: Optimize medical and surgical treatment of patients with medically refractory epilepsy; improve the understanding of the basic mechanisms of human epilepsy; study brain plasticity

Benefits for the future professional career of students:
Acquired scientific competence is useful for a future specialization in any field of clinical neuroscience. In particular, students get a sound basis for an academic career in the multidisciplinary field of clinical epileptology.

Previously supervised scientific co-workers have specialized in: neurology, neurosurgery, neuroradiology, nuclear medicine.
BAUMGARTNER, Christoph, MD

Address:
2nd Neurological Department, General Hospital Hietzing with Neurological Center
Rosenhuegel
Riedelgasse 5
A-1130 Vienna
Phone: ++43-1-88000-266
Email: christoph.baumgartner@wienkav.at

PERSONAL DATA
Date of Birth: 14-07-1959
Place of Birth: Salzburg
Nationality Austria

EDUCATION
Sep 22, 1992 Unrestricted ECFMG Certificate
Jul 23, 1986 Passed the Foreign Medical Graduate Examination in the Medical Sciences (FMGEMS) and the ECFMG English Test
1984 Graduation sub auspicis praesidentis rei publicae - M.D. - Medicine
1978-1984 Medicine - University of Vienna, Austria
1982 Graduation - M.Sc. - Technical Mathematics
1978-1982 Technical Mathematics - Technical University of Vienna, Austria
1977 Matura with Distinction, 2. Bundesgymnasium Salzburg
POSTGRADUATE TRAINING

Nov 22, 1992  Passed EEG examination of the Austrian Society of Clinical Neurophysiology - ‘EEG-Diploma’
1991-1992  Clinical Fellow in Epilepsy and Clinical Neurophysiology, Department of Neurology, Cleveland Clinic Foundation, Cleveland, Ohio
May 16, 1991  Certificate as Medical Specialist in Neurology - Facharzt für Neurologie
1987-1989  Research Fellowship in Clinical Neurophysiology, Department of Neurology, University of California, Los Angeles, California
1985-1991  Residency in Neurology, Department of Neurology, University of Vienna, Austria
1984-1985  Residency in Internal Medicine, Department of Cardiology, University of Vienna, Austria

ACADEMIC POSITIONS

2008-present  Head, Vienna Comprehensive Epilepsy Program
2008-present  Head, 2nd Neurological Department, General Hospital Hietzing with Neurological Center Rosenhuegel
1992-2008  Head, Comprehensive Epilepsy Program, Department of Neurology, Medical University of Vienna
1992-2008  Staff Position, Department of Neurology, University of Vienna
1992-present  Associate Professor of Neurology, Department of Neurology, University of Vienna

OTHER EXPERIENCE AND PROFESSIONAL MEMBERSHIPS

2005-present  Member, Commission on Therapeutic Strategies of the International League against Epilepsy
2002-2005  Member, Commission on Neurosurgery of the International League against Epilepsy
2004-present  President Elect, Austrian Chapter of the International League against Epilepsy
2000-present  Member, Ethics Committee, University of Vienna
1998-2004  First Secretary, Austrian Chapter of the International League against Epilepsy
1998-present  Vice President, Austrian Society of Clinical Neurophysiology
1999-2005  Scientific Board, Working Group of Presurgical Epilepsy Evaluation and Epilepsy Surgery for Germany, Austria and Switzerland
1997-1999 President, Working Group of Presurgical Epilepsy Evaluation and Epilepsy Surgery for Germany, Austria and Switzerland
1995-1997 Vice President, Working Group of Presurgical Epilepsy Evaluation and Epilepsy Surgery for Germany, Austria and Switzerland

HONORS AND AWARDS
2003 Best Poster Price of Austrian Neurological Society
1997 Otto Loewi Price of the Austrian Society of Neuroscience
1996 Science Award of the Ersten Österreichischen Spar-Casse
1996 Herbert Reisner Price for Epileptology
1991 Sandoz-Price for Medicine
1985 Price of the Chamber of Physicians of Vienna

EDITORIAL BOARD OF SCIENTIFIC JOURNALS
Zeitschrift EEG/EMG till 1997
Zeitschrift Epileptologie
Journal of Clinical Neurophysiology
Epileptic Disorders
Epilepsy Research till 2005
Epilepsy and Behavior
Klinische Neurophysiologie
Journal für Neurologie, Neurochirurgie und Psychiatrie
Focus Neurogeriatrie

MEMBERSHIPS
Austrian Neurological Society
Austrian Society for Clinical Neurophysiology
Austrian Chapter of the International League Against Epilepsy
Working Group of Presurgical Epilepsy Evaluation and Epilepsy Surgery for Germany, Austria and Switzerland
### SOURCES OF FUNDING IN LAST 6 YEARS (2003 – 2008)

<table>
<thead>
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<th>Period</th>
<th>Organization</th>
<th>Short Title</th>
<th>K€/year</th>
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<tr>
<td>01/01/2000 - 8/31/2003</td>
<td>Austrian National Bank Fund</td>
<td>Project 8135 Prognosis after Epilepsy Surgery Role: PI</td>
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<td>01/01/2005 - 5/31/2005</td>
<td>Fund of the Major of the City of Vienna</td>
<td>Project 2360 Quality of Life and Psychosocial Factors in Epilepsy Role: PI</td>
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<td>7/01/2005 - present</td>
<td>Austrian National Bank Fund</td>
<td>Project 11381 Mesial Temporal Lobe Epilepsy and the Emotional Brain Role: PI</td>
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<td>3/2008 - present</td>
<td>Austrian Science Fund</td>
<td>SFB 35 Membrane Transporters in Medically Refractory Epilepsy</td>
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### Dr.rer.nat., Dr.sci.med. Dr. techn. or PhD supervisions in last 6 years (2003 – 2008)

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<th>Period</th>
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<th>Topic</th>
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<tr>
<td>2003</td>
<td>Bonelli Silvia Beatrice</td>
<td>Frontallappenenepilepsie – Präoperative Diagnostik</td>
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<td>2003</td>
<td>Krendl Reinhard</td>
<td>Pathophysiology of the irritative zone in mesial temporal epilepsy: its impact on postoperative seizure control</td>
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<tr>
<td>2006-2007</td>
<td>Kerstin Kiefer</td>
<td>Lebensqualität bei Epilepsiepatienten</td>
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<tr>
<td>2006- present</td>
<td>Lackmayer Katharina</td>
<td>Depression als Outcome-Prädiktor bei epilepsiechirurgischen Eingriffen</td>
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<tr>
<td>2006- present</td>
<td>Pacher Christine</td>
<td>Neuropsychologische Auswirkungen von interiktale Spikes bei Temporallappenenepilepsie</td>
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<tr>
<td>2007- present</td>
<td>Fangmeyer Katharina</td>
<td>Postictal coughing as a lateralizing sign in focal epilepsy</td>
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<td>2007- present</td>
<td>Stockbauer Anna</td>
<td>The lateralizing significance of automatisms with preserved reponsiveness in focal epilepsy</td>
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<tr>
<td>2007-present</td>
<td>Mert Aygül</td>
<td>Ictal fear as a lateralizing and localizing sign in focal epilepsy</td>
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<td>2007-present</td>
<td>Galovic Marian</td>
<td>Dystonic posturing in focal epilepsy – mechanisms and clinical implications</td>
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</table>
PUBLICATIONS

Original research articles 124
Review articles 61
Book chapters 58
Books 2
Edited Books 2

Cumulative Impact-Factor - original research articles 357,733
Cumulative Impact-Factor - review articles 65,201
Cumulative Impact-Factor - total 422,934

PEER REVIEWED MANUSCRIPTS IN LAST 6 YEARS (2003 – 2008)

ORIGINAL RESEARCH ARTICLES

First, last or corresponding author


Coauthor


Spatt J, Bauer G, Baumgartner C, Feucht M, Graf M, Mamoli B, Trinka E; Austrian Section of the


Riederer F, Bittansky M, Lehner-Baumgartner E, Baumgartner C, Mlynnarik V, Gruber S, Moser E, PhD; Kaya M, SERLES W. Decrease of NAA with aging outside the seizure focus in mesial temporal lobe epilepsy - a proton-MRS-study at 3 Tesla. Brain Res (in press)
**REVIEW ARTICLES**

*First, last or corresponding author*


**Baumgartner C**. Epilepsie - Multimorbidity und Multimedikation bei älteren Patienten. Focus Neurogeriatrie (in press)


*Coauthor*

Thesis project topic:
**Prospective Evaluation of Outcome Predictors in Pediatric Epilepsy Surgery**
(Qualitätssicherung epilepsiechirurgischer Eingriffe bei Kindern und Jugendlichen – eine Analyse von prä- und postoperativen Prognosefaktoren)
ÖNB: 12063

Project supervisor:
**FEUCHT, Martha**
Department of Pediatrics; Martha.feucht@meduniwien.ac.at;

Brief description of the field of research:
**Goal:** 1) To assess prospectively predictors for favorable versus unfavorable seizure and/or developmental outcome after epilepsy surgery in pediatric patients with drug resistant epilepsies. 2) To assess the most useful diagnostic tools in this context.

**Techniques:** Intensive non-invasive and invasive simultaneous EEG-Video Monitoring, Neuropsychological and psychiatric Investigations inclusively WADA Test, high-resolution MRI, f-MRI, PET, SPECT, histopathological studies (in cooperation with the Institute of Neurology), statistical analysis (in cooperation with Medical Statistics)

**Approach:** Prospective. Included are consecutive children and adolescents investigated at the Vienna University Hospital Epilepsy Monitoring Unit. The predictive value of the following variables is tested: age at seizure onset /duration of epilepsy prior to epilepsy surgery, seizure type/epilepsy syndrome, etiology (according to genetics, MRI and histopathology), localization and lateralization of the epileptogenic zone due to the results of interictal/ictal EEG, seizure semiology, functional deficits (according to SPECT, PET, f-MRI), cognitive and/or psychiatric comorbid symptoms, and type and extent of surgery.

