Minutes of the Diagnostic Methods Commission business meeting Philadelphia, December 4th, 2015

Attendees: Ingmar Blümcke, Masako Watanabe, Severine Samson, Cigdem Özkara, Fernando Cendes, Sarah Wilson, Jean Gotman, Anna E. Vaudano, Riki Matsumoto, Harvey Sarnat, Lara Jehi, Gus Baker, Sallie Baxendale, Don Schomer, Hajime Miyata, Philippe Kahane, Andrea Bernasconi, Matthias Koepp, Philippe Ryvlin, Graeme Jackson, William Barr, Bill Theodore, Maria Thom, Sandor Beniczky, Paolo Federico. Meeting started at 9AM, finished at 5PM in Marriott Hotel Room 403.

1) **DM commission's website**: The DM website hasn't much content yet and need development. The website should be seen as commission's archive (for visitors as well as previous and upcoming members). The website should also work as meeting and dissemination platform for ongoing projects and events (i.e. summer schools, etc.).

TO DO LIST: Anna Vaudano and Sandor Beniczky agreed to develop a roadmap for content management of DM's website. Each TF should be presented herein, i.e. by an characteristic image icon. Previous and current publications as well as all other commission activity should be visible.

3) **Neuropsychology TF** (S. Wilson): The TF has published their first report in Epilepsia (see http://www.ilae.org/Commission/dm/index.cfm). The TF had several activities in 2015, i.e. SIG at AES, INS symposium in Sydney and a debate at IEC in Istanbul entitled "Is the WADA test still needed for presurgical assessment?"

TO DO LIST: The second report on "Guidelines for minimum standards for neuropsychological assessment in epilepsy surgery" is scheduled for 2016. Upcoming activities for 2016 will focus on the 1st international training course on Neuropsychology in Epilepsy, April 10-15th, in France. 19 applications were received already and the invitation flyer should be further distributed to all major epilepsy centers. Another TF meeting will take place here in Philadelphia later this WE to further develop the summer school's program.

4) **Neuropathology TF** (I. Blümcke): The TF has submitted a revised version of their recommendations of a comprehensive neuropathological work-up of epilepsy surgery specimens, which provoked substantial feedback from 3 referees and the editor. The manuscript's concept is to **systematically** document surgical samples and **systematically** distribute for histopathology as well as research studies according to available anatomical landmarks. Response letter of 11 pages was submitted 3 weeks ago and awaits 2nd review. The TF is currently addressing a revised classification of brain tumors associated with early epilepsy onset. There have been 4 microscopic agreement studies testing different proposals and inter-rater agreement increased from 40% (LEAT1) to 83% (LEAT 4). A collaborative virtual microscopy platform was used and demonstrated to the group. Two study group meetings in Amsterdam were helpful to develop the new classification scheme (including major and minor diagnostic criteria), and which includes a new tumor entity (diffuse glio-neuronal tumor). The

Neuropathology Summer School took place in Campinas, Brazil, July 26-30, 2015. A main session on epilepsy and brain tumors was organized at the IEC in Istanbul.

TO DO LIST: Presented tumor classification needs assessment of inter- and intra-rater agreement as well as confirmation of molecular signatures using 450k methylation profiles (which is mandatory as WHO criteria included into a revised classification of brain tumors). It is expected to complete the LEAT5 assessment survey in 2016 (at next European neuropathology meeting in Bordeaux), with publication of results in 2017. In 2016, we will organize 2 summer schools in Germany (Erlangen, October 6-9) and China (Chengdu, August 29th – September 1st).

5) **Neuroimaging TF** (A. Bernasconi): The TF has prepared a draft manuscript entitled: MRI in epilepsy care: report of the ILAE neuroimaging Task Force, Diagnostic Methods Commission, 2013-2017. The group discussed the proposal and targeted clinical scenarios, i.e. neurologists searching for major brain lesions using standardized MRI protocols or epilepsy specialists searching for more specific and difficult-to-identify lesions (using standardized MRI protocols and advanced post-processing). Neuroimaging reports should also refer to level of confidence with respect to proposed ILAE recommendations (level I – IV). A concept of a Summer school was presented. P. Ryvelin discussed the E-Epilepsy platform (EU project) which can offer web-based access for post-processing of MRI data. I. Blümcke presented a new web-based virtual MRI reading and teaching platform (<u>www.signallab.de/EOTW_3D2.mp4</u>), which will be further developed in 2016, but will require also input from the TF. This platform can be used for agreement studies of the TF or as teaching platform for

VIREPA and summer schools.

TO DO LIST: Preparation of a full concept for the 1st summer school in 2017, including venue, dates and faculty. The invitation must be ready-to-send 6-9 months in advance. It is also expected to receive a full manuscript of the TF's MRI recommendations in epilepsy care next year.

6) **Neurophysiology TF** (P. Kahane): The group has prepared a manuscript on iEEG, entitled **Diagnostic Utility of Invasive EEG for Resective Epilepsy Surgery: Indications, modalities and techniques ,** that has been reviewed by all TF members and is ready for submission. A second and third manuscript is scheduled for 2016 and 2017.

7) **Summer School TF** (S. Beniczky): ILAE endorsed summer schools for Neuropathology and Neuropsychology are in place. A neuroimaging summer school will be launched in 2017, and a complete program presented in Prague next year. The group discussed if an intl. neurophysiology (EEG) summer school should also be organized on behalf of the ILAE DM commission. S. Beniczky presented the concept of the Dianalund EEG Summer School endorsed by the European ILAE Commission. P. Kahane and P. Ryvelin reported about the bi-annual Intl SEEG course in San Servolo and Montreal. The commission favors the following strategy: VIREPA-EEG courses are successful and will be continued to cover the level of beginner and inter-mediates. Three advanced summer schools may complete the portfolio of the DM commission: EEG in neonates, advanced scalp EEG analysis and SEEG. S. Beniczky will prepare a draft concept identifying available people responsible for the organization and material for supporting webinars to be reviewed by the TF. All ILAE summer schools should contain assessment of achieved competencies. 8) The **next business meeting** will be at the ECE in Prague. However, our next full day business meeting will take place at AES in Houston, preferrably on a Friday before AES starts.

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