



ISNI  
International Society  
of Neuroimmunology

# ISNI 2014

12<sup>th</sup> International Congress  
of Neuroimmunology

9-13 November 2014 | Mainz, Germany

SCIENTIFIC PROGRAM

## ISNI EXECUTIVE

### President

Gianvito Martino (Italy)

### Vice-President

V. Wee Yong (Canada)

### Secretary / Treasurer

Roberto Furlan (Italy)

## HONORARY OFFICERS

J. Antel (Montreal Canada)

C. Raine (New York, USA)

A. Vincent (Oxford, UK)

H. Wekerle (Martinsried, Germany)

C. Whitacre (Columbus, USA)

T. Owens (Odense, Denmark)

T. Olsson (Stockholm, Sweden)

## INTERNATIONAL ADVISORY BOARD

S. Amor (Leiden, the Netherlands)

D. Baker (London, UK)

A. Bar-Or (Montreal, Canada)

B. Becher (Zurich, Switzerland)

M. Carson (Del Mar, USA)

A. Coles (Cambridge, UK)

R. Gold (Bochum, Germany)

B. Hemmer (Munich, Germany)

R. Hintzen (Rotterdam, the Netherlands)

L. Probert (Athens, Greece)

M. Racke (Powell, USA)

M. Schwartz (Rehovot, Israel)

L. Steinman (Stanford, USA)

P. Villoslada (Barcelona, Spain)

A. Waisman (Mainz, Germany)

T. Yamamura (Tokyo, Japan)

S. Zamvil (San Francisco, USA)

F. Zipp (Mainz, Germany)

## CONGRESS ORGANIZERS

### Congress Chairs

Ari Waisman (Mainz, Germany)

Frauke Zipp (Mainz, Germany)

Burkhard Becher (Zurich, Switzerland)

Britta Engelhardt (Bern, Switzerland)

Ralf Gold (Bochum, Germany)

Hans-Peter Hartung (Duesseldorf, Germany)

Bernahrd Hemmer (Munich, Germany)

Reinhard Hohlfeld (Munich, Germany)

Ludwig Kappos (Basel, Switzerland)

Hans Lassmann (Vienna Austria)

Marco Prinz (Freiburg, Germany)

Hartmut Wekerle (Martinsried, Germany)

Heinz Wiendl (Munster, Germany)



ISNI  
International Society  
of Neuroimmunology

On behalf of the International Society of Neuroimmunology (ISNI) and the Rhine Main Neuroscience Network (rmn2), we are pleased to invite you to participate in the Twelfth ISNI Congress, which will be held in the Rheingoldhalle Mainz, Germany, from November 9<sup>th</sup> - 13<sup>th</sup>, 2014.

There are exciting developments in the field of Neuroimmunology affecting our understanding of neuroimmune diseases, the development of new immunotherapies, and new technology for research.

The Organizing Committee, on behalf of the ISNI, is preparing an exciting program that will inform participants on the latest developments in the field. The program will include plenary sessions, focused symposia, and workshops. Plenty of time is devoted to poster presentations. We want to see you there!

Mainz is an old Roman city and a cultural center located only 20 minutes from the international airport of Frankfurt. The city is rich in history and is a touristic attraction. Mainz is the birthplace of Johannes Gutenberg and home for the museum in his name that describes the invention of the print. The University of Mainz, the host of the meeting also bears the name of Gutenberg and is one of the largest Universities in Germany. Museums, places to visit and restaurants in the city will make this event a wonderful experience.

We look forward to seeing you in Mainz as part of the rmn2!



***Frauke Zipp***



***Ari Waisman***

*Conference Chairs  
University Medical Center  
of the Johannes Gutenberg University of Mainz*

## General information

### Dates

14<sup>th</sup> ESNI pre-congress Course  
European School of Neuroimmunology  
Sunday, November 9, 2014

12<sup>th</sup> ISNI Congress  
International Society of Neuroimmunology  
Monday, November 10 to Thursday November 13,  
2014

### Congress venue

Rheingoldhalle  
mainzplus CITYMARKETING GmbH  
Rheinstrasse 66  
D-55116 Mainz, Germany  
[www.ccmmainz.de/rheingoldhalle.html](http://www.ccmmainz.de/rheingoldhalle.html)

### Registration desk

Opening hours are as follows:

|           |             |               |
|-----------|-------------|---------------|
| Saturday  | November 8  | 16.00 - 19.30 |
| Sunday    | November 9  | 07.00 - 18.00 |
| Monday    | November 10 | 07.00 - 18.00 |
| Tuesday   | November 11 | 07.30 - 18.00 |
| Wednesday | November 12 | 07.30 - 18.00 |
| Thursday  | November 13 | 07.30 - 16.00 |

### Participant's fee includes

- Participant's badge and congress material
- Access to scientific sessions and exhibition
- Abstract book
- Certificate of attendance
- CME Accreditation

### Badge

Upon registration you will receive your congress kit with your name badge. You are kindly requested to wear your badge during all congress sessions and events. In case you lose your badge, please ask for a duplicate at the congress secretariat desk.

### Certificate of attendance

Certificates of attendance will be sent to all participants by e-mail upon request after the congress end.

### Exhibition area

The exhibition area is in the Rhinefoyer.

Opening hours are as follows:

|           |             |               |
|-----------|-------------|---------------|
| Monday    | November 10 | 07:00 - 18:00 |
| Tuesday   | November 11 | 07:00 - 18:00 |
| Wednesday | November 12 | 07:00 - 18:00 |
| Thursday  | November 13 | 07:00 - 15:30 |

### Pre-Congress Teaching Course

The 14<sup>th</sup> ESNI Course will take place in the Kongress Saal between 9:15am and 6:00pm on Sunday, November 09, 2014. Delegates attending the course should register at the registration desk between 4:00pm and 8:00pm on Saturday November 8. Only the registered Students/Post.docs or the delegates who confirmed their participation in the 14<sup>th</sup> ESNI Course when they registered on-line are allowed.

### Plenary Lectures

There will be four plenary lectures from Monday to Thursday.

Lectures will take place in the Kongress Saal of the Rheingoldhalle.

### Plenary Symposia

There will be four plenary symposia in the morning from Monday to Thursday.

All plenary sessions will take place in the Kongress Saal.

### Concurrent Symposia

There will be twelve concurrent symposia. All concurrent sessions will take place in Room A (Kongress Saal), Room B (Gutenbergsaal 1) and Room C (Gutenbergsaal 2) of the Rheingoldhalle.

## Oral Sessions

Oral communications are allotted about 15 minutes for the presentation. Authors are kindly requested to respect their presentation time. Power Point video projection will be available in all rooms for the presentations, authors must upload their presentation at the Speakers' Ready Room located in the Rhine-foyer, no later than 9:00am on the assigned date of presentation, or beforehand.

## Poster Sessions

Posters will be on display on Monday, Tuesday and Wednesday between 9:00am and 5:30pm in the Rhinefoyer.

You can place your poster on the assigned board between 7:00pm of the previous day and 9:00am of the assigned date. Poster should be removed by authors between 5:30pm and 7:00pm on the same day of the assigned session. The Congress Secretariat will not be responsible for posters left behind. Poster size should be maximum 70cm wide and 1m high and will be displayed as a portrait. The position of each poster will be marked by the poster number and title, please place your poster on the assigned board. Authors must be present during the assigned poster session.

Underneath please find the poster sessions schedule

### Monday, November 10

- PS 1 B cells and antibodies
- PS 2 Biomarkers
- PS 3 Blood brain barrier
- PS 4 Clinical research
- PS 5 Innate immune system
- PS 6 Models of disease
- PS 7 Omics
- PS 8 Pathology
- PS 9 Psychoimmunomodulation

### Tuesday, November 11

- PS 10 Immunological mechanisms
- PS 11 Genetics
- PS 12 miRNA
- PS 13 Neuroinflammation

### Wednesday, November 12

- PS 14 Brain tumors and paraneoplastic
- PS 15 Infections
- PS 16 Mechanisms of CNS disease
- PS 17 Neurodegeneration
- PS 18 Repair
- PS 19 Stem cells
- PS 20 T-cells
- PS 21 Therapies

## Language

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

## Sessions

Please make sure to be in the session hall on time as all sessions will begin and end as according to the schedule.

## Lunch breaks

Participants that have ordered their lunch will receive lunch coupons from Monday to Thursday. Participants that also ordered lunch for the ESNI Course will also receive a coupon for Sunday.

Please show your lunch coupons to receive your lunch which will be distributed in the designed areas according to the schedule.

## CME credits

The 12<sup>th</sup> ISNI congress (International Congress of Neuroimmunology) and the 14<sup>th</sup> Esni Course (European School of Neuroimmunology) have been accredited by the European Accreditation Council for Continuing Medical Education (EACCME) for 28 credits.

That is the maximum possible number of credits we could get. This amazing result has been obtained thanks to the high level of the scientific program and the number of learning hours.

The EACCME is an institution of the European Union of Medical Specialists (UEMS), [www.uems.net](http://www.uems.net). Each medical specialist should claim only those hours of credits that he/she actually spent in the educational activity.

EACCME credits are recognized by the American Med-

ical Association towards the Physician's Recognition Award (PRA). To convert EACCME credit to AMA PRA category 1 credit, please contact the AMA. Other bilateral agreements may exist between AMA ACCME and your local CME authority.

### **Disabled persons**

The Rheingoldhalle is equipped with facilities for disabled persons. However, if you have any special needs or disabilities, please let the organizing secretariat know when registering for the congress.

### **Insurance**

The organizers will not accept liability for individual medical, travel or personal insurance. It is highly recommended that all participants carry proper health and travel insurance.

### **Smoking policy**

Smoking is forbidden at any time in the whole Congress Venue. Your compliance is appreciated.

### **Mobile phones**

Mobile phones must be switched off while attending a session.

### **Speakers' ready room**

Speakers' ready room is located in the Rhinefoyer and operates during the congress hours. See opening hours above.

### **All rooms are equipped as follow**

All invited speakers and presenting authors of accepted abstracts as oral presentation are kindly requested to visit the Speaker's ready room at least the day before their presentation time.

Speakers should clearly identify themselves and specify the room, date and time of presentation as indicated in the scientific program.

During the visit to the speakers' ready room a technician will load your presentation on the congress computers, run through it and check it. Your presentation will be sent from the central server to the room where you will give your talk. Congress staff will be available in the session rooms for assistance.

## **EXHIBITORS**

- **Merck Serono GmbH**
- **BIO-SYS GmbH**
- **Genzyme Europe B.V**
- **NanoString Technologies**

NanoString Technologies provides life science tools for translational research and molecular diagnostic products. The company's nCounter® Analysis System, which has been employed in basic and translational research and cited in 500 peer review publications, has also now been applied to diagnostic use with the nCounter Dx Analysis System. The nCounter-based Prosigna™ Breast Cancer Prognostic Gene Signature Assay is marketed for use on the nCounter Dx Analysis System which is FDA 510(k) cleared.

- **Bio-Rad AbD Serotec**
- **Sony Europe Ltd.**
- **Miltenyi Biotec GmbH**
- **Jackson ImmunoResearch Europe Ltd**
- **BioLegend UK Ltd**
- **R&D Systems GmbH**
- **eBioscience**
- **Euroimmun AG**

## SPEAKERS & CHAIRS

### Amparo Acker-Palmer PhD

Goethe University Frankfurt, Institute of Cell Biology and Neuroscience, Frankfurt, Germany

### Orhan Aktas MD

Department of Neurology, Heinrich-Heine-Universität Düsseldorf, Düsseldorf, Germany

### Francesca Aloisi PhD

Department of Cell Biology and Neuroscience, Istituto Superiore di Sanità, Rome, Italy

### Sandra Amor BSc, PhD

Pathology Department, VU Medical Center, Amsterdam, the Netherlands

### Jack Antel MD

Department of Neurology, McGill University, Montréal, Canada

### Carlo Avolio MD

Dept. of Medical and Surgical Sciences, University of Foggia, Foggia, Italy

### David Baker MD

Center for Neuroscience and Trauma, Blizard Institute of Cell and Molecular Science, Barts & the London School of Medicine, London, UK

### Sergio Baranzini PhD

Heidrich Family and Friends, Department of Neurology, University of California, San Francisco, US

### Amit Bar-Or MD FRCPC

Neuroimmunology Unit, Montréal Neurological Institute, McGill University, Montréal, Canada

### Luca Battistini MD, PhD

Neuroimmunology Unit, Santa Lucia Foundation, Rome, Italy

### Burkhard Becher PhD

University of Zürich, Institute of Experimental Immunology, Zürich, Switzerland

### Ingo Bechmann MD

Institute of Anatomy, University of Leipzig, Leipzig, Germany

### Carsten Berndt PhD

Department of Neurology Medical Faculty Heinrich-Heine University Life Science Center Düsseldorf, Germany

### Wolfgang Brück MD

Institut für Neuropathologie, Universitätsmedizin Göttingen, Georg-August-Universität, Göttingen, Germany

### Julia Bruttger

Institute for Molecular Medicine  
University Medical Center of the Johannes Gutenberg-University of Mainz, Germany

### Monica Carson PhD

UCRiverside School of Medicine, Riverside, US

### Diego Centonze MD

Multiple Sclerosis, Clinical & Research, Clinical & Research Center Department of Systems Medicine, Tor Vergata University, Rome, Italy

### Manuel Comabella MD

Neurogenomics Division, Vall d'Hebron University Hospital, Barcelona, Spain

### Alastair Compston MD

Department of Clinical Neurosciences, University Neurology Unit, Cambridge Biomedical Campus, Cambridge, UK

### Anne Cross MD

Dept. of Neurology (McMillan 310), Washington University, School of Medicine, St. Louis, US

### Josep Dalmau MD

Neurology, Hospital Clínic, University of Barcelona, Barcelona, Spain, University of Pennsylvania, Philadelphia, US

### Robert Dantzer DVM, PhD

Department of Symptom Research, Division of Internal Medicine, Houston, US

### Helga de Vries PhD

Blood-Brain Barrier Research Group, Dept. of Molecular and Cell Biology and Immunology, VU University Medical Center, Amsterdam, the Netherlands

### Suhayl Dhib-Jalbut MD

President-ACRIMS, Department of Neurology, Rutgers-Robert Wood Johnson Medical School, New Brunswick, US

### Ricarda Diem MD

Abteilung für Neuroonkologie, Universitätsklinikum Heidelberg, INF 400, Heidelberg, Germany

### Ivan Dikic PhD

Institute of Biochemistry II, Goethe University School of Medicine, Frankfurt, Germany

### Britta Engelhardt PhD

University of Bern, Theodor Kocher Institute, Bern, Switzerland

### Bente Finsen DMSc

Department of Neurobiology, Institute of Molecular Medicine, University of Southern Denmark, Odense, Denmark

### Alexander Flügel PhD

Institute for Multiple Sclerosis Research, Dept. of Neuroimmunology, University Medical Center Göttingen, Göttingen, Germany

**Lars Fugger MD, PhD**

Nuffield Dept. of Clinical Neurosciences, John Radcliffe Hospital, University of Oxford, Oxford, UK

**Roberto Furlan MD, PhD**

Clinical Neuroimmunology Unit, Institute of Experimental Neurology, INSPE Division of Neuroscience, San Raffaele Hospital, Milan, Italy

**Ralf Gold MD**

Department of Neurology, St. Josef-Hospital, Ruhr University, Bochum, Germany

**Joan Goverman PhD**

Dept. Immunology, University of Washington, Seattle, US

**Melanie Greter PhD**

University of Zürich, Institute of Experimental Immunology, Zürich, Switzerland

**David Hafler MD**

Department of Neurology, Yale School of Medicine, New Haven, US

**May Han MD**

Department of Neurology and Neurological Sciences, Multiple Sclerosis Center, Stanford Hospital and Clinics, Stanford, US

**Hanne Harbo MD, PhD**

Department of Neurology, Oslo University Hospital and University of Oslo, Oslo, Norway

**Hans-Peter Hartung MD, FRCP**

Department of Neurology, Heinrich-Heine-University, Düsseldorf, Germany

**Bernhard Hemmer MD**

Neurologischen Klinik und Poliklinik 1, Prodekan der Fakultät für Medizin der Technische Universität München, Klinikum rechts der Isar, München, Germany

**Michael Heneka MD**

Department of Neurology, Clinical Neuroscience Unit, University of Bonn, Bonn, Germany

**Frank Heppner MD**

Department of Neuropathology, Charité - Universitätsmedizin Berlin, Berlin, Germany

**Jan Hillert MD, PhD**

Department of Clinical Neuroscience, Karolinska Institutet, Stockholm, Sweden

**Rogier Hintzen MD, PhD**

Department of Neurology, Erasmus University Medical Center, Rotterdam, the Netherlands

**Reinhard Hohlfeld MD**

Institute of Clinical Neuroimmunology, Klinikum der LMU München, Campus Grosshadern, München, Germany

**Steffen Jung PhD**

Weizmann Institute of Science, Department of Immunology, Rehovot, Israel

**Johanna Kaplan**

Neuroimmunology Research  
Genzyme, a Sanofi company, Framingham, MA, United States

**Ludwig Kappos MD**

University Hospital Basel, Neurology and Department of Biomedicine, Basel, Switzerland

**Dimitrios Karussis MD**

Department of Neurology, Hadassah Medical Organization, Hadassah, Jerusalem, Israel

**Lloyd Kasper MD**

Geisel School of Medicine, Dartmouth College, Hanover, US

**Martin Kerschensteiner PhD**

Institute of Clinical Neuroimmunology, Medical Center of the University of Munich, München, Germany

**Samia Khoury MD**

Abu Haidar Neuroscience Institute, Clinical and Translational Research, Multiple Sclerosis Center, American University of Beirut, Jack, Sadie and David Breakstone, Harvard Medical School, Boston, Beirut, Lebanon

**Bernd Kieseier MD**

Department of Neurology, Heinrich-Heine-University, Düsseldorf, Germany

**Jonathan Kipnis PhD**

Department of Neuroscience, Center for Brain Immunology and Glia (BIG), University of Virginia, Charlottesville, US

**Thomas Korn MD**

Technische Universität München, Klinikum rechts der Isar, Experimental Neuroimmunology Group, München, Germany

**Vijay Kuchroo DVM, PhD**

Center for Neurologic Diseases, Brigham and Women's Hospital and, Harvard Medical School, Boston, US

**Jon D. Laman, PhD**

Dept. Immunology, Erasmus MC, University Medical Centre Rotterdam, Rotterdam, the Netherlands

**Antonio Lanzavecchia MD**

Human Immunology ETH Zürich, Institute for Research in Biomedicine, Zürich, Switzerland

**Hans Lassmann MD**

Head of Department of Neuroimmunology, Medical University of Vienna, Center for Brain Research, Vienna, Austria



**Roland Liblau MD, PhD**

Centre de Physiopathologie Toulouse Purpan (CPTP), INSERM UMR1043 - CNRS UMR5282, Université Toulouse III, Toulouse, France

**Catherine Lubetzki MD, PhD**

University Pierre and Marie Curie (UPMC), Brain and Spinal Cord Institute (ICM), Salpêtrière Hospital, Paris, France

**Burkhard Ludewig DVM**

Institute of Immunobiology, Medical Research Center, Kantonsspital St. Gallen, St. Gallen, Switzerland

**Gianvito Martino MD**

Division of Neuroscience, San Raffaele Hospital, Milan, Italy

**Edgar Meinel MD**

Institut für Klinische Neuroimmunologie, Klinikum der Ludwig-Maximilians-Universität München, München, Germany

**Doron Merkler MD**

Department of Pathology and Immunology, University of Geneva, Geneva, Switzerland

**Sven G. Meuth MD, PhD**

University Hospital Münster, Department of Neurology and Institute of Physiology I, Neuropathophysiology, Albert-Schweitzer Campus 1, Münster, Germany

**Emmanuel Mignot MD, PhD**

Craig Reynolds, Center for Sleep Sciences and Medicine, Stanford University, Stanford, US

**Ariel Miller MD, PhD**

Multiple Sclerosis and Brain Research Center, Department of Neurology, Carmel Medical Center, Pharmacogenetics and Personalized Medicine Center, Rappaport Faculty of Medicine and Research Institute, Technion-Israel, Institute of Technology, Haifa, Israel

**Stephen Miller PhD**

Judy Gugenheim, Interdepartmental Immunobiology Center, Department of Microbiology-Immunology, Northwestern University Medical School, Chicago, US

**Marcin Mycko MD, PhD**

Department of Neurology, Laboratory of Neuroimmunology, Medical University of Lodz, Lodz, Poland

**Klaus-Armin Nave PhD**

Max Planck Institute for Experimental Medicine, Dept. of Neurogenetics, Göttingen, Germany

**Tomas Olsson MD, PhD**

Department of Clinical Neurosciences, Neuroimmunology Unit, Center for Molecular Medicine, Karolinska Hospital Stockholm, Sweden

**Trevor Owens PhD**

Institute of Molecular Medicine, University of Southern Denmark, Odense, Denmark

**Nikolaos A. Patsopoulos MD, PhD**

Department of Neurology, Division of Genetics, Department of Medicine, Brigham & Women's Hospital, Harvard Medical School, Broad Institute, Boston/Cambridge, MA, USA

