The official journal of the European Academy of Neurology

Impact Factor
4.621

ISI Clinical Neurology subject ranking: 34/197
ISI Neurosciences subject ranking: 56/261

The European Journal of Neurology covers all areas of clinical and basic research in neurology, including pre-clinical research of immediate translational value for new potential treatments. The journal welcomes submissions on controlled clinical trials including those of novel therapies from Phase I-III. Emphasis is placed on major diseases of large clinical and socio-economic importance:

- Dementia
- Stroke
- Epilepsy
- Headache
- Multiple Sclerosis
- Movement Disorders
- Infectious Diseases

The journal provides a forum for European activity in clinical neuroscience and medical practice and helps strengthen the links between research workers and clinicians in Europe and other parts of the world.

Free Online Access for EAN Members

- FREE Guidelines
- Reviews
- High Impact Research Articles
- Topical Virtual Issues

Publish Your Next Paper With Us
Visit the EAN or Wiley Congress booths to find out why and how

Discover more at
wileyonlinelibrary.com/journal/ene or www.ean.org
General Information

Welcome Message ......................................................................................................................... 5
About EAN ........................................................................................................................................ 6
Board and Committees .................................................................................................................. 7
EAN Membership Information ....................................................................................................... 8
Educational Grants Information ...................................................................................................... 10
Resident and Research Fellow Section (EAN-RRFS) ................................................................. 13
Congress Grants ............................................................................................................................ 15
Appreciation and thanks ................................................................................................................ 16
Continuing Medical Education ..................................................................................................... 17
Instructions for Speakers and Presenters ..................................................................................... 19
Information from A to Z .................................................................................................................. 20
Floor plans ...................................................................................................................................... 28
EAN Business meeting overview ............................................................................................... 31
ePoster and ePresentation Overview ......................................................................................... 34
Networking Programme and Other Activities ............................................................................. 41
Timetable/Session Overview ........................................................................................................ 48
Scientific Theatre – Programme .................................................................................................. 53
Session Descriptions .................................................................................................................... 54

Scientific Programme

Saturday, 29 June 2019

Educational Sessions ................................................................. 62, 65, 67, 71
Focused Workshops ................................................................. 62
Special Sessions .................................................................. 65, 68, 72
Symposia ................................................................................. 66
Oral Sessions ...................................................................... 74
Plenary Symposium: Opening .................................................. 41

Monday, 1 July 2019

Educational Sessions ................................................................. 106, 108, 109, 110, 111, 112
Focused Workshops ................................................................. 106
Special Sessions .................................................................. 109
Plenary Symposium: Overarching Theme ........................................ 110
Symposia ................................................................................. 110, 111
Oral Sessions ...................................................................... 114

Sunday, 30 June 2019

Educational Sessions ................................................................. 84, 86, 91, 92, 94, 96
Focused Workshops ................................................................. 84
Special Sessions .................................................................. 87, 92, 95
Presidential Symposium .......................................................... 89
Symposia ................................................................................. 92
Oral Sessions ...................................................................... 98

Tuesday, 2 July 2019

Educational Sessions ................................................................. 120, 121, 122, 123, 124, 125
Special Sessions .................................................................. 121, 122
Symposia ................................................................................. 120
Plenary Symposium: Highlight Session ........................................ 122
Oral Sessions ...................................................................... 126

Industry Sponsored Programme

Acknowledgements .......................................................................................................................... 135
Exhibitors and Exhibition Floor Plan .......................................................................................... 136
Satellite Symposia Programmes .................................................................................................. 138
3-Days Satellite Sessions ........................................................................................................... 165
Forum Talk Programmes .......................................................................................................... 171
Speaker Index .................................................................................................................................. 177
OUR UNIVERSE IS MADE UP OF 86 BILLION NEURONS.

LET'S EXPLORE IT. TOGETHER.

Driving Excellence in Neurology.

Be part of one of humankind’s most ambitious projects to help uncover the workings of the nervous system. EAN connects 45,000 specialists in neurology in 47 countries across Europe. Promoting excellence, cutting-edge science and innovative therapies for a better life for more than 430 million patients in Europe alone. Read more on ean.org
Welcome

It is our great pleasure to welcome you to Oslo on the occasion of the 5th EAN Congress from 29 June to 2 July 2019.

Oslo is one of Europe’s fastest-growing cities, with a population of 620,000. Actually, half of Norway’s population lives less than 3 hours’ drive from Oslo harbour. The largest city in Norway is now quickly transforming into a cosmopolitan hub with many of world-class museums, restaurants and art, but still maintains the relaxed atmosphere of a much smaller town. The compact city centre is easily explored on foot or by bike, and an efficient public transport system makes the whole city accessible without a car.

Norway has longstanding traditions in neuroscience and clinical neurology. Oslo got its first full clinical professorship in Neurology already in 1895, possibly the second full chair of neurology in the world. Norway has a very active and dedicated Neurological association with more than 650 members who will do what they can to make the congress and your stay a great success and a memorable event.

The overarching theme for the congress is “Neuroinflammation – Science. Synergies. Solutions”. The role of neuroinflammatory processes is currently a hot topic in both understanding neurological diseases and in developing new therapies for brain diseases. Different aspects of neuroinflammation will be highlighted during the congress in addition to a broad spectrum of events related to the whole variety of disorders covered by neurology. Sessions will range from teaching courses and focused workshops over high-quality symposia and named lectures to presentations of most recent scientific progress and should allow participants an individualised and high quality up-date in every aspect of neurology.

EAN and the Norwegian Neurological Association welcome you all to exciting days in Oslo and hope that the congress will be of benefit both for you and your patients. We also hope that you will enjoy the city, the fjord with its activities, surrounding nature, and our hospitality. No effort will be spared to make this congress a great success.

Tony Marson
Chairman of the Programme Committee of the European Academy of Neurology

Franz Fazekas
President of the European Academy of Neurology

Erik Taubøll
Chairman of the Local Organising Committee
About EAN

This year, the European Academy of Neurology (EAN) celebrates its fifth year of supporting education and fostering research within European neurology. Founded in 2014, through the merger of two existing societies, EAN has since served as the home of neurology in Europe, giving neurologists and related professionals in Europe a unified voice, while ensuring it remains one of the world’s scientific hotspots.

The Aim of EAN (European Academy of Neurology) is Excellence in Neurology in Europe.

EAN is a non-profit organisation and identifies itself with the following five values:

- Professionalism. EAN strives to reach the highest scientific standards and to deliver unbiased information in its research and educational activities.
- High ethical standards. EAN applies high ethical standards in all its activities within science, education, communication, and administration, complying with applicable regulations and codes of ethics.
- Involvement. EAN strives to involve its members and collaborators in the organisation of research, education and liaison activities.
- Independence. EAN operates as a professional and scientific organisation, independent from the political or commercial interests of external companies or organisations.
- Transparency. EAN provides transparency in the organisation of all its scientific and administrative activities.

EAN is an organisation of:

- 47 European national neurological societies
- 1200 individual members
- 10 corresponding member societies

EAN consists of:

- an Assembly of Institutional and Individual delegates
- elected officers
- 4 standing committees, 2 sub-committees and working groups
- 30 Scientific Panels
Committees

Board

Franz Fazekas, Austria
President

Claudio Bassetti, Switzerland
President Elect

Günther Deuschl, Germany
Past President

Marianne de Visser, The Netherlands
Secretary General

Elena Moro, France
Treasurer

Dafin Muresanu, Romania
Chair Communication Committee

Riccardo Soffietti, Italy
Chair Education Committee

Tony Marson, United Kingdom (Chair)

To be read in context of the Program Committee:

Programme Committee

Urs Fischer, Switzerland

Salimata Gassama, France (RRFS representative)

Dan Healy, Ireland

Ivan Rektor, Czech Republic

Evzen Růžička, Czech Republic (MDS-ES representative)

Philip Scheltens, The Netherlands

Riccardo Soffietti, Italy (Chair Education Committee)

Claudia Sommer, Germany (Chair Teaching Course Sub-Committee)

Guido Stoll, Germany

Walter Struhal, Austria (Ethics & Quality TF representative)

Antonio Toscano, Italy

Marie José Vidailhet, France (Chair Scientific Committee)

Local Organising Committee

Erik Tauboll (Chair)

Teaching Course Sub-Committee

Claudia Sommer, Germany (Chair)

David García Azorín, Spain (RRFS representative)

Elena R. Lebedeva, Russian Federation

Milija Mijajlovic, Serbia

Celia Oreja-Guevara, Spain

Erich Schmutzhard, Austria

Maria Stamou, Greece (Ethics & Quality TF representative)

Pille Taba, Estonia (MDS-ES representative)

Roland Wiest, Switzerland
EAN Membership benefits

Fee 1 until 3 May
- Student Member: 0,-
- Resident & Research Member: 45,-
- Full Member: 150,-
- Corresponding Member: 250,-
- Fellow of EAN (FEAN): 0,-

Fee 2 from 4 May until 30 September
- Student Member: 0,-
- Resident & Research Member: 45,-
- Full Member: 75,-
- Corresponding Member: 125,-
- Fellow of EAN (FEAN): 0,-

Fee 3 after 30 September, all fees go towards the following year
- Student Member: 0,-
- Resident & Research Member: 45,-
- Full Member: 150,-
- Corresponding Member: 250,-
- Fellow of EAN (FEAN): 0,-

GET CONNECTED AND VISIT THE ANNUAL CONGRESS

- Reduced registration fees (*not valid for Fee 2)
- One free educational course (*not valid for Fee 2)
- Access to the VIP area
- Access to selected congress webcasts
- Have your picture taken at the EAN photobooth

MAKE CONNECTIONS AND EXPAND YOUR KNOWLEDGE

- Purchase the printed edition of the European Journal of Neurology at a reduced rate
- My EAN: free web-conferencing tool
- EAN Guideline Reference Centre
- Gain Individual Membership in EAN Scientific Panels

GET ACCESS TO AND LEARN

- Current issues and the full archive of the European Journal of Neurology
- Online learning platform eBrain
- E-book Manual of Neurological Examination
- Receive monthly mailshots of our electronic newsletter EAN pages
- EAN grants

SHAPE THE FUTURE OF EAN & PARTICIPATE

- Voting rights & Committee participation

ENJOY YOUR SPECIAL STATUS

- The right to use the FEAN title in your CV and publications & a medal recognizing your FEAN status

- If your place of work is a low/low middle income country (as defined by World Bank), you pay a reduced fee of €25
- If your place of work is a low/low middle income country (as defined by World Bank), you are entitled to a 50% discount
- If you are a retired neurologist, you are entitled to a discount of 50%
- AAN Members from outside Europe get a 10% discount off EAN membership
- Members from EAN member countries get a 10% discount off AAN membership

Associate Member conditions vary
Membership Information

EAN celebrates its 5-Year Anniversary. To honour those that have been a part of EAN from the very beginning, a “Wall of Fame” is dedicated to them in the hallway outside the main auditorium.

Become an EAN individual member and benefit from the following:

Get connected and visit the annual congress
- Reduced registration fees
- One free educational course
- Access to the VIP area
- Access to selected congress webcasts
- Have a professional picture taken at the EAN photobooth

Make connections and expand your knowledge
- Purchase the printed edition of the European Journal of Neurology at a reduced rate
- My EAN: web-conferencing tool
- EAN Guideline Reference Centre
- Gain Individual Membership in EAN Scientific Panels

Get access to and learn
- Current issues and the full archive of the European Journal of Neurology online
- Online learning platform eBrain
- E-book Manual of Neurological Examination
- EAN Grants (for Resident and Research Members)

Shape the future of EAN
- Voting rights & Committee participation (FEAN & Full members only)

Savings
- AAN shared Membership: If you are an AAN Reference Member, you are eligible for a 10% discount off your EAN Individual Membership fee. In reverse, EAN Individual members receive a 10% discount when applying for AAN membership.
- If your place of work is a low/low middle-income country (as defined by World Bank), you pay a reduced fee.
- If you are a retired neurologist, you are entitled to a discount of 50% off the regular membership fee.

Membership packages

Full Member: Neurologists who are nationals of any EAN member country, or practicing in any of the EAN member countries, irrespective of their citizenship, including neurologists in training who can become RRFS members.

Corresponding Member: Neurologists living in a non-EAN member country or a health professional and/or scientist working in another specialty area or profession related to neurology.

Resident and Research Member (RRFS): Residents/neurologists in training, research fellows, PhD students in Neurology. The mentioned three groups up to a maximum of 3 years beyond their latest degree (MD, PhD).

Student Member: All undergraduate medical students (Bachelor and Master, or equivalent) no matter which country they come from.

Fellow of EAN (FEAN)
The title ‘Fellow of the EAN’ acknowledges a limited number of neurologists/neuroscientists who are full/corresponding members and who deserve a special recognition.

- a scientific achievement that places you within the European leaders in your field, or
- significant and continuing service in a leadership position for a European or international society for neurology or a neurological subspecialty society, or
- a service for neurological patients that is considered exceptional

Please apply by sending your application form and CV (in English) to EAN Head Office: Forms can be downloaded online or be sent upon request. You can apply for any membership category online: www.ean.org/Membership-Packages.

Service Award
The European Academy of Neurology is proud to award outstanding members of the neurological community for their service to European Neurology and EAN. The award is handed over during the Assembly of Delegates, taking place at EAN annual congresses. Recipients are granted the Title “Fellow of EAN”.

In 2019, Hannah Cock, London, United Kingdom will receive the EAN Service Award during the EAN Assembly of Delegates, for her outstanding contributions towards improvement and expansion of the educational activities of EAN.
Clinical Fellowship 2020

Application deadline: October 31, 2019

The purpose of this award is to provide a well-defined observational clinical practice, service structure or technical experience to support training. The grant is to support a visit of six weeks duration.

Each grant is amounting to €1,500.-/month (plus travel expenses of up to €300.-)

A list of approved hosting departments (and details for interested hosts of how to apply) is available on www.ean.org

Candidates from all EAN member (and corresponding member) countries are eligible to apply. Applicants must be current residents with a minimum of 2 years training in neurology or have obtained their board certificate/completed training within the last 3 years at the time of application; have knowledge of the local language (host department) or be fluent in English. Awardees from previous years are no more qualified.

All applicants must be Full member or RRFS member at time of application.

Applicants and hosts are expected to have consulted and worked together on any application to maximise the likelihood of success.

All application documents must be submitted by October 31, 2019 by email to fellowship@ean.org

Application is open between 1 August and 31 October 2019

EAN Research Fellowship 2020

Application deadline: August 31, 2019

The purpose is to support training and experience for European Neurologists in any area of basic or clinical or applied research in neuroscience. The research work must be carried out at a European academic neurological department outside the country of residence. All applications should demonstrate experience/training of clear value to the home department/individual beyond that available in their own countries/institutions. Successful applicants will be awarded €2,000.- per month.

Research training fellowship: Expected to be of typically 12 months and no less than 6 months, to lead either to completion of a higher degree, a grant application or peer-reviewed publication.

Research experience fellowship: Expected to be of typically no more than 6 months duration for individuals who might otherwise not have the opportunity to gain high quality research experience; more experienced clinicians/researchers requiring training in a specific research methodology or technique not currently available in their own country and of clear value to home department will also be considered.

Candidates from EAN member countries and affiliated to a European academic neurological department with a minimum of 2 years neurology training, up to a maximum of 5 years beyond their final degree (PhD, MD, or equivalent) at the time of application are eligible to apply.

All applicants must be Full member or RRFS member at time of application.

Applicants and hosts are expected to have consulted and worked together on any application to maximise the likelihood of success.

All application documents must be submitted by August 31, 2019 by email to fellowship@ean.org

Application Deadline: August 31, 2019

EAN Spring School 2020

May 2020

Application deadline: January 31, 2020

Dedicated to clinical neurologists in training who did not yet complete their residency/clinical speciality training who wish to boost their knowledge and to get the chance to enable personal contacts among participants and faculty members.

Preliminary Programme:
1. Headache & Pain
2. Multiple Sclerosis
3. Infectious diseases
Educational Grants Information

Structure: morning plenary sessions and case-based workshops for smaller rotating groups in the afternoons.

Location: Steinschaler Doerfl, Frankenfels, Austria (1.5 h from Vienna airport)

All applicants must be neurologists in training (not yet completed residency/clinical speciality training) with more than 2 years of clinical training, and up to a maximum of 5 years beyond their final degree. RRFS members from Corresponding Institutional Member Countries and HINARI Group A countries are welcome to apply. Attendance during the entire course is mandatory.

Awardees from previous years are no more qualified.

All applicants must be Full member or RRFS member at time of application.

Accommodation, tuition, board and programme are sponsored by EAN. Participants pay for their travel only.

All application documents must be submitted by January 31, 2020 by email to education@ean.org

Application open between 1 October 2019 and 31 January 2020

EAN Autumn School 2019
October 17-20, 2019

Application deadline: July 31, 2019
Increase your knowledge of clinical neurology! Experienced neurologists and sub-specialists will illustrate how they approach specific clinical presentations, including an update on relevant diagnostic and treatment approaches for key conditions in the relevant areas.

Preliminary Programme:
1. Cognitive dysfunction and Headache: Image patterns and clinical presentations
2. Cognitive dysfunctions
3. Headache

Structure: morning plenary sessions and hands-on/case-based clinical workshops (video and patient presentations) for 20 persons each in the afternoons.

Location: Loutraki, Greece (1.5 h from Athens airport)

All applicants must be neurologists in training (not yet completed residency/clinical speciality training) with more than 2 years of clinical training, and up to a maximum of 5 years beyond their final degree. RRFS members from Corresponding Institutional Member Countries and HINARI Group A countries are welcome to apply. Attendance during the entire course is mandatory.

All applicants must be Full member or RRFS member at time of application.

Accommodation, tuition, board and programme are sponsored by EAN. Participants pay for their travel only.

All application documents must be submitted by July 31, 2019 by email to education@ean.org

Application Deadline: July 31, 2019

EAN Regional Teaching Courses (RTC) and EAN-Day

EAN RTCs are specially designed for the purpose to bring neurological standards directly to the countries that cannot host an EAN congress or to Sub-Saharan Africa to avoid that our colleagues in training have to travel to far-away congresses. RTCs provide basic teaching in neurology and thus also establish friendly relations with all colleagues. These courses are held in English language and have a duration of 3 days.

Plenary sessions with 3 international and 1 local speaker are held each morning and deal with each of the three main topics of the RTC, i.e. focus on one main topic per day. Small tuitional groups in the afternoon are set up to enhance the hands-on learning (case-based videoclips, Hands-on course, Workshops). Organisers are either National Neurological Societies or Neurological University departments.

RTC in Sub-Saharan Africa is organised in cooperation with AFAN – African Academy of Neurology – and other scientific societies who through their contribution make this RTC possible. The EAN Task Force “Neurology and Africa” together with the EAN Education Committee and Ethics and Quality Assurance task-force guarantee the high scientific standard of this Course.

The 11th Regional Teaching Course in Sub-Saharan Africa will take place September 04-07, 2019 in Accra, Ghana.

Involved Societies in 2019 are: AAN, IBRO, MDS, WFN and WSO.
The EAN-Day aims at bringing excellent teaching and special recognition by EAN to our National Neurological Member Societies (and Corresponding Societies). This day takes place directly prior or after a National Neurological Society meeting.

Three plenary sessions take place in the morning addressing 3 different topics by renowned international speakers. After a lunch break, there are rotating workshops on the same 3 topics, case-based video clips or hands-on courses for participants to work and learn in smaller groups. Lectures are usually in English.

All Guidance documents and application forms can be found online: www.ean.org-LEARN-Educational events

CME Articles

Based on selected articles published in the European Journal of Neurology that are related to either a Guideline, consensus document or key reviews/summaries. Answer 5 article-related questions correctly and receive a certificate recommending one hour of CME.

Please log-in on the EAN website for free-of-charge access to all e-learning features and the online version of the European Journal of Neurology.

Guideline papers

Included in the European Journal of Neurology & FREE OF CHARGE access for EAN members via the Guideline Reference Center on the EAN website.

---

**eBook Manual of the Neurological Examination for Neurologists in Training**

Launched in 2017, the e-book presents the basics and some advanced knowledge about the neurological examination in the clinic, on the ward, and in the emergency room. It contains 12 sections, intuitively divided for application of the exam to a variety of contexts, from cranial nerves to the examination of the unconscious patient. By utilizing the e-book structure, the examination techniques in over 90 video tutorials and over 100 figures, and show typical disease patterns in over 40 patient movies are illustrated.

It contains optimised display for tablets, smartphones and desktops with adjustable font size and gives opportunities for personal note-taking to support the learning process.

The eBook is available in English, German and Portuguese language on the EAN Website free for download for EAN members.

---

**eBrain**

ebrain represents the world’s largest, most comprehensive web-based training resource in clinical neuroscience designed to support training and continuous professional development for clinical neuroscience trainees, consultants and non-specialists. It is free-of-charge for EAN members. Please log-in on www.ean.org to have direct access. If you need help, please come to the EAN booth/LEARN, or contact education@ean.org

The multimedia-rich, engaging materials are designed to enhance traditional learning, support existing teaching methods and provide a valuable reference point that is accessible anytime, anywhere.

The online training content comprises approximately 20 modules of e-learning, with each of the 550+ individual lessons taking around 20 minutes to complete.
RRFS

Resident and Research Fellow Section

RRFS represents the junior generation of neurologists within EAN. Our members are physicians currently working as a resident in Neurology, research fellow, PhD student or neurologist with not more than 3 years of practice after completion of the residence training. Application for membership can be done directly at the EAN booth or online at the EAN website: https://www.ean.org/Resident-and-Research-Fellow.2676.0.html

The aims of RRFS are to support neurology trainees in their clinical training or research, to promote network between European junior neurologists and different generations of neurologists. In order to be eligible for any EAN educational grant, RRFS membership is mandatory.

Activities of Resident and Research Fellow Section (RRFS) during the Congress

Join us at the RRFS booth
During the congress, RRFS members will be available at the LEARN area of the EAN booth to provide up-to-date information about membership, travel grants, education and other congress activities. Furthermore, our amazing lottery takes place with drawing of the winners on Tuesday, July 02, at 10.00.

RRFS at the Scientific Theatre
Several talks by RRFS members are given at the Scientific Theatre, please see the complete schedule at page 53.

RRFS National representatives meeting
Saturday, June 29, 14:15-15:15, Room HoC

All RRFS National Representatives are invited to join this meeting as well as all RRFS members, who are interested to become an RRFS National Representative. Currently 36 countries are actively represented and involved, and new representatives are very welcome. The aim is to meet and discuss topics relevant to residents and research fellows in Europe. An overview about the current state and further development of RRFS projects are provided, together with the different national societies as well as how RRFS can be involved or support national initiatives.

RRFS Special Session
Sunday, June 30, 16:45 – 18:15 h, Room ChW

Resident and Research Fellow Section Round Table Discussion
Chairpersons: Officers of RRFS

1. Controversy: How to plan your residency in neurology?
   a. Completely in one country
      Jan Kuks, Groningen, The Netherlands
   b. Enclose an experience abroad
      Diana Aguiar, Lisbon, Portugal

2. Controversy: Being a clinical scientist...
   a. Positive chance to combine research and patient care
      Lars Timmermann, Marburg, Germany
   b. By no means at all (as this means no proper research and no full patient care)
      Michael Khalil, Graz, Austria

This session will provide a thorough discussion including pro and contra arguments with provision of facts but on the other hand still in an open environment with the possibility to question arguments on an individual level.

RRFS hospital visit
Sunday, June 30, 18:15, meeting-point is in front of Oslo congress center

If you have missed to register for your participation during your congress registration, you can sign up at the RRFS both – places are limited. Participants will be introduced to the local neurology education while visiting the Neurology Department of the Rikshospitalet and the adjacent building where the research departments are (Domus Medica). The hospital visit is followed by a get-together with food and beverages.

Registration is necessary due to limited places. If you would like to join us, send an email to rrfs@ean.org, or come by the EAN LEARN Booth.

RRFS General Assembly
Monday, July 01, 17:30 – 18:30, Room HoC

All RRFS members are invited to join the RRFS General Assembly to vote the next treasurer of the RRFS office.
FOR US, COMMUNICATION IS AN ART FORM.

LET’S PERFECT IT TOGETHER.

Driving Excellence in Neurology.
Be part of one of humankind’s most ambitious projects to help uncover the workings of the nervous system. EAN connects 45,000 specialists in neurology in 47 countries across Europe. Promoting excellence, cutting-edge science and innovative therapies for a better life for more than 430 million patients in Europe alone. Read more on ean.org

Great Minds.
Congress Grants

Bursaries

The 5th EAN Congress offered 240 bursaries consisting of free registration and up to four nights of hotel accommodation.

Eligible were EAN Resident and Research Members in good standing from EAN member countries, whose abstract had been accepted.

It was also possible for colleagues in training from Algeria, Egypt, Jordan, Lebanon, Libya, Mauretania, Morocco, Palestine, Syria and Tunisia as well as from sub-Saharan countries belonging to the HINARI Group A list of countries as established by WHO (www.who.int/hinari/eligibility/en/) to apply for bursaries.

Bursary recipients were selected by the Programme Committee based on abstract evaluation. One bursary per person was awarded. The bursaries were co-sponsored by an educational grant from MDS-ES.

Applications for the 6th EAN Congress Paris 2020 can be submitted by the time of the abstract submission deadline: 8 January 2020. Bursaries are available for EAN RRFS members only.

Investigator Award

All free presentations (oral presentations, ePresentations and ePosters) selected for presentation at the 5th EAN Congress 2019 will automatically take part in the selection of an Investigator Award. The award for the 20 best presentations will be a registration to the 6th EAN Congress in Paris, France, a certificate and the winners will be announced in EAN Pages. The award will be given to the first author, who needs to be the person to present the work at the congress. The EAN Scientific Panels together with the Scientific Committee and the Programme Committee will be responsible for the evaluation process before as well as during the congress.

Tournament for Neurologists in Training

A tournament for neurologists in training will take place. The tournament will be carried out in two groups. One on basic neurological science, Sunday, June 30, 2019 (see page 100) and one on clinical related research Monday, July 01, 2019 (see page 116)

Eligible were EAN Resident and Research Members in good standing from EAN member countries, whose abstracts had been accepted.

Selection of candidates: The EAN Programme Committee has selected 6 candidates for each tournament group based on the contents of the abstracts submitted. The clinical subjects had to be received from authors, who work in Europe and thus carry out their projects in Europe. For the basic science session, clinical relevance was weighted.

Financial support: Candidates selected for the tournament have received a bursary consisting of free registration to the Congress, up to four nights hotel accommodation, and a travel grant.

Presentation: Each selected candidate is allotted 10 minutes for presentation of his/her paper plus five minutes for discussion with the jury.

Jury: Members of the Programme, the Scientific and the Teaching Course Committees.

Evaluation: Candidates will be judged not only on the scientific value of the work presented, but also on the quality of the oral presentation and the way the candidate responds to the questions of the jury.

Prize: The winner of each group will receive a prize consisting of: Free registration to the 6th EAN Congress in Paris 2020, up to four nights hotel accommodation as well as a travel grant. The prize is not transferable and will not be paid off in cash.

Two runner-up prizes in each, the clinical and basic tournament will be awarded. They will consist of a certificate and a free registration to the 6th EAN Congress in Paris 2020.
Appreciation and thanks

We would like to thank the reviewers of the submitted abstracts for their invaluable help and assistance.

A
Anne Hege Aamodt, Norway
Yuri Alekseenko, Belarus
Cristian Andriescu, Romania
Kateryna Antonenko, Ukraine
Angelo Antonini, Italy
Nadine Attal, France

B
Claudio Bassetti, Switzerland
Raffaella Battisti, Italy
Ettore Beghi, Italy
Andreas Bender, Germany
Shakya Bhattacharjee, United Kingdom
Roberta Biundo, Italy

C
Ilaria Callegari, Italy
Diogo Carneiro, Portugal
Neşe Çelebisoy, Turkey
Moussa Chalah, France
Jonathan Cole, United Kingdom
Giancarlo Comi, Italy
Philippe Couratier, France

D
Catarina Damas, Portugal
Linda Damian, United Kingdom
Maxwell Damian, United Kingdom
Philippe Damier, France
Marianne de Visser, The Netherlands
Giovanni Di Liberto, Switzerland
Francesco Di Lorenzo, United Kingdom
Volker Dietz, Switzerland
Laurens Dobbels, Belgium
Raffaele Dubbioso, Italy
Nicolas Dubuisson, United Kingdom

E
Asya Ekmen, France
Ayse Deniz Elmali Yazici, Turkey
Fusun Erdogan, Turkey
Devrimse Halika Ertem, Turkey
Stefan Evers, Germany

F
Franz Fazekas, Austria
Lorenzo Ferlini, Belgium
Massimo Filippi, Italy
Urs Fischer, Switzerland
Vera Forminykh, Russia
Sten Fredriksson, Sweden
Rolf Frønczek, The Netherlands

G
Daniela Galimberti, Italy
Andreas Gantenbein, Switzerland
David García Azorín, Spain
Salimata Gassama, France
Thomas Gattringer, Austria
Nils Erik Gilhus, Norway
Loretta Giuliani, Italy
Peter Goadsby, United Kingdom
Ralf Gold, Germany
Mohamed Gomaa, Egypt

H
Dan Healy, Ireland
Wolfgang Heide, Germany
Raimund Helbok, Austria
Bernhard Hemmer, Germany
Marina Hernandez Gonzalez Monje, Spain
Aleksandra Herrera-Sokolowska, Poland
Max Hilz, Germany
Henry Houden, United Kingdom

I
Michella Ibrahim, Lebanon

J
Harish Jayakumar, India
Erik Jung, Germany

K
Manfred Kaps, Germany
Bartosz Karaszewski, Poland
Aristeidis Katsanos, Greece
Michael Khalil, Austria
Daniel Kondziella, Denmark
Christian Krarup, Denmark
Jan B.M. Kuk, The Netherlands
Hatice Kurucu, Turkey

L
Maurizio Leone, Italy

M
Antonella Macerollo, United Kingdom
Gian Luigi Mancardi, Italy
Hadi Manji, United Kingdom
Tony Marson, United Kingdom
Luca Massacesi, Italy
Geert Mayer, Germany
Eavan McGovern, France
Milija Mijajlovic, Serbia
Veronique Miron, United Kingdom
Marcello Moccia, Italy
Gustave Moonen, Belgium
Magdalena Mroczek, Poland
Dafin Muresanu, Romania

N
Bo Norrving, Sweden

O
Stefan Oberndorfer, Austria
David Oliver, United Kingdom
Celia Oreja-Guevara, Spain
Serefnur Ozturk, Turkey

P
Davide Pareyson, Italy
Max Christian Pensel, Germany
Miguel Pereira, Portugal
Antonio Pisani, Italy
Simon Podnar, Slovenia
**Appreciation and thanks & Continuing Medical Education**

**R**
Anna Rostedt Punga, Sweden
Paolo Ragonese, Italy
Martin Rakusa, Slovenia
Katrin Rauen, Switzerland
Răzvan Alexandru Radu, Romania
Ivan Rektor, Czech Republic
Irena Rektorová, Czech Republic
Evzen Růžička, Czech Republic

**S**
Ceyhun Sayman, Turkey
Anthony Schapira, United Kingdom
Philip Scheltens, The Netherlands
Erich Schmutzhard, Austria
Benedikt Schoser, Germany
Giorgio Sciacca, Italy
Pasquale Scoppettuolo, Belgium
Johann Sellner, Austria
Raad Shakir, United Kingdom
Kamila Shamtieva, Russian Federation
Yuliya Shpilyukova, Russian Federation
Vincenzo Silani, Italy
Aksel Siva, Turkey
David Skoloudik, Czech Republic
Ide Smets, Belgium
Alessandro Sodero, Italy
Riccardo Soffietti, Italy
Claudia Sommer, Germany
Israel Steiner, Israel
Guido Stoll, Germany
Anette Margrethe Storstein, Norway
Walter Struhal, Austria
Michael Strupp, Germany

**T**
Erik Taubøll, Norway
Maarten J. Titulaer, The Netherlands
Vlad Tiu, Romania
Antonio Toscano, Italy

**V**
Josep Valls-Solé, Spain
Domizia Vecchio, Italy
Marie José Vidailhet, France

**W**
Markus Weber, Switzerland
Roland Wiest, Switzerland

---

**Continuing Medical Education (CME Information)**

**Purpose**
The purpose of the 5th EAN Congress is to offer a forum for clinical and basic discussion on a variety of neurological topics including presentations of current research and available treatments.

**Learning Objectives**
Through Plenary Symposia, Symposia, Focused Workshops, Teaching Courses, Case-based workshops, Hands-on Courses, Controversy Sessions, Career development Sessions, Interactive Sessions and Special Sessions, participants will be better able to:

1. Describe the pathophysiology and neurobiology of neurological diseases
2. Discuss the diagnostic approaches and tools available for neurological diseases
3. Discuss the pharmacological and non-pharmacological treatment options available for neurological diseases

**Target Audience**
The target audience includes clinicians, researchers, post-doc fellows, medical residents, students and other healthcare professionals with an interest in the current research and diagnosis and treatment of neurological diseases. Kindly note that in the description of some courses the target audience is separately disclosed.

**Financial disclosure information**
It is the policy of the European Academy of Neurology to ensure objectivity, independence and balance in all congress activities. All participants are required to disclose any real or apparent conflict(s) of interest that can have a direct bearing on the subject matter of the activity. Financial disclosure information will be provided on the presentations and/or abstracts.

**EACCME Accreditation statement**
EACCME EVENT CODE: LEE19-00023
The 5th Congress of the European Academy of Neurology is accredited by the European Accreditation Council for Continuing Medical Education (EACCME). The EACCME is an institution of the European Union of Medical Specialists (UEMS): http://www.uems.net.
WCN 2019
XXIV WORLD CONGRESS OF NEUROLOGY
DUBAI, UNITED ARAB EMIRATES, OCTOBER 27-31 2019
ACCELERATING THE PACE OF CHANGE

PROGRAM HIGHLIGHTS
- Teaching Courses
- Tournament of the Minds
- WFN Medals Presentation
- Presidential Symposium
- Regional Symposium
- Sponsored Symposium

AWARD & LECTURES
- Elsevier Young Investigators Award
- Soriano Award Lecture
- Yahr Award Lecture
- Barucha Award Lecture
- Fulton Award Lecture
- Angela Vincent Award for Best Young Investigator

TOURNAMENT OF THE MINDS
Nominated team members for the 2019 Tournament (up to 4 per country) will qualify for reimbursement of their 2019 registration fees once they have completed the Tournament. National societies are encouraged to nominate their teams as soon as possible to enable team members to benefit from this incentive.

EARLY-BIRD REGISTRATION: AUGUST 6, 2019

Visit the website for full application details.
WWW.WCN-NEUROLOGY.COM
Continuing Medical Education & Instructions for Speakers

The Congress of the European Academy of Neurology (Saturday, Sunday, Monday, Tuesday) is designated for a maximum of 27 hours of European external CME credits. Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.

These points are accepted by several national societies, and thus they can be claimed in these countries.

Through an agreement between the Union Européenne des Médecins Spécialistes and the American Medical Association, physicians may convert EACCME® credits to an equivalent number of AMA PRA Category 1 Credits™. Information on the process to convert EACCME® credit to AMA credit can be found at www.ama-assn.org/education/earn-credit-participation-international-activities.

Ethical MedTech

The 5th Congress of the European Academy of Neurology is endorsed by MedTech Europe under the Code of Ethical Business Practice.

MedTech Europe is the European trade association representing the medical technology industries, from diagnosis to cure. It represents Diagnostics and Medical Devices manufacturers operating in Europe. Its mission is to make innovative medical technology available to more people, while helping healthcare systems move towards a sustainable path. It also promotes medical technology’s value for Europe focusing on innovation and stakeholder relations.

CME Certificate and Attendance Tracking Report

If you need a report of your attendance in sessions, please evaluate all sessions that you have attended. Once evaluation of the sessions is complete, you can obtain a CME Certificate, including all sessions attended, via the online registration platform.

If you have any questions, you can find a designated ‘App and Evaluation Helpdesk’ in the congress entrance area next to the registration desk.

Instructions for Speakers and Presenters

Speakers’ Service Centre

All speakers are requested to hand in their presentations (MS PowerPoint only) via a USB compatible memory stick at the Speakers’ Service Centre (SSC) at least three hours before the beginning of the session. The SSC is located next to Room ‘Jan Mayen’ on the first floor in the blue area.

Speakers will have the opportunity to check their presentations on PCs available in the SSC.

ePresentations and ePosters

All posters will be presented electronically only. Within the ePoster area (located in the exhibition hall) there are 24 poster screens and 12 iMac stations available throughout the congress, where presenters and audience are invited to interact with each other. You will be able to contact all presenters via the poster system and meet with them at any time at one of the poster screens to discuss his/her work.

In addition, there will be scheduled ePoster and ePresentation sessions, taking place from Saturday to Monday from 12:30 – 13:15 and 13:30 – 14:15 (see page 34).

All ePoster and ePresentation sessions will be discussed with a chairperson. The chairperson will be present and discuss each presentation with the presenter and the audience. In ePoster sessions (45 minutes) up to 15 presentations are scheduled at the dedicated poster screens. Each presenter will have 2 minutes of presentation time and approximately 1 minute of discussion. ePresentation sessions will be 45 minutes long as well and accommodate up to 10 presentations. Each presenter will have approximately 3 minutes of presentation time and 2 minutes of discussion.

Please make sure that you are present at your screen at the beginning of your session. Please see page 34 or the Interactive Programme Planner (IPP) for details and exact session times.

For better audio quality, please pick up a receiver and earphones from the ePoster Helpdesk before the session. Different sessions will have different channels, indicated next to each poster screen.

ePoster Helpdesk

Technicians and hosts will be available throughout the congress in the ePoster area.
Information from A to Z

Abstracts

All accepted abstracts are published as a supplement to the European Journal of Neurology. There will be no printed book available, but a USB drive can be picked up at the EAN LEARN + RESEARCH Booth.

You can create your personal abstract book by using the Interactive Programme Planner (IPP).

The abstracts can also be found online on www.ean.org/Oslo2019 and on www.europeanjournalofneurology.com.

App

The congress app “EAN Congress” is available for download free of charge on Google Play and iTunes.

It includes the Interactive Programme Planner (IPP), all session evaluations as well as the voting system for the Interactive sessions. Please download the app and login with your EAN user information. You can then go ahead and create your personal congress programme. You will also be able to access the favourites you made on the EAN Congress website.

Seize all benefits of the EAN Congress app to connect and meet with colleagues, prepare your meeting schedule and have additional and up-to-date information on the congress.

If you have any questions, you can find a designated ‘App and Evaluation Helpdesk’ in the congress entrance area next to the registration desk.

The App is supported by Roche

App and Evaluation Helpdesk

The ‘App and Evaluation Helpdesk’ can be found next to the entrance area, near the registration desk and is supported by Roche

ATM/Cash Machine

An ATM/cash machine is located next to the exhibition entrance.

Badges

Access to all scientific and networking events will only be possible with your personal badge. All participants are requested to wear their name badge throughout the congress.

If you forget your badge, we can reprint it for a fee of 50€.

Scanning of badges

Participants are not obliged to allow exhibitors to scan their badge in the exhibition area or when entering an industry symposium. Participants must show their badge for proof of access rights, but do not need to let anybody scan it. With allowing a company to scan, you acknowledge that your registration details will be forwarded to the exhibitor.

Caring for the environment

Bag recycling – You can leave your congress bag at the registration desk when leaving the congress.

Green print – The print materials of this congress have been printed on paper that is PEFC approved. PEFC is an organisation that certifies paper manufacturers who keep to sustainable forest management criteria.

Reducing print – The printed programme is available only for participants who order it in advance at registration. The complete programme can also be found online in the Interactive Programme Planner (IPP) and on our congress app and you can create your individual schedule & abstract book.

Recycling – As part of our efforts we try to produce less waste and recycle plastic, glass, cans and paper.

We are also trying to use only recyclable tableware.

Food waste – The venue has signed an agreement with the Norwegian Ministry of Climate and Environment on a 50% reduction in food waste by 2030. This is one of the United Nations’ sustainable development goals (SDGs).

Offset your Carbon Footprint – You can contribute to our ecological efforts by offsetting the Carbon Footprint of your travels to Oslo. A Carbon Offset represents a reduction in emissions somewhere else. You can learn more and offset your carbon foot print at: www.carbonfund.org.

We are doing our best and there is still much to learn. We will be happy to hear your ideas; please do not hesitate to write to us at headoffice@ean.org.
Information from A to Z

Certificate of Attendance

If you need a report of your attendance in sessions, please evaluate all sessions that you have attended immediately after the session. You can obtain a CME Certificate, including all sessions attended, via the online registration platform after the congress.

If you have any questions, you can find a designated ‘App and Evaluation Helpdesk’ in the congress entrance area next to the registration desk.

Guide to your certificate

1. Evaluate
Evaluate all sessions that you have attended. For this, please use the EAN website and EAN Congress App or go to the ‘App and Evaluation Helpdesk’ next to the registration area. Please note that evaluation is possible until Wednesday, 24 July 2019, 23:59 CET.

2. Get your certificate
Go to www.ean.org/oslo2019 and login with your EAN user information. Then, go to the online congress registration platform via “Register now” and click on “My documents”. There you will be able to download your CME Certificate. The certificate lists all sessions that were evaluated and includes all CME points. Please note that your certificate will be available in your user area only after the congress, i.e. from 3 July 2019.

CME Certificates including a record of attendance will only be available for participants who have evaluated the sessions attended during the congress. Evaluation is possible until Wednesday, 24 July 2019, 23:59 CET.

Information on EACCME accreditation can be found on page 17.

Congress registration desk

The registration desks, located in the entrance area of the congress venue, are open during the following hours:

- Friday: 28 June 2019: 16:00 – 19:00 (badge/congress bag pick-up for pre-registered delegates only)
- Saturday: 29 June 2019: 7:30 – 20:00
- Sunday: 30 June 2019: 7:00 – 19:00
- Monday: 1 July 2019: 7:00 – 19:00
- Tuesday: 2 July 2019: 7:30 – 17:00

All congress material (congress bag, personal name badge, etc.) will be handed over to the registered participants in this area. Onsite registration will be accepted, but receipt of all congress material cannot be guaranteed. Accepted payment methods on-site are credit card or cash. During the above-mentioned opening hours, the registration service desks can be reached at +43 676 637 39 56.

Congress Venue

The 5th Congress of the European Academy of Neurology takes place at the Norges Varemesse – Norway Convention & Exhibition Centre, which is located in Lillestrøm, only a few minutes away from the Oslo city centre by train and only 12 minutes away from the Oslo airport. We highly recommend going by train as it is the fastest and cheapest way from the airport to the congress centre and the city centre.

It takes 16 minutes from the city centre to the congress centre. You can take trains #R10, #L13, #R11 in both directions every 10 minutes. Try to avoid train #L1, which will hold at every stop and takes 34 minutes to the city centre.

The average cost for a ticket is 23 NOK/2.40 EUR per ticket.

Currency

The official currency of the 5th EAN Congress in Oslo is Euro (€). However, the local currency is Norwegian Krona (NOK), exchange rate is about 1NOK = 0.10€. Credit cards (Visa, Mastercard etc.) are accepted. Cash will only be accepted in Euro.

The easiest way to withdraw NOK is to get them from an ATM ("minibank"), which are everywhere in Oslo/Lillestrøm. Most ATMs work with credit cards of the Visa and MasterCard type, and debit cards that use the Maestro or Cirrus systems.

Children at EAN Congress 2019/ Kindergarten

Aiming to support families and parents attending the 2019 Congress, EAN provides a child care service to all registered participants. The Kindergarten Service is easy to find, located in Norges Varemesse next to Hall Paris (B4). Please note that children over the age of 1 year are not allowed to access the exhibition area due to the pharma codex.

Cloakroom

A cloakroom is located in the registration area and is open during the registration opening hours. The cloakroom service is free of charge.
While credit cards (usually MasterCard and Visa) are accepted in most hotels and restaurants, some shops, cafes or museums still don’t.

**EAN Booth – Your Home of Neurology**

“900,000,000 brains – 45,000 members – 47 countries – one community!”

Location: in front of the main auditorium (take a right from the main entrance)

Opening hours:
- Saturday 29 June 2019: 07:30 – 18:30
- Sunday 30 June 2019: 07:30 – 18:00
- Monday 1 July 2019: 07:30 – 18:00
- Tuesday 2 July 2019: 07:30 – 13:00

Visit the EAN Booth and its 4 different areas (HOME, MEET, LEARN and RESEARCH) and find out more about the European Academy of Neurology, your home of neurology, and its aims and missions:

**HOME**

Learn everything about EAN and the benefits of being an active and valuable part of Europe’s largest community of neurologists. Get all information on our different membership programmes, meet the people behind EAN, the EAN Board as well as the EAN Head Office.

Join us and become a member of our community today!

EAN Congress Postcards can be mailed – just drop them in the mailbox, EAN will provide the stamp and mail it for you! Join us and become a member of our community!

**LEARN**

When visiting the LEARN area, you can find all educational aspects that underpin the EAN vision to promote excellence in Neurology in Europe. From study programmes outside the EAN congress or grants to support projects in other European Neurological Departments or online learning possibilities.

Please visit the RRFS desk to get first hand information for Neurologists in training.

**RESEARCH**

Get all the information on EAN guideline production and the Scientific Panels – not only on panel membership but also what these panels do and plan to do in the future. Join the Scientific Panels right away and become actively involved! Grab your copy of the European Journal of Neurology and discover how to access EAN free-to-read guidelines.

**MEET**

MEET our next congress destinations and watch our whiteboard artist recreate the current congress on paper. You can also be a part of future EAN activities. Let us know about your congress experience and what YOU would do differently!

