



From The Information Officer

ILAE and Epilepsy



Since its beginning, the ILAE has been a major advocate for improved treatment of patients with epilepsy. It has sought to achieve this goal by improving our understanding of the group of disorders that are the epilepsies through disseminating the latest information to the professionals around the world who treat patients with epilepsy. This task has frequently faced many obstacles that were imposed by restricted ability to communicate quickly. The evolution of digital communication is radically changing how people across the many time zones communicate, and this evolution is finding its way into the ILAE. Education has been and remains a major function of the League, and this issue of *Epigraph* emphasizes the changing face of medical education. Several new educational initiatives are highlighted here, including the developing Faculty of 1000 and the Distance Learning Courses. Both are designed for and intended to educate the many professionals who will treat the patients, and the League intends to expand these educational opportunities over the coming years.

People looking for information use different methods for finding it, depending on their goals. Formal courses are used to provide in-depth information about a topic such as clinical neurophysiology. Single lectures are visited to update one's existing knowledge or to get introduced to a new topic. One employs quick visits to web sites or reference books when an answer to a specific question is sought. There are many sources for each of these educational goals, but not all sources represent a consensus of the epilepsy community nor is the information always reliable. As you will note in several of the articles in this edition, the League will address these concerns by establishing a means of accrediting educational programs and educators. There is also recognition that the League cannot develop educational and training programs about everything all at once. For this reason, efforts are being made by the various Commissions and Sub-commissions to identify key areas around which educational and training programs should be developed. Several of these areas of potential emphasis are described in this issue of *Epigraph*.

As a side note, this issue of *Epigraph* marks the formal beginning of my tenure as Information Officer for the League. I would like to thank my predecessor in this post, Simon Shorvon, for the assistance and advice he has given me during the transition. I would also like to recognize the contributions he has made during the years he occupied this office including an inclusion of historical notes in *Epigraph* issues as well as the transition to the digital editions. He has also led the effort to enhance the League's web site so that it can serve as a significant resource for members across the globe. Fortunately, his departure from this post does not mean that his considerable skills are lost to the League as he continues on as Editor-in-Chief of *Epilepsia* with Phil Schwartzkroin. I feel fortunate to be able to assume a post which the previous inhabitant has left in such good shape.

In this digital age, especially the age of digital media, it is true that nothing stays the same for very long. *Epigraph* and the League's web site are always open to change, but we want to be sure that whatever changes we may make prove useful to the League's members. In the next year we will try out new things from time to time and would appreciate any comments or suggestions that you may have regarding things that you find less helpful and features that you would like developed. The intent of *Epigraph* and the web site is to further the goals of the League by providing needed information and tools. I look forward to serving those goals.

Edward H. Bertram
Information Officer

President's Message



Important developments can be reported about our top priority: education. The Educational Commission held a two-day workshop on June 8-9 in Paris where the members discussed the optimal structure and distribution of responsibilities for our educational agenda. They also made proposals for rules, guidelines and recommendations for accreditation, bursaries, funding and structuring of educational budgets. The Commission recommended the establishment of an Educational Office as its "organizational arm" with the following preliminary list of tasks:

- Support the Educational Commission in meeting its mission
- Collect and publish all educational activities on the Website
- Update Website regularly
- Collect information on educational gaps identified in the regions and report to Education Commission
- Initiate ideas to overcome gaps together with regional academies
- Provide education materials to academies, chapters, etc. in cooperation with the Information Officer
- Develop courses in cooperation with the Educational Commission
- Organize accreditation, collect evaluation, provide reports
- Keep record of bursaries

More tasks will need to be added to this list, such as

- Support the "Faculty of 1000", a database of volunteers around the world who are willing to contribute to ILAE's educational programs. This important part of our priority is presently being organized by Vice President Emilio Perucca.
- Take care of specific didactic formats
 - Identify and copyright them
 - Evaluate their efficiency
 - Develop templates for quality activities
 - Promulgate their use
 - Develop new formats
- Organize networking of activities
- Respond to Chapter requirements

The Commission proposed to place this office close to the European Epilepsy Academy (Eurepa) since its secretariat is already doing some of these things. The Executive Committee is presently investigating how this can be organized.

Outside Europe, many may not be familiar with EUREPA, an affiliate of the ILAE which was developed by our Commission on European Affairs (CEA) and established in 1996 as the first regional Academy of the ILAE. The Asian Epilepsy Academy (ASEPA) and recently the Academia Latino-Americana de Epilepsia

(ALADE) followed. For organizational reasons, EUREPA was established as a separate non-profit association. All European ILAE Chapters but two, some 30 European Epilepsy Centers and institutions plus about 300 individuals from all over Europe have become members. EUREPA reports to our CEA. From its foundation until recently, I have been the Chair of EUREPA. Now, Past President Giuliano Avanzini has taken over this responsibility.