**Michael Platten MD,**

CCU Neuroimmunology and Brain Tumor Immunology, German Cancer Research Center and, Department of Neurooncology, University Hospital Heidelberg National Center for Tumor Diseases, Heidelberg, Germany

**Alexandre Prat MD, PhD, FRCPC**

Department of Neuroscience, Université de Montréal, Montréal, Canada

**Marco Prinz MD**

University Medical Center Freiburg, Institute of Neuropathology, Freiburg, Germany

**Francisco Quintana PhD**

Center for Neurologic Diseases, Brigham & Women's Hospital, Harvard Medical School, Boston, US

**Michael K. Racke MD**

the Helen C. Kurtz Chair in Neurology, Department of Neurology, Wexner Medical Center at the Ohio State University, Columbus, US

**Federica Sallusto PhD**

Institute for Research in Biomedicine, Università della Svizzera Italiana, Bellinzona, Switzerland

**Hansjorg Schild PhD**

Institute for Immunology, University Medical Center Mainz, Mainz, Germany

**Detlef Schuppan MD, PhD**

Institute of Translational Immunology, University Medical Center of the Johannes Gutenberg University Mainz, Harvard Medical School, Celiac and Small Intestinal Disease Center, Mainz, Germany

**Michal Schwartz MD, PhD**

The Maurice and Ilse Katz, The Department of Neurobiology, The Weizmann Institute of Science, Rehovot, Israel

**Benjamin Segal MD**

Holtom-Garrett Program in Neuroimmunology and Multiple Sclerosis Center, Department of Neurology, University of Michigan, Ann Arbor, US

**Krzysztof Selmaj MD, PhD**

Department of Neurology, Medical University of Lodz, Lodz, Poland

**Volker Siffrin MD**

Universitätsmedizin der Johannes Gutenberg-Universität Mainz, Klinik und Poliklinik für Neurologie, Forschungszentrum Translationale Neurowissenschaften (FTN), Forschungszentrum Immunologie (FZI), Rhein-Main-Neuronetzwerk (rmn2), Mainz, Germany

**Lydia Sorokin MD**

Institute of Physiological Chemistry and Pathobiochemistry,  
University of Münster, Münster, Germany

**Tim Sparwasser MD**

Instiut für Infektionsimmunologie, TWINCORE - Zentrum f.  
Experimentelle und, Klinische Infektionsforschung GmbH,  
Hannover, Germany  
**Christine Stadelmann-Nessler**  
Institute for Neuropathology, University Medical Center,  
Göttingen, Germany

**Bruno Stankoff MD, PhD**

University Pierre and Marie Curie, UPMC Paris, ICM Institut du  
Cerveau et de la Moelle, Hopital Pitié Salpêtrière and Neurology  
Department, Hopital Tenon HUEP, APHP, Paris, France

**Pavel Stourac MD, PhD**

Department of Neurology, University Hospital, Masaryk  
University, Brno, Czech Republic

**Olaf Stuve MD, PhD**

Neurology Section, VA North Texas Health Care System, Medical  
Service, Dallas VA Medical Center, Department of Neurology and  
Neurotherapeutics, University of Texas Southwestern Medical  
Center at Dallas, Dallas, USA

**Bert 't Hart PhD**

Chairman Department of Immunobiology, Biomedical Primate  
Research Centre, Rijswijk, the Netherlands

**Antonio Uccelli MD**

Department of Neurology, Rehabilitation, Ophthalmology,  
Genetics, Maternal and Child Health, University of Genoa,  
Genoa, Italy

**Annamaria Vezzani PhD**

Laboratory Experimental Neurology, Dept. of Neuroscience,  
Mario Negri Institute for Pharmacological Research, Milan, Italy

**Pablo Villoslada MD, PhD**

Center of Neuroimmunology, Institut Biomedical Research  
August Pi Sunyer (IDIBAPS), Hospital Clinic of Barcelona,  
Barcelona, Spain

**Angela Vincent MBBS**

Nuffield Department of Clinical Neurosciences, Oxford University  
Hospital, Oxford, UK

**Ari Waisman PhD**

University Medical Center of the Johannes Gutenberg University,  
Institute for Molecular Medicine, Mainz, Germany

**Howard Weiner MD**

Harvard Medical School, Brigham & Women's Hospital,  
Boston, US

**Hartmut Wekerle MD**

Max Planck Institute of Neurobiology, Emeritus Research Group  
- Neuroimmunology; Hertie Senior Professorship, Martinsried,  
Germany

**Michael Weller MD**

Department of Neurology, University Hospital Zürich, Zürich,  
Switzerland

**Wolfgang Wick MD**

Abteilung Neuroonkologie, Neurologische Klinik und Nationales  
Tumorzentrum, Universitätsklinik Heidelberg, Heidelberg,  
Germany

**Heinz Wiendl MD**

Department of Neurology, University of Münster, Münster,  
Germany

**Hugh Willison MBChB, PhD**

Glasgow Biomedical Research Centre, Glasgow, UK

**Takashi Yamamura MD, PhD**

Department of Immunology, National Institute of Neuroscience,  
NCNP, Tokyo, Japan

**V. Wee Yong PhD**

University of Calgary, Faculty of Medicine, Calgary, Canada

**Akihiko Yoshimura PhD**

Department of Microbiology and Immunology, Keio University  
School of Medicine, Tokyo, Japan

**Scott Zamvil MD, PhD**

Program in Immunology, University of California,  
San Francisco, US

**Frauke Zipp MD**

University Medical Center of the Johannes Gutenberg University,  
Department of Neurology, Mainz, Germany

---

## **DAY 1** Sunday | November 9<sup>th</sup> 2014

---

### MORNING SESSION

09:15 - 13:00 PLENARY ROOM (KONGRESS SAAL)

Chair: Gianvito Martino

- |       |                                                                                            |
|-------|--------------------------------------------------------------------------------------------|
| 09:15 | <b>INTRODUCTION TO THE COURSE</b><br>Gianvito Martino                                      |
| 09:30 | <b>LYMPHOCYTE TRAFFICKING IN THE CNS</b><br>Britta Engelhardt                              |
| 10:15 | <b>NEUROIMMUNOGENETICS</b><br>Tomas Olsson                                                 |
| 11:00 | Coffee break                                                                               |
| 11:30 | <b>REGULATORY T CELLS: WHERE WE ARE IN NEUROIMMUNOLOGICAL DISORDERS</b><br>Luca Battistini |
| 12:15 | <b>MICROGLIA: WHERE THEY COME FROM?</b><br>Melanie Greter                                  |

---

### LUNCH BREAK

13:00 - 14:30 RHEINFOYER

---

### AFTERNOON SESSION

14:30 - 18:00 PLENARY ROOM (KONGRESS SAAL)

Chair: Gianvito Martino

- |       |                                                                                                          |
|-------|----------------------------------------------------------------------------------------------------------|
| 14:30 | <b>INFLAMMATION AND SYNAPTIC PLASTICITY: A NEW EMERGING CONCEPT IN NEUROPROTECTION</b><br>Diego Centonze |
| 15:15 | <b>ION CHANNEL DISORDERS: FROM TARGET IDENTIFICATION TO THERAPIES</b><br>Josep Dalmau                    |
| 16:00 | Coffee break                                                                                             |
| 16:30 | <b>NEUROIMMUNOMODULATION: NEW DRUGS OR REPOSITIONING OF OLD DRUGS?</b><br>Samia J. Khoury                |
| 17:15 | <b>CELL BASED THERAPIES IN NEUROIMMUNOLOGICAL DISORDERS: FROM BLOOD TO BRAIN</b><br>Antonio Uccelli      |

## **DAY 2** Monday | November 10<sup>th</sup> 2014

---

### WELCOME ADDRESS

08:00 - 08:15 PLENARY ROOM (KONGRESS SAAL)

---

### MICROGLIA AND MICROBIOTA

08:15 - 09:30 PLENARY ROOM (KONGRESS SAAL)

**Chairs:** Alexandre Prat, Ralph Gold

**08:15 NATURE PLUS NURTURE: THE INTESTINAL IGNITION OF DEMYELINATING AUTOIMMUNE DISEASE**  
Hartmut Wekerle

**08:53 PERIPHERAL AND BRAIN-RESIDENT IMMUNE CELLS SUPPORT BRAIN FUNCTION IN HEALTH AND DISEASE**  
Jonathan Kipnis

---

### COFFEE BREAK

09:30 - 10:00 POSTERHALL (RHEINFOYER)

---

### EMERGING PSYCHIATRIC-IMMUNOLOGICAL DISORDER

10:00 - 11:45 ROOM A (KONGRESS SAAL)

**Chairs:** Bernhard Hemmer, Krzysztof Selmaj

**10:00 AUTOIMMUNE BASIS OF NARCOLEPSY**  
Emmanuel Mignot

**10:23 INFLAMMATION-INDUCED DEPRESSION. EVIDENCE AND MECHANISMS**  
Robert Dantzer

**10:45 MECHANISMS OF LESION DEVELOPMENT IN MULTIPLE SCLEROSIS FROM EARLY TO PROGRESSIVE DISEASE STAGES**  
Wolfgang Brück

**11:08 Roberto Furlan**

**11:30 365 - GENETIC STUDY OF PANDEMRIX-ASSOCIATED NARCOLEPSY**  
Izaura Lima Bomfim <sup>(1)</sup> - Katarina Fink <sup>(1)</sup> - Favelle Lamb <sup>(2)</sup> - Niklas Darin <sup>(3)</sup> - Attila Szakacs <sup>(3)</sup> - Tove Hallböök <sup>(3)</sup> - Fredrik Piehl <sup>(1)</sup> - Lisen Arnheim Dahlström <sup>(2)</sup> - Ingrid Kockum <sup>(1)</sup> - Tomas Olsson <sup>(1)</sup>  
Department Of Clinical Neuroscience, Karolinska Institutet, Stockholm, Sweden <sup>(1)</sup> - Department Of Epidemiology And Biostatistics, Karolinska Institutet, Stockholm, Sweden <sup>(2)</sup> - Department Of Children, County Hospital, Halmstad, Sweden <sup>(3)</sup>

---

### GENOTYPE/PHENOTYPE

10:00 - 11:45 ROOM B (GUTENBERGSAAL 1)

**Chairs:** David Baker, Tim Sparwasser

- 10:00 **RISK GENES, LIFESTYLE/ENVIRONMENTAL FACTORS AND THEIR INTERACTIONS IN MULTIPLE SCLEROSIS**  
Tomas Olsson
- 10:23 **REGULATION OF CNS INFLAMMATION**  
Francisco J. Quintana
- 10:45 **THE DRUGGABLE SPACE OF NEUROLOGIC DISEASES GUIDED BY GENETICS**  
Nikolaos Patsopoulos
- 11:08 **FROM GENOTYPES TO PHENOTYPES IN MULTIPLE SCLEROSIS**  
Hanne Flinstad Harbo
- 11:30 **89 - ROLE OF IMMUNE GENE VARIANTS IN MULTIPLE SCLEROSIS SUSCEPTIBILITY AND SEVERITY: GENETIC BURDEN CONSEQUENCES ON IMMUNE CELL FUNCTIONALITY**  
Mohamed El Behi - Vincent Damotte - Lena Guillot-nöel - Violetta Zujovic - Isabelle Rebeix - Bertrand Fontaine  
Brain And Spine Institute, Pitié Salpêtrière Hospital- Inserm U1127-pierre Et Marie Curie University, Paris, France

## BLOOD BRAIN BARRIER

10:00 - 11:45 ROOM C (GUTENBERGSAAL 2)

Chairs: Olaf Stuve, Hansjorg Schild

- 10:00 **IMMUNE CELL MIGRATION ACROSS THE DIFFERENT BRAIN BARRIERS: IMPLICATIONS FOR MULTIPLE SCLEROSIS LESION FORMATION.**  
Elga De Vries
- 10:23 **THE ROLE OF VASCULAR BASEMENT MEMBRANES AND MATRIX METALLPROTEINASES (MMPS) IN LEUKOCYTE MIGRATION INTO THE BRAIN**  
Lydia Sorokin
- 10:45 **ADHESION MOLECULES REGULATING LESION FORMATION IN MS**  
Alexandre Prat
- 11:08 **HOW BRAIN BARRIERS CONTROL IMMUNE CELL ENTRY INTO THE CNS**  
Britta Engelhardt
- 11:30 **432 - NOTCH RECEPTORS AND LIGANDS MEDIATE BARRIER FUNCTION IN BRAIN ENDOTHELIAL CELLS**  
Melissa Lopes Pinheiro <sup>(1)</sup> - Mark Mizee <sup>(1)</sup> - Bert Van Het Hof <sup>(1)</sup> - Susanne Van Der Pol <sup>(1)</sup>  
Dirk Geerts <sup>(2)</sup> - Arie Reijerkerk <sup>(1)</sup> - Wendy Unger <sup>(1)</sup> - Helga De Vries <sup>(1)</sup>  
Vumc, Vu University Medical Center, Amsterdam, Netherlands <sup>(1)</sup> - Erasmus University Medical Center, Erasmus University Medical Center, Rotterdam, Netherlands <sup>(2)</sup>

## INDUSTRY SPONSORED: INFLAMMATION AND DEGENERATION IN MS: HOW TO UNRAVEL THE TANGLE?

12:00 - 13:00 PLENARY ROOM (KONGRESS SAAL)

Chair: Reinhard Hohlfeld

- 12:00 **INFLAMMATORY MECHANISMS OF AXONAL INJURY**  
Martin Kerschensteiner
- 12:30 **IMAGING OF AND THERAPEUTIC STRATEGIES FOR PREVENTING NEURODEGENERATION**  
Bruno Stankoff

---

THE DALE MCFARLIN LECTURE

13:00 - 13:45 PLENARY ROOM (KONGRESS SAAL)

Chair: Michael Racke

13:00      **THE PATHOPHYSIOLOGY OF MULTIPLE SCLEROSIS**  
David Hafler

---

CRC 128 SPONSORED: NEUROINFLAMMATION

13:45 - 15:15 ROOM A (KONGRESS SAAL)

Chair: Sven Meuth

13:45      **442 - GLUTAMATERGIC TRANSMISSION IS ENHANCED IN THE AMYGDALA IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Shaona Acharjee - Quentin Pittman

Hotchkiss Brain Institute, University Of Calgary, Calgary, Canada

14:03      **92 - ENHANCED NETWORK ACTIVITY DESPITE CLINICAL RECOVERY IN EXPERIMENTAL NEUROINFLAMMATION USING TWO-PHOTON CALCIUM IMAGING**

Erik Ellwardt <sup>(1)</sup> - Gautam Kumar Pramanik <sup>(2)</sup> - Eduardo Rosales Jubal <sup>(2)</sup> - Dirk Luchtman <sup>(1)</sup>

Zeke Barger <sup>(2)</sup> - Esther Witsch <sup>(1)</sup> - Frauke Zipp <sup>(1)</sup> - Albrecht Stroh <sup>(2)</sup>

Focus Program Translational Neurosciences (ftn), Rhine Main Neuroscience Network (rmn2), Department Of Neurology, University Medical Center Of The Johannes-gutenberg University Mainz, Mainz, Germany <sup>(1)</sup> - Focus Program Translational Neuroscience (ftn), Rhine Main Neuroscience Network (rmn2), Institute Of Microscopy, Anatomy And Neurobiology, Johannes Gutenberg-university Mainz, Mainz, Germany <sup>(2)</sup>

14:21      **491 - TRANSGENIC MICE WITH ASTROCYTE-TARGETED IL-10 PRODUCTION IN THE CNS PRESENTED A SPECIFIC PHENOTYPE OF MICROGLIA THAT CORRELATES WITH CHANGES IN THE HIPPOCAMPAL NEURONAL FUNCTION**

Beatriz Almolda <sup>(1)</sup> - Carmen De Labra <sup>(1)</sup> - Iliana Barrera <sup>(1)</sup> - Agnès Gruart <sup>(2)</sup> - Jose Maria

Delgado-garcia <sup>(2)</sup> - Markus Hofer <sup>(3)</sup> - Juan Hidalgo <sup>(1)</sup> - Iain L. Campbell <sup>(3)</sup> - Berta González <sup>(1)</sup>

Bernardo Castellano <sup>(1)</sup>

Dept. Cell Biology, Physiology And Immunology. Institute Of Neurosciences., Autonomous University Of Barcelona, Barcelona, Spain <sup>(1)</sup> - Division Of Neurosciences, Pablo De Olavide University, Sevilla, Spain <sup>(2)</sup>

School Of Molecular Bioscience, University Of Sydney, Sydney, Australia <sup>(3)</sup>

14:39      **319 - ANTI-TNFR1 TARGETING IN HUMANIZED MICE AMELIORATES DISEASE IN A MODEL OF MULTIPLE SCLEROSIS**

Sarah K. Williams <sup>(1)</sup> - Olaf Maier <sup>(2)</sup> - Roman Fischer <sup>(2)</sup> - Richard Fairless <sup>(1)</sup> - Patricia C. Schmitt <sup>(1)</sup>

Uli Eisel <sup>(3)</sup> - Roland Kontermann <sup>(2)</sup> - Andreas Herrmann <sup>(4)</sup> - Eric Guenzi <sup>(4)</sup> - Ricarda Diem <sup>(1)</sup>

Klaus Pfizenmaier <sup>(2)</sup>

Department Of Neuro-oncology, University Of Heidelberg, Heidelberg, Germany <sup>(1)</sup> - Institute Of Cell Biology And Immunology, University Of Stuttgart, Stuttgart, Germany <sup>(2)</sup> - Department Of Molecular Neurobiology, University Of Groningen, Groningen, Netherlands <sup>(3)</sup> - Baloopharm, Ag, Basel, Switzerland <sup>(4)</sup>

14:57      **604 - SOURCES AND FUNCTIONAL SIGNIFICANCE OF IL-6 IN SHAPING AUTOREACTIVE T CELL RESPONSES IN THE PERIPHERAL IMMUNE COMPARTMENT AND THE CNS**

Sylvia Heink <sup>(1)</sup> - Franziska Petermann <sup>(1)</sup> - Christina Heinemann <sup>(1)</sup> - Bernhard Hemmer <sup>(1)</sup>

Mohamed Oukka <sup>(2)</sup> - Ari Waisman <sup>(3)</sup> - Thomas Korn <sup>(1)</sup>

Technical University Munich, Klinikum Rechts Der Isar, Neurology, Munich, Germany <sup>(1)</sup> - University Of Washington, Seattle Children's Research Institute - Center For Immunity And Immunotherapies, Seattle, United States <sup>(2)</sup>

Johannes Gutenberg University Mainz, Institute For Molecular Medicine, Mainz, Germany <sup>(3)</sup>

---

**NOVEL TECHNICAL APPROACHES IN DIFFERENT DISEASE MODELS**

13:45 - 15:15 ROOM B (GUTENBERGSAAL 1)

