

Preliminary Program



European Society of Magnetic Resonance in Neuropediatrics ESMRN

10th International Congress

September 3–5, 2009
University Hospital Zurich, Switzerland
www.imk.ch/esmrn2009

**Deadline Abstract Submission
May 6th, 2009**

Welcome to Zurich

Dear Colleagues,

We are pleased to announce the 10th International Congress of the European Society of Magnetic Resonance in Neuropediatrics (ESMRN) held in Zurich, Switzerland.

The ESMRN is a meeting place for neuroscientists, pediatric neurologists, scientists interested in developmental pediatrics, neonatologists, neuro-radiologists, neuropsychologists, neurophysiologists and physicists. Newest developments in advanced neuroimaging and image guided therapeutic approaches in the fields of normal and pathological brain development and brain functions will be presented by internationally recognized experts.

The congress takes place from Thursday, September 3 to Saturday, September 5, 2009 at the University Hospital Zurich and consists of key note lectures, advanced scientific lectures and poster presentations.

Sincerely Yours,

A handwritten signature in blue ink, appearing to read 'Ernst Martin', written in a cursive style.

Prof. Ernst Martin

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General Information

Date	September 3-5, 2009
Congress Venue	University Hospital Zurich Hörsaal Nordtrakt 1 Rämistrasse 100 CH-8091 Zurich
Webpages	www.imk.ch/esmrn2009 www.esmrn.com
Organizing Committee	Ernst Martin (President of ESMRN), Ianina Scheer, Ursula Staubli, Beat Werner, Zurich, Switzerland
Scientific Committee	J. Barkovich, San Francisco, USA D. Brandeis, Zurich, Switzerland K. Bucher, Zurich, Switzerland J. Hennig, Freiburg i. Br., Germany D. Jeanmonod, Zurich, Switzerland P. Klaver, Zurich, Switzerland E. Martin, Zurich, Switzerland C. Raybaud, Toronto, Canada
Administrative Secretariat	IMK Institute for Medicine and Communication Ltd Münsterberg 1, CH-4001 Basel Phone +41 (0)61 271 35 51 Fax: +41 (0)61 271 33 38 mail@imk.ch www.imk.ch
Registration	Online registration and secure online payment at: www.imk.ch/esmrn2009

General Information

Fees in CHF	Early bird (until June 30, 2009)	After June 30, 2009 and on site
Physicians, whole congress *	750	800
Physicians, 1 day **	400	450
Physicians in training, whole congress *	500	550
Physicians in training, 1 day **	300	340
Student, whole congress *	375	400
Student, 1 day **	200	225
Social dinner for accompanying person	100	120

* incl. all scientific sessions, certificate of attendance, coffee & lunch breaks, cocktail reception, social dinner, congress bag

** incl. scientific program for 1 day, certificate of attendance, coffee & lunch break, congress bag

Cancellation policy

All cancellations must be faxed or electronically mailed:

- Cancellations received up to June 15, 2009 - full refund less CHF 50 handling fee will be made
- Cancellations received between June 16 and August 1, 2009 - 50% refund will be made
- After August 1, 2009 - no refund will be made

Social dinner

Friday, September 4, 2009, Zunfthaus zur Meisen, Zurich (included in participation fees)

Language

The congress will be held in English.

General Information

Accommodation Zurich provides approximately 250 hotels in the region – from luxury hotels to sleeping on straw.

Please use the following link for accommodation
<http://hotels.zuerich.com/esmnrn2009/english>

or contact Zurich Tourism directly:

Zürich Tourismus
Im Hauptbahnhof
CH-8021 Zurich
Information: +41 (0) 44 215 40 00
Hotelreservation: +41 (0) 44 215 40 40
carmen.rana@zuerich.com
www.zuerich.com

Travel Information



Swiss International Air Lines is proud to be the Official Carrier for the 10th International Congress of the European Society of Magnetic Resonance in Neuropediatrics (ESMRN) and is offering special Congress Fares to all participants. The Congress Fares offer reductions of up to 25% depending on the fare type, route and space availability.