Stop by to get to know your colleagues in a relaxed setting and take the opportunity for quick casual business meetings!

You can also visit this area already in the morning for a cup of coffee and a chat with colleagues from all over Europe and the world.

During coffee and lunch breaks, you can then challenge yourself with the tricky EAN BrainGame and win various EAN prizes.

**EAN Booth**
Information from A to Z

EAN Bag

Need one-of-a-kind memorabilia? Come by and purchase one of the unique EAN bags – strictly limited to 150 pieces maximum per congress year, made of the poster background tarps of the 2015 – 2018 EAN congresses in Berlin, Copenhagen and Amsterdam and Lisbon. EAN decided to re-use nearly all printed tarps and cloths of the poster booths and design its very own limited collector item. The EAN bags are produced locally in Vienna, Austria by WienWork, an organisation that enables people with disabilities, chronic illnesses or long-term unemployed people to participate in economic and social life. With every purchase of a bag you support this project.

EAN unique bag: Be sure to get your one-of-a-kind limited bag for only €20 (discount possibilities: 2 for €35 and 3 for €45 only and 4 for €50)

Evaluation/Quality Control

In order to guarantee the quality of the upcoming congresses, we are carrying out congress evaluations.

General Evaluation
The general evaluation of the congress will be sent to all congress participants after the congress.

Session Evaluation/CME Certificate
If you need a report of your attendance in sessions, please evaluate all sessions that you have attended. Once evaluation of the sessions is complete, you can obtain a CME Certificate, including all sessions attended, via the online registration platform.

If you have any questions, you can find a designated ‘App and Evaluation Helpdesk’ in the congress entrance area next to the registration desk.

Guide to your certificate

1. Evaluate
Evaluate all sessions that you have attended. For this, please use the EAN website and EAN Congress App or go to the ‘App and Evaluation Helpdesk’ next to the registration area. Please note that evaluation is possible until Wednesday, 24 July 2019, 23:59 CET.

2. Get your certificate
Go to www.ean.org/oslo2019 and login with your EAN user information. Then, go to the online congress registration platform via “Register now” and click on “My documents”. There you will be able to download your CME Certificate and a confirmation of participation. The certificate lists all sessions that were evaluated and includes all CME points. Please note that your certificate will be available in your user area only after the congress, i.e. from 3 July 2019.

CME Certificates including a record of attendance will only be available for participants who have evaluated the sessions attended during the congress. Evaluation is possible until Wednesday, 24 July 2019, 23:59 CET.

Please take time to complete the electronic evaluation forms provided for each session you attend. Your input is essential for planning future EAN congresses and for receiving your certificate.

Emergency Phone Numbers

In case of an emergency there are three different phone numbers you should know.

Fire and major accidents: Tel 110
Police and rescue coordination centre: Tel 112
Ambulance and medical assistance: Tel 113
Information from A to Z

Exhibition

An extensive exhibition will be held concurrently with the congress.

Exhibition opening hours are:
Saturday 29 June 2019: 9:00 – 17:00
Sunday 30 June 2019: 9:00 – 17:00
Monday 1 July 2019: 9:00 – 17:00
Tuesday 2 July 2019: 9:00 – 13:30

Accompanying children over the age of 1 year are not allowed to access the exhibition area due to the Pharma Codex. Thank you for your understanding.

The exhibition floor plan can be found on page 29 and 137.

Film and photos

Please be advised that photographs and video recordings may be taken at the 5th EAN Congress. By participating in the congress, you consent to the publication, release, exhibition and/or reproduction of such photos to be used for the EAN website, EAN newsblog "EAN pages" and on social media.

Hotel and travel

Official Housing Agency
AIM Group International
hotel@ean.org

The Vienna office of the AIM Group International has been appointed as the official housing partner for EAN 2019 and is offering hotel accommodation for group and individual bookings.

AIM is present at the hotel desk in the registration area. Staff can assist you with your hotel bookings there.

Insurance & Liability

Neither EAN nor AIM group can accept liability for personal accidents or loss of or damage to private property of participants, either during or indirectly arising from the 5th Congress of the European Academy of Neurology.

It is recommended that all participants are covered by personal travel insurance for their trip.

Internet Corner / “Browse & print your boarding pass”

An Internet Corner, located in the exhibition, is available to all congress participants during the exhibition opening hours. A printer will be available.

Interactive Programme Planner (IPP)

Please use the IPP in order to create your personal programme and abstract book.

All invited lectures, oral sessions and poster presentations will be available in the IPP. By logging in with your EAN user information, you will be able to save and edit your personal programme. It is available for desktop, tablet and in our congress app.

Contents are sorted by topic and can be searched through standard web search functions. Once you have created your personal programme, you can export it to different calendar formats, or download it as a book of abstracts.

The IPP will be available before and during the congress.

Language

The official language of the congress is English. No simultaneous translation will be provided.

Login Corner

If you want to use all the EAN website’s benefits, you need to use your EAN login information. Visit the login corner at the EAN MEET Booth and collect your information.

Lost & Found

Please apply to the congress registration desk.

Lunch and Coffee Breaks

Light lunch and coffee is included in the registration fee and will be served in the exhibition area as per the times indicated in the timetable (see page 48).

Mail/Messages

ePoster and ePresentation presenters can be contacted via the online poster system.

If you wish to leave a message for somebody, please apply to the registration desk.
Information from A to Z

Media Contact

EAN Press & Communications Officer
Michael Crean
crean@ean.org, +43 1 889 05 03 24

EAN 2019 Congress Press Contact
Luke Paskins
Luke@spinkhealth.com, +44 1 444 811099

Medical Assistance

Please apply to the registration service desk or contact the next EAN staff.

Members’ Lounge

EAN Resident and Research, Full, Corresponding Members, Fellows of EAN and Faculty Members have the possibility to network and enjoy their lunch in a separated Members’ Lounge. The Members’ Lounge is located next to the EAN Booth area on the Mezzanine and is open from 7:30 – 18:30 Saturday till Monday, and 7:30 – 14:30 on Tuesday.

A photographer to take a portrait picture of you for your EAN profile is located in this area during the opening hours.

Mobile Charging Stations

Mobile charging stations will be placed all over the venue available to all congress participants.

The mobile charging stations are supported by Roche

Mobile phones

Please note that mobile phones must be switched off during all sessions.

Networking

Resident and Research Fellow Section Activities (see page 13)
Opening and Welcome Reception (See page 41)
Challenges for women in neurology (see page 43)
Musical recital on Sunday (see page 45)
History of neuroscience visit (see page 47)
Networking event “Meet your Neurology Network” (see page 47)
Members’ Lounge (see page 25)
EAN booth (see page 22)

NeuroTank

The EAN NeuroTank is located in the exhibition hall and is your hub for the digital content of EAN. You can relax and watch livestreams of current sessions, webcasts of previous lectures and browse all ePoster presentations.

Got to www.ean-neurotank.org to get started!

The online platform EAN NeuroTank is supported by Biogen

ePoster Session Overview

Please see page 34.

Public transportation

The congress centre is located in Lillestrøm, 16 minutes away from the Oslo city centre by train and 12 minutes away from the Oslo airport. We highly recommend going by train as it is the fastest and cheapest way from the airport to the congress centre and the city centre.

All the public transports in Oslo are part of the same ticket and price system.

The tickets are valid for buses, local trains, subways and trams.

To the Airport
You can take the Airport Express ‘Flytoget’ from Oslo Airport Gardermoen to Lillestrøm and be at the Lillestrøm station within 12 minutes. From there it is a 3-minute walk to the Congress Centre.
For more information on time schedules and ticket prices go to www.flytoget.no

From/to the city centre
It takes 16 minutes from the city centre to the congress centre. You can take trains #R10, #L13, #R11 in both directions every 10 minutes. Try to avoid train #L1, which will hold at every stop and takes 34 minutes to the city centre.
The average cost for a ticket is 23 NOK/2.40 EUR per ticket.

Press Office

A designated room with wireless internet access is available to registered journalists. The Press Office is located in the green area (first floor, Thon Hotel Arena).
As an organisation, the European Pain Federation EFIC® has been growing steadily over the last 25 years in its core domains of education, research, and advocacy. We have developed into Europe’s most important multi-disciplinary and multi-professional organisation in the field of pain medicine, representing 37 constituent national pain societies with over 20,000 scientists, physicians, nurses, psychologists, physiotherapists and other healthcare professionals.

OUR 11TH CONGRESS BRINGING THE FUTURE TO THE PRESENT

The 11th Congress of the European Pain Federation EFIC® will be held in Valencia, Spain from 4th to 7th September 2019. The congress will offer numerous lectures, workshops, refresher courses and networking initiatives on several aspects of pain. We will cover acute, chronic, cancer and non-cancer pain among the others. Along with the newest developments in basic science, we will discuss all aspects of multimodal interdisciplinary care for patients suffering from pain. As EFIC2019 is taking place in beautiful Valencia, there will also be several sessions in Spanish. This emphasis on the future of pain medicine leads up to the theme of our 2019 meeting: “BRINGING THE FUTURE TO THE PRESENT”. A comprehensive Industrial Exhibition and sponsored Satellite Symposia will complement the scientific content.

OUR ACTIVITIES IN THE FIELD OF EDUCATION, RESEARCH AND ADVOCACY

With regards to education, the European Pain Federation organises ‘Pain Schools’, bringing together leading educators to provide study programs across Europe. We have also developed curricula for medical schools, and on pain medicine and pain physiotherapy, as well as accompanying examinations and qualifications. The Examination for the European Diploma in Pain Medicine (EDPM) was launched in 2017. The Examination for the European Diploma in Pain Physiotherapy (EDPP) has been launched for the first time in 2018. Concerning research, the European Pain Federation provides grants and fellowships for researchers and takes part in international research consortia.

On advocacy, we partner within the Societal Impact of Pain platform, along with the pharmaceutical company Grünenthal, the patients’ organisation Pain Alliance Europe, and the citizens’ rights organisation Active Citizenship Network. The European Pain Federation runs awareness raising campaign such as EFIC on the move, and focused on pain primary and secondary prevention through physical activity and the Global Year Against Pain campaign, known as the European Year Against Pain in Europe.

Contact Information:
European Pain Federation (EFIC) • Rue de Londres / Londerstraat 18 • 1050 Brussels • BELGIUM
Tel.: +32 2 251 55 10 • Email: secretary@efic.org

www.efic.org
Information from A to Z

**Scientific Theatre**

Located on the ground floor, inside the exhibition, the Scientific Theatre is a forum for EAN committees, working groups, task forces and other EAN partner organisations to inform the audience in short about their latest achievements and future ambitions. The detailed programme is on page 53.

During lunch and coffee breaks, the scientific theatre is made available for forum talks by our industry partners. The detailed programme can be found on page 171.

Capacity is for 40 people, please bring your earphones (available at the Poster help desk).

**Smoking policy**

Smoking is always prohibited in the meeting halls, exhibition halls and restrooms. Your compliance is appreciated.

**Speakers’ Service Centre (SSC)**

See page 19.

**Tourist Information**

For tourist information, please visit: www.visitoslo.com

**Wi-Fi**

Wi-Fi will be available free of charge in the registration and exhibition area as well as in the session rooms.

Network: EAN2019_Wifi_Biogen
No password or username is necessary.

The Wi-Fi is supported by Biogen.
Blue Area

- Session Rooms – Blue Area
- Meeting Rooms – Blue Area
- EAN Areas
- EAN Scientific Areas
- Exhibition
- Scientific Business Suites
- Handicap Toilet
- Toilets
- Lift
- Catering Area
- Cloakroom
- Internet Corner
- Stairs
# Overview of Business Meetings

(in chronological order, as per date of printing)
Additional meetings reserved after the date of printing can be found in the IPP (App).

<table>
<thead>
<tr>
<th>Group/Committee</th>
<th>Day</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Affairs sub-Committee</td>
<td>Saturday, 29 June</td>
<td>08:30 – 10:00</td>
<td>President’s office, green area</td>
</tr>
<tr>
<td>UEMS Board</td>
<td>Saturday, 29 June</td>
<td>09:00 – 13:00</td>
<td>Måsan 1-2, Scandic Hotel</td>
</tr>
<tr>
<td>Assembly of Delegates</td>
<td>Saturday, 29 June</td>
<td>13:00 – 15:00</td>
<td>Berlin, blue area</td>
</tr>
<tr>
<td>RRFS National Representatives</td>
<td>Saturday, 29 June</td>
<td>14:15 – 15:15</td>
<td>HoC, blue area</td>
</tr>
<tr>
<td>Website Panel Representatives</td>
<td>Saturday, 29 June</td>
<td>15:30 – 16:30</td>
<td>Hordaland 2, green area</td>
</tr>
<tr>
<td>eCommunication board and Scientific Panel Website representatives</td>
<td>Saturday, 29 June</td>
<td>16:30 – 17:30</td>
<td>Rogaland 2, green area</td>
</tr>
<tr>
<td>Corresponding Societies</td>
<td>Saturday, 29 June</td>
<td>16:30 – 17:30</td>
<td>President’s office (Troms), green area</td>
</tr>
<tr>
<td>Africa Task Force</td>
<td>Sunday, 30 June</td>
<td>08:30 – 10:00</td>
<td>Hordaland 1, green area</td>
</tr>
<tr>
<td>Joint Education Board</td>
<td>Sunday, 30 June</td>
<td>08:30 – 10:00</td>
<td>Hordaland 2, green area</td>
</tr>
<tr>
<td>Scientific Panel Chairs</td>
<td>Sunday, 30 June</td>
<td>12:30 – 14:30</td>
<td>Berlin, blue area</td>
</tr>
<tr>
<td>eCommunication Board</td>
<td>Sunday, 30 June</td>
<td>16:00 – 17:30</td>
<td>Hordaland 1, green area</td>
</tr>
<tr>
<td>Teaching Course sub-Committee</td>
<td>Monday, 01 July</td>
<td>08:00 – 09:30</td>
<td>Hordaland 1, green area</td>
</tr>
<tr>
<td>Ethics and Quality Assurance Task Force</td>
<td>Monday, 01 July</td>
<td>11:15 – 12:45</td>
<td>Oppland, green area</td>
</tr>
<tr>
<td>Communication Committee</td>
<td>Monday, 01 July</td>
<td>12:30 – 14:00</td>
<td>Hordaland 1, green area</td>
</tr>
<tr>
<td>Scientific Committee</td>
<td>Monday, 01 July</td>
<td>12:30 – 14:00</td>
<td>Hordaland 2, green area</td>
</tr>
<tr>
<td>Guideline Production Group</td>
<td>Monday, 01 July</td>
<td>15:00 – 16:30</td>
<td>Hordaland 1, green area</td>
</tr>
<tr>
<td>Industrial Relation Board (IRB)</td>
<td>Monday, 01 July</td>
<td>15:00 – 16:30</td>
<td>Berlin, blue area</td>
</tr>
<tr>
<td>Education Committee</td>
<td>Monday, 01 July</td>
<td>15:00 – 16:30</td>
<td>Hordaland 2, green area</td>
</tr>
<tr>
<td>Local Organising Committee Paris</td>
<td>Monday, 01 July</td>
<td>17:00 – 18:00</td>
<td>Hordaland 1, green area</td>
</tr>
<tr>
<td>RRFS General Assembly</td>
<td>Monday, 01 July</td>
<td>17:30 – 18:30</td>
<td>HoC, blue area</td>
</tr>
<tr>
<td>Programme Committee</td>
<td>Tuesday, 02 July</td>
<td>13:00 – 14:30</td>
<td>Hordaland 1, green area</td>
</tr>
</tbody>
</table>
Overview of Business Meetings of Scientific Panels, Task Forces

(in chronological order, as per date of printing)
Additional meetings reserved after the date of printing can be found in the IPP (App).

<table>
<thead>
<tr>
<th>Scientific Panel/Task Force</th>
<th>Day</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific Panel Child Neurology</td>
<td>Saturday, 29 June</td>
<td>08:30 – 09:30</td>
<td>Hordaland 1, green area</td>
</tr>
<tr>
<td>Scientific Panel ALS and frontotemporal dementia</td>
<td>Saturday, 29 June</td>
<td>08:30 – 10:00</td>
<td>Akershus, green area</td>
</tr>
<tr>
<td>Scientific Panel Multiple sclerosis</td>
<td>Saturday, 29 June</td>
<td>11:00 – 12:30</td>
<td>Akershus, green area</td>
</tr>
<tr>
<td>Scientific Panel Neurotoxicology</td>
<td>Saturday, 29 June</td>
<td>11:00 – 12:30</td>
<td>Hordaland 2, green area</td>
</tr>
<tr>
<td>Scientific Panel Neurocritical care</td>
<td>Saturday, 29 June</td>
<td>13:00 – 14:30</td>
<td>Hordaland 1, green area</td>
</tr>
<tr>
<td>Scientific Panel Dementia and cognitive disorders</td>
<td>Saturday, 29 June</td>
<td>16:30 – 18:00</td>
<td>VIP Room, exhibition, blue area</td>
</tr>
<tr>
<td>Scientific Panel Stroke</td>
<td>Saturday, 29 June</td>
<td>16:30 – 18:00</td>
<td>Akershus, green area</td>
</tr>
<tr>
<td>Scientific Panel Neuropathies</td>
<td>Sunday, 30 June</td>
<td>08:00 – 09:30</td>
<td>Room Berlin, blue area</td>
</tr>
<tr>
<td>Scientific Panel Infectious diseases</td>
<td>Sunday, 30 June</td>
<td>08:30 – 10:00</td>
<td>VIP Room, exhibition, blue area</td>
</tr>
<tr>
<td>Scientific Panel Neurotraumatology</td>
<td>Sunday, 30 June</td>
<td>08:30 – 10:00</td>
<td>Akershus, green area</td>
</tr>
<tr>
<td>Scientific Panel Clinical neurophysiology</td>
<td>Sunday, 30 June</td>
<td>15:00 – 16:30</td>
<td>VIP Room, exhibition, blue area</td>
</tr>
<tr>
<td>Scientific Panel Neuro-oncology</td>
<td>Sunday, 30 June</td>
<td>15:00 – 16:30</td>
<td>Akershus, green area</td>
</tr>
<tr>
<td>Scientific Panel Neuro-ophthalmology and -otology</td>
<td>Sunday, 30 June</td>
<td>15:00 – 16:30</td>
<td>Hordaland 2, green area</td>
</tr>
<tr>
<td>Scientific Panel Neurorehabilitation</td>
<td>Sunday, 30 June</td>
<td>16:45 – 18:15</td>
<td>VIP Room, exhibition, blue area</td>
</tr>
<tr>
<td>Scientific Panel Translational neurology</td>
<td>Sunday, 30 June</td>
<td>16:45 – 18:15</td>
<td>Hordaland 2, green area</td>
</tr>
<tr>
<td>Scientific Panel Higher cortical functions</td>
<td>Sunday, 30 June</td>
<td>17:00 – 18:30</td>
<td>Akershus, green area</td>
</tr>
<tr>
<td>Scientific Panel Epilepsy</td>
<td>Monday, 01 July</td>
<td>08:00 – 09:30</td>
<td>Akershus, green area</td>
</tr>
<tr>
<td>Task Force Parkinson’s diseases guideline</td>
<td>Monday, 01 July</td>
<td>08:00 – 09:30</td>
<td>Oppland, green area</td>
</tr>
<tr>
<td>Scientific Panel Neuroepidemiology</td>
<td>Monday, 01 July</td>
<td>08:30 – 10:00</td>
<td>VIP Room, exhibition, blue area</td>
</tr>
<tr>
<td>Scientific Panel Autonomic nervous system disorders</td>
<td>Monday, 01 July</td>
<td>10:00 – 11:30</td>
<td>Hordaland 2, green area</td>
</tr>
<tr>
<td>Scientific Panel Neurosonology</td>
<td>Monday, 01 July</td>
<td>10:00 – 11:30</td>
<td>Hordaland 1, green area</td>
</tr>
<tr>
<td>Scientific Panel Movement disorders</td>
<td>Monday, 01 July</td>
<td>10:00 – 12:00</td>
<td>Room Berlin, blue area</td>
</tr>
<tr>
<td>Scientific Panel Headache</td>
<td>Monday, 01 July</td>
<td>10:15 – 11:45</td>
<td>VIP Room, exhibition, blue area</td>
</tr>
</tbody>
</table>
# Overview of Business Meetings of Scientific Panels, Task Forces

<table>
<thead>
<tr>
<th>Scientific Panel/Task Force</th>
<th>Day</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific Panel Neurogenetics</td>
<td>Monday, 01 July</td>
<td>10:15 – 11:45</td>
<td>Akershus, green area</td>
</tr>
<tr>
<td>Scientific Panel Coma and chronic disorders of consciousness</td>
<td>Monday, 01 July</td>
<td>13:00 – 14:30</td>
<td>Akershus, green area</td>
</tr>
<tr>
<td>Scientific Panel Muscle and NMJ disorders</td>
<td>Monday, 01 July</td>
<td>13:00 – 14:30</td>
<td>VIP Room, exhibition, blue area</td>
</tr>
<tr>
<td>Task Force Pain guideline</td>
<td>Monday, 01 July</td>
<td>13:30 – 15:00</td>
<td>Oppland, green area</td>
</tr>
<tr>
<td>Scientific Panel Palliative care</td>
<td>Monday, 01 July</td>
<td>15:00 – 16:30</td>
<td>Akershus, green area</td>
</tr>
<tr>
<td>Task Force Narcolepsy guideline</td>
<td>Monday, 01 July</td>
<td>15:00 – 16:30</td>
<td>Oppland, green area</td>
</tr>
<tr>
<td>Task Force Autoimmune encephalitis guideline</td>
<td>Monday, 01 July</td>
<td>16:30 – 18:00</td>
<td>Oppland, green area</td>
</tr>
<tr>
<td>Scientific Panel Pain</td>
<td>Monday, 01 July</td>
<td>17:00 – 18:30</td>
<td>VIP Room, exhibition, blue area</td>
</tr>
<tr>
<td>Scientific Panel Sleep-wake disorders</td>
<td>Monday, 01 July</td>
<td>17:00 – 18:30</td>
<td>Akershus, green area</td>
</tr>
<tr>
<td>Scientific Panel Neuroimmunology</td>
<td>Tuesday, 02 July</td>
<td>08:30 – 10:00</td>
<td>VIP Room, exhibition, blue area</td>
</tr>
<tr>
<td>Task Force Rare Neurological Diseases</td>
<td>Tuesday, 02 July</td>
<td>09:00 – 10:30</td>
<td>Akershus, green area</td>
</tr>
<tr>
<td>Task Force Coma guideline</td>
<td>Tuesday, 02 July</td>
<td>09:30 – 11:30</td>
<td>Hordaland 2, green area</td>
</tr>
<tr>
<td>Scientific Panel Neuroimaging</td>
<td>Tuesday, 02 July</td>
<td>10:45 – 12:45</td>
<td>Akershus, green area</td>
</tr>
</tbody>
</table>
All presenters are requested to be at their poster screen at the beginning of the sessions.
Pick up your audio equipment at the ePoster Helpdesk!

<table>
<thead>
<tr>
<th>Topic</th>
<th>Screen Nr</th>
<th>Poster Numbers</th>
<th>Chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ageing and dementia 1</td>
<td>Screen A1</td>
<td>EPO1001 – EPO1012</td>
<td>Reinhold Schmidt, Austria</td>
</tr>
<tr>
<td>Ageing and dementia 4</td>
<td>Screen A2</td>
<td>EPO1013 – EPO1024</td>
<td>Ana Graca Velon, Portugal</td>
</tr>
<tr>
<td>Cerebrovascular diseases 1</td>
<td>Screen B1</td>
<td>EPO1025 – EPO1038</td>
<td>Felix Schlachetzki, Germany</td>
</tr>
<tr>
<td>Cerebrovascular diseases 2</td>
<td>Screen B2</td>
<td>EPO1039 – EPO1052</td>
<td>Pasquale Scoppettuolo, Belgium</td>
</tr>
<tr>
<td>Cerebrovascular diseases 3</td>
<td>Screen B3</td>
<td>EPO1053 – EPO1066</td>
<td>Zazana Gdovinova, Slovakia</td>
</tr>
<tr>
<td>Child neurology/developmental neurology; Cognitive neurology/neuropsychology</td>
<td>Screen B6</td>
<td>EPO1067 – EPO1079</td>
<td>Miryam Carecchio, Italy</td>
</tr>
<tr>
<td>Critical Care; Neurorehabilitation</td>
<td>Screen B7</td>
<td>EPO1080 – EPO1092</td>
<td>Martin Rakusa, Slovenia</td>
</tr>
<tr>
<td>Epilepsy 1</td>
<td>Screen A3</td>
<td>EPO1093 – EPO1107</td>
<td>Eylert Brodtkorb, Norway</td>
</tr>
<tr>
<td>Epilepsy 2</td>
<td>Screen A4</td>
<td>EPO1108 – EPO1122</td>
<td>Füsun Erdoğan, Turkey</td>
</tr>
<tr>
<td>Headache and pain 1</td>
<td>Screen A9</td>
<td>EPO1123 – EPO1136</td>
<td>Hans-Christoph Diener, Germany</td>
</tr>
<tr>
<td>Infectious Diseases; Education in Neurology; History of Neurology; Neurology and Arts</td>
<td>Screen A5</td>
<td>EPO1137 – EPO1149</td>
<td>Klaus Viktor Toyka, Germany</td>
</tr>
<tr>
<td>Motor neurone diseases; Neuroimmunology</td>
<td>Screen A7</td>
<td>EPO1150 – EPO1164</td>
<td>Markus Weber, Switzerland</td>
</tr>
<tr>
<td>Movement disorders 1</td>
<td>Screen A10</td>
<td>EPO1165 – EPO1178</td>
<td>Efthalia Angelopoulou, Greece</td>
</tr>
<tr>
<td>Movement disorders 2</td>
<td>Screen A11</td>
<td>EPO1179 – EPO1192</td>
<td>Anthony Schapira, United Kingdom</td>
</tr>
<tr>
<td>Movement disorders 3</td>
<td>Screen A12</td>
<td>EPO1193 – EPO1206</td>
<td>Lucia Muntean, Germany</td>
</tr>
<tr>
<td>MS and related disorders 1</td>
<td>Screen B10</td>
<td>EPO1207 – EPO1220</td>
<td>Salimata Gassama, France</td>
</tr>
<tr>
<td>MS and related disorders 2</td>
<td>Screen B11</td>
<td>EPO1222 – EPO1236</td>
<td>Abhijit Chaudhuri, United Kingdom</td>
</tr>
<tr>
<td>MS and related disorders 3</td>
<td>Screen B12</td>
<td>EPO1237 – EPO1251</td>
<td>Hans-Peter Hartung, Germany</td>
</tr>
<tr>
<td>Muscle and neuromuscular junction disease 1</td>
<td>Screen A6</td>
<td>EPO1252 – EPO1265</td>
<td>Corrado Angelini, Italy</td>
</tr>
<tr>
<td>Neurogenetics 1</td>
<td>Screen B9</td>
<td>EPO1266 – EPO1280</td>
<td>Geir Bråthen, Norway</td>
</tr>
<tr>
<td>Neuroimaging 1</td>
<td>Screen B4</td>
<td>EPO1281 – EPO1295</td>
<td>Celia Oreja-Guevara, Spain</td>
</tr>
<tr>
<td>Neuroimaging 2</td>
<td>Screen A8</td>
<td>EPO1296 – EPO1311</td>
<td>Manfred Kaps, Germany</td>
</tr>
<tr>
<td>Peripheral nerve disorders 1</td>
<td>Screen B5</td>
<td>EPO1312 – EPO1326</td>
<td>Vanessa Carvalho, Portugal</td>
</tr>
<tr>
<td>Sleep disorders</td>
<td>Screen B8</td>
<td>EPO1327 – EPO1341</td>
<td>Stefan Seidel, Austria</td>
</tr>
</tbody>
</table>

All posters will be available throughout the congress on the poster screens and poster stations in the ePoster area (located in the exhibition area). You can contact ePoster and ePresentation presenters via the poster system. For this, please use one of the poster screens in the ePoster area and navigate to the poster you would like to contact the author of. You can find a contact link on the bottom of the page. You can do the same via the link on the congress website.
All presenters are requested to be at their poster screen at the beginning of the sessions. Pick up your audio equipment at the ePoster Helpdesk!

<table>
<thead>
<tr>
<th>Topic</th>
<th>Screen Nr</th>
<th>Poster Numbers</th>
<th>Chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ageing and dementia 2</td>
<td>Screen A1</td>
<td>EPO2001 – EPO2012</td>
<td>Leif Gjerstad, Norway</td>
</tr>
<tr>
<td>Ageing and dementia 5</td>
<td>Screen A2</td>
<td>EPO2013 – EPO2025</td>
<td>Görl R. Grøntvedt, Norway</td>
</tr>
<tr>
<td>Cerebrovascular diseases 4</td>
<td>Screen B1</td>
<td>EPO2026 – EPO2038</td>
<td>Harish Jayakumar, India</td>
</tr>
<tr>
<td>Cerebrovascular diseases 5</td>
<td>Screen B2</td>
<td>EPO2040 – EPO2053</td>
<td>Elena Lebedeva, Russian Federation</td>
</tr>
<tr>
<td>Cerebrovascular diseases 6</td>
<td>Screen B3</td>
<td>EPO2054 – EPO2067</td>
<td>Bartosz Karaszewski, Poland</td>
</tr>
<tr>
<td>Child neurology/developmental neurology</td>
<td>Screen A4</td>
<td>EPO2068 – EPO2081</td>
<td>Hatice Karucu, Turkey</td>
</tr>
<tr>
<td>Clinical neurophysiology 1</td>
<td>Screen B4</td>
<td>EPO2082 – EPO2094</td>
<td>Asya Ekmen, France</td>
</tr>
<tr>
<td>Cognitive neurology/neuropsychology 1</td>
<td>Screen B6</td>
<td>EPO2095 – EPO2108</td>
<td>Isil Tatlicil, Turkey</td>
</tr>
<tr>
<td>Epilepsy 3</td>
<td>Screen A3</td>
<td>EPO2109 – EPO2123</td>
<td>Gyri Veiby, Norway</td>
</tr>
<tr>
<td>Headache and pain 2</td>
<td>Screen A9</td>
<td>EPO2124 – EPO2137</td>
<td>Michel Ferrari, The Netherlands</td>
</tr>
<tr>
<td>Headache and pain 3</td>
<td>Screen A8</td>
<td>EPO2138 – EPO2151</td>
<td>Peter Goadsby, United Kingdom</td>
</tr>
<tr>
<td>Movement disorders 4</td>
<td>Screen A10</td>
<td>EPO2152 – EPO2165</td>
<td>Anastasia Bougea, Greece</td>
</tr>
<tr>
<td>Movement disorders 5</td>
<td>Screen A11</td>
<td>EPO2166 – EPO2179</td>
<td>Jaime Kulisevsky, Spain</td>
</tr>
<tr>
<td>Movement disorders 6</td>
<td>Screen A12</td>
<td>EPO2180 – EPO2193</td>
<td>Chokri Mhiri, Tunisia</td>
</tr>
<tr>
<td>MS and related disorders 4</td>
<td>Screen B10</td>
<td>EPO2194 – EPO2208</td>
<td>Per Soelberg Sörensen, Denmark</td>
</tr>
<tr>
<td>MS and related disorders 5</td>
<td>Screen B11</td>
<td>EPO2209 – EPO2223</td>
<td>Ilaria Callegari, Italy</td>
</tr>
<tr>
<td>MS and related disorders 6</td>
<td>Screen B12</td>
<td>EPO2224 – EPO2238</td>
<td>Banu Anlar, Turkey</td>
</tr>
<tr>
<td>Muscle and neuromuscular junction disease 2</td>
<td>Screen A6</td>
<td>EPO2239 – EPO2252</td>
<td>Kristin Ørstavik, Norway</td>
</tr>
<tr>
<td>Neurogenetics 2</td>
<td>Screen B9</td>
<td>EPO2253 – EPO2267</td>
<td>Miguel Pereira, Portugal</td>
</tr>
<tr>
<td>Neuroimmunology 1</td>
<td>Screen A5</td>
<td>EPO2268 – EPO2281</td>
<td>Mihailo Mirkovic, Serbia</td>
</tr>
<tr>
<td>Neurological manifestations of systemic diseases</td>
<td>Screen B8</td>
<td>EPO2282 – EPO2296</td>
<td>Ide Smets, Belgium</td>
</tr>
<tr>
<td>Neuro-oncology 1</td>
<td>Screen A7</td>
<td>EPO2297 – EPO2309</td>
<td>Ceyhun Sayman, Turkey</td>
</tr>
<tr>
<td>Neurorehabilitation</td>
<td>Screen B7</td>
<td>EPO2310 – EPO2321</td>
<td>Daniel Kondziella, Denmark</td>
</tr>
<tr>
<td>Peripheral nerve disorders 2</td>
<td>Screen B5</td>
<td>EPO2322 – EPO2336</td>
<td>Panagiotis Zis, United Kingdom</td>
</tr>
</tbody>
</table>

All posters will be available throughout the congress on the poster screens and poster stations in the ePoster area (located in the exhibition area). You can contact ePoster and ePresentation presenters via the poster system. For this, please use one of the poster screens in the ePoster area and navigate to the poster you would like to contact the author of. You can find a contact link on the bottom of the page. You can do the same via the link on the congress website.
All presenters are requested to be at their poster screen at the beginning of the sessions. Pick up your audio equipment at the ePoster Helpdesk!

<table>
<thead>
<tr>
<th>Topic</th>
<th>Screen Nr</th>
<th>Poster Numbers</th>
<th>Chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ageing and dementia 3</td>
<td>Screen A1</td>
<td>EPO3001 – EPO3012</td>
<td>Eric Salmon, Belgium</td>
</tr>
<tr>
<td>Autonomic nervous system</td>
<td>Screen B12</td>
<td>EPO3013 – EPO3022</td>
<td>Max Hilz, Germany</td>
</tr>
<tr>
<td>Cerebrovascular diseases 7</td>
<td>Screen B1</td>
<td>EPO3023 – EPO3036</td>
<td>Titto Idicula, Norway</td>
</tr>
<tr>
<td>Cerebrovascular diseases 8</td>
<td>Screen B2</td>
<td>EPO3037 – EPO3051</td>
<td>Eva Zupanic, Slovenia</td>
</tr>
<tr>
<td>Clinical neurophysiology 2</td>
<td>Screen B3</td>
<td>EPO3052 – EPO3063</td>
<td>Anna Rostedt Punga, Sweden</td>
</tr>
<tr>
<td>Cognitive neurology/neuropsychology 2</td>
<td>Screen B6</td>
<td>EPO3064 – EPO3077</td>
<td>Josep Valls-Solé, Spain</td>
</tr>
<tr>
<td>Epilepsy 4</td>
<td>Screen A3</td>
<td>EPO3078 – EPO3093</td>
<td>Alla Guekht, Russia</td>
</tr>
<tr>
<td>Headache and pain 4</td>
<td>Screen A9</td>
<td>EPO3094 – EPO3107</td>
<td>Aud Nome Dueland, Norway</td>
</tr>
<tr>
<td>Headache and pain 5</td>
<td>Screen A8</td>
<td>EPO3108 – EPO3121</td>
<td>Cristina Tassorelli, Italy</td>
</tr>
<tr>
<td>Infectious Diseases</td>
<td>Screen B4</td>
<td>EPO3122 – EPO3136</td>
<td>Aleksandra Herrera-Sokołowska, Poland</td>
</tr>
<tr>
<td>Motor neurone diseases</td>
<td>Screen A4</td>
<td>EPO3137 – EPO3151</td>
<td>Philippe Couratier, France</td>
</tr>
<tr>
<td>Movement disorders 7</td>
<td>Screen A10</td>
<td>EPO3152 – EPO3165</td>
<td>Anne Björnara, Norway</td>
</tr>
<tr>
<td>Movement disorders 8</td>
<td>Screen A11</td>
<td>EPO3166 – EPO3177</td>
<td>Kailash Bhatia, United Kingdom</td>
</tr>
<tr>
<td>Movement disorders 9</td>
<td>Screen A12</td>
<td>EPO3178 – EPO3189</td>
<td>Joakim Goberg Jørgensen, Norway</td>
</tr>
<tr>
<td>MS and related disorders 7</td>
<td>Screen B10</td>
<td>EPO3190 – EPO3204</td>
<td>Ludwig Kappos, Switzerland</td>
</tr>
<tr>
<td>MS and related disorders 8</td>
<td>Screen B11</td>
<td>EPO3205 – EPO3220</td>
<td>Giancarlo Comi, Italy</td>
</tr>
<tr>
<td>Muscle and neuromuscular junction disease; Neuroepidemiology</td>
<td>Screen A6</td>
<td>EPO3221 – EPO3235</td>
<td>Trine Popperud, Norway</td>
</tr>
<tr>
<td>Neurogenetics 3</td>
<td>Screen B9</td>
<td>EPO3236 – EPO3251</td>
<td>Michelangelo Mancuso, Italy</td>
</tr>
<tr>
<td>Neuroimaging 3</td>
<td>Screen A5</td>
<td>EPO3252 – EPO3267</td>
<td>Radu Razvan, Romania</td>
</tr>
<tr>
<td>Neuroimmunology 2</td>
<td>Screen A2</td>
<td>EPO3268 – EPO3281</td>
<td>Jan Kuks, The Netherlands</td>
</tr>
<tr>
<td>Neurological manifestations of system diseases; Peripheral nerve disorders</td>
<td>Screen B8</td>
<td>EPO3282 – EPO3294</td>
<td>Sophie Demeret, France</td>
</tr>
<tr>
<td>Neuro-oncology 2</td>
<td>Screen A7</td>
<td>EPO3295 – EPO3307</td>
<td>Stefan Oberndorfer, Austria</td>
</tr>
<tr>
<td>Neuro-ophthalmology/ neuro-otology</td>
<td>Screen B5</td>
<td>EPO3308 – EPO3319</td>
<td>Laurens Dobbels, Belgium</td>
</tr>
<tr>
<td>Neurotoxicology/occupational neurology; Neurotraumatology; Spinal cord and root disorders</td>
<td>Screen B7</td>
<td>EPO3320 – EPO3331</td>
<td>Radu Tanasescu, United Kingdom</td>
</tr>
</tbody>
</table>

All posters will be available throughout the congress on the poster screens and poster stations in the ePoster area (located in the exhibition area). You can contact ePoster and ePresentation presenters via the poster system. For this, please use one of the poster screens in the ePoster area and navigate to the poster you would like to contact the author of. You can find a contact link on the bottom of the page. You can do the same via the link on the congress website.
All presenters are requested to be at their poster screen at the beginning of the sessions. Pick up your audio equipment at the ePoster Helpdesk!

### ePresentation Overview

**Saturday, 29 June, 13:30 – 14:15**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Screen Nr</th>
<th>Poster Numbers</th>
<th>Chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ageing and dementia 1</td>
<td>Screen A1</td>
<td>EPR1001 – EPR1007</td>
<td>Kristian Steen Frederiksen, Denmark</td>
</tr>
<tr>
<td>Ageing and dementia 2</td>
<td>Screen A2</td>
<td>EPR1008 – EPR1014</td>
<td>Noa Bregman, Israel</td>
</tr>
<tr>
<td>Cerebrovascular diseases 1</td>
<td>Screen B1</td>
<td>EPR1015 – EPR1021</td>
<td>Christian Enzinger, Austria</td>
</tr>
<tr>
<td>Cerebrovascular diseases 2</td>
<td>Screen B2</td>
<td>EPR1022 – EPR1028</td>
<td>Gianmarco di Marchis, Switzerland</td>
</tr>
<tr>
<td>Epilepsy 1</td>
<td>Screen A3</td>
<td>EPR1029 – EPR1035</td>
<td>Jera Kruja, Albania</td>
</tr>
<tr>
<td>Epilepsy 2</td>
<td>Screen A4</td>
<td>EPR1036 – EPR1042</td>
<td>Christian Samsonsen, Norway</td>
</tr>
<tr>
<td>Headache and pain 1</td>
<td>Screen A9</td>
<td>EPR1043 – EPR1048</td>
<td>Messoud Ashina, Denmark</td>
</tr>
<tr>
<td>Motor neurone diseases 1</td>
<td>Screen A12</td>
<td>EPR1049 – EPR1055</td>
<td>Raffaele Dubbioso, Italy</td>
</tr>
<tr>
<td>Movement disorders 1</td>
<td>Screen B10</td>
<td>EPR1056 – EPR1062</td>
<td>Federica Agosta, Italy</td>
</tr>
<tr>
<td>Movement disorders 2</td>
<td>Screen B11</td>
<td>EPR1063 – EPR1069</td>
<td>Tzoulis Charalampos, Norway</td>
</tr>
<tr>
<td>Movement disorders 3</td>
<td>Screen B12</td>
<td>EPR1070 – EPR1076</td>
<td>Joaquim Ferreira, Portugal</td>
</tr>
<tr>
<td>MS and related disorders 1</td>
<td>Screen A6</td>
<td>EPR1077 – EPR1083</td>
<td>Hanne Flinstad Harbo, Norway</td>
</tr>
<tr>
<td>MS and related disorders 2</td>
<td>Screen A7</td>
<td>EPR1084 – EPR1090</td>
<td>Ralf Gold, Germany</td>
</tr>
<tr>
<td>Neurogenetics 1</td>
<td>Screen B4</td>
<td>EPR1091 – EPR1096</td>
<td>Giulia Ricci, Italy</td>
</tr>
<tr>
<td>Neuro-ophthalmology/ neuro-otology</td>
<td>Screen A10</td>
<td>EPR1097 – EPR1103</td>
<td>David Garcia Azorin, Spain</td>
</tr>
<tr>
<td>Neurorehabilitation</td>
<td>Screen A11</td>
<td>EPR1104 – EPR1110</td>
<td>Rita Formisano, Italy</td>
</tr>
<tr>
<td>Neurorehabilitation; Critical Care</td>
<td>Screen B7</td>
<td>EPR1111 – EPR1117</td>
<td>Andreas Gantenbein, Switzerland</td>
</tr>
<tr>
<td>Neurotraumatology</td>
<td>Screen B3</td>
<td>EPR1118 – EPR1122</td>
<td>Katrin Rauen, Germany</td>
</tr>
<tr>
<td>Peripheral nerve disorders</td>
<td>Screen B6</td>
<td>EPR1123 – EPR1130</td>
<td>Sissel Løseth, Norway</td>
</tr>
<tr>
<td>Sleep disorders 1</td>
<td>Screen B8</td>
<td>EPR1131 – EPR1135</td>
<td>Ulf Kallweit, Germany</td>
</tr>
</tbody>
</table>

All posters will be available throughout the congress on the poster screens and poster stations in the ePoster area (located in the exhibition area). You can contact ePoster and ePresentation presenters via the poster system. For this, please use one of the poster screens in the ePoster area and navigate to the poster you would like to contact the author of. You can find a contact link on the bottom of the page. You can do the same via the link on the congress website.
### ePresentation Overview

All presenters are requested to be at their poster screen at the beginning of the sessions.
Pick up your audio equipment at the ePoster Helpdesk!

<table>
<thead>
<tr>
<th>Topic</th>
<th>Screen Nr</th>
<th>Poster Numbers</th>
<th>Chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ageing and dementia 3</td>
<td>Screen A1</td>
<td>EPR2001 – EPR2006</td>
<td>Ole-Björn Tysnes, Norway</td>
</tr>
<tr>
<td>Cerebrovascular diseases 3</td>
<td>Screen B1</td>
<td>EPR2007 – EPR2013</td>
<td>Halvor Ness, Norway</td>
</tr>
<tr>
<td>Cerebrovascular diseases 4</td>
<td>Screen B2</td>
<td>EPR2014 – EPR2020</td>
<td>Johann Sellner, Austria</td>
</tr>
<tr>
<td>Child neurology/developmental neurology</td>
<td>Screen A4</td>
<td>EPR2021 – EPR2025</td>
<td>Ayse Deniz Elmali, Turkey</td>
</tr>
<tr>
<td>Cognitive Neurology/neuropsychology</td>
<td>Screen B6</td>
<td>EPR2026 – EPR2030</td>
<td>Marijke Miatton, Belgium</td>
</tr>
<tr>
<td>Epilepsy 3</td>
<td>Screen A3</td>
<td>EPR2031 – EPR2037</td>
<td>Erik Taubøll, Norway</td>
</tr>
<tr>
<td>Headache and pain 2</td>
<td>Screen A9</td>
<td>EPR2038 – EPR2043</td>
<td>Knut Hagen, Norway</td>
</tr>
<tr>
<td>Motor neurone diseases 2</td>
<td>Screen A12</td>
<td>EPR2044 – EPR2050</td>
<td>Christian Krarup, Denmark</td>
</tr>
<tr>
<td>Movement disorders 4</td>
<td>Screen B10</td>
<td>EPR2051 – EPR2057</td>
<td>Günter Hoeglinger, Germany</td>
</tr>
<tr>
<td>Movement disorders 5</td>
<td>Screen B11</td>
<td>EPR2058 – EPR2064</td>
<td>Regina Katzenschlager, Austria</td>
</tr>
<tr>
<td>Movement disorders 6</td>
<td>Screen B12</td>
<td>EPR2065 – EPR2071</td>
<td>Petra Schwingenschuh, Austria</td>
</tr>
<tr>
<td>MS and related disorders 3</td>
<td>Screen A6</td>
<td>EPR2072 – EPR2078</td>
<td>Michael Khalil, Austria</td>
</tr>
<tr>
<td>MS and related disorders 4</td>
<td>Screen A7</td>
<td>EPR2079 – EPR2085</td>
<td>Paolo Ragonese, Italy</td>
</tr>
<tr>
<td>Muscle and neuromuscular junction disease 1</td>
<td>Screen A2</td>
<td>EPR2086 – EPR2092</td>
<td>Laurence Bindoff, Norway</td>
</tr>
<tr>
<td>Neurogenetics 2</td>
<td>Screen B4</td>
<td>EPR2093 – EPR2098</td>
<td>Giovanni Meola, Italy</td>
</tr>
<tr>
<td>Neurogenetics 3</td>
<td>Screen B3</td>
<td>EPR2099 – EPR2104</td>
<td>Magda Mroczek, Poland</td>
</tr>
<tr>
<td>Neuroimaging 1</td>
<td>Screen B7</td>
<td>EPR2105 – EPR2111</td>
<td>Ivan Rektor, Czech Republic</td>
</tr>
<tr>
<td>Neuroimmunology 1</td>
<td>Screen A10</td>
<td>EPR2112 – EPR2116</td>
<td>Giovanni Di Liberto, Switzerland</td>
</tr>
<tr>
<td>Neuro-oncology</td>
<td>Screen A11</td>
<td>EPR2117 – EPR2121</td>
<td>Lorenzo Ferlini, Belgium</td>
</tr>
</tbody>
</table>

All posters will be available throughout the congress on the poster screens and poster stations in the ePoster area (located in the exhibition area). You can contact ePoster and ePresentation presenters via the poster system.
For this, please use one of the poster screens in the ePoster area and navigate to the poster you would like to contact the author of. You can find a contact link on the bottom of the page. You can do the same via the link on the congress website.
All presenters are requested to be at their poster screen at the beginning of the sessions. Pick up your audio equipment at the ePoster Helpdesk!

