# RC**2**NB 4.0: Transforming research in MS and Neuroimmunology

*Hosted by: Research Center for Clinical Neuroimmunology and Neuroscience Basel (RC**2**NB)*

**15.12.2023 (10:30-18:30 CET)**
**Basel, Switzerland**

**Biozentrum, Maurice E. Müller Saal,**
**Spitalstrasse 41, 4056 Basel**

**09:30**        **Welcome Coffee**

**10:00**        **Welcome by Ludwig Kappos and Cristina Granziera**

**10:10 – 10:40**        **Opening lecture: Learning from other areas of medicine**

| Time | Title | Referent |
|---|---|---|
| 10:10 – 10:40 | The patient's digital twin | Tobias Heimann, Head of Artificial Intelligence Germany, Siemens Healthineers |

**10:40 – 12:00**        **Session 1: Neuroimmunological mechanisms in MS**

Chairs: Renaud Du Pasquier (Lausanne, CH) and Reinhard Hohlfeld (Munich, DE)

| Time | Title | Referent |
|---|---|---|
| 10:40 – 11:00 | Innovative concepts in neuroimmunology | Amit Bar-Or, Philadelphia, PA, USA |
| 11:00 – 11:15 | The B-cell perspective of MS | Tobias Derfuss, Basel, CH |
| 11:15 – 11:30 | A role for IgA-producing cells in MS? | Anne-Katrin Pröbstel, Basel, CH |
| 11:30 – 12:00 | The success story of B-cell directed therapy and new therapeutic targets | Stephen Hauser, San Francisco, CA, USA |

**12:00 – 13:00**        **Lunch break & poster session**

**13:00 – 14:30**        **Session 2: Fluid and imaging biomarkers in MS**

Chairs: Massimo Filippi (Milano, IT) and Frederik Piehl (Stockholm, S)

| Time | Title | Referent |
|---|---|---|
| 13:00 – 13:30 | What can be said at all can be clearly quantified, and whereof one cannot quantify thereof one must be silent... | Daniel S. Reich, Bethesda, MD, USA |
| 13:30 – 13:50 | Body fluid biomarkers in MS – finally on target? | Jens Kuhle, Basel, CH |
| 13:50 – 14:00 | The role of complement in MS | Johanna Oechtering, Basel, CH |
| 14:00 – 14:20 | Imaging axonal damage and repair in MS: the INsIDER experience | Cristina Granziera, Basel, CH |
| 14:20 – 14:30 | Mechanisms of clinical worsening independent of inflammatory activity in MS: an advanced MRI perspective | Alessandro Cagol, Basel, CH |

**14:30 – 15:00**        **Coffee break & poster session**

**15:00 – 16:30**     **Session 3: Clinical trials, disease monitoring, cohort studies and pragmatic clinical trials in MS**

Chairs: Maria Pia Sormani (Genova, IT) and Urs Fischer (Basel, CH)

| Time | Title | Referent |
|---|---|---|
| 15:00 – 15:30 | Meta-epidemiology of clinical trials | John P.A. Ioannidis, Stanford, CA, USA |
| 15:30 – 15:40 | The Swiss Multiple Sclerosis Cohort: a 10-year investment in quality | Claudio Gobbi, Lugano, CH<br>Jens Kuhle, Basel, CH |
| 15:40 – 15:50 | Neurostatus eEDSS | Marcus d'Souza, Basel, CH |
| 15:50 – 16:10 | Digital Biomarkers for pwMS - the dreaMS project | Johannes Lorscheider,<br>Tim Woelfle, Basel, CH |
| 16:10 – 16:30 | Pragmatic trials in MS: a novel journey | Lars Hemkens, Basel, CH |

**16:30 – 17:00**     **Coffee break & poster session**

**17:00 – 18:00**     **Session 4: Towards digital twins in neuroimmunology?**

Chairs: Torsten Schwede (Basel, CH) and Jan Hillert (Stockholm, S)

| Time | Title | Speaker |
|---|---|---|
| 17:00 – 17:15 | The Big MS data network | Jan Hillert, Stockholm, S |
| 17:15 – 17:30 | Big (great) data in immunobiology: is more always better? | Manfred Claassen, Tübingen, D |
| 17:30 – 17:45 | Federated Learning as an alternative to data transfer? | Björn Tackenberg, Hoffmann La Roche, Basel, CH |
| 17:45 – 18:00 | Big (great) data from clinical trials: what can we learn | Amit Khanna, Novartis, Basel, CH |

**18:00**     **Closing remarks** – RC2NB 4.0: Τα πάντα ρει, μηδέποτε κατά τʹαυτό μένειν, Ludwig Kappos (Basel, CH)

**18:15**     **Apero Riche**

**For speakers/chairs and other invited guests:**

**19:30**     **Dinner**

# Saturday 16.12.2023: Cultural program (details to follow)