Congress Fares are valid on the entire SWISS route network for flights to Switzerland, including flights operated by partner airlines under an LX flight number. The fares are bookable for the travel period 14 days prior to and 14 days after the congress.

To take advantage of this offer, book easily and conveniently through the congress homepage:
www.imk.ch/esmnrn2009

Credits

National Credits

Following credits have been requested	
Swiss Society of Neurology	Thursday: 7 Credits Friday: 7 Credits Saturday: 6 Credits
Swiss Society of Neuropediatrics	15 Credits
Swiss Society of Neonatology	8 Credits
Swiss Society of Radiology	20 Credits

International Credits CME Accreditation

The quality of continuing education will be rated by the CME system of the European Accreditation Council for Continuing Medical Education, Institution of the UEMS.

**Rating of the ESMRN congress:
EACCME: 17 Credits**

The American Medical Association (AMA) has an agreement of mutual recognition of Continuing Medical Education (CME) credits with the European Union of Medical Specialists (UEMS). Under the terms of this agreement, the AMA will convert CME credits certified by the European Accreditation Council for Continuing Medical Education (EACCME), the accrediting arm of the UEMS, to AMA PRA Category 1 Credit™. Physicians (MDs, DOs or equivalent international degree) may have their EACCME credits converted to AMA PRA Category 1 Credit™ by applying to the AMA.

To convert EACCME credits to AMA PRA category 1 credit, contact AMA (<http://www.ama-assn.org>).

Abstracts

- Call For Abstracts** The European Society of Magnetic Resonance in Neuropediatrics (ESMRN) invites you to submit abstracts for posters to be presented at the 10th International Congress of ESMRN, held September 3 to 5, 2009, in Zurich, Switzerland.
- Posters will be exhibited throughout the congress. The presenting author shall be prepared to discuss the research work during the lunch breaks on Thursday or Friday. Presentation times will be assigned upon acceptance of the abstract, and a time table will be sent to the presenters before the meeting.
- ESMRN expects that original data will be presented at the meeting. Thus, abstracts previously published may not be submitted to ESMRN without modification. Data must be updated or expanded resulting in a new abstract.
- Submission** Online submission of poster abstracts at:
www.imk.ch/esmrn2009
- In case you have questions or problems, please do not hesitate to contact the administrative secretariat:
- IMK Institute for Medicine and Communication Ltd
Münsterberg 1, CH-4001 Basel
Phone +41 (0)61 271 35 51
Fax: +41 (0)61 271 33 38
mail@imk.ch
www.imk.ch
- Deadline** Deadline for submission of poster abstracts: May 6, 2009
- Acceptance notification** Abstract acceptance for posters will be communicated to the primary author by June 2, 2009.
- Registration Guidelines for Presenters** ESMRN will not waive the registration fee for presenters. These are responsible for all personal expenses (e.g., travel, hotel) and must register for the congress.

Abstracts

Important Information about Submission

- Abstracts are limited to 300 words (title, authors' names, affiliation and acknowledgments excluded). Images and/or tables are NOT allowed.
- The abstract shall contain all authors' names. The poster presenter's name must be stated.
- The corresponding author's email and affiliation address, including phone number, must be added at the end of the abstract in order to receive confirmation.
- The abstract shall be divided into «Aim(s),» «Methods,» «Results», «Conclusions» and "Acknowledgments" if applicable (see below).
- References must be placed at the end of the abstract using the following format: author name, journal name, year of publication, volume, starting page, without manuscript title e.g., Smith AG, et al. J Fant 2002:79:567.
- Abstracts must be written in English.

Selection Criteria

Poster submissions will be reviewed and rated by members of the ESMRN board and the scientific committee.

