

Epilepsy & Sleep – Advanced Course

Course content

The course is organized in two sequential parts: the first one, defined as the “Basic Part”, contains three modules; the second part is clinically-oriented and contains five modules. The clinical portion will start with a module on how to record video-EEGs in patients with epilepsy, but also suspected of having a sleep disorder. All following modules focus on disorders at the borderline between epilepsy and sleep and are based on clinical data and video/EEG recordings. Finally, the students are asked to give an example from their own practice in which they show how the course changed their approach to this particular patient.

Course units

Introduction to the VIREPA platform; Homeostatic, circadian and ultradian regulation of sleep; Interrelationship between basic mechanisms of sleep and epilepsy; Macro and micro structure of sleep in adults and children: relationships with interictal and ictal epileptic activity; Practicalities and methodology of sleep recording; Sleep related epilepsies and sleep related seizures: clinical and scalp/intracerebral EEG features; Epileptic and non-epileptic paroxysmal behaviors during sleep: differences and similarities; Epilepsy and comorbidity with sleep disorders: implications for treatment; Sleep and epilepsy: specific aspects in prematures, neonates, infants and children; Final task.

Learning objectives

Successful completion of the course will enable the participants to understand the basic principles of sleep and wake, their regulation over the 24-hour day and the interaction of neurophysiological mechanisms of sleep and epilepsy. These basic modules of the course will be followed by two modules with direct impact on every day practice: what is the mutual influence between sleep architecture and epileptic phenomena on the (video) EEG and how to get optimal results of recording sleep in the diagnostic work-up of the patient with epilepsy. Finally, the student will learn thoroughly the major clinical aspects as sleep related epilepsies, solving the differential diagnosis of paroxysmal events during sleep, epilepsy and co-morbidity with sleep disorders, and sleep and epilepsy in (very young) children.

Target group & entry criteria

The course is intended for sleep specialists, neurologists, paediatric neurologists and paediatricians, dealing with patients with epilepsy, including the EEG and polysomnography (PSG) studies of these patients. It is important to note that participants **must be able to contribute adult and pediatric case histories together with relevant EEGs and PSGs.**

The requirements below are obligatory for application to the course.

- A minimum of 3 years of training in Neurology, Neuropediatrics, Clinical Neurophysiology, Psychiatry or Neurosurgery, or combination of these, **including experience in clinical epilepsy (together with EEG) and in sleep medicine (together with PSG).**

- CV - Please submit in **English only**.
- List of publications (if applicable and in **English only**)

Course format

The course itself is divided into 10 units, beginning with a one-week introduction to the VIREPA e-learning platform, followed by 8 learning units of three weeks each and a Final Task unit. Additional educational material (textbooks and references) required for this course are available for downloading from the course learning platform. 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 (~2,5-3 hours/week) on individual study of the learning material, for reading/submitting 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 fields of speciality, 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. Al de Weerd and Dr. Lino Nobili

For questions, please contact ILAE VIREPA staff at courses@ilae.org.