

Report of the second meeting of ILAE NeuroBiology Commission

<http://www.ilae.org/Commission/neurobio/index.cfm>

Saturday June 28th, 2014, Stockholm Convention Center – 8:30 am-5:00 pm

Invited: *NBC members:* M. de Curtis, A. Galanopoulou, N. Garcia-Cairasco, R. Idro, D. Janigro, H-C Kang, K. Kobow, M. Kokaia, W.P. Liao, A. Nehlig, J. Noebels, T. O'Brien, V. Whittemore. *TF Chairs:* J. French, A. Pitkänen, R. Sankar. *Task Force Chairs:* M. Simonato, J. French, R. Sankar and A. Pitkänen. *Liaisons:* S. Moshe, A.M. Vezzani. *Epilepsia Editors.*

Attending: E. Bertram, M. de Curtis, N.Garcia-Cairasco, A. Galanopoulou, W.P. Liao, D. Janigro, A. Nehlig, J. Noebels, K. Kobow, T. O'Brien, M. Kokaia, S. Moshe, A. Pitkänen, R. Sankar, H. Potschka, A. Mazarati.

The meeting of the NBC started at 8:30 am and closed at 5:00 pm.

Budget issues

The 2014 budget approved by ILAE-EC is summarized below:

San Servolo Course 2014	\$35,000
LASSE 2014	\$0
Gordon Conference 2014	\$10,000
Translation Research TF-UPHAR Meeting in Cape Town	\$2,500
Conference Calls	\$1,000
Business Meetings - Stockholm & San Servolo	\$20,000
Training & Beyond TF meeting - San Servolo 26-27 July 2014	\$2,500
Translational TF meeting – June 29 th 2014 Stockholm	\$29,034
TOTALS:	\$100,034

From the next year the budget of the TFs will be formally submitted to the Treasurer Committee of NBC (to be nominated). TF budget submission deadline is September 15th, 2014. The budget request form (**Annex 1**) will be sent to TF Chairs before this deadline. The Commission budget will be submitted to the EC in November 2014 and a decision on the approved NBC budget will be available by February 2015.

Actions: -find a Treasurer!
-send TF budget by September 15th 2104

Web site

Katja Kobow reported on the advancements of the NBC web site on the ILAE web site:

<http://www.ilae.org/Commission/neurobio/index.cfm> .

Material of the activities of the NBC and TF was uploaded and will be updated every 3 months. **Please send photos of members, pictures of TF activities and TF updates to Katja Kobow.**

Jean Gotman will be contacted to ask permission to activate a hyperlink connection to NBC web site. The forms for WONOEP XIII registration and for NBC support will be posted on the website. The questionnaire of the Resource Mapping TF will be also posted on the web site.

Actions: -update TF activities
-send **KK missing photos and other pictures**
-upload forms and
-request a hyperlink
-send proposal for a NBC logo .

Translational TF

Aristea and Terry reported on the future developments of Translational TF **Initiative 1**. A TF meeting is organized for the 30th of June and a specific report will follow.

Terry reported on Multi-Parts program that has been developed as a 2-year project in stroke field to plan and organize multi-institute pre-clinical trial centers. Multi-part was contacted to organize a similar effort in epilepsy research, as previously planned in TASK 6 (STEP 6) action of the TF.

Actions: -progress TF activities according to TF report

Resource-mapping TF

The activity of the TF was discussed and it was decided that the aim of **Initiative 2** is too ambitious. The achievement of a proper mapping of international resources will require contacts with national chapters and regional commissions. This action is demanding and requires resources that are now not available. It was decided that the questionnaire developed by the TF (**Annex 2**) will be posted on the web site and will be available either for download or for on line compilation. The future of this Initiative will be reconsidered after evaluating the response to the on line survey.

Actions: -upload questionnaire to NBC website

Neurobiology contributes to *Epilepsia*.