<table>
<thead>
<tr>
<th>Topic</th>
<th>Screen Nr</th>
<th>Poster Numbers</th>
<th>Chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ageing and dementia 4</td>
<td>Screen A1</td>
<td>EPR3001 – EPR3006</td>
<td>Giorgio Fumagalli, Italy</td>
</tr>
<tr>
<td>Cerebrovascular diseases 5</td>
<td>Screen B1</td>
<td>EPR3007 – EPR3013</td>
<td>Jukka Putaala, Finland</td>
</tr>
<tr>
<td>Cerebrovascular diseases 6</td>
<td>Screen B2</td>
<td>EPR3014 – EPR3020</td>
<td>Natan Bornstein, Israel</td>
</tr>
<tr>
<td>Clinical neurophysiology; Neurological manifestations of systemic diseases</td>
<td>Screen A4</td>
<td>EPR3021 – EPR3027</td>
<td>Yuri Alekseenko, Belarus</td>
</tr>
<tr>
<td>Cognitive neurology/neuropsychology 2</td>
<td>Screen B6</td>
<td>EPR3028 – EPR3032</td>
<td>Milija Mijajlovic, Serbia</td>
</tr>
<tr>
<td>Epilepsy 4</td>
<td>Screen A3</td>
<td>EPR3033 – EPR3038</td>
<td>Kristl Vonck, Belgium</td>
</tr>
<tr>
<td>Headache and pain 3</td>
<td>Screen A9</td>
<td>EPR3039 – EPR3043</td>
<td>Stefan Evers, Germany</td>
</tr>
<tr>
<td>Infectious Diseases</td>
<td>Screen B3</td>
<td>EPR3044 – EPR3050</td>
<td>Raad Shakir, United Kingdom</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Screen A11</td>
<td>EPR3051 – EPR3055</td>
<td>Theodoros Kyriakides, Cyprus</td>
</tr>
<tr>
<td>Motor neurone diseases 3</td>
<td>Screen A12</td>
<td>EPR3056 – EPR3062</td>
<td>Vincenzo Silani, Italy</td>
</tr>
<tr>
<td>Movement disorders 7</td>
<td>Screen B10</td>
<td>EPR3063 – EPR3068</td>
<td>Angelo Antonini, Italy</td>
</tr>
<tr>
<td>Movement disorders 8</td>
<td>Screen B11</td>
<td>EPR3069 – EPR3074</td>
<td>Philippe Damier, France</td>
</tr>
<tr>
<td>MS and related disorders 5</td>
<td>Screen A6</td>
<td>EPR3075 – EPR3081</td>
<td>Mario Habek, Croatia</td>
</tr>
<tr>
<td>Muscle and neuromuscular junction disease 2</td>
<td>Screen A2</td>
<td>EPR3082 – EPR3088</td>
<td>Anneke van der Kooi, The Netherlands</td>
</tr>
<tr>
<td>Neuroepidemiology</td>
<td>Screen A7</td>
<td>EPR3089 – EPR3094</td>
<td>Anne Hege Aamodt, Norway</td>
</tr>
<tr>
<td>Neurogenetics 4</td>
<td>Screen B4</td>
<td>EPR3095 – EPR3100</td>
<td>Alessandro Filla, Italy</td>
</tr>
<tr>
<td>Neuroimaging 2</td>
<td>Screen B7</td>
<td>EPR3101 – EPR3106</td>
<td>Markus Kneihsl, Austria</td>
</tr>
<tr>
<td>Neuroimmunology 2</td>
<td>Screen A10</td>
<td>EPR3107 – EPR3111</td>
<td>Veronique Miron, United Kingdom</td>
</tr>
<tr>
<td>Sleep disorders 2</td>
<td>Screen B12</td>
<td>EPR3112 – EPR3115</td>
<td>Fabio Pizza, Italy</td>
</tr>
</tbody>
</table>

All posters will be available throughout the congress on the poster screens and poster stations in the ePoster area (located in the exhibition area). You can contact ePoster and ePresentation presenters via the poster system. For this, please use one of the poster screens in the ePoster area and navigate to the poster you would like to contact the author of. You can find a contact link on the bottom of the page. You can do the same via the link on the congress website.
IN OUR PROFESSION, PERCEPTION IS KEY.

LET’S TRAIN IT TOGETHER.

Driving Excellence in Neurology.

Be part of one of humankind’s most ambitious projects to help uncover the workings of the nervous system. EAN connects 45,000 specialists in neurology in 47 countries across Europe. Promoting excellence, cutting-edge science and innovative therapies for a better life for more than 430 million patients in Europe alone. Read more on ean.org

Great Minds.
Official Networking Programme & other activities  
Saturday, 29 June

18:30
Main Auditorium

Opening & Welcome Reception

Welcoming addresses by
Günther Deuschl, EAN Past President
Erik Taubøll, Local Chairperson

Announcement
Tony Marson, EAN Programme Committee Chair

Opening Lecture
“The positioning system in the brain”
Nobel Prize Winner 2014: Edvard I. Moser,
Trondheim, Norway

Musical and Dance performance
Known for innovative and prize-winning performing arts, FRIKAR will introduce the power of ancient but vital arts from Norway.

All participants and exhibitors are invited to the Opening and Welcome reception afterwards. The reception will take place in the Congress venue with the possibility to go outside. We are happy to serve a buffet and cold drinks. Please wear your badge.
International Neuro-Urology Society
the only scientific society which deals exclusively with Neuro-Urology with the aim to offer the best possible care to neuro-urological patients worldwide

INUS
ANNUAL CONGRESS 2020
Istanbul
January 23-25th

NEURO-UROLOGY IN PRACTICE:
ADVANCES & CHALLENGES

We invite all
doctors, nurses, physiotherapists etc. - who are involved in neuro-urological care and research
Challenges for Women in Neurology

Chairpersons:
Elena Moro, Grenoble, France
Antonella Macerollo, London, UK

The aim of the event is to help identifying and overcoming the challenges that women can find during their academic and hospital career development in neurology. This event is mainly directed to female neurology residents and neurologists at the beginning of their career. Male colleagues are welcome to join.

You are invited to bring your lunch to this session.

Anne Hege Aamodt
Oslo, Norway

Kristl Vonck
Ghent, Belgium

Alla Guekht
Moscow, Russia

Kristl Vonck is Head of the Department ‘Head and Skin’ at Ghent University in Belgium. She has held international training positions at Guy’s Hospital, London, UK; Yale University School of Medicine, New Haven, Connecticut, USA and the University of Stellenbosch, South Africa. She is a fellow of the EAN and member of the EU Joint Task Force of the International League Against Epilepsy. Her research interests include epilepsy, neuromodulation, bioelectronic medicine and neurophysiological home-monitoring of neurological disorders. In the translational research setting of the 4Brain Research team, her team investigates the mechanism of action, efficacy and side effects of several neurostimulation modalities. Both in animals and patients, crucial questions are investigated for the application of neurostimulation as a valuable treatment option for neurological disorders: stimulation parameters, open and closed loop neurostimulation applications, seizure detection and prediction algorithms, invasive versus non-invasive neurostimulation. Proof-of-concept and early innovative techniques for neurological monitoring@home are validated at the excellence Center for Neurofysiological Monitoring (CNM) of Ghent University Hospital before being investigated in a home environment.

Alla Guekht is Director of the Moscow Research and Clinical Center for Neuropsychiatry of the Moscow Healthcare Department and Professor of Neurology in the Russian National Research Medical University. She received the PhD Diploma for the dissertation on EEG monitoring in carotid surgery and the Doctor of Medical Sciences Diploma for the dissertation on Brain plasticity and restoration after stroke. Her main research interests are epilepsy and cerebrovascular diseases. She is the author of more than 190 Pubmed-listed publications, including over 80 papers in the international peer-reviewed journals and chapters in the international textbooks. She received the Bruce S. Schoenberg International Award in Neuroepidemiology, the European Educational Award on Epileptology and the Ambassador for Epilepsy Award. She is the elected Trustee of the WFN, the Vice-President of the ILAE and the Secretary-General of the National Society of Neurologists.

Anne Hege Aamodt is the President of the Norwegian Neurological Association and senior consultant at the Department of Neurology, Oslo University Hospital with headache and stroke as her subspecialties. Her primary research interest is related to acute stroke treatment, cryptogenic stroke and migraine treatment. She is the principle investigator of international stroke studies and is collaborating in several national and international projects. She is national deputy delegate and national delegate in the stroke scientific panel in EAN, board member of the World Federation of Neurology Constitution & Bye-laws Committee member of the EAN/UEMS-SN/EBN Joint Education Board and the Local Organising Committee for the 5th EAN congress in Oslo 2019 and Fellow of the European Stroke Organisation where she is member of board of the guideline committee and membership committee.
Europe - Middle East - Africa Chapter

The Europe-Middle East- Africa Chapter of the IFCN is pleased to be collaborating with the EAN to improve Clinical Neurophysiology.

The International Federation of Clinical Neurophysiology (IFCN) has member societies in 62 countries. The IFCN mission is to promote best practice in clinical neurophysiology through education and research throughout the world. And our vision is to improve healthcare worldwide by understanding the nervous system and optimizing the diagnosis and treatment of its disorders through clinical neurophysiology.

Our chapter, one of four in the IFCN, contains just over half the national societies affiliated to the IFCN. It runs its Congress every two years and supports visiting lecturer programmes, bursaries and scholarships. Our chapter was a founding member of the European Brain Council, representing clinical neurophysiology, and a partner in EBC-coordinated EU project ‘The European Brain Research Area (EBRA). It is initiating educational and training developments.

For details contact;

Professor Jonathan Cole, Chair, Executive Committee
jonathan.cole@poole.nhs.uk

Dr Hatice Tankisi, Secretary/Treasurer, hatitank@rm.dk

www.ifcn.info
Sunday, 30 June
18:15
meeting-point in front of Oslo congress center

Resident and Research Fellow Hospital Visit

This year, the traditional hospital visit is organised on Sunday, June 30, with meeting point at 18:15 in front of the Oslo congress centre.

You can sign up at the RRFS booth/EAN LEARN booth – places are limited. Participants will be introduced to the local neurology education while visiting the Neurology Department of the Rikshospitalet and the adjacent building where the research departments are (Domus Medica).

The hospital visit is followed by a get-together with food and beverages.

20:30
Room Nord Norge

From neurologists for neurologists – Music Recital

A Musical Journey through Europe with compositions from the Baroque to the Classic and Romantic Periods:
Johann Sebastian Bach – Edvard Grieg – Franz Schubert – Clara Schumann – Antonio Vivaldi

This chamber music recital is the third one organised and scheduled at the time of an EAN congress by the neurologists Klaus V. Toyka, Würzburg, Germany, Hannah Cock, London, UK, and pianist Beate Toyka, UK. Delegates of the congress are cordially invited to spend an hour of relaxed listening.

Tickets 15€/10 € at the registration desk onsite or by booking through EAN Registration.
EANO 2019
LYON

SAVE THE DATE

SEPTEMBER 19 - 22, 2019
14TH MEETING & Educational Day

EUROPEAN ASSOCIATION OF NEURO-ONCOLOGY

Centre de Congrès
Lyon, France

www.eano.eu
Monday, 1 July
12:30

**History of Neuroscience Visit to the Polhøgda – Fridtjof Nansen Institute**

The participants of the History of Neuroscience Visit will be picked up by bus at 12:30 on Monday, 1 July in front of Norges Varemesse. All participants will arrive at Polhøgda around 13:00. After a 90 minutes guided tour, the bus will take all participants back to the Norges Varemesse. Local neurologists are guiding the bus tour informing on historical facts and figures.

Entrance fee: 50€
Reduced fee: 35€

Fridtjof Nansen (1861-1930) was a famous Norwegian Arctic explorer, oceanographer, statesman and humanitarian. In the final decade of his life he was the League of Nation’s High Commissioner for Refugees. He was awarded the Nobel Peace Prize in 1922 for his work on behalf of the displaced victims of the First World War and related conflicts. What is less known, is that he was the first Norwegian to defend a Ph.D. in neuroscience. He studied the central nervous system of lower marine vertebrates. He was probably the first scientist who gave experimental evidence that nerve cells are not connected in a syncytium, and thus helped establishing the neuron theory.

Polhøgda was built 1900-1901, as the home of Fridtjof and Eva Nansen. Their home was an important location of social life for artists and intellectuals in the Oslo area. After Fridtjof Nansen’s death in 1930, he was buried at the property. Polhøgda was sold for a nominal fee from his heirs to a group of donators, who in turn gave the property to the University of Oslo. Their conditions included that the building should be preserved, and not be used as a museum. It was later owned by the Norwegian Academy of Science and Letters, and from 1947 the Norwegian Geographical Society.

It currently hosts the research foundation Fridtjof Nansen Institute. However, Fridtjof Nansen’s own office at Polhøgda has been kept unchanged throughout the years.

Monday, 1 July
19:00

**Meet Your Neurology Network**

Oslo City Hall houses the city council, city administration and art studios. Its characteristic architecture, artworks and the Nobel Peace Prize ceremony makes it one of Oslo’s most famous buildings.

The building as it stands today was constructed between 1931 and 1950, with an interruption during the Second World War. It was designed by architects Arnstein Arneberg and Magnus Poulsson. The building is located in the city center, in the northern part of the Pipervika neighbourhood, and it faces Oslofjord. Oslo City Hall is built of red brick and has two towers, one 63 meters tall and other 66 meters tall. The roof of the eastern tower has a 49-bell carillon which plays every hour. On December 10 (anniversary of Alfred Nobel’s death) each year, Oslo City Hall hosts the Nobel Peace Prize ceremony in which the annual laureate gives his or her lecture and is awarded the medal and diploma. The Norwegian Royal Family and Prime Minister are attendants.

The entrance fee is € 5 and includes free snacks and drinks and guiding through selected areas.

The City Hall is easy to reach from the Norges Varemesse by train. Take the train to the city center and get out at Nationaltheatret. From there it is a 5-minute walk.
<table>
<thead>
<tr>
<th>Time</th>
<th>Venue</th>
<th>Session Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30 – 10:00</td>
<td>Main Room</td>
<td>Stroke and Dementia</td>
</tr>
<tr>
<td>10:30 – 12:30</td>
<td>SYMP 1</td>
<td>Biomarkers in degenerative diseases and viewed from the European DLB Consortium</td>
</tr>
<tr>
<td>12:30 – 14:30</td>
<td>TC1</td>
<td>OS: Mitochondrial diseases for beginners (Level 1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TSYM: Neurology, Neurotransmitter analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SpS: Movement disorders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TC 2: Treatment of common and complex disorders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TC 3: Movement disorders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TC 4: Diagnosis and treatment of common and complex disorders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TC 5: Threshold testing for understanding nerve system functions and dysfunctions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OS: Diagnosis and treatment of common and complex disorders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SpS 5: Threshold testing for understanding nerve system functions and dysfunctions</td>
</tr>
<tr>
<td>17:00 – 18:30</td>
<td>TC1</td>
<td>OS: Mitochondrial diseases</td>
</tr>
</tbody>
</table>

* HoC 3-8 are repetitions of HoC 1-4*
<table>
<thead>
<tr>
<th>Time</th>
<th>Room</th>
<th>Session Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00 – 09:30</td>
<td>Amsterdam</td>
<td>Diagnostic: The maze of telemedicine and mobile applications in neurology.</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>Helsinki</td>
<td>Integration of new therapeutic possibilities in the treatment of neuroinfections.</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>Budapest</td>
<td>Disturbances of consciousness in acute hepatic porphyria.</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>Amsterdam</td>
<td>Clinical Grand Rounds: Medical management in acute migraine – where we do better?</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>Helsinki</td>
<td>The role of neuroimmunology; Infectious neuroinfections; Infectious diseases 3.</td>
</tr>
<tr>
<td>10:00 – 12:00</td>
<td>Amsterdam</td>
<td>Hands-on Course: Autologous hematopoietic transplantation in patients with multiple sclerosis.</td>
</tr>
<tr>
<td>10:00 – 12:00</td>
<td>Helsinki</td>
<td>Hands-on Course: The unexpected: Novel tales of the unexpected.</td>
</tr>
<tr>
<td>12:15 – 13:15</td>
<td>Helsinki</td>
<td>Biogen: Novel approaches to the path to earlier diagnosis of ALS.</td>
</tr>
<tr>
<td>13:00 – 14:30</td>
<td>Amsterdam</td>
<td>Hands-on Course: Hands-on Course.</td>
</tr>
<tr>
<td>13:00 – 14:30</td>
<td>Helsinki</td>
<td>Hands-on Course: Hands-on Course.</td>
</tr>
<tr>
<td>13:00 – 14:30</td>
<td>Budapest</td>
<td>Hands-on Course: Hands-on Course.</td>
</tr>
</tbody>
</table>

**Sunday, 30 June**

- **Main Auditorium**: Presidential Sessions (OS 3 & OS 4).
- **Amsterdam**: Hands-on Course.
- **Helsinki**: Hands-on Course.
- **Budapest**: Hands-on Course.

**Overarching Theme**

- Career Development Session (CdS).
- Plenary Symposium (PLEN).
- Hands-on Course (FW).
- Hands-on Course (FW).
- Hands-on Course (FW).
- Hands-on Course (FW).
- Hands-on Course (FW).

---

**Rooms and Sessions**

- **SpS 7**: Hands-on Course.
- **OS**: Hands-on Course.
- **SpS 8**: Hands-on Course.
- **OS**: Hands-on Course.
- **OS**: Hands-on Course.
- **OS**: Hands-on Course.
- **OS**: Hands-on Course.
- **OS**: Hands-on Course.

---

**EAN/MDS-ES:**

- **Diagnostic**
- **Integration**
- **Disturbances**
- **Clinical Grand Rounds**
- **Hematopoietic transplantation**
- **Autologous**
- **Neuroimmunology**
- **Infectious neuroinfections**
- **Infectious diseases**

---

**EAN/EAPC:**

- **Cerebrovascular diseases**
- **Neuroinfections**
- **Movement disorders**
- **Autonomic dysfunctions**
- **Peripheral nerve disorders**
- **Refractory status epilepticus**

---

**Sanofi Genzyme:**

- **Normal brain atrophy rates in multiple sclerosis, a brainwave?**

---

**Bial:**

- **Beyond morbidities**
- **Beyond medical management**

---

**Teva:**

- **Optimism and opportunities for women in neurology**

---

**UCB:**

- **Childhood to adulthood transition in neurology: How to best prevent and treat?**

---

**Eli Lilly:**

- **Success stories of migraine – where we do better?**

---

**Sanofi Genzyme:**

- **Cerebrovascular diseases 3**
- **Cerebrovascular diseases 4**
- **Cerebrovascular diseases 5**

---

**Novartis:**

- **Relentless in Multiple Sclerosis: the continuing mission to stop disease activity.**

---

**Biogen:**

- **Spinal muscular atrophy in adults: patient management in the new therapeutic era.**

---

**Merck:**

- **Cladribine Tablets real-world experience: the Finnish experience.**

---

**Roche:**

- **The paradigm – can we do better?**

---

**VIELA BIO:**

- **N-Momentum Study Design.**

---

**Sanofi Genzyme:**

- **Normal brain atrophy rates in multiple sclerosis, a brainwave?**

---

**Bial:**

- **Beyond morbidities**
- **Beyond medical management**

---

**Teva:**

- **Optimism and opportunities for women in neurology**

---

**UCB:**

- **Childhood to adulthood transition in neurology: How to best prevent and treat?**

---

**Eli Lilly:**

- **Success stories of migraine – where we do better?**

---

**Sanofi Genzyme:**

- **Cerebrovascular diseases 3**
- **Cerebrovascular diseases 4**
- **Cerebrovascular diseases 5**

---

**Novartis:**

- **Relentless in Multiple Sclerosis: the continuing mission to stop disease activity.**

---

**Biogen:**

- **Spinal muscular atrophy in adults: patient management in the new therapeutic era.**

---

**Merck:**

- **Cladribine Tablets real-world experience: the Finnish experience.**

---

**Roche:**

- **The paradigm – can we do better?**

---

**VIELA BIO:**

- **N-Momentum Study Design.**

---

**Bial:**

- **Beyond morbidities**
- **Beyond medical management**

---

**Teva:**

- **Optimism and opportunities for women in neurology**

---

**UCB:**

- **Childhood to adulthood transition in neurology: How to best prevent and treat?**

---

**Eli Lilly:**

- **Success stories of migraine – where we do better?**

---

**Sanofi Genzyme:**

- **Normal brain atrophy rates in multiple sclerosis, a brainwave?**

---

**Bial:**

- **Beyond morbidities**
- **Beyond medical management**

---

**Teva:**

- **Optimism and opportunities for women in neurology**

---

**UCB:**

- **Childhood to adulthood transition in neurology: How to best prevent and treat?**

---

**Eli Lilly:**

- **Success stories of migraine – where we do better?**

---

**Sanofi Genzyme:**

- **Normal brain atrophy rates in multiple sclerosis, a brainwave?**

---

**Bial:**

- **Beyond morbidities**
- **Beyond medical management**

---

**Teva:**

- **Optimism and opportunities for women in neurology**

---

**UCB:**

- **Childhood to adulthood transition in neurology: How to best prevent and treat?**

---

**Eli Lilly:**

- **Success stories of migraine – where we do better?**

---

**Sanofi Genzyme:**

- **Normal brain atrophy rates in multiple sclerosis, a brainwave?**

---

**Bial:**

- **Beyond morbidities**
- **Beyond medical management**

---

**Teva:**

- **Optimism and opportunities for women in neurology**

---

**UCB:**

- **Childhood to adulthood transition in neurology: How to best prevent and treat?**

---

**Eli Lilly:**

- **Success stories of migraine – where we do better?**

---

**Sanofi Genzyme:**

- **Normal brain atrophy rates in multiple sclerosis, a brainwave?**

---

**Bial:**

- **Beyond morbidities**
- **Beyond medical management**

---

**Teva:**

- **Optimism and opportunities for women in neurology**

---

**UCB:**

- **Childhood to adulthood transition in neurology: How to best prevent and treat?**

---

**Eli Lilly:**

- **Success stories of migraine – where we do better?**

---

**Sanofi Genzyme:**

- **Normal brain atrophy rates in multiple sclerosis, a brainwave?**

---

**Bial:**

- **Beyond morbidities**
- **Beyond medical management**

---

**Teva:**

- **Optimism and opportunities for women in neurology**

---

**UCB:**

- **Childhood to adulthood transition in neurology: How to best prevent and treat?**

---

**Eli Lilly:**

- **Success stories of migraine – where we do better?**

---

**Sanofi Genzyme:**

- **Normal brain atrophy rates in multiple sclerosis, a brainwave?**

---

**Bial:**

- **Beyond morbidities**
- **Beyond medical management**

---

**Teva:**

- **Optimism and opportunities for women in neurology**

---

**UCB:**

- **Childhood to adulthood transition in neurology: How to best prevent and treat?**

---

**Eli Lilly:**

- **Success stories of migraine – where we do better?**
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00 – 09:30</td>
<td>Management of cognitive aspects in Parkinson's disease and parkinsonisms</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>EAN/MDS-ES: Management of cognitive aspects in Parkinson's disease and</td>
</tr>
<tr>
<td></td>
<td>parkinsonisms</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>What can movement in sleep tell us about the disease?</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>Preclinical Alzheimer's disease</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>Diagnostic impact of perceptual, ocular motor, and body tilts</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>Management of stroke in young adults</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>Finishing and challenging aspects of awareness and neuroplasticity in</td>
</tr>
<tr>
<td></td>
<td>spinal cord injury</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>Coping with refractory disorders of children and adolescents</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>History of Neuroscience: Three men behind the neuron theory</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>Biomarkers in headache disorders</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>Neurosonology – from basics to clinical applications (Level 1)</td>
</tr>
<tr>
<td>09:00 – 12:00</td>
<td>The role of inflammation in 'non-inflammatory' neurological diseases</td>
</tr>
<tr>
<td>09:00 – 12:00</td>
<td>Difficult-to-treat myasthenia gravis?</td>
</tr>
<tr>
<td>09:00 – 12:00</td>
<td>Therapeutic inertia in Multiple Sclerosis: A Call to Action!</td>
</tr>
<tr>
<td>09:00 – 12:00</td>
<td>Optimizing levodopa therapy: searching for the evidence, looking beyond</td>
</tr>
<tr>
<td></td>
<td>the data</td>
</tr>
<tr>
<td>09:00 – 12:00</td>
<td>Nervous system disorders due to retroviruses (Level 3)</td>
</tr>
<tr>
<td>09:00 – 12:00</td>
<td>Optic neuritis, a very frequent diagnosis in a neuro-ophthalmology clinic</td>
</tr>
<tr>
<td>15:00 – 18:15</td>
<td>Clinical science in muscle disorders (Level 2)</td>
</tr>
<tr>
<td>15:00 – 18:15</td>
<td>Neurological disorders due to retroviruses</td>
</tr>
<tr>
<td>15:00 – 18:15</td>
<td>Diagnosing coma and disorders of consciousness – Pearls and pitfalls</td>
</tr>
<tr>
<td></td>
<td>from a new EAN GL (Level 1-2)</td>
</tr>
<tr>
<td>15:00 – 18:30</td>
<td>Movement Disorders 2</td>
</tr>
<tr>
<td>15:00 – 18:30</td>
<td>Autonomic nervous system disorders; Peripheral nerve disorders</td>
</tr>
<tr>
<td>16:00 – 18:15</td>
<td>ABACE: Optimizing Care in Advanced Parkinson’s Disease – Past insights,</td>
</tr>
<tr>
<td></td>
<td>Current Practices, and Future Prospects</td>
</tr>
<tr>
<td>Time</td>
<td>Main Auditorium</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>08:00 – 10:00</td>
<td>Neuroimaging in common neurologic disorders</td>
</tr>
<tr>
<td>08:00 – 09:30</td>
<td>The Do's and Don'ts in neurologic emergencies</td>
</tr>
<tr>
<td>08:00 – 10:00</td>
<td>New insights and developments in stroke treatment</td>
</tr>
<tr>
<td>08:00 – 10:00</td>
<td>Late Breaking News</td>
</tr>
<tr>
<td>08:30 – 10:00</td>
<td>Scientific writing</td>
</tr>
<tr>
<td>08:30 – 10:00</td>
<td>How to use big data and digital technology to improve epilepsy care and patient outcomes</td>
</tr>
<tr>
<td>08:30 – 10:00</td>
<td>KANMIS-EN: When 'playing' with dopamine goes wrong</td>
</tr>
<tr>
<td>08:30 – 10:00</td>
<td>Epilepsy 2</td>
</tr>
<tr>
<td>08:30 – 10:15</td>
<td>MS and related disorders 2</td>
</tr>
<tr>
<td>08:30 – 10:15</td>
<td>In-dose examination of the vestibular and ocular motor system</td>
</tr>
</tbody>
</table>

**Tuesday, 2 July**

**08:00 – 13:30** Exhibition opening hours

**10:00 – 10:30** Coffee Break at exhibition

**11:30 – 13:30** Lunch Break at exhibition

**14:30 – 15:00** Coffee Break near session rooms
11th EAPC
World Research Congress of the European Association for Palliative Care
13-16 May 2020
Palermo, Italy
<table>
<thead>
<tr>
<th>Time</th>
<th>Saturday, 29 June</th>
<th>Sunday, 30 June</th>
<th>Monday, 01 July</th>
<th>Tuesday, 02 July</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>09:00 – 17:00 exhibition opening hours</td>
<td>09:00 – 13:30 exhibition opening hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:30</td>
<td>Coffeebreak: Forum talk by industry 9:30–9:45 ALNYLAM PHARMA-CEUTICALS - Acute hepatic porphyria: A potentially fatal cause of peripheral neuropathy or encephalopathy. A practical perspective from an expert centre 9:45–10:00 MERCK - Cladribine Tablets real-world experience</td>
<td></td>
<td>Coffeebreak: Forum talk by industry 9:45–10:00 ROCHE - Aware of rare: what's new in Huntington's Disease?</td>
<td></td>
</tr>
<tr>
<td>10:00</td>
<td>Coffeebreak</td>
<td></td>
<td>RRFS - S. Gassama</td>
<td>Tips and Practical advices for the EBN examination</td>
</tr>
<tr>
<td>10:30</td>
<td>eBook - K. Toyka</td>
<td>EFNA - E. Cunningham - #BrainLifeGoals: An Awareness Campaign</td>
<td>eBook - K. Toyka A. Siva</td>
<td>The handbook for neurological examination – Turkish edition of the e-Book</td>
</tr>
<tr>
<td>11:00</td>
<td>RRFS - A. Sauerbier</td>
<td>EBC - M. Kautsch - The MULTI-FACT project: the science of patient input</td>
<td>Wiley - P. Saloheimo</td>
<td>Scientific Writing</td>
</tr>
<tr>
<td>11:30</td>
<td>EFNA - T. Hawrot - Global Health Policy: Advocating for Neurology</td>
<td>Wiley - P. Saloheimo</td>
<td>RRFS - F. Di Lorenzo</td>
<td>Italian young neurologists: activities and projects looking to the future in Italy and Europe</td>
</tr>
<tr>
<td>12:00</td>
<td>EBC - P. Destrebecq, G. Esposito</td>
<td>European Brain Research Area (EBRA): coordinating European brain research and developing global initiatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:30</td>
<td>EAPC - D. Oliver - Neurology and Palliative Care - collaboration now and in the future</td>
<td>INUS - J. Panicker - INUS and the EAN - a year of collaboration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13:00</td>
<td>RRFS - D. Schreier - How young neurologists in Europe can shape their own future</td>
<td>RRFS - N. Kleinberg M. Van Der Meulen - Residency Program in Europe – a National Representatives Survey</td>
<td>RRFS - L. Klingelhöfer G. Di Liberto - News from the Resident and Research Fellow Section</td>
<td>News from the Resident and Research Fellow Section</td>
</tr>
<tr>
<td>14:00</td>
<td>RRFS - F. Di Lorenzo, D. Schreier</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:30</td>
<td>EAN - D. Mure-samu - Scientific Panels - what they are and how they work</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Session Descriptions

Session descriptions and Buttons

Please make sure to be in session halls on time as all sessions will begin as per schedule.

If you need a report of your attendance in sessions, please evaluate all sessions that you have attended. Once evaluation of the sessions is complete, you can obtain a CME Certificate, including all sessions attended, via the online registration platform. (see also page 21)

If you have any questions, you can find a designated ‘App and Evaluation Helpdesk’ in the congress entrance area next to the registration desk.

CME Certificates including a record of attendance will only be available for participants who have evaluated the sessions attended during the congress. Evaluation is possible until Wednesday, 24 July 2019, 23:59 CET.

Scientific Sessions:

Plenary Symposia:
One Plenary Symposium per day is scheduled, with no other session held in parallel. During these four sessions, outstanding speakers will present the Opening lecture, three Named Lectures, the most relevant topics within the Overarching congress theme and the highlights of the congress.

Symposia:
Symposia are scheduled on each congress day and will last 2 hours each. Lecturers will give general information on the main topics of the congress.

Focused Workshops:
Focused workshops (FWs) will be held in the morning and last for 1.5 hours. They cover narrow topics and aim to promote discussion around new ideas, evidence or theories. Ample time for discussion will be provided.

Special Sessions:
Special Sessions (SPS) cover topics of special interest.

Educational Sessions:

Teaching Courses:
If you wish to participate, tickets can still be purchased at the Course booking stations/Registration helpdesk for a fee of €38/€25, availability permitting.

TCs are held on each congress day in the afternoon and last for 3 hours (plus 1/2 hour coffee break). They are interactive with ample opportunity for participants to ask questions. All TCs are aimed primarily at a post-graduate audience.

There are 3 levels of TCs:
Level 1 (Introductory): Aimed primarily at neurologists in training, or those wishing to refresh/update their basic knowledge in the field. Level 1 can also be suitable for undergraduates or general trainees with a particular interest.
Level 2 (standard): Assumes familiarity with basic clinical knowledge and practice, aimed at specialist trainees or practitioners wishing to update and further develop their knowledge in the field.
Level 3 (advanced): Aimed at specialist trainees or practitioners with a particular interest in that field, covering the latest advances of particular interest to a specialist audience.

Participation is not included in the registration fee. The manuscript of the lectures will be available online on the congress website.

Hands-on Courses:
If you wish to participate, tickets can still be purchased at the Course booking stations/Registration helpdesk for a fee of €38/€25, availability permitting.

These Hands-on Courses (HoC) are for a limited number of participants only, with some built-in work in smaller groups who attend parallel by rotating to each presenter of the course. Live demonstrations with screening machines are the core of these courses.

Participation is not included in the registration fee. For a limited number of participants only (first come-first-served basis).

Case-based Workshops:
If you wish to participate, tickets can still be purchased at the Course booking stations/Registration helpdesk for a fee of €38/€25, availability permitting.

The case-based workshops are to support knowledge and practice in clinical diagnosis and management in a format, which requires the attendees to actively participate, with opportunities for direct discussion/contact with leading experts to discuss pre-prepared cases.

Participation is not included in the registration fee. For a limited number of participants only (first come-first-served basis).

Interactive Sessions:
These sessions are open for all participants. Through an interactive voting system, the opinions of colleagues will be collected. Please download the congress app to actively participate in the Q&A.

Controversy Sessions:
Allow to give a critical overview of the current and most recent advances on key topics, share knowledge, stimulate debate and forge opinions on controversial issues of clinical care, research, educational practice and therapy.
Session Descriptions

Career development Sessions:
This format shall allow to share and improve knowledge on: “how to best write an academic paper”; “how to plan and organize a clinical or scientific study”; “how to apply for a grant”, “how to get a paper accepted” etc...
These sessions are open for all participants and primarily aim at a post-graduate audience.

EAN BrainChallenge: (see page 73)
The session will give a platform for interactive learning using quiz questions. Two competing teams, a local team and an international team, will try to win the BrainChallenge by giving the correct answer to a case-presentation. The audience can silently vote via the EAN congress app, the results will be presented after each case.
Please download the congress app to actively participate in the Quiz.

Clinical Grand Rounds: (see page 92)
In this session, highly experienced neurologists will interview and examine real patients with difficult or complex neurological conditions. They will discuss the clinical diagnosis, request and review all available diagnostic tests and will end by formulating a final diagnosis.

Buttons & Scientific programme:
The Overarching Theme for the 2019 Congress is “Neuroinflammation”. Sessions with this button are dedicated to the Overarching theme and were either created by the Programme committee together with Local Organising committee, or by the EAN Scientific Panels.

EFNA (European Federation of Neurological Associations), the federation uniting European Patients’ Associations, has selected these sessions as high priority.

These are the highlights of the congress.

These sessions were selected by the EAN Rare Neurological Disease Task Force.
IN OUR WORLD, A STEADY FLOW KEEPS PATIENTS ALIVE.
LET’S TAKE CARE OF IT TOGETHER.

Driving Excellence in Neurology.
Be part of one of humankind’s most ambitious projects to help uncover the workings of the nervous system. EAN connects 45,000 specialists in neurology in 47 countries across Europe. Promoting excellence, cutting-edge science and innovative therapies for a better life for more than 430 million patients in Europe alone. Read more on ean.org

Great Minds.
Scientific Programme

5th Congress of the European Academy of Neurology

June 29 – July 2
Driving Excellence in Neurology.

Be part of one of humankind's most ambitious projects to help uncover the workings of the nervous system. EAN connects 45,000 specialists in neurology in 47 countries across Europe. Promoting excellence, cutting-edge science and innovative therapies for a better life for more than 430 million patients in Europe alone. Read more on ean.org

Great Minds.
Saturday
29 June 2019
Do you want to hear the results of late-breaking trials and receive updates on world-leading science with reduced registration rates for the ESO Conference?

**Become a member of ESO!**

Other benefits include:
- Subscription to the European Stroke Journal
- Monthly newsletter
- Joint membership with WSO
- Possibility to attend other ESO educational events (e.g. Summer / Winter School, Department-to-Department Visiting Programme, etc.)
- …and many more

*Apply for membership online now.*

Reduced membership fees for low income countries and members of associated national stroke societies.

[www.eso-stroke.org](http://www.eso-stroke.org)
Hands-on Course 1: Conventional needle EMG – Level 1

Chairperson:
Christian Krarup (Copenhagen, Denmark)

- Conventional needle EMG
  Christian Krarup (Copenhagen, Denmark)

Educational Content:
Teaching the use of EMG and jitter analysis to differentiate weakness due to neurogenic disorders, myopathy and neuromuscular transmission disorders.

Limited to 40 persons. Please register separately – additional fees will apply.

This course is supported by NATUS Medical Inc.

Hands-on Course 2: Nerve conduction studies – Level 1

Chairperson:
Josep Valls-Solé (Barcelona, Spain)

- Motor and sensory nerve conduction studies. F-wave
  Josep Valls-Solé (Barcelona, Spain)

Educational Content:
Teaching how to perform nerve conduction studies and use them in the clinical neurophysiological evaluation of neurological, mostly neuromuscular, disorders.

Limited to 40 persons. Please register separately – additional fees will apply.

This course is supported by NATUS Medical Inc.

Case-based Workshop 1: Dilemmas in neuroinflammatory disease in the ICU

Chairperson:
Maxwell S. Damian
(Cambridge, United Kingdom)

- Management of super-refractory status epilepticus in autoimmune encephalitis
  Sophie Demeret (Paris, France)

- Severe inflammatory disease of the spinal cord: diagnostic and management dilemmas
  Hadi Manji (London, United Kingdom)

- Dilemmas in prognostication: when is coma in severe encephalitis salvageable and when to stop
  Maxwell Damian
  (Cambridge, United Kingdom)

Educational Content:
This session aims to illustrate major diagnostic problems in severe inflammatory disease of the nervous system and discuss their possible solution, based on case examples demonstrated by recognised experts in inflammatory disease and intensive care neurology. The session is aimed at Level 2-3 participants.

Limited to 60 participants. Please register separately – additional fees will apply.

Focused Workshop 1: Stroke and Dementia

Chairperson:
Tormod Fladby (Lørenskog, Norway)

- Does treating vascular risk factors prevent dementia and Alzheimer’s disease? A systematic review and meta-Analysis
  Hugh Markus
  (Cambridge, United Kingdom)

- How can we reduce cognitive decline after stroke?
  Reinhold Schmidt (Graz, Austria)

- Synergic interactions between brain small vessel disease and Alzheimer’s disease?
  Tormod Fladby (Lørenskog, Norway)

Scientific Content:
This topic should be highly relevant, these are of course very prevalent diseases where epidemiological research indicate clinically relevant interaction.

1: Recent meta-analyses (Larsson, Markus) point to putative promising effects on dementia (including Alzheimer’s dementia) of treatment of vascular risk factors, but also to the need for further trials. An understanding of specific mechanisms is lacking, but could ultimately lead to better focused prevention.

2: Several therapies and interventions have been suggested to improve cognitive prognosis post-stroke, there is a need for trials but some substantial evidence exists for guidance. Interactions between markers for small vessel disease and amyloid pathology has been studied and there are clear interactions, though the direction of causality may be difficult to discern and mechanisms need to be better explored. Improved understanding of genetic risk factors, and improved imaging and fluid biomarkers for both diseases now rapidly increase our understanding and should improve disease prevention in the near future.
08:30 – 10:00
Room Paris

**Focused Workshop 2: Future treatments of neuroinflammation and neuroimmune diseases**

**Chairpersons:**
- Hanne Flinstad Harbo (Oslo, Norway)
- Antonio Uccelli (Genoa, Italy)

**Scientific Content:**
Diverse immunomodulatory treatments have recently been introduced for treatment of a broad spectrum of neurological diseases. The rationale, mechanisms, effects and risks of such treatments are not always evident. This is a hot topic both for new research and for scientists in clinical practice. This workshop will aim at reviewing the current principles and applications of established as well as future treatments of neuroinflammation through talks by world-leading scientists and clinicians. The workshop will end with an interactive session with a discussion of the topic between the panel of speakers and participants of the workshop.

08:30 – 10:00
Room Svalbard

**Focused Workshop 3: EAN/MDS-ES: Functional movement disorders**

**Chairperson:**
Francesca Morgante (London, United Kingdom)

**Scientific Content:**
This session is focused on the clinical diagnosis, biological background and management of functional movement disorders.

Recommended Audience
- Clinical academicians
- Practitioners
- Students/residents/trainees
- Non-physician Health professionals

08:30 – 10:00
Room Sør Norge

**Focused Workshop 4: “Can we reduce mortality in epilepsy? Yes, we can!”**

**Chairperson:**
Rainer Surges (Aachen, Germany)

**Scientific Content:**
Mortality in epilepsy is an important and clinically relevant topic. There is an increased risk of mortality from the disease, such as SUDEP and persons with epilepsy are reported to have a 2 to 3-fold increased risk to die compared to the general population. More recently publications show, that mortality ratios are no longer increased in some populations and life expectancy in epilepsy has increased. One explanation could be the full deployment of epilepsy surgery, better preventive measures against SUDEP, and improved primary health care with earlier diagnosis and better selection of refractory cases. Within this focussed workshop speakers will outline the most up to date facts on mortality trends. Participants will learn about the mechanisms, risk factors and prevention of SUDEP. Epilepsy surgery is a very effective treatment of epilepsy. Besides abolishing seizures mortality can be reduced, but current data to support this are still controversial. The participants of this focussed workshop will be engaged in a critical debate on the current evidence to reduce mortality and the measured needed in the future to improve the patient’s outcomes.
Focused Workshop 5: Cannabinoids: between neuroinflammation and neurodegeneration

Chairpersons:
Antonio Pisani (Rome, Italy)
Radu Tanasescu (Nottingham, United Kingdom)

- Cannabinoids and neuroinflammation
  Radu Tanasescu (Nottingham, United Kingdom)

- Cannabinoids and neurodegeneration
  Antonio Pisani (Rome, Italy)

- Cannabinoids beyond beneficial effects: the risk of abuse
  Olivier Manzoni (Marseille, France)

- Cannabinoids in epilepsy
  Rima Nabbout (Paris, France)

Scientific Content:
The participants will be able to know the main characteristics of the endocannabinoids as important mediators involved in neuroinflammation and neurodegeneration and will understand the basic of the endocannabinoid system and the fundamental functions played by its major components, with particular practical emphasis on its important physiological and pathological role of clinical interest for the neurologist. They will be able to describe the main clinical neurological indications for which endocannabinoid-targeting medication is already approved, their major pathophysiological basis, the benefits and side issues raised in practice as well as familiarized with the near-future practical trends in endocannabinoid research with future clinical implications, aiming to specifically ameliorate neurological disease while eliminating side effects such as psychological or addictive complications. The participants will understand the current controversies and issues regarding the use of cannabinoid medicines, both therapeutic and legal, from a practical point of view.

Focused Workshop 6: Circulating biomarkers in genetic and autoimmune neuromuscular disorders and RNAi therapeutics

Chairperson:
Maria Judit Molnar (Budapest, Hungary)

- MicroRNA in metabolic dystrophies
  Maria Judit Molnar (Budapest, Hungary)

- RNAi therapeutics in peripheral neuropathies
  Giuseppe Vita (Messina, Italy)

- Circulating microRNA in myasthenia gravis
  Anna Rostedt Punga (Uppsala, Sweden)

Scientific Content:
The scientific content of the focused workshop is intended to highlight the circulating biomarkers in neuromuscular disorders, neuropathies and myasthenia gravis, since the follow-up of these disorders could be better performed by clinicians if they follow not only the clinical evolution but also specific molecular biomarkers in future clinical trials to treat these disorders. Biomarkers can identify both muscle, nerve, neuromuscular junctions or inflammatory components in a neuromuscular disorder.

Focused Workshop 7: Liquid biopsy of CSF in brain tumours

Chairperson:
Roberta Rudá (Turin, Italy)

- Primary CNS lymphomas
  Uwe Schlegel (Bochum, Germany)

- Brain and leptomeningeal metastases
  Roberta Rudá (Turin, Italy)

- Primary brain tumours
  Johan M. Kros (Rotterdam, The Netherlands)

Scientific Content:
Review of usefulness of ctDNA, miRNA, and circulating tumour cells in CSF for diagnosis and monitoring.
Interactive Session 1: Treatment strategies in MS

Chairperson:
Eva Kubala Havrdova (Prague, Czech Republic)

- Escalating treatment strategy
Emmanuelle Le Page (Rennes, France)

- Induction treatment strategy
Eva Kubala Havrdova (Prague, Czech Republic)

- Deciding to treat progressive MS
Aksel Siva (Istanbul, Turkey)

Educational Content:
6 clinical cases offering clinical and MRI data that might help for discussing the different option strategies according to some well-known predictive factors and the main results of phase 3 clinical trial in relapsing and progressive MS.

