# Educational Sessions

**Wednesday, 10 October 2018**

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<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Chairs</th>
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<tr>
<td>08.00 – 09.30</td>
<td><strong>Educational Session 1: Pregnancy management in MS</strong></td>
<td>Hall D</td>
<td>K. Hellwig (Bochum, DE)</td>
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<td></td>
<td><strong>Level: Basic</strong></td>
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<td>A. Langer Gould (Pasadena, US)</td>
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<tr>
<td>08.00</td>
<td>Symptomatic MS treatment and pregnancy / lactation management</td>
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<td>M. Magyari (Copenhagen, DK)</td>
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<td>08.30</td>
<td>The natural history of MS during pregnancy and the postpartum period</td>
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<td>A. Langer Gould (Pasadena, US)</td>
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<td>09.00</td>
<td>MS medication in people with MS planning a pregnancy - an update</td>
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<td>K. Hellwig (Bochum, DE)</td>
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<td>08.00 – 09.30</td>
<td><strong>Educational Session 2: Practical treatment recommendations</strong></td>
<td>Hall E</td>
<td>X. Montalban (Barcelona, ES)</td>
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<td></td>
<td><strong>based on new guidelines in MS</strong></td>
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<td>D. Pelletier (Los Angeles, US)</td>
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<td><strong>Level: Basic</strong></td>
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<td>Detailed programme to be announced</td>
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<td>08.00 – 09.30</td>
<td><strong>Educational Session 3: Neurofilament light chains in MS:</strong></td>
<td>Hall F</td>
<td>C. Teunissen (Amsterdam, NL)</td>
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<td><strong>where do we stand, the long road to clinical application</strong></td>
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<td>J. Kuhle (Basel, CH)</td>
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<tr>
<td>08.00</td>
<td>The long road to clinical application: where do we stand with neurofilament light chain in MS?</td>
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<td>J. Kuhle (Basel, CH)</td>
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<td>08.30</td>
<td>The long road to clinical implementation</td>
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<td>C. Teunissen (Amsterdam, NL)</td>
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<td>09.00</td>
<td>Clinical application today and tomorrow</td>
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<td>F. Piehl (Stockholm, SE)</td>
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08.00 – 09.30  **Educational Session 4: Immunology of MS**  
**Level:** Advanced  
**Chairs:**  
E. Meinl (Martinsried, DE)  
V.W.W. Yong (Calgary, CA)  

- **08.00**  
  B and T cells in MS  
  E. Meinl (Martinsried, DE)  

- **08.30**  
  Myeloid cells in MS  
  V.W.W. Yong (Calgary, CA)  

- **09.00**  
  Systems immunology to model, predict, and monitor MS  
  C. Farina (Milan, IT)

08.00 – 09.30  **Educational Session 5: Impact and management of comorbidities in MS**  
**Level:** Intermediate  
**Chairs:**  
R.A. Marrie (Winnipeg, CA)  
H. Tremlett (Vancouver, CA)  

- **08.00**  
  Impact of comorbidity in MS  
  R.A. Marrie (Winnipeg, CA)  

- **08.30**  
  Bidirectional relationships between comorbidity and disease-modifying therapy  
  H. Tremlett (Vancouver, CA)  

- **09.00**  
  Management of psychiatric comorbidity in MS  
  A. Feinstein (Toronto, CA)

09.45 – 10.30  **Case-based Educational Session 6: How to manage non-response to highly active (second line) drugs?**  
**Chairs:**  
A.J. Coles (Cambridge, UK)  
J. Sastre-Garriga (Barcelona, ES)  

- **09.45**  
  Case 1  
  A.J. Coles (Cambridge, UK)  

- **10.07**  
  Case 2  
  J. Sastre-Garriga (Barcelona, ES)
09.45 – 10.30  Case-based Educational Session 7: Progressive MS: who should be treated and how to monitor treatment response?  
Chairs:  
B.A.C. Cree (San Francisco, US)  
R. Kapoor (London, UK)  
09.45  Case 1  
B.A.C. Cree (San Francisco, US)  
10.07  Case 2  
R. Kapoor (London, UK)  

09.45 – 10.30  Case-based Educational Session 8: Should all MS patients be treated?  
Chairs:  
A. Chan (Bern, CH)  
M. Stangel (Hannover, DE)  
09.45  Pro  
M. Stangel (Hannover, DE)  
10.07  Con  
A. Chan (Bern, CH)  

13.30 – 15.00  Educational Session 9: Clinical trials in MS: the need for novelty  
Level: Advanced  
Chairs:  
M.P. Sormani (Genoa, IT)  
J. Chataway (London, UK)  
13.30  Endpoints in MS clinical trials: going beyond EDSS  
F. Pellegrini (Zug, CH)  
14.00  More flexibility for future MS trials: adaptive designs  
J. Chataway (London, UK)  
14.30  Prognosis, response to therapy and treatment effect: easy to say, hard to measure  
M.P. Sormani (Genoa, IT)
13.30 – 15.00