Social Program

Welcome Drink All congress participants are invited to the welcome drink on Wednesday, September 2, 2009

Speakers Dinner For invited guests only
Thursday, September 3, 2009, 19.30h



Sorell Hotel Zürichberg
Orellistrasse 21, CH-8044 Zurich
Phone: +41 (0)44 268 35 55
www.zuerichberg.ch

Social Dinner Friday, September 4, 2009, 19.30h



Zunft Haus zur Meisen
Münsterhof 20, CH-8001 Zurich
Tel. +41 (0)44 211 21 44
www.zunft-haus-zur-meisen.ch

Facts and Figures about Zurich

- Geography**
- Location: in the heart of Europe, in the center of Switzerland, 409m/1342 ft above sea level
 - Total surface area of the city: 92 km²/35.52 square miles, divided into 12 districts
 - Total surface area of the region: approx. 2,200 km²/850 square miles, including Zurich Airport, Rapperswil-Lake Zurich, Baden, Winterthur, Zug
 - Lake Zurich: 28 km/17.4 miles long, up to 4 km/2.485 miles wide, up to 143 m/469.2 ft deep, very good water quality
 - Climate: 4 seasons, approx. 3,500 hours of sunshine each year, pleasant humidity levels
 - Summer: average daily temperature 22 °C/71.6 °F
 - Winter: -2 to 3.5 °C/28.4 to 38.3 °F

City of Zurich the largest city in Switzerland, with 370,000 inhabitants

Canton of Zurich 1.275 million inhabitants

Languages: Zurich German dialect, French, Italian

Currency Accepted currencies in Zurich (in most shops, restaurants, hotels.):

* Swiss Franc

* Euro

* Credit cards like MasterCard, VISA, American Express etc.

Facts and Figures about Zurich

Convenient Location/ Public Transportation

- Zurich International Airport: direct flights to more than 150 destinations, 10 minute train ride from the city center, nominated for Europe's best airport in 2007
- Zurich Main Station: frequent connections to Swiss tourist destinations and European cities
- The world's densest public transport network: urban railway serves the Zurich region every half or quarter of an hour, buses and streetcars every few minutes

History of the City of Zurich

- Towards the end of the 20th century, new, urban life is breathed into former industrial districts – Zurich develops into a lifestyle and party capital
- 1946: electorate vote to build Zurich Airport, which is now a hub for international air traffic
- Zurich has frequently been the point of departure, center and transit station of avant-garde writers and artists such as Mozart, Goethe, Lenin, Georg Buchner and Thomas Mann
- 1855: Gottfried Semper builds the Swiss Federal Institute of Technology (ETH) Zurich
- 1847: the Spanisch-Brötli railway embarks on its maiden voyage from Zurich to Baden. By building Zurich Main Station, the Gotthard Tunnel and the foundation of Credit Suisse, statesman Alfred Escher establishes the infrastructure for rail traffic and business in Zurich
- 1833: the city's fortifications are demolished
- In the 16th century, Zurich becomes the point of departure and center of the Reformation in German-speaking Switzerland under Huldrych Zwingli
- 1351: Zurich joins the Swiss Confederation
- 1336: Rudolf Brun establishes the guilds' constitution
- Zurich has enjoyed the town privilege since the 10th century
- In the Middle Ages, Zurich is an important place of pilgrimage thanks to the relics of Felix and Regula, the city's patron saints
- 15 B.C.: the Roman customs station, «Turicum», is set up on the Lindenhof – now a vantage point in the very well preserved Old Town



Scientific Program

Thursday, September 3, 2009

8.00–8.15 Welcome
E. Martin, Zurich, Switzerland

8.15–9.00 **Special Morning Lecture**
Normal Pre- and Postnatal Brain Development
J. Barkovich, San Francisco, USA

Scientific Sessions

1st Session

9.00–12.45 **Neuroimaging of Acquired Brain Injury**
Chair: N. Girard, Marseille, France

9.00–9.45 Intrauterine Brain Injury
D. Prayer, Vienna, Austria

9.45–10.30 Peri- and Postnatal Brain Injury
M. Rutherford, London, United Kingdom