Please download the app "EAN Congress" to actively participate and vote.

Special Session 1: Brain death, circulatory death and organ donation

Chairperson:
Nina Forss (Helsinki, Finland)

- Clinical diagnosis of brain death – is it enough?
Nina Forss (Helsinki, Finland)

- Use of ancillary tests – when and why?
Uwe Walter (Rostock, Germany)

- Circulatory death of organ donators
Michael Kuiper (Leeuwarden, The Netherlands)

- Legislation and consent in European countries
Ronny Beer (Innsbruck, Austria)

Scientific Content:
Brain death means irreversible cessation of all brain functions and is a prerequisite for organ donation. However, methods for determining brain death vary widely. In addition, there is marked variation in use of ancillary tests. In some countries organ donation after circulatory death (DCD) makes significant contribution to overall donation, whereas in some other countries DCD is not at all in use. This special session aims to highlight the best practises in different countries and to stimulate discussion on this important topic.

Hands-on Course 3: Transcranial magnetic stimulation – Level 1

Chairperson:
Letizia Leocani (Milan, Italy)

- Transcranial magnetic stimulation
Letizia Leocani (Milan, Italy)

Educational Content:
Teaching how to perform transcranial magnetic stimulation studies. Technical aspects of basic recordings and their interpretation according to the clinical context. Indications and applications

Limited to 40 persons. Please register separately – additional fees will apply.

Hands-on Course 4: Vestibular evoked myogenic potentials – Level 1

Chairperson:
Eleftherios S. Papathanasiou (Nicosia, Cyprus)

- Vestibular evoked myogenic potentials
Eleftherios S. Papathanasiou (Nicosia, Cyprus)

Educational Content:
Teaching how to perform vestibular evoked myogenic potentials. Technical aspects of basic recordings and their interpretation according to the clinical context.

Limited to 40 persons. Please register separately – additional fees will apply.

This course is supported by by NATUS Medical Inc.
10:30 – 12:30
Main Auditorium

**Symposium 1:**
Biomarkers in degenerative dementia: news and views from the European Dementia with Lewy Body (DLB) Consortium

Chairpersons:
Flavio Nobili (Genova, Italy)
Dag Aarsland (London, United Kingdom)

• Neurophysiology: EEG and videopolysomnography
  Laura Bonanni (Chieti, Italy)

• Molecular imaging: PET and SPECT
  Zuzana Walker (London, United Kingdom)

• MRI tools: structural and functional imaging
  Irena Rektorová (Brno, Czech Republic)

• CSF markers: tau, amyloid, alpha-synuclein, and beyond
  Evelien Lemstra (Amsterdam, The Netherlands)

**Scientific Content:**
An effort to define the criteria to identify the prodromal stage of DLB is ongoing and here the role of biomarkers is even more relevant. Molecular imaging can show nigrostriatal deafferentation as well as norepinephrine transporter deficit at heart level in most DLB patients early in the disease while polysomnography demonstrates REM sleep without atonia. Supporting biomarkers are structural MRI showing relatively preserved medial temporal lobe, EEG with the typical frequency fluctuations of dominant posterior rhythm and diffuse delta waves, and FDG-PET demonstrating the temporo-occipital hypometabolism with preservation of posterior cingulate cortex. CSF biomarkers are in full development based on the new alpha-synuclein assays, but other markers are actively studied. Harmonization efforts across European countries are needed to improve homogeneity in biomarker assay and reporting.

---

10:30 – 12:30
Room Lisbon

**Symposium 2:**
Insights into headache pathophysiology

Chairpersons:
Messoud Ashina (Copenhagen, Denmark)
Stefan Evers (Münster, Germany)

• Insights from the ergot derivatives and triptans
  Stefan Evers (Münster, Germany)

• What does the efficacy of neurostimulation tell us?
  Peter Goadsby (London, United Kingdom)

• CGRP and PACAP mechanisms
  Messoud Ashina (Copenhagen, Denmark)

• Insights from medication overuse headache
  Cristofer Lundqvist (Oslo, Norway)

**Scientific Content:**
Since the development of triptans, migraine and headache drugs have shown increasing efficacy changing the life of headache sufferers. However, there are still unmet needs in treating headaches, searching for better ways of treatment is still ongoing. In the beginning of modern migraine treatment, drugs were developed empirically and based on wrong assumptions. Meanwhile, we have learnt a lot on headache pathophysiology by investigating the exact mechanisms of the drugs. The major aim of the symposium is to give an oversight on the present knowledge about drug efficacy and drug mechanisms in migraine and other headache disorders such as cluster headache (including the risks of the drugs) and to give perspectives on future drug developments based on the knowledge we obtain from older drugs. Thus, the audience will receive a comprehensive insight into the modern knowledge of headache pathophysiology and modern drug treatment and drug development.

---

10:30 – 12:30
Room Paris

**Symposium 3:**
New insights into the pathogenesis and treatment of autoimmune neuromuscular disorders

Chairpersons:
Peter van den Bergh (Brussels, Belgium)
Hugh Willison (Glasgow, United Kingdom)

• Immuno-molecular paradigms in the neuromuscular system
  Hugh Willison (Glasgow, United Kingdom)

• Progress in the diagnosis and management of GBS and CIDP
  Bart Jacobs (Rotterdam, The Netherlands)

• Conceptual paradigm shifts in inflammatory myopathies
  Werner Stenzel (Berlin, Germany)

• New guidelines for diagnosis and treatment in myasthenia gravis
  Nils-Erik Gilhus (Bergen, Norway)

**Scientific Content:**
Inflammation plays an important role in the neuromuscular system. Much progress has been made in the understanding of immune mechanisms leading to new pathogenetic insights, novel treatment approaches and new diagnostic and therapeutic guidelines of these disorders.
10:30 – 12:30
Room Svalbard

Symposium 4:
EAN/MDS-ES:
Movement disorders in systemic conditions

Chairperson:
Joaquim Ferreira (Lisbon, Portugal)
Maria Stamelou (Athens, Greece)

• Metabolic movement disorders
  Susanne Schneider (Munich, Germany)

• Toxic movement disorders
  Pille Taba (Tartu, Estonia)

• Autoimmune movement disorders
  Angela Vincent (Oxford, United Kingdom)

• Neuroinfections and movement disorders
  Joaquim Ferreira (Lisbon, Portugal)

Scientific Content:
Presentation and discussion of the pathogenesis, clinical spectrum, workup and management of the most common neuro-metabolic, toxic, autoimmune and neuroinfections diseases causing movement disorders. Update on the pathogenesis of the different etiologies and overlap in the movement disorders syndromes. Advances in the management of the different etiologies and clinical features.

14:45 – 15:45
Room HoC

Hands-on Course 5:
Conventional needle EMG – Level 1 – repetition of HoC 01

Chairperson:
Christian Krarup (Copenhagen, Denmark)

• Conventional needle EMG
  Christian Krarup (Copenhagen, Denmark)

Educational Content:
Teaching the use of EMG and jitter analysis to differentiate weakness due to neurogenic disorders, myopathy and neuromuscular transmission disorders

Limited to 40 persons. Please register separately – additional fees will apply.

This course is supported by NATUS Medical Inc.

14:45 – 16:15
Room CbW

Case-based Workshop 2:
Diagnostic dilemmas in glioma

Chairperson:
Anette Storstein (Bergen, Norway)

• Clinical pitfalls in Gliomas
  Anette Storstein (Bergen, Norway)

• MRI dilemmas in Glioma
  Martha Nowosielski (Innsbruck, Austria)

• What’s the use amino acid PET in Glioma
  Norbert Galldiks (Cologne, Germany)

Educational Content:
The focus of this workshop is to elaborate the advantages and disadvantages of clinical, morphological and metabolic diagnostics in the follow up of glioma patients. This CbW is aimed to improve knowledge concerning multimodal diagnostic approaches and to strengthen the ability of the participants in identifying pitfalls.

Limited to 60 participants. Please register separately – additional fees will apply.

14:45 – 15:45
Room HoC

Hands-on Course 6: Nerve conduction studies – Level 1 – repetition of HoC 02

Chairperson:
Josep Valls-Solé (Barcelona, Spain)

• Motor and sensory nerve conduction studies. F-wave
  Josep Valls-Solé (Barcelona, Spain)

Educational Content:
Teaching how to perform nerve conduction studies and use them in the clinical neurophysiological evaluation of neurological, mostly neuromuscular, disorders.

Limited to 40 persons. Please register separately – additional fees will apply.

This course is supported by NATUS Medical Inc.
14:45 – 16:15  
Room Paris

**Topical Symposium: Unmet needs in the treatment of migraine**

**Chairpersons:**  
Stefan Evers (Münster, Germany)  
Cristina Tassorelli (Pavia, Italy)

- Refractory migraine attacks  
  Cristina Tassorelli (Pavia, Italy)

- High frequency and chronic migraine  
  Patricia Pozo-Rosich (Barcelona, Spain)

- Medication-overuse headache  
  Zaza Katsarava (Essen, Germany)

- Rare migraine syndromes  
  Stefan Evers (Münster, Germany)

**Scientific Content:**  
This symposium is directed to all neurologists with more than a basic interest in headache medicine. The first two lectures will be on patients who are refractory to “normal” treatment (i.e., in accordance to guidelines): one is addressing the possibilities of acute treatment, the other is addressing patients refractory to standard prophylactic care. A separate problem in migraine treatment is medication overuse headache (MOH). Thus, a lecture on the clinical picture and prevention, on the different ways of management and specifically on the treatment of withdrawal headache is included in this symposium. Finally, rare syndromes such as uncommon migraine auras, complications of migraine such as migraineous infarction and epilepsy associated with migraine, and the associated syndromes such as the periodic syndromes of childhood are presented with respect to both diagnosis and treatment. At the end of symposium, the participant will have better knowledge in the treatment of migraine patients who are not sufficiently relieved by a basic guideline adherent treatment and on MOH and on rare migraine syndromes.

This symposium is supported by an educational grant from Eli Lilly.

14:45 – 16:15  
Room Svalbard

**Special Session 3:**  
**MDS-ES: European Basal Ganglia Club**

**Chairperson:**  
Evžen Růžička (Prague, Czech Republic)

- C. David Marsden Award Lecture:  
  Tremor  
  Günther Deuschl (Kiel, Germany)

- Video Cases  
  Junior participants

**Scientific Content:**  
Every year the European Basal Ganglia Club features a prominent speaker to present a C. David Marsden Award lecture. During the 5th congress of the European Academy of Neurology, it is an honour to have Prof. Günther Deuschl present a lecture on Tremor. In addition, selected video case studies will be featured. Presenters of the video case studies will have been chosen through an application and selection process in collaboration with the International Parkinson and Movement Disorder Society – European Section.

14:45 – 16:15  
Room Amsterdam

**Special Session 4:**  
**EAN/AFAN: Intractable Epilepsies**

**Chairpersons:**  
Jean-Michel Vallat (Limoges, France)  
Erich Schmutzhard (Innsbruck, Austria)

- Symptomatic etiologies of epilepsy in Mediterranean countries and Africa  
  Hassan Hosny (Cairo, Egypt)

- Autoimmune epilepsies  
  Sarosh Irani (London, United Kingdom)

- Selection of epileptic patients for surgery  
  Augustina Charway-Felli (Accra, Ghana)

- Personalised treatment of epileptic patients  
  Amadou Gallo Diop (Dakar, Senegal)

**Scientific Content:**  
Epilepsy affects 50 million persons worldwide. In spite of optimum anti-epileptic drug treatment, about one third of all epilepsy patients have medically intractable epilepsy. To be able to determine prognostic factors that, in an early therapeutic stage of epilepsy herald intractability could facilitate patient management. Several clinical, etiological, demographic, pharmacological, and genetic factors may be involved in the development of intractability. In cases of medically refractory, lesion-negative epilepsy, clinicians should have a high level of suspicion for the diagnosis of autoimmune aetiologies, the key role of neuro-inflammation in the pathophysiology of resistant epilepsy becoming very important. A better knowledge of those independent factors that predict intractability, as early as possible, could improve patient management by guiding treatment decisions, such as earlier referral for epilepsy surgery. Most of these very important points will be addressed. The speakers will discuss the causes of intractable epilepsy in non-occidental countries and point out the difficulties to diagnose and manage such epileptic patients.
EHF 2020
Head over Ache – Silver Lining Novel Treatments

14th European Headache Federation Congress
3–5 July 2020  |  Berlin  |  Germany

www.ehf2020.com
WELCOME TO
ECTRIMS
11–13 SEPTEMBER
2019
STOCKHOLM, SWEDEN
35TH Congress of the European Committee for Treatment and Research in Multiple Sclerosis and 24TH Annual Conference of Rehabilitation in MS
Teaching Course 1:
Mitochondrial diseases for beginners – Level 1

Chairperson:
Michelangelo Mancuso (Pisa, Italy)

• Mitochondrial diseases of the brain
  Thomas Klopstock (Munich, Germany)

• Mitochondrial diseases beyond the brain
  Grainne Gorman (Newcastle, United Kingdom)

• Diagnostic approach: which are the red flags?
  Michelangelo Mancuso (Pisa, Italy)

• Management: What to do and not to do
  Laurence Bindoff (Bergen, Norway)

Educational Content:
The primary role of the mitochondrion is to produce cell’s energy in the form of ATP through a process called oxidative phosphorylation. A variety of clinical disorders are linked to mutations in both mitochondrial and nuclear genomes, leading to defective oxidative phosphorylation and ATP depletion, and clinically impairing multiple tissues and organs. This class of diseases still represents a challenge for physicians, both in the diagnosis and treatment approaches.

This course is tailored for trainee clinicians and clinical scientists with an interest in mitochondrial diseases. It will provide an update on recent developments in diagnostics and clinical presentation of mitochondrial diseases, with an emphasis on clinical cases, management, diagnostic approaches and therapy.

Teaching Course 2:
Treatment of adult and paediatric primary sleep disorders – Level 2

Chairperson:
Rolf Fronczek (Leiden, The Netherlands)

• Management of CNS hypersomnia disorders
  Rolf Fronczek (Leiden, The Netherlands)

• Treatment of sleep-related movement and breathing disorders
  Ulf Kallweit (Witten, Germany)

• Parasomnia’s – video session & treatment
  Stine Knudsen (Oslo, Norway)

• Paediatric sleep disorders – diagnosis and treatment
  Fabio Pizza (Bologna, Italy)

Educational Content:
More than 90% of sleep disorders are either primary neurological disorders or secondary to other neurological disorders. Hence, sleep medicine and the treatment of sleep disorders is a vital part of neurology training. This teaching course will expand upon the 2018 level 1 course. Basic knowledge regarding sleep mechanisms and the primary sleep disorders is thus presumed.

Dr. Fronczek will cover the treatment of hypersomnia according to the recently updated EAN guideline.

Dr. Kallweit will cover two topics: RLS - one of the most common neurological disorders and a “24-h” disorder. SBD - a frequent co-morbidity in neurological disorders.

Dr. Knudsen’s session will cover REM-sleep behaviour disorder, pavor nocturnus, sleep walking and their differential diagnosis.

To conclude, Dr. Pizza will cover both the diagnosis and treatment of primary sleep disorders in children (such as narcolepsy, idiopathic hypersomnia, Kleine-Levin Syndrome, REM and sleep-related movement disorders.

Teaching Course 3:
EAN/PNS: Novel approach in the treatment of neuropathy – Level 3

Chairperson:
Eduardo Nobile-Orazio (Milan, Italy)

• Inherited neuropathies: Emerging genetic therapies
  Mary Reilly (London, United Kingdom)

• Genetic therapy in amyloid neuropathy: The future has started
  Davide Pareyson (Milan, Italy)

• Novel therapies in immune-mediated neuropathies
  Eduardo Nobile-Orazio (Milan, Italy)

• Novel advances in the treatment of pain in neuropathies
  Claudia Sommer (Würzburg, Germany)

Educational Content:
Several new advances have been recently made in the treatment of peripheral neuropathies. Most of these treatments are effective but all of them are very expensive. It is important for specialists to have an overview of the benefit and limits of currently used treatment and what are the effective benefits of newly developed therapies and in which conditions these new therapies have led to a major advance in the treatment of neuropathies.
**Teaching Course 4:**
Emergencies in neurology: dealing effectively with syncope and transient loss of consciousness (TLOC) – Level 1

**Chairperson:**
J. Gert van Dijk (Leiden, The Netherlands)

- Why 'TLOC' and not just epilepsy as we are used to?
  J. Gert van Dijk (Leiden, The Netherlands)

- When neurologists and cardiologists must meet
  Artur Fedorowski (Malmö, Sweden)

- Orthostatic hypotension and falls
  Alessandra Fanciulli (Innsbruck, Austria)

- Psychogenic Transient Loss of Consciousness (TLOC) with a focus on syncope mimics.
  Roland Thijs (Leiden, The Netherlands)

**Educational Content:**
Syncope accounts for up to 3% of emergency room (ER) visits and is often the cause of misdiagnosis. This course will cover:

1. The 2018 multidisciplinary guidelines on syncope of the European Society of Cardiology (ESC), endorsed by EFAS and EAN, providing a differential diagnostic framework suitable for all specialties, centred round 'Transient Loss of Consciousness' (TLOC); decision trees for TLOC and syncope in the ER; and using a syncope unit as the logical outpatient corollary of ER care.

2. No specialty considers vasovagal syncope as one of its subjects, although it affects one third of all people. This blind spot results in inefficient care by neurologists as well as cardiologists, also contributing to misdiagnosis of epilepsy.

---

**Hands-on Course 7:**
Transcranial magnetic stimulation – Level 1 - repetition of HoC 03

**Chairperson:**
Letizia Leocani (Milan, Italy)

- Transcranial magnetic stimulation
  Letizia Leocani (Milan, Italy)

**Educational Content:**
Teaching how to perform transcranial magnetic stimulation studies. Technical aspects of basic recordings and their interpretation according to the clinical context. Indications and applications

Limited to 40 persons. Please register separately – additional fees will apply.

---

**Hands-on Course 8:**
Vestibular evoked myogenic potentials – Level 1 - repetition of HoC 04

**Chairperson:**
Eleftherios S. Papathanasiou (Nicosia, Cyprus)

- Vestibular evoked myogenic potentials
  Eleftherios S. Papathanasiou (Nicosia, Cyprus)

**Educational Content:**
Teaching how to perform vestibular evoked myogenic potentials. Technical aspects of basic recordings and their interpretation according to the clinical context.

Limited to 40 persons. Please register separately – additional fees will apply.

This course is supported by NATUS Medical Inc.

---

**Special Session 5:**
The lesson from Rare Neurological Diseases for understanding nervous system functions and dysfunctions

**Chairpersons:**
Antonio Federico (Siena, Italy)
Holm Grassner (Tübingen, Germany)
Nicole Wolf (Amsterdam, The Netherlands)

**Scientific Content:**
The workshop will consider rare neurologic diseases as a model to discuss how an identified molecular or biochemical alteration will reflect on the dysfunction of the nerve system and in consequence identify a specific role in normal CNS function. The interaction between clinical neurologists, geneticists and neuro-pediatricians will also give the opportunity to discuss about the clinical and genetic heterogeneity, the higher vulnerability of several CNS area to dysmetabolic changes, the possibility of symptoms in carriers, and the new findings suggested by the used of new genetic technologies, enlarging the phenotypic presentation.
Interactive Session 9: BrainChallenge

Moderators:
Angelo Antonini (Padua, Italy)
Marie Vidalhêt (Paris, France)

• Local Team
• International Team

The aim of this session is to promote a meaningful and interactive learning experience based on clinical study cases designed for both senior and junior neurologists from all over the world. The cases will not only show how prompt and accurate diagnosis can be achieved despite the complexity of neurology, but will also draw attention to rarely recognised conditions.

A team of local neurologists is competing with a team of international neurologists - each team consists of 4 senior and 2 junior neurologists.

Download the app “EAN Congress” and be part of EAN’s quiz show.

Hands-on Course 9: Threshold tracking and nerve excitability testing – Level 3

Chairperson:
Mihai Moldovan (Copenhagen, Denmark)

Educational Content:
Demonstration how to perform studies of nerve excitability testing, including refractory period and threshold tracking. Clinical applications.

Limited to 40 persons. Please register separately – additional fees will apply.

Hands-on Course 10: Nerve and muscle echography – Level 2

Chairperson:
Simon Podnar (Ljubljana, Slovenia)

Educational Content:
Teaching how to perform nerve and muscle echography and use the results together with those of clinical neurophysiological evaluation in the assessment of neurological, mostly neuromuscular, disorders.

Limited to 40 persons. Please register separately – additional fees will apply.
Oral Session

14:45 – 16:00
Room Jan Mayen 2

Aging and dementia 1

Chairpersons:
Tormod Flandby (Oslo, Norway)
Irena Rektorová (Brno, Czech Republic)

14:45 | O1101
Italian inter-societal consensus for the biomarker-based etiological diagnosis in MCI
M. Boccardi1, V. Nicolosi1, C. Festari1, A. Bianchetti2, S. Campa3, D. Chiasserini4, A. Falini1, U. Guerra1, F. Nobili1, A. Padovan1, G. M. Sancesario1, S. D. Morbelli1, L. Parnetti2, P. Tiraboschi2, C. Muscio1, D. Perani1, F. B. Pizzini1, A. Beltramello1, G. Salvini Porro1

M. Ciaccio1, O. Schillaci2, M. Trabucchi2, F. Tagliaferri2, G. B. Frisoni4
1Brescia, 2Perugia, 3Milan, 4Genoa, 5Rome, 6Verona, 7Palermo, Italy

14:50 | O1102
The pathophysiological and clinical significance of soluable TREM2 in Mild Cognitive Impairment and Mild Alzheimer’s Disease
A. Chandra, O. Cousins, M. Politis
London, United Kingdom

15:00 | O1103
Serum neurofilament light levels in normal aging: associations with morphologic brain changes
M. Khalil1, L. Pirpamer1, E. Hofer1, M. Voortman1, C. Barro1, S. Ropele1, C. Enzinger1, F. Fazekas1, R. Schmidt1, J. Kuhle1
1Graz, Austria, 2Basel, Switzerland

15:15 | O1104
Effect of antipsychotic drugs on mortality risk among dementia patients with and without comorbidity: A nationwide study
A. Nørgaard1, C. Jensen-Dahm1, T. Wimberley2, J. H. Svendsen2, K. Ishtiak-Ahmed1, T. Munk-Laursen1, G. Waldemar1, C. Gasse2
1Copenhagen, 2Aarhus, Denmark

15:30 | O1105
Association of EEG topographical markers with FDG–PET brain glucose metabolism and CSF neurogranin in MCI and AD patients
U. Smailovic1, T. Koenig1, K. Höglund1, I. Savitcheva1, B. Winblad1, V. Jelic1
1Stockholm, Sweden, 2Bern, Switzerland, 3Gothenburg, Sweden
Cerebrovascular diseases 1

Chairpersons:
Charlotte Cordonnier (Lille, France)
Simona Sacco (L'Aquila, Italy)

14:45 | O1106
Cryptogenic stroke is linked to cardioembolic aetiology: A histopathological study of thrombus retrieved after endovascular thrombectomy
S. Bhaskar1, J. Saab1, C. Cappelen-Smith1, D. Cordato1, A. Cheung1, N. Manning2, J. Wenderoth2, P. Thomas1, P. Aouad1, R. Beran1, S. Hodgkinson1, A. McDougall1, M. Killingsworth1
1Sydney, 2Liverpool, Australia

15:00 | O1107
Cerebrolysin ameliorates BBB leakage and microvascular inflammation induced by tPA and fibrin
M. Chopp, C. Li, H. Teng, L. Zhang, Z. Zhang
Detroit, USA

15:15 | O1108
Idarucizumab in cerebral ischemia or intracranial hemorrhage under dabigatran therapy in Germany – A Nationwide Case Collection
P. Kermer1, C. Eschenfelder2, H.-C. Diener3, M. Grond4
1Sanderbusch, 2Ingelheim, 3Essen, 4Siegen, Germany

15:30 | O1109
Access to mechanical thrombectomy for cerebral ischaemia: a population-based study in the North of France
D. Lega1, N. Dequatre-Ponchelle1, M. Ferrigno1, H. Hénon1, F. Mounier-Vehier1, S. Moulin1, B. Casolla1, R. Tortugaux2, M. Chocq1, I. Girard-Buttaz1, J.-P. Pruvot1, P. Goldstein1, C. Cordonnier4
1Lille, 2Lens, 3Valenciennes, France

15:45 | O1110
Hunting for the underlying causes and links: Atrial Fibrillation in Cryptogenic Stroke and TIA - The Nordic Atrial Fibrillation and Stroke Study (NOR-FIB)
1Kalnes, 2Olsø, 3Bergen, Norway, 4Copenhagen, 5Bispebjerg, Denmark, 6Skien, 7Bærum, Norway, 8Herlev, Denmark, 9Bodo, 10Drummen, 11Molde, 12Stavanger, 13Lillehammer, 14Tromsø, Norway, 15Malmo, Sweden

14:45 – 16:15
Room Lisbon

Neuroimmunology; Neurotraumatology

Chairpersons:
Erich Schmutzhard (Innsbruck, Austria)
Aksel Siva (Istanbul, Turkey)

14:45 | O1111
Immunological insights into the mechanisms by which RTX is effective in Neuromyelitis Optica spectrum disorders
Y. Damato1, D. Whittam1, S. Huda1, M. Woodhall1, P. Waters1, A. Jacob1, S. R. Irani2
1Oxford, 2Liverpool, United Kingdom

15:00 | O1112
Single cell immune profiling of lymphocytes from autoimmune encephalitis-associated teratomas reveals novel clonally expanded cell populations
A. Handel, A. Al-Diwani, M. Makuch, H. Slawinski, T. Hassanali, D. Fowler, G. Holland, S. Irani
Oxford, United Kingdom

15:15 | O1113
Susac syndrome is a CD8+ T-cell-mediated endotheliopathy
C. C. Gross1, C. Meyer1, U. Bhatia2, L. Yshi2, I. Kefler2, J. Bauer3, S. Meuth1, G. Martin-Blondel2, H. Wiendl1, R. Liblau2
1Münster, Germany, 2Toulouse, France, 3Vienna, Austria

15:30 | O1115
Neurologic syndromes associated with GADA65 antibodies. Clinical and serological response to immunotherapy
A. Muñoz Lopetegi1, M. de Bruijn2, S. Boukhriess3, A. Bastiaansen4, M. Nagtzaam2, E. Hulskenboom2, P. A. Sillevis Smitt1, M. Schreurs2, M. J. Titulaer9
1San Sebastian, Spain, 2Rotterdam, The Netherlands
Autoantibody production following traumatic brain injury is associated with poor outcome, and is therapeutically modifiable

E. Needham, A. Coles, D. K. Menon
Cambridge, United Kingdom

Clinical and prognostic meaning of Myelin Oligodendrocyte Glycoprotein antibodies (MOG-Abs): a multicentre Italian study

E. Rigoni1, M. Gastaldi, P. Banfi2, L. Benedetti3, G. Novi4, G. Mallucci2, A. Sturchio4, S. Scaranzin5, E. Zardini1, M. Mancardi3, T. Giacomini4, P. Annovazzi1, S. Savasta1, T. Foiadelli1, M. Bianco5, E. Marchioni1, D. Franciotta1

1Pavia, 2Varese, 3Genoa, 4Galarate (VA), 5Milan, Italy

Reduced brain volume loss in relapsing multiple sclerosis with Ozanimod versus Interferon beta-1a in two phase 3 trials (SUNBEAM and RADIANCE)

D. L. Arnold1, J. A. Cohen2, B. A. C. Cree3, D. Silva4, J. K. Sheffield4, V. Huang4, G. Comi5

1Montréal, Quebec, Canada, 2Cleveland, OH, 3San Francisco, CA, 4Summit, NJ, USA, 5Milan, Italy

Alemtuzumab improves clinical and MRI outcomes, including slowing of brain volume loss, in RRMS patients over 8 years: CARE-MS I Follow-up (TOPAZ Study)


1Milan, Italy, 2Montréal, Canada, 3Moscow, Russian Federation, 4Düsseldorf, Germany, 5Prague, Czech Republic, 6Dubai, United Arab Emirates, 7Brisbane, Australia, 8Cleveland, OH, 9Milan, Italy, 10Los Angeles, USA, 11Rome, Italy, 12Olsztyn, Poland, 13Pittsburgh, USA, 14Cambridge, USA, 15Hasselt, Belgium

In-vivo mapping of thalamic pathological mechanisms in pediatric patients with MS

E. de Meo1, L. Storelli1, L. Moiola1, M. P. Amato2, A. Ghezzi, P. Veggiotti3, R. Capra4, M. A. Roccia5, M. Filippi2

1Milan, 2Florence, Gallarate, 3Gallarate (VA), 4Brescia, Italy

Cancer risk in multiple sclerosis patients, siblings, and healthy controls: a prospective, longitudinal cohort study

N. Grutter1, K. M. Myhr2, E. G. Celius1, E. Benjaminisen1, M. T. Kampman1, R. Midgard3, A. Vatne4, J. H. Aarseth5, T. Riise6, O. F. G. Torkildsen1

1Bergen, 2Bodø, Tromsø, Molde, 3Kristiansand, Norway
16:45 – 18:00
Room Svalbard

**Movement disorders 1**

**Chairpersons:**
Tove Henriksen (Copenhagen, Denmark)
Eavan McGovern (Paris, France)

16:45 | O1208
Longitudinal evaluation of mutant huntingtin and neurofilament light as biomarkers for Huntington’s disease: the HD-CSF study
F. Brogueira Rodrigues1, L. Byrne1, E. Johnsson1, R. Tortelli1, P. Wijeratne1, D. C. Alexander1, C. Czech1, S. Schobel1, R. Scallhill1, A. Helegrave1, H. Zetterberg1, E. Wild1
1 London, United Kingdom, 2 Basel, Switzerland

17:00 | O1209
Tracking cortical changes throughout cognitive decline in Parkinson’s disease: a longitudinal MRI study
E. Camu1, F. Agosta1, T. Stojkovic1, S. Basaia1, I. Stanković2, V. Marković2, I. Petrović2, E. Stefanova2, V. S. Kostić2, M. Filippi1
1 Milan, Italy, 2 Belgrade, Serbia

17:15 | O1210
Nigral iron load as diagnostic parameter in Parkinson’s disease
Graz, Austria

17:30 | O1211
Rare variation in biological pathways and their impact on development and progression of Parkinson’s disease
J. J. Gaare1, G. S. Nido1, P. Sztromwasser1, P. M. Knappsog1, O. Dahl1, M. Lund-Johansen1, J. Maple-Groden2, G. W. Alves2, O.-B. Tynes1, S. Johansson1, K. Haugarvoll1, C. Tzoulis1
1 Bergen, Stavanger, Norway

17:45 | O1212
Multiple System Atrophy: phenotypic spectrum approach coupled with brain FDG PET
S. Grimaldi1, M. Boucekine1, M. Renaud2, P. J.-P. Azulay1, E. Guedj1, P. A. Eusebio1
1 Marseilles, Nancy, France

16:45 – 18:15
Room CbW

**Muscle and neuromuscular junction disease**

**Chairpersons:**
Benedikt Schoser (Munich, Germany)
Antonio Toscano (Messina, Italy)

16:45 | O1213
Assessing frequency and features of muscle pain in mitochondrial diseases: a survey from a cohort of the Italian network
S. Cotti Piccinelli1, T. Mongini2, S. Servidei3, O. Musumeci4, P. Tonin5, F. M. Santorelli6, C. Simonicini7, G. A. Primiano1, L. Vercelli2, A. Rubegni1, A. Galcagni8, M. G. Moggio9, C. Lamperti9, G. P. Comi10, V. Carelli11, A. Toscano1, A. Padovani1, G. Siciliano1, M. Mancuso12, M. Filosto1
1 Brescia, 2 Turin, 3 Rome, 4 Messina, 5 Verona, 6 Pisa, 7 Brescia, 8 Milan, Italy

17:00 | O1214
Variable effects of enzyme replacement therapy in adults with Pompe disease: a 10-year prospective study
L. Harlaar1, J.-Y. Hogrel2, B. Perniconi2, M. Kruijshaar1, D. Rizopoulos1, N. Taouag2, A. Canal2, E. Brusse1, P. A. van Doorn1, P. A. van der Ploeg1, P. Laforêt3, N. van der Beek1
1 Rotterdam, The Netherlands, 2 Paris, France, 3 Garches, France

17:15 | O1215
Zilucoplan, a subcutaneously self-administered peptide inhibitor of complement component 5 (C5), for the treatment of generalized myasthenia gravis: results of a Phase 2 randomized, double-blind, placebo-controlled trial
1 Chapel Hill, New Haven, CT, Buffalo, NY, Miami, FL, Cambridge, MA, Washington, DC, Cambridge, USA

17:30 | O1216
First-in-human study of ATB200/AT2221 in patients with Pompe disease: preliminary functional assessment results from the ATB200-02 trial
B. Schoser1, P. Kishnani2, D. Bratkovic1, B. J. Byrne1, P. R. Clemens3, O. Goker-Alpan1, X. Ming1, M. Robert3, P. Schwenkreis9, K. Siwakumar10, A. T. van der Ploeg11, V. Jain12, J. Wright13, S. Sitaraman14, J. A. Barth13, H. Lagast13, T. Mozaффar14
1 Munich, Germany, 2 Durham, USA, 3 Adelaide, Australia, 4 Gainesville, USA, 5 Pittsburgh, USA, 6 Fairfax, USA, 7 Newark, USA, 8 Salford, United Kingdom, 9 Bochum, Germany, 10 Phoenix, USA, 11 Rotterdam, The Netherlands, 12 Cranbury, USA, 13 Irvine, USA

18:00 | O1218
Intravenous iMmunoglobulins as Early treatment in newly DiAgosed idiopathic inflammaT ory myopathiEs (IMMEDIATE): a phase-2 open-label pilot study
J. Lim1, F. Eftimova2, C. Verhamme3, E. Brusse5, J. Hoogendijk5, C. Saris6, R. de Haan1, I. N. van Schaik1, E. Aronica1, M. de Visser1, A. van der Kooi1
1 Amsterdam, Rotterdam, Utrecht, Nijmegen, The Netherlands
Oral Session

16:45 – 18:15
Room Paris

Neuro-oncology

Chairpersons:
David Oliver (London, United Kingdom)
Anette Storstein (Bergen, Norway)

16:45 | O1219
Treatment of primary brain tumors with BRAF Inhibitors
Lisbon, Portugal

17:00 | O1220
Avelumab in newly diagnosed glioblastoma multiforme - the SEJ study
F. Jacques1, G. Nicholas2, I. Lorimer2, V. Sikati Foko1, J. Prevost1
1Gatineau, 2Ottawa, Canada

17:15 | O1221
Can we spare patients with PCNSL a bone marrow biopsy?
M. Margold1, A. Korfel2, A. Baraniskin1, R. Schroers1, T. Kowalski1, U. Schlegel1
1Bochum, 2Berlin, Germany

17:30 | O1222
Hope springs eternal: A longitudinal comparative analysis of neuro-oncological patients
S. Mayer1, M. Skardelly2, S. Fuchs3, H. Reichmann1, N. Schaeffeler2, S. Zipfel2, M. Teufel3
1Dresden, 2Tübingen, 3Essen, Germany

17:45 | O1223
HDMTX-based induction therapy followed by consolidation with conventional systemic chemotherapy and intraventricular therapy (modified Bonn protocol) in primary CNS lymphoma: A monocentric retrospective analysis
S. Seidel1, A. Korfel2, T. Kowalski1, M. Y. Margold1, F. S. Ismail1, R. Schroers1, A. Baraniskin1, H. Pels1, P. Martus1, U. Schlegel1
1Bochum, 2Berlin, 3Regensburg, 4Tübingen, Germany

18:00 | O1224
Cognitive functioning as predictor of survival in diffuse glioma patients
Utrecht, The Netherlands
17:00 – 18:15
Room Helsinki

Cerebrovascular diseases 2

Chairpersons:
Didier Leys (Lille, France)
Nicola Logallo (Bergen, Norway)

17:00 | O1225
Ischemic stroke despite oral anticoagulant therapy in patients with AF: recurrence risk and optimal anticoagulation strategy
D. Seiffge¹, G. M. de Marchis², M. Koga³, M. Paciaronti¹, D. Wilson⁴, M. Cappellari⁴, K. Macha⁵, G. Tsivgoulis⁶, G. Ambler⁴, S. Arihiro⁸, L. Bonatti⁴, B. Bonetti⁴, B. Kallmuenzer⁷, K. Muir⁸, P. Bovi⁶, H. Gensicke², S. Schwab⁷, S. Yagi⁹, P. Lyrra³, M. Takagi⁹, H. R. Jager⁶, A. Polymeris⁶, K. Toyoda⁹, S. Engelter⁶, D. Werring⁸

¹Berne, ²Basel, Switzerland, ³Osaka, Japan, ⁴Perugia, Italy, ⁵London, United Kingdom, ⁶Verona, Italy, ⁷Erlangen, Germany, ⁸Athens, Greece, ⁹Suita, Japan, ¹⁰Glasgow, United Kingdom, ¹¹Providence, USA

17:15 | O1226
Effect of chronic administration of GA-BAA α5 antagonist on motor recovery in a permanent middle cerebral artery occlusion rat model
M. Pace¹, M. Falappa¹, D. M. Hermann⁸, C. Bassetti¹³
¹Genoa, Italy, ¹²Essen, Germany, ¹³Berne, Switzerland

17:30 | O1227
Tenecteplase compared to alteplase beyond 3 hours after ischemic stroke
O. M. Rønning¹, N. Logallo², B. Thommessen¹, H. Tobro³, V. Novotny², C. Kuistad², A. H. Aamodt⁴, H. Næss², U. Waje-Andreassen², L. Thomassen²
¹Lørenskog, ²Bergen, ³Skien, ⁴Oslo, Norway

17:45 | O1228
Depression and anxiety in acute thalamic stroke patients prospectively examined over one year
A. C. Scharf⁶, J. Gronewold¹, A. Eilers⁶, O. Todica⁹, T. Døepner⁵, C. Moenninghoff⁵, C. Kleinschnitz⁴, D. M. Hermann³
¹Essen, ²Goettingen, Germany

18:00 | O1229
Risk factors for symptomatic hemorrhagic transformation after recanalization therapy following acute cerebral infarction in a prospective cohort
L. Venditti, N. Legris, C. Anelet, C. Denier, O. Chassin
Paris, France
Come Join Us

IMPORTANT DATES
July 18, 2019: Early Registration Deadline
August 22, 2019: Final Pre-Registration Deadline

International Congress of Parkinson’s Disease and Movement Disorders®
NICE, FRANCE SEPTEMBER 22-26, 2019
www.mdscongress.org
17:00 – 18:15
Room Berlin

Neurogenetics 1

Chairpersons:
Vincenzo Bonifati
(Rotterdam, The Netherlands)
Enza-Maria Valente (Udine, Italy)

17:00 | O1230
A phase 1/2 open-label extension study of Givosiran, an investigational RNAi therapeutic, in patients with acute intermittent porphyria
M. Bissell1, K. E. Anderson2, D. H. L. Bokkovsky3, E. Sardh4, P. Harper5, M. Balwani6, D. Rees6, P. Stein6, J. R. Bloomer6, C. Parker6, J. Phillips6, D. Vassiliou4, C. Penz7, A. Chan7, G. Liu7, W. Querbes7, A. Simon7
1San Francisco, 2Galveston, 3Winston-Salem, USA, 4Stockholm, Sweden, 5New York, USA, 6London, United Kingdom, 7Birmingham, 8Salt Lake City, 8Cambridge, USA

17:00 | O1231
BICD2 Arg747Cys point mutation causes autosomal dominant SMA: clinical phenotype of a British family
M. Boix Codonu, V. Bharambe, M. Bonello, C. F. Dougall, J. Holt
Liverpool, United Kingdom

17:00 | O1232
Parkinsonism in mitochondrial diseases: expanding the genetic basis of an emerging clinical phenotype of mitochondrial dysfunction
C. La Morgia1, M. L. Valentino1, V. Donadio1, P. Liguori1, C. Casali2, O. Musumeci3, A. Toscano1, M. Zeviani4, E. Pegoraro4, G. Rizzo1, P. Martinelli5, P. Avoni6, M. P. Giannoccaro6, P. Parchi6, F. Tagliavini6, L. Caporali6, V. Carelli6
1Bologna, 2Rome, 3Messina, Italy, 4Cambridge, United Kingdom, 6Padua, Italy

17:00 | O1233
Compound heterozygous and homozygous mutations reducing VPS13C protein expression are associated with Lewy body disease and Parkinson’s disease
S. Smolders1, S. Philtjens1, D. Crosier2, S. van Mossevelde3, B. Heeman4, A. Sieben5, P. Pals6, S. Engelborghs7, P. P. de Deyn8, P. Cras9, C. van Broeckhoven9, B. Consortium
1Antwerp, 2Edegem, 3Ghent, Belgium

17:00 | O1234
Brain white matter MRI differentiates Kennedy’s disease from other motor neuron disease clinical phenotypes
E. G. Spinelli1, F. Agosta1, P. M. Ferraro1, G. Querin1, N. Riva1, C. Bertolin1, I. Martinelli1, C. Lunetta1, A. Fontana1, G. Soraru1, M. Filippi1
1Milan, 2Padua, 3San Giovanni Rotondo, Italy
FOR OUR PATIENTS, FLEXING MUSCLES IS CRITICAL.

LET’S STRETCH OURS TOGETHER.

Driving Excellence in Neurology.
Be part of one of humankind’s most ambitious projects to help uncover the workings of the nervous system. EAN connects 45,000 specialists in neurology in 47 countries across Europe. Promoting excellence, cutting-edge science and innovative therapies for a better life for more than 430 million patients in Europe alone. Read more on ean.org

Great Minds.
Sunday
30 June 2019
Case-based Workshop 3: Clinical differential diagnosis of ALS

Chairperson: Vincenzo Silani (Milan, Italy)

• Differential diagnosis of bulbar palsy
  Vincenzo Silani (Milan, Italy)

• Multifocal motor neuropathies
  Eduardo Nobile-Orazio (Milan, Italy)

• Distal myopathies and ALS
  Benedikt Schoser (Munich, Germany)

Educational Content:
The diagnosis and differential diagnosis of ALS is clinically not difficult, but often important since it is of major relevance for the individual prognosis. Therefore, for the diagnosis of bulbar palsy speech and swallowing disorders must be distinguished, including space-occupying lesions of the esophagus, myasthenia gravis, sarcoidosis, and polymyositis. With regard to multifocal motor neuropathy (MMN), it is important to know that this disease is rare, but potentially treatable. Important differential diagnoses include flail arm syndrome, lesions of the brachial plexus, and cervical radiculopathies. Many cases of MMN seem to have a similar prognosis as ALS. This dilemma should be discussed.
The spectrum of distal myopathies is a fast-developing field. These diseases may look like leg-onset ALS (or neuropathies), but can be clinically distinguished, MRI and muscle biopsy are of help. These diseases have a completely different prognosis and must be approached therapeutically in a different manner.
In conclusion, this case-based workshop emphasizes the importance of a thorough clinical differential diagnosis of ALS, including its subtypes and variants.

Limited to 60 participants. Please register separately – additional fees will apply.

Focused Workshop 8: The maze of ataxias: need for an Ariadne’s thread

Chairperson: Alessandro Filla (Naples, Italy)

• Dominant ataxias
  Thomas Klockgether (Bonn, Germany)

• Recessive ataxias
  Mario Manto (Brussels, Belgium)

• Sporadic ataxias
  Alessandro Filla (Napoli, Italy)

Scientific Content:
The ataxia field is growing. The next generation techniques allowed the discovery of new genes, widened the phenotypes, and made easier the laboratory tests. New therapeutic approaches in some forms seem to be on hand.

Focused Workshop 9: Integration of telemedicine and mobile applications into stroke care networks

Chairperson: Bo Norrving (Lund, Sweden)

• Insights from using smartphones in stroke prevention
  Bo Norrving (Lund, Sweden)

• The PRE-hospital Stroke Treatment Organization
  Heinrich Audebert (Berlin, Germany)

• Mobile applications related to stroke: a systematic review
  Lucas Rodríguez Prunotto (Madrid, Spain)

Scientific Content:
Motivating and empowering people to reduce their risk of having a stroke/CVD by using increasingly used smartphone technologies would bridge the gap in the population-wide and high-risk prevention strategies and reduce stroke/CVD burden worldwide. The integration of modern mobile applications into pre-hospital management of acute stroke and rehabilitation of stroke survivors would further improve stroke care.
Focused Workshop 10: Disturbances of consciousness and sleep-wake functions: The lesson from brain damaged patients

Chairpersons:
- Ulf Kallweit (Witten, Germany)
- Steven Laureys (Liege, Belgium)

- Disturbances of consciousness and sleep-wake functions following thalamic lesions
  Claudio Bassetti (Bern, Switzerland)

- Disturbances of consciousness and sleep-wake functions following hemispheric lesions
  Steven Laureys (Liege, Belgium)

- Disturbances of consciousness and sleep-wake functions in patients following brainstem lesions
  Poul Jennum (Copenhagen, Denmark)

Scientific Content:
Clinical observations in brain damage patients offer unique insights into the brain mechanisms regulating consciousness and the sleep-wake cycle.