By offering and accrediting quality educational courses, by conducting a series of train-the-trainer courses and developing a European curriculum for certification as an epileptologist, EUREPA has been especially instrumental in rapidly raising epileptology in Eastern Europe after the system shift in the early 1990s. One specific feature of the work of EUREPA was its focus on optimizing our didactic methods. The introduction of tutored distance learning in 2004 was an important step forward. This approach has been prospectively evaluated and recently published (Hézser – v. Wehrs V et al, *Epilepsia* 2007; 48: 872-879).

In recognition of its success, Dr. Avanzini in his term as President gave EUREPA the task of developing global education. Training of trainers was now brought to French-speaking and Portuguese-speaking Africa in cooperation with the French, Portuguese and Brazilian Chapters and with economic support of the CEA. The most recent development was the expansion of the e-learning program to address a global audience with new modules. In the fall of 2007, four modules are being offered on Genetics, EEG, AED therapy and Imaging. Other modules will follow, and immense thanks are due to the colleagues who have devoted much of their time and thoughts to the development of these courses.

With increasing globalization, the organizational structures, including the important questions of ownership and funding, needed to be redesigned. An agreement has now been accepted by ILAE and EUREPA that ensures the further services of the Academy for the League's global educational activities in a way that provides ownership of all materials and copyrights to the ILAE. Apart from that, regional educational agendas exist and will hopefully be further developed by local institutions like ASEPA, ALADE and the AES, as European tasks continue with EUREPA. In addition, promising interregional projects are being developed, e.g. between the North American and Latin American Commissions.

The Commission on Education is the forum where all these activities are represented and integrated. The final and ambitious aim of these developments remains for the ILAE to have the most advanced and effective educational system of all medical specialties, with the ultimate goal to improve epilepsy care throughout the world.

Peter Wolf
ILAE President

ILAE Welcomes New Chapters

We are proud to announce the addition of two more chapters, bringing our membership up to 98 chapters across the globe. The newest chapters were approved at the recent General Assembly, held in Singapore during the 27th International Epilepsy Congress in July of 2007. We welcome New Zealand and Uganda as chapters of ILAE.

Six other countries have active applications. Cameroon, Ghana, Republic of Guinea, Sierra Leone, Sudan and Yemen have submitted applications and begun the process for acceptance. Prospective chapters have to prove their membership is made up of professionals actively involved in providing care to people with epilepsy or in research activities related to epilepsy as well as representing the Epilepsy community in the country. Members should be representative of more than one city or hospital as well. The application process also includes a report on the Epilepsy services throughout the country and how the people who provide these services are represented in the Chapter. The next opportunity to be accepted will be during the next General Assembly which will be held during the 28th International Epilepsy Congress in Budapest, Hungary in 2008.

Chapter Reporting Update

The ILAE Website, www.ilae.org continues to improve to meet your needs. We'd like to announce improvements to the Chapter Member Database that was launched earlier this year. This valuable tool allows Chapter members to locate other Chapter members and the League to keep all Chapters and their memberships informed. The League's official newsletter, Epigraph, is distributed electronically three times a year and sent to all available e-mail addresses. You can make sure your chapter members are fully informed by providing their contact information.

The database has been revised to make uploading your Chapter's database as easy as possible. Extraneous fields have been eliminated leaving only the crucial name and e-mail fields. The process now involves only a couple of simple steps.

To upload your chapter roster, log into the ILAE web site at <http://www.ilae.org/Chapter/Secure/LoginPage.cfm>. Select your chapter from the drop down list, then enter your chapter's password. The password will be ILAE for most chapters. Chapters that have changed their password, or have forgotten it, can use the "[Have you forgotten your password?](#)" link to have your password sent to you.

Once you have logged in, scroll down the page and click on "[Add Chapter Members](#)".

Follow the directions on the screen to download the template, enter your data, and upload it back to the web site. When you are done, click on "Return to Main Menu" to see other actions you can perform under your member log in. To log out, simply return to the website home page or close out of the Website.

If you have any questions or you need assistance with uploading your file, you can contact me, Sofie Peeters, at the ILAE office at speeters@ilae.org. Thank you for your assistance.

Workshops at The International Chapter Convention Plan Future Directions and Priorities

The ILAE is dedicated to improving treatment of patients with epilepsy. To achieve this goal, the League promotes educational programs, expanded diagnostic and treatment opportunities and research into new and better treatments. These goals and ways to support them were discussed in four parallel workshops held during the International Chapters Convention at the International Epilepsy Congress in Singapore. The workshops focused on epilepsy care, educational programs, translational research and potential financial support for the expanded initiatives. This article summarizes the discussions of each of the

workshops.