**Deliverables:** Clarification of clinical relevant outcome predictors and definition of ideal candidates for pediatric epilepsy surgery.

**Benefits for the future professional career of students:**

Acquired scientific competence is useful for a future specialization in any field of clinical neuroscience. In particular, students get a sound basis for an academic career in the multidisciplinary field of clinical epileptology and epilepsy surgery.

Previously supervised scientific co-workers have specialised in: neurology (neuropediatrics), neurophysiology, neuropsychology, neuroradiology and nuclear medicine, neurosurgery, neuropathology.
**Curriculum Vitae**

**Name**
FEUCHT Martha, MD

**Address**
Department of Pediatrics, Medical University of Vienna
Währinger Gürtel 18-20
A-1097 Vienna

**Personal Data**
Date of Birth: 19-06-1957
Place of Birth: Vienna
Nationality Austria

**Education**
01 10 2008  Specialist (Facharzt) in Pediatrics and (Zusatzfacharzt) Neuropediatrics
07 11 2003  ILAE Diploma in epileptology
08 09 1994  Specialist (Zusatz-Facharzt) in neuropsychiatry of children and adolescents
17 04 1993  ÖGKN Certificate in clinical electroencephalography
09 12 1992  Ius practicandi (Facharzt) in neurology and psychiatry
11 06 1987  Ius practicandi in general medicine (Arzt für Allgemeinmedizin)
21 12 1980  Medical Doctor Degree at the University of Vienna

**Career History**
25 05 1999  Venia legendi (Habilitation) and associate Professor in Neurology
01 04 1994  Head of the Pediatric Epilepsy Service and EEG Laboratory
01 02 1994  Consultant (Oberarzt) at the University Clinic of Child and Adolescent Neuropsychiatry
Since 01 01 1991  Consultant Centre for Autistic Children Sobieskygasse
01 05 1987 – 01 02 1994  Resident at the University Clinics of Neurology and Neuropsychiatry - Vienna
01 03 1981 – 30 04 1986  Resident at the Psychiatry Hospital Baumgartner Höhe, the Mautner Markhof Children’s Hospital and the General
Hospital Rudolfstiftung (Gemeinde Wien)

**Career-related Activities**

Since 02 1996

Examiner for the licence in Clinical Electroencephalography (ÄK-Diplom und Zertifikat der ÖGKN)

Since 2001

ILAE-Certified Trainer in Clinical Epileptology (EUREPA)

**Memberships**

EPNS – European Pediatric Neurology Society

ÖGN – Österreichische Gesellschaft für Neurologie

ÖGKN – Österreichische Gesellschaft für klinische Neurophysiologie (Board Member since 1999, Second Chancellor since 1999)

ILAE – International League against Epilepsy (Board member of the Austrian section since 1999, First President since October 2004)

Österreichische Gesellschaft für Kinder- und Jugendheilkunde - Arge Neuropädiatrie

Österreichische Gesellschaft für Kinder- und Jugendpsychiatrie

ÖGfMRT – Österreichische Gesellschaft für funktionelle Magnetresonanztomographie - Wissenschaftlicher Beirat

**Sources of funding in last 6 years (2003 – 2008)**

<table>
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<tr>
<th>Period</th>
<th>Organization</th>
<th>Short Title</th>
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<tr>
<td>2001-2004</td>
<td>FWF – DGN (Medical Statistical Institute Jena)</td>
<td>Non-linear EEG-Analysis</td>
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<td>2004-2005</td>
<td>ÖNB</td>
<td>Non-linear EEG Analysis</td>
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<tr>
<td>2001 - 2004</td>
<td>FWF</td>
<td>Genetic Background of CAE (GABA Receptor Genes)</td>
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<td>2004 - 2006</td>
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<td>Genetic Background of IGE</td>
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<td>2007 -</td>
<td>ILAE</td>
<td>fMRI in presurgical evaluation of pediatric patients</td>
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**Dr. rer. nat., Dr. sci. med. Dr. techn. or PhD supervisions in last 6 years (2003 – 2008)**

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<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
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<tr>
<td>2003</td>
<td>Dr Barbara Porsche</td>
<td>Presurgical Neuropsychological Evaluation (incl fMRI) of children and adolescents with drug resistant temporal lobe epilepsy</td>
</tr>
<tr>
<td>Year</td>
<td>Author/Title</td>
<td>Details</td>
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<tr>
<td>1999-2003</td>
<td>DI Kathrin Hoffmann, DI Ulrich Möller</td>
<td>Nonlinear EEG and EP Analysis</td>
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<td>2006</td>
<td>Dr Sabine Völkl-Kernstock</td>
<td>Neuropsychological Deficits in Benign Rolandic Epilepsy</td>
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<td>2004 -</td>
<td>Dr Belinda Plattner</td>
<td>Psychiatric Symptoms and personality traits in pediatric epilepsy patients</td>
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Supervision of doctoral thesis

Publications

Peer reviewed manuscripts in last 6 years (2003 – 2008, original research and reviews)

First, last or corresponding author manuscripts:


Co-author manuscripts:


Invited Talks in last 6 years (2003 – 2008)

Jährlich fix:

2 EEG Kurse im Rahmen des Ausbildungsprogrammes der ÖGKNWorkshops/Kurse
Jahrestagung der österreichischen Sektion der ILAE

ÖÄK Diplom-Kurs Genetik: Autismus

Ärztewoche Grado – Kurs Autismus

7th CONGRESS OF THE EUROPEAN PAEDIATRIC NEUROLOGY SOCIETY - EPNS (Izmir, 26 - 29 09 2007). Levetirazetame Monotherapy in BREC

TAGUNG DES DEUTSCH-ÖSTERREICHISCH-SCHWEIZER ARBEITSKREISES EPILEPSIE - DACH (Morschach/Luzern 20 – 22 09 2007). Pseudobenigne Partialepilepsien


17th INTERNATIONAL CLEVELAND CLINIC EPILEPSY SYMPOSIUM ON EPILEPSY SURGERY (Cleveland 27 – 29 06 2007). „Postsurgical psychiatric Outcome in Children“

SYMPOSIUM KETOGENE DIÄT – ERNÄHRUNG ALS THERAPIE (Fulda 13 – 15 06 2007) : „Ketogene Diät bei Epilepsien im Säuglingsalter“

GEMEINSAME JAHRRESTAGUNG DER DEUTSCHEN, ÖSTERREICHISCHEN UND SCHWEIZERISCHEN SEKTIONEN DER ILAE (Basel 16 – 19 05 2007). „Lennox Gastaut Syndrom – eine therapeutische Sackgasse?“

33. JAHRRESTAGUNG DER GESELLSCHAFT FÜR NEUROPÄDIATRIE (Passau 22 – 25 03 2007).

1)Geladene Plattformpräsentation: Epilepsiechirurgie bei tuberöser Sklerose. 2) Geladene Plattformpräsentation Satellitensymposium „Medikamentöse Therapieresistenz bei Epilepsien im Kindesalter“

ÖAK DIPLOMKURS GENETIK (Wien 02 – 03 03 2007) Autismus

INTERNATIONAL SYMPOSIUM FOCUS ON NEUROPEDIATRICS Fulda 10 – 12 01 2007. Teamtrainer: „ketogene Diät bei therapieresistenter Epilepsie“

Jahrestagung der Österreichischen Sektion der ILAE/Wien 16 - 18 11 06. 1) Epilepsiechirurgische Eingriffe bei Kindern mit FCD. 2) Workshop Klinische lateralisationszeichen bei Kindern mit TLE

DACH-Arbeitskreis Epilepsie/Prien-Chiemsee 14 - 17 09 06. Prognoese und Behandelbarkeit fokaler epilepsien im Kindesalter

7th European Congress Epileptology/Helsinki 02 - 07 06 06. Seminar: Neuropsychological deficits in children with BREC

10th International Child Neurology Congress Montreal 11 - 16 06 06. Predictors of psychiatric outcome after epilepsy surgery in Childhood

32. Jahrestagung der Ges für Neonatologie u. Intensivmed./Wien 18 - 20 05 06. Workshop - Akuttherapie epileptischer Anfälle inklusive status Epilepticus
Pädiatrischer Frühling/Schloss Seggau-Leibnitz-Steiermark 11 - 13 05 06. Prognose der Epilepsien im Kindesalter

46. Jahrestagung ILAE/Strassburg 04 - 06 05 06. Kurs EEG für Fortgeschrittene

Collegium Publicum Wien 5.11.2995. Rehabilitation bei Epilepsie und Mehrfachbehinderung im Kindesalter


25th International Epilepsy Congress Paris 28.8.-1.9.05. Personality traits in Juvenile Myoclonic Epilepsy

Jahrestagung der Österreichischen sektion der ILAE in Innsbruck 5. - 7. 5. 2005. Prächirurgische Diagnostik im Säuglingsalter


Jahrestagung der Österreichischen Sektion der ILAE in Steyer. 15. – 16.10 2004. Instrumente zur Erfassung neuropsychiatrischer Störungen bei Jugendlichen mit Epilepsie


14th International Bethel-Cleveland Clinic Epilepsy Symposium, Bielefeld, Germany. May 29th – June 1st, 2003. Psychiatric Comorbidity in Children with Epilepsy

Österreichischer Autismuskongress 2003 30.5. – 1.6. 2003 in Wien. Hirnstuffwechselstörungen als mögliche Mitursachen von Erkrankungen im Rahmen des Autismusspektrums


Plenary: Lokalisationsbezogene Epilepsien – Spektrum und Syndromatologie 2) Symposium: Psychiatrische komorbidität bei kindlicher Epilepsie
Thesis project topic:

Clinical and translational brain tumour biomarker research

Project supervisors:

HAINFELLNER, Johannes A. (in cooperation with PREUSSER, Matthias)
Institute of Neurology; Johannes.Hainfellner@meduniwien.ac.at; www.kin.at

Brief description of the field of research:

Goal: to assess and to test clinical usability and analytical performance of new laboratory methods and candidate biomarkers in brain tumours, as basis for optimized therapy decisions

Techniques: histological techniques, immunohistochemistry, in-situ hybridization, PCR, statistical analysis (in cooperation with Medical Statistics)

Approach: testing of reliability and reproducibility of new analytical laboratory tests, interlaboratory comparisons, correlation of biomarker information with patient outcome and response to therapy (in cooperation with Medical Oncology and Medical Statistics).