Epilepsia Editor in Chief Astrid Nehlig and Associate Editors E. Bertram, H. Potschka and A. Mazarati, participated to the discussion. G. Mathern joined at the end of the meeting. It emerged from the discussion that there is no easy solution to the fact that many authors do not send their articles to Epilepsia. It is clear that Epilepsia is only a second or third choice after the authors have submitted to more highly ranked journals. Moreover, there is a clear competition between Epilepsia and more general Neuroscience journals such as Neurobiology of Disease and Experimental Neurology. Also Epilepsia is not always perceived as a journal interested in basic or translational research. Finally Epilepsia is often considered an unfriendly journal and authors complain because the level of demand by reviewers is not always adjusted to the impact factor of the journal.

Actions: - devote a whole free supplement of Epilepsia to basic science topics, either new emerging technology or else, possibly in response to a call by the Editors-in-Chief

WONOE TF

XIII WONOE was rescheduled for the period August 31st – September 3rd 2015. The main ILAE meeting will start Sept. 5th. Details on the location, application, etc. of XII WONOE are reported in the attached first announcement (**Annex 3**; see also <http://www.ilae.org/Commission/neurobio/index.cfm>).

The format utilized in the last 2 WONOEPS is confirmed: 5 half-day sessions on subthemes that will be identified after abstract selection. Each session will start with a 30-min critical introduction of the subtheme, followed by 8-10 data-blitzes (max 15 min. each) and will be concluded by general discussion lead by a panel of discussants. WONOE travelling fellowship (3-4) of 300-500 Euro, were approved, if the budget allows. Applicants must have obtained their last training degree no more than 5 years before application and will present their own work at WONOE. Candidates can only apply once in 5 years.

It was proposed that the evening of the 31st a special lecture on the evolution of biomarker discovery by an expert external to the epilepsy field (Blennow, Alzheimer expert). The final subtopics of XIII WONOE will be defined according to the abstracts that are received. The following themes have been considered: Central and peripheral biomarkers, Biomarkers of co-morbidities, Biomarkers of treatment response, Genetic biomarkers, Biomarkers of epileptogenesis, epileptogenicity, brain injury, seizure, tissue reorganization, etc. The following speakers and discussants were proposed for the 5 sessions: A Pitkanen, D Janigro, R Sankar, I Scheffer, T O'Brien, WP Liao, J Jr Engel, D Henshall, N Garcia-Cairasco, J Noebels (comorbidities) K Staley, Z Szallasi, M Kokaia, W Loeschner, AM Vezzani, U Heinemann, G Avanzini.

The first call for abstracts (see attached file) will be published through WONOE mailing list (that needs to be checked and improved) and will be published on ILAE web site and on Epilepsia, Epilepsy Currents and other epilepsy and neuroscience journals and web sites of neuroscience societies (SfN and FENS). Fund-raising will start soon after.

WONOEP application form will be available on line on the web site. Aristeia proposed to submit applications and abstracts through the registration system of ILAE meeting – after approval by Holmes/Finola. Abstract submission will end of January 2015 and by the end of February 2015 abstract selection by WONOEP TF and LOC will be completed. Invitations and fellowships invitations will be sent out by April 1st, 2015. The NBC confirmed that WONOEP content will be reported by *ad hoc* regular reviews (WONOEP APPRAISALS) that will be published on Epilepsia. A senior and a junior scientist will be engaged for the production of the review, at least one month before WONOEP. Detailed instructions on the style of the review will be given to the responsible authors. **The reference persons in charge of the development of the WONOEP APPRAISAL will be also responsible for the presentation of WONOEP HIGHLIGHT at the Istanbul 2015 ILAE meeting on September 5th.**

The WONOEP TF met after the NBC meeting to discuss the following issues: The budget for lodging, meals and local facilities at Halki Palace will be around 32/35.000 Euro.