The Education Workshop focused on the current status of the educational programs and the programs that will be needed to reach more people. At present, the League is involved with distance learning programs such as the Virtual Epilepsy Academy (VIREPA), live regional programs, and the newly created Faculty of 1000. The workshop participants indicated that the greatest need was the availability of qualified educators to work with the many professionals around the world who deliver care and support to patients with epilepsy. It was recommended that regionally appropriate programs be developed and accredited so that internationally accepted standards of care can be more widely disseminated.

The Epilepsy Care Workshop focused on how to improve the availability and quality of care throughout the world. The disparity in the distribution of technology and minimal essentials of care is an issue that requires a solution. On the technology side, simple but essential diagnostic techniques such as EEG and video EEG are not available in many countries and the expertise to use the technology doesn't exist. Similarly, the most basic medical therapies aren't available because of cost. In order to begin resolving this disparity, the Workshop recommended the implementation of a program of technology transfer by which equipment that is serviceable but being replaced be donated to a program that will assist with the refurbishment and distribution of equipment to needy treatment centers. In addition, programs will need to be created to help with the training of the personnel to operate the equipment. There was also a discussion about making phenobarbital more available to areas that have limited resources by working with countries that have low production costs and could produce this basic drug in large quantities.

The Translational Research Workshop focused on how to develop treatments that are directed at improved outcomes. It was recognized that epilepsy may require treatments that vary by region and, for this reason, the Workshop participants recommended developing a list of clinical issues for which clinically oriented laboratory research can provide a solution. However, the participants also recognized that there was a critical lack of researchers with the appropriate background to carry out such research. For this reason, there was also a strong recommendation to develop educational and training programs to expand the number of translational researchers working on solutions to these pressing clinical problems.

The fourth workshop discussed the critical issue of finances. There is a general recognition that achieving these ambitious goals will require financial resources that are at present well beyond the means of the League. New approaches to fundraising will have to be developed. Much of the fundraising will, of necessity, be regional or local, but there was also a recommendation that the League explore fundraising on a larger scale with the goal of supporting key initiatives that cross regions. As this approach would represent a new endeavor for the ILAE, there was a recommendation to seek the advice of professional fundraisers to explore the potential of this approach and how to establish such a program.

As the League looks to establish goals and priorities for the future, these Workshops have provided a strong set of recommendations that will guide the discussions of the Executive Committee and the relevant Commissions in the development of future programs.

Morris-Coole Prize Winner



Award winner Dr. Zita Gubja

The inaugural Morris-Coole Prize was awarded to Dr. Zita Gubja at the International Epilepsy Congress in Singapore for her *Epilepsia* paper "The Functional Significance of Gap Junction Channels in the Epileptogenicity and Seizure Susceptibility of Juvenile Rats" (47:1009-1022, 2006). In her study, she induced focal cortical seizure activity in young rats at specific developmental points and observed the effects that gap junction openers and blockers had on the seizures. She and her colleagues found that gap junction openers and blockers had on the seizures. She and her colleagues found that gap junctions could significantly influence the nature of the seizure as well as the overall seizure susceptibility in an age dependent manner. The study pointed to potential therapeutic targets for epilepsy and the importance of considering the developmental stage in selecting treatments. She performed these studies as part of her Ph.D. studies under the direction of Professor Magdolna Szente at the University of Szeged, Hungary.

The Morris-Coole Prize is a new ILAE award that is given annually in recognition of an outstanding research paper published in *Epilepsia* the previous year on any field of epilepsy research, either clinical or basic. The prize was established through the generosity of Christopher and Sandra Morris-Coole with the intention of stimulating excellence in epilepsy research as well as rewarding young researchers for outstanding contributions to the field. Award winners receive 10,000 euros and present the Morris-Coole lecture at a major epilepsy meeting (at the International Epilepsy Congress during the years it is held).



Papers are nominated to the selection committee by the associate editors of *Epilepsia* from among the papers that were published in the journal the previous year. This year's Prize winner was chosen from among 14 nominations that were deemed deserving of special recognition by the associate editors.

All papers nominated for the 2007 Morris-Coole Prize

Aker RG, Yananli HR, Gurbanova AA, Ozkaynakci AE, Ates N, van Luijtelaar G, Onat FY. Amygdala kindling in the WAG/Rij rat model of absence epilepsy. *Epilepsia*. 2006; 47(1):33-40.