Deliverables: Clarification of clinical relevance of new brain tumour candidate biomarkers, clarification of clinical usability of new laboratory techniques

Benefits for the future professional career of students:

Acquired scientific competence is useful for a future specialization in any field of clinical neuroscience, pathology, and oncology. In particular, students get a sound basis for an academic career in the multidisciplinary field of brain tumour diagnosis and therapy.

Previously supervised scientific co-workers have specialised in: pathology, neuropathology, neurosurgery, neurology, medical oncology.
Curriculum Vitae

Name
HAINFELLNER, Johannes, MD

Address
Institute of Neurology, Medical University of Vienna
Währinger Gürtel 18-20
A-1097 Vienna

Personal Data
Date of Birth: 04-11-1964
Place of Birth: Neunkirchen, Niederösterreich
Nationality Austria

Education
2003 Post-graduate specialization in Hospital Management,
University of Economics and Business Administration
Vienna (Akademischer Krankenhausmanager)
2001 Degree as medical specialist (Facharzt) in Neurobiology
1996 Degree as medical specialist (Facharzt) in Neuropathology
1989 Medical Doctor Degree at the Medical University of Vienna
1983 A-levels, BG Neunkirchen, Niederösterreich

Career History
2002 Venia legendi (Habilitation) in Neuropathology
1999 Deputy Institute Director, Institute of Neurology, University
of Vienna
1998 Consultant (Oberarzt) in Neuropathology, University
Hospital Vienna
1997 Consultant (Oberarzt) in Neuropathology, University
Hospital Zurich
1991-1996 Resident in Neuropathology, Institute of Neurology,
University of Vienna
1989-1990 Service at the Military Hospital Wien-Stammersdorf

Career-related Activities
2004-2012 Medical examiner for the license to practice
Neuropathology in Austria (Facharztprüfer der
Österreichischen Ärztekammer)
Awards
2002 Kardinal Innitzer Förderungspreis

Memberships
Austrian Society of Neuropathology
German Society of Neuropathology
European Confederation of Neuropathological Societies (EURO-CNS)
International Society of Neuropathology (ISN)
Austrian Society for Research on Cerebral Tumours
European Association of Neurooncology (EANO)
European Organization for Research and Treatment of Cancer (EORTC)

Sources of funding in last 6 years (2003 – 2008)

<table>
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<tr>
<th>Period</th>
<th>Organization</th>
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<th>K€/year</th>
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<tr>
<td>2005-</td>
<td>Federal Ministry of Science and Research</td>
<td>Research equipment for interdisciplinary Neurooncology (Uniinfrastruktur III Programm)</td>
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<td>2005</td>
<td>Hans und Blanca Moser Stiftung</td>
<td>Establishment of the Austrian Brain Tumour Registry</td>
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<td>2007-2008</td>
<td>Österreichische Nationalbank</td>
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<td>2006-2007</td>
<td>Initiative Krebsforschung</td>
<td>In vivo Bedeutung der Hypoxie für Telomerase und Telomere bei astrozytären Tumoren WHO Grad II-IV</td>
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<td>2007-2009</td>
<td>Herzfelder’sche Familienstiftung</td>
<td>CD133 expression in response to hypoxia in adult astrocytic brain tumors</td>
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<td>2007-2009</td>
<td>Pfizer Inc</td>
<td>Sunitinib (SUTENT, SU11248) in Patients with Recurrent or Progressive Glioblastoma multiforme. An Academic Prospective Single-arm Phase II Clinical Trial including Translational Research Analyses</td>
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</tr>
</tbody>
</table>

Dr.rer.nat., Dr.sci.med. Dr. techn. or PhD supervisions in last 6 years (2003 – 2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
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<tr>
<td>2003</td>
<td>Marco HASSLER*</td>
<td>Pathobiologische Grundlagen für die medikamentöse Therapie von progredienten Meningiomen</td>
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<td>Year</td>
<td>Author</td>
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</tr>
<tr>
<td>2005</td>
<td>Jörg WUNDERER*</td>
<td>Analyse der klinischen Wertigkeit der histologischen Zellproliferationsmarker MIB-1 und Topoisomerase II alpha bei Hypophysenadenomen</td>
</tr>
<tr>
<td>2004</td>
<td>Stefan WOLFSBERGER**</td>
<td>Ki-67 immunolabeling index is an accurate predictor of outcome in patients with intracranial ependymoma</td>
</tr>
<tr>
<td>2006</td>
<td>Christine HABERLER**</td>
<td>Immunohistochemical analysis of INI1 protein in malignant pediatric CNS tumors: lack of INI1 in atypical teratoid/rhaboid tumors and in a fraction of primitive neuroectodermal tumors without rhabdoid phenotype</td>
</tr>
<tr>
<td>2006</td>
<td>Christine HABERLER**</td>
<td>Histopathological prognostic factors in medulloblastoma: high expression of survivin is related to unfavourable outcome</td>
</tr>
<tr>
<td>2006</td>
<td>Christine HABERLER**</td>
<td>Immunohistochemical analysis of platelet-derived growth factor receptor-alpha, -beta, c-kit, c-abl, and arg proteins in glioblastoma: possible implications for patient selection for imatinib mesylate therapy</td>
</tr>
<tr>
<td>2004</td>
<td>Matthias PREUSSER**</td>
<td>Presence of D110 antigen expressing immunocompetent cells in glioblastoma associates with prolonged survival</td>
</tr>
<tr>
<td>2004</td>
<td>Matthias PREUSSER**</td>
<td>Algorithm for the standardized assessment of vascular patterns in glioblastoma specimens</td>
</tr>
<tr>
<td>2005</td>
<td>Matthias PREUSSER**</td>
<td>Vascularization and expression of hypoxia-related tissue factors in intracranial ependymoma and their impact on patient survival</td>
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<tr>
<td>2005</td>
<td>Matthias PREUSSER**</td>
<td>No prognostic impact of survivin expression in glioblastoma</td>
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<td>2005</td>
<td>Matthias PREUSSER**</td>
<td>DEC1 expression in 1p-aberrant oligodendroglial neoplasms</td>
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<td>2005</td>
<td>Matthias PREUSSER**</td>
<td>Survivin expression in intracranial ependymomas and its correlation with tumor cell proliferation and patient outcome</td>
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<td>2006</td>
<td>Matthias PREUSSER**</td>
<td>Comparative analysis of NeuN immunoreactivity in primary brain tumours: conclusions for rational use in diagnostic histopathology</td>
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<td>2006</td>
<td>Matthias PREUSSER**</td>
<td>Histopathologic assessment of hot-spot</td>
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Doctoral Program Clinical Neurosciences (CLINS) -32-
<table>
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<tr>
<th>Year</th>
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<tr>
<td>2007</td>
<td>Matthias PREUSSER**</td>
<td>Microvessel density and vascular patterns in glioblastoma: poor observer agreement limits clinical utility as prognostic factors: a translational research project of the European Organization for Research and Treatment of Cancer Brain Tumour Group</td>
</tr>
<tr>
<td>2008</td>
<td>Matthias PREUSSER**</td>
<td>OLIG2 is a useful immunohistochemical marker in differential diagnosis of clear cell primary CNS neoplasms</td>
</tr>
<tr>
<td>2008</td>
<td>Matthias PREUSSER**</td>
<td>Ki-67 index in intracranial ependymoma: a promising histopathological candidate biomarker</td>
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<tr>
<td>2008</td>
<td>Matthias PREUSSER**</td>
<td>Anti-O6-methylguanine-methyltransferase (MGMT) immunohistochemistry in glioblastoma multiforme: observer variability and lack of association with patient survival impede its use as clinical biomarker</td>
</tr>
<tr>
<td>2003</td>
<td>Ellen GELPI**</td>
<td>Fluorescent in situ hybridization on isolated tumor cell nuclei: a sensitive method for 1p and 19q deletion analysis in paraffin-embedded oligodendrogial tumor specimens</td>
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<tr>
<td>2004</td>
<td>Oskar KOPEREK**</td>
<td>Value and limits of immunohistochemistry in differential diagnosis of clear cell primary brain tumors</td>
</tr>
<tr>
<td>2004</td>
<td>Peter BIRNER**</td>
<td>Expression of hypoxia-related tissue factors correlates with diminished survival of adjuvantly treated patients with chromosome 1p aberrant oligodendroglial neoplasms and therapeutic implications</td>
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<tr>
<td>2003</td>
<td>Peter BIRNER**</td>
<td>Vascular patterns in glioblastoma influence clinical outcome and associate with variable expression of angiogenic proteins: evidence for distinct angiogenic subtypes</td>
</tr>
<tr>
<td>2007</td>
<td>Josa FRISCHER**</td>
<td>Cerebral cavernous malformations: congruency of histopathological features with the current clinical definition</td>
</tr>
</tbody>
</table>

*Supervision of doctoral thesis
**Supervision of research work and publication as peer-reviewed original paper, see list of publications
Publications

Peer reviewed manuscripts in last 6 years (2003 – 2008, original research and reviews)

First, last or corresponding author manuscripts:


Co-author manuscripts:


Invited Talks in last 6 years (2003 – 2008)


European Organization for Research and Treatment of Cancer (EORTC), brain tumour group meeting: Identification of priority projects - “Methylation-specific-PCR for analysis of MGMT promoter methylation status in routinely processed neurosurgical specimens: can it be used for diagnostic purposes?” February 21, 2008, Bologna, Italy


European Organization for Research and Treatment of Cancer (EORTC), brain tumour group meeting. “Neuropathology perspective: summary of past and current trials” September 23, 2007, Barcelona, Spain