The local organizers will provide informations on

- Accurate directions on how to reach the venue from the airport
- a local secretarial support and the relative costs
- costs of 3-4 water taxis from the airport to the WONOEP venue
- costs of a possible excursion and dinner the evening of September 2nd

The WONOEP TF

- will prepare an application form (mention gender)
- will revise the mailing list for WONOEP and will ensure the diffusion of the first announcement, as described above
- Hunt for attendants in charge of WONOEP APPRAISAL/WONOEP HIGHLIGHTS

Actions:

- update WONOEP mailing list
- follow next organization steps
- obtain logistic information from local committee
- check first announcement
- prepare application form
- application form on web site and request next steps to Richard Holmes/Finola Quinn
- finalize WONOEP list of discussants and program
- propose topics for 2017 WONOEP

Education and Beyond TF Initiatives 3

The Commission discussed the report prepared by the TF chair that evaluates the content of experimental epileptology in Courses and training events sponsored by ILAE (**Annex 4**) aimed at verifying one of the objectives of the mission of ILAE. Most of the events sponsored by CEA and other regional commissions have an inadequate content (if any) of neurobiology issues. The potential request emerging from these training events could be provided by the NBC, upon formal request. The need for a formal application to demand the contribution of the NBC to educational events sponsored by ILAE and by other agencies was discussed. Two types of contributes are identified in the proposed application form (**Annex 5**): scientific contribute and economical support. Both types of applications will be evaluated by the NBC members via skype conferences and a decision about the support will be taken before the budget request of the Commission is submitted, either by the end of November (non-financial contribute) or by the end of March (financial contribute). Requests of support must be submitted before the 15th of July of the year before the event.

The new procedure and the application request/form will be disseminated to all ILAE Commissions and to the organizers of already sponsored events.

Actions:

- finalize the form for NBC support
- advertise call for NBC support within and outside ILAE

Education and Beyond TF Initiative n. 4: Beyond training project

On July 1st the project was discussed during a meeting of the Managing Committee with the Secretary General of IBRO, Sten Grillner. Future plans of collaborations on the project were envisaged. A meeting of

the TF is planned for July 27th in San Servolo, Italy. The following plan will be discussed and steps will be made to achieve the goals:

Task 1 - Identify ILAE-sponsored Courses for project testing/validation: to be discussed during the TF meeting

Task 2 - Identify specific epilepsy research topics of regional relevance: to be discussed during the TF meeting

Task 3 - Define criteria to evaluate the fundability of applicants from limited resources areas: to be discussed during the TF meeting

Task 4 - Define grant application and rules along the outline in **Annex 6**.

Step 5 - Develop a strategy to raise funding external to ILAE (IBRO, NIH, private)

Step 6 - procedure for grant evaluation (*liasons* with Regional Commissions)

Actions: -follow indications of the future TF meeting

Dissemination TF Initiative 6

The program of neurobiology activities at the 2015 ILAE meeting in Istanbul is defined and a flier for dissemination was prepared (**Annex 7**). The flier will be distributed to any possible Neuroscience meeting, Course or event. A copy of the flier will be circulated among NBC members for dissemination.

After the NBC meeting a later version of the Educational session was prepared in collaboration with Walter van Emde Boas:

The Best of two worlds: Translational Epileptology

1. *Of mice and men: clinical and neurobiological perspectives in temporal lobe epilepsy*; proposed speakers C Özkara & A Depaulis
2. *When a seizure is a seizure*; proposed speakers M de Curtis & P Kahane
3. *What do and can clinicians expect from neuroscientists?*; proposed speakers J.Engel & G. Avanzini
4. *Beyond the Neuron(s): where is epilepsy*; proposed speakers D Janigro & TBA

IBRO accepted a NBC symposium on epilepsy: The organizing committee of the 2016 ECE meeting in Prague was contacted to strengthen the links with NBC activities. A message to CEA will be sent.

Contacts were activated with IBRO through the Secretary General Sten Grillner.