Battaglia G, Chiapparini L, Franceschetti S, Freri E, Tassi L, Bassanini S, Villani F, Spreafico R, D'Incerti L, Granata T. Periventricular nodular heterotopia: classification, epileptic history, and genesis of epileptic discharges. *Epilepsia*. 2006; 47(1):86-97.

Bien CG, Schulze-Bonhage A, Soeder BM, Schramm J, Elger CE, Tiemeier H. Assessment of the long-term effects of epilepsy surgery with three different reference groups. *Epilepsia*. 2006 ; 47(11):1865-9.

Chandra PS, Salamon N, Huang J, Wu JY, Koh S, Vinters HV, Mathern GW. FDG-PET/MRI coregistration and diffusion-tensor imaging distinguish epileptogenic tubers and cortex in patients with tuberous sclerosis complex: a preliminary report. *Epilepsia*. 2006; 47(9):1543-9.

Chen WF, Chang H, Huang LT, Lai MC, Yang CH, Wan TH, Yang SN. Alterations in long-term seizure susceptibility and the complex of PSD-95 with NMDA receptor from animals previously exposed to perinatal hypoxia. *Epilepsia*. 2006; 47(2):288-96.

Gajda Z, Hermes E, Gyengesi E, Szupera Z, Szente M. The functional significance of gap junction channels in the epileptogenicity and seizure susceptibility of juvenile rats.

Epilepsia. 2006; 47(6):1009-22.

Hmpelmann A, Taylor KP, Heils A, Lorenz S, Prud'homme JF, Nababout R, Dulac O, Rudolf G, Zara F, Bianchi A, Robinson R, Gardiner RM, Covanis A, Lindhout D, Stephani U, Elger CE, Weber YG, Lerche H, Nurnberg P, Kron KL, Scheffer IE, Mulley JC, Berkovic SF, Sander T.
Exploration of the genetic architecture of idiopathic generalized epilepsies.
Epilepsia. 2006; 47(10):1682-90.

Hessen E, Lossius MI, Reinvang I, Gjerstad L.
Influence of major antiepileptic drugs on attention, reaction time, and speed of information processing: results from a randomized, double-blind, placebo-controlled withdrawal study of seizure-free epilepsy patients receiving monotherapy.
Epilepsia. 2006; 47(12):2038-45.

Lin EJ, Young D, Baer K, Herzog H, During MJ.
Differential actions of NPY on seizure modulation via Y1 and Y2 receptors: evidence from receptor knockout mice.
Epilepsia. 2006; 47(4):773-80.

Lofgren E, Tapanainen JS, Koivunen R, Pakarinen A, Isojarvi JI.
Effects of carbamazepine and oxcarbazepine on the reproductive endocrine function in women with epilepsy.
Epilepsia. 2006; 47(9):1441-6.

Meurs A, Clinckers R, Ebinger G, Michotte Y, Smolders I.
Substantia nigra is an anticonvulsant site of action of topiramate in the focal pilocarpine model of limbic seizures.
Epilepsia. 2006; 47(9):1519-35.

Nilsen KE, Kelso AR, Cock HR.
Antiepileptic effect of gap-junction blockers in a rat model of refractory focal cortical epilepsy.
Epilepsia. 2006; 47(7):1169-75.

Swartz BE, Houser CR, Tomiyasu U, Walsh GO, DeSalles A, Rich JR, Delgado-Escueta A.
Hippocampal cell loss in posttraumatic human epilepsy.
Epilepsia. 2006; 47(8):1373-82.

Zhang K, Peng BW, Sanchez RM.
Decreased IH in hippocampal area CA1 pyramidal neurons after perinatal seizure-inducing hypoxia.
Epilepsia. 2006; 47(6):1023-8.

2007 Michael Prize



Winners of the Michael Prize Alon Friedman (l) and Christophe Bernard (r) with Dr. Heinz Buehler of the Stiftung Michael (c).

Every two years, the Stiftung Michael from Germany awards the Michael Prize for outstanding epilepsy research performed by young investigators (under the age of 45). The Prize was presented this year at the International Epilepsy Congress in Singapore to Alon

Friedman from Ben Gurion University in Beersheba, Israel and Christophe Bernard from the University of the Mediterranean in Marseille, France. They were chosen from among 27 nominees from 11 countries. In addition to the recognition from the epilepsy community for their important contributions to our understanding of epilepsy, the awardees also received 15,000 euros supported by UCB.

Dr. Friedman was recognized for his integration of the clinic and the laboratory in his study of the blood brain barrier and its alterations and potential contributions to epilepsy. His work has suggested that an open or less restrictive blood brain barrier leaves the affected area of the brain open to a number of substances that, over time, result in fundamental changes in the local physiology. These changes can potentially lead to a chronic epileptic state under certain conditions.