European Organization for Research and Treatment of Cancer (EORTC), brain tumour group meeting. Symposium “Pathology of Brain Tumours” February 8, 2007, Brussels, Belgium

7th meeting of the European Association for Neurooncology (EANO) 2006: “Molecular biology of brain tumours” September 14, 2006, Vienna

Eli Lilly Steering Meeting: The study and evaluation of enzastaurin in recurrent glioblastoma “Glioblastoma and Neoangiogenesis” April 6, 2006, Vienna

Synthes Symposium. Osteosynthesis and bone management in cranial Neurosurgery “Histological considerations of the cranial bone” June 8, 2006, Vienna


8th European Congress of Neuropathology, organised by the European Confederation of Neuropathological Societies (EURO-CNS). Symposium “Brain Tumours – Microenvironment Interactions”. June 28, 2005, Amsterdam, Netherlands


20th European Congress of Pathology Symposium “New Entities and new molecular approaches in brain tumour classification” September 8, 2005, Paris


Thesis project topic:

Clinical and translational neurodegenerative disease biomarker research

Project supervisor:

KOVACS, Gabor, G.
Institute of Neurology; Gabor.Kovacs@meduniwien.ac.at ; www.kin.at

Brief description of the field of research:

Goal: to assess and to test clinical usability of new laboratory methods and candidate biomarkers in different neurodegenerative diseases, as basis for optimized therapy decisions

Techniques: histological techniques, immunohistochemistry, ELISA; morphometry, in-situ hybridization, PCR, statistical analysis

Approach: To examine systematically with different methods in the same anatomical areas from each patient different markers of neuronal vulnerability (at system, cell, and protein levels such as neurotransmitters with clinical relation; protein-components of pathological deposits; neuronal death, furthermore, alterations in synapses and dendrites). By comparison of different markers, we will evaluate which combination is mostly congruent with the clinical syndrome and thus may be used as a biomarker set.

Deliverables: Clarification of clinical relevance of new combinations of biomarkers, clarification of clinical usability of new laboratory techniques

Benefits for the future professional career of students:

Acquired scientific competence is useful for a future specialization in any field of clinical neuroscience. In particular, students get a sound basis for an academic career in the field of neurodegenerative disease diagnosis.

Previously supervised scientific co-workers have specialised in: neuropathology, neurology.
Curriculum Vitae

Name
KOVACS, Gabor G., MD, PhD

Address
Institute of Neurology, Medical University of Vienna
Währinger Gürtel 18-20
A-1097 Vienna

Personal Data
Date of Birth: 23-05-1969
Place of Birth: Kecskemet, Hungary
Nationality Hungary

Education
2003 Degree as medical specialist (Facharzt) in Neuropathology (accepted in Austria)
2002 PhD in Neuroscience (Semmelweis University, Budapest, Hungary)
1998 Degree as medical specialist (Facharzt) in Neurology (accepted in Austria)
1994 Medical Doctor Degree at Semmelweis University of Medicine, Budapest, Hungary
1987 A-levels, Kecskemet, Hungary

Career History
2007 August- Consultant (Oberarzt) in Neuropathology, Institute of Neurology, University of Vienna
2004 April-2007 July Institute Director, National Institute of Psychiatry and Neurology, Department of Neuropathology, Hungarian Reference centre for Human Prion diseases
2003 January- 2004 April Consultant (Oberarzt) in Neuropathology, National Institute of Psychiatry and Neurology, Laboratory of Neuropathology, Consultant
2000-2002 Resident in Neuropathology, Institute of Neurology, University of Vienna
1994-2000 Clinical doctor in the Department of Neurology, Semmelweis University of Medicine, Budapest, Hungary
Awards
2007 Erste Bank Preis (Vienna)
2002 Gedeon Richter research prize (Budapest)

Memberships
Austrian Society of Neuropathology
European Confederation of Neuropathological Societies (EURO-CNS)
International Society of Neuropathology (ISN)
Founding member of the Hungarian Neuropathological Society; currently: secretary
Hungarian Society of Neurology and Psychiatry
Founding member of the Hungarian Parkinson Disease Society
Hungarian Society of Neurogenetics

Editorial board member
Acta Neuropathologica, Central European Journal of Medicine


Sources of funding in last 6 years (2003 – 2008)

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<td>2007-2009</td>
<td>EU FP6</td>
<td>Neuroscreen project for the establishment of Biomarkers for Neurodegenerative diseases</td>
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<td>2004-2009</td>
<td>EU FP6</td>
<td>BrainNet II Network of Excellence</td>
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Dr.rer.nat., Dr.sci.med. Dr. techn. or PhD supervisions in last 6 years (2003 – 2008)

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<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
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<tr>
<td>2007</td>
<td>Csaba ADORI*</td>
<td>Ubiquitine-protesome system in neurodegeneration (PhD thesis: Eötvös University of Sciences, Budapest, Hungary)</td>
</tr>
<tr>
<td>2007</td>
<td>Csaba ADORI**</td>
<td>Evaluation of serotonergic axons and molecular chaperones after a single dose of MDMA administration in Dark Agouti rats.</td>
</tr>
<tr>
<td>2006</td>
<td>Csaba ADORI**</td>
<td>Evaluation of subcellular distribution of</td>
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components of the ubiquitin-proteasome system in non-diseased human and rat brain.

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<tr>
<th>Year</th>
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<th>Title</th>
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*Supervision of doctoral thesis

**Supervision of research work and publication as peer-reviewed original paper, see list of publications

Scientific Oeuvre (as of 1 April 2008):
49 original articles in English; 1 in German, 11 in Hungarian language. 3 book chapters; 32 abstracts in periodicals.

Peer reviewed manuscripts in last 6 years (2003 – 2008, original research and reviews)

First, last or corresponding author manuscripts:


Adori C, Low P, Moszkovkin G, Bagdy G, László L, Kovacs GG. Subcellular distribution of

Doctoral Program Clinical Neurosciences (CLINS) -43-


Co-author manuscripts:


Horvath MC, Kovacs GG, Kovari V, Majtenyi K, Hurd YL, Keller E. Heroin abuse is characterized by discrete mesolimbic dopamine and opioid abnormalities and exaggerated nuclear receptor-related 1 transcriptional decline with age. J Neurosci. 2007;27(49):13371-5.


Illes Z, Vincent A, Kovacs GG, Merkli H, Tordai A, Komoly S, Nagy F. Acquired neuromyotonia precipitated by thyroid surgery and associated with


Invited Lectures in English (Hungarian lectures not shown):


Kovacs GG. Neuropathology of human prion disease. 31st Congress of the European Association of Geriatric Psychiatry Wroclaw; Poland; Sept, 2003.

Kovacs GG. Pathogenesis of human prion disease: a neuropathological approach Joint Meeting of the Austrian; Czech; Slovakian and Hungarian Societies of Pathologists; Eisenstadt Austria; Nov, 2004.

Kovacs GG. Prion diseases. II Congress of the Cognitive Neurology DE-II-MENTIA; Pardubice, Tczech Rep. May, 2005

Kovacs GG. Molecular pathology of neurodegenerative diseases. X. Hungarian and International Conference on Alzheimer-disease, Szeged, Hungary, September, 2006.
Thesis project topic:
Multimodal neuroimaging *in vivo* using molecular and functional methods (PET, fMRI, phMRI, morphometry/VBM, imaging genetics)

Project supervisor:
LANZENBERGER, Rupert, MD
Department of Psychiatry and Psychotherapy, Clinical Division of Biological Psychiatry
rupert.lanzenberger@meduniwien.ac.at, http://www.meduniwien.ac.at/neuroimaging

Brief description of the field of research:

**Methods:** Molecular and Functional Neuroimaging in vivo techniques are promising new tools in research and diagnostics of psychiatric and neurological disorders as well in clinical neuroscience and neuroncology. Positron emission tomography (PET) and Single photon emission tomography (SPECT) are used to quantify neurotransmitter transporters, receptor subtypes, enzymes and other proteins in the human brain in vivo. Structural magnetic resonance imaging (MRI) and functional MRI (fMRI) for the (indirect) measurement of neural activation are important techniques. By combining molecular and functional imaging, it is possible to investigate the relation between neurochemical, structural and functional alterations in psychiatric and neurological disorders. Multimodal imaging approaches using pharmacological MRI (phMRI) and PET are advanced methods in psychopharmacology to evaluate the effects of drugs in the brain of healthy subjects and patients.

**Aim:** There is a focus on the serotonergic and dopaminergic system in psychiatric disorders including depression and anxiety disorders. Molecular and functional alterations in patients will be quantified and topologically analysed. In addition, using a multimodal approach, the effects of psychopharmacological treatment on brain function, neurochemical patterns and structure will be investigated.

**Benefits for the future career of students:**
The profound knowledge in different neuroimaging in vivo methods provided by this programme might be an important support for professionals in psychiatry, neurology, radiology, nuclear medicine, and can be used in diagnostics as well in brain research.

Professional and scientific network of Rupert Lanzenberger
Details about partners, cooperations, memberships, projects and conference contributions can be found: http://www.meduniwien.ac.at/neuroimaging
Curriculum Vitae

Name
Rupert Lanzenberger, MD

Address
Department of Psychiatry and Psychotherapy, Clinical Division of Biological Psychiatry, Medical University of Vienna, Währinger Gürtel 18-20, A-1090 Vienna

Personal Data
Date of Birth: December 22, 1964
Place of Birth: Scheibbs, Niederösterreich
Nationality Austria

Education
2005 – 2008 Doctoral Program (Dr.rer.nat.), Faculty of Psychology, University of Vienna (Supervisor: Prof.Dr.H.Bauer).
2003 – 2004 Ph.D.Program, University of Liechtenstein (Supervisor: Prof.Dr.G.Guttmann).
1998 Medical Doctor Degree, Medical University of Vienna

Career History
2005 – present Head, Functional Neuroimaging Group – PET & fMRI at the Department of Psychiatry and Psychotherapy, MUW. Focused on translational, molecular and multimodal neuroimaging including PET/µPET, SPECT, fMRI, phMRI.
2004 – 2005 Postdoctoral research fellow, Neuroimaging Group (Head: Prof.Dr.J.Tauscher) at the Clinical Division of General Psychiatry (Head: Prof.Dr.DDr.hc.S.Kasper)
1999 – 2003 Postdoctoral research fellow, Neuroimaging Group (Head: Prof.Dr.R.Beisteiner) at the Ludwig Boltzmann Institute f. Functional Brain Topography (Head: Prof.Dr.L.Deecke), Department of Neurology (Head: Prof.Dr.E.Auff), and Study Group Clinical fMRI at the Departments of Neurology, Neurosurgery and Radiology, MUW. Comparative Neuroimaging using fMRI, MEG, EEG and intra-operative cortical stimulation in clinical applications.
**Career-related Activities**

2006 – present  
Brain Imaging Task Force, World Federation of Societies of Biological Psychiatry (WFSBP).

