

## **The role of EEG in the Diagnosis and Management of Epilepsy - Advanced Course -**

### **Course content**

The course will cover advanced aspects of EEG assessment and interpretation in clinical practice, in persons with suspected or already established epilepsy, adults and children. Thus participants need to have **a solid knowledge** of clinical EEG before enrolling to this course. Otherwise, participants would be advised to start by taking the basic course, which is aimed at providing a comprehensive and robust basis in clinical EEG.

The advanced course will be practice oriented and aimed at the general neurologist / paediatric neurologist / paediatrician dealing with - but not exclusively involved in - epilepsy care. Attention will be given to practical aspects of more advanced techniques such as source imaging, long-term video-EEG monitoring, intracranial recordings, EEG after the first seizure and specific provocation methods. Clinical aspects will be discussed for the different age-groups.

Since the two learning modules addressing source imaging will require that participants install and use software packages, a beyond-average skills in computers is needed. Otherwise participants will need to request support from the computer specialist in their department to install and run the software we will provide.

### **Course units**

Introduction to the VIREPA platform; Source analysis – Part 1: Voltage mapping & averaging; Source analysis – Part 2: Dipoles & distributed source models; EEG maturation; Epilepsy syndromes in childhood; Electroclinical syndromes in adolescents & adults; Reflex epilepsies; Epilepsy monitoring unit; Intracranial recordings; Final task.

### **Learning objectives**

Successful completion of the course will enable the participants to further improve the quality of the diagnostic approach in adults and children with epilepsy or other suspected paroxysmal disorders in the EEG lab of their clinics, by using more advanced techniques (as source imaging, long-term monitoring and intracranial recordings). It will help them to set the findings in the clinical context and make appropriate diagnostic decisions.

### **Target group & entry criteria**

The course is intended for neurologists, paediatric neurologists and paediatricians, dealing with patients with epilepsy, including the EEG studies of these patients. Prerequisites include:

- A minimum of 12 months of practical experience with clinical EEG is required
- 4 years of training in neurology, neuropediatrics, clinical neurophysiology, psychiatry or neurosurgery, or combinations of these
- Previous completion of the VIREPA Basic EEG course is an advantage

### **Course format**

The course itself is divided into 9 units, beginning with a one week introduction to the VIREPA e-learning platform, followed by 8 learning units of two or three weeks each and a

final task unit. Additional educational material (textbooks and references) required for this course is available for downloading from the course's server repositories. To earn credits in each learning unit, tasks will be successfully completed within an active online communication process among all participants, guided by the experts in the discussion fora on the e-learning platform. These tasks help to deepen the theoretically gained knowledge from the learning material and enable the participant to transfer this knowledge to his/her daily clinical practice. The participants are expected to spend about 8 hours per unit (~2,5-3hours/week) on individual study of the learning material, for reading/submitted contributions to the course's virtual discussion forum and for the completion of the learning unit tasks, which includes the contribution of one's own case histories and EEG samples.

All tutors are currently practicing in their respective speciality field, moderating the distance courses in addition to their regular duties. This gives participants the unique opportunity to draw upon their expertise and practical experience even beyond the statutory requirements of the course.

**Course fee:** \$1080. A restricted number of bursaries will be available. For participants living in countries with "low" and "lower middle" income, self payment for approved bursaries will be \$270. [See categories according to the statistics of the World Bank.](#)

**Important for bursary applicants:**

1 a) Submission of a **letter of recommendation** from the bursary applicant's **current workplace or from the leadership of the local ILAE Chapter or Regional Commission** stating the expected benefit to the epilepsy care and development in the bursary applicant's community **specific to the VIREPA course** for which application is being made.

1 b) In case such evidence cannot be submitted, a **personal letter of motivation** is required outlining the benefit the bursary candidate expects from his/her daily practice and professional career **specific to the VIREPA course** for which application is being made.

Please note that this **requirement is mandatory** and is an important part of the decision-making process for the granting of any bursary.

It is also wise to note that dropping out of a course or having limited participation in one, may impact future decisions about bursary eligibility.

**Number of participants:** up to 30

**Course Directors**

Dr. Michalis Koutroumanidis and Dr. Antonio Valentin

For questions, contact ILAE VIREPA staff at [courses@ilae.org](mailto:courses@ilae.org).