Dr. Bernard received the award for his work examining the changes that may occur in the hippocampus and eventually lead to chronic temporal lobe epilepsy. Using an animal model of chronic temporal lobe epilepsy he has demonstrated that there are multiple changes that occur in the hippocampus following an injury that leads to the development of chronic epilepsy. He and his group have shown that changes occur in both GABAergic and glutamatergic cells, changes that result in a proepileptic shift in the balance between excitation and inhibition.

The Stiftung Michael (Michael Foundation) was founded in 1962 in Germany by Dr. Fritz Harzendorf and was named for his son Michael who suffered from epilepsy. His intent was to improve the care of patients with epilepsy as well as to encourage research in the field. Over the years, the foundation has supported the development of expertise in epilepsy in Germany as well as other countries through educational programs and other endeavors.

Faculty of 1000 Task Force



Task Force Chair Emilio Perucca

The ILAE President and the ILAE Executive Committee have made it clear on several occasions that education is the first priority in the list of their activities. In order to foster educational activities in all parts of the world in the most efficient way and to facilitate the utilization of resources in a coordinated manner, the ILAE President set up a special Task Force called the "Faculty of One Thousand Task Force" with the mandate to assemble an international database of professionals with the competence, ability and motivation to contribute to ILAE educational initiatives in all areas of epileptology. These initiatives will not be restricted to congresses, courses and on-site training programs where faculty members may serve as lecturers, tutors or mentors, but will also include distance education (e-learning) modules which are increasingly being developed by ILAE Commissions and are being received extremely well by trainees worldwide.

E-learning activities which are already available include courses on Electroencephalography (stage I) and on Genetics, both of which have been coordinated by EUREPA. Topics for courses currently in development include Electroencephalography (stage II), Neuroimaging, and Clinical Pharmacology and Pharmacotherapy. These courses have a limited number of participants who must, in some cases, meet specific entry requirements. Since the same course may be run repeatedly over the same year, each topic requires the dedicated contribution of a significant number of highly qualified e-tutors and e-moderators. Given the interactive nature of distant education activities, e-moderators need to have not only professional expertise but also special communication and motivation skills, as well as a positive attitude toward the new information and communication technologies. It is one of the objectives of the Faculty of 1000 Task Force to enroll these dedicated professionals, to keep a record of their special areas of expertise, and to make their abilities available to the educational activities organized by all ILAE Commissions. In due course, it will also be an objective of the Task Force to monitor the quality of the educational activities contributed by individual Faculty members.

As a first step, the Task Force, which is acting in synergy with the Commission on Education, agreed on a list of requirements for inclusion of potential Faculty members in a list of nominees:

- (1) Peer-recognized professional competence and teaching capabilities, best documented by lecturing experience in national or international courses, is an essential prerequisite. Research experience, documented by indexed publications, is considered desirable but not mandatory;
- (2) Knowledge of English is highly desirable, and fluency in an additional language beyond the nominee's mother language is an advantage. In any case, task force members must have sufficient skills in a widely spoken language to be able to communicate with peers outside their regional borders;
- (3) Nominees will be selected from different disciplines (e.g., clinical epileptology, pediatrics, neurophysiology, imaging, clinical pharmacology, social support activities, basic science, etc.), to address the multidisciplinary nature of epileptology and the diverse areas of interest and geographical settings of professionals engaged in epilepsy-related activities;
- (4) Nominees are presumed to be willing to take part in ILAE-related educational activities in the future, though specific commitments will not be requested at the time of inclusion in the Faculty.

Based on the above criteria, the Task Force has assembled, with the help of individual ILAE chapters, a list of over 700 candidates from 82 countries in 5 continents. Selected candidates are being contacted and invited to become members of the Faculty. It is hoped that this initiative will be received positively by many qualified and committed professionals who will eventually provide the backbone for the ambitious educational agenda that the ILAE is developing. All nominations must come through the individual chapters. League Chapters wishing to nominate additional qualified candidates, please contact Emilio Perucca (perucca@unipv.it)

Emilio Perucca, ILAE 1st Vice President, University of Pavia, Italy

The members of the Faculty of 1000 Task Force include Edward Bertram (Charlottesville, U.S.A.), Peter Camfield (Halifax, Canada), Esper Cavalheiro (São Paulo, Brasil), Marco De Curtis (Milano, Italy), Lamine Gueye (Dakar, Senegal), Najib Kissani (Marrakech, Morocco), Kristina Malmgren (Gothenburg, Sweden), Emilio Perucca (Pavia, Italy), Alejandro Scaramelli (Montevideo, Uruguay), Shih-Hui Lim (Singapore) and Gedlie Zenebe (Addis Ababa, Ethiopia).