2000 – present  
Frequent speaker and chair on national and international conferences and meetings.

2004 – present  
Referee for peer reviewed journals dedicated to neuroimaging, neuroscience and psychiatry.

**Awards**

2006  
ÖGPB Research Award in Clinical Psychiatry 2006, Austrian Society of Neuropsychopharmacology and Biological Psychiatry

2001  
Theodor Körner Award, Austria
Prize for the Promotion of Science and Arts

2001 – 2007  

**Memberships**

2008 – present  
European College of Neuropsychopharmacology (ECNO)

2007 – present  
Austrian Neuroscience Association (ANA)

2006 – present  
World Federation of Societies of Biological Psychiatry (WFSBP)

2006 – present  
Österreichische Gesellschaft für Nuklearmedizin (ÖGN)

2005 – present  
Österreichische Gesellschaft funkt. MR Tomographie (ÖGfMRT)

2005 – present  

1999 – present  
Organization for Human Brain Mapping (OBHM)

2001 – 2002  
International Society Magnetic Resonance in Medicine (ISMRM)

1997 – 2001  
Association of Scientific Study of Consciousness (ASSC)

**Sources of funding in last 6 years (2003 – 2008)**

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<tr>
<th>Period</th>
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<th>Short Title</th>
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<tr>
<td>2005 – 2008</td>
<td>Österreichische Nationalbank</td>
<td>A multimodal study combining fMRI and PET to investigate serotonergic modulation of limbic excitability in patients with anxiety disorders.</td>
</tr>
<tr>
<td>Period</td>
<td>Name of student</td>
<td>Topic</td>
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Dr.rer.nat., Dr.med., Dr. techn., PhD supervisions/support in last 6 years (2003 – 2008)

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<th>Period</th>
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<th>Topic</th>
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<tr>
<td>2006 – 2008</td>
<td>Patrycja STEIN*</td>
<td>Sex differences in the serotonin-1A receptor distribution of the human brain measured by positron emission tomography</td>
</tr>
<tr>
<td>2006 – 2007</td>
<td>Florian GERSTL*</td>
<td>Comparison of serotonin1A receptor distribution and functional activation in the visual cortex - A multimodal neuroimaging study combining quantitative molecular and high field functional magnetic resonance imaging in vivo.</td>
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<td>2007</td>
<td>Mag. Leonhard-Key MIEN*</td>
<td>About the radiosynthesis and preclinical evaluation of innovative PET-tracers labelled with fluorine-18 and carbon-11 for neuroimaging.</td>
</tr>
<tr>
<td>2008</td>
<td>Florian GERSTL**</td>
<td>Multimodal imaging of human early visual cortex by combining functional and molecular measurements with fMRI and PET. Neuroimage 2008 Mar 6 [Epub ahead of print]; [IF: 5.56]</td>
</tr>
</tbody>
</table>

*Supervision and/or support of doctoral and diploma theses
**Supervision of research work and publications as peer-reviewed original paper, see list of publications**

**Publications**

**Peer reviewed manuscripts in last 6 years (2003 – 2008, original research and reviews)**

*First, last or corresponding author manuscripts:*

Multimodal imaging of human early visual cortex by combining functional and molecular measurements with fMRI and PET. *Neuroimage* 2008 Mar 6 [Epub ahead of print]; [IF: 5.56]


**Lanzenberger** R, Kasper S.

**Co-author manuscripts:**

The suppressive influence of SMA on M1 in motor imagery revealed by fMRI and Dynamic Causal Modeling.

Riederer F, Lanzenberger R, Kaya M, Prayer D, Serles W, Baumgartner C.
Network Atrophy in Temporal Lobe Epilepsy – A Voxel-based Morphometry (VBM) Study.
*Neurology* 2008 [2006, IF: 5.69], in press.

Wadsak W, Mien LK, Shanab K, Ettlinger DE, Haeusler D, Sindelar K,
Lanzenberger R, Spreitzer H, Viernstein H, Keppler BK, Dudczak R, Kletter K,
Mitterhauser M.
Preparation and first evaluation of [18F]FE@SUPPY: a new PET-Tracer for the Adenosine A3 Receptor.

Windischberger W, Cunnington R, Lamm C, Lanzenberger R, Langenberger H,
Deecke L, Bauer H, Moser E.
Time-resolved Analysis of fMRI signal changes using Brain Activation Movies.
*Journal of Neuroscience Methods* 2007 Dec 14 [2006, IF: 2.24]

Mitterhauser M, Toegel S, Wadsak W, Lanzenberger R, Mien LK, Kuntner C,
Wanek T, Harald Eidherr H, Ettlinger DE, Viernstein H, Kluger R, Dudczak R,
Kletter K.
Pre vivo, ex vivo and in vivo evaluations of [68Ga]-EDTMP.

Klein N, Sacher J, Geiss-Granadia T, Mossaheb N, Attarbaschi T, Lanzenberger R,
Higher serotonin transporter occupancy after multiple dose administration of escitalopram compared to citalopram: an [123I]ADAM SPECT study.

Attarbaschi T, Sacher J, Geiss-Granadia T, Klein N, Mossaheb N, Wiesegger G,
Lanzenberger R, Asenbaum S, Dudczak R, Doby D, Kasper S, Tauscher J.
Striatal D2 receptor occupancy in bipolar patients treated with olanzapine.
*European Neuropsychopharmacology* 2007 Feb;17(2):102-7. [IF: 3.79]

Wadsak W, Mien LK, Ettlinger DE, Feitscher S, Lanzenberger R, Marton J,
Dudczak R, Kletter K, Mitterhauser M.
Preparation and radiosynthesis of [18F]FE@CFN (2-[^18F]fluoroethyl 4-[N-(1-oxopropyl)-N-phenylamino]-1-(2-phenylethyl)-4-piperidinecarboxylate): a potential µ- opioid receptor imaging agent.


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*Doctoral Program Clinical Neurosciences (CLINS) -52-*
Radiochimica Acta 2007, 95, 1-6 [2005, IF: 1.07]

A positron emission tomography microdosing study with a potential antiamyloid drug in healthy volunteers and Alzheimer’s disease patients

In vivo imaging of serotonin transporter occupancy by means of SPECT and [123I]ADAM in healthy volunteers treated different doses of escitalopram or citalopram.

Int J Neuropsychopharmacol. 2006 Feb 17;1-8 [2006, IF: 5.18]

FMRI of the emotions: towards an improved understanding of amygdala function.

Evaluation of preoperative high field motor functional- MRI (3 Tesla) in glioma patients by navigated electrocortical stimulation and postoperative outcome.
J Neurol Neurosurg Psychiatry (JNPP) 2005 Aug;76(8):1152-7 [IF: 3.63]

Geissler A, Lanzenberger R, Barth M, Tahamtan A, Milakara D, Bartus A, Beisteiner, R.
Influence of fMRI smoothing procedures on replicability of fine scale motor localization.

Magnetoencephalography indicates finger motor somatotopy.

Invited Talks in last 6 years (2003 – 2008)

XXVI CINP Congress – 50th Anniversary of CINP (Collegium Internacionale of Neuro-Psychopharmacologicum)

Sitzung in der Gesellschaft der Ärzte, „Wie Steroidhormone die Neurotrans-


Wissenschaftliches Seminar der Universitätsklinik für Psychiatrie, „Biologie der Angststörungen“. 29.11.2007, MUW, Austria.


2nd International Congress of Biological Psychiatry, “Serotonin1A receptor level affects neural activation revealed by combining PET and functional MRI“. April 17-21, 2007, Santiago de Chile, Chile


COGNITIVE SCIENCE Ringvorlesung der Universität Wien, „NeuroImaging: Positron Emission Tomography and Molecular Imaging“. 17.10.2006, Wien, Austria.

Wissenschaftliches Seminar der Universitätsklinik für Psychiatrie, „Aktuelle Forschung zur Bedeutung der Steroidhormone und Neurosteroide in der Psychiatrie“. 29.06.2006, MUW, Austria.

CINP Conference (Collegium Internationale Neuro-Psychopharmacologicum), “Imaging of the serotonergic system in depression and anxiety”. April 2-4, 2006, Queen’s University Belfast, Northern Ireland, UK.

Biologische Psychiatrie Winterseminar, „Cortisol und Serotonin-1A Rezeptorbindung bei Angsterkrankungen (PET)“. 19.-24.3.2006, Oberlech, Austria.


9th International Congress on Amino Acids and Proteins (ICAAP), "The serotonergic system in anxiety disorders". August 8-12, 2005, Vienna, Austria.

8th World Congress of Biological Psychiatry (WFSBP), “5-HT1A BP in limbic areas correlates with sex hormone plasma levels in men”. June 28 – July 3, 2005, Vienna, Austria.

Wissenschaftliches Seminar der Universitätsklinik für Psychiatrie, „Das serotonerge System bei Angsterkrankungen “. 23.6.2005, MUW, Austria.


XI. Update in Psychiatrie, „Bildgebende Verfahren in der Psychiatrie“. 12.-13.5.2005, Museumsquartier, Wien, Austria

Biologische Psychiatrie Winterseminar, „5-HT1A Neurorezeptor Imaging mit PET b
Angststörungen ($^{11}$C WAY)“. 17.1.2005, Oberlech, Austria.