Focused Workshop 11: Glia and epilepsy: pathophysiology, inflammation and new therapeutic possibilities

Chairpersons:
- Annamaria Vezzani (Milan, Italy)
- Erik Taubøll (Oslo, Norway)

- The roles of glia cells in epilepsy
  Kjell Heuser (Oslo, Norway)

- The role of astrocyte-mediated inflammatory processes in epileptogenesis
  Eleonora Aronica
  (Amsterdam, The Netherlands)

- Managing epilepsy by modulating glia?
  Peter Bedner (Bonn, Germany)

Scientific Content:
Until recently, epilepsy research has largely focused on the most prominently affected cell types – the neurons. The passive role of glial cells described in the past is now overlaid with discoveries of crucial glial functions for normal CNS functioning which have changed focus to a more holistic neuroglial viewpoint. Disruption of glia-mediated function and uncontrolled glial-mediated immunity with activated astrocytes and microglia has now been found to be crucial in the pathogenesis of not only epilepsy, but most neurological diseases. The new understanding of the role and importance of glial cells in health and disease opens up for completely new therapeutic strategies for a multitude of neurological diseases, including epilepsy, in the future. New glial targets for potential drug treatment are now being studied.

Focused Workshop 12: Autologous haematopoietic stem cell transplantation in multiple sclerosis – results and future directions

Chairperson:
- Øivind Torkildsen (Bergen, Norway)

- A meta-analysis of autologous haematopoietic stem cell transplantation in MS
  Giovanni Luigi Mancardi (Genova, Italy)

- HSCT-treatment for multiple sclerosis: Results from the MIST-trial
  Joachim Burman (Uppsala, Sweden)

- RAM-MS: A randomised controlled trial comparing alemtuzumab to HSCT
  Øivind Torkildsen (Bergen, Norway)

Scientific Content:
Autologous haematopoietic stem cell transplantation (HSCT) seem to have a higher treatment effect than standard RRMS immunomodulatory treatment. The premise of autologous haematopoietic stem cell transplantation (HSCT) in MS is that the self-reactive immune response is eradicated by the conditioning regime, and that the immune system is “reset” after reinforcement of autologous haematopoietic stem cells, producing an immune system that is less self-reactive. There has been a tremendous patient interest in this treatment option, but until now, long-term studies and randomised controlled trials have not been available. The topic will cover long time effects of the treatment, comparison to standard MS-treatment, results from randomised controlled trials and future directions.
08:00 – 09:30
Room Amsterdam

Focused Workshop 13: The role of neuroinflammation in metabolic encephalopathy

Chairperson: Raimund Helbok (Innsbruck, Austria)

• Hypoxic encephalopathy
  Ronny Beer (Innsbruck, Austria)

• Septic encephalopathy
  Simone Tauber (Aachen, Germany)

• Metabolic encephalopathy with specific focus on hepatic encephalopathy
  Vicente Felipo (Valencia, Spain)

Scientific Content:
Metabolic encephalopathy describes a clinical state of global cerebral dysfunction that can vary in clinical presentation from mild executive dysfunction to deep coma with decerebrate posturing. Neuroinflammation plays a critical role in pathophysiologic mechanisms leading to prolonged deterioration of consciousness. Targeting neuroinflammation may serve as novel treatment to improve patient care.

08:00 – 09:30
Room HoC

Hands-on Course 11: EAN/MDS-ES: Clinical neurophysiology for assessment of patients with movement disorders – Level 2

Chairperson: Marina de Koning-Tijssen (Groningen, The Netherlands)

• Jerky movements
  Marina de Koning-Tijssen (Groningen, The Netherlands)

• Tremorous movements
  Petra Schwingenschuh (Graz, Austria)

• Polymyography for dystonia
  Hans Koelman (Amsterdam, The Netherlands)

Educational Content:
This hands-on course will discuss and illustrate the use of EMG and other electrophysiological tools in the assessment of hyperkinetic movement disorders.

Limited to 60 persons. Please register separately – additional fees will apply.

08:00 – 09:30
Room Lisbon

Interactive Session 2: Diagnostic dilemmas in neuromuscular disease

Chairperson: Jochen Schäfer (Dresden, Germany)

• Progressive tetraparesis and anaemia in a young man
  Jochen Schäfer (Dresden, Germany)

• Distal myopathy with vocal cord and pharyngeal weakness in a middle-aged woman
  Giovanni Meola (Milan, Italy)

• Limb girdle weakness and fatiguability in a young man
  Anna Kostera-Pruszczyk (Warsaw, Poland)

Educational Content:
In this Interactive Session, differential diagnostic problems in neuromuscular medicine will be discussed with the audience using four cases to illustrate the diagnostic pathway and potential pitfalls in reaching a diagnosis. The cases will cover major fields of neuromuscular medicine: neuromuscular junction disorders, polyneuropathies, muscular dystrophies, metabolic myopathies, inflammatory myopathies. After presentation of the cases the audience will be invited to offer diagnostic options by means of a smartphone voting app; furthermore, questions will be asked and discussed regarding investigations and management of the patient. Particular emphasis will be laid upon demonstrating ways how to approach a neuromuscular patient with seemingly puzzling physical findings and how to consider and evaluate the neuromuscular differential diagnoses.

Please download the app “EAN Congress” to actively participate and vote.
Special Session 6: New neurological guidelines

Chairpersons:
Maurizio Leone
(S. Giovanni Rotondo, Italy)
Marie Vidailhet (Paris, France)

- General medical management issues in dementia
  Kristian Steen Frederiksen
  (Copenhagen, Denmark)

- Sleep & Stroke
  Claudio Bassetti (Bern, Switzerland)

- Trigeminal neuralgia
  Lars Bendtsen (Glostrup, Denmark)

- Medication Overuse in Headache
  Hans-Christoph Diener (Essen, Germany)

This session will introduce the latest guideline papers developed by EAN.
ON OUR SHORES, THE OBVIOUS NEEDS DEEPER EXPLORATION.

LET’S DIVE FOR IT. TOGETHER.

Driving Excellence in Neurology.

Be part of one of humankind’s most ambitious projects to help uncover the workings of the nervous system. EAN connects 45,000 specialists in neurology in 47 countries across Europe. Promoting excellence, cutting-edge science and innovative therapies for a better life for more than 430 million patients in Europe alone. Read more on ean.org

Great Minds.
10:00 – 12:00
Main Auditorium

Plenary Symposium 2:
Presidential Symposium

Chairpersons:
Günther Deuschl (Kiel, Germany) EAN Past President
Anne Hege Aamodt (Oslo, Norway)
President of the Norwegian Society of Neurology

• The Brain Prize Lecture: The prodromal, cellular phase of Alzheimer’s disease: towards a novel understanding of the disorder
Bart De Strooper (Leuven, Belgium)

• Charles Edouard Brown-Séquard Lecture: Do we need to reinvent translational cerebrovascular research?
Ulrich Dirnagl (Berlin, Germany)

• Moritz Romberg Lecture: Translational neuroscience to improve outcomes for motor neuron disease. Are we winning?
Pamela Shaw (Sheffield, United Kingdom)

Prof. Bart De Strooper
Bart De Strooper is scientific director of the UK-Dementia Research Institute, United Kingdom, and Professor of molecular medicine at KU Leuven and VIB, Belgium and Professor in dementia research at the University College London. He received his M.D. in 1985 and Ph.D. in 1991 from KU Leuven and worked as postdoc in the laboratory of Carlos Dotti at EMBL in Heidelberg.

His scientific work focuses on the understanding of the fundamental mechanisms that underlie Alzheimer’s and Parkinson’s disease. His major findings are the role of ADAM10 and presenilin/gamma-secretase in the proteolysis of the amyloid precursor protein and Notch, and he has worked on microRNA, mitochondria, and more recently on the role of the different brain cell types in the pathogenesis of AD.

In 2018, Bart De Strooper, together with John Hardy, Christian Haas and Michel Goedert, were awarded The Brain Prize for their groundbreaking research on the genetic and molecular basis of Alzheimer’s disease.

Prof. Ulrich Dirnagl
At the Charité Universitätsmedizin Berlin Ulrich Dirnagl is Professor for Clinical Neurosciences and serves as Director of the Department of Experimental Neurology. Since 2017 he is also the founding director of the QUEST Center for Transforming Biomedical Research at the Berlin Institute of Health. QUEST aims at overcoming the roadblocks in translational medicine by increasing the value and impact of biomedical research through maximizing the quality, reproducibility, generalizability, and validity of research. In preclinical as well as in clinical studies Ulrich Dirnagl’s research has revealed pathobiology which impact on the outcome after a stroke. These include deleterious as well as endogenous protective mechanisms, as interactions of the brain with other systems of the body after it has been injured. Several of these mechanism can be therapeutically targeted, clinical trials are under way. In addition, through meta-research he was able to identify opportunities for improving research practice and to obtain evidence for the impact of interventions targeted to increase the value of biomedical research.

Prof. Dame Pamela Shaw
DBE MBBS MD FRCP FMED SCI FAAN FANA FAAAS
Professor Dame Pamela Shaw, Professor of Neurology and Vice President and Pro-Vice Chancellor for the Faculty of Medicine, Dentistry and Health at the University of Sheffield and Founding Director of the Sheffield Institute for Translational Neuroscience (SITraN), one of the world-leading centres for motor neuron disease (MND) research. She is also Director of the Sheffield NIHR Biomedical Research Centre for Translational Neuroscience. The work of her team is focused on investigating molecular mechanisms of motor neuron injury and new therapeutic approaches in MND, both for neuroprotection and improved symptom management. Key recent achievements include: identification of new genetic subtypes of MND; improvements in symptomatic management of MND including non-invasive ventilation and the HeadUp collar; identification and implementation of new therapeutic targets for MND including evaluation of novel drug and gene therapy approaches and the development of innovative preclinical model systems for screening of therapeutic agents.
15th EuGMS
International Congress of the European Geriatric Medicine Society
EVIDENCE BASED MEDICINE IN GERIATRICS
SEPTEMBER 25/27, 2019
KRAKÓW, POLAND

www.eugms.org/2019
#eugms2019
@EuGMSsociety
Career Development Session 1: Basic statistics for neurologists

Chairperson: Ettore Beghi (Milan, Italy)

- Strengths & limitations of statistical analyses
  Derrick Bennett (Oxford, United Kingdom)

- Statistics in observational studies
  Josemir Sander (London, United Kingdom)

- Statistics in randomised clinical trials
  Ettore Beghi (Milan, Italy)

Educational Content:
Both residents and board-certified neurologists have limited knowledge on the choice and significance of the statistical tests applied in medical research. This is an obstacle to the interpretation of the findings of published reports and even when planning a study. Although the presence of a statistician is required to prepare the statistical plan of a scientific protocol, the problems to be solved by the statistician should be clarified by a clinician that speaks the same language. The limits of the statistical analyses will be outlined (sample size, characteristics of the data, frequency and variability of the independent and the dependent variables, etc.).

Case-based Workshop 4: EAN/EAPC: Taboos in care – issues that are difficult to discuss

Chairperson: David Oliver (Canterbury, United Kingdom)

- Interventions may become a burden to patients
  Christina Faull (Leicester, United Kingdom)

- Requests for assisted dying
  Stefan Lorenzl (Salzburg, Austria)

- Discussing difficult subjects – how do we cope?
  David Oliver (Canterbury, United Kingdom)

Educational Content:
This session will allow discussion and consideration of difficult issues when caring for someone with neurological disease, particularly when they are deteriorating and needing palliative care. There will be opportunities to consider the most effective and helpful ways of communication with patients, families and other professionals within the team. The session will allow these taboos to be discussed more openly and potential ways of helping/supporting to be developed.

Limited to 60 participants. Please register separately – additional fees will apply.

Interactive Session 3: The dying, still deadly breed of neuroinfections

Chairperson: Bettina Pfausler (Innsbruck, Austria)

- Lassa Virus, Rabies, Dipteria
  Erich Schmutzhard (Innsbruck, Austria)

- Tetanus, Botulism
  Bettina Pfausler (Innsbruck, Austria)

- Polio & Measles
  Banu Anlar (Ankara, Turkey)

Educational Content:
Several pathogens cause only rarely CNS infections in the Western hemisphere. Neurologists should be familiar with the presentation, diagnostic tools and therapy in this condition, and the course aims at thorough description of these conditions.

Please download the app “EAN Congress” to actively participate and vote.
15:00 – 16:30
Room Jan Mayen 1

**Topical Symposium:**
**Novel approaches in progressive supranuclear palsy**

**Chairperson:**
Angelo Antonini (Padua, Italy)

- **Clinical diagnosis and phenotype**
  Maria Stamelou (Athens, Greece)

- **Cognitive and imaging biomarkers**
  Angelo Antonini (Padua, Italy)

- **Current and future treatments**
  Guenter Hoeglinger (Munich, Germany)

- **Case presentations**
  Klaus Seppi (Innsbruck, Austria)

This symposium was supported by educational funding from Biogen.

15:00 – 16:30
Room Nord Norge

**Special Session 7:**
**Clinical Grand Rounds**

**Chairpersons:**
Espen Dietrichs (Oslo, Norway)

- **Movement disorders**
  Espen Dietrichs (Oslo, Norway)
  Lasse Pihlstrøm (Oslo, Norway)

- **Ataxia**
  Siri Rydning (Oslo, Norway)
  Rebecca Schüle (Tübingen, Germany)

- **Neuromuscular disorders**
  Trine Popperud (Oslo, Norway)
  Bjarne Udd (Tampere, Finland)

**Scientific Content:**
Patients will be examined during the session. The clinician will first inform on the patient’s history, focus on neurological examination, work-up a plan to confirm the diagnosis and aetiology.

15:00 – 18:15
Room Paris

**Teaching Course 5:**
**Refractory status epilepticus (RSE): What to do and how dangerous is it to the brain? – Level 2**

**Chairperson:**
Hannah Cock (London, United Kingdom)

- **Which AED to choose when first line SE treatment fails?**
  Hannah Cock (London, United Kingdom)

- **What to do when refractory SE does not stop? Third-line therapy.**
  Andrea Rossetti (Lausanne, Switzerland)

- **Is convulsive or non-convulsive SE a risk factor for cognitive dysfunction?**
  Kjersti Nesheim Power (Bergen, Norway)

- **What is the role for EEG in RSE?**
  Sandor Beniczky (Copenhagen, Denmark)

**Educational Content:**
Status epilepticus (SE) that does not terminate with a first or a second line antiepileptic drug (AED) is considered as refractory SE (RSE). RSE is frequently seen in the emergency room in all neurological departments and must be treated immediately. Still, correct AED treatment of RSE has been discussed for many years but no consensus has been reached. The ongoing ESETT study may shed some light on this and will be discussed in the first talk. What to choose as third line treatment is even less evidence based, and many options are available. Therapeutic coma is one of several options often discussed in patients with both convulsive and non-convulsive RSE not responding to antiepileptic drugs, but what is the evidence? And what is the possibility for permanent cognitive decline after RSE? Can we predict the outcome in RSE patients better? What is the role for EEG in RSE, both in the acute phase, but also in the follow-up of patients with different forms of RSE? These clinically important, day to day issues will be discussed during the course.
Teaching Course 6:  
EAN/MDS-ES: Movement disorders for general neurologists – Level 1

Chairperson:  
Evžen Růžička (Prague, Czech Republic)

- Diagnosis and early management of Parkinson’s disease  
  Daniela Berg (Kiel, Germany)
- Diagnosis and therapy of essential tremor  
  Evžen Růžička (Prague, Czech Republic)
- Diagnosis and therapy of common dystonias  
  Marie Vidailhet (Paris, France)
- Diagnosis and therapy of restless legs syndrome  
  Claudio Bassetti (Berne, Switzerland)

Educational Content:  
The aim of this course is to refresh the knowledge of neurologists about the four most common movement disorders encountered in general practice and familiarize them with the relevant news. Each lecture will be accompanied by numerous patient videos and demonstrations of common phenotypes. Current diagnostic and therapeutic criteria and recommendations will be shown in a way that will be beneficial to general practice. If advanced therapy methods are routinely available in specialised centres, listeners will be introduced to their effects and approaches for patient selection will be presented. In each lecture, diagnostic and therapeutic procedures will be illustrated using practical examples and questions for listeners.
Teaching Course 9: Antibodies: From autoimmune encephalitis to paraneoplastic myelopathies – Level 2

Chairperson: Romana Höftberger (Vienna, Austria)

- What the neurologist needs to know in choosing the right assay for autoantibody testing
  Romana Höftberger (Vienna, Austria)

- Paraneoplastic and autoimmune myelopathies
  Isabel Leite (Oxford, United Kingdom)

- Autoimmune encephalitis
  Maarten Titulaer (Rotterdam, The Netherlands)

- Antibody-mediated neuropathies
  Luis Querol (Barcelona, Spain)

Educational Content:
In this TC, the speakers will prove practical relevant knowledge on autoantibody testing in neurological disorders. They will discuss the clinical phenotypes, suggested treatments and discuss the newest developments in this rapidly advancing field of neurology. They will provide tricks to recognize these diseases and share pitfalls to avoid misdiagnosis. In addition, the attendant will learn how these diseases can be relevant to other disciplines within clinical neurology and basic neurosciences.

Controversy 1: Controversies in neuro-infections

Chairperson: Israel Steiner (Petach Tikva, Israel)

- PRO: ICP monitoring should be routinely done in comatose patients
  Raimund Helbok (Innsbruck, Austria)

- CON: ICP monitoring should not be routinely done in comatose patients
  Johann Sellner (Salzburg, Austria)

- PRO: There is chronic Lyme disease
  Karl Bechter (Guenzburg, Germany)

- CON: There is no chronic Lyme disease
  Rick Dersch (Freiburg, Germany)

Educational Content:
These topics cover two important issues that are undecided and draw heated debates: the effective and mandatory employment of intensive care for patients with reduced consciousness due to neuroinfections and the existence (or lack of it) of chronic lyme disease.

Interactive Session 4: Autonomic dysfunction in common neurological conditions

Chairperson: Max J. Hilz (Erlangen, Germany)

- ANS dysfunction in neuroimmunological diseases
  Mario Habeck (Zagreb, Croatia)

- ANS dysfunction in neurodegenerative disorders
  Alessandra Fanciulli (Innsbruck, Austria)

- ANS and emergencies in neurology
  Max J. Hilz (Erlangen, Germany)

Educational Content:
Disorders of the autonomic nervous system (ANS) are often perceived as typical of rare diseases and, by contrast, rare in common neurological diseases. This may result in limited knowledge on the clinical presentation, differential diagnostic role and prognostic implications of ANS disturbances among general neurologists. As a matter of fact, ANS dysfunction does frequently occur in common neurological conditions and emergency situations, like multiple sclerosis, movement disorders, dementias and stroke. Knowledge on how to suspect an ANS involvement, interpret autonomic findings and prevent the potentially life-threatening consequences associated with untreated ANS dysfunction is therefore essential not only for ANS specialists, but also for a broader neurological audience.

Please download the app “EAN Congress” to actively participate and vote.
Special Session 8: Resident and Research Fellow Section
Round Table Discussion

Chairpersons:
Office of the EAN RRFS

1. Controversy: How to plan your residency in neurology?
   a. Completely in one country
      Jan Kuks (Groningen, The Netherlands)
   b. Enclose an experience abroad
      Diana Aguiar (Lisbon, Portugal)

2. Controversy: Being a clinical scientist ...
   a. Positive chance to combine research and patient care
      Lars Timmermann (Marburg, Germany)
   b. By no means at all (as this means no proper research and no full patient care)
      Michael Khalil (Graz, Austria)

Scientific Content:
The main aims of this sessions are to obtain experts’ advices about the design of the neurology training including or not including a time abroad and to learn about research opportunities: combination of research and clinical work in contrast to primary focus on either research or patient care. Where to do your residency in neurology? Completely in one country or enclose an experience abroad? How to maintain work-life balance while still being a clinical scientist? The RRFS special session will be a controversial discussion of two experienced physicians including pro and contra arguments based on their individual experience next to facts. The discussion will be kept open with the possibility to question arguments on an individual level. Hereby an individual guidance next to a broader exchange about two topics being of primary interest for residents and researcher shall be possible. Firstly the design of the residency with the enclosure of an experience abroad or not shall be discussed. This will be followed by a discussion about how to maintain work-life balance while still being a clinical scientist. We aim to give interested residents and researchers an overview of different ways to design their residency as well as the best way to combine clinical work and research in general but also on an individual basis.
Hands-on Course 12: Motor Unit Number Index and phrenic nerve conduction studies – Level 3

Chairperson: Markus Weber (St. Gallen, Switzerland)

- Introduction: MUNIX – a progression marker of motor neuron loss
  Markus Weber (St. Gallen, Switzerland)

- Introduction: Phrenic nerve conduction studies
  Mamede de Carvalho (Lisbon, Portugal)

- Device 1 – MUNIX – UL muscles
  Markus Weber (St. Gallen, Switzerland)

- Device 2 – MUNIX – Biceps
  Christoph Neuwirth
  (St. Gallen, Switzerland)

- Device 3 – MUNIX – LL muscles
  Sanjeev Nandedkar
  (Hopewell Junction, United States)

- Device 4 – phrenic nerve conduction
  Mamede de Carvalho (Lisbon, Portugal)

Educational Content:
Objective markers of disease progression in ALS clinical trials are urgently needed. Quantification of motor unit loss by means of MUNIX has the great advantage that this measure directly reflects the underlying pathology. Likewise, phrenic nerve conduction studies will not only objectively reveal diaphragmatic function but also prognostic information.

Both methods have gained a lot of scientific interest over the past few years and are at the forefront of ALS research.

This course will focus on practical issues. Participants will understand the applicability and limitations of these methods. After a brief introduction to both methods (lecture 15 minutes each) participants will apply the methods on each other. MUNIX will be performed on APB, ADM, FDI, Biceps, TA, EDB. After the course attendees will be able to make high quality MUNIX recordings and CMAP recordings of the diaphragm.

Limited to 60 persons. Please register separately – additional fees will apply.

This course is supported by NATUS Medical Inc.
ECNR European Congress of NeuroRehabilitation 2019
Budapest

9–12 October 2019
Budapest

Impairment, disability, handicap:
So little done, so much to do

Abstract submission deadline:
1 May 2019

www.ecnr-congress.org
Oral Session

14:45 – 15:45
Room Budapest

**Miscellaneous 1**

Chairpersons:
Jeanette Koht (Drammen, Norway)
Nils Peters (Basel, Switzerland)

14:45 | O2101
The NorMig study: Migraine prophylactics in the Norwegian population – duration of use and effect on triptan prescription
M. H. Bjørk1, A. Nome Dueland2, F. Sorgaard2, Y. Mikkelsen
1Bergen, 2Oslo, Norway

14:45 | O2102
Presented as ePoster

15:00 | O2103
Differences in the residency programme of neurology throughout Europe – A survey of the EAN-RRFS national representatives
N. Kleineberg1, M. van Der Meulen1, C. Franke1, L. Klingelhofer1, A. Sauerbier1, G. Di Liberto, V. Carvalho1, G. Deuschl1
1Cologne, Germany, 2Rotterdam, The Netherlands

15:15 | O2104
Fampridine and acetazolamide for the treatment of episodic ataxia type 2 (EAT2TREAT): a randomised, double-blind, placebo-controlled, three-period crossover trial
M. L. Strupp, U. Mansmann, C. Muth
Munich, Germany

15:30 | O2105
Syringomyelia secondary to pseudo-Chiari in spontaneous craniospinal hypotension: report of a new entity
G. Vilanilam1, L. Okromelidze, N. Gopa1, M. Bad1, E. Middlebrooks1, P. H. Luetmer1, V. Gupta1
1Jacksonville, 2Rochester, USA

14:45 – 16:00
Room Helsinki

**Neurommunology; Infectious diseases**

Chairpersons:
Anke Salmen (Bochum, Germany)
Maarten Titulaer (Rotterdam, The Netherlands)

14:45 | O2106
Anti-LGI1, anti-NMDAR and anti-GABABR encephalitis resembling dementia syndromes
A. E. Bastiaansen1, M. Nuhn1, A. van Sonderen1, M. Coevorden, M. H. van Hameete1, M. de Bruijn1, M. Schreurs1, P. A. Sillevi1, J. de Vries1, M. J. Titulaer1
1Rotterdam, 2The Hague, The Netherlands

15:00 | O2107
Adoptive transfer of JC virus-specific T-lymphocytes for the treatment of Progressive Multifocal Leuкоencephalopathy
Pavia, Italy

15:15 | O2108
Differences between sexes in the response to corticosteroids in adults with community-acquired bacterial meningitis
S. Dias, M. C. Brouwer, D. van de Beek
Amsterdam, The Netherlands

15:30 | O2109
Clinico-serological features in autoimmune encephalitis: an Italian multicenter retrospective study
M. Gastaldi1, S. Casagrande1, L. Benedetti1, S. Bova1, M. Di Filippo1, A. Ecol1, S. Ferrari1, T. Foiadelli1, T. Giacomini1, R. Iorio1, M. Mancardi1, S. Mariotto1, L. Massacesi1, S. Ricci1, S. Sartori1, S. Savasta1, M. Valeriani1, M. Zoccarato1, L. Zuliani1, L. Zuliani, D. Franciotta1
1Pavia, 2Florence, 3Genoa, 4Milan, 5Perugia, 6Rome, 7Verona, 8Varese, 9Padua, 10Città di Castello, 11Vicenza, Italy

14:45 – 16:00
Room Helsinki

15:45 | O2110
Epidemiology and Mortality of Group B Streptococcal Meningitis in The Netherlands (1987-2016)
M. van Kassel1, G. de Boer1, D. Jamrozy2, M. Bijlsma1, M. C. Brouwer1, A. van der Ende1, D. van de Beek1
1Amsterdam, The Netherlands, 2Hinxton, United Kingdom
15:00 – 16:30
Room Berlin

Cerebrovascular diseases 3

Chairpersons:
Raimund Helbok (Innsbruck, Austria)
Martin Kurz (Stavanger, Norway)

15:00 | O2111
The safety of intravenous thrombolysis for acute ischemic stroke in patients with unruptured intracranial aneurysms – a case series
Lisbon, Portugal

15:15 | O2112
Transesophageal echocardiography as dysphagia risk in acute stroke

15:30 | O2113
Is it possible to detect large-vessel occlusions in acute ischemic stroke using screening scales?
E. S. Kristoffersen, A. Reichenbach, K. Faiz, M. Altmann, A. Sundseth, B. Thommessen, O. M. Romming
Lørenskog, Norway

15:45 | O2114
Ischemic strokes in adolescents
T. Rambaud\(^1\), L. Nicolas\(^1\), C. Bellesme\(^1\), B. Lapergue\(^1\), E. Jouvent\(^1\), M. Zuber\(^1\), S. Crozier\(^2\), C. Lamy\(^2\), Y. Béjot\(^2\), M. Kossorotoff\(^3\), C. Denier\(^3\)
\(^{1}\)Paris, \(^{2}\)Kremlin, \(^{3}\)Paris, \(^{4}\)Suresnes, \(^{5}\)Dijon, France

16:00 | O2115
Acute ischemic stroke due to large vessel occlusion: predicting functional outcome with tissue viability score combining ASPECTS and collateral vessel status
M. Vabanesi, G. Schwarz, A. Giordano, G. Sferruzza, G. Giacalone, F. Simionato, M. Filippi, L. Roveri
Milan, Italy

16:15 | O2116
Carotid plaque neovascularization can be detected with Superb Microvascular Imaging Ultrasound without the use of contrast
M. Zamani, K. Ryeng Skagen, H. Scott, D. Russell, M. E. Skjelland
Oslo, Norway

---

European Human Genetics Conference 2020
City Cube | Berlin - Germany | June 6-9

https://2020.eshg.org
#eshg2020
Oral Session

15:00 – 16:30
Room Nord Norge

Tournament basic

Chairpersons:
P. A. Boon (Ghent, Belgium)
G. Bråthen (Trondheim, Norway)
G. Stoll (Würzburg, Germany)

15:00 | O2117
Inherited peripheral neuropathies: whole genome sequencing identifies a new treatable disorder

15:15 | O2118
Mapping in vivo cortical myelination in patients with Charcot-Marie-Tooth type 1A
Naples, Italy

15:30 | O2119
Impact of direct T-cell-neuron inter-action on single neuron and global network activity
E. Ellwardt, D. Luchtman, F. Zipp, S. Bittner
Mainz, Germany

15:45 | O2120
Glia-neuron interactions underlie state transitions to generalized seizures
S. Myren-Svelstad, C. Diaz Verdugo, C. Denebourg, A. Muto, K. Kawakami, N. Jurisch-Yaksi, E. Yaksi
Trondheim, Norway, Leuven, Belgium, Shizuoka, Japan

16:00 | O2121
Mass cytometry-based analysis of the composition of the immune system in narcolepsy type 1
Leiden, The Netherlands, Hagen, Germany, Berne, Switzerland, Witten, Germany

16:15 | O2122
Evaluation of Imidazoline 2 binding sites reflecting astroglia pathology in Parkinson’s Disease: An in vivo [11C]BU99008 PET study
London, United Kingdom
16:45 – 18:15
Room Berlin

**Cerebrovascular diseases 4**

Chairpersons:
Hugh Markus (London, United Kingdom)
Else Charlotte Sandset (Oslo, Norway)

16:45 | O2201
Meta-analysis of haematoma volume, haematoma expansion and mortality in intracerebral haemorrhage associated with oral anticoagulant use

M. Goeldlin1, D. J. Seiffge2, T. Tatlisumak3, P. Lyrer2, U. Fischer1, S. Engelter2, D. Werring4

1 Berne, Switzerland, 2 Basel, Switzerland, 3 Gothenburg, Sweden, 4 London, United Kingdom

17:00 | O2202
Differences in stroke mimics in young and old patients and their outcome in NOR-TEST Study

T. T. Idicula1, J. Crespi Vidal1, I. Winnberg1, V. Novotny2, N. Logallo2, L. Thomassen2

1 Trondheim, 2 Bergen, Norway

17:15 | O2203
Increase in physical activity as a moderator of stroke risk among physically inactive older adults: evidence from a nationwide cohort study

K. Kim, S. Choi, J.-K. Lee, S. M. Park

Seoul, Republic of Korea

17:30 | O2204
Factors influencing employment and quality of life 12 months after a minor stroke

A. H. Morsund1, H. Nass2

1 Molde, 2 Bergen, Norway

18:00 | O2206
Sex related rupture rate of unruptured intracranial aneurysms: an individual patient data meta-analysis

C. Zuurberg1, L. Mensing1, M. Wermser1, S. Juvela2, C. Lindgren3, J. Jääskeläinen3, T. Koivistoa, A. Morita1, H. Arai2, K. Nozaka2, Y. Murayama1, T. Ishibashii, H. Takao2, G. Rinkel1, Y. Ruigrok1, J. Greving1

1 Utrecht, 2 Leiden, The Netherlands, 3 Helsinki, 4 Kuopio, Finland, 5 Tokyo, 6 Shiga, Japan

17:15 | O2209
Onset symptoms and time to diagnosis in Friedreich’s Ataxia

E. Indelicato1, W. Nachbauer1, A. Eigentler1, M. Amprosi1, P. Giunti1, C. Mariotti1, J. Arpa1, A. Durr1, T. Klopstock2, L. Schöls2, T. Klockgether2, K. Bürk2, M. Pandolfo2, J. B. Schulze1, S. M. Boesch1

1 Innsbruck, Austria, 2 London, United Kingdom, 3 Milan, Italy, 4 Madrid, Spain, 5 Paris, France, 6 Munich, Germany, 7 Bern, 8 Marburg, Germany, 9 Brussels, Belgium, 10 Aachen, Germany

17:30 | O2210
Molecular mechanisms of mitochondrial disease: pathological and genetic studies in Mendelian disorders of mtDNA maintenance

D. Lehmann1, H. S. Rosa2, M. C. Rocha2, S. Zier1, R. W. Taylor1, D. M. Turnbull2, A. E. Vincent2

1 Ulm, Germany, 2 Newcastle-upon-Tyne, United Kingdom, 3 Halle, Germany

18:00 | O2212
Subclinical diffuse leukoencephalopathy: proposal for a new entity

E. Salsano, D. Di Bella, S. Magri, L. Farrina, C. Benzoni, S. Fenu, E. Mauro, C. Gellera, D. Pareyson, F. Taroni

Milan, Italy
**Peripheral nerve disorders**

**Chairpersons:**
Jonathan Cole (Poole, United Kingdom)
Hadi Manji (London, United Kingdom)

**16:45 | O2213**
Facilitated subcutaneous immunoglobulin in multifocal motor neuropathy – a randomized, single-blinded, non-inferiority cross-over trial
A. Al-Zuhairy¹, J. Jakobsen¹, H. Andersen², S. H. Sindrup³, L. H. Markvardsen³
¹Copenhagen, ²Aarhus N, ³Odense, Denmark

**17:00 | O2214**
Testing the effects of SHP2 inhibition on in vitro and in vivo models of neuromuscular junction disorders
M. Cao, R. Webster, J. Cossins, S. Huda, P. Rodriguez Cruz, W. Liu, D. Beeson, A. Vincent
Oxford, United Kingdom

**17:15 | O2215**
Data on pregnancy in Charcot-Marie-Tooth Disease from questionnaires linked to the Italian CMT National Registry
D. Pareyson¹, C. Pisciotta¹, D. Calabrese¹, L. Santoro², F. Manganelli³, G. M. Fabrizi³, P. Liguori², G. Plazzi²
¹Milan, ²Naples, ³Verona, Italy

**17:30 | O2216**
Novel diagnostic approach and algorithm for small fiber neuropathy
N. Saffer¹, L. Kress¹, K. Eggermann¹, B. Nummer¹, T. Malzacher¹, A. Klitsch¹, D. Kampik³, R. Malik³, I. Kurth³, C. Sommer³, N. Ucuculer¹
¹Würzburg, ²Aachen, ³Erlangen, Germany, ¹Doha, Qatar

**17:45 | O2217**
Second IVIg Course in Guillain-Barré syndrome patients with poor prognosis (SID-GBS): a double-blind randomized controlled trial
C. Walgaard¹, B. Jacobs², H. F. Lingsma², E. Steyerberg², D. R. Corinblath³, P. van Doorn³
¹Rotterdam, ²The Netherlands, ³Baltimore, USA

**18:00 | O2218**
Efficacy and safety of PXT3003 in patients with Charcot-Marie-Tooth type 1A (CMT1A): Results of PLEX-CMT an International Pivotal Phase 3 trial.
For the PLEX CMT Investigators
P. Young¹, S. Attarian², B. Youcef³, P. Rinaudo², S. Fitoussi², V. Bertrand³, R. Haji³, S. Nahbrotchkin³, D. Cohen³
¹Münster, ²Marseilles, ³Issy les Moulineaux, France

**Sleep disorders**

**Chairpersons:**
Poul Jennum (Copenhagen, Denmark)
Stine Knudsen (Oslo, Norway)

**17:00 – 18:30**
Room Budapest

**17:00 | O2219**
Skin biopsy searching for phosphorylated α-synuclein deposits distinguishes idiopathic REM sleep behavior disorder from the secondary form due to Narcolepsy
E. Antelmi, Y. Sosero, F. Pizza, V. Donadio, P. Liguori, G. Plazzi
Bologna, Italy

**17:15 | O2220**
Motor, non-motor and Quality of Life outcome in patients with Parkinson’s disease and REM sleep behavior disorder following subthalamic deep brain stimulation
P. Bargiotas¹, I. Debove¹, I. Bargiotas², L. Lachenmayer³, M. Natofoul³, M. Schuepbach³, P. Krack³, C. Bassetti³
¹Berne, ²Paris, France

**17:30 | O2221**
Increased frequency of antibodies against neuronal surface antigens in childhood narcolepsy with cataplexy with complex movement disorders
M. P. Giannoccaro¹, F. Pizarra, L. Jacobson¹, R. Liguori², G. Plazzi², A. Vincent²
¹Oxford, ²Bologna, Italy

**17:45 | O2222**
Sleep-wake disturbances after ischemic stroke/transient ischemic attack: frequency and evolution
S. Duss¹, C. Gorban-Peric¹, C. Bernasconi¹, D. Kuen¹, A. Seiler¹, M. Oberholzer¹, F. Alexiev¹, J. Lippert¹, A.-K. Brill¹, M. Manconi², M. Schmid¹, T. Horvath¹, C. Bassetti²
¹Berne, ²Lugano, Switzerland

**18:00 | O2223**
Evaluation of micro-sleep stability in patients with neurodegeneration using an automated algorithm
M.-L. Muntean¹, M. Cesari¹, F. Sixel-Döring¹, B. Mollenhauer¹, J. A. Christensen¹, H. B. Sorensen¹, P. J. Jenni¹, C. Trenkwalder¹
¹Kassel, ²Kgs. Lyngby, ³Glostrup - Copenhagen, Denmark

**18:15 | O2224**
Multimodal MRI reveals alterations of sensorimotor circuits in restless legs syndrome
A. Stefani¹, T. Mitterling¹, A. Heidbreder¹, R. Steiger¹, C. Kremsner¹, B. Frauscher¹, E. Gizewski¹, W. Pouce¹, B. Högl¹, C. Scherfler¹
¹Insbruck, ²Linz, Austria, ³Münster, Germany, ⁴Montreal, Canada
On behalf of the European Federation of Autonomic Societies we warmly welcome you to our scientific and educational activities. Join us!

Get updated:

Annual meetings
- 2019: May 9-10, Leiden, Netherlands
- 2020: May 23-26, Paris, France, joint congress with EAN

Education (EFAS School) – regular teaching events focused on diagnosis and management of autonomic disorders

For detailed information, visit the WWW.EFASWEB.COM
The 24th International Annual Congress of the World Muscle Society (WMS)

1st - 5th October 2019 · Copenhagen · Denmark

Invited speakers

Pascal Laforêt
Hôpital Raymond-Poincaré and INSERM U1179, France

Mette Cathrine Ørngreen
Copenhagen Neuromuscular Center, Denmark

Dirk Lefebver
Radboud University Medical Center, The Netherlands

Aldo Faisal
Imperial College, London, UK

Nathalie Doorenweerd
Leiden University Medical Center, The Netherlands and Newcastle University, UK

Markus Schulke
Charité Campus Virchow Klinikum, Berlin, Germany

Kareem Wahbi
CHU Paris Centre, Hôpital Cochin, France

Bradley Olwin
University of Colorado Boulder, United States of America

Jordi Diaz Manera
Hospital de la Santa Creu i Sant Pau de Barcelona, Spain

Tina Dysgaard Jeppesen
Copenhagen Neuromuscular Center, Denmark

Johan den Dunnen
University of Leiden, The Netherlands

Federico Minozzi
Genethon and INSERM U951

MAIN TOPICS

+ Metabolic disturbances in neuromuscular diseases
+ Extra-muscular manifestations in neuromuscular diseases
+ Advances in the treatment of neuromuscular disorders

For further information please visit: www.wms2019.com

We look forward to seeing you in Copenhagen!

@WorldMuscleSoc
#WMS2019

www.wms2019.com
Monday
1 July 2019
Case-based Workshop 5: Coping with refractory headache disorders of children and adolescents

Chairperson: Aynur Özge (Mersin, Turkey)

- Childhood chronic migraine (CM)
  Aynur Özge (Mersin, Turkey)

- Childhood CM with epilepsy
  Füsun Erdoğan (Kayseri, Turkey)

- Childhood periodic syndrome
  Prab Prabhakar (London, United Kingdom)

Educational Content:
All of the cases will be presented with
- A short story of headache
- A short story of developmental process
- A short story of comorbidities and family history
- A short video (if possible) with English subtitle
- Summary of updated diagnostic criteria
- Summary of management guidelines
- Key messages
- Q and A

All of the presenters are members of International Headache Society Paediatric Headache Special Interest Group. There are also editors and authors of the Book “Headache in Children and Adolescents: A Case-Based Approach, Editors: Abu-Arafeh, Ishaq, Özge, Aynur (Eds.)” This book also has been awarded as “Highly Recommended” by BMA in 2017.

Limited to 60 participants. Please register separately – additional fees will apply.

Focused Workshop 14: Preclinical Alzheimer’s disease

Chairperson: Bruno Dubois (Paris, France)

- Natural history of Preclinical AD
  Bruno Dubois (Paris, France)

- Biomarkers of preclinical AD
  Femke Bouwman (Amsterdam, The Netherlands)

- Defining the risk, the brain health clinics
  Giovanni Frisoni (Geneva, Switzerland)

Scientific Content:
During the past decade, a conceptual shift occurred in the field of Alzheimer’s disease (AD) considering the disease as a continuum. Thanks to evolving biomarker research and substantial discoveries, it is now possible to identify the disease even at the preclinical stage before the occurrence of the first clinical symptoms. This preclinical stage of AD has become a major research focus as the field postulates that early intervention may offer the best chance of therapeutic success. A clarification is needed about the definitions and lexicon, the limits, the natural history, the markers of progression, the future developments in the field of biomarkers and the ethical consequence of detecting the disease at this asymptomatic stage. In this context, a new generation of healthcare facilities, the brain health services, can be envisioned. The main missions of brain health services will be to transfer the latest evidence on risk profiling to practice; to accurately estimate an individual’s risk of developing dementia before the onset of cognitive symptoms; and to put in place risk-specific prevention interventions. This Focused Workshop is aimed at addressing all the different issues about Preclinical AD by providing for each of them an updated review of the literature and evidence, with practical recommendations.

Focused Workshop 15: EAN/MDS-ES: Management of cognitive aspects in Parkinson’s disease and parkinsonisms

Chairperson: Roberta Biundo (Venice, Italy)

- Clinical profile of cognitive decline in patients with Parkinson’s disease, progressive supranuclear palsy and multiple system atrophy
  Roberta Biundo (Venice, Italy)

- Biomarkers for cognitive impairment in Lewy body disorders: status and relevance for clinical trials
  Dag Aarsland (London, United Kingdom)

- State-of-the-art of pharmacological treatments and alternative interventions for cognitive symptoms in PD and parkinsonian patients
  Jaime Kulisevsky (Barcelona, Spain)

Scientific content:
Unlike the situation in Alzheimer’s disease, little is known about the pre-dementia, prodromal stages of Lewy Body dementia and the presence of dementia/cognitive impairments (CI) in parkinsonisms plus syndromes [such as Multiple System Atrophy (MSA) and Progressive Supranuclear Palsy (PSP)], whose misdiagnosis is mostly due to overlapping features shared with DLB and PD. This workshop aims to provide neuropsychological, neuropathological and imaging biomarkers for dementia and CI which have the potential to improve diagnosis and prognosis and guide clinical treatment decisions, leading to a better efficacy of pharmacological treatment, motor and cognitive rehabilitative therapy in Parkinson’s disease and atypical parkinsonisms. Clinicians should gain some knowledge helping them in their routine care and researchers should obtain some hints to guide research studies.
Focused Workshop 16: Diagnostic impact of perceptual, ocular motor, and body tilts

Chairperson:
Marianne Dieterich (Munich, Germany)

- Topographic diagnosis of nystagmus
  Dominik Straumann (Zurich, Switzerland)
- Subjective visual vertical and ocular skew – most sensitive signs of vestibular dysfunction
  Marianne Dieterich (Munich, Germany)
- Disturbance of body posture in pusher syndrome
  Dominic Perrenou (Grenoble, France)

Focused Workshop 17: EEG in the ICU

Chairperson:
Harald Aurlien (Bergen, Norway)

- EEG patterns in critically ill patients: towards standardised descriptions
  Harald Aurlien (Bergen, Norway)
- Challenges in status epilepticus
  Eugen Trinka (Salzburg, Austria)
- Challenges in cerebral anoxia
  Erik Westhall (Lund, Sweden)

Scientific Content:
The aim of the session will first be to get acquainted with typical EEG-patterns that are often present in critically ill patients (periodic, rhythmic patterns, etc.). The participants will learn how to recognise these patterns in the EEG-reports, which will be much easier if we use a standardised language! Then, in the second part of the session, the aim will be to learn how to interpret these patterns, to know which patterns are controversial and why, with a special focus on status epilepticus and cerebral anoxia. The most recent research in these areas will be presented, and advise given on the best ways to use continuous EEG to improve EEG-interpretations.

Focused Workshop 18: Management of stroke in young adults

Chairperson:
Frank-Erik de Leeuw (Nijmegen, The Netherlands)

- Recent insights in the etiology of young stroke.
  Jukka Putaala (Helsinki, Finland)
- Acute treatment and secondary prevention after stroke in a young adult.
  Frank-Erik de Leeuw (Nijmegen, The Netherlands)
- Life-long challenges after young stroke: prognosis and personalised counselling
  Bettina von Sarnowski (Greifswald, Germany)
- Recent development in the etiology and management of extra- and intracranial dissection
  Stephanie Debette (Bordeaux, France)

Scientific Content:
Worldwide more than 2 million young patients (18-49 years) suffer from an ischemic stroke and its incidence continues to increase; in other words, every tenth stroke patient of a practicing neurologist is “young”. Studies from the last few years created a paradigm shift by recognising that stroke among young adults is an acute disease during a vulnerable period in life with lifelong consequences on virtual every aspect of life. This workshop will start with epidemiology, by using it as a magnifying glass, to illustrate recently discovered causes of stroke that have been identified by taking a closer look at time trends, gender and age differences. We will specifically present emerging findings on extra- and intracranial dissection. Next, we will present recent advances of acute treatment and secondary prevention of stroke in young adults. We will discuss both vascular and psychosocial post-stroke sequelae that may serve a starting point for personalised counseling of the patient and their relatives.
08:00 – 09:30
Room Nord Norge

Focused Workshop 19: Promising and challenging aspects of neuro-regeneration and neuroplasticity in spinal cord injury

Chairperson:
Volker Dietz (Zurich, Switzerland)

• Basic mechanisms of axonal growth and regeneration
  Frank Bradke (Bonn, Germany)

• Experience with application of stem cell therapies in humans
  Armin Curt (Zurich, Switzerland)

• Promises and limits of neuroplasticity after stroke and spinal cord injury
  Volker Dietz (Zurich, Switzerland)

• Immunomodulation of spinal cord injury
  Martin Schwab (Zurich, Switzerland)

Scientific Content:
Actual neurorehabilitation approaches after a stroke or spinal cord injury are based on the exploitation of neuroplasticity. This can be achieved by an intensive training with the consequence of an improvement of function. Today novel rehabilitation technologies based on a neurophysiological basis (e.g. activation of load receptors) allow well-designed intensive trainings times with individually adapted support. Nevertheless, it is obvious that there are strong limits to improve function, especially of hand function, by these approaches. To achieve further progress in the improvement of function some regeneration of damaged tracts would be required. Several promising regeneration inducing therapies designed in rodent experiments are on the way in phase 1 and 2 trials to become applied in humans. In this focused workshop the present state of art and the outlook on promises and challenges of therapies presently exist in neurorehabilitation and neuro-regeneration will be discussed.