**Educational Session 10: Innovation in MRI in relation to cognitive and neuropsychiatric phenomena in MS (IMSCOGS)**

*Level: Advanced*

*Chairs:*

*C. Enzinger (Graz, AT)*

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**13.30**

**Neuropathological injury in MS and relationship to structural MRI metrics**

*J. Geurts (Amsterdam, NL)*

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**14.00**

**Functional MRI studies in MS: update on brain plasticity and repair**

*C. Enzinger (Graz, AT)*

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**14.30**

**Functional relevance of MRI in early MS, correlation with cognitive performance and related outcomes**

*B. Brochet (Bordeaux, FR)*

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13.30 – 15.00

**Educational Session 11: Molecular mechanisms of tissue injury in cortical MS lesions**

*Level: Advanced*

*Chairs:*

*J. Van Horssen (Amsterdam, NL)*

*D.J. Mahad (Edinburgh, UK)*

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**13.30**

**Unraveling the cause of neuronal mitochondrial dysfunction in MS**

*J. Van Horssen (Amsterdam, NL)*

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**14.00**

**Uncovering the pathogenesis of synapse loss in cortical MS and its models**

*M. Kerschensteiner (Munich, DE)*

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**14.30**

**Understanding the early clinical and pathological consequences of mitochondrial dysfunction in progressive MS**

*D.J. Mahad (Edinburgh, UK)*

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15.30 – 17.00

**Educational Session 12: MS mimicks: other neuro-inflammatory disorders**

*Level: Basic*

*Chairs:*

*D.M. Wingerchuk (Scottsdale, US)*

*A. Siva (Istanbul, TR)*

*M. Keegan (Rochester, US)*

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**15.30**

**NMOSD and related autoantibody CNS Disorders**

*A. Siva (Istanbul, TR)*

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**16.00**

**Atypical inflammatory syndromes of the CNS**

*M. Keegan (Rochester, US)*

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**16.30**

**Primary and secondary inflammatory vasculopathies and other inflammatory disorders of the CNS mimicking MS**

*C. Rice (Bristol, UK)*
15.30 – 17.00  **Educational Session 13: Genetics and biomarkers in MS**  
*Hall G*

**Level:** Advanced

**Chairs:**
- B. Hemmer (Munich, DE)
- M. Comabella (Barcelona, ES)

15.30  **General considerations in biomarker research and application**

B. Hemmer (Munich, DE)

16.00  **Serum and CSF biomarkers in MS**

M. Comabella (Barcelona, ES)

16.30  **Basics of MS genetics**

S.E. Baranzini (San Francisco, US)

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15.30 – 17.00  **Educational Session 14: Myelin repair in MS**  
*Hall H*

**Level:** Advanced

**Chairs:**
- C. Lubetzki (Paris, FR)

15.30  **What have we learnt on remyelination in MS? an historical perspective**

C. Lubetzki (Paris, FR)

16.00  **Promoting exogenous remyelination: from basic sciences to translation**

S. Goldman (Copenhagen, DK)

16.30  **Promoting endogenous remyelination: from basic sciences to trans**

A. Green (San Francisco, US)
Thursday, 11 October 2018

08.00 – 09.30  **Educational Session 15: Disease modifying treatments in MS**  Hall D

*Level: Basic*

*Chairs:*
- H.-P. Hartung (Düsseldorf, DE)
- T. Derfuss (Basel, CH)

08.00  *Disease modifying treatments for relapsing MS*

H.-P. Hartung (Düsseldorf, DE)

08.30  *Treatment approaches to progressive MS*

T. Derfuss (Basel, CH)

09.00  *Risks, risk management, and the choice of treatments for MS*

G. Giovannoni (London, UK)

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08.00 – 09.30  **Educational Session 16: Symptomatic treatment of MS: how to manage pain/bladder/bowel/sexual dysfunction? (RIMS)**  Hall E

*Level: Basic*

*Chairs:*
- P.L. Eelen (Melsbroek, BE)
- R. Moss Morris (London, UK)

08.00  *Management of bladder and bowel problems*

P.L. Eelen (Melsbroek, BE)

08.30  *Treatment of sexual dysfunction*

C.A. Young (Liverpool, UK)

09.00  *Pain management*

R. Moss Morris (London, UK)

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10.00 – 11.30  **Educational Session 17: MS pathology for clinical neurologists**  Hall D

*Level: Basic*

*Chairs:*
- W. Brück (Göttingen, DE)
- C. Stadelmann (Göttingen, DE)

10.00  *The white matter lesion in MS*

W. Brück (Göttingen, DE)

10.30  *The grey matter lesion in MS*

C. Stadelmann (Göttingen, DE)

11.00  *Inflammatory demyelination spectrum*

R. Höftberger (Vienna, AT)
10.00 – 11.30 Educational Session 18: Experimental neuroimmunology

Level: Advanced

Chairs:
A. Flügel (Göttingen, DE)
T. Kuhlmann (Münster, DE)