Center of Addiction and Mental Health (CAMH), "Multimodal NeuroImaging – Towards combining pharmacological MRI and Neuroreceptor imaging". November 15, 2004, Toronto, Canada.


Thesis project topic:
**MRI of pathological fetal brain development**

Project supervisor:
**PRAYER, Daniela**
Department of Neuroradiology; daniela.prayer@meduniwien.ac.at

Brief description of the field of research:

**Goal:** to validate in-vivo fetal MR-findings of developmental and acquired brain pathologies by postnatal/ postmortal imaging, postnatal clinical assessment or postmortal neuropathological workup. More accurate prenatal MR-diagnosis supporting decision-making is aimed for.

**Techniques:** fetal MRI, including diffusion-tensor imaging and spectroscopy, postnatal ultrasound and/or MRI, gross neuropathology and histology

**Approach:** testing the reliability of MR-findings in prenatal imaging, especially with the use of the methods mentioned above.

**Deliverables:** Clarification of accuracy and prognostic value of prenatal MR-methods

Benefits for the future professional career of students:

Knowledge of anatomy and pathology of the immature brain is useful for a future specialization in any field of clinical neuroscience, radiology, pathology, pediatrics and obstetrics. In particular, students get a sound basis for an academic career in the multidisciplinary field of prenatal development.

Previously supervised scientific co-workers have specialised in: neurology, radiology and pediatrics.
Curriculum Vitae

Name
PRAYER, Daniela, MD

Address
Department of Neuroradiology, University Clinics of Radiodiagnosics, Medical University of Vienna
Währinger Gürtel 18-20
A-1097 Vienna

Personal Data
Date of Birth: 23-06-1956
Place of Birth: Wien
Nationality Austria

Education
1996 Degree as medical specialist (Facharzt) in Radiology
1991 Degree as medical specialist (Facharzt) in Neurology
1981 Medical Doctor Degree at the Medical University of Vienna

Career History
1996 Lecturer (Universitätsdozent) in Radiology
1993-1996 Residency in Radiodiagnostics, University Clinics of Radiodiagnosics, Univ of Vienna
1992/1993 Research fellow University of California, San Francisco
Department of Neuroradiology and Neuroradiology research
1990-1992 Residency in Radiodiagnostics, University Clinics of Radiodiagnosics, Univ of Vienna
1982-1990 Resident in Neurology and Psychiatry, University Clinics of neurology and Psychiatry Univ of Vienna
1981-1982 Residency in Internal Medicine, Hospital Lainz, Vienna

Career-related Activities
2004-2012 Medical examiner for the license to practice Radiology in Austria (Facharztprüfer der Österreichischen Ärztekammer)

Awards
1996 Reward of the Vienna Medical University for the best
Memberships
Austrian Society of Neuroradiology
Austrian Society Of Radiology
European Society of Neuroradiology
European Society of Radiology
Austrian Society for Perinatology
International Society of Perinatal Diagnostics

Sources of funding in last 6 years (2003 – 2008)

<table>
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<th>Period</th>
<th>Organization</th>
<th>Short Title</th>
<th>K€/year</th>
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<tr>
<td>2005</td>
<td>Fonds of the Mayor of Vienna</td>
<td>Wertigkeit der CT-Angiographie bei Patienten mit Aneurysmen</td>
<td></td>
</tr>
<tr>
<td>2005-2007</td>
<td>ECR</td>
<td>MRI in fetal lung maturation</td>
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<td>2006-2008</td>
<td>Aventis</td>
<td>Placebo-controlled study to evaluate efficacy and safety of Teriflunomide in subjects with MS which relapses</td>
<td></td>
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<td>2006-2008</td>
<td>Novartis</td>
<td>Plazebo-kontrollierte Studie um Die Effektivität und Sicherheit Von Interferon beta-1a bei Patienten mit schubförmiger MS</td>
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<tr>
<td>2007-2009</td>
<td>Schering</td>
<td>Studie zur Verträglichkeit von Gadovist bei Kindern</td>
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Dr rer nat., Dr sci med. Dr techn. or PhD supervisions in last 6 years (2003 – 2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
</tr>
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<tbody>
<tr>
<td>2006</td>
<td>Linde WITZANI</td>
<td>Normal renal development investigated with fetal MRI</td>
</tr>
<tr>
<td>2006</td>
<td>Linde WITZANI</td>
<td>MRI of the fetal abdomen</td>
</tr>
<tr>
<td>2006</td>
<td>Linde WITZANI</td>
<td>Fetal MRI of the urinary system.</td>
</tr>
<tr>
<td>2006</td>
<td>Gregor KASPRIAN</td>
<td>[Fetal lung development on MRT. Normal course and impairment due to premature rupture of membranes]</td>
</tr>
<tr>
<td>2006</td>
<td>Gregor KASPRIAN</td>
<td>MRI of normal fetal brain development</td>
</tr>
<tr>
<td>2006</td>
<td>Gregor KASPRIAN</td>
<td>MRI of normal and pathological fetal lung development.</td>
</tr>
<tr>
<td>2006</td>
<td>Gregor KASPRIAN</td>
<td>MRI of fetal acquired brain lesions.</td>
</tr>
<tr>
<td>2007</td>
<td>Gregor KASPRIAN</td>
<td>MRI investigation of normal fetal lung maturation using signal intensities on different imaging sequences.</td>
</tr>
</tbody>
</table>
Publications

Peer reviewed manuscripts in last 6 years (2003 – 2008, original research and reviews)

First, last or corresponding author manuscripts:


Doctoral Program Clinical Neurosciences (CLINS) -60-


Co-author manuscripts:

Riederer F, Lanzenberger R, Kaya M, **Prayer D**, Serles W, Baumgartner C
Network Atrophy in Temporal Lobe Epilepsy – a Voxel-based Morphometry (VBM) Study.
Neurology 2008 (in press)

Rossmanith W, Freilinger M, Roka J, Raffelsberger T, Moser-Thier K, **Prayer D**, Bernert G,
Bittner RE.
Isolated cytochrome c oxidase deficiency as a cause of MELAS. J Med Genet. 2008
Feb;45(2):117-21.

Leithner K, Pörnbacher S, Assem-Hilger E, Krampl E, Ponocny-Seliger E, **Prayer D**.
Psychological reactions in women undergoing fetal magnetic resonance imaging.

Refining clinical phenotypes in septo-optic dysplasia based on MRI findings.


Haberler C, Slavc I, Czech T, **Prayer D**, Pirker C, Budka H, Hainfellner JA.


Piribauer M, Czech T, Dieckmann K, Birner P, Hainfellner JA, Prayer D,


**Invited Talks in last 6 years (2003 – 2008)**

- Prä- und postnatale MRT-Diagnosik bei fetalen Hirnfehlbildungen – wann sinnvoll?
  24.10. – 25.10.07, Center Leipzig
- European Society of Neuroradiology, Annual Meeting, 16th Advanced Course the Pediatric Posterior Cranial Fossa. Usefulness of Fetal MRI. 20.9.2007, Genoa, Italy
- European Society of Neuroradiology, Annual Meeting, 16th Advanced Course the Pediatric Posterior Cranial Fossa. Round Table. 20.9.2007, Genoa, Italy
- European Society of Neuroradiology, Annual Meeting, 16th Advanced Course the Pediatric Posterior Cranial Fossa. 20.9.2007 Genoa, Italy
- 3 presentations on fetal MRI, case discussion and study meeting
  Multi-disciplinary meetings of Fetal and Congenital Malformations. 4.9. – 8.9.07, Tel-Aviv, Israel
- LKH Salzburg. MRT in der Abklärung der Epilepsie.
  24.7.07, Salzburg
- American Society of Neuroradiologie (ASNR). Lamination of the Fetal Brain on Prenatal MR Scans: An Early Indicator of Normal or Abnormal Cerebral Development. 11.6. – 14.6.2007, Chicago, USA
- The 6th Graz Symposium on Developmental Neurology.
  Fetal MRI vom Structure to Behavior. 3.5. – 5.5.07, Graz
- Gastprofessur. 18.- 21.3.2007, San Francisco/Standford
kompatiblen Inkubator. Der Radiologe 8: 725. 2006, Leipzig

9th Danube Symposium of Paediatric Surgery. Fetal magnetic resonance imaging (MRI): Indications. 2005, Vienna


Fortbildung der Radiologie Universität Münster. Fetale MRT wie, wann, warum, wer ? 6.– 7.4.2005, Münster


ECR. Body MR imaging. 4.-8.3.2005, Vienna
Fortbildungsveranstaltung Universität Bern, 23.2. – 24.2.2005, Bern

Fetal Neurology. The Multidisciplinary Approach Course University. Pränatale MR-Diagnostik des Gehirns. 19.- 22.2.2005, Tel Aviv / Israel


ASNR. The triangular crossroads- a "Wetterwinkel" of the fetal brain, abstract in. 2005, Toronto


ASNR 2004. Fetal Brain MR Imaging in Placental Impairment. 5.11.2004, Seattle

Philips IACSM. Fetal MR Imaging. 2004, Eindhoven


Fetal MRI in oligohydramnios. ECR 2004, Vienna.