Chair: Anne H. Cross

- 13:45      336 - FOLLOWING ANTI-CD20 TREATMENT, COMPARTMENT-SPECIFIC REPLETION WITH IMMUNE-COMPETENT B CELLS DEPENDS ON ACTIVATION OF REAPPEARING B CELLS**  
Linda Feldmann - Martin S. Weber  
Department Of Neuropathology, University Medical Center Göttingen, Göttingen, Germany
- 14:00      274 - IN SITU MICRORNA PROFILES OF ASTROCYTES IN THE CONTEXT OF ISCHEMIC BRAIN INJURY AND MULTIPLE SCLEROSIS**  
Vijayaraghava Rao <sup>(1)</sup> - Fuh Shih-chieh <sup>(1)</sup> - Craig Moore <sup>(2)</sup> - Samuel Ludwin <sup>(3)</sup> - Rosanne Séguin <sup>(1)</sup> - Ming-kai Ho <sup>(1)</sup> - Barry Bedell <sup>(1)</sup> - Amit Bar-or <sup>(1)</sup> - Jack Antel <sup>(1)</sup>  
Mcgill University, Montréal Neurological Institute, Montréal, Canada <sup>(1)</sup> - Memorial University, Health Sciences Centre, St. John's, Canada <sup>(2)</sup> - Queen's University, Department Of Pathology And Molecular Medicine, Kingston, Canada <sup>(3)</sup>
- 14:15      279 - MIR-223 REGULATES MYELOID DERIVED SUPPRESSOR CELLS DURING EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**  
Claudia Cantoni <sup>(1)</sup> - Todd Fehniger <sup>(2)</sup> - Anne Cross <sup>(1)</sup> - Laura Piccio <sup>(1)</sup>  
Washington University In St Louis, Department Of Neurology, St. Louis, United States <sup>(1)</sup>  
Washington University In St Louis, Department Of Internal Medicine, St. Louis, United States <sup>(2)</sup>
- 14:30      40 - THE PROTEOME PROFILE OF THE URINE IS DIFFERENT IN PATIENTS WITH NEUROMYELITIS OPTICA COMPARED TO MULTIPLE SCLEROSIS AND HEALTHY SUBJECTS**  
Helle Hvilsted Nielsen <sup>(1)</sup> - Lars P Kristensen <sup>(2)</sup> - Hans C Beck <sup>(2)</sup> - Jay Reddy <sup>(3)</sup> - Zsolt Illes <sup>(1)</sup>  
University Of Southern Denmark, Odense University Hospital, Odense, Denmark <sup>(1)</sup> - Center For Clinical Proteomics, Odense University Hospital, Odense, Denmark <sup>(2)</sup> - School Of Veterinary Medicine And Biomedical Sciences, University Of Nebraska-lincoln, Lincoln, United States <sup>(3)</sup>
- 14:45      303 - LOSS OF IGF1R FROM OLIGODENDROCYTES AMELIORATES NEUROINFLAMMATION WITHOUT AFFECTING CELL SURVIVAL**  
Giuseppe Locatelli <sup>(1)</sup> - Martin Krüger <sup>(2)</sup> - Olivia Prazeres Da Costa <sup>(3)</sup> - Barbara Ingold-heppner <sup>(4)</sup> - Linda Koch <sup>(5)</sup> - Bettina Schreiner <sup>(6)</sup> - Jens Brüning <sup>(5)</sup> - Ingo Bechmann <sup>(2)</sup> - Burkhard Becher <sup>(6)</sup> - Thorsten Buch <sup>(3)</sup>  
Institute Of Clinical Neuroimmunology, Ludwig-maximilian Universität München, Munich, Germany <sup>(1)</sup>  
Institute Of Anatomy, University Of Leipzig, Leipzig, Germany <sup>(2)</sup> - Institute For Med. Microbiology, Immunology And Hygiene, Technische Universität München, Munich, Germany <sup>(3)</sup> - Institute Of Pathology, Charité – universitätsmedizin Berlin, Berlin, Germany <sup>(4)</sup> - Institute For Genetics, University Of Cologne, Cologne, Germany <sup>(5)</sup> - Institute For Exp. Immunology, University Of Zurich, Zurich, Germany <sup>(6)</sup>
- 15:00      532 - IDENTIFICATION OF A TRANSCRIPTIONAL REGULATOR OF PATHOGENICITY OF TH17 CELLS.**  
Gerd Meyer Zu Horste - Chuan Wu - Youjin Lee - Wassim Elyaman - Vijay K Kuchroo  
Center For Neurologic Diseases, Brigham And Women's Hospital / Harvard Medical School, Boston, United States

---

**MECHANISMS AND THERAPIES OF CNS DISEASE**

13:45 - 15:15 ROOM C (GUTENBERGSAAL 2)

Chair: Sandra Amor

- 13:45      122 - DEMYELINATION DURING MULTIPLE SCLEROSIS IS ASSOCIATED WITH COMBINED ACTIVATION OF MICROGLIA AND MACROPHAGES BY IFN-GAMMA AND ALPHA B-CRYSTALLIN**  
Malika Bsibsi <sup>(1)</sup> - Laura Peferoen <sup>(2)</sup> - Inge Holtman <sup>(3)</sup> - Peter Nacken <sup>(1)</sup> - Wouter Gerritsen <sup>(4)</sup> - Maarten Witte <sup>(5)</sup> - Jack Van Horssen <sup>(5)</sup> - Bart Eggen <sup>(3)</sup> - Paul Van Der Valk <sup>(4)</sup> - Sandra Amor <sup>(4)</sup> - Johannes Van Noort <sup>(1)</sup>  
Delta Crystallon, -, Leiden, Netherlands <sup>(1)</sup> - Dept .pathology, Vumc, Amsterdam, Netherlands <sup>(2)</sup> - Dept. Medical

Physiology, Umcg, Groningen, Netherlands <sup>(3)</sup> - Dept. Pathology, Vumc, Amsterdam, Netherlands <sup>(4)</sup>  
Dept. Molecular Cell Biology And Immunology, Vumc, Amsterdam, Netherlands <sup>(5)</sup>

- 14:00 444 - DETECTION OF AUTO-ANTIBODIES TO LEOMODIN-1 IN PATIENTS WITH NODDING SYNDROME**  
Tory Johnson <sup>(1)</sup> - Richa Tyagi <sup>(1)</sup> - Paul R Lee <sup>(1)</sup> - Myoung-hwa Lee <sup>(1)</sup> - Kory R Johnson <sup>(1)</sup>  
Jeffery Kowalak <sup>(1)</sup> - Marie Medynets <sup>(1)</sup> - Alina Hategan <sup>(1)</sup> - Thomas B Nutman <sup>(2)</sup> - James Sejvar <sup>(3)</sup>  
Issa Makumbi <sup>(4)</sup> - Jane R Aceng <sup>(4)</sup> - Scott F Dowell <sup>(5)</sup> - Avindra Nath <sup>(1)</sup>  
Ninds, National Institutes Of Health, Bethesda, Md, United States <sup>(1)</sup> - Niaid, National Institutes Of Health, Bethesda, Md, United States <sup>(2)</sup> - National Center For Emerging And Zoonotic Infectious Diseases, Center For Disease Control And Prevention, Atlanta, Ga, United States <sup>(3)</sup> - Ministry Of Health, Uganda, Kampala, Uganda <sup>(4)</sup> - Center For Global Health, Center For Disease Control And Prevention, Atlanta, Ga, United States <sup>(5)</sup>
- 4:15 305 - PLP1 MUTATIONS IN PATIENTS WITH MULTIPLE SCLEROSIS: IDENTIFICATION OF A NEW MUTATION AND ANALYSIS OF IN VITRO EFFECTS OF PLP1 MUTATIONS.**  
Nancy Cloake <sup>(1)</sup> - Jun Yan <sup>(1)</sup> - Michael Pender <sup>(2)</sup> - Atefeh Aminian <sup>(1)</sup> - Judith Greer <sup>(1)</sup>  
Uq Centre For Clinical Research, The University Of Queensland, Brisbane, Australia <sup>(1)</sup> - School Of Medicine, The University Of Queensland, Brisbane, Australia <sup>(2)</sup>
- 14:30 62 - IMAGING GENERATION AND ACTION OF REACTIVE SPECIES IN AN ANIMAL MODEL OF MULTIPLE SCLEROSIS: FOCUS ON AXONAL PATHOLOGY**  
Giuseppe Locatelli  
Institute Of Clinical Neuroimmunology, Ludwig-maximilians Universität München, München, Germany
- 14:45 107 - FINGOLIMOD TREATMENT PROMOTES REGULATORY B-CELL PHENOTYPE AND FUNCTION IN MULTIPLE SCLEROSIS**  
Berit Grützke <sup>(1)</sup> - Stephanie Hücke <sup>(1)</sup> - Brigitte Wildemann <sup>(2)</sup> - Thomas Dehmel <sup>(3)</sup> - Bernd Kieseier <sup>(3)</sup>  
Anita Posevitz-feijfar <sup>(1)</sup> - Heinz Wiendl <sup>(1)</sup> - Luisa Klotz <sup>(1)</sup>  
Department Of Neurology, University Hospital Münster, Münster, Germany <sup>(1)</sup> - Department Of Neurology, Universityhospital Heidelberg, Heidelberg, Germany <sup>(2)</sup> - Department Of Neurology, University Hospital Düsseldorf, Düsseldorf, Germany <sup>(3)</sup>
- 15:00 584 - CNS DCS MODULATE PERIPHERAL ANTI CNS IMMUNITY**  
Mohammad Mohammad <sup>(1)</sup> - Vicky Wang Wei Tsai <sup>(1)</sup> - Marc Ruitenberg <sup>(2)</sup> - Masoud Hassanpour <sup>(1)</sup>  
Hui Li <sup>(1)</sup> - Prue Hart <sup>(3)</sup> - Samuel Breit <sup>(1)</sup> - Paul Sawchenko <sup>(4)</sup> - David Brown <sup>(1)</sup>  
Peter Duncan Neurosciences Research Centre, St Vincent's Centre For Applied Medical Research And University Of Nsw, Sydney, Australia <sup>(1)</sup> - School Of Biomedical Sciences And Queensland Brain Institute, The University Of Queensland, Brisbane, Australia <sup>(2)</sup> - Telethon Institute For Child Health Research, University Of Western Australia, Perth, Australia <sup>(3)</sup> - Laboratory Of Neuronal Structure And Function, The Salk Institute For Biological Studies, La Jolla, United States <sup>(4)</sup>

---

## COFFEE BREAK & POSTER SESSION | B-CELLS AND ANTIBODIES

15:15 - 16:45 POSTERHALL (RHEINFOYER)

### 242 - B CELL IRF1 PATHWAY IS DYSREGULATED IN MULTIPLE SCLEROSIS

Viviana Annibali <sup>(1)</sup> - Renato Umeton <sup>(1)</sup> - Antonia Palermo <sup>(1)</sup> - Maria Chiara Buscarinu <sup>(1)</sup> - Claudia Policano <sup>(1)</sup>  
Rosella Mechelli <sup>(1)</sup> - Silvia Romano <sup>(1)</sup> - Daniela F. Angelini <sup>(2)</sup> - Eleonora Piras <sup>(2)</sup> - Gianluca Mattei <sup>(1)</sup> - Vito Antonio Gerardo Ricigliano <sup>(1)</sup> - Anita Annesse <sup>(1)</sup> - Luca Battistini <sup>(2)</sup> - Marco Salvetti <sup>(1)</sup> - Giovanni Ristori <sup>(1)</sup>

Centre For Experimental Neurological Therapies (centers) - Dep. Of Neurosciences, Mental Health And Sensory Organs., Sapienza, University Of Rome, S. Andrea Hospital Site., Rome, Italy <sup>(1)</sup> - Neuroimmunology Unit., Santa Lucia Foundation., Rome, Italy <sup>(2)</sup>

### 210 - ANTI-CD20 THERAPY DOWN-REGULATES LESION FORMATION AND MICROGLIAL ACTIVATION IN PATTERN I AND PATTERN II RAT MODELS OF MULTIPLE SCLEROSIS

Daniel C Anthony <sup>(1)</sup> - Alex M Dickens <sup>(1)</sup> - Nicholas Seneca <sup>(2)</sup> - Yvonne Couch <sup>(1)</sup> - Sandra Campbell <sup>(1)</sup> - Begona Checa <sup>(3)</sup> - Veerle Kersemans <sup>(4)</sup> - Edward A Warren <sup>(1)</sup> - Matthew Tredwell <sup>(3)</sup> - Nicola R Sibson <sup>(4)</sup> - Veronique Gouverneur <sup>(3)</sup> - David Leppert <sup>(2)</sup>  
Department Of Pharmacology - Experimental Neurology, University Of Oxford, Oxford, United Kingdom <sup>(1)</sup> - F. Hoffmann-la Roche Ltd, Building 74/3w.306a, Basel, Switzerland <sup>(2)</sup> - Department Of Chemistry, University Of Oxford, Oxford, United Kingdom <sup>(3)</sup> - Cr-uk/mrc Gray Institute For Radiation Oncology And Biology, University Of Oxford, Oxford, United Kingdom <sup>(4)</sup>



**614 - ANALYSIS OF AUTOANTIBODIES AGAINST ANTIGENS OF THE INHIBITORY SYNAPSIS IN PATIENTS WITH NON-PARANEOPLASTIC NEUROLOGICAL SYNDROMES AND GAD65 ANTIBODIES**

Nuria Gresa-arribas <sup>(1)</sup> - Helena Ariño <sup>(2)</sup> - Eugenia Martínez-hernández <sup>(2)</sup> - Mar Petit-pedrol <sup>(1)</sup> - Merce Alba <sup>(1)</sup>  
Eva Caballero <sup>(1)</sup> - Esther Aguilar <sup>(1)</sup> - Albert Saiz <sup>(2)</sup> - Josep Dalmau <sup>(3)</sup> - Francesc Graus <sup>(2)</sup>

Neuroimmunology Program, Idibaps, Barcelona, Spain <sup>(1)</sup> - Neurology Service, Hospital Clinic, Barcelona, Spain <sup>(2)</sup> - Institutio Catalana De Recerca I Estudis Avançats, Icrea, Barcelona, Spain <sup>(3)</sup>

**629 - MS CSF-DERIVED RECOMBINANT ANTIBODIES CAUSE CENTRAL NERVOUS SYSTEM DEMYELINATION**

Kevin Blauth - John Soltys - Alanna Ritchie - Cory Reiter - Sean Selva - Adeline Matschulat - Jeffrey Bennett  
Gregory Owens

University Of Colorado Anschutz Medical Campus, Department Of Neurology, Aurora, Co, United States

**119 - B-CELL MARKERS FROM THE BAFF FAMILY AS PREDICTORS FOR EXPERIMENTAL AUTOIMMUNE MYASTHENIA GRAVIS AGGRAVATION IN MICE LACKING PLASMINOGEN ACTIVATOR COMPONENTS**

Talma Brenner - Tehila Mizrahi - Devorah Gur-wahnon - Camille Sicsic - Abd Al-roof Higazi

Hadassah Medical Center, Hadassah Hebrew University, Jerusalem, Israel

**272 - A MONOCLONAL ANTIBODY FROM A MOTHER OF A CHILD WITH AUTISM RESULTED IN CORTICAL AND BEHAVIORAL ALTERATIONS IN MALE BUT NOT FEMALE MICE.**

Lior Brimberg - Simone Madar - Venkatesh Jeganathan - Roseann Berlin - Cassandra Smith - Patricio Huerta - Bruce Volpe - Betty Diamond

Feinstein Institute For Medical Research, North Shore University Hospital, Manhasset, United States

**616 - HUMAN PERM IGG INDUCES MOTOR DYSFUNCTION IN MICE**

Alexander Carvajal - Leslie Jacobson - Linda Clover - Bethan Lang - Angela Vincent

University Of Oxford, John Radcliffe Hospital, Oxford, United Kingdom

**624 - DYNAMICS OF B CELL SUBSETS WITHIN THE CNS DURING VIRAL ENCEPHALOMYELITIS**

Krista Disano <sup>(1)</sup> - Timothy Phares <sup>(2)</sup> - Cornelia Bergmann <sup>(2)</sup>

Cleveland Clinic Foundation, Kent State University, Cleveland, United States <sup>(1)</sup> - Lerner Research Institute, Cleveland Clinic Foundation, Cleveland, United States <sup>(2)</sup>

**234 - GAD65 EPIOTOPE MAPPING IN DISTINCT CNS SYNDROMES**

Pinelopi Fouka <sup>(1)</sup> - Harry Alexopoulos <sup>(1)</sup> - Panos Politis <sup>(2)</sup> - Marinos Dalakas <sup>(1)</sup>

Neuroimmunology Unit, Department Of Pathophysiology, Faculty Of Medicine, National And Kapodistrian University Of Athens, Athens, Greece <sup>(1)</sup> - Department Of Histology, Biomedical Research Foundation, Academy Of Athens, Athens, Greece <sup>(2)</sup>

**183 - STUDY OF THE ROLE OF SECONDARY DIVERSIFICATION OF B CELL RECEPTOR IN EAE**

Georgina Galicia

University Of Toronto, University Of Toronto, Toronto, Canada

**518 - AUTOIMMUNE ENCEPHALITIS: SINGLE CELL PCR ANALYSIS OF THE INTRATHECAL PLASMA CELL REPERTOIRE**

Manish Malviya <sup>(1)</sup> - Nico Melzer <sup>(2)</sup> - Guido Widman <sup>(3)</sup> - Christian Elger <sup>(3)</sup> - Heinz Wiendl <sup>(2)</sup> - Hans-peter Hartung <sup>(1)</sup>  
Norbert Goebels <sup>(1)</sup>

Department Of Neurology, Heinrich-heine-university, Duesseldorf, Germany <sup>(1)</sup> - Department Of Neurology, University Of Muenster, Muenster, Germany <sup>(2)</sup> - Department Of Epileptology, University Of Bonn, Bonn, Germany <sup>(3)</sup>

**228 - B CELL FOLLICLE LIKE STRUCTURES IN MULTIPLE SCLEROSIS**

Morten Haugen <sup>(1)</sup> - Jette L Frederiksen <sup>(2)</sup> - Matilda Degn <sup>(2)</sup>

Faculty Of Health And Medical Sciences, University Of Copenhagen, Copenhagen, Denmark <sup>(1)</sup> - Department Of Neurology, Copenhagen University Hospital, Glostrup, Denmark <sup>(2)</sup>

**316 - ADAM10 RELEASES THE IMMUNOREGULATOR SOLUBLE TACI - A NOVEL BIOMARKER FOR B-CELL PATHOLOGIES**

Franziska Hoffmann

Institute Of Clinical Neuroimmunology, Ludwig Maximilian University, Munich, Germany

**125 - IMMUNOAFFINITY PURIFICATION AND CHARACTERIZATION OF SPECIFIC ANTIBODIES AGAINST RECOMBINANT TAU PROTEIN FROM INTRAVENOUS IMMUNOGLOBULIN PRODUCT**

Lenka Hromadkova <sup>(1)</sup> - Michala Kolarova <sup>(1)</sup> - Barbora Jankovicova <sup>(2)</sup> - Ales Bartos <sup>(1)</sup> - Jan Ricny <sup>(1)</sup> - Zuzana Bilkova <sup>(2)</sup> Daniela Ripova <sup>(1)</sup>

Laboratory Of Biochemistry And Brain Pathophysiology And Ad Center, Prague Psychiatric Centre, Prague, Czech Republic <sup>(1)</sup>  
Department Of Biological And Biochemical Sciences, University Of Pardubice, Pardubice, Czech Republic <sup>(2)</sup>

**630 - CELL-SURFACE NEURONAL ANTIBODIES IN PATIENTS WITH JAPANESE ENCEPHALITIS VIRUS**

Anjan Nibber <sup>(1)</sup> - Bethan Lang <sup>(1)</sup> - Bridget Wills <sup>(2)</sup> - Angela Vincent <sup>(1)</sup> - Sarosh Irani <sup>(1)</sup>

Nuffield Department Of Clinical Neurosciences, University Of Oxford, Oxford, United Kingdom <sup>(1)</sup> - Oxford University Clinical Research Unit, Hospital For Tropical Diseases, Vietnam, Viet Nam <sup>(2)</sup>

**214 - PROCESSING OF MOG IS AFFECTED BY POST-TRANSLATIONAL MODIFICATION IN VIRUS INFECTED NON-HUMAN PRIMATE B CELLS**

Anwar Jagessar <sup>(1)</sup> - Karin Dijkman <sup>(2)</sup> - Sam Hofman <sup>(1)</sup> - Nicole Heijmans <sup>(1)</sup> - Bart Faber <sup>(1)</sup> - Sander Van Kasteren <sup>(3)</sup> Bogdan Blore <sup>(4)</sup> - Bert 't Hart <sup>(1)</sup>

Biomedical Primate Research Centre, Biomedical Primate Research Centre, Rijswijk, Netherlands <sup>(1)</sup> - Dept. Immunobiology, Biomedical Primate Research Centre, Rijswijk, - <sup>(2)</sup> - Leiden Institute Of Chemistry, Leiden University, Leiden, Netherlands <sup>(3)</sup>  
Leiden Institute Of Chemistry, Leiden University, Leiden, Netherlands <sup>(4)</sup>

**554 - B CELL DEPLETION ALTERS T CELL HOMING**

Yolanda Kap <sup>(1)</sup> - Nikki Van Driel <sup>(1)</sup> - Bert 't Hart <sup>(1)</sup>

Department Of Immunobiology, Biomedical Primate Research Centre, Rijswijk, Netherlands <sup>(1)</sup>

**249 - MYELIN-SPECIFIC ANTIBODIES TRIGGER SPONTANEOUS CNS AUTOIMMUNE DISEASE IN THE ABSENCE OF MYELIN-SPECIFIC B CELLS**

Silke Kinzel <sup>(1)</sup> - Klaus Lehmann-horn <sup>(2)</sup> - Scott S. Zamvil <sup>(3)</sup> - Anne Winkler <sup>(1)</sup> - Claude C. Bernard <sup>(4)</sup>

Christine Stadelmann-nessler <sup>(1)</sup> - Wolfgang Brück <sup>(1)</sup> - Martin S. Weber <sup>(1)</sup>

Institute Of Neuropathology, University Medical Centre, Göttingen, Germany <sup>(1)</sup> - Department Of Neurology, Technische Universität München, Munich, Germany <sup>(2)</sup> - Department Of Neurology And Program In Immunology, University Of California, San Francisco, United States <sup>(3)</sup> - Monash Immunology And Stem Cell Laboratories, Monash University, Clayton, Australia <sup>(4)</sup>

**456 - AUTOANTIBODIES AGAINST IGLON5: TWO NEW CASES**

Ramona Bahtz <sup>(1)</sup> - Bianca Teegen <sup>(1)</sup> - Kathrin Borowski <sup>(1)</sup> - Christian Probst <sup>(1)</sup> - Inga-madeleine Blöcker <sup>(1)</sup> - Kai Fechner <sup>(1)</sup> - Silvia Parigger <sup>(2)</sup> - Gerhard Daniel <sup>(2)</sup> - Thomas Brücke <sup>(2)</sup> - Ann-sophie Lauenstein <sup>(3)</sup> - Bertold Schrank <sup>(3)</sup> Winfried Stöcker <sup>(1)</sup> - Lars Komorowski <sup>(1)</sup>