Actions: -send flier to all NBC members for dissemination
-fliers to FENS meeting and San Servolo Course
-CONTACT CEA FOR NBC ACTIVITIES IN 2016 ECE IN PRAGUE
-proposals for ECE 2016 – link to TF activities

The next NBC meeting is planned for September 4th 2015 in Istanbul.

Annex 1**NBC Task Force 2015 budget request
(submission deadline September 15th 2014)**

XXX Task Force	Type of activity	Date of event	budget request	

Annex 2

Epilepsy research laboratories: questionnaire

Name of institution / department:

Address: including Street, Number, zip code, city, country

Website:

Principal investigator:

Co-workers:

E-mail:

Phone:

Research focus/interest:

- Mechanisms of Epileptogenesis
- Mechanisms of Ictogenesis
- Pathology
- Pathophysiology
- Pharmacology
- Epileptogenesis
- Ictogenesis
- Behavior & Psychology
- Imaging
- Genetics
- Neuromodulation-stimulation
- Natural products
- Other - please specify:

Available techniques:

- Electrophysiology (in vitro; ex vivo; in vivo)
- Brain microdialysis
- Seizure models

Chemically-induced; 6Hz model; maximal electroshock;
species & strain:

- Epilepsy models

post SE; brain stimulation; post-trauma; post-stroke; dementia-related; genetic epilepsies (absence epilepsy; audiogenic epilepsy)

species & strain:

- Video/EEGs seizure monitoring
- Genetic
- Imaging (autoradiography; MRI; fMRI; tractography)

Specific equipment available:

- Immunohistochemistry
- Molecular biology
- Optogenetics
- Imaging (MRI; μ PET)
- Behavioral paradigms
- Other - please specify

Key publications (3):

Graduate programs:

Collaborati

Annex 3

XIII Workshop on Neurobiology of Epilepsy - WONOEP 2015

**Heybeliada Island, Istanbul, Turkey
August 31st – September 4th 2015**

Scientific Organizing Committee

Katja Kobow, Raman Sankar, Filiz Onat, Candan Gurses and Marco de Curtis

WONOEP XIII, a satellite event of the 31st ILAE/IBE International Epilepsy Congress, will take place at the Heybeliada Island, Istanbul, Turkey. The **main topic** of WONOEP XIII is **Biomarkers in Epilepsy**. Abstracts on peripheral and central biomarkers, biomarkers of co-morbidities, response to treatment, genetic biomarkers as well as biomarkers of epileptogenesis, brain injury, seizure, or tissue reorganization will be considered.

Abstract submission opens November 15th 2014 and closes January 15th 2015.

Abstracts of 300 words or less should be submitted as Word files to wonoep@epilepsycongress.org. The abstract submission form is available at the Neurobiology Commission website (<http://www.ilae.org/Commission/neurobio/events.cfm>).

A maximum of 40 abstracts **strictly related to the main topic** will be selected and the authors will be invited to WONOEP after April 1st 2015. Lodging and meals will be provided to the selected participants. Travel costs will not be supported. A WONOEP registration fee of 100 Euros is applied to all selected participants.

Invited speakers are strongly encouraged to submit an abstract also to the 2015 ILAE/IBE International Epilepsy Congress in Istanbul (September 5-10, 2015). The registration fee will be waived if registration to WONOEP is combined with registration and submission of an abstract to the 31st ILAE/IBE meeting (see <http://www.epilepsyistanbul2015.org>). In this case, proof of registration to the ILAE main meeting should be provided before 15th June 2015.

WONOEP 2015 is organized by the **ILAE Neurobiology Commission** and by the **WONOEP Task Force**.