08:00 – 09:30
Room Amsterdam

Focused Workshop 20: Biomarkers in headache disorders

Chairperson:
Cristina Tassorelli (Pavia, Italy)

• Genetic biomarkers
  Bendik Winsvold (Oslo, Norway)

• Neuroimaging
  Till Sprenger (Wiesbaden, Germany)

• Molecular biomarkers
  Cristina Tassorelli (Pavia, Italy)

Scientific Content:
Biomarkers can be helpful for both diagnosis and treatment of disorders. In the field of primary headache disorders, no reliable biomarkers have been detected to date. However, there is a lot of research in the genetic field which might be able to identify specific migraine types by genetic analyses. Also, in neuroimaging, specific types of headache patients have been detected which might help to classify and stratify the best treatment. Neuropeptides are among the oldest biomarkers in migraine but are still not used to classify headache patients. However, recent advances in GCRP metabolism might help to find specific biomarkers for treatment response in migraine and cluster headache.

08:00 – 09:30
Room HoC

Hands-on Course 13: Neurosonology – from basics to clinical applications – Level 1

Chairperson:
Branko Malojcic (Zagreb, Croatia)

• Cervical artery protocol and plaque morphology
  Branko Malojcic (Zagreb, Croatia)

• Intracranial artery protocol
  Eva Bartels (Munich, Germany)

• Sonographic features of dissection and inflammation
  Mona Skjelland (Oslo, Norway)

Educational Content:
The participants will gain knowledge and skills on how to perform and report examinations of extra- and intracranial arteries with possible implications in the workup of neurovascular patients. The most frequent clinical scenarios requiring neurosonological assessment, such as atherosclerotic disease, stroke, vasospasm, dissection and inflammatory diseases of cerebral arteries will be presented.

Hands on teaching demonstration:
Cervical and intracranial ultrasound protocols.

Limited to 60 persons. Please register separately – additional fees will apply.
Interactive Session 5: What can movement in sleep tell us about the disease?

Chairperson:
Anna Heidbreder (Munster, Germany)

• REM-Sleep behaviour disorder – early face of alpha-synucleinopathy
Ambra Stefani (Innsbruck, Austria)

• Parasomnia in neuro-immunological disorders
Anna Heidbreder (Munster, Germany)

• REM, NREM parasomnia and overlap parasomnia disorder
Panagiotis Bargiotas (Bern, Switzerland)

Educational Content:
This video-based session should give an overview over sleep related movement disorders. Movement disorders do not only play an important role in sleep disorders itself, they can also represent a key symptom preceding the manifestation of different neurological disorders e.g. Parkinson’s disease or neuroimmunological disorder e.g. Anti-IgLON5 disease. In some cases, the differentiation between NREM and REM parasomnia is challenging. In detail, this course will illustrate diagnosis and implications of REM-behavior disorder, neuroimmunology and Sleep- parasomnia as first symptom and movement disorders during sleep, RLS and others- course and consequences.

Please download the app “EAN Congress” to actively participate and vote!

Special Session 9: EAN/EFNA: Norwegian Brain Strategy: a plan to strengthen brain health in Europe

Chairpersons:
Joke Jaarsma (Amsterdam, The Netherlands)
Hanne Flinstad Harbo (Oslo, Norway)

• Better Brains for a Better World
Vladimir Hachinski (London, Ontario, Canada)

• National Brain Plans: A tool to push neurology up the political agenda?
Fred Destrebecq (Brussels, Belgium)

• The Norwegian Brain Plan 2018-2024: An example to follow?
Anne Grethe Erlandsen (Oslo, Norway)
Anne Hege Aamodt (Oslo, Norway)

• Discussion with panel and audience

Scientific Content:
This symposium will focus on the increasing burden of brain diseases and why we must advocate for the development of European brain health plans to address this trend. The first national brain plan in Europe was launched in Norway in December 2017. This will be presented as a best practice template by State Secretary, Anne Grethe Erlandsen of the Norwegian Ministry of Health and Care Services. Eminent speakers such as Prof. Vladimir Hachinski (former President of the World Federation of Neurology) and Prof. Monica di Luca (President of the European Brain Council) will present how such plans could be used to push neurology up the political agenda and ensure optimal outcomes for healthcare systems and patients. Come along to hear how, together, we can advocate for higher priority for neurological disorders and how the examples presented could be implemented in your region.

Special Session 12: History of Neuroscience: Three men behind the neuron theory

Chairperson:
Espen Dietrichs (Oslo, Norway)

• Introduction
Espen Dietrichs (Oslo, Norway)

• Fridtjof Nansen
Ragnar Stien (Oslo Norway)

• Camillo Golgi
Giorgio Zanchin (Padova, Italy)

• Santiago Ramon y Cajal
Eduardo Tolosa (Barcelona, Spain)

Scientific Content:
In 1906 Santiago Ramon y Cajal and Camillo Golgi shared the Nobel Prize in Physiology or Medicine. Even though they did not agree on all points, both made discoveries that were crucial for evolving the neuron theory. However, the Norwegian Arctic explorer and statesman Fridtjof Nansen was probably the first scientist that presented experimental evidence in favour of this theory. The neuron theory and the achievements of these three men will be the topic of this History of Neuroscience symposium.
Plenary Symposium 3: The role of inflammation in “non-inflammatory” neurological diseases

Chairpersons:
Nils Erik Gilhus (Bergen, Norway)
Annamaria Vezzani (Milano, Italy)

- Epilepsy: Neuroinflammatory pathways as treatment targets and biomarker candidates in epilepsy
  Annamaria Vezzani (Milano, Italy)
- Parkinson’s disease: Is there a role for neuroinflammation in the pathogenesis of Parkinson’s disease?
  Vidar Gundersen (Oslo, Norway)
- Cerebrovascular disease: Neuroinflammatory responses to stroke – implications for treatment?
  Guido Stoll (Würzburg, Germany)
- Migraine: Understanding migraine: Potential role of neurogenic inflammation
  Lars Edvinsson (Lund, Sweden)

Scientific Content:
During the last few years, inflammation has been increasingly recognised as playing a critical role in the pathogenesis of a vast number of previously considered “non-inflammatory” neurological diseases such as stroke, Parkinson’s disease, epilepsy and Alzheimer’s dementia. This has increased our understanding of disease mechanisms in these major neurological conditions, but also opens for new treatment strategies. The primary focus of this symposium is to highlight the role of inflammation in neurological diseases and to discuss the complexities of targeting neuroinflammation as a novel therapy.

Case-based Workshop 6: Optic neuritis: a very frequent diagnosis in a neuro-ophthalmology clinic

Chairperson:
Gordon Plant (London, United Kingdom)

- Typical optic neuritis
  Gordon Plant (London, United Kingdom)
- Atypical optic neuritis (NMO SPECTRUM)
  Anat Kesler (Tel-Aviv, Israel)
- Optic neuropathy due to inflammatory disease (Behçet, sarcoid)
  Gulden Akdal (Izmir, Turkey)

Educational Content:
Optic neuritis will be discussed with case presentations. In addition to the typical cases, atypical cases which need to be differentiated because of differing diagnostic work-up and treatment strategies with a special emphasize on Neuromyelitis Optica (NMO) will be given.

Limited to 60 participants. Please register separately – additional fees will apply.

Interactive Session 6: Challenging stroke patients

Chairperson:
Natan Bornstein (Tel Aviv, Israel)

- Embolic stroke of unknown cause
  Natan Bornstein (Tel Aviv, Israel)
- Cryptogenic stroke?
  Milija Mijajlovic (Belgrade, Serbia)
- Rare stroke cause
  Anita Arsowska (Skopje, Macedonia)

Educational content:
Rare and difficult to define stroke aetiologies will be presented, including clinical cases with discussion of treatment options, such as:
- Rare stroke aetiology
- Cryptogenic stroke and ESUS
- Clinical cases of rare and complex stroke patients
- Clinical signs
- Neuroimaging features of rare stroke aetiology (metabolic, infectious, inflammatory)
- Differential diagnosis of rare stroke anthologies
- Treatment options for rare stroke causes

Please download the app “EAN Congress” to actively participate and vote!
15:00 – 17:00
Room HoC

**Hands-on Course 14:**
EAN/ESNCH: Neurosonology – contemporary and future developments – Level 2-3

**Chairperson:** Fabienne Perren (Lausanne, Switzerland)

- Cerebral sonography of cerebral parenchyma in movement disorders
  Uwe Walter (Rostock, Germany)

- Optic nerve sonography
  Fabienne Perren (Lausanne, Switzerland)

- Diagnosis and management of traumatic nerve lesions
  Daniele Coraci (Rome, Italy)

- Comprehensive ultrasound examination in stroke units
  Ole-Morten Rønning (Lørenskog, Norway)

**Educational Content:**
This course presents recent developments in neurological ultrasound. Participants will gain knowledge and skills on how to perform, interpret and report ultrasound examinations of the patients with movement disorders, increased intracranial pressure and traumatic peripheral nerve lesions. Hands-on teaching demonstration by the faculty

Limited to 60 persons. Please register separately – additional fees will apply.

15:00 – 17:00
Main Auditorium

**Symposium 5:**
Hot topics in neurostimulation

**Chairpersons:**
Patricia Limousain (Paris, France)
Kristl Vonck (Ghent, Belgium)

- Vagal nerve – the missing link in the gut brain axis
  Bruno Bonaz (Grenoble, France)

- Behavioural disturbances and deep brain stimulation
  Paul Krack (Bern, Switzerland)

- Adaptive neurostimulation in epilepsy
  Kristl Vonck (Ghent, Belgium)

- Technological advances of neurostimulation for movement disorders
  Jens Volkmann (Würzburg, Germany)

**Scientific Content:**
The vagal nerve is a major component of the autonomic nervous system and has an important role in the anti-inflammatory gut-brain axis. This lecture is highlighting the potential treatment options including vagal nerve stimulation (VNS). Deep brain stimulation is a well-established treatment in Parkinson’s disease, dystonia and tremor. The area of behavioural changes as an indication for DBS treatment as well as a consequence of neurostimulation will be discussed. Next to chronic continuous deep brain stimulation recently proof of principle of adaptive DBS was shown. The core idea is a dynamic adaptation of stimulation with a feedback loop of biomarkers indicating pathological central brain circuit activity. For vagal nerve stimulation as a therapy for epilepsy, a closed loop system is also available. Seizure activity is detected by ictal heart rate increase triggering stimulation. Research findings and clinical outcome will be discussed.

This symposium is supported by an educational grant from Livanova.

15:00 – 17:00
Room Paris

**Symposium 6:**
Diagnostic dilemmas in MS

**Chairpersons:**
Bernhard Hemmer (Munich, Germany)
Ludwig Kappos (Basel, Switzerland)

- Challenges of the diagnostic criteria of MS
  Wallace J. Brownlee (London, United Kingdom)

- MRI red flags for MS mimics
  Christian Enzinger (Graz, Austria)

- Inflammatory mimics of MS
  Romain Marignier (Lyon, France)

- Genetic mimics of MS
  Wolfgang Köhler (Leipzig, Germany)

**Scientific Content:**
The first talk will summarise the evolution of the current diagnostic criteria of MS. The McDonald criteria were developed to allow an early diagnosis of MS. However, the criteria in itself do not exclude differential diagnoses. Therefore, clinical vigilance is necessary even when the criteria are fulfilled. MRI is the most important paraclinical marker that is used for diagnosing MS. However, neurologists have to be aware that this biomarker bears the risk of misinterpretation. During recent years several novel neuroinflammatory diseases like MOG antibody associated demyelination, CLIP-PERS and others have been discovered. This session highlights the clinical and paraclinical clues that differentiate MS from these conditions. It also discusses the therapeutic differences between these diseases. Genetic diseases like leukodystrophies, metabolic disorders, and spastic paraplegia can mimic progressive MS and sometimes also a relapsing-remitting disease course. They can even be associated with Gadolineum enhancing lesions in MRI and present with inflam- matory CSF. This talk will give an overview of important genetic differential diagnoses of MS and explain how to spot them.
Teaching Course 10: Clinical science in muscle disorders – Level 2
Chairpersons:
Benedikt Schoser (Munich, Germany)
Antonio Toscano (Messina, Italy)

- The “myopathic” face
  Benedikt Schoser (Munich, Germany)

- Differential diagnosis of “scapular winging”
  Antonio Toscano (Messina, Italy)

- Rigid Spine syndrome
  Sabrina Sacconi (Nice, France)

- Diaphragmatic weakness
  Pascal Laforêt (Paris, France)

Educational Content:
The speakers will address some of the common problems that are often referred to the Muscle Clinics, either when proposed by experts in neuromuscular disorders but also by general neurologists. A practical approach will be presented, based on the long experience of the presenters which aims to enhance the knowledge and confidence of the attendees to better handle these issues and provide guidance when to refer. Consequently, differential diagnostic problems in neuromuscular medicine will be discussed with the audience, even using specific cases to illustrate the diagnostic pathway and potential pitfalls in reaching a diagnosis. This teaching course is directed towards the diagnostic utility of recognising different causes and mechanisms of the “myopathic face”, winging scapula, rigid spine syndrome and respiratory weakness related to muscular disorders. Treatment and disease management will be part of the presentations.

Teaching Course 11: Current treatments in Neurology – Level 1
Chairperson:
Celia Oreja-Guevara (Madrid, Spain)

- Stroke: acute treatment and prevention
  Urs Fischer (Bern, Switzerland)

- Examples of successful gene treatment - FAP
  Laura Obici (Pavia, Italy)

- Examples of successful gene treatment - SMA
  Tim Hagenacker (Essen, Germany)

- Parkinson’s disease: Current treatment (medical and stimulation)
  Per Odin (Lund, Sweden)

- MS: an up-to-date treatment algorithm
  Celia Oreja-Guevara (Madrid, Spain)

Educational Content:
This Teaching Course on current treatments in various neurological disorders/diseases will give an update of current treatment and management strategies in stroke, two major genetic disorders, Parkinson’s disease and multiple sclerosis. The lectures will summarise current state-of-the-art therapies and also address future therapeutic options and developments.

Teaching Course 12: EAN/MDS-ES: Hyperkinetic movement disorders – Level 2
Chairperson:
Mathieu Anheim (Strasbourg, France)

- The paroxysm of dyskinesias
  Emmanuel Roze (Paris, France)

- Ataxia: some order in the disorder?
  Mathieu Anheim (Strasbourg, France)

- What’s new in chorea?
  Edward Wild (London, United Kingdom)

- What’s new in paediatric movement disorders
  Miryam Carecchio (Milan, Italy)

Educational Content:
This TC will give an overview including many didactic videos demonstrating typical and subtle phenotypes, including new entities of hyperkinetic movement. Insights to the diagnostic work for the management in clinical practice of patients with hyperkinetic movement disorders in clinical practice will be presented as well as automated algorithm for the diagnosis of recessive ataxias. Participants will learn how to handle with the genetic analysis in such patients: when, what, why?
Teaching Course 13: Nervous system disorders due to retroviruses – Level 3

Chairperson:
Israel Seiner (Petach Tikva, Israel)

- Neuro-cognitive disorders due to HIV
  Christian Eggers (Linz, Austria)

- Aging with HIV
  Gabriele Arendt (Düsseldorf, Germany)

- Neurological disorders due to HTLV - an emerging issue in migrants to Europe
  Francisco Javier Carod Artal (Inverness, United Kingdom/Barcelona, Spain)

- The possible role of retroviruses in neurological disorders of unknown aetiology
  Israel Steiner (Petach Tikva, Israel)

Educational Content:
Retroviruses are responsible for chronic neurological disorders and are suspected as causing agents in neurological conditions of unknown aetiology. This course will focus on aspects of retroviral infections that are not emphasized and known.

Teaching Course 14: Diagnosing coma and disorders of consciousness: pearls and pitfalls from a new EAN guideline – Level 1-2

Chairpersons:
Daniel Kondziella (Copenhagen, Denmark)
Steven Laureys (Liège, Belgium)

- Clinical examination in the ICU
  Karin Diserens (Lausanne, Switzerland)

- Neuroimaging
  Daniel Kondziella (Copenhagen, Denmark)

- Electrophysiology
  Benjamin Rohaut (Paris, France)

Educational Content:
This teaching course is based on the work currently conducted as part of the «EAN Guideline on the Classification of Coma and Chronic Disorders of Consciousness», aiming at gathering the state-of-the-art evidence regarding diagnosis and classification of coma and disorders of consciousness, including (a) clinical bedside examination techniques, (b) laboratory investigations based on functional neuroimaging (fMRI, PET, and (c) EEG (including transcranial magnetic stimulation (TMS)-EEG)). This course offers the audience a comprehensive overview on the current state of knowledge in assessing severely brain-injured patients in the acute and chronic setting. Particular emphasis will be given to the translation of scientific evidence from the guidelines into practical recommendations for the busy clinician at the bedside.

Controversy 2: Controversies in headache medicine

Chairperson:
Messoud Ashina (Copenhagen, Denmark)

- PRO: Tension-type headache is a frequent disorder
  Jes Olesen (Copenhagen, Denmark)

- CON: Tension-type headache is NOT a frequent disorder
  Anish Bahra (London, United Kingdom)

- PRO: Medication overuse headache: detox!
  Zaza Katsarava (Essen, Germany)

- CONTRA: Medication overuse headache: do NOT detox!
  Christian Lampf (Linz, Austria)

Educational Content:
In the first controversy the existence of tension-type headache (TTH) is debated. While epidemiological studies suggest that TTH is the most frequent headache disorder, clinicians argue that TTH can also be a minor form of migraine.

The second controversy is a very practical and important topic. There is no unanimous acceptance of when to detoxify medication overuse in headache patients. Evidence is controversial and conflicting. Modern randomised studies on this issue will be discussed as well as personal experience of the participants.
14:45 – 16:00
Room Budapest

**Miscellaneous 2**

**Chairpersons:**
Josif Bednarik (Brno, Czech Republic)
Dan Healy (Dublin, Ireland)

**14:45 | O3101**

Brain volume changes underlying square wave jerks in Progressive Supranuclear Palsy
E. Anagnostou, E. Karavasilis, E. Potiri, V. Constantinides, E. Kapaki, C. Potagas
Athens, Greece

**15:00 | O3102**

Migraine and cluster headache classification using a supervised machine learning approach: a multimodal MRI study
R. Messina1, R. Leech2, F. Zelaya2, O. Dipasquale2, D. Wei2, M. Filippé2, P. J. Goadsby2
1Milan, Italy, 2London, United Kingdom

**15:15 | O3103**

Results of the CAPTAIN-RO Trial – A New Horizon in TBI Clinical Research?
D. F. Muresanu1, J. Vester2, K. von Wild3, V. Hömberg4
1Cluj, Romania, 2Krailing, 3Münster, 4Düsseldorf, Germany

---

14:45 – 16:00
Room Helsinki

**Neurogenetics 3**

**Chairpersons:**
Matthias Toft (Oslo, Norway)
Stephanie Debette (Bordeaux, France)

**14:45 | O3106**

Clinical practice guidelines for rare neurological diseases: preliminary results of a systematic appraisal
K. Aleksovska1, T. Kobulashvili2, C. Reinhart3, M. Copetti1, A. Federico1, M. Leone1
1San Giovanni Rotondo, Italy, 2Salzburg, Austria, 3Tübingen, Germany, 4Sienna, Italy

**15:00 | O3107**

DNA methylation profile in the human hippocampus identifies involvement of genes essential in neurogenesis in Alzheimer’s disease
M. Altuna Azkargorta1, M. S. Câmara Marcos1, A. Urdanoz2, A. Labarga2, J. Sánchez-Ruiz de Gordoa1, M. Zelaya1, M. Roldán1, I. Blanco1, X. Martinez de Morentin1, M. T. Tuïn1, R. Larumbe Ilundain1, C. Echavarri2, M. Mendioroz1
1Pamplona, 2San Sebastián, 3Alsasua, Spain

**15:15 | O3108**

De novo mutations in TAOK1 cause neurodevelopmental disorders
1Skien, Norway, 2Lübeck, 3Rostock, 4Dresden, Germany, 5Miami, USA

**15:30 | O3110**

Nusinersen in infants who initiate treatment in a presymptomatic stage of Spinal Muscular Atrophy (SMA): Interim results from the phase 2 NURTURE Study
1Milan, Italy, 2New York, NY, USA, 3Rome, Italy, 4Taipei, Taiwan, Chinese Taipei, 5Baltimore, MD, 6Boston, MA, 7Orlando, FL, USA, 8Freiburg, Germany, 9Chicago, IL, 10Aurora, CO, USA, 11Melbourne, Australia, 12Salt Lake City, UT, USA, 13Ankara, Turkey, 14Doha, Qatar, 15Kaohsiung, Taiwan, Chinese Taipei, 16Los Angeles, CA, 17Cambridge, MA, USA, 18Maidenhead, United Kingdom

---

15:45 | O3109

A recessive repeat expansion causes CANVAS and is a frequent cause of late-onset sensory ataxia
A. Cortese1, R. Simone1, R. Sullivan1, J. Vandrovouev2, W. Y. Yau3, J. Humphrey1, Z. Jaunmuktane1, P. Sivakumar1, J. Polke3, P. J. Tomasi2, G. Devigili2, I. Callegari2, M. Versino2, V. Salpietro2, S. Efthymiou2, D. Kaski1, N. W. Wood1, N. S. Andrade4, A. M. Rossor5, A. Bronstein5, P. Fratta6, W. J. Marques7, S. Züchner8, M. M. Reilly9, H. Houlden7
1London, United Kingdom, 2Ribeirão Preto, Brazil, 3Milan, Italy, 4Miami, USA

16:00 | O3110

Inspiratory sighs in multiple system atrophy
S. Parreira1, F. Antunes2, C. Bentes1, R. Peralta1
1Lisbon, 2Almada, Portugal
15:00 – 16:15
Room Nord Norge

**Aging and dementia 2**

**Chairpersons:**
Michael Khalil (Graz, Austria)
Gunhild Waldemar (Copenhagen, Denmark)

**15:00 | O3111**
IGFBP-2 as a novel biomarker for incident dementia
E. McGrath1, J. Himali1, D. Levy2, S. Conner1, C. Decarli3, M. Pase1, P. Courchesne2, C. Satizabal4, R. Vasan1, A. Beiser1, S. Seshadri1
1Boston, 2Framingham, 3Davis, 4San Antonio, USA

**15:15 | O3112**
Statins, risk of death and stroke in patients with dementia – a registry-based study
B. Petek1, M. Villa-Lopez2, B. Winblad3, M. G. Kramberger1, M. von Euler3, H. Xu3, M. E. Eriksdotter3, S. Garcia-Ptacek3
1Ljubljana, Slovenia, 2Toronto, Canada, 3Stockholm, Sweden

**15:30 | O3113**
Detection of non-emotional body language: Interaction between the amygdala, insula and cerebellar vermis
A. Sokolov1, P. Zeidman2, M. Erb3, F. Pollick4, A. Fallgatter2, P. Ryelin1, K. Friston2, M. Pavlova3
1Lausanne, Switzerland, 2London, United Kingdom, 3Glasgow, United Kingdom

**15:45 | O3114**
Declining incidence of dementia: a national registry-based cohort study over twenty years
L. Taudorf1, A. Nørgaard1, S. Islamoska1, K. Jørgensen1, T. M. Laursen2, G. Waldemar1
1Copenhagen, 2Aarhus, Denmark

**16:00 | O3115**
Functional connectivity and microstructural alterations in regions of synaptic density loss in DLB and PDD
T. Yousef1, G. Dervenoulas2, G. Pagano2, C. Loane1, H. Wilson3, A. Chandra2, O. Cousins1, R. Gunn1, E. Rabiner1, F. Niccolini1, M. Esposito1, L. Ricciardi2, D. Aarsland1, M. Politis1
1London, United Kingdom, 2Naples, Italy
16:45 – 18:15
Room Lisbon

**Tournament Clinical**

Chairpersons:
Sten Fredrikson (Stockholm, Sweden)
Ellisiv Mathiesen (Tromso, Norway)
Ivan Rektor (Brno, Czech Republic)

16:45 | O3207
Semantic fluency impairment and amygdala atrophy are predictive factors for the development of Parkinson's disease dementia
O. Cousins, G. Pagano, J. Schulz, G. Dervenoulas, H. Wilson, S. P. Caminiti, S. Polychronis, M. Politis
London, United Kingdom

17:00 | O3208
Cortical abnormalities and cognitive impairment in pediatric MS patients
E. de Meo1, L. Moiola1, M. P. Amato2, A. Ghezzi3, P. Veggiotti1, R. Capra4, M. Filippi1, M. A. Rocca1
1Milan, 2Florence, 3Gallarate, 4Brescia, Italy

16:45 – 18:30
Room Budapest

**Autonomic nervous system disorders; Peripheral nerve disorders**

Chairpersons:
Walter Strahal (Tulln, Austria)
Nurcan Üceyler (Würzburg, Germany)

17:00 | O3213
Evaluation of RNA interference/gene therapy combination as potential therapeutic approach for Charcot-Marie-Tooth 2A
E. Abati1, F. Rizzo2, S. Bono3, S. Salani4, A. Bordoni5, V. Melzi6, M.-D. Ruepp7, S. Pagliarani8, K. Barbullushi9, C. Cordiglietti10, N. Bresolin11, G. Comi12, M. Nizzardo13, S. Corti14
1Milan, Italy, 2London, United Kingdom

17:15 | O3214
Long-term efficacy and safety of inotersen for hereditary transthyretin amyloidosis: 2-year results from the NEURO-TTR open-label extension study
1New York, USA, 2Rio de Janeiro, Brazil, 3Orange, 4Baltimore, 5Rochester, 6Philadelphia, USA, 7Creteil, France, 8Boston, USA, 9Buenos Aires, Argentina, 10Pavia, Italy, 11Lisbon, Portugal, 12Carlsbad, USA, 13Indianapolis, USA, 14Porto, Portugal
17:45 | O3216
Correlation between serum IgG levels and INCAT scores in patients with CIDP receiving subcutaneous immunoglobulin (IgPro20) in the PATH study
X. Ma1, D. R. Cornblath2, T. Yuraszeck3, O. Mielke4, V. Brit5, H.-P. Hartung6, G. Sobue7, J.-P. Lawo5, M. Praus5, B. L. Durn1, R. A. Lewis1, I. Merkies1, I. N. van Schaik1, M. A. Tortorici1
1King of Prussia, USA, 2Baltimore, USA, 3Marburg, Germany, 4Toronto, Canada, 5Düsseldorf, Germany, 6Nagoya, Japan, 7Los Angeles, USA, 8Maastricht, 9Amsterdam, The Netherlands

17:45 – 18:15
Main Auditorium
Epilepsy 1
Chairpersons:
Marte Helene Bjørk (Bergen, Norway)
Hanna Cock (London, United Kingdom)

17:00 | O3219
Long-term consequences of recurrent febrile seizures
J. Dreier1, Y. Sun2, J. Christensen2
1Aarhus, 2Viby, Denmark

17:15 | O3220
The slowdown of the high frequency sensory-motor cortical oscillations is associated to cortical GABAergic dysfunction and myoclonus severity in Italian ADCME families
R. Dubbioso1, L. Tomasevic2, M. Esposito1, L. Bilo1, H. R. Siebner2, P. Striano2, A. Coppola1, F. Manganelli1
1Naples, Italy, 2Copenhagen, Denmark, 3Genoa, Italy

17:30 | O3221
Panel of inflammation-associated microRNAs as genetic generalized epilepsy biomarker
Porto, Portugal

17:45 | O3222
Pharmacological modification of periictal respiration and effects on SUDEP
Cleveland, USA

18:00 | O3223
Can sexual abuse and fear of birth explain the increased prevalence of Cesarean section in women with epilepsy?
J. Vederhus1, N. E. Gilhus1, M. H. Bjørk, E. S. N. Husebye
1Bergen, Norway

17:00 – 18:15
Room Helsinki
Movement disorders 2
Chairpersons:
Francesca Morgante, (London, United Kingdom)
Jaime Kulsievsky (Barcelona, Spain)

17:00 | O3224
Randomized delayed-start trial of levodopa in Parkinson’s disease
R. de Bie
Amsterdam, The Netherlands

17:15 | O3225
Intraneural skin nerve α-synuclein deposits in Multiple System Atrophy
V. Donadio1, A. Incensi1, G. Rizzo1, F. Del Sorbo1, P. A. Tessitore1, R. Cilia2, R. Infante1, V. Vacchiano1, R. de Micco1, S. Bowegna1, G. Pezzoli1, G. Tedeschi1, P. Liguori1
1Bologna, ‘Milan, ‘Naples, Italy

17:30 | O3226
Multimodal imaging of neuromelanin and dopamine transporters in Parkinson’s disease reveals asymmetrical relationships within the nigrostriatal system
N. P. Lao-Kaim1, A. Martin-Bastida2, A.-A. Roussakis1, G. Searle1, Y. Xing2, R. Gunn1, S. T. Schwarz2, D. P. Auer2, P. Piccini1, R. Barker3
1London, 2Nottingham, 3Cambridge, United Kingdom

17:45 | O3227
Dystonia in Europe: a survey towards care from patients’ perspectives
1Zagreb, Croatia, 2Milan, Italy, 3London, United Kingdom, 4Hanover, Germany, 5Lisbon, Portugal, 6Grenoble, France, 7Athens, Greece, 8Groningen, The Netherlands, 9Paris, France

18:00 | O3228
Selective DBS of the subthalamic nucleus improved motor and non-motor deficits without affecting weight gain in a rat model of Parkinson’s disease
H. Tibar1, F. Naudet, B. Ribot, E. Faggiani, A. Benazzouz
Bordeaux, France
29th Alzheimer Europe Conference
Making valuable connections
The Hague, Netherlands
23–25 October 2019

www.alzheimer-europe.org/conferences

#29AEC
Tuesday 2 July 2019
08:00 – 09:30
Room Lisbon

**Interactive Session 7:**
The Do’s and Don’ts in neurologic emergencies

**Chairperson:**
Raimund Helbok (Innsbruck, Austria)

- **Ischemic Stroke**
  Bernd Kallmuenzer (Erlangen, Germany)

- **Status epilepticus**
  Felix Rosenow (Frankfurt, Germany)

- **Subarachnoid hemorrhage**
  Erich Schmutzhard (Innsbruck, Austria)

**Educational content:**
This session will provide an updated recommendation on difficult treatment decisions in the acute phase of ischemic stroke, hemorrhagic stroke and status epilepticus. The concept is based on updated guideline recommendations and covers clinical scenarios which may not be precisely covered by current recommendation.

Please download the app “EAN Congress” to actively participate and vote!

08:00 – 10:00
Main Auditorium

**Symposium 7:**
Neuroimaging in common neurologic disorders

**Chairpersons:**
Massimo Filippi (Milan, Italy)
Christian Enzinger (Graz, Austria)

- **Neuroimaging in dementing disorders**
  Mara Ten Kate
  (Amsterdam, The Netherlands)

- **Neuroimaging in multiple sclerosis and other immune-mediated inflammatory disorders**
  Christian Enzinger (Graz, Austria)

- **Neuroimaging in epilepsy**
  John Duncan (London, United Kingdom)

- **Neuroimaging in neuro-oncology**
  Riccardo Soffietti (Turin, Italy)

**Scientific Content:**
This Symposium has been jointly organised under the auspices of the panel neuroimaging by the panels dementia and cognitive disorders, stroke, and neuro-oncology to provide state-of-the-art knowledge concerning the use of neuroimaging in the diagnosis, differential-diagnosis, selection for treatments and monitoring response to it in common neurologic disorders. A special emphasis will be laid on existing international guidelines, including a discussion of the chances and challenges involved with their use in the management of patients with these disorders. The course aims primarily at young neurologists in training, or those wishing to refresh/update their basic knowledge in the respective fields. Given the spread of topics, a good overview should be guaranteed, also enabling cross-fertilisation between different fields.

08:00 – 10:00
Room Paris

**Symposium 8:**
New insights/developments in stroke treatment

**Chairperson:**
Urs Fischer (Bern, Switzerland)
Else Charlotte Sandset (Oslo, Norway)

- **Recanalisation in acute stroke: current status and future developments**
  Urs Fischer (Bern, Switzerland)

- **How to improve the detection and the prevention of cardiac embolism**
  Simona Sacco (L’Aquila, Italy)

- **Patent Foramen Ovale (PFO) as a possible cause of stroke: how to decide, how to manage**
  Sara Mazzucco (Oxford, United Kingdom)

- **Intracerebral haemorrhage (ICH) treatment issues in the acute phase**
  Adrian Parry-Jones (Manchester, United Kingdom)

**Scientific Content:**
The symposium will cover four very topical areas in stroke research in which there have been major research advances/new information published in the last 2 years.
Hands-on Course 15: Bedside examination of the vestibular and ocular motor system – Level 2

Chairperson:
Marianne Dieterich (Munich, Germany)

• How to take patient history
Michael Strupp (Munich, Germany)
Alexandre Bisdorff
(Luxembourg, Luxembourg)

• How to examine the vestibular and ocular motor system
Alexander Tarnutzer (Zurich, Switzerland)
Marianne Dieterich (Munich, Germany)

• How to examine binocular control and pupillary function
Gordon Plant (London, United Kingdom)
Konrad Weber (Zurich, Switzerland)

• How to diagnose and treat benign paroxysmal positional vertigo
Dominik Straumann (Zurich, Switzerland)
Thomas Brandt (Munich, Germany)

Educational Content:
This hands-on-course will demonstrate and teach the skills required for state-of-the-art bedside testing of patients with vertigo and ocular motor disorders. Each of the four stations covers a cardinal aspect of the examination: (1) history taking, (2) vestibular and ocular motor testing, (3) testing of binocular control (strabismus) and pupillary function (including differentiating between afferent and efferent deficits), and (4) provocation manoeuvres to elicit positional nystagmus (including liberation manoeuvres). Each presenter will stimulate the discussion, highlight possible variations of tests, and allow better interaction with the participants, who are encouraged to practice the demonstrated tests.

Limited to 60 persons. Please register separately – additional fees will apply.

Special Session 10: How to use ‘big data’ and digital technology to improve epilepsy care and patient outcomes

Chairperson:
Tony Marson (Liverpool, United Kingdom)

• Variability in care and the costs of inadequately coordinated care: Lessons from national and international audits
Tony Marson (Liverpool, United Kingdom)

• Health informatics and ‘big data’:
Using ‘big data’ to assess service performance and inform point of care decisions
Jakob Christensen (Arhus, Denmark)

• Digital technologies: Building digital epilepsy care pathways
Colin Doherty (Dublin, Ireland)

Scientific Content:
It is vital that neurologists that see epilepsy patients know about development in health informatics to enable them to develop services, improve efficiency and patient outcomes. Three linked talks are proposed, one on national/multinational audits that use online web systems to capture anonymised data. Most important example is the EBC Value of Treatment of Epilepsy project. The second outlines use of routinely collected health data to provide information on service performance and point of care decisions. The third addresses digital technologies such as ‘apps’ that can be integrated into patient pathways in order to improve responsiveness of services, diagnostic accuracy, efficiency and patient outcomes.

Limited to 60 participants. Please register separately – additional fees will apply.

Case based Workshop 7: EAN/MDS-ES: When “playing” with dopamine goes wrong

Chairperson:
Philippe Damier (Nantes, France)

• Tardive syndrome
Bettina Balint (London, United Kingdom)

• Acute side effects of antipsychotics
(Acute dystonia, neuroleptic malignant syndrome)
Sophie Drapier (Rennes, France)

• L-DOPA-induced dyskinesias
Philippe Damier (Nantes, France)

Educational Content:
Cases will be illustrated by videos to perform a detailed analysis of the semiological presentation of the different dopaminergic drug-induced complications. Evidence based treatment options and expert opinions about the management of these complications will be discussed.

Limited to 60 participants. Please register separately – additional fees will apply.
Career Development Session 2: Scientific writing

Chairperson: Bo Norrving (Lund, Sweden)

- Grant writing
  Masud Husain (Oxford, United Kingdom)
- Publication of a scientific paper
  Bo Norrving (Lund, Sweden)
- How to use media to communicate in science?
  Elena Moro (Grenoble, France)

Educational Content: by attending this course, physicians in training and researchers can learn to improve their writing skills, with a focus on:
- Grant writing
- Publication of a scientific paper, including effective ways of organizing and writing the individual sections
- How to use media to communicate in science (social networks, press releases and opinion pieces)

(Press release: http://pn.bmj.com/content/15/6/474; Bo Norrving is Editor in chief of the European Stroke Journal; Elena Moro is Editor in chief of EANpages the EAN News blog)

Plenary Symposium 4: Highlight Session

Chairpersons:
Günther Deuschl (Kiel, Germany)
Tony Marson (Liverpool, United Kingdom)
Erik Taubøll (Oslo, Norway)

- Multiple sclerosis
  Kjell Morten Myhr (Bergen, Norway)
- Movement disorders
  Ole Bjørn Tysnes (Bergen, Norway)
- Headache
  Lars Jacob Stovner (Trondheim, Norway)
- Cerebrovascular diseases
  Anne Hege Aamodt (Oslo, Norway)
- Epilepsy
  Erik Taubøll (Oslo, Norway)

Highlights from Lancet Neurology

After the presentation of the Congress Highlights, the winners of the Tournament for neurologists in training will be announced and receive their certificates.

Good-bye words & Presentation EAN 2020 Paris.

Special Session 11: Using health registries in neurology: the Norwegian experience

Chairperson: Siri Eldevik Håberg, Deputy director Centre for Fertility and Health Norwegian Institute of Public Health, (Oslo, Norway)

- The Norwegian health registries
  Siri Eldevik Håberg (Oslo, Norway)
- How can MS registries help to improve MS treatment?
  Maura Pugliatti (Ferrara, Italy)
- National stroke registry data as basis for simulating patient flow
  Kim Rand (Lørenskog, Norway)
- The “Health atlas” – using quality registries to improve quality and reduce regional differences
  Olav Helge Førde (Tromsø, Norway)

Scientific Content: The Scandinavian countries with their unique, all-covering population registries and national health insurance policies have the fundaments, legislation and infrastructure necessary for forming national health registries and quality registries. Such registries offer excellent opportunities for epidemiologically based research, planning of future health service tasks and quality improvement measures. This session focuses on ways in which some of our registries have contributed and will in the future contribute with important data on neurological disorders and treatment. The session will give an overview on the national policy and focus on traditional epidemiological use of nationwide registries and novel ways to visualise regional variations in treatment quality and to simulate patient flow in the future based on present day epidemiological registry data. The special session is co-sponsored by the Norwegian Brain Council and the Norwegian Institute of Public Health.
Case-based Workshop 8: Challenging neurogenetics phenotypes: acute presentation, management and diagnoses not to miss

Chairperson:
Henry Houlden (London, United Kingdom)

• Assessment, differential diagnosis, investigations and management of likely neurogenetic disorders
Lasse Pihlstrøm (Oslo, Norway)

• Rapid onset CNS disorders, focussing on ataxia, parkinsonism and white matter
Mathias Toft (Oslo, Norway)

• Rapid and Progressive onset of likely inherited seizure disorders, from childhood through to adult onset
Henry Houlden (London, United Kingdom)

Educational Content:
Neurogenetic disorders can present acutely which can make diagnosis, management, treatment and prognosis even harder to make under strained conditions in the acutely unwell patient. A number of examples of this exist in the press as delays in diagnosis and lack of guidelines are highlighted and many of these disorders are diagnosed late. Most neurologists find this area difficult and the disorders that make up the lectures outline the most prevalent. The lectures will also give neurologists an understanding on how to detect the underlying genetic disorders and a framework on which to manage conditions.

Limited to 60 participants. Please register separately – additional fees will apply.

Interactive Session 8: Epileptic seizure semiology: What can be inferred from ictal behavioural manifestations for clinical practice?

Chairperson:
Margitta Seeck (Geneva, Switzerland)

• Temporal lobe epilepsy
Milan Brázdil (Brno, Czech Republic)

• Frontal lobe epilepsy
Hajo Hamer (Erlangen, Germany)

• Insular epilepsy
Lorella Minotti (Grenoble, France)

• Generalized epilepsy
Margitta Seeck (Geneva, Switzerland)

Educational Content:
This session will focus on lateralising and localising values of distinct behavioural manifestations in focal and generalised seizures. Lectures will be based on high-quality video-recordings of typical as well as rare ictal manifestations with a discussion of their occurrence during the seizure (chronology), and what it means. Typical differential diagnostic features of seizures in focal and generalised epilepsies will be covered and discussed, including combined epilepsy, introduced in new ILAE classification of epilepsies. Seizures in four selected patients will be presented and discussed with the audience. This session is targeted on general neurologists and shall contribute to more accurate diagnostics of epilepsy in the everyday clinical practice.

Teaching Course 15: Eye movements and vestibular function in critical care, emergency and ambulatory neurology – Level 2

Chairperson:
Alessandra Rufa (Siena, Italy)

• Eye movements and vestibular function in critical care and emergency neurology
Alexander Tarnutzer (Baden, Switzerland)

• Eye movements in cognitive and neurodegenerative disorders
Chrystalina Antoniades (Oxford, United Kingdom)

• Eye Movements in muscles, nerves, neuromuscular junction, and functional neurological disorders
Alessandra Rufa (Siena, Italy)

Educational Content:
The first lecture will start with basic examination of eye movement and vestibular function, and identification of basic deficits in oculomotor and vestibular function. This will then lead to disorders of oculomotor and vestibular function in critical care and emergency neurology.
The second lecture will discuss disorders of oculomotor and vestibular function in dementias, parkinsonism, cerebellar ataxia, and prion diseases.
The third lecture will discuss disorders of oculomotor and vestibular function in myopathies, neuropathies, neuromuscular disorders, and functional neurological disorders.
Teaching Course 16: Traumatic Brain Injury, stroke and subarachnoid haemorrhage – How to make an impact in neurocritical care management and research – Level 2

Chairperson:
Ronny Beer (Innsbruck, Austria)

- Acute management of TBI, including an outlook on forthcoming TBI trials
  Ronny Beer (Innsbruck, Austria)

- Neuroimaging, CSF and plasma biomarkers in TBI
  Virginia Newcombe (Cambridge, United Kingdom)

- Spreading depolarizations and spreading ischemia in TBI, stroke and SAH
  Sebastian Major (Berlin, Germany)

- Hypothermia for TBI, anoxic ischemic encephalopathy and stroke
  Bernd Kallmuenzer (Erlangen, Germany)

Educational Content:
Acute traumatic brain injury (TBI) and Subarachnoid haemorrhage (SAH) are usually considered the domain of neurosurgeons. However, neurologists can make an impact and should get more involved. This Teaching Course starts with a clinical overview of the state-of-the-art management of TBI in the intensive care setting, including data from recent TBI management trials, followed by a comprehensive review of new advancements in neuroimaging and biomarkers. We then give a detailed account of the pathophysiological mechanisms in TBI, SAH and stroke, with particular emphasis on spreading depolarisations and spreading ischemia. Finally, data from recent trials on hypothermia in TBI and other neurocritical care conditions will be presented.

Teaching Course 17: Congenital myasthenic syndromes and the myotonic dystrophies: Diagnostics and possible treatment – Level 3

Chairpersons:
Sissel Løseth (Tromsø, Norway)
Kristin Ørstavik (Oslo, Norway)

- Congenital myasthenic syndromes (CMS) – clinical and genetic variety and possible treatment
  Jacqueline Palace (Oxford, United Kingdom)

- The role of Clinical neurophysiology in diagnosing CMS and Myotonic disorders
  Sissel Løseth (Tromsø, Norway)

- Myotonic dystrophy 1 and 2 (DM1 and 2) – diagnosis, recommendations for care and future treatment options
  Cornelia Kornblum (Bonn, Germany)

- Interview with a patient and a care-giver on the impacts of Myotonic dystrophy 1
  Kristin Ørstavik (Oslo, Norway)

Educational Content:
The participants will get an update on the latest knowledge on genetic variants of CMS and learn how the symptoms are reflected in the different genetic subtypes both in children and adults. They will learn how clinical neurophysiology can be used in diagnosing CMS and hear about the latest advances in treatment of these rare conditions. In the second part we will focus on DM1 and 2 giving a short overview of diagnostics including clinical neurophysiology. This part will focus on the new recommendations for follow-up especially in DM1 and to what extent these conditions affect many organs and thereby leads to a huge impact both on patients and their care-givers. Possible future treatment options are discussed. We will end this TC with an interview with a young man with DM1 and a lecture from a woman who wrote a book about living with DM1 in the family.