Institute Of Experimental Immunology, Euroimmun Ag, Lübeck, Germany <sup>(1)</sup> - Department Of Neurology, Wilhelminenspital, Vienna, Austria <sup>(2)</sup> - Department Of Neurology, German Clinic For Diagnostics, Wiesbaden, Germany <sup>(3)</sup>

**84 - ELECTROPHYSIOLOGICAL FEATURES OF GUILLAIN-BARRE SYNDROME ASSOCIATED WITH ANTI-GALACTOCEREBROSIDE ANTIBODIES AS WELL AS ANTI-GANGLIOSIDE ANTIBODIES**

Susumu Kusunoki <sup>(1)</sup> - Makoto Samukawa <sup>(1)</sup> - Yukihiro Hamada <sup>(1)</sup> - Motoi Kuwahara <sup>(1)</sup> - Kazuo Takada <sup>(1)</sup>

Makito Hirano <sup>(1)</sup> - Yoshiyuki Mitsui <sup>(1)</sup>

Department Of Neurology, Faculty Of Medicine, Kinki University, Osaka-sayama, Japan <sup>(1)</sup>

**427 - INTRATHECAL PRODUCTION OF ANTIBODIES AGAINST JC VIRUS AND OTHER VIRUSES IN MULTIPLE SCLEROSIS AND NATALIZUMAB-ASSOCIATED PROGRESSIVE MULTIFOCAL LEUKOENCEPHALOPATHY**

Fabienne Largey - Ivan Jelcic - Mireia Sospedra - Roland Martin - Ilijas Jelcic

Neuroimmunology And Multiple Sclerosis Research Section, University Hospital Of Zurich, Zurich, Switzerland

**282 - LIMBIC ENCEPHALITIS WITH ANTIBODIES TO LGI1 IS ASSOCIATED WITH AN ACTIVE INTRATHECAL B CELL RESPONSE**

Klaus Lehmann-horn <sup>(1)</sup> - Sarosh Irani <sup>(2)</sup> - Shengzhi Wang <sup>(1)</sup> - Jeffrey Gelfand <sup>(1)</sup> - Michael Geschwind <sup>(1)</sup> - Scott Zamvil <sup>(1)</sup> - H.-christian Von Büdingen <sup>(1)</sup>

Department Of Neurology, University Of California, San Francisco, San Francisco, United States <sup>(1)</sup> - Nuffield Department Of Clinical Neurosciences, University Of Oxford, Oxford, United Kingdom <sup>(2)</sup>

**277 - AQP4-IGG PLACENTAL TRANSFER IN NMO PREGNANCIES**

Simone Mader <sup>(1)</sup> - Lior Brimberg <sup>(1)</sup> - Alexandre Bonnin <sup>(2)</sup> - Jeffrey L. Bennett <sup>(3)</sup> - Betty Diamond <sup>(1)</sup>

The Feinstein Institute For Medical Research, North Shore Long Island Jewish Health System, New York, United States <sup>(1)</sup>

Keck School Of Medicine Of University Of Southern California, Zilkha Neurogenetic Institute, Los Angeles, United States <sup>(2)</sup>  
Departments Of Neurology & Ophthalmology, University Of Colorado Denver, Denver, United States <sup>(3)</sup>

#### **403 - IL-33/ST2 AXIS MEDIATES RESISTANCE TO EAE BY PROMOTING REGULATORY B AND TOLEROGENTIC DENDRITIC CELLS**

Bojana Stojanovic - Jelena Milovanovic - Aleksandar Arsenijevic - Marija Milovanovic - Nebojsa Arsenijevic  
Miodrag L. Lukic

Center For Molecular Medicine And Stem Cell Research, Faculty Of Medical Sciences University Of Kragujevac, Kragujevac, Serbia

#### **549 - INTRATHECAL IGM PRODUCTION CORRELATES WITH MORE SEVERE DISEASE COURSE IN MULTIPLE SCLEROSIS: CLINICAL AND MRI RESULTS**

Serkan Ozakbas <sup>(1)</sup> - Bilge Piri Cinar <sup>(2)</sup> - Pinar Ozelik <sup>(1)</sup> - Hatice Baser <sup>(1)</sup> - Gökrem Kosehasanogullari <sup>(3)</sup>

Department Of Neurology, Dokuz Eylul University, Izmir, Turkey <sup>(1)</sup> - Department Of Neurology, Giresun State Hospital, Giresun, Turkey <sup>(2)</sup> - Department Of Neurology, Usak State Hospital, Usak, Turkey <sup>(3)</sup>

#### **605 - ANTI-MYELIN ANTIBODY RESPONSES FOLLOWING INDUCTION OF ANTIGEN-SPECIFIC TOLERANCE WITH ANTIGEN-COUPLED CELLS**

Patrick Peschl <sup>(1)</sup> - Markus Reindl <sup>(1)</sup> - Kathrin Schanda <sup>(1)</sup> - Mireia Sospedra <sup>(2)</sup> - Roland Martin <sup>(2)</sup> - Andreas Lutterotti <sup>(1)</sup>

Clinical Department Of Neurology, Innsbruck Medical University, Innsbruck, Austria <sup>(1)</sup> - Neuroimmunology And Multiple Sclerosis Research, Department Of Neurology, University Hospital Zurich, Zurich, Switzerland <sup>(2)</sup>

#### **221 - A ROLE FOR REGULATORY B CELLS IN PREVENTING THE PROGRESSION OF MULTIPLE SCLEROSIS**

Federica Piancone - Francesca La Rosa - Ivana Marventano - Laura Mendozzi - Domenico Caputo - Marco Rovaris  
Marina Saresella - Mario Clerici

Don Gnocchi Foundation S. Maria Nascente, Don Gnocchi Foundation, Milan, Italy

#### **606 - A HIGHLY SENSITIVE LIVE CELL BASED ASSAY FOR DETECTION OF ANTIBODIES AGAINST N-METHYL-D-ASPARTATE RECEPTORS**

Melanie Ramberger <sup>(1)</sup> - Patrick Peschl <sup>(1)</sup> - Kathrin Schanda <sup>(1)</sup> - Romana Höftberger <sup>(2)</sup> - Florian Deisenhammer <sup>(1)</sup>

Kevin Rostásy <sup>(3)</sup> - Thomas Berger <sup>(1)</sup> - Josep Dalmau <sup>(4)</sup> - Markus Reindl <sup>(1)</sup>

Clinical Department Of Neurology, Innsbruck Medical University, Innsbruck, Austria <sup>(1)</sup> - Institute Of Neurology, Medical University Vienna, Vienna, Austria <sup>(2)</sup> - Department Of Pediatrics I, Division Of Pediatric Neurology, Innsbruck Medical University, Innsbruck, Austria <sup>(3)</sup> - Institució Catalana De Recerca I Estudis Avançats (icrea), Idibaps, Hospital Clínic, Barcelona, Spain <sup>(4)</sup>

#### **148 - TAKING A CLOSER LOOK AT SPAG16 IN MULTIPLE SCLEROSIS**

Laura De Bock <sup>(1)</sup> - Klaartje Somers <sup>(1)</sup> - Judith Fraussen <sup>(1)</sup> - Jerome Hendriks <sup>(1)</sup> - Jack Van Horssen <sup>(2)</sup> - Myrthe Rouwette <sup>(1)</sup> - Niels Hellings <sup>(1)</sup> - Luisa M Villar <sup>(3)</sup> - José C. Álvarez-cermeño <sup>(3)</sup> - Mercedes Espiño <sup>(3)</sup> - Raymond Hupperts <sup>(4)</sup> - Peter Jongen <sup>(5)</sup> - Jan Damoiseaux <sup>(6)</sup> - Marcel M. Verbeek <sup>(7)</sup> - Peter P. De Deyn <sup>(8)</sup> - Marie D'hooghe <sup>(9)</sup>  
Bart Van Wijmeersch <sup>(1)</sup> - Piet Stinissen <sup>(1)</sup> - Veerle Somers <sup>(1)</sup>

Biomedical Research Institute, Hasselt University, Diepenbeek, Belgium <sup>(1)</sup> - Department Of Molecular Cell Biology And Immunology, VU University Medical Center, Amsterdam, Netherlands <sup>(2)</sup> - Departments Of Neurology And Immunology, Ramón Y Cajal Hospital, Madrid, Spain <sup>(3)</sup> - Department Of Neurology, Orbis Medical Center, Sittard, Netherlands <sup>(4)</sup> - Ms4 Research Institute, /, Nijmegen, Netherlands <sup>(5)</sup> - Maastricht University Medical Centre, Maastricht University, Maastricht, Netherlands <sup>(6)</sup> - Radboud University Medical Center, Radboud Universiteit, Nijmegen, Netherlands <sup>(7)</sup> - Department Of Neurology, Middelheim Hospital, Antwerp University, Antwerp, Belgium <sup>(8)</sup> - Department Of Neurology, National Ms Center,, University Hospital Brussel, Melsbroek, Belgium <sup>(9)</sup>

#### **318 - MYELIN OLIGODENDROCYTE GLYCOPROTEIN SPECIFIC AUTOANTIBODIES IN ADULT PATIENTS WITH DIFFERENT INFLAMMATORY DISEASES OF THE CNS**

Melania Spadaro <sup>(1)</sup> - Lisa Gerdes <sup>(1)</sup> - Cathrin Mayer <sup>(1)</sup> - Elisabeth Schuh <sup>(1)</sup> - Franziska Hoffmann <sup>(1)</sup> - Sarah Laurent <sup>(1)</sup>

Hans Lassmann <sup>(2)</sup> - Reinhard Hohlfeld <sup>(1)</sup> - Tania Kümpfel <sup>(1)</sup> - Edgar Meinl <sup>(1)</sup>

Institute Of Clinical Neuroimmunology,, Ludwig Maximilian University, Munich, Germany <sup>(1)</sup> - Division Of Neuroimmunology, Centre For Brain Research,, Medical University Of Vienna, Vienna, Austria <sup>(2)</sup>

#### **335 - CHARACTERIZATION OF RESIDENT PLASMA CELLS IN AND THEIR MIGRATION TO THE INFLAMED CENTRAL NERVOUS SYSTEM DURING EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Carolin Ulbricht <sup>(1)</sup> - Karolin Pollok-trage <sup>(1)</sup> - Jöran Keßler <sup>(1)</sup> - Robert Günther <sup>(2)</sup> - Katharina Horn <sup>(2)</sup> - Sabrina Schlüngel <sup>(2)</sup> - Friedemann Paul <sup>(1)</sup> - Raluca Niesner <sup>(2)</sup> - Helena Radbruch <sup>(1)</sup> - Anja E. Hauser <sup>(1)</sup>

Neurocare, Charité University Of Medicine, Berlin, Germany <sup>(1)</sup> - German Rheumatism Research Center, A Leibniz Institute, Berlin, Germany <sup>(2)</sup>

### 633 - ASSESSMENT OF AQUAPORIN-4 (AQP4) ANTIBODY ASSAYS IN EUROPEAN DIAGNOSTIC CENTRES

Patrick Waters <sup>(1)</sup> - Markus Reindl <sup>(2)</sup> - Kathrin Schanda <sup>(2)</sup> - Friederike Tuller <sup>(2)</sup> - Vlastimil Kral <sup>(3)</sup> - Petra Nytrova <sup>(3)</sup> Ondrej Sobek <sup>(4)</sup> - Helle Hvilsted Nielsen <sup>(5)</sup> - Zsolt Illés <sup>(6)</sup> - Torben Barington <sup>(5)</sup> - Søren Thue Lillevang <sup>(5)</sup> - Winfried Stöcker <sup>(7)</sup> - Kristin Rentzsch <sup>(7)</sup> - Christian Probst <sup>(7)</sup> - Sandra Saschenbrecker <sup>(7)</sup> - Christine Klingbeil <sup>(7)</sup> - Ulrike Krummrei <sup>(7)</sup> - Achim Berthele <sup>(8)</sup> - Timea Berki <sup>(9)</sup> - Letizia Granieri <sup>(10)</sup> - Antonio Bertolotto <sup>(10)</sup> - Bruno Giometto <sup>(11)</sup> Luigi Zuliani <sup>(11)</sup> - Dörte Hamann <sup>(12)</sup> - Albert Saiz <sup>(13)</sup> - Romana Höftberger <sup>(13)</sup> - Manuel Comabella <sup>(14)</sup> - Carme Costa Riu <sup>(14)</sup> - Aksel Siva <sup>(15)</sup> - Ayse Altintas <sup>(15)</sup> - Günnur Deniz <sup>(15)</sup> - Angela Vincent <sup>(1)</sup> - M. Isabel Leite <sup>(1)</sup> - Mark Woodhall <sup>(1)</sup> Jacqueline Palace <sup>(1)</sup> - Friedemann Paul <sup>(16)</sup> - Orhan Aktas <sup>(17)</sup> - Sven Jarius <sup>(18)</sup> - Christian Vedeler <sup>(19)</sup> - Anne Ruiz <sup>(20)</sup> Romain Marignier <sup>(20)</sup>

University Of Oxford, Nuffield Dept. Of Clinical Neurosciences, Oxford, United Kingdom <sup>(1)</sup> - Innsbruck Medical University, Clinical Dept. Of Neurology, Innsbruck, Austria <sup>(2)</sup> - Zdravotni Ustav Se Sidlem V Usti Nad Labem, Centrum Imunologie A Mikrobiologie, Usti Nad Labem, Czech Republic <sup>(3)</sup> - Topelex Ltd, Laboratory For Csf And Neuroimmunology, Prague, Czech Republic <sup>(4)</sup> Odense University Hospital, Dept. Of Neurology, Odense, Denmark <sup>(5)</sup> - Odense University Hospital, Dept. Of Neurology, Odense, Denmark / University Of Pécs, Department Of Immunology And Biotechnology, Pécs, Hungary <sup>(6)</sup> - Euroimmun Ag, Lübeck, Germany <sup>(7)</sup> Klinikum Rechts Der Isar Der Tu München, Klinik Für Neurologie, Munich, Germany <sup>(8)</sup> - University Of Pécs, Department Of Immunology And Biotechnology, Pécs, Hungary <sup>(9)</sup> - Neuroscience Institute Cavalieri Ottolenghi (nico), University Hospital San Luigi Gonzaga, Clinical Neurobiology Unit - Regional Referring Multiple Sclerosis Centre, Orbassano, Italy <sup>(10)</sup> - Azienda Ulss 9 Treviso, Dept. Of Neurology, Treviso, Italy <sup>(11)</sup> - Sanquin Diagnostic Services/ Erasmusmc, Dept. Of Immunopathology And Blood Coagulation, Amsterdam, Netherlands <sup>(12)</sup> - Neuroimmunology Group, Service Of Neurology, Universitat De Barcelona And Institut D' Investigació Biomèdica August Pi I Sunyer, Barcelona, Spain <sup>(13)</sup> - Institut De Recerca - Edifici Mediterrània, Hospital Universitari Vall D'hebron, Barcelona, Spain <sup>(14)</sup> - Istanbul University Cerrahpasa School Of Medicine, Neurology Department, Istanbul, Turkey <sup>(15)</sup> - Neurocure Clinical Research Center (ncrc), Charité Universitätsmedizin Berlin, Berlin, Germany <sup>(16)</sup> - Heinrich-heine-university Düsseldorf, Department Of Neurology, Düsseldorf, Germany <sup>(17)</sup> - Otto Meyerhof Zentrum, Heidelberg, Germany <sup>(18)</sup> - Haukeland University Hospital, Department Of Neurology, Bergen, Norway <sup>(19)</sup> - Lyon Neurosciences Research Centre, Neuro-inflammation And Neuro-oncology Team, Faculty Of Medicine Rth Laennec, Lyon, France <sup>(20)</sup>

### 291 - INTRATHECAL IGG FROM PATIENTS WITH MULTIPLE SCLEROSIS TARGET PATIENT-SPECIFIC PHAGE PEPTIDES

Tiffany Pointon <sup>(1)</sup> - Sean Manton <sup>(1)</sup> - Mollie Davis <sup>(1)</sup> - Gino Braiotta <sup>(1)</sup> - Laura Chambers <sup>(1)</sup> - Taylor Edwards <sup>(1)</sup> - Bailey Polonsky <sup>(1)</sup> - Michael Graner <sup>(2)</sup> - Mark Burgoon <sup>(1)</sup> - Xiaoli Yu <sup>(1)</sup>

University Of Colorado Anschutz Medical Campus, Neurology, University Of Colorado Anschutz Medical Campus, Aurora, United States <sup>(1)</sup> University Of Colorado Anschutz Medical Campus, Neurosurgery, University Of Colorado Anschutz Medical Campus, Aurora, United States <sup>(2)</sup>

### 515 - THE IDENTITY OF OLIGOCLONAL BANDS IN PATIENTS WITH MULTIPLE SCLEROSIS

Xiaoli Yu <sup>(1)</sup>

Department Of Neurology, University Of Colorado School Of Medicine, Aurora, United States <sup>(1)</sup>

---

## COFFEE BREAK & POSTER SESSION | BIOMARKERS

15:15 - 16:45 POSTERHALL (RHEINFOYER)

### 578 - A NOVEL PREDICTIVE FACTOR, SORCIN ANTIBODY IN CONVERSION OF RADIOLOGICALLY ISOLATED SYNDROME TO MULTIPLE SCLEROSIS

Ece Erdag <sup>(1)</sup> - Elcin Sehitoglu <sup>(1)</sup> - Melike Kucukerden <sup>(1)</sup> - Arda Orcen <sup>(1)</sup> - Erdem Tuzun <sup>(1)</sup> - Recai Turkoglu <sup>(2)</sup>

Institute For Experimental Medicine, Istanbul University, Istanbul, Turkey <sup>(1)</sup> - , Haydarpasa Numune Education And Research Hospital, Istanbul, Turkey <sup>(2)</sup>

### 180 - NOVEL GENETIC MARKERS, ASSOCIATED WITH FIRST REMISSION DURATION IN MULTIPLE SCLEROSIS, AS PREDICTOR OF THE FOLLOWING DISEASE SEVERITY IN RUSSIAN PATIENTS

Vitalina Bashinskaya - Ekaterina Tsareva - Olga Kulakova - Ivan Kiselev - Alexey Boyko - Olga Favorova

Pirogov Russian National Research Medical University, N.i. Pirogov Russian National Research Medical University, Moscow, Russian Federation

### 591 - GENE EXPRESSION PROFILING AND IMMUNOPHENOTYPING ASSOCIATED WITH DIFFERENT CLINICAL FORMS AND ACTIVITY PHASES OF MULTIPLE SCLEROSIS

Nicolas Fissolo - Ramil Nurtdinov - Laura Negrotto - Sunny Malhotra - Angela Vidal-jordana - Joaquín Castilló Xavier Montalban - Manuel Comabella

Servei De Neurologia-neuroimmunologia. Centre D'esclerosi Múltiple De Catalunya (cemcat). Institut De Recerca Vall D'hebron (vhir), Hospital Universitari Vall D'hebron. Universitat Autònoma De Barcelona, Barcelona, Spain

**551 - NO CORRELATION BETWEEN KIR 4.1 AUTOIMMUNITY AND MULTIPLE SCLEROSIS**

Justyna Maria Czarna Bahl

Department Of Clinical Biochemistry, Immunology And Genetics, Statens Serum Institut, Copenhagen, Denmark

**645 - CEREBROSPINAL FLUID LIGHT NEUROFILAMENTS AS A THERAPEUTIC MARKER OF RESPONSE IN MODIFYING THERAPIES DISEASE IN MULTIPLE SCLEROSIS**