New Discounted Journal - *Epilepsies*



The League is proud to announce a sixth journal now available to members at a discounted subscription rate. ***Epilepsies*** provides full coverage of advances in epilepsy. The journal covers all subjects connected with epilepsy: basic scientific, clinical, diagnostic, therapeutical, psychological and social news. The official journal of several French-speaking anti-epilepsy leagues. Four issues a year. Published in French. To subscribe, go to

<http://www.ilae.org/Visitors/Publications/Index.cfm>

New ILAE Task Force Seeks Ways to Bring Better Treatments to Patients



Task Force Chair Annamaria Vezzani

One of the primary goals of the International League Against Epilepsy is to improve the treatment of patients with epilepsy. The search for innovative, more effective, and better tolerated antiepileptic therapies is an ongoing challenge and an ethical obligation for the scientific community. The development of new drugs is a major goal not only for the pharmaceutical industry but also for an increasing number of small biotech companies and universities. Turning a molecule that shows promise in the laboratory into an active drug for patients is a composite process requiring different skills from chemists, experimental pharmacologists and clinicians. An important element in this process is preclinical experimental data which is highly predictive of clinical efficacy and which can anticipate possible side-effects of a new drug.

To date, it has proved difficult to translate effective therapeutic approaches in the animal models to success in humans. Part of the problem is certainly the huge investment by the sponsors of clinical trials and the scientific community that the step from animal model to humans requires. Recommendations for standards regarding preclinical drug development have been provided in published documents for stroke (*Stroke*. 1999;30:2752-2758) and ALS/MND (*ALS*; 2007, ePub ahead of print) with the intention of providing guidelines for "rigorous, robust, and detailed preclinical evaluation to have a reasonable chance to succeed in an appropriately designed clinical trial". However, in the epilepsies, the standardization of the methods is more complicated as epilepsy is a multifaceted condition comprising many syndromes and numerous pathogenic mechanisms.

To seek ways to improve on the current process of preclinical screening, the League's Commissions on Neurobiology and Therapy Development have joined on a new initiative to revisit the current methods of antiepileptic drug screening with the goal of enhancing the existing screens in a way that will improve the prediction of ultimate clinical efficacy, at least for some forms of epilepsy. Under the aegis of the ILAE Executive Committee, lead members of these two Commissions have created "The ILAE Neurobiology/Therapeutic Strategies Joint Task Force" (Gary Mathern, Jacqueline French, Michael Rogawski, Christophe Bernard, Solomon Moshe, and Annamaria Vezzani) to evaluate the screening process with the aim of obtaining insights into the validity of models used in the identification of anticonvulsant and neuroprotective activity.

The current screening process relies heavily on inducing seizures in normal animals to identify new drugs. It has led to the introduction of most of the new antiepileptic drugs, but there are a number of instances of compounds that showed efficacy in these tests but were not so successful in clinical trials. It has been recognized for some years that new in vitro and in vivo models should be introduced to the process of therapy discovery. The National Institute of Neurological Disorders and Stroke (NINDS) started the process of examining potential models to assist with therapy discovery by holding several international workshops; a set of recommendations has led to the first steps in validating identified models and associated testing protocols to identify new treatments for drug resistant epilepsy. The new ILAE initiative is a logical extension of that initial effort.

As a first step, the sub-commission will evaluate the predictive value of the existing preclinical screens. Although the much of the initial process will involve epilepsy researchers, key to this initiative will be the involvement of representatives from the pharmaceutical industry who may provide input on what will be useful from industry's perspective. The group will review the available data from drugs that came to clinical trials irrespective of their clinical success. The final aim is to recommend a battery of screening tools to identify new and more effective treatments. Potential new screens may also be identified based in part on molecular mechanisms that may play a role in epilepsy.

A first meeting to discuss this strategy will take place during the 61st American Epilepsy Society Annual Meeting in Philadelphia, Pennsylvania, USA. It is the hope of the commission that providing a more accurate prediction of clinical success will encourage the selection of truly promising compounds for clinical development, and may allow interventions aimed at curing several forms of epilepsy, not merely

developing symptomatic treatments.

Annamaria Vezzani, Head of the Laboratory of Experimental Neurology, Mario Negri Institute for Pharmacological Research, Milan, Italy

Internet-based Entry Level EEG Course: A Successful Beginning to the Distance Education Initiative



Course Chairs Walter Van Emde Boas, M.D., Ph.D. and Demetrios N. Velis, M.D.