WONOEP queries: Katja Kobow (katja.kobow@uk-erlangen.de)

and Marco de Curtis (decurtis@istituto-besta.it)

Annex 4

Meetings sponsored by ILAE 2012-2014

	edition	acronym	Relevance	topic	location	dd	Sponsor	Sessions	Basic science
Workshop on Neurobiology of Epilepsy	13 th	WONOEP	Internat	Epilepsy Neuroscience	migrating	4	ILAE		100%
San Servolo Epilepsy Summer School	13 th	Bridging - 5 th	Internat	Epilepsy + Neuroscience	Italy	12	ILAE + CEA		>50%
		Surgery – 3 rd	Internat	Epilepsy Surgery	Italy	12	ILAE + CEA	36	9 (25%)
		Pediatrics – 3 rd	Internat	Pediatric Epilepsy	Italy	12	ILAE + CEA	20	7 (<30%)
		Pharmacol 12 nd	Internat	Pharmacol epil	Italy	12			
Latin America Summer School on Epilepsy	9 th	LASSE	Regional	Epilepsy	South America		CLAA - ILAE	54	17 (30%)
Intern. Postgraduate Practical Epilepsy School	9 th		Internat	Epilepsy	Slovenia	2	CEA	???	???
Baltic Sea Summer School	8 th	BSSSE	Regional	epilepsy	Baltic area	5	CEA	21	3
Migrating Course on Epilepsy	8 th		Regional			5	CEA		0
Eilat International Course Pharmacol. Treatment of Epilepsy	6 th		Internat	Pharmacology /Therapy in epilepsy	Israel	5	CEA	27	5 (<20%)
Caucasian Summer School on Clinical Epileptology	6 th	RCSSCE	Regional	Epilepsy	Georgia	5	CEA	???	???
International training course in Stereo- EEG	4 th		Internat	Epilepsy surgery	Italy- France	5	CEA		0
Eur Project Development Epilepsy Surgery	3 rd	EPODES	???	Epilepsy surgery – basic and advanced course	Czec Rep.	4	CEA	??	low
Epilepsy Brain and Mind	3 rd		Internat		Czec Rep.	3		62	20%
Summer School for Neuropathology and Epilepsy	2 nd	INES	Internat	Neuropathology Epilepsy	Germany	4	CEA		30%
Dianalund Summer School EEG and Epilepsy	2 nd	DSSSE	Internat	EEG Epilepsy	Denmark	6	CEA	23	2 (<10%)
Francophone Course of CAA	1 st		Regional	Epilepsy	Africa	3	CAA ILAE	???	???
International Course on Drug Resistant Epilepsy	1 st		Regional	Epilepsy	Italy		???	21	2 (<10%)
East-European Course of Epilepsy			Regional	Epilepsy	Romania	2	CEA		0
China Summer School on Epilepsy	4 st		Regional	Epilepsy	China	7	CAOA ChinaAA E		10%
Teaching Course on Focal Epilepsy		ASEPA			Asia				

Percentage of teaching method:	frontal lectures	%
	practical sessions	%
	project development	%
	hands-on activities	%

Target audience

Number of expected attendants

Proposed budget	faculty support
	venue facilities
	local assistance
	sundry
	proceedings costs
	bursaries for students
total budget	

Please, define the criteria for bursary application (max 200 words)

The NBC contribute will be utilized for the following

Expected proceedings

Please, attach to the present form a detailed preliminary program and a detailed budget plan

Contact person name

Annex 6

General description of the grant scope/application:

The *Training and Beyond Grant Program* seeks to foster the development of local research activities in geographical areas with limited resources and to promote scientific collaboration within an International research network. Project proposals must have a first validation during ILAE-sponsored Training Courses, such as LASSE and San Servolo Course. Grant application is proposed by a scientific network as a joint research projects. Seeding funds for research will be given to the partner in the less-advantaged geographical area and travelling from and to this region are provided to team partners. The main goal is to favor the development of the neurobiology of epilepsy allowing established research groups to set up collaboration with emerging groups within a less-advantaged region.