10.00 Immunopathogenesis in CNS autoimmunity: lessons from animal models
A. Flügel (Göttingen, DE)

10.30 Experimental MS models and their relation to the human disease
T. Kuhlmann (Münster, DE)

11.00 Blood-brain barrier autoimmune function and dysfunction in CNS autoimmunity
B. Engelhardt (Bern, CH)

11.45 – 12.45 Case-based Educational Session 19: Pediatric MS

Chairs:
T. Chitnis (Boston, US)
J. Gärtner (Göttingen, DE)

11.45 What's in a name? Pediatric MS or another diagnosis?
T. Chitnis (Boston, US)

12.15 Treatment of highly active pediatric MS and potential treatment failures
J. Gärtner (Göttingen, DE)

14.15 – 15.45 Educational Session 20: MRI and the diagnosis of multiple sclerosis (MAGNIMS)

Level: Basic

Chairs:
F. Barkhof (London, UK)
M. Filippi (Milan, IT)

14.15 MRI and the diagnosis of MS: from MAGNIMS 2016 to the 2017 revision of the McDonald criteria
M. Filippi (Milan, IT)

14.45 Application of MRI diagnostic criteria in clinical practice
M. Tintoré (Barcelona, ES)

15.15 MRI and multiple sclerosis misdiagnosis and differential diagnosis
F. Barkhof (London, UK)

**Level:** Basic

**Chairs:**
- J. Kesselring (Valens, CH)
- V. de Groot (Amsterdam, NL)

14.15 **Overview**

J. Kesselring (Valens, CH)

14.45 **Exercise of gait therapy**

P. Feys (Hasselt, BE)

15.15 **Pharmacological and non-pharmacological treatment of fatigue**

V. de Groot (Amsterdam, NL)

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16.15 – 17.15 **Case-based Educational Session 22: MOG-Ab phenotype**

**Chairs:**
- M. Weber (Göttingen, DE)
- T. Derfuss (Basel, CH)

16.15 **Case 1: The features of anti-MOG antibody-associated CNS demyelination: NMOSD, MS or a novel disease entity?**

M. Weber (Göttingen, DE)

16.45 **Case 2: Two cases of anti-MOG associated CNS demyelinating disease**

T. Derfuss (Basel, CH)
Friday, 12 October 2018

08.30 – 10.00 **Educational Session 23: NMO-spectrum disorders: current concepts and clinical management**  
Hall D  

**Level:** Intermediate  
**Chairs:**  
F. Paul (Berlin, DE)  
J. Palace (Oxford, UK)  

08.30 NMOSD and AQP4-Ab positive disease classification and update on epidemiology and phenotypic features  
F. Paul (Berlin, DE)  

09.00 MOG antibody disease update and differentiation from MS and AQP4-Ab positive disease  
K. Fujihara (Sendai, JP)  

09.30 Treatment of NMOSD using case studies  
J. Palace (Oxford, UK)  

08.30 – 10.00 **Educational Session 24: The use of stem cells in MS: where are we and where are we going?**  
Hall E  

**Level:** Intermediate  
**Chairs:**  
D. Karussis (Jerusalem, IS)  
A. Uccelli (Genoa, IT)  

08.30 Overview of the rationale and the options of stem cells therapies in MS and review of the existing clinical experience  
D. Karussis (Jerusalem, IS)  

09.00 Mesenchymal stem cells in MS: possible mechanisms of action and future directions  
A. Uccelli (Genoa, IT)  

09.30 The rationale and the existing clinical data using Hematopoetic stem cells in MS  
P.A. Muraro (London, UK)
10.30 – 12.00 Educational Session 25: MS mimicks: genetic disorders  

**Level:** Basic  

**Chairs:**  
O. Boespflug-Tanguy (Paris, FR)  
F. Mochel (Paris, FR)

10.30  
**Genetic mimicks with acute presentation**  
O. Boespflug-Tanguy (Paris, FR)

11.00  
**Genetic mimicks with progressive presentation**  
F. Mochel (Paris, FR)

11.30  
**Treatments in genetic mimicks of MS**  
O. Boespflug-Tanguy (Paris, FR)  
F. Mochel (Paris, FR)

10.30 – 12.00 Educational Session 26: From structural and functional connectivity to clinical impairment in multiple sclerosis (MAGNIMS)  

**Level:** Advanced  

**Chairs:**  
M.A. Rocca (Milan, IT)  
D. Chard (London, UK)

10.30  
**Structural connectivity**  
M. Schoonheim (Amsterdam, NL)

11.00  
**Functional connectivity**  
M.A. Rocca (Milan, IT)

11.30  
**Clinical significance**  
D. Chard (London, UK)