Dear colleagues,

On behalf of the organizing committee, I am pleased to invite you to the Conference & Workshop ‘Hallmarks of epileptic brain activity’, which will take place on 24 – 27 October 2017 in the Georgian National Academy of Science. The meeting will bring together EU and national physicians and researchers to explore and discuss opportunities and strengths related to the optimization of the pre-surgical epilepsy diagnostics in Georgia, the exchange of scientific ideas and concepts and the establishment of a new research network.

I hope that this international meeting will give rise to new perspectives and cooperation and will contribute to establish long-term relationships in clinic and scientific research. We feel that the topic of our meeting constitutes a timely and exciting growing field for both, clinic and experimental investigation, and look forward to sharing several interesting days with you.

Sincerely yours,

Tengis Gloveli
Conference Chairman
Conference

Tuesday, October 24, 2017

Registration 09:00-12:00

Opening Ceremony

10:00–11:00  T. Gloveli, M. Holtkamp
G. Kvesitadze – President of the Georgian National Academy of Science
R. Shakarishvili – President of the Georgian Union of Neurologists
Representative of the Ministry of Labour, Health & Social Affairs of Georgia
Representative of the German Embassy in Georgia

11.00 - 11:30 Coffee break

Plenary lectures (clinic): Chair Sofia Kasradze
11:30 - 12:15  Martin Holtkamp  Difficult-to-treat epilepsy and the barriers towards resective surgery
12:15 - 13:00  Thomas-N. Lehmann  Invasive approach to pharmacoresistant epilepsy

13:00 - 14:30  Lunch

Plenary lectures (clinic): Chair Martin Holtkamp
14:30 - 15:15  Nana Tatishvili  Neurodevelopmental outcome of early onset epilepsy
15:15 - 16:00  Sofia Kasradze  Situational analysis for the development of epilepsy surgery in Georgia

16:00 - 16:30  Coffee break

Plenary lectures (basic research): Chair Imre Vida
16:30 - 17:15  Tengis Gloveli  High-frequency oscillations in the epileptic brain

Wednesday, October 25, 2017

Oral Presentations (clinic): Chair Nana Tatishvili
10:00 – 10:30  Natela Okujava  Capturing seizures: diagnostic challenges
10:30 – 11:00  Giorgi Lomidze  Epilepsy surgery in Georgia: current experiences and limitations
11:00 – 11:30  Viktor Lomadze  Methods of surgical treatment of symptomatic epilepsy
11:30 – 12:00  Vladimir Tsikarishvili  Perspectives of neurosurgical treatment of epilepsy in Georgia

12:00 – 13:30  Lunch

Oral Presentations (basic research): Chair Dietmar Schmitz
13:30 – 14:00  Peter Bäuerle  Analysis of high-frequency oscillations in the normal and epileptic brain
14:00 – 14:30  Tamar Dugladze  Axonal activity and hyperexcitability in epilepsy

14:30 – 15:00  Coffee break
Plenary lectures (basic research): *Chair Thomas Lehmann*
15:00 – 15:45  **Mark Cunningham**  *Why do we need to understand glutamatergic mechanisms in brain tumour related epilepsy?*
15:45 – 16:30  **Imre Vida**  *Inhibitory mechanisms in the normal and epileptic brain*
18:00  Get-together

**Workshop**

**Thursday, October 26, 2017**

10:00 – 11:00  **Case studies I** – simple cases: Video/MRI/EEG (Holtkamp, Lehmann)
11:00 -11:30  Coffee break
11:30 – 12:30  **Case studies II** – simple cases: Video/MRI/EEG (Kasradze, Tatishvili, Lomidze, Tsikarishvili)
12:30- 14:00  Lunch
14:00 – 18:00  Joint consultation in local clinic
19:00  Dinner

**Friday, October 27, 2017**

10:00 – 11:00  **Case studies III** – difficult cases: Video/MRI/EEG (Holtkamp, Lehmann)
11:00 -11:30  Coffee break
11:30 – 12:30  **Case studies IV** – difficult cases: Video/MRI/EEG (Kasradze, Lomidze, Okujava)
12:30 - 14:00  Lunch

Plenary lectures (basic research): *Chair Tengis Gloveli*
14:00 - 14:45  **Dietmar Schmitz**  *Differential embedding of hippocampal output neurons during high-frequency oscillations*
14:45 – 15:15  Closing remarks (Gloveli, Holtkamp, Lehmann, Kasradze)
15:15  End of meeting
15:15 – 18:00  Cultural program at the afternoon (optional)

**Schedule at a glance**

<table>
<thead>
<tr>
<th>Registration</th>
<th>Tuesday, October 24, 2017</th>
<th>09:00 – 12:00</th>
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<tr>
<td></td>
<td>Plenary lectures</td>
<td>30 min (talk)</td>
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<td>15 min (disc.)</td>
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<td></td>
<td>Oral Presentations</td>
<td>20 min (talk)</td>
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<td>10 min (disc.)</td>
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**Organizing committee:** Gloveli (chairman), Dugladze, Kasradze, Kvesitadze, Sadunishvili (Member of the Georgian National Academy of Sciences)

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Bäuerle, Peter</td>
<td>Institute of Integrative Neuroanatomy, Charité - Universitätsmedizin Berlin, Germany</td>
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<tr>
<td>Cunningham, Mark</td>
<td>Professor in Neuronal Dynamics, Institute of Neuroscience, University of Newcastle, United Kingdom</td>
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<tr>
<td>Dugladze, Tamar</td>
<td>Exzellenzcluster NeuroCure, Institute of Integrative Neuroanatomy, Charité - Universitätsmedizin Berlin, Germany</td>
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<tr>
<td>Gloveli, Tengis</td>
<td>Head of Lab, Neuroscience Research Center, Charité - Universitätsmedizin Berlin, Germany</td>
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<tr>
<td>Holtkamp, Martin</td>
<td>Medical Director, Epilepsy-Center Berlin-Brandenburg, Germany</td>
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<tr>
<td>Kasradze, Sofia</td>
<td>Scientific Director, Institute of Neurology and Neuropsychology, Tbilisi, Georgia</td>
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<tr>
<td>Lehmann, Thomas-Nicolas</td>
<td>Head of clinic of Neurosurgery, Helios Hospital Bad Saarow, Germany</td>
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<tr>
<td>Lomadze, Viktor</td>
<td>Multiprofile Medical Center 'Innova', Tbilisi, Georgia</td>
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<tr>
<td>Lomidze, Giorgi</td>
<td>Director, Institute of Neurology and Neuropsychology, Tbilisi, Georgia</td>
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<tr>
<td>Okujava, Natela</td>
<td>Department of Neumedicine, Tbilisi State Medical University, Tbilisi, Georgia</td>
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<tr>
<td>Schmitz, Dietmar</td>
<td>Head of Neuroscience Research Center, NeuroCure Cluster of Excellence, Charité - Universitätsmedizin Berlin, Germany</td>
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<td>Tatishvili, Nana</td>
<td>Head of Neuroscience Dep. Central Children Hospital, President of Georgian Association of Pediatric Neurology, Tbilisi, Georgia</td>
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<tr>
<td>Tsikarishvili, Vladimir</td>
<td>Head of the neurosurgery Department at Medical Center ‘Lancet’, Tbilisi, Georgia</td>
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<tr>
<td>Vida, Imre</td>
<td>Head of Institute of Integrative Neuroanatomy, NeuroCure Cluster of Excellence, Charité - Universitätsmedizin Berlin, Germany</td>
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