Scope of the Grant Program. The program is designed to intensify the scientific exchange among research laboratories from well-established epilepsy research Laboratories with new Laboratories in Africa, South America and Asia, thus creating conditions for scientific developments in the field of neurobiology of epilepsy in these areas. Collaborative, multi-team project application must focus on region-specific epilepsy theme and should be first validated during one of the training Courses sponsored and supported by ILAE under the tutorship of scientists and clinicians with well-recognized expertise in epilepsy research field. ILAE-sponsored Courses are LASSE, San Servolo Course,. Candidate teams will be invited to apply xxx?? The research activity in the limited-resource area will be funded and collaborations will be supported through research missions to work on scientific questions specifically proposed in the submitted project.

Research teams. Projects are presents by a Principal Investigator active in Countries of limited resources in Africa, South America and Asia (excluding China, Japan and), who coordinates an international research team that involve up to 3 established groups in the field of epilepsy research. The Principal Investigator should not be older than 40 years of age. Established participating research group must have a local coordinator with recognized competence in the area of the project. The hosting Institute in established and emerging teams should provide the necessary infrastructure and resources to achieve the goals of the project.

Research funded. Projects should focus on research in neurobiology of epilepsy, and in particular on scientific topics of regional relevance for the area of the Principal Investigator. The projects should be planned for a two year period with a detailed definition of the chronogram of activities. The feasibility of the research project should be tested at one of the ILAE-sponsored Courses x

Financial support. Funding is provided for 2 years from the acceptance of the grant application. The Grant Program finances research activity in the Coordinator Country for a sum of \$. Research missions and exchange trips by doctoral and post-doctoral students and faculty from the participating institutions will also be funded for up to \$ for the 3 years. Applications should be submitted through ILAE NBC xxx. The applicant must indicate how the funding will support collaboration with research partners. An applicant will only be eligible for the same category of the African Collaboration Grant every five years. Supplementary funds could be sought from other sources. Proof of price quotations (e.g. flights, accommodation, etc.) should be attached to the application.

Application procedure. An electronic version of the application form with inserted signatures must be submitted electronically to xxxx. Deadlines and completeness of application forms should be strictly adhered to. Late applications will not be considered. Incomplete applications will not be considered. Training and Beyond Grant is made on a competitive basis. Applications are evaluated through peer review by a team of ILAE xx.

Reporting activities. Grant holders must submit a short report every year , according to the guidelines provided with the Award Letter.

Annex 7



Save the date

31st International Epilepsy Congress, Istanbul, 2nd - 4th September 2015
www.epilepsyistanbul2015.org

Why attend?

- To learn about clinical epilepsy issues dedicated to the neuroscientist
- To update your knowledge on neurobiology of epilepsy
- To participate in the Young Scientist Award
- Many other sessions in the congress programme with a prominent neurobiology content

Submit an abstract to be invited to the Workshop on Neurobiology of the Epilepsies (WONOE) XIII, Istanbul, 2nd - 4th September 2015

Venue: Merit Hotel Palace, 45th Sehitler Cad 94, Heybeliada Island, Istanbul

The goal of WONOE is to develop new research directions on specific epilepsy themes.

WONOE XIII topic: "Biomarkers in epilepsy"

The abstract submission deadline: **January 2015**

Further details are available at: <http://www.ilae.org/Commission/NeurobiologyEvents.htm>

Neurobiology events at the 31st International Epilepsy Congress 2015 are sponsored by the Dissemination Task Force of the ILAE Commission on Neurobiology.

the bookmark

the flier



Why attend the 31st International Epilepsy Congress in Istanbul?

5th - 9th September 2015
www.epilepsyistanbul2015.org

To learn about clinical epilepsy issues during sessions dedicated to the neuroscientist:

- Temporal lobe epilepsy: Trauma and its models
- Intel and interictal patterns

To update your knowledge on neurobiology of epilepsy during educational experimental epileptology sessions on:

- What and where is epilepsy? Neurons vs. brain
- Of mice and men: What is temporal lobe epilepsy?
- Facts vs. fiction: What do and can clinicians expect from neuroscientists?