ESMRN 2004. Diffusion-weighted imaging in fetal MRI- what can it be used for? Genua, Italy

Philips User – Meeting. Fetal MRI – Where are we, where do we go ?. 8.10.2004, Utrecht

14th World Congress on Ultrasound in Obstetrics and Gynecology. Fetal MRI – Luxury or necessity. 31.8. – 3.9.2004

Fetal MRI – Methods and Indications

ESMRN. Assessment of fetal behavior with dynamic MR-sequences. 2004, Genua, Italy


ASNR. Diffusion Weighted Imaging (DWI) in Intrauterine Brain Development 2003 Washington DC

13th World Congress on Ultrasound in Obstetrics and Gynecology, Ultrasound in Obstetrics and Gynecology 22, Suppl. 1, p3. Assessment of intrauterine brain maturation using Diffusion Weighted Imaging. 2003, Paris


Thesis project topic:

**Clinical and translational brain tumour biomarker research**

Project supervisors:

**PREUSSER, Matthias** (in cooperation with HAINFELLNER, Johannes A.)
Department of Oncology, Matthias.Preusser@meduniwien.ac.at

Brief description of the field of research:

**Goal:** to assess and to test clinical usability and analytical performance of new laboratory methods and candidate biomarkers in brain tumours, as basis for optimized therapy decisions

**Techniques:** histological techniques, immunohistochemistry, in-situ hybridization, PCR, statistical analysis (in cooperation with Medical Statistics)

**Approach:** testing of reliability and reproducibility of new analytical laboratory tests, interlaboratory comparisons, correlation of biomarker information with patient outcome and response to therapy (in cooperation with Medical Oncology and Medical Statistics).

**Deliverables:** Clarification of clinical relevance of new brain tumour candidate biomarkers, clarification of clinical usability of new laboratory techniques

Benefits for the future professional career of students:

Acquired scientific competence is useful for a future specialization in any field of clinical neuroscience, pathology, and oncology. In particular, students get a sound basis for an academic career in the multidisciplinary field of brain tumour diagnosis and therapy.
Curriculum Vitae

Name
PREUSSER, Matthias, MD

Address
Department of Internal Medicine I
Medical University of Vienna
Währinger Gürtel 18-20
A-1097 Vienna

Personal Data
Date of Birth: 29-10-1976
Place of Birth: Mödling, Austria
Nationality German

Education
2007-2008 Training in interdisciplinary Psycho-Oncology: „Breaking Bad News”
2006- Fellow in Internal Medicine/Oncology, Department of Internal Medicine I, Medical University of Vienna
2005-2006 Fellow in Neuropathology, Institute of Neurology, Medical University of Vienna
2005 Training as moderator of “Problem-oriented learning (POL)”, Medical University of Vienna
2005 Training in “Medical Education at the Medical University of Vienna”
2003-3004 Post-graduate training in Medical Statistics and Biometrics, Medical University of Vienna
2003 Medical Doctor Degree at the Medical University of Vienna
1995-1996 Visiting student at the University of Southwestern Louisiana (USL), Lafayette, U.S.A
1995 A-levels, GRG 12, Vienna, Austria

Career History
04/2008 Submission of application to acquire the Venia docendi (Habilitation) in „Experimental Oncology”
Career-related Activities

2008-
Translator for the german edition of the Journal of Clinical Oncology (JCO)

2006-2007
Supervision of diploma thesis of Cand.med. Felicia Popovici “Establishing chromosome 1p microsatellite markers for PCR-based molecular genetic testing of oligodendrogial neoplasms: systematic analysis of frequency of heterozygosity and comparison with FISH”

2005-
Service as reviewer for several scientific journals (Clinical Cancer Research, BMC Cancer, Neuropathology and Applied Neurobiology, Histology and Histopathology, Pathology in Research and Practice, Neurology India)

2004-
Lecturing/teaching of medical students in Neuropathology/Neurology, Internal Medicine, Oncology

Memberships
European Organisation for Research and Treatment of Cancer (EORTC) Brain Tumour Group
American Association for Cancer Research (AACR)
European Association of Neurooncology (EANO)
Austrian Society of Neuropathology (ÖGNP)
German Society of Neuropathology and Neuroanatomy (DGNN)
European Confederation of Neuropathological Societies (Euro-CNS)
International Society of Neuropathology (ISN)

Sources of funding in last 6 years (2003 – 2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Organization</th>
<th>Short Title</th>
<th>K€/year</th>
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<tr>
<td>2006-2007</td>
<td>Initiative</td>
<td>In vivo Bedeutung der Hypoxie für Telomerase und Telomere bei astrozytären Tumoren WHO Grad II-IV</td>
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Dr. rer. nat., Dr. sci. med. Dr. techn. or PhD supervisions in last 6 years (2003 – 2008)

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<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
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<tr>
<td>2007</td>
<td>Ute Laggner*</td>
<td>Immunohistochemical detection of class III beta-tubulin in primary brain tumours: variable expression in most tumour types limits utility as differential diagnostic marker.</td>
</tr>
<tr>
<td>2006</td>
<td>Iris Pipp*</td>
<td>Secretagogin expression in tumours of the human brain and its coverings.</td>
</tr>
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*Supervision of research work and publication as peer-reviewed original paper, see list of publications.

Publications
33 peer reviewed publications in scientific journals, 3 book chapters, 4 invited lectures

Peer reviewed manuscripts in last 6 years (2003 – 2008, original research and reviews)

First, last or corresponding author manuscripts:


Doctoral Program Clinical Neurosciences (CLINS) -72-


Preusser M, Budka H, Rössler K, Hainfellner JA. OLIG2 is a useful immunohistochemical marker in differential diagnosis of clear cell primary CNS neoplasms. Histopathol. 2007 Feb;50(3):365-70


Preusser M, Kitzwoegerer M, Budka H, Brugger S. Bilateral striopallidodentate calcification (Fahr’s syndrome) and multiple system atrophy in a patient with longstanding hypoparathyroidism. Neuropathology. 2007 Oct;27(5):453-6


Co-author manuscripts:


Attems J, Preusser M, Grosinger-Quass M, Wagner L, Lintner F, Jellinger K. Calcium binding protein secretagogin expressing neurones in the human hippocampus are
largely resistant to neurodegeneration in Alzheimer disease.
Neuropathol Appl Neurobiol. 2007 Oct 24


Invited Talks in last 6 years (2003 – 2008)
Optimal approaches to MGMT assessment. Perspectives in Central Nervous System Malignancies meeting, 28-29 March 2008, Berlin, Germany

Evaluating clinical utility of MGMT immunolabelling in GBM: Interobserver agreement, comparison with MSP and correlation with patient outcome in EORTC/NCIC trial 26981/22981. Pathology of Brain Tumours Symposium at the Brain Tumour Group Meeting of the European Organization for Research and Treatment of Cancer (EORTC), Brussels, March 7th 2007

Konfokale Laserscanning Mikroskopie: Anwendungsbeispiele. 20. Frühjahrstagung der Österreichischen Gesellschaft für Pathologie (ÖGP) und 7. Gemeinsame Fortbildungstagung für Ärzte und Biomedizinische AnalytikerInnen, 19.05.2006, Linz, Austria

Pathological prion protein deposits in the human brain: from immunohistological pattern to subcellular localization. 8th European Congress of Neuropathology, Amsterdam, June 24–28 2005
Thesis project topic:
Quantitative eeg measures to define neurologic function in pediatric critical care patients

Project supervisor:
TRITTENWEIN, Gerhard
Pediatric Intensive Care Unit, Department of Pediatrics, University of Vienna, Austria, gerhard.trittenwein@meduniwien.ac.at

Brief description of the field of research:

Goal: To investigate quantitative eeg measures which enable to describe actual neurological function in pediatric critical care patients particularly of recall during critical care and of prognosis after severe cerebral damage

Techniques: routine digital eeg recordings were investigated retrospectively along with simultaneous findings of clinical neurological function, of underlying critical care illness, of physiologic parameters and of medication relevant to influence brain function

Approach: Microprocessor aided analysis of quantitative eeg developed by ourselves to derive measures of electric and resonance function of the pediatric brain during critical care. Those measures were compared statistically within different clinical conditions and ages and confidence intervals as well as regressions were calculated.

Deliverables: Reference values and mathematical areas of specific pathological values enable reliable and easy to perform parameters to define recall and prognosis in pediatric critical care patients.

Benefits for the future professional career of students:

Acquired scientific competence is useful for a future specialization in any field of clinical neuroscience, pediatrics and pediatric critical care. In particular, students get a sound basis for an academic career in the multidisciplinary field of pediatric critical care.
Curriculum Vitae

Name
TRITTENWEIN, Gerhard, MD, Professor of Pediatrics

Address
Pediatric Intensive Care Unit (PICU), Department of Pediatrics, Medical University of Vienna
Währinger Gürtel 18-20
A-1097 Vienna, Austria

Personal Data
Date of Birth: 04-11-1948
Place of Birth: Vienna
Nationality Austria

Education
1995 Degree as medical specialist in psychotherapy
1995 Degree as medical specialist in pediatric intensive care
1983 Degree as medical specialist in pediatrics
1978 Degree as medical specialist in anesthesiology
1975 Degree as general practitioner
1972 Medical Doctor Degree at the Medical University of Vienna

Career History
1999 Venia docendi in pediatrics
Since 1992 Head of Pediatric Intensive Care Unit of University
Children’s Hospital Vienna

Career-related Activities
from – to

Awards
Year

Memberships
Austrian Society of Pediatrics
German-Austrian Society of Neonatology and Pediatric Intensive Care
International Society of Rotary Blood Pumps

Sources of funding in last 6 years (2003 – 2008)
Dr. rer. nat., Dr. sci. med. Dr. techn. or PhD supervisions in last 6 years (2003 – 2008)

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<th>Period</th>
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<th>Topic</th>
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<td>2007</td>
<td>Sandra Plenk</td>
<td>Quantitative EEG values in ventilated critical care neonates</td>
</tr>
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Publications

Peer reviewed manuscripts in last 6 years (2003 – 2008, original research and reviews)

First, last or corresponding author manuscripts:


Co-author manuscripts:

Thesis project topic:
Neurophysiologic methods for early prognostic information of neurological function in very preterm infants

Project supervisor:
Manfred WENINGER, Department of Pediatrics and Adolescent Medicine, Division of General Pediatrics and Neonatology, University of Vienna, Austria
manfred.weninger@meduniwien.ac.at

Brief description of the field of research:

Goal: To compare neurophysiological methods for prognostic power for later neurodevelopmental outcome in very low birth weight infants. Techniques: aEEG (amplitude-integrated EEG), conventional Video-EEG, VEP (visual evoked potential), and NIRS (near infrared spectroscopy) were investigated prospectively along with simultaneous findings of brain morphology (CUS (vertebral ultrasound) and MRI (magnetic resonance imaging) ), clinical neurologic function, of underlying critical care illness and physiological parameters which are known to influence brain function. Approach: Comparison of the above mentioned neurophysiological methods with regard to prognostic power for patient`s outcome and response to therapy. Deliverables: Clarification of the clinical relevance and clinical usability of the different neurophysiological techniques

Benefits for the future professional career of students:

Acquired scientific competence is useful for a future specialization in any field of clinical neuroscience, pediatrics, pediatric critical care and neonatology. In particular, students get a sound basis for an academic career in the multidisciplinary field of pediatrics and neonatology.