Teaching Course 18: Testing of cognitive functions by the neurologist – Level 1

Chairperson:
Armin Schnider (Geneva, Switzerland)

- Testing cognitive functions with a view on anatomy
  Armin Schnider (Geneva, Switzerland)

- Clinical dementia testing: methods and meaning
  Eric Salmon (Liège, Belgium)

- How to explore confused patients
  Jacques Luauté (Lyon, France)

- When standardised neuropsychological testing is needed
  Lisa Cipolotti (London, United Kingdom)

- Discussion, Q&A
  All speakers

Educational Content:
While the physical exam is a standard part of neurological training, many neurologists do not feel at ease when it comes to evaluating cognitive dysfunctions. This teaching course presents methods to clinically explore cognitive functions and to interpret the results with comparable functional and anatomical reliability as the physical exam. It covers the following topics:
- Mental status testing by the neurologist (“bedside testing“): methods to test cognitive functions and anatomical significance of the results.
- Mental testing of patients suspected of suffering from a dementing illness: what tests are useful, what questions can they answer, and what do the results mean?
- Methods to explore patients with disturbed consciousness and patients in a confusional state (delirium). How should these states be documented to follow the clinical course of the patients?
When is it necessary to have standardized and quantified evaluation of cognitive functions? In what ways does it differ from “bedside testing” by the neurologist?

All lectures will use examples of clinical cases.

The teaching course should be of interest to neurologists in training and to established neurologists who do not (yet) feel at ease when it comes to evaluating cognitive dysfunctions.

15:00 – 16:30
Room Lisbon

**Controversy 3:** Controversies in pain research: small fiber pathology and fibromyalgia, objective markers of pain

**Chairperson:**
Nadine Attal
(Boulogne Billancourt, France)

- **PRO:** Small-fiber pathology:
  Could it account for fibromyalgia?
  Nurcan Üceyler (Würzburg, Germany)

- **CON:** Small-fiber pathology:
  Could it account for fibromyalgia?
  Andrea Truini (Rome, Italy)

**Tuesday, 2 July**
13:00 – 16:30

- **PRO:** Is there an objective imaging marker of pain?
  Ulrike Bingel (Hamburg, Germany)

- **CON:** Is there an objective imaging marker of pain?
  André Mouraux (Louvain, Belgium)

**Educational Content:**
Part 1: Fibromyalgia has been shown to be associated with small-fiber pathology. The question is whether there is a causal link between the two conditions. The two speakers will present opposing views.
Part 2: Pain is clearly subjective. Imaging represents a new method to look into a black box. The question is whether imaging tools can be used as an objective marker for the subjective response pain. The two speakers will present opposing views.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Room</th>
<th>Presentations</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30 – 10:00</td>
<td>Oral Session</td>
<td>Room Svalbard</td>
<td><strong>Late breaking News</strong>&lt;br&gt;Chairpersons: Nils Erik Gilhus (Bergen, Norway) Marie Vidailhet (Paris, France)&lt;br&gt;Presentations will be announced in the online programme.</td>
</tr>
<tr>
<td>08:30 – 10:00</td>
<td>Oral Session</td>
<td>Room Berlin</td>
<td><strong>Epilepsy 2</strong>&lt;br&gt;Chairpersons: Dag Aurlien (Stavanger, Norway) Louise Tyvaert (Nancy, France)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>08:30</td>
</tr>
<tr>
<td>08:30 – 10:00</td>
<td>Oral Session</td>
<td>Room Amsterdam</td>
<td><strong>MS and related disorders 2</strong>&lt;br&gt;Chairpersons: Elisabeth Celsiu (Oslo, Norway) Bernhard Hemmer (Munich, Germany)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>08:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>08:45</td>
</tr>
<tr>
<td>08:30 – 10:00</td>
<td>Oral Session</td>
<td></td>
<td>09:00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>08:45</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>09:15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>09:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>09:45</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10:00</td>
</tr>
</tbody>
</table>
08:45 – 10:00
Room Jan Mayen 1

Movement disorders 3

Chairpersons:
Inge Marie Skogserd (Oslo, Norway)
Evžen Růžička (Prague, Czech Republic)

08:45 | O4114
Efficacy of ND0612 for nocturnal problems and early morning OFF: A blinded rater study of 2 dosing regimens
F. Stocchi1, W. Poewe2, S. Oren3, C. Durlach4, K. Kieburtz5, C. Olanow6
1Rome, Italy, 2Innsbruck, Austria, 3Rehovot, Israel, 4Rehovot, France, 5Rochester, USA, 6New York, USA

09:00 | O4115
Cortical FDG-PET patterns predict long-term motor progression and disability milestones in Parkinson’s disease
A. Pilotto1, A. Imarisio1, E. Premi1, S. P. Caminiti1, L. Presotto2, A. Sala3, R. Turrone3, R. Grasso4, A. Alberici5, B. Paghera6, M. C. Rizzetti1, B. Borroni1, D. Perani1, A. Padovani1
1Brescia, Italy, ‘Milan, Italy

09:15 | O4116
Design of an open-label, adaptive multiple-dose study to investigate the PK/PD of RG6042 in CSF and plasma following intrathecal administration in patients with HD
P. Sanwald Ducray1, E. J Wild2, A. Portron3, Y. Yamamoto4, K. Marsh5, G. Palermo6, L. Boak7, S. Schobel8
1Basel, Switzerland, 2London, United Kingdom, 3Welwyn Garden City, United Kingdom

09:30 | O4117
Camptocormia in Parkinson’s disease – impaired kinesthesial of the trunk extensors
R. Wolke, J. Kuhtz-Buschbeck, G. Deuschl, N. G. Margraf
Kiel, Germany

09:45 | O4118
Structural changes in non-manifesting GBA mutation carriers and GBA mutation carriers with Parkinson’s disease
T. Yousaf, M. Kershaw, V. C. Suarez Contreras, G. Pagano, P. Vickers, M. Politis
London, United Kingdom
What we do

- Advance knowledge of Huntington’s disease
- Support the development of better therapeutic interventions
- Improve the quality of life of people affected by HD

What you can do

- Share your knowledge and ideas
- Become part of the HD research community
- Help us improve treatment and care for HD families

Join us for the EHDN2020 Plenary Meeting in Bologna, Italy, 10 – 12 September 2020

ADVANCES IN ALZHEIMER’S AND PARKINSON’S THERAPIES
AN AAT-AD/PD™ FOCUS MEETING

2-5 APRIL 2020 | VIENNA, AUSTRIA
www.aat-adpd.kenes.com

ORGANIZING COMMITTEE
Ezio Giacobini, Switzerland, Co-President
Gabriel Gold, Switzerland, Executive Organizer
Abraham Fisher, Israel, Co-President
Roger M. Nitsch, Switzerland, Executive Organizer
Manfred Windisch, Austria, Executive Organizer
ISNI 2020
15th International Congress of Neuroimmunology
2-6 November 2020
NICE FRANCE

SAVE THE DATE

International Society of Neuroimmunology

NEURODEGENERATIVE DISORDERS
JOURNALS COLLECTION

Premier peer-reviewed journals dedicated to advancing research in neurodegenerative disorders

iospress.com/neurodegen
900,000,000 brains

45,000 members

1 community

47 countries

Great Minds.

European Academy of Neurology
The MS Knowledge Hub for training and thought leadership in MS

Join ECF eLearning to access a varied collection of webinars:
- Updates by key opinion leaders on a specific topic
- Critical reviews of new data presented at ECTRIMS and EAN
- Annual Meeting lectures

To receive a 12 MONTH FREE ACCESS.
SUBSCRIBE NOW with coupon code "EAN2019".

The Role of B-Lymphocytes in Multiple Sclerosis

Attend the Annual Meeting to exchange views with fellow professionals and thought leaders in MS:
- Discuss the most recent research progresses
- Create opportunities for collaborations
- Share ideas and build relationships

21 - 23 November 2019
Grand Hotel Dino, Baveno, Italy

VISIT www.charcot-ms.org TO SUBSCRIBE and/or TO SECURE YOUR SEAT!
Industry Sponsored Programme
There is no MRI for quality of life

Treat the whole life of your MS patient, not just their symptoms.

Consider new perspectives on quality of life at the Sanofi Genzyme stand today.
Acknowledgements

We wish to express our gratitude to the following companies, who contributed to the success at EAN 2019.

Premium Sponsor

Biogen
MERCK
NOVARTIS
Roche
SANOFI GENZYME
Teva

Major Sponsor

Bial
Celgene
Lilly

Top Sponsor

abbvie
AKCEA THERAPEUTICS
ALEXION
Alnylam
AveXis
EVER PHARMA
Sunovion
UCB
Zambon

Contributor

Janssen Neuroscience
LivaNova
medDay
natus.
Pfizer
### Exhibitors

<table>
<thead>
<tr>
<th>Name</th>
<th>Booth Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>AbbVie</td>
<td>C57</td>
</tr>
<tr>
<td>Adelphi Communications</td>
<td>C56</td>
</tr>
<tr>
<td>Aequus Research Ltd</td>
<td>C22</td>
</tr>
<tr>
<td>AFAN</td>
<td>C30</td>
</tr>
<tr>
<td>Akcea Therapeutics</td>
<td>C66</td>
</tr>
<tr>
<td>Alexion</td>
<td>C20</td>
</tr>
<tr>
<td>Alylam</td>
<td>C11</td>
</tr>
<tr>
<td>American Academy of Neurology</td>
<td>C62</td>
</tr>
<tr>
<td>AveXis</td>
<td>C33</td>
</tr>
<tr>
<td>BIAL</td>
<td>C8</td>
</tr>
<tr>
<td>Biogen</td>
<td>C2</td>
</tr>
<tr>
<td>Bioprojet</td>
<td>C17</td>
</tr>
<tr>
<td>Boston Scientific</td>
<td>C38</td>
</tr>
<tr>
<td>British Medical Journal</td>
<td>C31</td>
</tr>
<tr>
<td>CeGat GmbH</td>
<td>C37</td>
</tr>
<tr>
<td>Celgene International</td>
<td>C10</td>
</tr>
<tr>
<td>Cephalon - Scan-Med. als Norway</td>
<td>C58</td>
</tr>
<tr>
<td>Deymed Diagnostic SRO</td>
<td>C43</td>
</tr>
<tr>
<td>Dystonia Europe</td>
<td>C50</td>
</tr>
<tr>
<td>ECTRIMS</td>
<td>C15</td>
</tr>
<tr>
<td>EFAS</td>
<td>C24</td>
</tr>
<tr>
<td>EFIC - European Pain Federation</td>
<td>C32</td>
</tr>
<tr>
<td>EFNA</td>
<td>C52</td>
</tr>
<tr>
<td>EFNR/WFNW</td>
<td>C46</td>
</tr>
<tr>
<td>EHDN</td>
<td>C44</td>
</tr>
<tr>
<td>Eli Lilly</td>
<td>C13</td>
</tr>
<tr>
<td>EpiCare</td>
<td>C60</td>
</tr>
<tr>
<td>ERN NEURO-NMD</td>
<td>C61</td>
</tr>
<tr>
<td>ERN RND</td>
<td>C61</td>
</tr>
<tr>
<td>ESNCH</td>
<td>C67</td>
</tr>
<tr>
<td>European Brain Council</td>
<td>C28</td>
</tr>
<tr>
<td>European Charcot Foundation</td>
<td>C29</td>
</tr>
<tr>
<td>European Headache Federation</td>
<td>C47</td>
</tr>
<tr>
<td>Ever Neuro Pharma GmbH</td>
<td>C14</td>
</tr>
<tr>
<td>g.tec medical engineering GmbH</td>
<td>C64</td>
</tr>
<tr>
<td>Hoffmann-La Roche</td>
<td>C5/C7</td>
</tr>
<tr>
<td>ICNMD</td>
<td>C25</td>
</tr>
<tr>
<td>Icometrix</td>
<td>C59</td>
</tr>
<tr>
<td>Impeto Medical</td>
<td>C18</td>
</tr>
<tr>
<td>Janssen Neuroscience</td>
<td>C36</td>
</tr>
<tr>
<td>Journal of Medicine and Life</td>
<td>C27</td>
</tr>
<tr>
<td>Karger Publishers</td>
<td>C32</td>
</tr>
<tr>
<td>Livanova</td>
<td>C23b</td>
</tr>
<tr>
<td>Medday Pharmaceuticals SA</td>
<td>C34</td>
</tr>
<tr>
<td>Merck</td>
<td>C9/C35</td>
</tr>
<tr>
<td>Mitsubishi Tanabe Pharma</td>
<td>C51</td>
</tr>
<tr>
<td>Movement Disorders Society</td>
<td>C65</td>
</tr>
<tr>
<td>Natus Medical Incorporated</td>
<td>C48</td>
</tr>
<tr>
<td>Novartis Pharma AG</td>
<td>C1/C3</td>
</tr>
<tr>
<td>OPTOMED OY</td>
<td>C63</td>
</tr>
<tr>
<td>Pfizer</td>
<td>C40</td>
</tr>
<tr>
<td>Pharnext</td>
<td>C55</td>
</tr>
<tr>
<td>PTC Therapeutics</td>
<td>C21</td>
</tr>
<tr>
<td>Quanterix</td>
<td>C42</td>
</tr>
<tr>
<td>Retrophin Europe Limited</td>
<td>C45</td>
</tr>
<tr>
<td>Sanofi Genzyme</td>
<td>C6</td>
</tr>
<tr>
<td>Teva</td>
<td>C4a/C4b</td>
</tr>
<tr>
<td>Turkish Neurological Society</td>
<td>C19</td>
</tr>
<tr>
<td>Veriton</td>
<td>C49</td>
</tr>
<tr>
<td>Wiley</td>
<td>C23a</td>
</tr>
<tr>
<td>Wisepress</td>
<td>C39</td>
</tr>
<tr>
<td>Wolters Kluwer</td>
<td>C54</td>
</tr>
<tr>
<td>World Federation of Neurology (WFN/WCN)</td>
<td>C16</td>
</tr>
<tr>
<td>Zambon</td>
<td>C12</td>
</tr>
<tr>
<td>Zero Gravity Skin</td>
<td>C53</td>
</tr>
</tbody>
</table>
An invitation to physicians and nurses to attend a Satellite Symposium at the 5th EAN Congress, sponsored by Novartis

Calcitonin gene-related peptide monoclonal antibodies for migraine prevention:
What the neurologist needs to know

Saturday 29 June 2019
13:00–14:30
Room Lisbon
Norges Varemesse
Lillestrøm, Norway

This event is organised in accordance with The Association of the Pharmaceutical Industry (LMI) in Norway's local code. Novartis does not cover any costs related to your attendance at the event. Novartis may offer a light meal/refreshments at the event in accordance with local code.

Novartis processes personal data in accordance with the Personal Information Act and GDPR. We respect your rights to access the personal information stored about you. You have the right to correct or request deletion of such information, as well as requesting the removal of personal data about you. Please contact dataprivity.nordics@novartis.com or visit www.novartis.no.

Welcome and introduction
Dr Andreas Gantenbein (RehaClinic, Bad Zurzach, Switzerland)

How novel targets are changing migraine prevention
Dr Patricia Pozo Rosich (Vall d’Hebron University Hospital, Barcelona, Spain)

Who is the right patient for migraine prevention with calcitonin gene-related peptide monoclonal antibodies?
Dr Andreas Gantenbein and Professor Dr Heinz Wiendl (University Hospital Münster, Münster, Germany)

A patient perspective: living with calcitonin gene-related monoclonal antibodies and why they make a difference
Audrey Craven (Migraine Association of Ireland, Dublin, Ireland)

Managing migraine prevention in every-day practice
Dr Jack Schim (University of California San Diego and The Neurology Center of Southern California, CA, USA) and Dr Peter McAllister (New England Institute for Neurology and Headache, Stamford, CT, USA)

Panel discussion and Q&A
Moderated by Dr Andreas Gantenbein and Dr Patricia Pozo Rosich

Closing remarks
Dr Patricia Pozo Rosich
GENE THERAPY IN NEUROMUSCULAR DISEASES:
A JOURNEY FROM BENCH TO BEDSIDE

Saturday 29 June 2019, 13:00 – 14:30
Svalbard Room
Norges Varemesse
Lillestrøm, Norway
(Lunch boxes will be provided)

Faculty:
Dr Sean Wallace (Chair)
Dr Brian Kaspar
Prof Eugenio Mercuri
Joana Claverol

This AveXis-sponsored satellite symposium at the 5th EAN Congress will explore the latest advances in gene therapy (GT) research and its potential application for treating neuromuscular diseases in clinical practice, thereby taking the treatment from bench to bedside. Experts will also explore the clinical practicalities and considerations of GT as a real-world treatment.

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:00 – 13:05</td>
<td>Welcome and introduction</td>
<td>Dr Sean Wallace (Chair)</td>
</tr>
<tr>
<td>13:05 – 13:25</td>
<td>Delivering cutting-edge science in neurology</td>
<td>Dr Brian Kaspar</td>
</tr>
<tr>
<td>13:25 – 13:45</td>
<td>The impact of gene therapy on clinical practice</td>
<td>Prof Eugenio Mercuri</td>
</tr>
<tr>
<td>13:45 – 14:05</td>
<td>Practical considerations for the management of gene therapy</td>
<td>Joana Claverol</td>
</tr>
<tr>
<td>14:05 – 14:25</td>
<td>Speaker panel discussion</td>
<td>All faculty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Facilitated by Chair</td>
</tr>
<tr>
<td>14:25 – 14:30</td>
<td>Symposium close</td>
<td>Dr Sean Wallace</td>
</tr>
</tbody>
</table>
Our mission is to leverage cannabinoid science. We recognize the needs of patients and their caregivers and use these insights to guide our research programs.

GW Pharmaceuticals is committed to evaluating new treatment options in neurology, oncology and psychiatric illness.

GW Pharmaceuticals is a biopharmaceutical company developing novel medicines in a broad range of disease states.
Alnylam-Sponsored Symposium at the
European Academy of Neurology (EAN) 2019 Congress
Oslo, Norway | Saturday, 29 June 2019 | 13:00–14:30 | Jan Mayen 1

hATTR AMYLOIDOSIS
UNRAVELED:
Linking a Mixed Presentation to One Disease

FACULTY

Symposium Chair: Yesim G. Parman, MD
Professor of Neurology
Istanbul University
Istanbul Faculty of Medicine
Neurology Department
Neuromuscular Unit

Theodorus Kyriakides, MB, ChB, BSc (Hons), FRCP (Lon)
Senior Consultant Neurologist
Head of Clinic A, Director of Neuropathology Lab
Professor, Cyprus School of Molecular Medicine
Cyprus Institute of Neurology and Genetics
Professor of Neurology University of Nicosia

Astrid J. Terkelsen, MD, DrMedSc, PhD
Associate Professor
Danish Pain Research Center and
Department of Neurology
Aarhus University Hospital

JOIN US TO LEARN ABOUT
the multisystem manifestations and high burden of disease in patients with hereditary transthyretin-mediated (hATTR) amyloidosis

AGENDA
• A Mixed Spectrum of One Disease
• The Genetics of a Multisystem Hereditary Disease
• The Range of Polyneuropathy: A Deeper Look at Autonomic Manifestations
NOVARTIS
Calcitonin gene-related peptide monoclonal antibodies for migraine prevention: what the neurologist needs to know

Chairpersons:
Patricia Pozo Rosich (Barcelona, Spain)
Andreas Gantenbein (Bad Zurzach, Switzerland)

• Welcome and Introductions
  Andreas Gantenbein (Bad Zurzach, Switzerland)

• How novel targets are changing migraine prevention
  Patricia Pozo Rosich (Barcelona, Spain)

• Who is the right patient for migraine prevention with Calcitonin gene-related peptide monoclonal antibodies?
  Andreas Gantenbein (Bad Zurzach, Switzerland)
  Heinz Wiendl (Münster, Germany)

• A patient perspective: living with Calcitonin gene-related peptide monoclonal antibodies and why they make a difference
  Audrey Craven (Dublin, Ireland)

• Managing migraine prevention in every-day practice
  Jack Schim (San Diego, USA)
  Peter McAllister (Stamford, USA)

• Panel Q&A
  All, facilitated by Patricia Pozo Rosich (Barcelona, Spain) and Andreas Gantenbein (Bad Zurzach, Switzerland)

• Summary
  Patricia Pozo Rosich (Barcelona, Spain)

BIOGEN
Multiple Sclerosis diagnostic challenges and cognitive impairment in a changing world

Chairperson:
Trygve Holmøy (Oslo, Norway)

• Introduction
  Trygve Holmøy (Oslo, Norway)

• Changing demographics: diagnostic challenges and Multiple Sclerosis mimickers
  Bassem Yamout (Beirut, Lebanon)
  Majda Thurnher (Vienna, Austria)

• Q&A

• Recommendations for cognitive screening: reality or utopia?
  Ralph Benedict (New York, USA)
  Carlo Tornatore (Washington DC, USA)

• Closing
  Trygve Holmøy (Oslo, Norway)
13:00 – 14:30
Room Svalbard

AVEXIS
Gene therapy in neuro-muscular diseases: a journey from bench to bedside

Chairperson:
Sean Wallace (Oslo, Norway)

• Welcome and introduction
  Sean Wallace (Oslo, Norway)

• Delivering cutting-edge science in neurology
  Brian Kaspar (Columbus, USA)

• The impact of gene therapy on clinical practice
  Eugenio Mercuri (Rome, Italy)

• Practical considerations for the management of gene therapy
  Joana Claverol (Barcelona, Spain)

• Speaker panel discussion
  All faculty, facilitated by chair

• Symposium close
  Sean Wallace (Oslo, Norway)

13:00 – 14:30
Room Jan Mayen 1

ALNYLAM PHARMACEUTICALS
Hereditary transthyretin amyloidosis (hATTR) Unraveled: Linking a Mixed Presentation to One Disease

Chairperson:
Yesim G. Parman (Istanbul, Turkey)

• A Mixed Spectrum of One Disease
  Theodoros Kyriakides (Nicosia, Cyprus)

• The Genetics of a Multisystem Hereditary Disease
  Yesim G Parman (Istanbul, Turkey)

• The Range of Polyneuropathy:
  A Deeper Look at Autonomic Manifestations
  Astrid J. Terkelsen (Aarhus, Denmark)
Relentless in MS: the continuing mission to stop disease activity

Sunday 30 June, 12:15–13:15
Room Lisbon,
Norway Convention & Exhibition Centre,
Oslo, Norway

Chair’s opening and welcome
Prof. Kjell-Morten Myhr (University of Bergen, Bergen, Norway)

Early warnings: can we do more for younger patients with MS?
Dr Kumaran Deiva (University Hospitals of Paris-Sud, France)

Signal to noise: how do we better detect the transition to SPMS?
Dr Martin Duddy (Newcastle University, Newcastle, UK)

Focusing our efforts: how can we meet the individual needs of our patients?
Prof. Amit Bar-Or (University of Pennsylvania, Philadelphia, USA)

Q&A and closing remarks
All faculty

This event is organized in accordance with The Association of the Pharmaceutical Industry (LMI) in Norway’s local code. Novartis does not cover your costs related to attending the event. Novartis may offer a light meal/refreshments at event in accordance with local code. Novartis processes personal data in accordance with Personal Information Act and GDPR. We respect your rights to access the personal information stored about you. You have the right to request correcting or deleting such information, as well as requesting the removal of personal data about you, please contact dataprivacy.nordics@novartis.com or visit www.novartis.no.
We invite you to come along to our Satellite Symposia at the 5th EAN Congress. Whether you have an interest in Multiple Sclerosis or Spinal Muscular Atrophy, we have some hot topics and expert presenters to keep you informed. Choose your area of interest from the timetables presented.

### Multiple Sclerosis Satellite Symposium

**MS diagnostic challenges and cognitive impairment in a changing world**

Oslo, Saturday June 29th – 13.00-14.30 – Room Paris, Norges Varemesse congress centre

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:00-13:10</td>
<td>Introduction Chair</td>
<td>Trygve Holmøy (Chair) Akershus University Hospital, Lørenskog, Norway</td>
</tr>
<tr>
<td>13:10-13:50</td>
<td>Changing demographics: diagnostic challenges and MS mimickers</td>
<td>Bassem Yamout (American University of Beirut, Beirut, Lebanon) Majda Thurnher (Medical University of Vienna, Vienna, Austria)</td>
</tr>
<tr>
<td>13:50-13:55</td>
<td>Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>13:55-14:25</td>
<td>Recommendations for cognitive monitoring: reality or utopia?</td>
<td>Ralph Benedict (Jacobs School of Medicine and Biomedical Sciences University of Buffalo, Buffalo, NY) Carlo Tornatore (Georgetown University Medical Center, Washington, DC)</td>
</tr>
<tr>
<td>14:25-14:30</td>
<td>Closing Chair</td>
<td>Trygve Holmøy (Chair) Akershus University Hospital, Lørenskog, Norway</td>
</tr>
</tbody>
</table>

### Spinal Muscular Atrophy Satellite Symposium

**Spinal muscular atrophy in adults: patient management in the new therapeutic area**


<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:15-12:20</td>
<td>Welcome and introduction</td>
<td>Valeria Sansone (Chair) NEuroMuscular Omnicentre (NEMO), Milan, Italy</td>
</tr>
<tr>
<td>12:20-12:35</td>
<td>Natural history studies and real-world evidence in treated adults</td>
<td>Susanne Petri (Hannover Medical School, Hannover, Germany)</td>
</tr>
<tr>
<td>12:35-12:50</td>
<td>Transition of care from paediatrics to adults</td>
<td>Valeria Sansone (NEuroMuscular Omnicentre (NEMO), Milan, Italy)</td>
</tr>
<tr>
<td>12:50-13:05</td>
<td>How can we manage patients’ treatment expectations in later-onset SMA?</td>
<td>Vivian Drory (Tel Aviv Sourasky Medical Center, Tel Aviv, Israel)</td>
</tr>
<tr>
<td>13:05-13:15</td>
<td>Discussion and Q&amp;A</td>
<td>All faculty</td>
</tr>
</tbody>
</table>
NOVEL TALES OF THE UNEXPECTED: UNCOVERING THE PATH TO EARLIER DIAGNOSIS IN NEUROMUSCULAR DISEASES

SUNDAY 30 JUNE 2019, 13:00–14:30
Sør Norge, Thon Hotel, Norges Varemesse, Lillestrøm

Satellite Symposium at the 5th EAN Congress
Oslo, 29 June–2 July, 2019
Teva-sponsored satellite symposium at the 5th EAN Congress

Optimism and opportunities with anti-CGRP biologics in migraine
- where are we today?

Sunday, 30 June 2019
13:45–14:45
Room Lisbon

Programme

Migraine in 2019: what are the greatest unmet needs?
Messoud Ashina, Denmark

Anti-CGRP biologics: a new era for migraine prevention
Anthony Dickenson, UK

Changing pathways, changing lives: taking control of migraine management
Zaza Katsarava, Germany

The right treatment for the right patients
Patricia Pozo Rosich, Spain

Closing remarks
Messoud Ashina, Denmark
Satellite Symposia Programmes

12:15 – 13:15
Room Lisbon

NOVARTIS
Relentless in Multiple Sclerosis:
the continuing mission to stop disease activity

Chairperson:
Kjell-Morten Myhr (Bergen, Norway)

• Chair’s opening and welcome
  Kjell-Morten Myhr (Bergen, Norway)

• Early warnings: can we do more for younger patients with
  Multiple Sclerosis?
  Kumaran Deiva (Le Kremlin Bicetre, France)

• Signal to noise: how do we better detect the transition to
  Secondary progressive Multiple Sclerosis?
  Martin Duddy (Newcastle, United Kingdom)

• Focusing our efforts: how can we meet the individual needs
  of our patients?
  Amit Bar-Or (Philadelphia, USA)

• Q&A and closing remarks
  All faculty

12:15 – 13:15
Room Jan Mayen 1

BIOGEN
Spinal muscular atrophy in adults: patient
management in the new therapeutic era

Chairperson:
Valeria Sansone (Milan, Italy)

• Opening and introduction
  Valeria Sansone (Milan, Italy)

• Natural history studies and real-world evidence in
  treated adults
  Susanne Petri (Hannover, Germany)

• Transition of care from paediatrics to adults
  Valeria Sansone (Milan, Italy)

• How can we manage patients’ treatment expectations
  in later-onset spinal muscular atrophy?
  Vivian Drory (Tel Aviv, Israel)

• Discussion and Q&A
  All faculty
SANOFI GENZYME
Novel tales of the unexpected: Uncovering the path to earlier diagnosis in muscular diseases

Chairperson:
Peter Young (Bad Feilnbach, Germany)

• Symposium introduction
Peter Young (Bad Feilnbach, Germany)

• Case 1: Unknown progressive respiratory insufficiency
Stephan Wenninger (Munich, Germany)

• Case 2: Obstacles on the road to diagnosis
Anthony Behin (Paris, France)

• Case 3: Magnetic Resonance Imaging: the magnifying glass of accurate diagnosis
Jordi Diaz Manera (Barcelona, Spain)

• Muscle disease diagnosis: an exercise in deduction
Peter Young (Bad Feilnbach, Germany)

• Closing remarks/take home messages
Peter Young (Bad Feilnbach, Germany)

TEVA
Optimism and opportunities with anti-CGRP (Calcitonin Gene-Related Peptide) biologics in migraine – where are we today?

Chairperson:
Messoud Ashina (Copenhagen, Denmark)

• Migraine in 2019: what are the greatest unmet needs?
Messoud Ashina (Copenhagen, Denmark)

• Anti-CGRP (Calcitonin Gene-Related Peptide) biologics: a new era for migraine prevention
Anthony Dickenson (London, United Kingdom)

• Changing pathways, changing lives: taking control of migraine management
Zaza Katsarava (Unna, Germany)

• The right treatment for the right patients
Patricia Pozo-Rosich (Barcelona, Spain)

• Closing remarks
Messoud Ashina (Copenhagen, Denmark)
The MS paradigm – Can we do better?

Sunday 30 June 2019
13:45 - 14:45
Room Paris

Refreshments will be served

Expert panel:
Gavin Giovannoni (UK)
Ralf Gold (DE)
Patrick Vermersch (FR)

Join us to discuss:
- Can we minimise time to diagnosis and treatment initiation?
- What are the implications of early, high-efficacy treatment?
- How can regular monitoring and holistic MS care preserve long-term patient function?
BEYOND MOTOR WEARING-OFF:
WHAT HAVE WE LEARNED?

AGENDA

Professor Werner Poewe
INNSBRUCK, AUSTRIA
Chairman's introduction

Professor Angelo Antonini
PADUA, ITALY
The spectrum of wearing-OFF: motor features

Professor K Ray Chaudhuri
LONDON, UK
The spectrum of wearing-OFF: non-motor features

Professor Maria C Rodríguez Oroz
PAMPLONA, SPAIN
Non-invasive treatment options for wearing-OFF

Panel discussion

Lunch bags available for symposium attendees

Satellite Symposium at the 5th Congress of the European Academy of Neurology 2019

Sunday
30th June 2019
13:45–14:45

Svalbard Room
Norway Convention & Exhibition Centre, Oslo
Managing switching between high-efficacy treatments in relapsing multiple sclerosis: lessons from Cladribine Tablets

Celia Oreja-Guevara, Spain

16:15–16:30, Monday 1 July 2019
**Satellite Symposia Programmes**

**30**

**Sunday, 30 June**

**13:45 – 14:45**

**Room Paris**

**ROCHE**

The Multiple Sclerosis paradigm – can we do better?

**Expert panel:**

*Gavin Giovannoni (London, United Kingdom)*

*Ralf Gold (Bochum, Germany)*

*Patrick Vermersch (Lille Cedex, France)*

- Join us to discuss:
  - Can we minimise time to diagnosis and treatment initiation?
  - What are the implications of early, high-efficacy treatment?
  - How can regular monitoring and holistic Multiple Sclerosis care preserve long-term patient function?

**13:45 – 14:45**

**Room Svalbard**

**BIAL**

Beyond motor wearing-OFF: What have we learned?

**Chairperson:**

*Werner Poeue (Innsbruck, Austria)*

- **Introduction**

  Werner Poeue (Innsbruck, Austria)

- **The Spectrum of wearing-OFF:**

  **Motor features**

  *Angelo Antonini (Padua, Italy)*

- **The Spectrum of wearing-OFF:**

  **Non-motor features**

  *K. Ray Chaudhuri (London, United Kingdom)*

- **Non-invasive treatment options for wearing-OFF**

  *Maria C. Rodríguez-Oroz (Barakaldo, Spain)*

- **Panel discussion**

  *All*
Satellite Symposia Programmes

18:30 – 20:00
Room Lisbon

SUNOVION
From “OFF” To “ON” – Treating “OFF” Episodes In Parkinson’s Disease

Chairperson:
Fabrizio Stocchi (Rome, Italy)

• Phenomenology And Clinical Significance Of “OFF” Episodes in Parkinson’s Disease
  Werner Poewe (Innsbruck, Austria)

• Current Approaches To The Treatment Of “OFF” Episodes in Parkinson’s Disease
  Olivier Rascol (Toulouse Cedex, France)

• New Therapies For The Acute Treatment Of “OFF” Episodes In Parkinson’s Disease
  Fabrizio Stocchi (Rome, Italy)

• Panel Discussion
  All

18:30 – 20:00
Room Paris

ELI LILLY
Successfully navigating the practice of migraine prevention

Chairperson:
Manjit Matharu (London, United Kingdom)

• Chairman introduction – Guidelines (2019)
  Manjit Matharu (London, United Kingdom)

• Calcitonin Gene-Related Peptide monoclonal antibodies: What can we expect from treatment?
  Gisela Terwint (Leiden, The Netherlands)

• Patient outcomes and clinical assessment. How do I measure effect?
  Jan Brandes (Nashville, USA)

• Panel discussion, Questions & Answers and Close
  All faculty
Sunday, 30 June
18:30 – 20:00
Room Svalbard

UCB
Childhood to adulthood transition in Neurology: How to best orchestrate the transition within epilepsy

Chairperson:
Morten Lossius (Oslo, Norway)

• Chairman opening
Morten Lossius (Oslo, Norway)

• Challenges and solutions during the transition from childhood to adulthood in neurological disorders
Alessandro Simonati (Verona, Italy)

• How to ensure an holistic, seamless transition in epilepsy. Integrated perspectives on challenges and needs from the patient and the physician
Rima Nabbout (Paris, France)
Andreas Schulze-Bonhage (Freiburg, Germany)

• Facilitated discussion with Panel & Audience
Morten Lossius (Oslo, Norway)
Rima Nabbout (Paris, France)
Guido Rubboli (Dianalund, Denmark)
Susanne Schubert-Bast (Frankfurt, Germany)
Andreas Schulze-Bonhage (Freiburg, Germany)
Alessandro Simonati (Verona, Italy)
Caregiver

Satellite Symposium at the 5th EAN Congress

Successfully navigating the practice of migraine prevention

Sunday 30th June 2019 | 18:30 – 20:00 | Room Paris, Norges Varemesse | Oslo, Norway

SYMPOSIUM OBJECTIVES
• Review 2019 guidelines with focus on CGRP monoclonal antibodies
• Understand the clinical approach to treating migraine
• Discuss clinical meaningfulness of data and management

SYMPOSIUM CHAIR
Manjit Matharu, MD, PhD, FRCP (United Kingdom)

AGENDA
Manjit Matharu, MD, PhD, FRCP (United Kingdom)
18:45 – 19:15 CGRP monoclonal antibodies:
What can we expect from treatment?
Gisela Terwindt, MD, PhD (The Netherlands)
19:15 – 19:45 Patient outcomes and clinical assessment:
How do I measure effect?
Jan Brandes, MD (United States)
19:45 – 20:00 Panel discussion, questions & answers and close
All faculty
Satellite Symposia Programmes

**CELGENE**
Therapeutic Inertia in Multiple Sclerosis: A Call to Action!

**Chairperson:**
Xavier Montalban (Toronto, Canada)

- Welcome and Introductions
  Xavier Montalban (Toronto, Canada)
- What is Therapeutic Inertia in Multiple Sclerosis Care?
  Gustavo Saposnik (Toronto, Canada)
- Optimising Decision Making in Multiple Sclerosis to Overcome Therapeutic Inertia
  Volker Limmroth (Cologne, Germany)
- Defined Therapeutic Goals for Better Treatment Choices
  Patrick Vermersch (Lille, France)
- Meeting Close
  Xavier Montalban (Toronto, Canada)

**ZAMBON**
Optimizing levodopa therapy: searching for the evidence, looking beyond the data

**Chairpersons:**
Tove Henriksen (Copenhagen, Denmark)
Gaëtan Garraux (Liege, Belgium)

- How to manage Parkinson’s Disease progression: from evidence-based to empiric decision
  Javier Pagonabarraga (Barcelona, Spain)
- Interactive patient case series: treatment challenges in mid- to late-stage Parkinson’s Disease
  1. Early-fluctuating Parkinson’s Disease patient
  2. Fluctuating patient Parkinson’s Disease patient
  Gaëtan Garraux (Liege, Belgium)
- Take home messages
  Tove Henriksen (Copenhagen, Denmark)
AKCEA
Navigating the Accurate Diagnosis of Rare Neuropathies

Chairperson:
Ole Suhr (Umeå, Sweden)

- Embarking on a diagnostic journey: The importance of differential diagnosis in rare neuropathies
  Yesim Parman (Istanbul, Turkey)

- A compass to lead the way: The role of genetic testing in diagnosing hereditary neuropathies
  Violaine Planté-Bordeneuve (Créteil, France)

- In deep water: The risk and burden of hereditary transthyretin amyloidosis (hATTR) with polyneuropathy
  Ole Suhr (Umeå, Sweden)

- Stemming the tide: Monitoring polyneuropathy disease progression in the real world
  Márcio Neves Cardoso (Porto, Portugal)

- Questions & Answers

ALEXION
How can we improve patient outcomes in difficult-to-treat myasthenia gravis? An interactive discussion

Chairperson:
John Vissing (Copenhagen, Denmark)

- Welcome and introduction
  John Vissing (Copenhagen, Denmark)

- What does difficult-to-treat myasthenia gravis look like? A clinical guide
  John Vissing (Copenhagen, Denmark)

- What lies beneath? The pathophysiology and treatment of anti-AChR (Acetylcholine Receptor) antibody-positive myasthenia gravis
  Heinz Wiendl (Münster, Germany)

- Putting complement inhibition into practice: What does the evidence say?
  Saiju Jacob (Birmingham, United Kingdom)

- Panel discussion, questions and close
  All
In Multiple Sclerosis—
GREY MATTERS, TOO
Think White and Grey to Complete the Picture

Satellite Symposium at the 5th EAN Congress
Therapeutic Inertia in Multiple Sclerosis: A Call to Action!
Room Lisbon

Monday 1st July 2019, 12:15–13:15
Chair: Xavier Montalban – Toronto, Canada
What is Therapeutic Inertia in Multiple Sclerosis Care?
Gustavo Saposnik – Toronto, Canada
Optimising Decision Making in Multiple Sclerosis to Overcome Therapeutic Inertia
Volker Limmroth – Cologne, Germany
Defined Therapeutic Goals for Better Treatment Choices
Patrick Vermersch – Lille, France

3-Day Satellite Sessions at the 5th EAN Congress
Room Budapest

Saturday 29th June 2019, 16:15–16:45
How to Interpret Published Data?
Maria Pia Sormani – Genoa, Italy

Sunday 30th June 2019, 09:30–10:00
How to Apply McDonald 2017 Criteria?
Hans-Peter Hartung – Düsseldorf, Germany

Tuesday 2nd July 2019, 10:00–10:30
Are Brain Atrophy and Cognition Important in the Treatment of Early Multiple Sclerosis?
Dawn Langdon – London, UK
How can we improve patient outcomes in difficult-to-treat myasthenia gravis?

An interactive discussion

13:00–14:30, Monday 1 July 2019
Sør Norge, ground floor of the Thon Hotel Arena, Lillestrøm, Norway
Lunch will be provided

Lunchtime satellite symposium organized and sponsored by Alexion Pharmaceuticals on the occasion of the 5th European Academy of Neurology (EAN) congress, Lillestrøm, Norway

PROGRAM

13:00–13:15 Welcome and introduction
John Vissing (Denmark)

John Vissing (Denmark)

13:30–13:45 What lies beneath? The pathophysiology and treatment of anti-AChR antibody-positive myasthenia gravis
Heinz Wiendl (Germany)

13:45–14:00 Putting complement inhibition into practice: What does the evidence say?
Saiju Jacob (UK)

14:00–14:30 Panel discussion, questions and close
All
Satellite Symposia Programmes

**MERCK**
Recent advancements in the management of relapsing multiple sclerosis

**Chairpersons:**
Giancarlo Comi (Milano, Italy)
Elisabeth Celius (Oslo, Norway)

- Welcome and objectives
  Elisabeth Celius (Oslo, Norway)

- Family planning in multiple sclerosis
  Kerstin Hellwig (Bochum, Germany)

- Managing high disease activity in multiple sclerosis:
  what have we learned from Cladribine Tablets clinical trials?
  Bassem Yamout (Beirut, Lebanon)

- Cladribine Tablets: Nordic real-world experience
  Elisabeth Celius (Oslo, Norway)

- Concluding remarks and Q&A
  Giancarlo Comi (Milano, Italy)

**EVERPHARMA**
Innovative treatment options for Traumatic Brain Injuries (TBI)

**Chairperson:**
Erich Schmutzhard (Innsbruck, Austria)

- Treatment of traumatic brain injury (TBI) with Cerebrolysin - enhances neurological and cognitive recovery
  Michael Chopp (Detroit, USA)

- Challenges and Advances in Neurotrauma Treatment
  Martin Rakusa (Maribor, Slovenia)

- New Vistas in TBI Research - Results from CAPTAIN studies and the multidimensional methodology
  Johannes Vester (Krailling, Germany)
ABBVIE
Optimizing Care in Advanced Parkinson’s Disease – Past Insights, Current Practices, and Future Prospects

Chairperson:
Per Odin (Lund, Sweden)

• Welcome and Introductions
Per Odin (Lund, Sweden)

• Understanding the Progression and Burden of Advanced Parkinson’s Disease
Maja Trost (Ljubljana, Slovenia)

• Identification, Referral, and the Team Approach: Improving Patient Care
Angelo Antonini (Padua, Italy)

• Continuous Dopaminergic Stimulation: From Concept to Reality
Regina Katzenschlager (Vienna, Austria)

• Strategies for Treatment Selection: Which Device-Aided Therapy for Which Patient?
Robert Jech (Prague, Czech Republic)

• Panel Discussion
All

• Q & A
All
Current advancements in the management of relapsing multiple sclerosis

Co-chairs: Giancarlo Comi, Italy and Elisabeth Celius, Norway

13:45–14:45, Monday 1 July 2019
Room Lisbon, Norges Varemesse, Oslo, Norway

Welcome and objectives
Elisabeth Celius, Norway

Family planning in multiple sclerosis
Kerstin Hellweg, Germany

Managing high disease activity in multiple sclerosis: what have we learned from Cladribine Tablets clinical trials?
Bassem Yamout, Lebanon

Cladribine Tablets: Nordic real-world experience
Elisabeth Celius, Norway

Concluding remarks and Q&A
Giancarlo Comi, Italy
RNAi: Innovative Nobel Prize-winning technology that targets disease at its source

RNA interference (RNAi) harnesses a natural biological pathway for the regulation of gene expression.

How RNAi works


RNAi uses synthetic small interfering RNAs (siRNAs) to specifically target and degrade messenger RNA (mRNA) from the disease causing gene by complementary binding.

Visit Booth C11 to learn more about RNAi

Using synthetic siRNAs to directly suppress production of pathogenic proteins, RNAi is an innovative class of medicine that specifically targets the disease at its source.

References:

mRNA, messenger RNA; RISC, RNA-induced silencing complex; RNA, ribonucleic acid; RNAi, RNA interference; siRNA, small interfering RNA

Developed and produced by Alnylam Pharmaceuticals

© 2019 Alnylam Pharmaceuticals, Inc. All rights reserved
3-Days Satellite Sessions

Programme
TREATING THE BRAIN IN MS: A NO BRAINER?

Please join the Sanofi Genzyme 3-Day satellite session at the 5th EAN Congress

SATURDAY, 29 JUNE 2019, 10:00 - 10:30
Title: MS: Out of the Brain?
Speaker: Prof. Cristiana Granziera, Switzerland

SUNDAY, 30 JUNE 2019, 16:15 - 16:45
Title: Normal brain atrophy rates in MS, a Brainwave?
Speaker: Prof. Gavin Giovannoni, UK

MONDAY, 1 JULY 2019, 09:30 - 10:00
Title: Wrap your brain around quality of life in MS
Speaker: Prof. Veronica Popescu, Belgium

Location: Norges Varemesse, Room Helsinki
3-Days Satellite Session Programme

SANOFI GENZYME
Treating the brain in Multiple Sclerosis: no brainer?