To attend state-of-the-art symposia on neurobiology of epilepsy:

- Neurobiology Symposium: "Epigenetics to cure epilepsy: facts and feasibility"
Speakers: Merab Kokka (Sweden), Robert Wykes (UK), Esther Knook-Magnussen (USA) and Giorgio Carragnato (Italy)
- Neurobiology of Epilepsy/Translational Epileptology Symposium: "Personalizing mTOR inhibition for epilepsy treatment: From bench to bedside"
Speakers: Eleonora Avanzini (The Netherlands), Peter Cilio (USA), Neil Burnashev (France) and Sergiusz Zdzienicka (Poland)
- "Exploring new therapies for human intractable epilepsies using personalized models"
Speakers: Jeffrey Noebels (USA), Steve Petrou (Australia) and Kazuhito Yanai (Japan)
- "Epilepsy across species and ages: translating video and EEG terminology from animals to humans and back"
Speakers: Arlissa S. Galanopoulos (USA), Terence O'Brien (Australia), Norberto Garcia-Casares (Brazil) and Alexia Artimagine (France)

To participate in the Young Scientist Award:

- The award is presented to the best platform presentation submitted to the congress (The prize consists of €500 and a diploma).

Other sessions in the congress programme with a prominent neurobiology content:

- The complexities of epilepsy genetics
- Epilepsies related to the immune system
- Understanding and preventing epilepsy-related mortality
- Insights in the life cycle of antiepileptic drugs
- Advances in the treatment of Status Epilepticus: Translation from animal models to humans
- Epilepsy and Autism: Co-occurrence and potential commonalities during brain development
- Differential foci of interictal discharges
- Unravelling the genetic causes of epileptic encephalopathies
- Where is the next big breakthrough coming from?
- Modeling comorbidities in animals



Submit an abstract to be invited to the Workshop on Neurobiology of the Epilepsies (WONOE) XIII, Istanbul, 2nd - 4th September 2015

Venue: Merit Hotel Palace, 45th Sehitler Cad 94, Heybeliada Island, Istanbul, Turkey.
WONOE XIII, the International Forum for the discussion of issues related to experimental epileptology of the ILAE Neurobiology Commission.

The goal: The goal of WONOE is to develop new research directions on a particular epilepsy theme.

Applications: Applications are open to clinical and experimental scientists with a specific and documented interest in epilepsy.

WONOE XIII topic: "Biomarkers in epilepsy"

Abstract Deadline: The abstract submission deadline for the WONOE is set for January 2015.

Further Details: Available at: <http://www.ilae.org/Commission/NeurobiologyEvents.htm>

Commission on Neurobiology: Further information about the Commission on Neurobiology can be found on: <http://www.ilae.org/Commission/Neurobio/index.htm>

Neurobiology events at the 31st International Epilepsy Congress 2015 are sponsored by the Dissemination Task Force of the ILAE Commission on Neurobiology:

ILAE Neurobiology Commission

Chair: Marco de Curtis (Italy)

Members: Norberto Garcia-Casares (Brazil), Arlissa Galanopoulos (USA), Hoon-Chul Kang (Korea), Katja Kohler (Germany), Merab Kokka (Sweden), Daniel Janigo (USA), Richard Idro (Uganda), Wei Ping Liu (China), Astrid Nehlig (France), Jeff Noebels (USA), Terence O'Brien (Australia), Vicky Whitmore (USA), Ijaz BC Saeed, Solomon L. Moshé (USA)

Neurobiology Dissemination Task Force

Chair: Merab Kokka (Sweden) and Ada Pitkanen (Finland)

Members: Daniel Janigo (USA), Arlissa Galanopoulos (USA), Vicky Helena Whitmore (USA), Jeffrey Noebels (USA), Astrid Nehlig (France), Norberto Garcia-Casares (Brazil), Giuliano Aranzini (Italy), Helen E. Scharfman (USA), Akio Sato (Japan) and Uwe Heinemann (Germany)

For further information about the 31st IEC, such as the scientific programme, registration rates and abstract/ternary applications, please visit:

www.epilepsyistanbul2015.org