10.30–11.00 Coffee Break

11.00–11.45 Motor Brain Dysfunction: Morphology - Function Relationship
I. Krägeloh-Mann, Tübingen, Germany

11.45–12.30 Encephalitis and Related Inflammatory Brain Disorders
A. Rossi, Genoa, Italy

12.30–12.45 Panel Discussion
N. Girard, Marseille, France

Thursday, September 3, 2009

12.45-14.15 Lunch and guided poster tour

2nd Session

14.15-18.00 **Recent Advances in Developmental Brain Anomalies & Epilepsy**

Chair: C. Raybaud, Toronto, Canada

14.15-15.00 Gray Matter: Imaging, Embryology, Genetics
J. Barkovich, San Francisco, USA

15.00-15.45 White Matter: Imaging, Embryology, Genetics
C. Raybaud, Toronto, Canada

15.45-16.15 Coffee Break

16.15-17.00 Pathology and Pathogenesis of Epilepsy
R. Spreafico, Milan, Italy

17.00-17.45 Advanced Diagnostic Imaging of Epilepsy
E. Widjaja, Toronto, Canada

17.45-18.00 Panel Discussion
C. Raybaud, Toronto, Canada

19.30 Speakers Dinner
for invited guests only

Friday, September 4, 2009

8.15–9.00 **Special Morning Lecture**

Principles of the default network (EEG/ERP and fMRI) and its functional relevance in the developing brain

M. Raichle, St. Louis, USA

Scientific Sessions

3rd Session

9.00–12.45 **Advanced Imaging of Cognitive Brain Functions**

Chair: L. Jäncke, Zurich, Switzerland

9.00–9.45 Principles of Developmental and Adaptive Changes of Neuronal Networks in Neurocognition

L. Jäncke, Zurich, Switzerland

9.45–10.30 Development of Language Functions – Normal Reading and Dyslexia

D. Brandeis, Zurich, Switzerland

10.30–11.00 Coffee Break

11.00–11.45 Development of Number Processing – Normal Calculation and Dyscalculia

K. Kucian, Zurich, Switzerland

11.45–12.30 Development of Higher Visual Function – Normal Visual Perception and Visuo-Motor Deficits

P. Klaver, Zurich, Switzerland

12.30–12.45 Panel Discussion

L. Jäncke, Zurich, Switzerland

12.45–14.15 Lunch and guided poster tour

4th Session

14.15–18.00 **Advanced Imaging of Brain Plasticity**

Chair: WD. Gaillard, Washington, D.C., USA

14.15–15.00 DTI, Tractography and Connectivity

J. Hennig, Freiburg i. Br., Germany

15.00–15.45 DTI and Functional Imaging in Neonates, Infants and Small Children

L. Hertz-Pannier, Paris, France

Friday, September 4, 2009

- 15.45-16.15** Coffee Break
- 16.15-17.00** Functional Imaging of Developmental and Adaptive Changes in Neurocognition
WD. Gaillard, Washington, D.C., USA
- 17.00-17.45** Reparative plasticity (injury and recovery): What do DTI and functional imaging of prematurely born children tell us?
L. Ment, New Haven, CT, USA
- 17.45-18.00** Panel Discussion
WD. Gaillard, Washington, D.C., USA
- 19.30** Social Dinner

Saturday, September 5, 2009

- 8.15–8.45 Honorary Lecture**
10th Biennial Congress of the ESMRN
J. Valk, Amsterdam, Netherlands
- 8.45–9.30 Special Topic**
Network Concepts in Normal Brain Function
and in Functional Brain Disorders
R. Llinás, New York, USA
- 5th Session**
- 9.30–12.15 Network Concepts in Epilepsy I**
Chair: D. Brandeis, Zurich, Switzerland
- 9.30–10.15 Neural Networks in Childhood Epilepsy: Evidence of and possible
Implications for Treatment**
M. Siniatchkin, Kiel, Germany
- 10.15–10.45 Coffee Break**
- 10.45–11.30 Functional Networks underlying Epileptic Discharges using EEG, fMRI
and DTI**
K. Bucher, L. Michels, Zurich, Switzerland
- 11.30–12.15 Pathophysiology of Childhood Absence Epilepsy:
from Genes to Neural Networks**
V. Crunelli, Cardiff, United Kingdom
- 12.15–13.15 Lunch**