The past year saw the launching of the first basic course on EEG in the diagnosis and management of epilepsy, offered by VirEpA, the Virtual Epilepsy Academy segment of the European Epilepsy Academy (EUREPA). At the 27th International Epilepsy Congress in Singapore, members of two of the ILAE's existing commissions (Education and Diagnostic Methods) and EUREPA Course directors discussed expanding the VirEpA courses to geographic areas outside the European Region. A

Sub-commission on Distance Education was constituted to recommend action and coordinate existing initiatives. This article describes the recent experience with an internet based course and its potential to expand epilepsy expertise globally.

The first basic EEG course enrolling some 30 trainees was given in the Autumn 2006-Spring 2007 period and consisted of 12 modules following each other on a fortnight's basis, with a brief interruption around Christmas and New Year. Some rudimentary prior experience with human EEG was required, the rough equivalent of having worked as a neurologist in a clinical EEG facility for four months. The level of knowledge and experience of the trainees was widely varying.

The format of the course was practice oriented and designed to familiarize the trainees with the possibilities and limitations of clinical EEG in present-day diagnosis of epilepsy. Modules covered the technical aspects of recording, recognizing and dealing with extraneous activity and artifacts, as well as the optimal use of montages and EEG derivations. Maturational aspects of the EEG record were covered. Applications of various types of EEG recording were discussed in both the pediatric and adult population. The use of sleep EEG recording in epilepsy was reviewed as were the areas of overlap between epileptic events and paroxysmally occurring non-epileptic sleep disturbances. The possible use of extended recordings with video-EEG (Long-Term Monitoring, LTM) received considerable attention. Although video sessions dealing with ictal semiology were not feasible in this first edition of the course, special studies in topics such as reflex epilepsies and visual sensitivity were illustrated by appropriate material. Finally, the participants covered the issue of non-epileptic paroxysmal events and the role of video/EEG in their documentation and differential diagnosis.

For each module, the students were provided with a short introductory textbook prepared by the tutors. It outlined the topics to be covered with basic reading material as well as references to the pertinent published literature. The trainees communicated with each other and with their tutors through an interactive platform on the VirEpa website. For most modules, the students had to provide and discuss relevant EEG samples and clinical cases from their own files. Furthermore, they were encouraged to present issues they had encountered in their daily practice.

Each module included discussion on designated forums and e-mail exchanges between trainees and between trainees and the instructors. Collaborative work was encouraged throughout the course yet, at the end of each module, the trainees had to complete a time-limited task for that module. Each trainee's responses were evaluated on a pass-fail basis. Their overall attendance and contribution in the discussions within each module were also scored. For a final task, the trainees were required again to present material from their own patient and EEG-files and to illustrate how participation in the course had

affected their diagnostic and managing practice. Eighteen students finished the course with full credit and six with partial credit.

Students received self-evaluation scores before and after finishing the course. In addition, they were requested to score the performance of their tutors for each module and rate the instructional material. Finally, the tutors evaluated and offered suggestions for changes in the format of their respective modules and/or the forums on the website. All evaluations will be used for continuous improvement of the course over time.

As it was a first time for all involved, the course proved quite demanding, both for the trainees and their tutors. All were relying on a largely novel medium for learning and assessment. Several hours of studying and e-mail correspondence were required on an almost daily basis. The time-limited, modular aspect of the course made strict adherence to its time schedule absolutely mandatory. Students and tutors, however, were very positive about the course as a learning and teaching experience.

A new distance learning basic EEG course will start in the Fall of this year and is already fully booked. However, additional courses are planned for the future as the need for such courses is deemed quite significant.

Individuals wishing to learn more about distance learning opportunities may find additional information at the URL: http://www.eurepa.de/homepage/de/eurepa_activities/distance_courses/55.html

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San Servolo Epilepsy Summer School



The idea of organizing an Epilepsy Summer Course at the International School of Neurological Sciences of Venice (ISNV) came to me as soon as I was invited to succeed Diego Fontanari as ISNV President in 2001. The training activities of the ISNV take place in the facilities of the Venice International University in San Servolo that are ideally suited for residential courses.

After six years of the Summer School we can state that 315 students from 75 countries have benefited thanks to 116 teachers from 29 countries. The largest student attendance was in 2007. The success of the program is due to the generous commitment of the course directors, teachers and tutors who shared their outstanding experience with the students and lived with them for the duration of the course. Their enthusiastic contribution met a high degree of motivation of the students whose scientific and professional endowments made the interaction with the faculty particularly effective. I thank all of them for making my involvement in the Epilepsy Summer School so exciting.