Fabian Gomez - Carlos Oehninger

University Of Uruguay, Clinical Hospital, Montevideo, Uruguay

**593 - THE EXPRESSIONS OF APOPTOTIC-RELATED GENES IN PATIENTS WITH THE CLINICALLY ISOLATED SYNDROME: A FOLLOW-UP STUDY**Sanna Hagman <sup>(1)</sup> - Pabitra Basnyat <sup>(1)</sup> - Marcin Kolasa <sup>(1)</sup> - Mika Helminen <sup>(2)</sup> - Prasun Dastidar <sup>(3)</sup> - Irina Elovaara <sup>(4)</sup>Neuroimmunology Unit, Medical School, University Of Tampere, Tampere, Finland <sup>(1)</sup> - School Of Health Sciences, University Of Tampere, Tampere, Finland <sup>(2)</sup> - Medical Imaging Centre, Department Of Diagnostic Radiology, Tampere University Hospital, Tampere, Finland <sup>(3)</sup> - Neuroimmunology Unit, Medical School, University Of Tampere, Tampere, Finland <sup>(4)</sup>**165 - RELATIONSHIP BETWEEN IMAGING AND BLOOD-BASED TRANSCRIPTION PROFILES IN PRIMARY-PROGRESSIVE MULTIPLE SCLEROSIS**Matilde Inglese <sup>(1)</sup> - Christophe Gerald <sup>(2)</sup> - Roxana Teodorescu <sup>(2)</sup> - Colleen Farrell <sup>(2)</sup> - Michelle Fabian <sup>(2)</sup> - Fred Lublin <sup>(2)</sup>Department Of Neurology, Radiology, Neuroscience, Icahn School Of Medicine At Mount Sinai, New York, United States <sup>(1)</sup>Department Of Neurology, Icahn School Of Medicine At Mount Sinai, New York, United States <sup>(2)</sup>**140 - INVESTIGATION OF SEMA4A AS A BIOMARKER FOR TREATMENT SELECTION FOR MULTIPLE SCLEROSIS**Toru Koda <sup>(1)</sup> - Tatsusada Okuno <sup>(1)</sup> - Yuji Nakatsuji <sup>(1)</sup> - Kazushiro Takata <sup>(1)</sup> - Josephe Archie Honorat <sup>(1)</sup>Akiko Namba <sup>(1)</sup> - Saburo Sakoda <sup>(2)</sup> - Atsushi Kumanogoh <sup>(3)</sup> - Hideki Mochizuki <sup>(1)</sup>Departments Of Neurology, Osaka University Graduate School Of Medicine, Osaka, Japan <sup>(1)</sup> - National Hospital Organization, Toneyama National Hospital, Osaka, Japan <sup>(2)</sup> - Departments Of Respiratory Medicine, Allergy And Rheumatic Diseases, Osaka University Graduate School Of Medicine, Osaka, Japan <sup>(3)</sup>**95 - A NEW RECOMBINANT CELL-BASED IFA FOR THE DETERMINATION OF AUTOANTIBODIES TO GAD IN STIFF-PERSON SYNDROME**Inga-madeleine Blöcker <sup>(1)</sup> - Swantje Mindorf <sup>(1)</sup> - Winfried Stöcker <sup>(1)</sup> - Bettina Balint <sup>(2)</sup> - Hans-michael Meinck <sup>(3)</sup> - Lars Komorowski <sup>(1)</sup> - Christian Probst <sup>(1)</sup> - Wolfgang Schlumberger <sup>(1)</sup>Institute Of Experimental Immunology, Euroimmun Ag, Lübeck, Germany <sup>(1)</sup> - Institute Of Neurology, University College London, London, United Kingdom <sup>(2)</sup> - Department Of Neurology, University Of Heidelberg, Heidelberg, Germany <sup>(3)</sup>**96 - AUTOANTIBODIES AGAINST GLYCINE-ASSOCIATED SYNAPTIC PROTEINS IN STIFF-PERSON SYNDROME**Christian Probst <sup>(1)</sup> - Inga-madeleine Blöcker <sup>(1)</sup> - Swantje Mindorf <sup>(1)</sup> - Mandy Unger <sup>(1)</sup> - Kai Fechner <sup>(1)</sup> - Hans-michael Meinck <sup>(2)</sup> - Bettina Balint <sup>(3)</sup> - Winfried Stöcker <sup>(1)</sup> - Wolfgang Schlumberger <sup>(1)</sup> - Lars Komorowski <sup>(1)</sup>Institute Of Experimental Immunology, Euroimmun Ag, Lübeck, Germany <sup>(1)</sup> - Department Of Neurology, University Of Heidelberg, Heidelberg, Germany <sup>(2)</sup> - Institute Of Neurology, University College London, London, Germany <sup>(3)</sup>**94 - IDENTIFICATION OF THE INOSITOL 1,4,5-TRISPHOSPHATE RECEPTOR TYPE 1 AS A NEW AUTOANTIGEN OF PURKINJE CELLS**

Madeleine Scharf - Inga-madeleine Blöcker - Kathrin Borowski - Bianca Teegen - Nora Begemann - Yvonne Denno - Stephan Tiede - Winfried Stöcker - Christian Probst - Wolfgang Schlumberger - Lars Komorowski

Institute Of Experimental Immunology, Euroimmun Ag, Lübeck, Germany

**181 - GLATIRAMER ACETATE PHARMACOGENETICS IN RUSSIAN MULTIPLE SCLEROSIS PATIENTS: CLEC16A AND GPC5 AS NEW PLAYERS**Olga Kulakova <sup>(1)</sup> - Ekaterina Tsareva <sup>(1)</sup> - Vitalina Bashinskaya <sup>(1)</sup> - Natalia Baulina <sup>(1)</sup> - Dmitrijs Lvovs <sup>(2)</sup> - Alexander Favorov <sup>(3)</sup> - Alexey Boyko <sup>(4)</sup> - Olga Favorova <sup>(1)</sup>Pirogov Russian National Research Medical University, Pirogov Russian National Research Medical University, Moscow, Russian Federation <sup>(1)</sup> - Research Institute For Genetics And Selection Of Industrial Microorganisms, Research Institute For Genetics And Selection Of Industrial Microorganisms, Moscow, Russian Federation <sup>(2)</sup> - Johns Hopkins University School Of Medicine, Johns Hopkins University School Of Medicine, Baltimore, United States <sup>(3)</sup> - Pirogov Russian National Research Medical University, Moscow City Multiple Sclerosis Center, Moscow, Russian Federation <sup>(4)</sup>



**477 - CSF BIOMARKERS OF INFLAMMATION AND NEURONAL DAMAGE IN ACUTE OPTIC NEURITIS PREDICT LATER DEVELOPMENT OF MS AND LONG-TERM DISABILITY**

Signe Modvig <sup>(1)</sup> - Matilda Degn <sup>(1)</sup> - Jette L Frederiksen <sup>(2)</sup> - Finn Sellebjerg <sup>(3)</sup>

Department Of Neurology, Hospital Of Glostrup, University Of Copenhagen, Glostrup, Denmark <sup>(1)</sup> - Department Of Neurology, Hospital Of Glostrup, University Of Copenhagen, Glostrup, Denmark <sup>(2)</sup> - Danish Multiple Sclerosis Centre, Department Of Neurology, Rigshospitalet, University Of Copenhagen, Copenhagen, Denmark <sup>(3)</sup>

**597 - NON-INVASIVE SINGLE CELL-TRACKING IN MOUSE BRAIN BY USING TIME-LAPSE MRI**

Yuki Mori - Yoshichika Yoshioka

Immunology Frontier Research Center, Osaka University, Osaka, Japan

**113 - IDENTIFICATION OF CANDIDATE PREDICTIVE PROTEIN BIOMARKERS BY M2 PROTEOMICS FOR CLINICAL ONSET AND TREATMENT EFFICACY OF MULTIPLE SCLEROSIS**

Itay Raphael - Thomas Forsthuber

The University Of Texas At San Antonio, The University Of Texas At San Antonio, San Antonio, United States

**495 - JCV INDEX AND L-SELECTIN FOR NATALIZUMAB-ASSOCIATED PML RISK STRATIFICATION**

Nicholas Schwab - Tilman Schneider-hohendorf - Johanna Breuer - Anita Posevitz-fejfar - Heinz Wiendl

University Of Münster, University Clinic - Neurology, Münster, Germany

**472 - DIFFERENTIAL GLYCOSYLATION OF KIR4.1 IN GLIAL CELLS AFFECTS BINDING OF AUTOANTIBODIES IN MULTIPLE SCLEROSIS**

Rajneesh Srivastava <sup>(1)</sup> - Sudhakar Reddy Kalluri <sup>(1)</sup> - Yvonne Schäfer <sup>(1)</sup> - Anita Krysta <sup>(1)</sup> - Verena Grummel <sup>(1)</sup> - Elisabeth Kremmer <sup>(2)</sup> - Dorothea Buck <sup>(1)</sup> - Lucas Schirmer <sup>(1)</sup> - Bernhard Hemmer <sup>(1)</sup>

Department Of Neurology, Klinikum Rechts Der Isar, Technische Universität, Munich, Munich, Germany <sup>(1)</sup> - Institute Of Molecular Immunology, Helmholtz Zentrum München, Germany, Munich, Germany <sup>(2)</sup>

**323 - TREATMENT NON-RESPONSE TO BOSWELIC ACIDS IS ASSOCIATED WITH MIR-302B EXPRESSION IN CD4+ T CELLS OF RELAPSING-REMITTING MULTIPLE SCLEROSIS PATIENTS IN THE SABA PROOF-OF-CONCEPT TRIAL**

Klarissa Hanja Stürner <sup>(1)</sup> - Oliver Kemner <sup>(2)</sup> - Christoph Heesen <sup>(1)</sup> - Benjamin Otto <sup>(3)</sup> - Ole Pless <sup>(2)</sup>

Institute For Neuroimmunology And Multiple Sclerosis Research (inims), University Medical Center Hamburg-eppendorf, Hamburg, Germany <sup>(1)</sup> - European Screening Port, Center For Molecular Neurobiology Hamburg, Hamburg, Germany <sup>(2)</sup> - I. Department Of Internal Medicine, University Medical Center Hamburg-eppendorf, Hamburg, Germany <sup>(3)</sup>

**78 - ANTIBODIES TO LRP4 IN SERUM AND CSF FROM AMYOTROPHIC LATERAL SCLEROSIS PATIENTS**

John Tzartos <sup>(1)</sup> - Paraskevi Zisimopoulou <sup>(2)</sup> - Michael Rentzos <sup>(3)</sup> - Nikos Karandreas <sup>(3)</sup> - Vasiliki Zouvelou <sup>(3)</sup> -

Panagiota Evangelakou <sup>(4)</sup> - Anastasios Tsonis <sup>(4)</sup> - Thomas Thomaidis <sup>(5)</sup> - Giuseppe Lauria <sup>(6)</sup> - Francesca Andreetta <sup>(6)</sup> Renato Mantegazza <sup>(6)</sup> - Socrates Tzartos <sup>(2)</sup>

Hellenic Pasteur Institute, Red Cross Hospital, Athens, Greece <sup>(1)</sup> - Hellenic Pasteur Institute, Hellenic Pasteur Institute, Athens, Greece <sup>(2)</sup> Aeginition Hospital, National And Kapodistrian University, Athens, Greece <sup>(3)</sup> - Hellenic Pasteur Institute, Hellenic Pasteur, Athens, Greece <sup>(4)</sup> - Neurology Department, Red Cross Hospital, Athens, Greece <sup>(5)</sup> - Neurological Institute "carlo Besta", Neurological Institute "Carlo Besta", Milan, Italy <sup>(6)</sup>

**250 - IGM (AND NOT IGG) OLIGOCLONAL BANDS: BIOMARKER OF TARGETABLE INFLAMMATION IN PPMS**

Luisa M Villar <sup>(1)</sup> - Amit Bar-or <sup>(2)</sup>

Servicios De Inmunología Y Neurología. Unidad De Esclerosis Múltiple., Hospital Universitario Ramón Y Cajal., Spain, Spain <sup>(1)</sup> Neuroimmunology Unit, Montréal Neurological Institute, McGill University <sup>(2)</sup>

---

**COFFEE BREAK & POSTER SESSION | BLOOD BRAIN BARRIER**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

**595 - NETRIN-1 REGULATES BLOOD-BRAIN BARRIER FUNCTION AND CNS INFLAMMATION**

Jorge Alvarez <sup>(1)</sup> - Cornelia Podjaski <sup>(1)</sup> - Lyne Bourbonniere <sup>(1)</sup> - Sandra Larouche <sup>(1)</sup> - Simone Terouz <sup>(1)</sup> - Marc-andre Lecuyer <sup>(1)</sup> - Lamia Hachehouche <sup>(1)</sup> - Akiko Nakano <sup>(1)</sup> - Mike Sabbagh <sup>(1)</sup> - Olivia Saint-laurent <sup>(1)</sup> - Catherine Larochelle <sup>(1)</sup> Jenea Bin <sup>(2)</sup> - Peter Darlington <sup>(2)</sup> - Nathalie Arbour <sup>(1)</sup> - Jack Antel <sup>(2)</sup> - Timothy Kennedy <sup>(2)</sup> - Alexandre Prat <sup>(1)</sup>

Centre De Recherche De Centre Hospitalier De L'université De Montréal, University, Montreal, Canada <sup>(1)</sup> - McGill University, University, Montreal, Canada <sup>(2)</sup>

### **281 - INFLUENCE OF AGE-RELATED BLOOD BRAIN BARRIER MODIFICATIONS ON THE OUTCOME OF EXPERIMENTAL STROKE IN ELDERLY MICE.**

Marco Bacigaluppi - Mattia Gallizioli - Gianluca Luigi Russo - Giancarlo Comi - Gianvito Martino

Neuroimmunology Unit, Institute Of Experimental Neurology, University Vita Salute San Raffaele And San Raffaele Hospital, Milan, Italy

### **321 - BLOOD-BRAIN BARRIER MARKERS AFTER ACUTE EPILEPTIC SEIZURES.**

Agnes Cudna - Iwona Kurkowska-jastrzebska

Institute Of Psychiatry And Neurology, 2 Nd Department Of Neurology, Neuroimmunology Laboratory, Warsaw, Poland

### **621 - EFFECT OF HIV-REACTIVATING AGENTS ON BLOOD BRAIN BARRIER PERMEABILITY.**

Clelia Dental - Corine Barat - Michel Ouelet - Michel J. Tremblay <sup>(1)</sup>

Laboratoire D'immuno-rétrovirologie Humaine, Centre De Recherche Du Chuq, Pavillon Chul, Québec, Canada <sup>(1)</sup>

### **384 - THE ROLE OF THE MICRORNA-30 FAMILY IN THE REGULATION OF THE BLOOD-BRAIN BARRIER DURING INFLAMMATION. IMPLICATIONS FOR MULTIPLE SCLEROSIS**

Claudio Derada Troletti <sup>(1)</sup> - Wouter W. Kamphuis <sup>(1)</sup> - Bert Van Het Hof <sup>(1)</sup> - Arie Reijerkerk <sup>(2)</sup> - Mark R. Mizee <sup>(1)</sup> Helga E. De Vries <sup>(1)</sup>

Blood-brain Barrier Research Group, Molecular Cell Biology And Immunology, Neuroscience Campus Amsterdam, Vu University Medical Center, Amsterdam, Netherlands <sup>(1)</sup> - To-bbb Technologies Bv, Leiden Bio Science Park, Leiden, Netherlands <sup>(2)</sup>

### **441 - DEFINING THE ROLES OF ICAM-1 AND ICAM-2 IN THE PATHOGENESIS OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Neda Haghayegh Jahromi <sup>(1)</sup> - Rémy Boscacci <sup>(1)</sup> - Michael Abadier <sup>(1)</sup> - Daniel C. Bullard <sup>(2)</sup> - Scott R. Barnum <sup>(3)</sup> Urban Deutsch <sup>(1)</sup> - Ruth Lyck <sup>(1)</sup> - Britta Engelhardt <sup>(1)</sup>

Theodor Kocher Institute, University Of Bern, Bern, Switzerland <sup>(1)</sup> - Departments Of Microbiology, University Of Alabama, Birmingham, United States <sup>(2)</sup> - Departments Of Genetics, University Of Alabama, Birmingham, United States <sup>(3)</sup>

### **508 - VLA-4 BLOCKADE PROMOTES DIFFERENTIAL ROUTES INTO HUMAN CNS INVOLVING PSGL-1-ROLLING OF T CELLS AND MCAM-ADHESION OF TH17 CELLS**

Tilman Hohendorf <sup>(1)</sup> - Jan Rossaint <sup>(2)</sup> - Hema Mohan <sup>(1)</sup> - Daniel Böning <sup>(3)</sup> - Johanna Breuer <sup>(1)</sup> - Tanja Kuhlmann <sup>(4)</sup> Catharina Gross <sup>(1)</sup> - Ken Flanagan <sup>(5)</sup> - Lydia Sorokin <sup>(6)</sup> - Dietmar Vestweber <sup>(7)</sup> - Alexander Zarbock <sup>(2)</sup> - Nicholas Schwab <sup>(1)</sup> - Heinz Wiendl <sup>(1)</sup>

Neurology, University Of Muenster, Muenster, Germany <sup>(1)</sup> - Anaesthesiology, University Of Muenster, Muenster, Germany <sup>(2)</sup> - Medical Physics And Biophysics, University Of Muenster, Muenster, Germany <sup>(3)</sup> - Neuropathology, University Of Muenster, Muenster, Germany <sup>(4)</sup> - Prothena, Corporation, San Francisco, United States <sup>(5)</sup> - Physiological Chemistry And Pathobiochemistry, University Of Muenster, Muenster, Germany <sup>(6)</sup> - Molecular Biomedicine, Max Plank, Muenster, Germany <sup>(7)</sup>

### **37 - PATHOGEN RECOGNITION REGULATES BLOOD-BRAIN BARRIER INTEGRITY AND PROTECTS AGAINST WEST NILE VIRUS ENTRY VIA TYPE I INTERFERON SIGNALING**

Brian Daniels - David Holman - Lillian Cruz-orengo - Harsha Jujjavarapu - Robyn Klein

Washington University School Of Medicine, University, St. Louis, United States

### **111 - B7-HOMOLOGUE 1 INHIBITS T CELL-MEDIATED BLOOD-BRAIN BARRIER DISRUPTION AND REGIONAL ENCEPHALITIS IN A SPONTANEOUS MODEL OF CNS AUTOIMMUNITY**

Ivan Kuzmanov - Vilmos Posevitz - Stephanie Hucke - Daria Chudyka - Angela Dreykluft - Luisa Klotz - Heinz Wiendl

Department Of Neurology, University Hospital Münster, Münster, Germany

### **98 - ALCAM REGULATES BBB INTEGRITY AND NEUROINFLAMMATION**

Marc-andré Lécuyer - Lyne Bourbonnière - Sandra Larouche - Simone Terouz - Hania Kébir - Soufiane Ghannam Catherine Larochelle - Alexandre Prat

Centre De Recherche Du Chum, University Of Montréal, Montréal, Canada

### **28 - ALPHA4BETA1 IS A MAJOR MOLECULAR CUE USED BY CYTOTOXIC CD8 T CELLS TO MIGRATE INTO THE CNS**

Guillaume Martin-blondel <sup>(1)</sup> - Béatrice Pignolet <sup>(1)</sup> - Claudia Blatti <sup>(2)</sup> - Therese Perinat <sup>(2)</sup> - Lidia Yshii <sup>(1)</sup> Christina Gebauer <sup>(1)</sup> - Britta Engelhardt <sup>(2)</sup> - Roland Liblau <sup>(1)</sup>

Inserm Umr 1043, Centre De Physiopathologie Toulouse-purpan, Toulouse University Hospital, Toulouse, France <sup>(1)</sup> - Theodor Kocher Institute, University Of Bern, Bern, Switzerland <sup>(2)</sup>

**285 - ASTROCYTE-DERIVED RETINOIC ACID: A NOVEL REGULATOR OF BLOOD-BRAIN BARRIER FUNCTION DURING NEUROINFLAMMATION IN MULTIPLE SCLEROSIS.**

Mark Mizze (1) - Philip Nijland (1) - Susanne Van Der Pol (1) - Joost Drexhage (1) - Bert Van Het Hof (1) - Reina Mebius (2) - Paul Van Der Valk (3) - Jack Van Horssen (1) - Arie Reijerkerk (4) - Elga De Vries (1)

Neuroscience Campus Amsterdam, VU University Medical Center, Amsterdam, Netherlands (1) - MCBi, VU University Medical Center, Amsterdam, Netherlands (2) - Pathology Department, VU University Medical Center, Amsterdam, Netherlands (3) - To-bbb, Technologies, Leiden, Netherlands (4)

**500 - IMATINIB AMELIORATES NEUROINFLAMMATION IN A RAT MODEL OF MULTIPLE SCLEROSIS BY ENHANCING BLOOD-BRAIN BARRIER INTEGRITY AND BY MODULATING THE PERIPHERAL IMMUNE RESPONSE**

Milena Adzemovic (1) - Manuel Zeitelhofer (1) - Ulf Eriksson (1) - Tomas Olsson (2) - Ingrid Nilsson (1)

Department Of Medical Biochemistry And Biophysics, Vascular Biology Division, Karolinska Institute, Stockholm, Sweden (1) - Center Of Molecular Medicine, Karolinska Institute, Stockholm, Sweden (2)

**151 - NOVEL INSIGHTS INTO CELL-CELL INTERACTIONS AT THE BLOOD-BRAIN BARRIER REVEALED BY A FULLY-HUMAN IN VITRO MODEL INCORPORATING FLOW**

Birgit Obermeier (1) - Bryan L. Benson (2) - Haiyan Lu (1) - Grahame Kidd (1) - Simona Spampinato (1) - Yukio Takeshita (3) - Yasutero Sano (3) - Takashi Kanda (3) - Richard M. Ransohoff (1)

Neuroinflammation Research Center, Department Of Neurosciences, Lerner Research Institute, Cleveland Clinic, Cleveland, United States (1) - Department Of Pathology, Case Western Reserve University School Of Medicine, Cleveland, United States (2) - Department Of Neurology And Clinical Neurosciences, Yamaguchi University Graduate School Of Medicine, Yamaguchi, Japan (3)