Saturday, 29 June 2019
10:00 – 10:30
Room Helsinki
• Multiple Sclerosis, out of the Brain?
  Christina Granziera (Basel, Switzerland)

Sunday, 30 June 2019
16:15 – 16:45
Room Helsinki
• Normal brain atrophy rates in Multiple Sclerosis, a brainwave?
  Gavin Giovannoni (London, United Kingdom)

Monday, 01 July 2019
09:30 – 10:00
Room Helsinki
• Wrap your brain around quality of life in Multiple Sclerosis
  Veronica Popescu (Pelt, Belgium)
3-Days Satellite Session Programme

Saturday, 29 June 2019
16:15 – 16:45
Room Budapest

• How to Interpret Published Data?
  Maria Pia Sormani (Genoa, Italy)

Sunday, 30 June 2019
09:30 – 10:00
Room Budapest

• How to Apply McDonald 2017 Criteria?
  Hans-Peter Hartung (Düsseldorf, Germany)

Tuesday, 02 July 2019
10:00 – 10:30
Room Budapest

• Are Brain Atrophy and Cognition Important in the Treatment of Early Multiple Sclerosis?
  Dawn Langdon (London, United Kingdom)
From “OFF” To “ON” – Treating “OFF” Episodes In Parkinson’s Disease

Organized And Supported By Sunovion

Sunday, June 30
18:30 – 20:00
Optional hors d’oeuvres will be provided

Norges Varamesse – Norway Convention and Exhibition Centre
Room Lisbon

Program:

• Phenomenology And Clinical Significance Of “OFF” Episodes In Parkinson’s Disease
  Werner Poewe, MD, PhD (Austria)

• Current Approaches To The Treatment Of “OFF” Episodes In Parkinson’s Disease
  Olivier Rascol, MD, PhD (France)

• New Therapies For The Acute Treatment Of “OFF” Episodes In Parkinson’s Disease
  Fabrizio Stocchi, MD, PhD (Italy)

• Panel Discussion – All
Forum Talk

Programmes
Early Alzheimer’s disease: Towards drug-biomarker co-development

Speaker: Andrea Vergallo (France)
Saturday 29 June 2019
16:15 - 16:30
Scientific Theater (Exhibit Hall)

Understanding spinal muscular atrophy: How far have we come?

Speaker: Eugenio Mercuri (Italy)
Sunday 30 June 2019
16:15 - 16:30
Scientific Theater (Exhibit Hall)

Aware of rare: What’s new in Huntington’s disease?

Speaker: Bernhard Landwehrmeyer (Germany)
Monday 1 July 2019
09:45 - 10:00
Scientific Theater (Exhibit Hall)
Family planning for patients with multiple sclerosis

Kerstin Hellwig, Germany
16:30–16:45, Sunday 29 June 2019

Managing switching between high-efficacy treatments in relapsing multiple sclerosis: lessons from Cladribine Tablets

Celia Oreja-Guevara, Spain
16:15–16:30, Monday 1 July 2019

Interactions

Cladribine tablets may increase urine output/urinary tract infections, which may be apparent for cardiac function with other medicinal products, potentially leading to an increase in urinary tract infections. It is recommended that administration of any other medicinal product be started from that of MAVENCLAD at least 2 hours. Initiation of cladribine treatment is contraindicated in immunocompromised patients because of a risk of additive effects on the immune system. The use of MAVENCLAD with interferon beta results in an increased risk of lymphopenia. Additive haematological adverse reactions may be expected if cladribine is administered prior to or, in conjunction with, other substances that affect the haematopoietic profile. Treatment with MAVENCLAD should not be initiated within 4–6 weeks after vaccination with live or attenuated live vaccines because of a risk of active vaccine infection. Limitation of breast cancer occurrence post- (BCRP or ENT1) is in the gastrointestinal tract may increase the oral bioavailability and systemic exposure of cladribine. The bioavailability, intracellular distribution and renal elimination of cladribine may theoretically be altered by potent equilibrative nucleoside transporter (ENT1) and concentrative nucleoside (CNT3) transporter inhibitors. It is recommended that co-administration of potent ENT1, CNT3 or BCRP inhibitors be avoided. A possible difference in cladribine exposure should be considered if protein BCRP or BCRP inhibitors are co-administered. It is unknown whether cladribine may reduce the effectiveness of systemically acting hormonal contraceptives (see below).

Contraception

In women of childbearing potential, pregnancy must be excluded before initiation of cladribine treatment and for at least 6 months after the last dose. Women using systemically acting hormonal contraceptives should avoid the start of cladribine treatment and for at least 6 months after the last dose. Women using a barrier method or during pregnancy, should be advised to avoid the start of cladribine treatment. Cladribine could cause congenital malformations after administration during pregnancy. Studies in animals have shown reproductive toxicology. MAVENCLAD tablets should not be used during pregnancy. Women of childbearing potential, breast-feeding or planning to breast-feed must be advised to avoid breast-feeding (see below). Pregnancy, breast-feeding

Lactation

Before the start of treatment in Years 1 and 2, women of childbearing potential and male who could potentially father a child should be cautioned regarding the potential for serious risk to the fetus and the need for effective contraception. In women of childbearing potential, pregnancy must be excluded before the initiation of MAVENCLAD in Years 1 and 2, and breast-feeding is not recommended during treatment and for at least 6 months after the last dose. Women using systemically acting hormonal contraceptives should avoid the start of cladribine treatment and for at least 6 months after the last dose. Women using a barrier method or during pregnancy, should be advised to avoid the start of cladribine treatment. Cladribine could cause congenital malformations after administration during pregnancy. Studies in animals have shown reproductive toxicology. MAVENCLAD tablets should not be used during pregnancy. Women of childbearing potential, breast-feeding or planning to breast-feed must be advised to avoid breast-feeding (see below). Pregnancy, breast-feeding

Family planning for patients with multiple sclerosis

Kerstin Hellwig, Germany
16:30–16:45, Sunday 29 June 2019

Managing switching between high-efficacy treatments in relapsing multiple sclerosis: lessons from Cladribine Tablets

Celia Oreja-Guevara, Spain
16:15–16:30, Monday 1 July 2019

Interactions

Cladribine tablets may increase urine output/urinary tract infections, which may be apparent for cardiac function with other medicinal products, potentially leading to an increase in urinary tract infections. It is recommended that administration of any other medicinal product be started from that of MAVENCLAD at least 2 hours. Initiation of cladribine treatment is contraindicated in immunocompromised patients because of a risk of additive effects on the immune system. The use of MAVENCLAD with interferon beta results in an increased risk of lymphopenia. Additive haematological adverse reactions may be expected if cladribine is administered prior to or, in conjunction with, other substances that affect the haematopoietic profile. Treatment with MAVENCLAD should not be initiated within 4–6 weeks after vaccination with live or attenuated live vaccines because of a risk of active vaccine infection. Limitation of breast cancer occurrence post- (BCRP or ENT1) is in the gastrointestinal tract may increase the oral bioavailability and systemic exposure of cladribine. The bioavailability, intracellular distribution and renal elimination of cladribine may theoretically be altered by potent equilibrative nucleoside transporter (ENT1) and concentrative nucleoside (CNT3) transporter inhibitors. It is recommended that co-administration of potent ENT1, CNT3 or BCRP inhibitors be avoided. A possible difference in cladribine exposure should be considered if protein BCRP or BCRP inhibitors are co-administered. It is unknown whether cladribine may reduce the effectiveness of systemically acting hormonal contraceptives (see below).

Contraception

In women of childbearing potential, pregnancy must be excluded before initiation of cladribine treatment and for at least 6 months after the last dose. Women using systemically acting hormonal contraceptives should avoid the start of cladribine treatment and for at least 6 months after the last dose. Women using a barrier method or during pregnancy, should be advised to avoid the start of cladribine treatment. Cladribine could cause congenital malformations after administration during pregnancy. Studies in animals have shown reproductive toxicology. MAVENCLAD tablets should not be used during pregnancy. Women of childbearing potential, breast-feeding or planning to breast-feed must be advised to avoid breast-feeding (see below). Pregnancy, breast-feeding

Lactation

Before the start of treatment in Years 1 and 2, women of childbearing potential and male who could potentially father a child should be cautioned regarding the potential for serious risk to the fetus and the need for effective contraception. In women of childbearing potential, pregnancy must be excluded before the initiation of MAVENCLAD in Years 1 and 2, and breast-feeding is not recommended during treatment and for at least 6 months after the last dose. Women using systemically acting hormonal contraceptives should avoid the start of cladribine treatment and for at least 6 months after the last dose. Women using a barrier method or during pregnancy, should be advised to avoid the start of cladribine treatment. Cladribine could cause congenital malformations after administration during pregnancy. Studies in animals have shown reproductive toxicology. MAVENCLAD tablets should not be used during pregnancy. Women of childbearing potential, breast-feeding or planning to breast-feed must be advised to avoid breast-feeding (see below).
Our Mission
Pioneering and advancing treatments for severe inflammation and autoimmune diseases by selectively targeting shared critical pathways that are the root cause of disease

Led by a team of global leaders in inflammation and autoimmunity, Viela Bio strives to be a fully integrated biotechnology company, helping millions of patients worldwide. We are defined by our core competencies including deep therapeutic knowledge and operational effectiveness. Viela Bio, driven by our talented research and development team, is currently focused on:

- **Delivering the inebilizumab phase 2 clinical study**
- **Efficiently developing the early stage portfolio**
- **Exploring existing and novel pathways to develop next generation inflammation and autoimmune therapies**

Please join us for a Forum Talk at the 5th EAN Congress on our N-MOmentum Study in NMOSD. Sunday, 30 June 2019 from 16:30-16:45 in the Scientific Theater

© 2019 Viela Bio. All rights reserved. https://vielabio.com
Forum Talk Programmes

EXHIBITION - SCIENTIFIC THEATRE

Overview of forum talk programmes organised by industry partners in the scientific theatre within the exhibition. Additional talks reserved after the date of printing will be announced on-site.

Saturday, 29 June 2019
16:15 – 16:30
**ROCHE**

- Early Alzheimer’s disease: Towards drug-biomarker co-development
  Andrea Vergallo (Paris, France)

Sunday, 30 June 2019
09:30 – 09:45
**ALNYLAM PHARMACEUTICALS**

- Acute hepatic porphyria: A potentially fatal cause of peripheral neuropathy or encephalopathy.
  A practical perspective from an expert centre.
  Elena Pischik (St. Petersburg, Russia)

Sunday, 30 June 2019
09:45 – 10:00
**MERCK**

- Cladribine Tablets real-world experience: the Finnish experience
  Hanna Kuusisto (Hämeenlinna, Finland)

Monday, 01 July 2019
09:45 – 10:00
**ROCHE**

- Aware of rare: what’s new in Huntington’s Disease?
  Bernhard Landwehrmeyer (Ulm, Germany)

Sunday, 30 June 2019
16:15 – 16:30
**ROCHE**

- Understanding spinal muscular atrophy: how far have we come?
  Eugenio Mercuri (Rome, Italy)

Sunday, 30 June 2019
16:30 – 16:45
**VIELA BIO**

- N-Momentum Study Design
  Orhan Aktas (Dusseldorf, Germany)
Speaker Index

Final Programme
Speaker Index

Di Filippo, M. .................. 98
Di Liberto, G. .................. 16, 38, 53, 98
Di Lorenzo, F. ................. 16, 53
Di Marchis, G. .................. 37
Di Meglio, L. .................... 115
Dipasquale, O. .................. 114
Dirnagl, U. ...................... 89
Diserens, K. .................... 113
Dobbels, L. ..................... 16, 36
Doepner, T. ..................... 121
Doherty, C. ..................... 121
Donadio, V. ..................... 81, 102, 117
Donnet, A. ...................... 93
Doty, E.G. ....................... 101
Dougan, C.F. .................... 81
Draganacea, I. .................. 116
Draper, S. ....................... 121
Dreier, J. ....................... 117
Dressler, D.M. .................. 117
Drory, V. ....................... 148
Dubbioso, R. .................... 16, 37, 100, 117
Dubois, B. ...................... 106
Dubuisson, N. ................... 116
Ducray, F. ....................... 116
Duda, P.W. ...................... 77
Duddy, M. ...................... 148
Dulovic-Mahlow, M. .......... 114
Dunn, B.L. ....................... 117
Durr, A. ......................... 101
Duss, S. ......................... 102
Dyck, P.J. ....................... 116

E

Echavarri, C. .................... 114
Edvinsson, L. ................... 114
Edwards, M. .................... 63
Ethymiou, S. .................. 106, 114
Eftimov, F. ..................... 77
Eggermann, K. .................. 102
Eggers, C. ....................... 113
Eigentler, A. .................... 101
Eilers, A. ....................... 79
Ekman, A. ....................... 16, 35
Eldevik Håberg, S. .......... 122
Eldoen, G. ...................... 75, 115
El-Khairi, M. ................... 101
Ellward, E. ...................... 100
Elmali Yazici, A. ............... 16
Engelborghs, S. .............. 81
Engel, S. ....................... 79, 101, 115
Enzinger, C. ................... 37, 74, 111, 120
Erb, M. ......................... 115
Erdogan, F. .................... 16, 34, 106
Eriksdotter, M.E. ............ 115
Eriksen, E. ..................... 75, 115
Erlendsen, A.G. .............. 109
Ertom, D. ....................... 16
Eschenfelder, C. ............. 75
Esposito, G. .................... 53
Esposito, M. ................... 115, 117
Evans, J. ....................... 126
Eusebio, P. ..................... 77
Eusebi, F. ...................... 115
Evers, S. ....................... 16, 39, 66, 68
Evoli, A. ....................... 98

F

Fabrizi, G.M. ................... 102
Faggiani, E. ................... 117
Faiz, K. .......................... 99
Falappa, M. .................... 79
Falsini, A. ...................... 74
Falgatier, A. ................... 115
Fanciulli, A. ................... 72, 94
Fandl-Hüfer, S. ................ 115
Fari, A. .......................... 126
Farina, L. ....................... 101
Farwell, W. ..................... 114
Farzan, Far, R. ............... 77
Faull, C. ....................... 91
Fazekas, F. ..................... 5, 7, 16, 74, ........................................ 77, 115
Federico, A. ................... 72, 114
Fedorovski, A. ................ 72
Felipo, V. ....................... 86
Fenu, S. ......................... 101
Ferlini, L. ....................... 16, 38
Fernandes, M. ................ 78
Ferrari, M. ..................... 35
Ferrari, S. ...................... 98
Ferraro, P.M. ................... 81
Feirrea, J. ...................... 37, 67, 117
Feirrea, R. ...................... 117
Ferrigno, M. ................... 75
Ferrreiro, P. ................... 99
Festari, C. ...................... 74
Filippi, M. ..................... 16, 76, 77, 81, ........................................ 99, 114, 116, 120, 126
Filippini, S. ................... 126
Filla, A. ......................... 39, 41, 84, 101
Filosto, M. ..................... 77
Finkel, R.S. ..................... 114
Fischer, U. ..................... 7, 16, 101, 112, 120
Fitousi, S. ...................... 102
Fleidby, T. ...................... 62, 74
Fladt, J. ......................... 115
Foidielli, T. ................... 76, 98
Foiani, M. ...................... 100
Fontana, F. ..................... 81
Fournier, S. .................... 78
Forci, B. ......................... 126
Forde, O.H. .................... 122
Forminykh, V. ................. 16
Formisano, R. .................. 37
Forss, N. ....................... 65
Fowler, D. ...................... 75
Fox, E. .......................... 126
Fradette, S. .................... 114
Franciolli, D. .................. 76, 98
Franke, C. ...................... 98
Fratta, P. ....................... 114
Fratter, C. ...................... 116
Frauscher, B. .................. 102
Frederiksen, K.S. ............ 37, 87, 93
Fredrikson, S. ................ 7, 16, 116
Friberg, H. ..................... 116
Friedman, D. .................. 117
Frisoni, G. ..................... 74, 106
Friston, K. ..................... 115
Fronczek, R. ................... 16, 71, 100
Fuchs, S. ...................... 78
Fujihara, K. ................... 126
Fumagalli, G. .................. 39

G

Gaare, J. ....................... 77
Galimberti, D. ................. 16
Galldiks, N. ................... 67
Gallo Diop, A. ............... 68
Galvagni, A. ................... 77
Gantenbein, A. ............... 16, 37, 93, ........................................ 142
Garcia Azorin, D. .......... 7, 16, 37
Garcia-Pla, C. ................. 75
Garratt, A. ..................... 156
Gassama, S. .................. 7, 16, 34, 53
Gas, C. .......................... 74
Gastaldi, M. ................... 76, 98
Gattringer, T. .................. 16, 115
Gaul, C. ....................... 93
Gedovinova, Z. .................. 34
Gelblin, K. ..................... 101
Geller, C. ....................... 101
Gensicke, H. .................. 79
Gerber, M. ...................... 101
Gerrets, T. ..................... 99
Gertz, M. ....................... 116
Geurt, N. ....................... 126
Gharig, M. ..................... 116
Ghezzi, A. ....................... 76, 116
Giacalone, G. .................. 99
Giacomini, T. .................. 76, 98
Giannandrea, D. ............ 115
Giannoccaro, M.P. .......... 81, 102
Gillius, N. ...................... 7, 16, 66
Gillius, N.E. ................... 7, 16, 110, .......................... 117, 126
Gilli, A. .......................... 115
Giordano, A. ................... 99
Giorianni, A. .................. 115
Giovannoni, G. ............... 153, 167
Giraud-Buttaz, I. ............ 75
Giuliano, L. ................... 16, 126
Giunti, P. ....................... 101
Gizewski, E. ................... 102
Gjerstad, L. .................... 35
Goldsby, P.J. ................. 16, 35, 66, 114
Goberg Jörgensen, J. ....... 36
Goldehlin, M. .................. 101
Goker-Alpan, O. ............. 77
Gold, R. ......................... 16, 37, 153
Goldstein, P. .................. 75
Gomaa, M. ...................... 16
Gopal, N. ....................... 98
Gorban-Peric, C. ............. 102
Gorman, G. .................... 71, 116
Gorni, K. ....................... 101
Grammatico Di Tullio, M. .. .......................... 126
Granichler, H. .................. 63
Grands, M. ..................... 102
Granziol, C. ................... 167
Grassner, H. ................... 72
Grasso, R. ..................... 127
Greenberg, B. .................. 126
Garcia-Azorin, D. ......... 7, 16, 37
Garcia-Pla, C. ............... 75
Garratt, A. ..................... 156
Gassama, S. .................. 7, 16, 34, 53
Gas, C. .......................... 74
Gastaldi, M. ................... 76, 98
Gattringer, T. .................. 16, 115
Gaul, C. ....................... 93
<table>
<thead>
<tr>
<th>A</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afsari, M.</td>
<td>102</td>
</tr>
<tr>
<td>Aharoni, A.</td>
<td>161</td>
</tr>
<tr>
<td>Aikawa, H.</td>
<td>17</td>
</tr>
<tr>
<td>Algvere, H.</td>
<td>102</td>
</tr>
<tr>
<td>Altmann, B.</td>
<td>101</td>
</tr>
<tr>
<td>Amaguri, K.</td>
<td>115</td>
</tr>
<tr>
<td>Amster, M.</td>
<td>65</td>
</tr>
<tr>
<td>Anagnostou, E.</td>
<td>102</td>
</tr>
<tr>
<td>Anagnostou, E.</td>
<td>102</td>
</tr>
<tr>
<td>Anagnostou, E.</td>
<td>102</td>
</tr>
<tr>
<td>Ander, M.</td>
<td>114</td>
</tr>
<tr>
<td>Ando, Y.</td>
<td>101</td>
</tr>
<tr>
<td>Angelov, A.</td>
<td>115</td>
</tr>
<tr>
<td>Anderson, A.</td>
<td>101</td>
</tr>
<tr>
<td>Angiulli, A.</td>
<td>102</td>
</tr>
<tr>
<td>Annesi, M.</td>
<td>101</td>
</tr>
<tr>
<td>Ansay, R.</td>
<td>102</td>
</tr>
<tr>
<td>Apicella, M.</td>
<td>102</td>
</tr>
<tr>
<td>Appendini, M.</td>
<td>102</td>
</tr>
<tr>
<td>Appenzeller, A.</td>
<td>101</td>
</tr>
<tr>
<td>Arya, S.</td>
<td>102</td>
</tr>
<tr>
<td>Asai, T.</td>
<td>101</td>
</tr>
<tr>
<td>Asai, T.</td>
<td>101</td>
</tr>
<tr>
<td>Ascenso, A.</td>
<td>102</td>
</tr>
<tr>
<td>Ascenso, A.</td>
<td>102</td>
</tr>
<tr>
<td>Aspersson, L.</td>
<td>102</td>
</tr>
<tr>
<td>Aspersson, L.</td>
<td>102</td>
</tr>
<tr>
<td>Astarita, A.</td>
<td>102</td>
</tr>
<tr>
<td>Astarita, A.</td>
<td>102</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
<tr>
<td>Atzori, L.</td>
<td>101</td>
</tr>
</tbody>
</table>
| Atzor}
Kneihsl, M. 39, 115
Knudsen, S. 71, 102
Kobulashvili, T. 114, 126
Koelman, H. 86
Koenig, T. 74
Koga, M. 79
Köhler, W. 111
Koht, J. 98
Koivisto, T. 102
Kondziella, D. 16, 35, 77, 113
Koning, F. 100
Kooij-Winkelhaar, Y. 100
Korjel, A. 78
Kornblum, C. 39
Krasnik, C. 124
Kossorotoff, M. 99
Koster-Kruszczak, A. 86
Kostic, V. 77
Kovalski, T. 102
Krack, P. 102, 111
Krajka, V. 114
Kramberger, M. 93, 115
Krarup, C. 16, 38, 62, 67
Krauss, J.K. 117
Kremer, C. 75, 115
Kremser, C. 102
Kress, L. 115
Kristoffersen, E.S. 99
Kroghseth, S. 76, 115
Kros, J. 64
Krujshaar, M. 77
Kruja, J. 37
Kruuse, C. 75, 115
Kubala Haerdova, E. 65, 76
Kuen, D. 102
Kuhle, J. 74
Kuzet-Buschbeck, J. 127
Kuiper, M. 95
Kuks, J. 13, 16, 36, 95
Kulisevsky, J. 35, 106, 117
Kuntz, N. 114
Kurth, I. 102
Kurucz, H. 16, 35
Kurz, F.M.W. 115
Kurz, M. 75, 99
Kuwisto, H. 175
Kuitzstad, C. 79
Kuooh, J. 116
Kyriakides, T. 39, 143

L
Labarga, A. 114
Lachenmayer, L. 102
Lacewy, N. 117
La Delfa, G. 126
Laforté, P. 77, 112
Lagast, H. 77
Lambert, A. 75
Lammers, G.J. 100
La Morgia, C. 81
Lamperti, C. 77
Lampi, C. 113
Lamy, C. 99
Landwehrmeyer, B. 175
Langdon, D. 168
La-Ra-Kaim, N.P. 117
Lapergue, E. 69
Larumbe Ilandain, R. 114
Lattanzi, S. 126
Lauers, S. 85, 113
Laursen, T.M. 115
Lawo, J.P. 117
Leal, B. 117
Lebedeva, E. 7.35
Lebrun-Frenay, C. 76
Leech, R. 114
Lee, J.K. 114
Lee, S. 76
Legris, N. 79
Lehmann, D. 101
Leite, I. 94
Lemstra, E. 66
Leocani, L. 65, 72
Leone, M. 16, 87, 114
Le Page, E. 65
Levy, D. 115
Lewis, R.A. 117
Legs, D. 75, 79
Lhatoo, S. 117
Liblau, R. 102
Lii, C. 75
Li, L. 115
Liek, J. 115
Liguori, P. 82, 102, 117
Liguori, R. 102
Lim, A. 116
Lim, J. 77
Limbucci, N. 115
Limroth, V. 156
Limousain, P. 111
Lindgren, A. 101

Lindholm, A. 76
Lingsma, H.F. 102
Lin, J. 102
Lippert, J. 102
Liu, G. 81
Liu, W. 102
Loane, C. 115
Logallo, N. 79, 101
Lohmann, K. 114
Lopes, J.M.C.F. 117
Lorenz, S. 91
Lorimer, I. 78
Loseth, S. 37, 124
Lossius, M. 155
Lotti, A. 115
Luentes, J. 124
Lucev, F. 98
Luchtman, D. 100
Luetmer, P.H. 98
Lund-Johansen, M. 77
Lundqvist, C. 66
Lunetta, C. 81
Lyer, P. 79, 101, 115

M
Macdougall, J. 77
Macerollo, A. 16, 43
Macho, K. 79
Mafra, M. 78
Magnani, E. 126
Magir, S. 101
Magyar, M. 115
Mainieri, G. 126
Major, S. 124
Makbule, S. 126
Makuch, M. 75
Malik, R. 102
Mallucci, G. 76
Malojcic, B. 108
Malzacher, T. 102
Mancardi, G.L. 16, 85
Mancardi, M. 76, 98
Manconi, M. 102
Mancuso, M. 36, 77
Manganelli, F. 100, 102
Mangiafico, S. 115
Manji, H. 16, 62, 102
Manning, N. 75
Manto, M. 84
Manzoni, O. 64
Maple-Grodem, J. 77
Marchetti, C. 126
Marchioni, E. 76, 98
Margold, M.Y. 78
Margraf, N.G. 127
Marignier, R. 111
Mariotti, C. 101
Mariotti, A. 126
Mariotto, S. 98
Markowicz, V. 77
Markus, H. 62, 101
Markus, J. 117
Markvardsen, L.H. 102
Marques, W.J. 114
Marsh, K. 127
Marson, T. 5, 7, 16, 41, 121
Martin, A. 114
Martin-Bastida, A. 117
Martin-Blondel, G. 75
Martin, E. 76
Martinelli, I. 81
Martinelli, P. 81
Martinis Da Silva, A. 114
Mathieson, N. 7, 116
Mauri, M. 98
Mauro, E. 101
Ma, X. 117
Mayer, G. 16, 93
Mayer, S. 78
Mazzier, S. 110
Mazzighi, M. 115
Mazzee, A. 102
Mazzucchelli, S. 120
McAllister, P. 142
McCombe, P. 76
McDougall, A. 75
McEntagart, M. 116
McFarland, R. 116
McGovern, E. 76
McGrath, E. 115
Meani, A. 108
McKenna, A. 126
Mechi, C. 126
Melzi, V. 116
Speaker Index

Picard, G.  .................. 116
Piciaci, F.  .................. 117
Pichighio, A.  .......... 98
Pihlstrom, L.  ...... 92, 123
Pilotto, A.  .......... 127
Piotin, M.  .......... 115
Pirramer, L.  .......... 74
Pisman, I.  ................ 98
Pischik, E.  .......... 175
Pisciotta, C.  .......... 102
Piteathly, R. .... 116
Pitt, M.  .......... 117
Pizz, F.  .... 39, 71, 102
Pizzini, F.  .......... 74
Plante-Bordeneuve, V.  ...... 116, 157
Plant, G.  .......... 110, 121
Plazier, S.  .......... 102
Podnar, S.  ...... 16, 73
Poewe, W. .... 102, 127, 153, 154
Politis, M. ...... 74, 100, 115, 123
Polke, J.  .... 114
Pollick, F.  .......... 115
Pollock, M.  .......... 116
Polychronis, S.  ...... 116
Polydefkis, M.J.  ...... 116
Polymenidis, A. .... 79, 115
Pontillo, G. .... 100
Pope, S.  .......... 120
Popescu, V.  .......... 167
Popperud, T. .... 36, 92
Portron, A.  ...... 126
Potagias, C.  ...... 127
Potiri, E.  .......... 114
Poulton, J.  ...... 116
Power, S.  .......... 126
Pozo-Rosich, P. .... 142
Pozo-Rosich, P. .... 68, 149
Pozzilli, C. .... 76
Prabhakar, P. .... 106
Pracucci, G. .... 115
Praus, M.  .......... 117
Premi, E.  .......... 127
Presotto, L.  ...... 127
Presslauer, S. .... 126
Previtali, S. .... 102
Prevost, J. .... 78
Preziosa, P. .... 126
Primiano, G. .... 77
Prunotto, L.R. .... 84
Pruvo, J.  .......... 75
Psimaras, D. .... 116
Pugliatti, M. .... 122
Puglilii, E. .... 115
Purucker, J. .... 114
Putala, J. .......... 39, 107
Q
Quattromne, A. .... 102
Querbes, W. .... 81
Querin, G. .... 81
Querol, L. .... 94
R
Rabiner, E. .... 100, 115
Radu, R. .... 17
Raeid, R. .... 126
Ragones, P. .... 17, 38
Rakusa, M. .... 17, 34, 160
Ramatheira, J.E.D.P. .... 117
Rambaud, T. .... 99
Ramdas, S. .... 117
Rand, K. .... 122
Rascol, O. .... 154
Ratulczak-Tretel, B. .... 75, 115
Rauh, G. .... 144
Rauen, K. .... 17, 37
Ravran, R. .... 36
Rees, D. .... 81
Reichenbach, A. .... 99
Reichmann, H. .... 78
Reilly, M. .... 71, 114
Reinhard, C. .... 114
Rektor, I. .... 7, 17, 38, 116
Rektrojav, I. .... 17, 66, 74
Relja, M. .... 117
Renaud, M. .... 77
Repace, A.M. .... 126
Reza, M. .... 115
Ribot, B. .... 117
Ricciardi, L. .... 115
Ricci, G. .... 37
Ricci, S. .... 98, 115
Ricciulli, G.C. .... 126
Richerson, G.B. .... 117
Rigioni, E. .... 76
Riise, T. .... 76
Rino, P. .... 102
Rinaldo, P. .... 102
Ringleb, P. .... 114
Rinkel, G. .... 101
Riva, N. .... 81
Rizopoulos, D. .... 77
Rizzetti, M.C. .... 127
Rizzo, F. .... 116
Rizzo, G. .... 81, 117
Robb, S. .... 117
Robe, P. .... 78
Roberts, M. .... 77
Rocca, M. .... 76, 116, 126
Rocha, M.C. .... 101
Rodegger, M. .... 126
Rodriguez Cruz, P. .... 102, 117
Rodriguez-Oroz, M.C. .... 153
Rogemond, V. .... 116
Rohut, B. .... 113
Roldán, M. .... 114
Rofs, A. .... 114
Romani, A. .... 98
Romoli, M. .... 115
Ranning, O.M. .... 79, 99, 111
Ropele, S. .... 74
Roque, L. .... 78
Rosa, H.S. .... 101
Rosenow, F. .... 120
Rossetti, A. .... 92
Rossov, A.M. .... 114
Rostedt Punga, A. .... 17, 36, 64
Rothman, J. .... 100
Rothuell, P.M. .... 115
Rouskas, A.A. .... 117
Roveri, L. .... 99
Roy, S. .... 117
Roze, E. .... 112
Rubboli, G. .... 155
Rubegni, A. .... 77
Rudá, R. .... 64
Ruepp, M.D. .... 116
Rufa, A. .... 123
Ruijgrok, Y. .... 101
Ruis, C. .... 78
Russell, D. .... 75, 99, 115
Russo, M. .... 115
Rüžička, E. .... 7, 17, 68, 93, 127
Ryan, M.M. .... 114
Ryding, S. .... 92
Ryeng Skagen, K. .... 99
Ryu, H.S. .... 101
Ryulin, P. .... 115
S
Saab, J. .... 75
Saccardi, R. .... 126
Sacconi, S. .... 112
Sacco, S. .... 75, 120
Saffer, N. .... 102
Saja, V. .... 115
Sainju, R.K. .... 117
Saja, A. .... 126
Sala, A. .... 127
Salani, S. .... 116
Sallet, A. .... 115
Salgado, D. .... 78
Salmen, A. .... 98
Salmon, E. .... 36, 124
Saloheimo, P. .... 53
Salpietro, V. .... 114
Salsano, E. .... 101
Salvini Porro, G. .... 74
Samões, R. .... 117
Samonsen, C. .... 37
Sancesario, G. .... 74
Sánchez-Ruiz de Gordoa, J. .... 114
Sander, J. .... 91
Sandset, E. .... 75, 115
Sandset, E.C. .... 101, 120
Sансоне, V. .... 114, 148
Santorelli, F. .... 77
Santoro, L. .... 100, 102
Sanwald Ducray, P. .... 127
Saposnik, G. .... 156
Sarchielli, P. .... 115
Sard, E. .... 81
Sarit, C. .... 77
Sartori, S. .... 98
Satzabai, C. .... 115
Sauerbier, A. .... 53, 98
Savasta, S. .... 76, 98
Savitcheva, I. .... 74
Sayman, C. .... 17, 35
Seahill, R. .... 77
Scarnazin, S. .... 76
Schaedelin, S. .... 115
Schaefeler, A. .... 116
Schaffeler, N. .... 78
Schäfer, J. .... 86
Schapira, A. .... 17, 34
Scharf, A.C. .... 79
Scheiie, D. .... 77
Scheltens, P. .... 7, 17
<table>
<thead>
<tr>
<th>Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toyka, B.</td>
<td>45</td>
</tr>
<tr>
<td>Toyka, K.V.</td>
<td>34, 45, 53</td>
</tr>
<tr>
<td>Toyoda, K.</td>
<td>79</td>
</tr>
<tr>
<td>Tozza, S.</td>
<td>100, 102</td>
</tr>
<tr>
<td>Trabucchi, M.</td>
<td>74</td>
</tr>
<tr>
<td>Trancka, K.</td>
<td>115</td>
</tr>
<tr>
<td>Tramacere, I.</td>
<td>102</td>
</tr>
<tr>
<td>Trenkwalder, C.</td>
<td>102</td>
</tr>
<tr>
<td>Triller, A.</td>
<td>100</td>
</tr>
<tr>
<td>Trinh, J.</td>
<td>114</td>
</tr>
<tr>
<td>Trinka, E.</td>
<td>107, 126</td>
</tr>
<tr>
<td>Trost, M.</td>
<td>161</td>
</tr>
<tr>
<td>Troelsen, T.</td>
<td>75, 115</td>
</tr>
<tr>
<td>Truini, A.</td>
<td>125</td>
</tr>
<tr>
<td>Tsai, C.P.</td>
<td></td>
</tr>
<tr>
<td>Tsigoulis, G.</td>
<td>79</td>
</tr>
<tr>
<td>Tumani, H.</td>
<td>126</td>
</tr>
<tr>
<td>Tuna, M.A.</td>
<td>115</td>
</tr>
<tr>
<td>Tuñon, M.T.</td>
<td>114</td>
</tr>
<tr>
<td>Turnbull, D.</td>
<td>101, 116</td>
</tr>
<tr>
<td>Turronc, R.</td>
<td>127</td>
</tr>
<tr>
<td>Tveten, K.</td>
<td>114</td>
</tr>
<tr>
<td>Tyacke, R.</td>
<td>100</td>
</tr>
<tr>
<td>Tynsnes, O.B.</td>
<td>7, 38, 77, 122</td>
</tr>
<tr>
<td>Tyvaert, L.</td>
<td>126</td>
</tr>
<tr>
<td>Tsouli, C.</td>
<td>77</td>
</tr>
<tr>
<td>Van der Ende, A.</td>
<td>98</td>
</tr>
<tr>
<td>Van der Kooi, A.</td>
<td>39, 77</td>
</tr>
<tr>
<td>Van Der Meulen, M.</td>
<td>53, 98</td>
</tr>
<tr>
<td>Van der Ploeg, A.T.</td>
<td>77</td>
</tr>
<tr>
<td>Van Dijk, J.G.</td>
<td>72, 116</td>
</tr>
<tr>
<td>Van Doorn, P.</td>
<td>77, 102</td>
</tr>
<tr>
<td>Vandelroo, J.</td>
<td>100, 114</td>
</tr>
<tr>
<td>Van Hameete, M.H.</td>
<td>98</td>
</tr>
<tr>
<td>Van Kessel, E.</td>
<td>78</td>
</tr>
<tr>
<td>Van Mossevelde, S.</td>
<td>81</td>
</tr>
<tr>
<td>Van Schaik, I.N.</td>
<td>77, 117</td>
</tr>
<tr>
<td>Van Sonderen, A.</td>
<td>98</td>
</tr>
<tr>
<td>Van Wijmersch, B.</td>
<td>76</td>
</tr>
<tr>
<td>Van Zandvoort, M.</td>
<td>78</td>
</tr>
<tr>
<td>Van Zuer, E.</td>
<td>116</td>
</tr>
<tr>
<td>Vasan, R.</td>
<td>115</td>
</tr>
<tr>
<td>Vassiliou, D.</td>
<td>81</td>
</tr>
<tr>
<td>Vatne, A.</td>
<td>76</td>
</tr>
<tr>
<td>Vaz, S.</td>
<td>99</td>
</tr>
<tr>
<td>Vecchio, D.</td>
<td>17, 117</td>
</tr>
<tr>
<td>Vederhus, J.</td>
<td>117</td>
</tr>
<tr>
<td>Vezzi, E.</td>
<td>98</td>
</tr>
<tr>
<td>Veggiootti, P.</td>
<td>76, 116</td>
</tr>
<tr>
<td>Velby, G.</td>
<td>35</td>
</tr>
<tr>
<td>Velon, A.G.</td>
<td>34</td>
</tr>
<tr>
<td>Venditti, L.</td>
<td>79</td>
</tr>
<tr>
<td>Vercelli, L.</td>
<td>77</td>
</tr>
<tr>
<td>Vegel, A.</td>
<td>175</td>
</tr>
<tr>
<td>Verhamme, C.</td>
<td>77</td>
</tr>
<tr>
<td>Verhooff, J.</td>
<td>78</td>
</tr>
<tr>
<td>Vermersch, P.</td>
<td>153, 156</td>
</tr>
<tr>
<td>Versino, M.</td>
<td>114</td>
</tr>
<tr>
<td>Vester, J.</td>
<td>114, 160</td>
</tr>
<tr>
<td>Vezzani, A.</td>
<td>85, 110</td>
</tr>
<tr>
<td>Vickers, P.</td>
<td>116, 127</td>
</tr>
<tr>
<td>Vidalhleit, M.</td>
<td>7, 17, 73, 87,</td>
</tr>
<tr>
<td>Vigneau, F.</td>
<td>126</td>
</tr>
<tr>
<td>Villanilam, G.</td>
<td>98</td>
</tr>
<tr>
<td>Villa-Lopez, M.</td>
<td>115</td>
</tr>
<tr>
<td>Villata, L.</td>
<td>117</td>
</tr>
<tr>
<td>Villoch, M.</td>
<td>75</td>
</tr>
<tr>
<td>Vincent, A.</td>
<td>67, 102, 117</td>
</tr>
<tr>
<td>Vincent, A.E.</td>
<td>101</td>
</tr>
<tr>
<td>Vissing, J.</td>
<td>157</td>
</tr>
<tr>
<td>Vita, G.</td>
<td>64, 102</td>
</tr>
<tr>
<td>Vogrig, A.</td>
<td>116</td>
</tr>
<tr>
<td>Volkman, J.</td>
<td>111</td>
</tr>
<tr>
<td>Vonck, K.</td>
<td>39, 43, 111, 126</td>
</tr>
<tr>
<td>von Euler, M.</td>
<td>115</td>
</tr>
<tr>
<td>von Sarnowski, B.</td>
<td>107</td>
</tr>
<tr>
<td>Von Wild, K.</td>
<td>114</td>
</tr>
<tr>
<td>Voortman, M.</td>
<td>74</td>
</tr>
<tr>
<td>Vos, M.</td>
<td>114</td>
</tr>
<tr>
<td>Vukusic, S.</td>
<td>76</td>
</tr>
<tr>
<td>Waddington Cruz, M.</td>
<td>116</td>
</tr>
<tr>
<td>Wagner, B.</td>
<td>115</td>
</tr>
<tr>
<td>Waje-Andreassen, U.</td>
<td>79</td>
</tr>
<tr>
<td>Wajer, I.</td>
<td>78</td>
</tr>
<tr>
<td>Walde, J.</td>
<td>126</td>
</tr>
<tr>
<td>Waldemar, G.</td>
<td>74, 115</td>
</tr>
<tr>
<td>Wallgaard, C.</td>
<td>102</td>
</tr>
<tr>
<td>Walker, Z.</td>
<td>66</td>
</tr>
<tr>
<td>Wallace, S.</td>
<td>143</td>
</tr>
<tr>
<td>Walter, U.</td>
<td>65, 111</td>
</tr>
<tr>
<td>Wang, A.K.</td>
<td>116</td>
</tr>
<tr>
<td>Wang, R.</td>
<td>117</td>
</tr>
<tr>
<td>Waters, P.</td>
<td>75</td>
</tr>
<tr>
<td>Weber, K.</td>
<td>121</td>
</tr>
<tr>
<td>Weber, M.</td>
<td>17, 34, 76, 96</td>
</tr>
<tr>
<td>Weber, S.</td>
<td>99</td>
</tr>
<tr>
<td>Webster, R.</td>
<td>102</td>
</tr>
<tr>
<td>Wei, D.</td>
<td>114</td>
</tr>
<tr>
<td>Weiss, M.</td>
<td>114, 126</td>
</tr>
<tr>
<td>Wenderoth, J.</td>
<td>75</td>
</tr>
<tr>
<td>Wenninger, S.</td>
<td>149</td>
</tr>
<tr>
<td>Werber, M.</td>
<td>114</td>
</tr>
<tr>
<td>Wermers, M.</td>
<td>101</td>
</tr>
<tr>
<td>Werring, D.</td>
<td>79, 101</td>
</tr>
<tr>
<td>Westhall, E.</td>
<td>107, 116</td>
</tr>
<tr>
<td>Whittam, D.</td>
<td>75</td>
</tr>
<tr>
<td>Wiendl, H.</td>
<td>75, 142, 157</td>
</tr>
<tr>
<td>West, R.</td>
<td>7, 17</td>
</tr>
<tr>
<td>Wijeratne, P.</td>
<td>77</td>
</tr>
<tr>
<td>Wild, E.</td>
<td>77, 112, 127</td>
</tr>
<tr>
<td>Willison, H.</td>
<td>66</td>
</tr>
<tr>
<td>Wilson, D.</td>
<td>79</td>
</tr>
<tr>
<td>Wilson, H.</td>
<td>100, 115, 116</td>
</tr>
<tr>
<td>Wilson, M.</td>
<td>100</td>
</tr>
<tr>
<td>Wimberley, T.</td>
<td>74</td>
</tr>
<tr>
<td>Winblad, B.</td>
<td>74, 115</td>
</tr>
<tr>
<td>Winneberg, I.</td>
<td>101</td>
</tr>
<tr>
<td>Winsvold, B.</td>
<td>108</td>
</tr>
<tr>
<td>Wolfe, G.I.</td>
<td>77</td>
</tr>
<tr>
<td>Wolf, F.</td>
<td>72</td>
</tr>
<tr>
<td>Wolinsky, J.</td>
<td>76</td>
</tr>
<tr>
<td>Wolke, R.</td>
<td>127</td>
</tr>
<tr>
<td>Woodhall, M.</td>
<td>75</td>
</tr>
<tr>
<td>Wood, N.</td>
<td>100, 114</td>
</tr>
<tr>
<td>Wray, S.</td>
<td>126</td>
</tr>
<tr>
<td>Wright, J.</td>
<td>77</td>
</tr>
<tr>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Xing, Y.</td>
<td>117</td>
</tr>
<tr>
<td>Xu, H.</td>
<td>115</td>
</tr>
<tr>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Yagi, S.</td>
<td>79</td>
</tr>
<tr>
<td>Yaksi, E.</td>
<td>100</td>
</tr>
<tr>
<td>Yamamoto, Y.</td>
<td>127</td>
</tr>
<tr>
<td>Yamamura, T.</td>
<td>126</td>
</tr>
<tr>
<td>Yamout, B.</td>
<td>142, 160</td>
</tr>
<tr>
<td>Yao, W.Y.</td>
<td>114</td>
</tr>
<tr>
<td>Yoc Re, F.</td>
<td>102</td>
</tr>
<tr>
<td>Young, P.</td>
<td>102, 149</td>
</tr>
<tr>
<td>Yousaf, T.</td>
<td>115, 127</td>
</tr>
<tr>
<td>Yshii, L.</td>
<td>75</td>
</tr>
<tr>
<td>Yuraszeck, T.</td>
<td>117</td>
</tr>
<tr>
<td>Z</td>
<td></td>
</tr>
<tr>
<td>Zakrzewska-Pniewska, B.</td>
<td>126</td>
</tr>
<tr>
<td>Zamani, M.</td>
<td>99</td>
</tr>
<tr>
<td>Zamba-Papanicolaou, E.</td>
<td>100</td>
</tr>
<tr>
<td>Zanchin, G.</td>
<td>109</td>
</tr>
<tr>
<td>Zanetti, N.</td>
<td>100</td>
</tr>
<tr>
<td>Zappia, M.</td>
<td>126</td>
</tr>
<tr>
<td>Zardini, E.</td>
<td>76</td>
</tr>
<tr>
<td>Zecca, M.</td>
<td>98</td>
</tr>
<tr>
<td>Zeidman, P.</td>
<td>115</td>
</tr>
<tr>
<td>Zelaya, F.</td>
<td>114</td>
</tr>
<tr>
<td>Zelaya, M.</td>
<td>114</td>
</tr>
<tr>
<td>Zenker, M.</td>
<td>126</td>
</tr>
<tr>
<td>Zetterberg, H.</td>
<td>77, 100</td>
</tr>
<tr>
<td>Zeviani, M.</td>
<td>81</td>
</tr>
<tr>
<td>Zhang, L.</td>
<td>75</td>
</tr>
<tr>
<td>Zhang, Z.</td>
<td>75</td>
</tr>
<tr>
<td>Zier, S.</td>
<td>101</td>
</tr>
<tr>
<td>Zimmermann, G.</td>
<td>126</td>
</tr>
<tr>
<td>Zipfel, S.</td>
<td>78</td>
</tr>
<tr>
<td>Zipp, F.</td>
<td>100</td>
</tr>
<tr>
<td>Zis, P.</td>
<td>35</td>
</tr>
<tr>
<td>Zoccarato, M.</td>
<td>98</td>
</tr>
<tr>
<td>Zuber, M.</td>
<td>99</td>
</tr>
<tr>
<td>Züchner, S.</td>
<td>114</td>
</tr>
<tr>
<td>Zuliani, L.</td>
<td>98</td>
</tr>
<tr>
<td>Zupanic, E.</td>
<td>36</td>
</tr>
<tr>
<td>Zurbür, C.</td>
<td>101</td>
</tr>
</tbody>
</table>
Time for Action

Abstract submission deadline
8 January 2020
Early registration deadline
16 March 2020

www.ean.org/paris2020
#ean2020
Together we are celebrating 5 years of excellence in Neurology.