Previously supervised scientific co-workers have specialized in: pediatrics and neonatology.
Curriculum Vitae

Name
Manfred WENINGER, MD

Address
NICU, Department of Pediatrics and Adolescent Medicine, Division of General Pediatrics and Neonatology, Medical University of Vienna
Währinger Gürtel 18-20
A-1097 Vienna

Personal Data
Date of Birth: 15 – 04 - 1950
Place of Birth: Zams in Tirol
Nationality Austria

Education
1983 Diploma as Specialist in Pediatrics (Facharzt)
1979 Jus practicandi (Diploma as General Practionar)
1975 Graduation from Medical School

Career History
Since 2007 Head of the Clinical Competence Centre (CCC) NICU Ebene 10 and Ebene 12 – Intermediate Care and Head of the Scientific Competence Centre (FCC) NICU and Pediatric Intensive Care
2000 Deputy Head of the Division of Neonatology
Head of the ambulance for sudden infant death syndrome
1996 Head of Division of NICU Ebene 12
1996 Associate Professor of Pediatrics (Tit.ao. Univ. Prof.)
Lecturer in Pediatric (Univ. Doz.)
Since 1983 Consultant in Neonatology and Pediatrics Intensiv Care
(Oberarzt)
1979 – 1983 Residency in Pediatrics, University Children`s Hospital of Vienna
1975 – 1978 Clinical Residency (Krankenhaus Mistelbach)
Awards
1995 Österreich – Preis der österreichischen Gesellschaft für Kinder- und Jugendheilkunde

Memberships
Pediatrics

Austrian German Society of Neonatology and Pediatric Intensive Care
European Society of Pediatric Research
American Society of Pediatric Research
Austrian Society of Pediatrics

Perinatology

Austrian Society Obstetrics and Gynecology, Neonatology and Anesthesia

Sources of funding in last 6 years (2003 – 2008)

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<th>Period</th>
<th>Organization</th>
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<tr>
<td>2005-</td>
<td>Österreichische Nationalbank 11593</td>
<td>Hat die Senkung des intrakraniellen Himdruckes bei Frühgeborenen mit Hydrocephalus einen Einfluß auf die zerebrale Durchblutung und Oxygenierung?</td>
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<tr>
<td>2008-</td>
<td>Firma Mattel</td>
<td>Neurophysiologische Evaluation mittels visuell evozierter Potentiale und amplituden-integrierterm EEG als sensitiver Marker zur Erfassung der Hirnfunktion vor und nach einer neurochirurgischen Intervention zur intrakraniellen Drucksenkung bei Frühgeborenen mit posthämorrhagischem Hydrocephalus</td>
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Dr rer nat., Dr sci med. Dr techn. or PhD supervisions in last 6 years (2003 – 2008)

Only students in your lab, no external

<table>
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<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
</tr>
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<tbody>
<tr>
<td>2003</td>
<td>Ewelina CZTERNASTEK*</td>
<td>The Development of General Movements in Preterm Infants born between the 23rd and 30th week of Gestation</td>
</tr>
<tr>
<td>2007</td>
<td>Christine CZABA*</td>
<td>Intraventricular hemorrhage in the premature infant below 1500 g</td>
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</tbody>
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*Supervision of doctoral thesis
Supervision of research work and publication as peer-reviewed original paper, see list of publications

Publications
54 peer reviewed publications in scientific journals (1992-2008)

Peer reviewed manuscripts in last 6 years (2003 – 2008, original research and reviews)

First, last or corresponding author manuscripts:


Co-author manuscripts:


Invited Talks in last 6 years (2003 – 2008)


Thesis project topic:
The clinical application of chemical shift imaging in Neurooncology

Project supervisor:
WOLFSBERGER, Stefan
Department of Neurosurgery; stefan.wolfsberger@meduniwien.ac.at

Brief description of the field of research:

Goal: To assess the feasibility and clinical usefulness of chemical shift imaging (CSI) for preoperative evaluation, intraoperative application, histopathology, and postoperative adjuvant treatment strategies in neurooncology.

Techniques: Two- and three-dimensional CSI\(^1\), positron emission tomography (PET)\(^2\), image pre-processing, image registration, neuronavigation, tumor resection / biopsy, histopathological techniques\(^3\), radiation\(^4\) and oncologic\(^5\) therapies, statistical analysis\(^6\). Cooperations exist with ¹Department of Radiology, ²Department of Nuclear Medicine, ³Clinical Institute for Neurology, ⁴Department of Radiotherapy, ⁵Department of Internal Medicine I, and ⁶Medical Statistics.

Approach: Testing of feasibility of intraoperative application of pre-processed CSI in neuronavigation, correlation of different CSI ratio-hotspots with current standard metabolic assessment technique (PET) and histopathology, development of two-dimensional CSI co-planar to the biopsy trajectory, development and evaluation of three-dimensional CSI in high-field MRI at 3 and 7 Tesla, development and evaluation of CSI ratio thresholds for delineation of tumor margins.

Deliverables: Clarification of feasibility of intraoperative application, clarification of relevance and clinical usability of CSI as a new metabolic imaging technique in neurooncology.

Benefits for the future professional career of students:

Acquired scientific competence is useful for a future specialization in any field of clinical neuroscience. In particular, students get a sound basis in the field of preoperative evaluation of brain tumours, state-of-the-art brain tumor surgery and postoperative therapies.

Previously supervised scientific co-workers have specialised in: neurosurgery, neurology, general medicine.
*Curriculum Vitae*

**Name**

**Stefan Wolfsberger**

**Address**

Department of Neurosurgery, Medical University of Vienna
Währinger Gürtel 18-20
A-1097 Vienna

**Personal Data**

Date of Birth: 22.01.1970
Place of Birth: Vienna
Nationality: Austria

**Education**

2006 – Postgraduate MBA course in health care management, Medical University Vienna, Austria
2003 Degree as medical specialist (Facharzt) in Neurosurgery
1997 Medical Doctor Degree at the Medical University of Vienna
1992 – 93 Medical Studies at the University of Bristol, UK
1988 – 96 Medical Studies at the University of Vienna
1988 A-levels, BG 21, Vienna
1985 – 95 Music Studies at Vienna Conservatory (Concert Piano)

**Career History**

2006 - Consultant (Oberarzt) in Neurosurgery, Department of Neurosurgery, University Hospital Vienna
2005 Venia legendi (Habilitation) in Neurosurgery
1997 – 2003 Resident in Neurosurgery, Department of Neurosurgery, University Hospital Vienna
1997 Military Service at the Department of Traumatology, Hospital Korneuburg

**Career-related Activities**

2007 Organizer of the 2007 Meeting of the International Society of Pituitary Surgeons
2005 Member of Medtronic Navigation Panel
2003 - Organizer of the yearly Endoscopic Pituitary Workshop, Depts. of Anatomy and Neurosurgery, Med. Univ.of Vienna
Awards
2007 IEEE Visualization 2007: Best Applications Paper Award (High-quality multimodal volume rendering for preoperative planning of neurosurgical interventions)
2004 IEEE Visualization 2004: Best Applications Paper Award (STEPS – an application for simulation of transsphenoidal endonasal pituitary surgery)
1993 Francis Dudley Memorial Prize (Dissection of N.maxillaris)

Memberships
Austrian Society of Neurosurgery
International Society of Pituitary Surgeons

Dr.rer.nat., Dr.sci.med. Dr. techn. or PhD supervisions in last 6 years (2003 – 2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student*</th>
<th>Topic</th>
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<tbody>
<tr>
<td>2007</td>
<td>Tanja Mayerhofer*</td>
<td>DTI für die präoperative Planung und intraoperative Navigation neurochirurgischer Eingriffe</td>
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<tr>
<td>2007</td>
<td>Alexander Micko*</td>
<td>Mikroskopischer versus endoskopischer Zugang zu Hypophysenadenomen: Technik, Ergebnisse und Komplikationen</td>
</tr>
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<td>2006</td>
<td>Serge Mikayel*</td>
<td>Volumen Rendering für die dreidimensionale Planung neurochirurgischer Zugänge</td>
</tr>
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<td>2005</td>
<td>André Neubauer*</td>
<td>Virtual Endoscopy for Preoperative Planning and Training of Endonasal Transsphenoidal Pituitary Surgery</td>
</tr>
<tr>
<td>2003</td>
<td>Jörg Wunderer*</td>
<td>Analyse der klinischen Wertigkeit der histologischen Zellproliferationsmarker MIB-1 und Topoisomerase II alpha bei Hypophysenadenomen</td>
</tr>
<tr>
<td>2003</td>
<td>Marie-Therese Forster*</td>
<td>Virtuelle Endoskopie von Hypophysenadenomen</td>
</tr>
<tr>
<td>2001</td>
<td>Anita Mederitsch*</td>
<td>Risikofaktoren für Infektionen bei externen Ventrikeldrainagen</td>
</tr>
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</table>

* Supervision of doctoral thesis
Publications
27 peer reviewed publications in scientific journals, 1 book chapter, 10 invited lectures

Peer reviewed manuscripts in last 6 years (2003 – 2008, original research and reviews)

First, last or corresponding author manuscripts:


Doctoral Program Clinical Neurosciences (CLINS) -88-
Co-author manuscripts:


Invited Talks in last 6 years (2003 – 2008)