**494 - ALPHA 4 BETA 7 INTEGRIN SELECTIVELY CONTROLS TH17 CELL RECRUITMENT TO THE CENTRAL NERVOUS SYSTEM DURING EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Barbara Rossi - Silvia Dusi - Antonella Amoroso - Gabriela Constantin

Department Of Pathology And Diagnostics, University Of Verona, Verona, Italy

**270 - IDENTIFICATION OF SUBSET SPECIFIC MECHANISMS FOR CD8+ VERSUS CD4+ TEM CELLS MEDIATING THEIR MIGRATION ACROSS THE INFLAMED BLOOD-BRAIN BARRIER UNDER PHYSIOLOGICAL FLOW IN VITRO**

Henriette Rudolph (1) - Claudia Blatti (1) - Horst Schrotten (2) - Ruth Lyck (1) - Britta Engelhardt (1)

Theodor Kocher Institute, University Of Bern, Bern, Switzerland (1) - Pediatric Infectious Diseases, University Children's Hospital Mannheim, Mannheim, Germany (2)

**137 - ANALYSIS OF FACTORS REGULATING THE EXPRESSION OF AQP4 IN HUMAN ASTROCYTE**

Yasutero Sano - Mariko Oishi - Hiroyo Haruki - Fumitaka Shimizu - Masaaki Abe - Takashi Kanda

Department Of Neurology And Clinical Neuroscience, Yamaguchi University Graduate School Of Medicine, Ube, Japan

**85 - REGULATION OF LYMPHOCYTE ADHESION AND MIGRATION INTO THE CNS BY PHOSPHOLIPASE D1 IN AUTOIMMUNE NEUROINFLAMMATION**

Bittner Stefan

Department Of Neurology, University Of Muenster, Münster, Germany

**440 - INVOLVEMENT OF JUNCTIONAL ADHESION MOLECULES IN THE PATHOGENESIS OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Julia Michel (1) - Silvia M. Tietz (1) - Rémy Boscacci (1) - Claudia Blatti (1) - Ruth Lyck (1) - Israel F. Charo (2)

Richard M. Ransohoff (3) - Elisabetta Dejana (4) - Urban Deutsch (1) - Britta Engelhardt (1)

Theodor Kocher Institute, University Of Bern, Bern, Switzerland (1) - Gladstone Institute Of Cardiovascular Disease, University Of California San Francisco, San Francisco, United States (2) - Lerner Research Institute, Cleveland Clinic, Cleveland, United States (3) - Ifom-ieo Campus, Research Institute, Milan, Italy (4)

**638 - EARLY BREAKDOWN OF THE BLOOD-BRAIN BARRIER IN A MODEL OF NEUROMYELITIS OPTICA**

Anne Winkler (1) - Claudia Wrzos (1) - Wolfgang Brück (1) - Jeffrey L. Bennett (2) - Stefan Nessler (1) - Christine Stadelmann (1)

Institute Of Neuropathology, University Medical Center Göttingen, Göttingen, Germany (1) - Departments Of Neurology And Ophthalmology, University Of Denver, Colorado, United States (2)



---

**COFFEE BREAK & POSTER SESSION | CLINICAL RESEARCH**  
15:15 - 16:45 POSTERHALL (RHEINFOYER)

**314 - STUDY ON ASSAY SYSTEM FOR ANTI-SYNAPSIN 1A ANTIBODY**

Atsuro Chiba - Ayumi Uchibori - Tomoko Kato

School Of Medicine, Kyorin University, Tokyo, Japan

**353 - JUVENILE MYASTHENIA GRAVIS: COMPARISON OF PRE AND POSTPUBERTAL CASES**

Ozgul Ekmekci - Hatice Karasoy - Ayse Nur Yuceyar

Ege University, Neurology Department, Ege University, Neurology Department, Izmir, Turkey

**123 - A RETROSPECTIVE STUDY OF THE ASSOCIATION BETWEEN LEUCOCYTES, IGG-INDEX, OLIGOCLONAL BANDS AND AGE IN DEMYELINATING DISEASE.**

Jette L Frederiksen - Mie Bülow

Clinic Of Multiple Sclerosis And Optic Neuritis, Department Of Neurology, Glostrup Hospital, University Of Copenhagen, Glostrup, Denmark

**155 - RITUXIMAB AMELIORATES ANTI-N-METHYL-D-ASPARTATE RECEPTOR ENCEPHALITIS BY REMOVING SHORT-LIVED PLASMA BLASTS**Yasuo Hachiya<sup>(1)</sup> - Akinori Uruha<sup>(2)</sup> - Emi Kasai-yoshida<sup>(1)</sup> - Konomi Shimoda<sup>(3)</sup> - Ikuko Shirai<sup>(1)</sup> - Satoko Kumada<sup>(1)</sup>Eiji Kurihara<sup>(1)</sup> - Kotoko Suzuki<sup>(4)</sup> - Atsuko Ohba<sup>(4)</sup> - Shin-ichiro Hamano<sup>(4)</sup> - Hiroshi Sakuma<sup>(5)</sup>Department Of Neuropediatrics, Tokyo Metropolitan Neurological Hospital, Tokyo, Japan<sup>(1)</sup> - Department Of Clinical Development, Translational Medical Center, National Center Of Neurology And Psychiatry, Tokyo, Japan<sup>(2)</sup> - Department Of Pediatrics, Graduate School Of Medicine, University Of Tokyo, Tokyo, Japan<sup>(3)</sup> - Division Of Neurology, Saitama Children's Medical Center, Saitama, Japan<sup>(4)</sup> - Department Of Brain Development And Neural Regeneration, Tokyo Metropolitan Institute Of Medical Science, Tokyo, Japan<sup>(5)</sup>**260 - NEUROMYELITIS OPTICA IN AN ASIAN POPULATION: CLINICAL FEATURES AND DISEASE COURSE**Jyh Yung Hor<sup>(1)</sup> - Thien Thien Lim<sup>(1)</sup> - Yuen Kang Chia<sup>(1)</sup> - Han Bing Chow<sup>(2)</sup> - Yee Ming Ching<sup>(3)</sup> - Masita Arip<sup>(3)</sup>Gaik Bee Eow<sup>(1)</sup> - Md Hanip Rafia<sup>(4)</sup>Department Of Neurology, Penang General Hospital, Penang, Malaysia<sup>(1)</sup> - Department Of Medicine, Penang Medical College, Penang, Malaysia<sup>(2)</sup> - Autoimmune Unit, Allergy And Immunology Research Centre, Institute For Medical Research, Kuala Lumpur, Malaysia<sup>(3)</sup> - Department Of Neurology, Kuala Lumpur General Hospital, Kuala Lumpur, Malaysia<sup>(4)</sup>**352 - DYNAMIC CHANGES OF PROINFLAMMATORY BIOMARKERS IN THE ACUTE PHASE OF ISCHEMIC STROKE PREDICT OUTCOME AND CORRELATE WITH CHANGES IN THE L-ARGININE PATHWAY**Zsolt Illes<sup>(1)</sup> - Tihamer Molnar<sup>(2)</sup> - Viktoria Papp<sup>(3)</sup> - Gergely Feher<sup>(3)</sup> - Norbert Kovacs<sup>(3)</sup> - Laszlo Szapary<sup>(3)</sup>Birgit Debrabant<sup>(4)</sup> - Gabriella Pusch<sup>(3)</sup>Institute Of Clinical Research And Department Of Neurology, University Of Southern Denmark, Odense, Denmark<sup>(1)</sup> - Department Of Anaesthesiology And Intensive Care, University Of Pecs, Pecs, Hungary<sup>(2)</sup> - Department Of Neurology, University Of Pecs, Pecs, Hungary<sup>(3)</sup> - Epidemiology And Biostatistics, Institute Of Public Health, University Of Southern Denmark, Odense, Denmark<sup>(4)</sup>**133 - ABNORMALITIES IN T CELL DIFFERENTIATION IN PATIENTS WITH THE LAMBERT-EATON MYASTHENIC SYNDROME**Alexander F Lipka<sup>(1)</sup> - Maarten J.d. Van Tol<sup>(2)</sup> - Jacqueline L.m. Waaijer<sup>(2)</sup> - Cornelia M. Jol-van Der Zijde<sup>(2)</sup>Jan J.g.m. Verschuuren<sup>(1)</sup>Dept. Of Neurology, Leiden University Medical Center, Leiden, Netherlands<sup>(1)</sup> - Dept. Of Pediatrics, Leiden University Medical Center, Leiden, Netherlands<sup>(2)</sup>**423 - INVOLVEMENT OF SEMA4A IN MULTIPLE SCLEROSIS AND NEUROMYELITIS OPTICA**Tatsusada Okuno<sup>(1)</sup> - Toru Koda<sup>(1)</sup> - Katsuichi Miyamoto<sup>(2)</sup> - Kazushiro Takata<sup>(1)</sup> - Josephe A. Honorat<sup>(1)</sup>Susumu Kusunoki<sup>(2)</sup> - Atsushi Kumanogoh<sup>(3)</sup> - Yuji Nakatsuji<sup>(1)</sup> - Hideki Mochizuki<sup>(1)</sup>Departments Of Neurology, Osaka University Graduate School Of Medicine, Osaka, Japan<sup>(1)</sup> - Departments Of Neurology, Kinki University, Osaka, Japan<sup>(2)</sup> - Ifrec, Osaka University, Osaka, Japan<sup>(3)</sup>**503 - CYTOKINE LEVELS IN NON-ONCOLOGIC NEUROPATHIC PAIN PATIENTS UNDER INTRATHECAL OR ORAL PROLONGED MORPHINE TREATMENT**

Christiane Pellegrino Rosa

University Of Sao Paulo, School Of Medicine Of Medical School Of University Of Sao Paulo, Sao Paulo, Brazil

**344 - SARCOIDOSIS ASSOCIATED T-CELL DYSREGULATION PREDISPOSES TO PROGRESSIVE MULTIFOKAL LEUKENCEPHALOPATHY**

Sina C. Rosenkranz <sup>(1)</sup> - Vivian Thom <sup>(2)</sup> - Anne Willing <sup>(1)</sup> - Manuela Kolster <sup>(3)</sup> - Eva Tolosa <sup>(3)</sup> - Manuel A. Fries <sup>(1)</sup>  
Institute Of Neuroimmunology And Multiple Sclerosis (inims), Centre For Molecular Neurobiology (zmnh), University Medical Centre Hamburg-eppendorf, Hamburg, Germany <sup>(1)</sup> - Department Of Neurology, University Medical Centre Hamburg-eppendorf, Hamburg, Germany <sup>(2)</sup> - Department Of Immunology, University Medical Centre Hamburg-eppendorf, Hamburg, Germany <sup>(3)</sup>

**58 - MYASTHENIA GRAVIS ASSOCIATED WITH THYMOMA IN A PATIENT WITH CHRNE CONGENITAL MYASTHENIC SYNDROME**

Ernestina Santos <sup>(1)</sup> - Isabel Moreira <sup>(2)</sup> - Maria Isabel Leite <sup>(3)</sup> - Jose Lopes Lima <sup>(2)</sup>  
Neurology Department, Hospital Santo Antonio, Instituto De Ciencias Biomedicas Abel Salazar, Universidade Do Porto, Porto, Portugal <sup>(1)</sup> - Neurology Department, Hospital Santo Antonio, Porto, Portugal <sup>(2)</sup> - Department Of Clinical Neurology, Nuffield Department Of Clinical Neurosciences, John Radcliffe Hospital, University Of Oxford, Oxford, United Kingdom <sup>(3)</sup>

**32 - EOSINOPHILIC CNS VASCULITIS CAN MIMIC DEMYELINATING DISEASE OF THE BRAIN AND SPINAL CORD**

Raphael Schneider - Jenny Tsai - Daniel Selchen - David Munoz  
University Of Toronto, St. Michael's Hospital, Toronto, Canada

**55 - THE COMPARISON OF MESENCHYMAL STEM CELL WITH MITOXANTRONE IN TREATMENT OF PATIENTS WITH MULTIPLE SCLEROSIS.**

Saeed Shahbeigi <sup>(1)</sup> - Mandana Mohyeddin Bonab <sup>(1)</sup> - Behrouz Nikbin <sup>(1)</sup> - Yadollah Shakiba <sup>(1)</sup> - Ghazal Jalilzadeh <sup>(2)</sup> - Abbas Najari <sup>(3)</sup> - Leila Chegini <sup>(4)</sup> - Torach Orang <sup>(5)</sup> - Shaghayegh Ranjbar <sup>(6)</sup> - Samaneh Sheikhi Kouhsar <sup>(1)</sup> - Foroogh Nejatollahi <sup>(7)</sup> - Masoud Yousefvand <sup>(8)</sup> - Gholamreza Bakhshandepour <sup>(9)</sup> - Saeed Esmaeil Soofian <sup>(10)</sup>  
Immunology Department, Tehran, Tehran, Iran <sup>(1)</sup> - Jondishapour Neurology Clinic, Jondishapour Neurology Clinic, Tehran, <sup>(2)</sup> - Ministry Of Health, Ministry Of Health, Tehran, <sup>(3)</sup> - Iran Medical University, Iran Medical University, Tehran, Iran <sup>(4)</sup> - Iran Medical University, Iran Medical University, Tehran, Iran <sup>(5)</sup> - Shahid Beheshti Medical University, Shahid Beheshti Medical University, Tehran, Iran <sup>(6)</sup> - Shiraz Medical University, Shiraz Medical University, Shiraz, Iran <sup>(7)</sup> - Ministry Of Health, Ministry Of Health, Tehran, Iran <sup>(8)</sup> - Paytakht Mri Center, Paytakht Mri Center, Tehran, Iran <sup>(9)</sup> - Iran Medical University, Iran Medical University, Tehran, Iran <sup>(10)</sup>

**252 - UNALTERED FREQUENCY AND FUNCTIONALITY OF CD56BRIGHT AND CD56DIM NATURAL KILLER CELLS IN UNTREATED RELAPSING-REMITTING MULTIPLE SCLEROSIS PATIENTS**

Sofia Sisay <sup>(1)</sup> - Alicia Rosello <sup>(1)</sup> - Korinna Henseleit <sup>(1)</sup> - Matt Tan <sup>(1)</sup> - Monica Marta-caldo <sup>(1)</sup> - Priya Dua <sup>(1)</sup> - Gary Warnes <sup>(1)</sup> - Jacqueline Palace <sup>(2)</sup> - Gavin Giovannoni <sup>(1)</sup> - Ute-christiane Meier <sup>(1)</sup>  
Centre Of Neuroscience And Trauma, Blizard Building, Barts And The London School Of Medicine And Dentistry, Queen Mary Univeristy, London, United Kingdom <sup>(1)</sup> - The Department Of Clinical Neurology, Oxford University Hospitals Nhs Trust, Oxford, Oxford University Hospital, Oxford, United Kingdom <sup>(2)</sup>

**24 - ANTIPHOSPHOLIPID ANTIBODIES IN PATIENTS WITH MULTIPLE SCLEROSIS OR NEUROMYELITIS OPTICA**

Kazuya Takahashi - Kiyonobu Komai - Chiho Ishida - Yuko Motozaki - Tokuhei Ikeda - Ichiro Nozaki  
Neurology, National Hospital Organization Iou Hospital, Kanazawa, Japan

**320 - A STUDY ON THE MECHANISM OF ANTIGEN-ANTIBODY REACTION INCREASED BY GANGLIOSIDE-COMPLEX IN GUILLAIN-BARRÉ SYNDROME.**

Ayumi Uchibori - Atsuro Chiba  
School Of Medicine, Kyorin University, Tokyo, Japan

**504 - TREATMENT RESISTANT AUTOIMMUNE AUTONOMIC GANGLIONITIS ASSOCIATED WITH INCREASED SERUM IMMUNOGLOBULIN LIGHT CHAINS**

Atay Vural <sup>(1)</sup> - Pelin Nar Senol <sup>(1)</sup> - Yahya Büyükasik <sup>(2)</sup> - Bülent Elibol <sup>(1)</sup> - Meryem Asli Tuncer <sup>(1)</sup>  
Hacettepe University, Faculty Of Medicine, Department Of Neurology, Ankara, Turkey <sup>(1)</sup> - Hacettepe University, Faculty Of Medicine, Department Of Hematology, Ankara, Turkey <sup>(2)</sup>

**618 - MEMANTINE THERAPY IN A PATIENT WITH SEVERE ANTI-N-METHYL-D-ASPARTATE RECEPTOR (NMDAR) ENCEPHALITIS**

Yi-chia Wei <sup>(1)</sup> - Ming-feng Liao <sup>(2)</sup> - Yih-ru Wu <sup>(2)</sup> - Chi-hung Liu <sup>(2)</sup> - Jaiinn-jim Lin <sup>(3)</sup>  
Department Of Neurology, Chang Gung Memorial Hospital, Keelung, Taiwan, Province Of China <sup>(1)</sup> - Department Of Neurology, Linkou Medical Center, Chang Gung Memorial Hospital, Taoyuan, Taiwan, Province Of China <sup>(2)</sup> - Division Of Pediatric Neurology, College Of Medicine, Chang Gung University, Taoyuan, Taiwan, Province Of China <sup>(3)</sup>

**17 - GUILLAIN-BARRÉ SYNDROME IN NORTHEAST CHINA: A RETROSPECTIVE ANALYSIS OF 516 CASES**

Ying Wang - Guihong Li - Xinyu Li - Siyu Yang - Xiaoyi Gu - Mingyang Liu - Xiujuan Wu - Hongliang Zhang

Neuroscience Center, Department Of Neurology, The First Hospital Of Jilin University, Changchun, China

**22 - MORE SEVERE MANIFESTATIONS AND POORER SHORT-TERM PROGNOSIS OF GANGLIOSIDE-ASSOCIATED GUILLAIN-BARRÉ SYNDROME IN NORTHEAST CHINA**Hongliang Zhang <sup>(1)</sup> - Xiujuan Wu <sup>(1)</sup> - Wei Wu <sup>(2)</sup> - Zhengzheng Wang <sup>(1)</sup> - Donghui Shen <sup>(1)</sup> - Wei Pan <sup>(3)</sup> - Ying Wang <sup>(4)</sup> Linmin Wu <sup>(1)</sup> - Xiaokun Wu <sup>(1)</sup> - Jiachun Feng <sup>(1)</sup> - Kangding Liu <sup>(1)</sup> - Jie Zhu <sup>(1)</sup>Neuroscience Center, Department Of Neurology, The First Hospital Of Jilin University, Changchun, China <sup>(1)</sup> - Department OfNeurosurgery, The First Hospital Of Jilin University, Changchun, China <sup>(2)</sup> - School Of Public Health, Jilin University, Changchun, China<sup>(3)</sup> - Norman Bethune Health Science Center, Jilin University, Changchun, China <sup>(4)</sup>**570 - TOXIC LEUKOENCEPHALOPATHY CAUSED BY MORANTEL: A CASE REPORT**

Jing Bai - Shuai Yan - Xiujuan Wu - Hongliang Zhang

Neuroscience Center, Department Of Neurology, The First Hospital Of Jilin University, Changchun, China

---

**COFFEE BREAK & POSTER SESSION | INNATE IMMUNE SYSTEM**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

**406 - INFLAMMASOME-MEDIATED ACTIVATION OF MICROGLIA DIFFERS IMPORTANTLY FROM THAT OF HEMATOPOIETIC MACROPHAGES**Saskia Burm <sup>(1)</sup> - Ella Zuiderwijk-sick <sup>(1)</sup> - Anke't Jong <sup>(1)</sup> - Céline Van Der Putten <sup>(1)</sup> - Jennifer Veth <sup>(1)</sup> - Ivanela Kondova <sup>(2)</sup>Jeffrey Bajramovic <sup>(1)</sup>Biomedical Primate Research Centre, Alternatives Unit, Rijswijk, Netherlands <sup>(1)</sup> - Biomedical Primate Research Centre, AnimalScience Department, Rijswijk, Netherlands <sup>(2)</sup>**408 - UTILIZING AN IN VITRO MICROGLIA-LIKE MODEL FOR EXPLORING GENETIC-DRIVEN INNATE IMMUNE SYSTEM DYSFUNCTION IN ALZHEIMER'S DISEASE.**Katie Ryan <sup>(1)</sup> - Gail Chan <sup>(1)</sup> - Marta Olah <sup>(1)</sup> - Phoebe Winn <sup>(1)</sup> - Maria Cimpean <sup>(1)</sup> - Michael Frangieh <sup>(1)</sup> - Jaime Imitola <sup>(2)</sup>Wassim Elyaman <sup>(1)</sup> - Philip De Jager <sup>(1)</sup> - Elizabeth Bradshaw <sup>(1)</sup>Brigham And Women's Hospital, Harvard Medical School, Boston, United States <sup>(1)</sup> - Ohio State University, College Of Medicine,Columbus, United States <sup>(2)</sup>**608 - TARGETING MICROGLIA USING THE SPECIFIC TRANSCRIPTION FACTOR SALL1**Anne Buttgereit <sup>(1)</sup> - Iva Lelios <sup>(1)</sup> - Xueyang Yu <sup>(1)</sup> - Ryuichi Nishinakamura <sup>(2)</sup> - Burkhard Becher <sup>(1)</sup> - Melanie Greter <sup>(1)</sup>Institute Of Experimental Immunology, University Of Zurich, Zurich, Switzerland <sup>(1)</sup> - Institute Of Molecular Embryology And Genetics,Kumamoto University, Kumamoto, Japan <sup>(2)</sup>**244 - MYELOID-DERIVED SUPPRESSOR CELLS ARE KEY ELEMENTS FOR SYMPTOM RECOVERY IN A MURINE MODEL OF MULTIPLE SCLEROSIS**