The next Summer School is scheduled for 27 July through 8 August, 2008 with a theme of "Bridging Basic with Clinical Epileptology – 3". The directors will be Uwe Heinemann of Germany and Marco de Curtis of Italy. For more information contact Melella Paterlini at epilepsy-summercourse@univiu.org. Programs and organization details can be found on www.univiu.org and www.ilaepilepsy.org.

Giuliano Avanzini
ISNV President

Epilepsy Neurosurgery: Another Treatment Gap



Task Force Chair Gary Mathern

Professionals who treat patients with epilepsy know about gaps in epilepsy care. Many regions of the world lack knowledgeable physicians, nurses and other professionals of epilepsy care to diagnose and treat patients with seizures. In addition, the limited availability and distribution of pharmaceuticals can lead to less than optimal care. These problems are true not only for economically developing countries, but also for parts of the developed world such as remote rural areas and inner cities where there is limited access to specialty health care.

A less recognized but equally important treatment gap is inadequate access to surgical treatment for epilepsy. For many patients, especially those with medically refractory epilepsy from easily identified brain lesions such as tumors and hippocampal sclerosis, surgical removal of the abnormality is the most cost-effective method to control recurrent seizures and their consequences, including increased morbidity and mortality. Control of refractory epilepsy in patients not only treats the individual with epilepsy but also has significant secondary gains for the family and society.

Closing the surgical treatment gap was discussed at the International Congress on Epilepsy in Singapore. As part of the Commission of Therapeutic Strategies, a sub-committee met for the first time with representatives from Europe, Latin America, Asia and North America. Many of the participants are currently involved in training epilepsy specialists. A major focus of the discussion was how to identify medical professionals and centers that would benefit from focused training. An additional topic was on how to develop an appropriate curriculum that would assure that future trainees have the necessary skills. From the discussion, a common theme emerged: Many regions have access to key medical technologies, such as EEG and MRI scanners, but are lacking the trained and dedicated neurologists, surgeons, nurses, psychologists and social workers to create Centers of Excellence for Epilepsy Care. Many of the existing centers in all the geographic regions are willing to provide the necessary training. To move forward, however, requires local interest and support to provide the necessary infrastructure and training opportunities. An additional benefit in creating Centers of Excellence for surgical care is that there will be facilities, such as long-term EEG monitoring, that should improve the diagnosis and treatment of all patients with epilepsy.

Although many regions are at various stages in organizing appropriate training, much work remains to be done. Methods have to be created to identify medical and surgical professionals and hospital systems that have the desire and capacity to develop Centers of Excellence for Epilepsy Care. In addition, faculty to teach and mentor future epilepsy specialists from a variety of subspecialties have to be identified and a curriculum developed. Finally, standards for quality care need to be created and implemented. This process will be ongoing and continuous. Those interested in participating, either as an instructor or trainee, can contact Gary Mathern, M.D. chair of this subcommittee (gmathern@ucla.edu) or one of the participants.

Participants:

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Canadian League Against Epilepsy - 30th Anniversary



Canadian League Against Epilepsy – 30th Anniversary
Vancouver, Canada
2-4 October, 2007

http://www.clae.org/Pub/Pub_Front.asp

Idiopathic Generalized Epilepsy (IGE): Developmental Aspects, Bridging Basic Science and Clinical Research



Idiopathic Generalized Epilepsy (IGE): Developmental Aspects, Bridging
Basic Science and Clinical Research
Antalya, Turkey
3-7 October, 2007

www.ige2007.org

Baltic Sea Summer School on Epilepsy



Baltic Sea Summer School on Epilepsy
Lithuania
19-23 October, 2007

www.epilepsy-academy.org

International Symposium on Landau-Kleffner Syndrome

International Symposium on Landau-Kleffner Syndrome
Alden-Biesen, Belgium
2-4 November, 2007

<http://www.lks-symposium.eu>

II Latin-American Summer School on Epilepsy (LASSE II)

II Latin-American Summer School on Epilepsy (LASSE II)
Sao Paulo, Brazil
7-17 February, 2008

www.lasse.med.br

Course on Epilepsy Surgery

European Project on Development of Epilepsy Surgery Program (EPODES)
Brno, Czech Republic
18-23 March , 2008

Applications with CV and recommendation letter to Dr. Cigdem Ozkara at cigdemoz@istanbul.edu.tr

7th Asian & Oceanian Epilepsy Congress



7th Asian & Oceanian Epilepsy Congress
Xiamen, China
15-18 May, 2008

www.epilepsyxiamen2008

San Servolo Summer School

San Servolo Summer School - Bridging basic with clinical epileptology-3
International School of Neurological Sciences of Venice
27 July-8 August 2008

www.univiu.org or epilepsysummercourse@univiu.org

EPIGRAPH

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