Saturday, September 5, 2009

6th Session

- 13.15–15.00** **Network Concepts in Epilepsy II**
Chair: L. Michels, Zurich, Switzerland
- 13.15–14.00** Thalamo-Cortical Dysrhythmia: Diagnostic and Therapeutic Experience in Epilepsy
D. Jeanmonod, Zurich, Switzerland
- 14.00–14.45** Non-Invasive Functional Neurosurgery using Transcranial MR-Guided High Intensity Focused Ultrasound
E. Martin, Zurich, Switzerland
- 14.45–15.00** Panel Discussion
D. Jeanmonod, Zurich, Switzerland
L. Michels, Zurich, Switzerland
- 15.00** Farewell
E. Martin, Zurich, Switzerland

Invited speakers

Prof. A. James Barkovich
University of California at San Francisco
Neuroradiology
Room L371, 505 Parnassus Ave
San Francisco USA

Prof. Daniel Brandeis
Department of Child
and Adolescent Psychiatry
University of Zurich
Neumunsterallee 9
CH -8032 Zurich

Dr. Kerstin Bucher
Universitäts-Kinderkliniken
MR-Zentrum
Steinwiesstrasse 75
CH-8032 Zurich

Prof. Vincenzo Crunelli
School of Bioscience Cardiff University
Museum Avenue, PO Box 911
UK-Cardiff CF 10 3US

Prof. William Gaillard
Children's National Medical Center
111 Michigan Ave NW,
US-Washington DC 20010

Prof. Nadine Girard
Neuroradiologie Diag.
et Interventionnelle
Hôpital de la Timone
Rue Saint-Pierre 13385
F-Marseille 5

Prof. Jurgen Henning
University Hospital Freiburg
Department of Diagnostic Radiology
Hugstetter Str. 55
D-79106 Freiburg

Prof. Lucie Hertz-Pannier
Pediatric Radiology Department
Necker-Enfants Malades Hospital
149 rue de Sevres
F-75015 Paris

Prof. Lutz Jäncke
Universität Zurich Neuropsychologie
Binzmühlestrasse 14
CH-8050 Zurich

Prof. Daniel Jeanmonod
Neurosurgical Department
University Hospital Zurich
Sternwartstrasse 6
CH-8091 Zurich

Dr. Peter Klaver
Universitäts-Kinderkliniken
MR-Zentrum
Steinwiesstrasse 75
CH-8032 Zurich

Prof. Ingeborg Krägeloh-Mann
Eberhard-Karls-Universität Tübingen
Universitätsklinik für Kinder- und
Jugendmedizin
Hoppe-Seyler-Straße 1
D-72076 Tübingen

Dr. Karin Kucian
Universitäts-Kinderkliniken
MR-Zentrum Steinwiesstrasse 75
CH-8032 Zurich

Prof. Rodolfo Llinas
Department of Physiology and
Neuroscience
New York University Medical Centre
550 First Avenue
US-NewYork

Invited speakers

Prof. Ernst Martin
Universitäts-Kinderkliniken
MR-Zentrum Steinwiesstrasse 75
CH-8032 Zurich

Prof. Laura Ment
Department of Pediatrics
Yale School of Medicine
P.O. Box 208064 / New Haven
06520-8064
US-Connecticut

Prof. Daniela Prayer
Medizinische Universität Wien
Universitätsklinik für Radiodiagnostik
Währinger Gürtel 18-20
A-1090 Wien

Prof. Marcus E. Raichle
Washington University School of Medicine
East Building, Room 2116
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IT20133 Milano

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