Verónica Moliné-velázquez - María Cristina Ortega - Virginia Vila-del Sol - Carolina Melero-jerez - Fernando De Castro Diego Clemente

Grupo De Neurobiología Del Desarrollo-gnde, Hospital Nacional De Paraplégicos, Toledo, Spain

**70 - EXPRESSION AND FUNCTIONAL ANALYSIS OF NUCLEIC ACID SENSORS IN CELLS OF THE CENTRAL NERVOUS SYSTEM.**Donal Cox <sup>(1)</sup> - Glyn Williams <sup>(1)</sup> - Neil Kearney <sup>(1)</sup> - Andrew Bowie <sup>(1)</sup> - Marina Lynch <sup>(2)</sup> - Aisling Dunne <sup>(1)</sup>School Of Biochemistry And Immunology, Trinity College Dublin, Dublin, Ireland <sup>(1)</sup> - Trinity College Institute Of Neuroscience, TrinityCollege Dublin, Dublin, Ireland <sup>(2)</sup>**469 - PLOVAMER ACETATE, BUT NOT GLATIRAMER ACETATE, INDUCES AN ANTI-INFLAMMATORY PHENOTYPE IN HUMAN MONOCYTES**Chui-se Tham <sup>(1)</sup> - Mike Webb <sup>(2)</sup> - Kenneth Crook <sup>(1)</sup> - Ursula Boschert <sup>(1)</sup>Neurology Etip, Emd Serono Research & Development Institute, Billerica, United States <sup>(1)</sup> - Neurology Etip, Neuroimmunology Group,Emd Serono Research & Development Institute, Billerica, United States <sup>(2)</sup>

**552 - MICROGLIA'S GENE EXPRESSION AT DIFFERENT STAGES OF EVOLUTION AND UNDER PATHOLOGICAL CONDITIONS**

Francesca Grassivaro - Ramesh Menon - Cinthia Farina - Luca Muzio - Gianvito Martino

Institute Of Experimental Neurology (inspe), University Vita Salute-san Raffaele, Milan, Italy

**611 - INFLAMMATORY DYSREGULATION OF BLOOD MONOCYTES IN PARKINSON'S DISEASE PATIENTS**

Veselin Grozdanov <sup>(1)</sup> - Corinna Blierderhaeuser <sup>(1)</sup> - Valerie Roth <sup>(1)</sup> - Kathrin Fundel-clemens <sup>(2)</sup> - Lisa Zondler <sup>(1)</sup>

Wolfgang P. Ruf <sup>(1)</sup> - Bastian Hengerer <sup>(2)</sup> - Jan Kassubek <sup>(1)</sup> - Albert C. Ludolph <sup>(1)</sup> - Jochen H. Weishaupt <sup>(1)</sup>

Karin M. Danzer <sup>(1)</sup>

Neurology, Ulm University, Ulm, Germany <sup>(1)</sup> - Div. Research Germany, Boehringer Ingelheim Pharma Gmbh, Biberach/riss, Germany <sup>(2)</sup>

**557 - INNATE MEMORY FORMATION IN NEUROIMMUNE INTERACTIONS IN PSORIASIS**

Tom Hartwig <sup>(1)</sup> - Stanislav Pantelyushin <sup>(2)</sup> - Paulina Kulig <sup>(1)</sup> - Burkhard Becher <sup>(1)</sup>

Institute Of Experimental Immunology, University Of Zurich, Zurich, Switzerland <sup>(1)</sup> - Department Of Pathology, University Of Geneva, Geneva, Switzerland <sup>(2)</sup>

**436 - FAAH INHIBITION MODULATES TLR3-INDUCED INFLAMMATORY RESPONSES IN THE PERIPHERY AND BRAIN: POSSIBLE ROLE FOR CB1 RECEPTORS**

Rebecca Henry

Physiology, School Of Medicine And Ncbes Centre For Pain Research And Galway Neuroscience Centre, National University Of Ireland, Galway, Galway, Ireland

**152 - NEUTROPHIL PROFILE IN MULTIPLE SCLEROSIS AND NEUROMYELITIS OPTICA.**

Laura Hertwig <sup>(1)</sup> - Silvina Romero <sup>(1)</sup> - Klarissa Stürner <sup>(2)</sup> - Nadja Borisow <sup>(3)</sup> - Florence Pache <sup>(3)</sup> - Janina Behrens <sup>(3)</sup>

Jason Millward <sup>(1)</sup> - Klemens Ruprecht <sup>(4)</sup> - Carmen Infante Duarte <sup>(1)</sup> - Friedemann Paul <sup>(3)</sup>

Institute For Medical Immunology, Charité - University Medicine Berlin, Berlin, Germany <sup>(1)</sup> - Institute For Neuroimmunology And Clinical Ms Research, University Medical Center-eppendorf, Hamburg, Germany <sup>(2)</sup> - Neurocure Clinical Research Center Nrcr, Clinical Neuroimmunology, Charité - University Medicine Berlin, Berlin, Germany <sup>(3)</sup> - Clinical And Experimental Multiple Sclerosis Research Center, Charité - University Medicine Berlin, Berlin, Germany <sup>(4)</sup>

**424 - ENHANCED INNATE IMMUNE ACTIVATION BY GUILLAIN-BARRÉ SYNDROME-ASSOCIATED CAMPYLOBACTER JEJUNI LIPO-OLIGOSACCHARIDES**

Ruth Huizinga <sup>(1)</sup> - Wouter Van Rijs <sup>(2)</sup> - Jeffrey Bajramovic <sup>(3)</sup> - Astrid Heikema <sup>(4)</sup> - Jon Laman <sup>(1)</sup> - Janneke Samsom <sup>(5)</sup>  
Bart Jacobs <sup>(2)</sup>

Department Of Immunology, Erasmus Mc, University Medical Center, Rotterdam, Netherlands <sup>(1)</sup> - Department Of Immunology And Neurology, Erasmus Mc, University Medical Center, Rotterdam, Netherlands <sup>(2)</sup> - Unit Alternatives, Biomedical Primate Research Centre, Rijswijk, Netherlands <sup>(3)</sup> - Department Of Microbiology, Erasmus Mc, University Medical Center, Rotterdam, Netherlands <sup>(4)</sup> - Division Gastroenterology And Nutrition, Department Of Paediatrics, Erasmus Mc, University Medical Center, Rotterdam, Netherlands <sup>(5)</sup>

**213 - CHARACTERIZATION OF CD56BRIGHT NK CELLS IN DACLIZUMAB HYP-TREATED RRMS PATIENTS**

David J. Huss <sup>(1)</sup> - Maria F. Fragoso <sup>(1)</sup> - Patrick Cullen <sup>(2)</sup> - Norm Allaire <sup>(2)</sup> - Jason D. Fontenot <sup>(1)</sup>

Immunology Research, Biogen Idec, Cambridge, United States <sup>(1)</sup> - Genetics And Genomics, Biogen Idec, Cambridge, United States <sup>(2)</sup>

**195 - INDUCTION OF TYPE I INTERFERON IN THE CENTRAL NERVOUS SYSTEM PLAYS A PROTECTIVE ROLE IN EAE**

Reza M. H. Khorrooshi <sup>(1)</sup> - Thomas Holm <sup>(2)</sup> - Carsten Tue Berg <sup>(1)</sup> - Marlene Mørch <sup>(1)</sup> - Ruthe Truong Dieu <sup>(2)</sup>

Dina Dræby <sup>(1)</sup> - Siegfried Weiss <sup>(3)</sup> - Stefan Lienenklaus <sup>(3)</sup> - Trevor Owens <sup>(1)</sup>

Institute Of Molecular Medicine, University Of Southern Denmark, Odense, Denmark <sup>(1)</sup> - Department Of Biomedicine, Århus University, Århus, Denmark <sup>(2)</sup> - Helmholtz-zentrum Für Infektionsforschung Gmbh, Braunschweig, Braunschweig, Germany <sup>(3)</sup>

**105 - EFFECTS OF SOLUBLE HELMINTH COMPONENTS ON HUMAN MONOCYTES AND MACROPHAGES IN NEUROINFLAMMATION**

Gijs Kooij - Elsenoor J. Klaver - Mendel Ottow - Lisa Laan - Priscilla Heijnen - Susanne Van Der Pol - Helga E. De Vries - Chriistine D. Dijkstra - Irma Van Die

Vumc, Vu University Medical Center Amsterdam, Amsterdam, Netherlands

**199 - UP-REGULATION OF NOD LIKE RECEPTORS-3 SIGNALING IN MULTIPLE SCLEROSIS DISEASE**

Francesca La Rosa <sup>(1)</sup> - Federica Piancone <sup>(1)</sup> - Ivana Marventano <sup>(1)</sup> - Laura Mendozzi <sup>(1)</sup> - Domenico Caputo <sup>(1)</sup>

Marco Rovaris <sup>(1)</sup> - Marina Saresella <sup>(1)</sup> - Mario Clerici <sup>(2)</sup>

Don C. Gnocchi Onlus Foundation, Irccs S.m.nascente - Via Capecelatro, 66, Milano, Italy <sup>(1)</sup> - University Of Milan, Milan, Italy, Don C. Gnocchi Onlus Foundation, Milano, Italy <sup>(2)</sup>

**97 - REGULATION OF AMYLOID BETA OLIGOMER PHAGOCYTOSIS BY M1 AND M2 MACROPHAGE POLARIZATION**

Harald Lund - Xingmei Zhang - Robert Harris

Department Of Clinical Neuroscience, Karolinska Institutet, Stockholm, Sweden

**587 - SHOULD RAPID DECREASE OF NK CELLS BE MARKER OF CONVERSION FROM CIS TO CDMS?**Helena Mareckova <sup>(1)</sup> - Dana Horakova <sup>(2)</sup> - Lucia Skacikova <sup>(1)</sup> - Eva Havrdova <sup>(2)</sup>Immunology And Microbiology, First Medical Faculty, Charles University, Prague, Czech Republic <sup>(1)</sup> - Neurology Clinic, Ms Centrum, First Medical Faculty, Charles University, Prague, Czech Republic <sup>(2)</sup>**628 - IL-27 ACTS ON DCS TO SUPPRESS CNS AUTOIMMUNITY BY INDUCING CD39 EXPRESSION**Ivan Mascanfroni <sup>(1)</sup> - Ada Yeste <sup>(1)</sup> - Silvio Vieira <sup>(1)</sup> - Evans Burns <sup>(1)</sup> - Bonny Patel <sup>(1)</sup> - Ido Sloma <sup>(2)</sup> - Yan Wu <sup>(3)</sup>Lior Mayo <sup>(1)</sup> - Rotem Ben-hamo <sup>(2)</sup> - Sol Efroni <sup>(2)</sup> - Vijay Kuchroo <sup>(1)</sup> - Simon Robson <sup>(3)</sup> - Francisco Quintana <sup>(1)</sup>Center For Neurologic Diseases, Brigham And Women's Hospital/harvard Medical School, Boston, United States <sup>(1)</sup> - The Mina And Everard Goodman Faculty Of Life Sciences, Bar Ilan University, Ramat Gan, Israel <sup>(2)</sup> - Division Of Gastroenterology And Hepatology, Beth Israel Deaconess Medical Center/harvard Medical School, Boston, United States <sup>(3)</sup>**145 - INNATE IMMUNE RESPONSES IN MS: A SYSTEMATIC MONOCYTE AND B CELL-BASED STUDY**Amandine Mathias <sup>(1)</sup> - Guillaume Perriard <sup>(1)</sup> - Mathieu Canales <sup>(1)</sup> - Charlotte Soneson <sup>(2)</sup> - Mauro Delorenzi <sup>(2)</sup>Giuseppe Pantaleo <sup>(3)</sup> - Myriam Schluep <sup>(4)</sup> - Renaud Du Pasquier <sup>(1)</sup>Laboratory Of Neuro-immunology, Neuroscience Research Center, Lausanne University Hospital (chuv), Lausanne, Switzerland <sup>(1)</sup>Swiss Institute Of Bioinformatics, University Of Lausanne, Lausanne, Switzerland <sup>(2)</sup> - Service Of Immunology, Department Of Medicine, Lausanne University Hospital (chuv), Lausanne, Switzerland <sup>(3)</sup> - Service Of Neurology, Department Of Clinical Neurosciences, Lausanne University Hospital (chuv), Lausanne, Switzerland <sup>(4)</sup>**309 - CELL DIFFERENTIATION MODULATES INTRACELLULAR ANTIVIRAL RESPONSES IN NEURONAL CELLS**

Tomoh Matsumiya - Ryo Hayakari - Fei Xing - Hidemi Yoshida - Tadaatsu Imaizumi

Department Of Vascular Biology, Institute Of Brain Science, Hirosaki University Graduate School Of Medicine, Hirosaki, Japan

**248 - THE SEVERITY OF THE CLINICAL COURSE IN EAE MICE IS RELATED TO MYELOID-DERIVED SUPPRESSOR CELL ENRICHMENT IN BOTH THE SPLEEN AND THE SPINAL CORD**

Carolina Melero-jerez - Fernando De Castro - Diego Clemente

Grupo De Neurobiología Del Desarrollo-gnde, Hospital Nacional De Paraplégicos, Toledo, Spain

**585 - SIRTUIN-1 IS INVOLVED IN LIPOPOLYSACCHARIDE- AND INTERFERON BETA-MEDIATED INTERLEUKIN-10 REGULATION IN HUMAN MONOCYTES**Yusei Miyazaki <sup>(1)</sup> - Masaaki Niino <sup>(1)</sup> - Toshiyuki Fukazawa <sup>(2)</sup> - Eri Takahashi <sup>(1)</sup> - Takayuki Nonaka <sup>(3)</sup> - Ryutaro Ochi <sup>(3)</sup>Naoya Minami <sup>(3)</sup> - Naoto Fujiki <sup>(3)</sup> - Shizuki Doi <sup>(3)</sup> - Seiji Kikuchi <sup>(3)</sup>Clinical Research, Hokkaido Medical Center, Sapporo, Japan <sup>(1)</sup> - Neurology, Sapporo Neurology Clinic, Sapporo, Japan <sup>(2)</sup> - Neurology, Hokkaido Medical Center, Sapporo, Japan <sup>(3)</sup>**72 - IDENTIFICATION OF P2Y12 AS A MEDIATOR OF MIGRATION AND INFLAMMATION IN HUMAN MICROGLIA**Craig Moore <sup>(1)</sup> - Ariel Ase <sup>(1)</sup> - Angham Kinsara <sup>(1)</sup> - Vijayraghava Rao <sup>(1)</sup> - Mackenzie Michell-robinson <sup>(1)</sup>Oleg Butovsky <sup>(2)</sup> - Samuel Ludwin <sup>(3)</sup> - Philippe Seguela <sup>(1)</sup> - Amit Bar-or <sup>(1)</sup> - Jack Antel <sup>(1)</sup>Montreal Neurological Institute, McGill University, Montreal, Canada <sup>(1)</sup> - Center For Neurologic Diseases, Department Of Neurology, Brigham And Women's Hospital, Harvard Medical School, Boston, United States <sup>(2)</sup> - Department Of Pathology And Molecular Medicine, Queens University, Kingston, Canada <sup>(3)</sup>**529 - INCREASED ADIPONECTIN LEVELS IN SERUM OF EARLY PEDIATRIC ONSET MS INDUCE PRO-INFLAMMATORY RESPONSES OF BOTH MYELOID CELLS AND T CELLS.**Mukanthu Nyirenda <sup>(1)</sup> - Laurence Poliquin-lasnier <sup>(1)</sup> - Heather Hanwell <sup>(2)</sup> - Alexander Saveriano <sup>(1)</sup> - Ayal Rozenberg<sup>(1)</sup> - Rui Li <sup>(1)</sup> - Craig Moore <sup>(1)</sup> - Chahrazed Belabani <sup>(3)</sup> - Trina Johnson <sup>(3)</sup> - Julia O'mahony <sup>(2)</sup> - Ruth Ann Marrie <sup>(4)</sup>Shannon Dunn <sup>(5)</sup> - Brenda Banwell <sup>(6)</sup> - Amit Bar-or <sup>(1)</sup>Neuroimmunology Unit, Montreal Neurological Institute, McGill University, Montreal, Canada <sup>(1)</sup> - Neuroscience And Mental Health, Hospital For The Sick Children Research Institute, Toronto, Canada <sup>(2)</sup> - Experimental Therapeutics Program, Montreal Neurological Institute, McGill University, Montreal, Canada <sup>(3)</sup> - Departments Of Internal Medicine And Community Health, University Of Manitoba, Manitoba, Canada <sup>(4)</sup> - University Health Network, Toronto General Hospital, Toronto, Canada <sup>(5)</sup> - Division Of Neurology, Children Hospital Of Philadelphia, Philadelphia, United States <sup>(6)</sup>

**288 - DISPENSABLE ROLE FOR TLRs 2,3,4,7,9 IN THE MOUSE OF MULTIPLE SCLEROSIS**

Pushpalatha Palte - Prof.dr.thorsten Buch

Institute For Medical Microbiology, Immunology And Hygiene, Technische Universität Of Munich, Munich, Germany

**380 - MICROGLIA SHOW AN INTERMEDIATE ACTIVATION STATUS IN EARLY LESION FORMATION IN MULTIPLE SCLEROSIS**

Laura Peferoen <sup>(1)</sup> - Daphne Vogel <sup>(1)</sup> - Kimberley Ummenthum <sup>(1)</sup> - Marjolein Breur <sup>(2)</sup> - Priscilla Heijnen <sup>(2)</sup>  
Wouter Gerritsen <sup>(1)</sup> - Paul Van Der Valk <sup>(1)</sup> - Christine Dijkstra <sup>(2)</sup> - Sandra Amor <sup>(1)</sup>

Pathology Department, VU Medical Centre, Amsterdam, Netherlands <sup>(1)</sup> - MCB, VU Medical Centre, Amsterdam, Netherlands <sup>(2)</sup>

**215 - FORMYL PEPTIDE RECEPTORS FROM THE INNATE IMMUNE SYSTEM AND THE VOMERONASAL ORGAN RECOGNIZE PATHOGEN DERIVED PEPTIDES**

Timo Schumann - Bernd Bufe - Frank Zufall

Department Of Physiology, Saarland University/medical School Homburg, Homburg, Germany

**182 - REDUCED RELEASE OF NITRIC OXIDE AND DIFFERENT CYTOKINES/CHEMOKINES BY AGED MICROGLIAL CELLS UPON ACTIVATION OF TOLL-LIKE RECEPTORS 2 AND 4**

Sandra Schütze <sup>(1)</sup> - Annika Kaufmann <sup>(2)</sup> - Sandra Ribes <sup>(2)</sup> - Jörg Scheffel <sup>(2)</sup> - Sandra Redlich <sup>(2)</sup>

Uwe-karsten Hanisch <sup>(2)</sup> - Wolfgang Brück <sup>(2)</sup> - Roland Nau <sup>(2)</sup>

Department Of Geriatrics, Agaplesion Diakonissen Krankenhaus, Frankfurt Am Main, Germany <sup>(1)</sup> - Institute Of Neuropathology, University Medical Center, Göttingen, Germany <sup>(2)</sup>

**496 - ROLE OF TREM2 AND CD200R IN MODULATING MICROGLIAL RESPONSE IN ASTROCYTE TARGETED IL10TG MICE FOLLOWING PERFORANT PATHWAY TRANSECTION**

Kalpna Shrivastava <sup>(1)</sup> - Mireia Recasens <sup>(1)</sup> - Beatriz Almolda <sup>(1)</sup> - Iain Campbell <sup>(2)</sup> - Bernardo Castellano <sup>(1)</sup>  
Berta Gonzalez <sup>(1)</sup>

Unit Of Histology, Dept. Of Cell Biology, Physiology And Immunology. Institute Of Neuroscience., Autonomous University Of Barcelona, Barcelona, Spain <sup>(1)</sup> - School Of Molecular Biosciences, University Of Sydney, Nsw, Sydney, Australia <sup>(2)</sup>

**308 - DENDRITIC CELLS ARE SPECIFICALLY AFFECTED BY DIFFERENT IMMUNOMODULATORY TREATMENT STRATEGIES IN MULTIPLE SCLEROSIS**

Katja Thomas - Tony Sehr - Undine Hainke - Thorsten Schultheiß - Tjalf Ziemssen

Department Of Neurology, Neuroimmunological Lab, University Hospital, Dresden, Germany

**369 - INCREASED PREVALENCE OF LTI CELLS IN CSF OF PATIENTS WITH EARLY MS**

Matilda Degn <sup>(1)</sup> - Signe Modvig <sup>(1)</sup> - Beatrice D Andersen <sup>(2)</sup> - Charlotte M Bonefeld <sup>(2)</sup> - Jette L Frederiksen <sup>(1)</sup>

Carsten Geisler <sup>(2)</sup> - Marina Rode Von Essen <sup>(3)</sup>

The Multiple Sclerosis Clinic, Glostrup Hospital, University Of Copenhagen, Glostrup, Denmark <sup>(1)</sup> - Institute For International Health, Immunology And Microbiology, University Of Copenhagen, Copenhagen, Denmark <sup>(2)</sup> - The Danish Multiple Sclerosis Center, Copenhagen University Hospital, Rigshospitalet, Copenhagen, Denmark <sup>(3)</sup>

**412 - IGF1 PRODUCING CD11C+ MICROGLIA EMERGE DURING POSTNATAL NEURODEVELOPMENT**

Agnieszka Włodarczyk <sup>(1)</sup> - Nellie Martin <sup>(2)</sup> - Trevor Owens <sup>(1)</sup>

Institute Of Molecular Medicine, University Of Southern Denmark, Odense, Denmark <sup>(1)</sup> - Clinical Institute, Odense University Hospital, Odense, Denmark <sup>(2)</sup>

**317 - DOUBLE-STRANDED RNA INDUCES THE EXPRESSION OF TYPE I INTERFERON-STIMULATED GENES 54 AND 56 IN HUMAN ASTROCYTE CELL LINE**

Fei Xing - Tomoh Matsumiya - Ryo Hayakari - Hidemi Yoshida - Tadaatsu Imaizumi

Department Of Vascular Biology, Institute Of Brain Science, Hirosaki University Graduate School Of Medicine, Hirosaki, Japan

**610 - MONOCYTE SUBTYPES IN ALS**

Lisa Zondler - Kathrin Müller - Veselin Grozdanov - Corinna Bliedehäuser - Patrick Weydt - Albert C. Ludolph  
Karin Danzer - Jochen H. Weishaupt

Neurology Department, Ulm University, Ulm, Germany



**COFFEE BREAK & POSTER SESSION | MODELS OF DISEASE**  
 15:15 - 16:45 POSTERHALL (RHEINFOYER)

**602 - SPHINGOSIN-1-PHOSPHATE-RECEPTOR MODULATION REDUCES HYPEROXIA MEDIATED BRAIN INJURY**

Meray Serdar <sup>(1)</sup> - Karina Kempe <sup>(1)</sup> - Katharina Lumpe <sup>(1)</sup> - Barbara S. Reinboth <sup>(1)</sup> - Xinlin Hou <sup>(1)</sup> - Ralf Herrmann <sup>(1)</sup>  
 Marco Siffringer <sup>(2)</sup> - Ursula Felderhoff-müser <sup>(1)</sup> - Ivo Bendix <sup>(1)</sup>

Department Of Pediatrics 1 - Neonatology, University Hospital Essen, Essen, Germany <sup>(1)</sup> - Department Of Anesthesiology And Intensive Care Medicine, Charité-universitätsmedizin Berlin, Berlin, Germany <sup>(2)</sup>

**79 - CENTRAL BUT NOT PERIPHERAL ADMINISTRATION OF XPRO1595 IS THERAPEUTIC FOLLOWING MODERATE SPINAL CORD INJURY IN MICE.**

Hans Novrup <sup>(1)</sup> - Valerie Bracchi-ricard <sup>(2)</sup> - Dite Ellman <sup>(1)</sup> - Jerome Ricard <sup>(3)</sup> - Anajana Jain <sup>(4)</sup> - Lise Lyck <sup>(1)</sup>  
 David Szymkowski <sup>(5)</sup> - Kate Lambertsen <sup>(1)</sup> - John Bethea <sup>(3)</sup>

Institute Of Molecular Medicine, University Of Southern Denmark, Odense, Denmark <sup>(1)</sup> - Biology, Drexel University, Philadelphia, United States <sup>(2)</sup> - Biology Department, Drexel University, Philadelphia, United States <sup>(3)</sup> - The Miami Project To Cure Paralysis, University Of Miami, Miami, <sup>(4)</sup> - Xencor Inc, Xencor Inc, Monrovia, United States <sup>(5)</sup>

**100 - CHARACTERIZATION OF THE HUMORAL IMMUNE RESPONSE IN A LEWIS RAT MODEL OF CIDP**

Susana Brun - Jérôme De Seze - Elisabeth Trifilieff

Inserm U1119 - Biopathologie De La Myéline, Neuroprotection Et Stratégies Thérapeutiques, Université De Strasbourg, Strasbourg, France

**60 - TREATMENT WITH FTY-720 REVERSES SOCIAL RECOGNITION DEFICITS WITHOUT AFFECTING CLINICAL SCORES OR IMPAIRED MOTOR PERFORMANCE IN EAE IN SJL MICE**

Natasja M.w.j. De Bruin <sup>(1)</sup> - Katja Schmitz <sup>(2)</sup> - Irmgard Tegeder <sup>(2)</sup> - Sonja Talmon <sup>(1)</sup> - Holger Jordan <sup>(1)</sup> - Mike Schmidt <sup>(1)</sup>  
 Annett Haeussler <sup>(2)</sup> - Gerd Geisslinger <sup>(2)</sup> - Michael J. Parnham <sup>(1)</sup>

Fraunhofer Institute For Molecular Biology And Applied Ecology (ime), Project Group Translational Medicine & Pharmacology (tmp), Frankfurt Am Main, Germany <sup>(1)</sup> - Institute Of Clinical Pharmacology, Johann Wolfgang Goethe-university, Frankfurt Am Main, Germany <sup>(2)</sup>

**577 - CNS TLR2 MEDIATES INNATE NEUROINFLAMMATION BUT NOT AUTOIMMUNE PATHOGENESIS AND DEMYELINATION**

Nina Fainstein <sup>(1)</sup> - Avital Luz <sup>(2)</sup> - Ofira Einstein <sup>(2)</sup> - Tamir Ben-hur <sup>(1)</sup>

Department Of Neurology, Hadassah Hebrew University Medical Center, Jerusalem, Israel <sup>(1)</sup> - Physiotherapy Department, Faculty Of Health Sciences, Ariel University Center Of Samaria, Israel, Ariel, Israel <sup>(2)</sup>

**38 - THE EXPERIMENTAL ANTIPHOSPHOLIPID SYNDROME: AN INVALUABLE TOOL TO STUDY AUTOIMMUNITY-INDUCED NEURODEGENERATION**

Katrin Frauenknecht <sup>(1)</sup> - Aviva Katzav <sup>(2)</sup> - Ronen Weiss <sup>(2)</sup> - Avishag Sabag <sup>(2)</sup> - Susanne Otten <sup>(1)</sup> - Joab Chapman <sup>(2)</sup>  
 Clemens Sommer <sup>(1)</sup>

Department Of Neuropathology, University Medical Center Of The Johannes Gutenberg University Mainz, Mainz, Germany <sup>(1)</sup>  
 Department Of Neurology, Chaim Sheba Medical Center, Sackler Faculty Of Medicine, Tel Aviv University, Tel Aviv, Israel <sup>(2)</sup>

**108 - THE EFFECTS OF CILOSTAZOL ON EXPERIMENTAL AUTOIMMUNE NEURITIS IN LEWIS RATS**

Wataru Hagiwara - Masashi Inoue - Shingo Konno - Toshiki Fujioka

Division Of Neurology, Department Of Internal Medicine, Toho University Ohashi Medical Centre, Tokyo, Japan

**373 - HEMATOMA CLEARANCE AND FUNCTIONAL RECOVERY AFTER INTRACEREBRAL HEMORRHAGE REQUIRE RECRUITED MONOCYTES**

Matthew D. Hammond <sup>(1)</sup> - Youxi Ai <sup>(1)</sup> - Lauren H. Sansing <sup>(2)</sup>

Department Of Neuroscience, University Of Connecticut Health Center, Farmington, Connecticut, United States <sup>(1)</sup> - Department Of Neurology, Yale School Of Medicine, New Haven, Connecticut, United States <sup>(2)</sup>

**399 - TREATMENT WITH ANTI-MOUSE CD52 ANTIBODY IS ASSOCIATED WITH PRESERVATION OF MYELIN AND MAINTENANCE OF AXONAL CONDUCTION IN THE MOG-INDUCED EAE MOUSE MODEL**

Jianhua Huang - Petti Pang - Nilesh Pande - Michael J Turner - Michael J Lamorte - Nathalie Chretien - Carrie Garron  
 Bruce L Roberts - Johanne M Kaplan - William M Siders

Neuroimmunology Research, Genzyme, A Sanofi Company, Framingham, Ma, United States



## **29 - LATENT VIRAL INFECTION OF THE CENTRAL NERVOUS SYSTEM AND THE INSIDE-OUT AND OUTSIDE-IN HYPOTHESES OF MULTIPLE SCLEROSIS**

Lorne Kastrukoff <sup>(1)</sup> - Allan Lau <sup>(1)</sup> - Eva Thomas <sup>(2)</sup>

Department Of Medicine, University Of British Columbia, Vancouver, Canada <sup>(1)</sup> - Department Of Pathology, British Columbia's Children's Hospital, Vancouver, Canada <sup>(2)</sup>

## **533 - ANGIOTENSIN-(1-7) INHIBITS NF-KAPPA B IN GLIA CELLS OF ALS MODEL MICE**

Kiyokazu Kawabe - Osamu Kano - Masaru Yanagihashi - Ken Ikeda - Yasuo Iwasaki

Department Of Neurology, Toho University Omori Medical Centre, Tokyo, Japan

## **625 - DEVELOPMENT AND CHARACTERIZATION OF A NOVEL MOUSE MODEL OF RASMUSSEN'S ENCEPHALITIS**

François Fontaine <sup>(1)</sup> - Hania Kebir <sup>(2)</sup> - Nathalie Sanon <sup>(1)</sup> - Ciprian Bosoi <sup>(1)</sup> - Lyne Bourbonnière <sup>(2)</sup> - Simone Terouz <sup>(2)</sup> - Cecile Ciuta <sup>(3)</sup> - Gregory L. Holmes <sup>(4)</sup> - Howard Goodkin <sup>(5)</sup> - John Myrtinger <sup>(5)</sup> - Mary Connolly <sup>(6)</sup> - Lionel Carmant <sup>(1)</sup> - Alexandre Prat <sup>(2)</sup> - Elie Haddad <sup>(7)</sup>

Research Center, Centre Hospitalier Universitaire Sainte-justine, Department Of Pediatrics, Université De Montréal, Montreal, Canada <sup>(1)</sup> - Centre De Recherche Du Centre Hospitalier De L'université De Montréal, Université De Montréal, Montreal, Canada <sup>(2)</sup> - Centre Hospitalier Universitaire De Sherbrooke, Department Of Pediatrics, Université De Sherbrooke, Sherbrooke, Canada <sup>(3)</sup> - Dartmouth-Hitchcock Medical Center Children's Hospital, Department Of Neurology And Pediatrics, Dartmouth University, Manchester, United States <sup>(4)</sup> - Fountain Research Park, Department Of Pediatrics, University Of Virginia, Charlottesville, United States <sup>(5)</sup> - B.c. Children's Hospital, Department Of Pediatrics, University Of British Columbia, Vancouver, Canada <sup>(6)</sup> - Department Of Pediatrics, Université De Montréal, Montreal, Canada <sup>(7)</sup>

## **639 - A NEW MOUSE MODEL OF INFLAMMATORY CORTICAL DEMYELINATION**

Nielsen Lagumersindez Denis - Claudia Wrzos - Wolfgang Brück - Christine Stadelmann - Stefan Nessler

Institute Of Neuropathology, University Medical Centre Göttingen (umg), Göttingen, Germany

## **636 - HUMAN N-METHYL-D-ASPARTATE RECEPTOR ANTIBODIES ALTER MEMORY AND BEHAVIOR IN A PASSIVE VENTRICULAR MURINE INFUSION MODEL**

Frank Leypoldt <sup>(1)</sup> - Jesus Planaguma <sup>(1)</sup> - Francesco Mannara <sup>(1)</sup> - Javier Gutierrez Cuesta <sup>(2)</sup> - Elena Martin-garcia <sup>(2)</sup> - Esther Aguilar <sup>(1)</sup> - Ankit Jain <sup>(3)</sup> - Maarten J. Titulaer <sup>(4)</sup> - Rita Balice-gordon <sup>(3)</sup> - Francesc Graus <sup>(1)</sup> - Rafael Maldonado <sup>(2)</sup> - Josep Dalmau <sup>(1)</sup>

Idibaps, Neurology, Hospital Clinic, Barcelona, Spain <sup>(1)</sup> - Laboratori De Neurofarmacología, Universitat Pompeu Fabra, Barcelona, Spain <sup>(2)</sup> - University Of Pennsylvania, Department Of Neuroscience, Philadelphia, United States <sup>(3)</sup> - Department Of Neurology, Erasmus Medical Center, Rotterdam, Netherlands <sup>(4)</sup>

## **445 - PHAGOCYTOSIS OF ABETA BY INFILTRATING MYELOID CELLS IN A MOUSE MODEL OF ALZHEIMER'S DISEASE**

Luisa Möhle <sup>(1)</sup> - Andreas Müller <sup>(2)</sup> - Inna N. Lavrik <sup>(3)</sup> - Jens Pahnke <sup>(4)</sup> - Ildiko R. Dunay <sup>(1)</sup>

Institute Of Medical Microbiology, Otto-von-guericke University, Magdeburg, Germany <sup>(1)</sup> - Institute For Molecular And Clinical Immunology, Otto-von-guericke University, Magdeburg, Germany <sup>(2)</sup> - Institute Of Experimental Internal Medicine, Otto-von-guericke University, Magdeburg, Germany <sup>(3)</sup> - Neurodegeneration Research Lab (nrl), Department Of Neurology, Otto-von-guericke University, Magdeburg, Germany <sup>(4)</sup>

## **588 - MODELING BRAIN DISEASES WITH DIRECT INDUCTION TECHNOLOGY OF RAMIFIED MICROGLIA-LIKE (IMG) CELLS FROM HUMAN MONOCYTES**

Masahiro Ohgidani - Takahiro A. Kato - Shigenobu Kanba

Department Of Neuropsychiatry, Graduate School Of Medical Sciences, Kyushu University, Fukuoka, Japan

## **206 - MODELING CNS PHENOTYPES OF X-LINKED CMT BY LPS-INDUCED INFLAMMATION**

Margarita Olympiou

The Cyprus Institute Of Neurology And Genetics, Cyprus School Of Molecular Medicine, Nicosia, Cyprus

## **347 - THE GUT MICROFLORA DETERMINES PATHOGENICITY IN TH17-MEDIATED CNS AUTOIMMUNITY**

Tommy Regen <sup>(1)</sup> - Nir Yogev <sup>(1)</sup> - Julia Huppert <sup>(1)</sup> - Sandrine Isaac <sup>(2)</sup> - Immo Prinz <sup>(3)</sup> - Carles Ubéda <sup>(2)</sup> - Ari Waisman <sup>(1)</sup>

Institute For Molecular Medicine, University Medical Center, Mainz, Germany <sup>(1)</sup> - Department Of Genomics And Health, Center For Advanced Research In Public Health, Valencia, Spain <sup>(2)</sup> - Institute Of Immunology, Hannover Medical School, Hannover, Germany <sup>(3)</sup>

#### **446 - EFFICACY AND MECHANISMS OF A COMBINATION THERAPY WITH DIMETHYL FUMARATE AND COPOLYMER-1 IN AUTOIMMUNITY OF THE CENTRAL NERVOUS SYSTEM**

Christiane Reick <sup>(1)</sup> - Gisa Ellrichmann <sup>(1)</sup> - Carsten Saft <sup>(1)</sup> - Ralf Linker <sup>(2)</sup> - Ralf Gold <sup>(1)</sup>

Department Of Neurology, St. Josefs Hospital, Clinic Of The Ruhr University Bochum, Bochum, Germany <sup>(1)</sup> - Department Of Neurology, University Hospital Erlangen, Erlangen, Germany <sup>(2)</sup>

#### **141 - ROLE OF ALPHA-METYLACYL-COA RACEMASE IN IMMUNE CELLS DURING THE DEVELOPMENT OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Nadja Tafferer <sup>(1)</sup> - Julia Männich <sup>(2)</sup> - Max Eberle <sup>(2)</sup> - Nerea Ferreiros <sup>(2)</sup> - Natasja Debruin <sup>(1)</sup> - Gerd Geisslinger <sup>(1)</sup> Michael J. Parnham <sup>(1)</sup> - Susanne Schiffmann <sup>(1)</sup>

Fraunhofer Institute For Molecular Biology And Applied Ecology (ime), Project Group Translational Medicine & Pharmacology (tmp), Institute Of Clinical Pharmacology, Johann Wolfgang Goethe-university, Frankfurt, Germany <sup>(1)</sup> - Institute Of Clinical Pharmacology, Johann Wolfgang Goethe-university, Frankfurt, Germany <sup>(2)</sup>

#### **400 - THE ANTI-INFLAMMATORY ACTIONS OF NORADRENERGIC AGENTS AS A TARGET TO PREVENT NEURODEGENERATION IN PARKINSON'S DISEASE**

Justin Yssel - Thomas Connor - Andrew Harkin

Trinity College Institute Of Neuroscience, Trinity College Dublin, Dublin, Ireland

#### **COFFEE BREAK & POSTER SESSION | OMICS**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

#### **35 - GENOME-WIDE RNA EXPRESSION PROFILING IN HUMAN GREY AND WHITE MATTER TISSUE REVEALS A ROLE FOR PSA-NCAM DYSREGULATION IN MS PATHOGENESIS**

Ilona Bruinsma <sup>(1)</sup> - Vivian Eijssink <sup>(2)</sup> - Evert-Jan Kooi <sup>(3)</sup> - Sergio Baranzini <sup>(4)</sup> - Xuhuai Ji <sup>(5)</sup> - Robert Axtell <sup>(5)</sup> - May Han <sup>(5)</sup> Hedwich Kuipers <sup>(5)</sup> - Raymond Sobel <sup>(5)</sup> - Chris Polman <sup>(3)</sup> - Jeroen Geurts <sup>(3)</sup> - Gerard Martens <sup>(2)</sup> - Geert Poelmans <sup>(1)</sup> Lawrence Steinman <sup>(5)</sup> - Brigit De Jong <sup>(1)</sup>

Radboud University Medical Center, Hospital, Nijmegen, Netherlands <sup>(1)</sup> - Radboud University, University, Nijmegen, Netherlands <sup>(2)</sup> Vu University Medical Center, Hospital, Amsterdam, Netherlands <sup>(3)</sup> - Ucsf, University, San Francisco, United States <sup>(4)</sup> - Stanford University, University, Stanford, United States <sup>(5)</sup>

#### **232 - CEREBROSPINAL FLUID PROTEOMICS SIGNATURE OF PROGRESSIVE MULTIFOCAL LEUKOENCELOPHATHY IN NATALIZUMAB-TREATED MS PATIENTS**

Wolfgang Faigle <sup>(1)</sup> - Ilijas Jelcic <sup>(1)</sup> - Bernd Roschitzki <sup>(2)</sup> - Roland Martin <sup>(1)</sup>

Neuroimmunology And Multiple Sclerosis Research Department Of Neurology, University Hospital Zurich, Zurich, Switzerland <sup>(1)</sup> Functional Genomic Center Zurich, University Of Zurich, Zurich, Switzerland <sup>(2)</sup>

#### **COFFEE BREAK & POSTER SESSION | PATHOLOGY**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

#### **128 - STRUCTURAL ABNORMALITIES OF MYELIN AND AXON IN MURINE MODELS OF CNS DEMYELINATING DISEASE.**

Yoshio Bando - Shigetaka Yoshida

Dept. Of Functional Anatomy And Neuroscience, Asahikawa Medical University, Asahikawa, Japan

#### **COFFEE BREAK & POSTER SESSION | PSYCHOIMMUNOMODULATION**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

#### **217 - PRE-EXPOSURE TO THE UNCONDITIONED OR THE CONDITIONED STIMULUS DIFFERENTIALLY AFFECT LEARNED IMMUNOSUPPRESSION IN RATS**

Katharina Bösch - Martin Hadamitzky - Laura Lückemann - Harald Engler - Manfred Schedlowski

Institute Of Medical Psychology And Behavioral Immunobiology, University Hospital, University Duisburg-essen, Essen, Germany

**118 - MICROGLIA ARE POLARIZED TO M1 TYPE IN HIGH-ANXIETY INBRED MICE IN RESPONSE TO LIPOPOLYSACCHARIDE CHALLENGE**

Zhilin Li - Li Ma - Natalia Kuleshkaya - Vootele Võikar - Li Tian

Neuroscience Center, University Of Helsinki, Helsinki, Finland

**631 - RELIGIOUS THOUGHTS AND PSYCHOLOGICAL HEALTH IN THE STUDENTS OF BROOKLYN NEW YORK USA: AN ECOLOGICAL MOMENTARY ASSESSMENT INVESTIGATION**

Md. Ariful Haque Mollik

Peoples Integrated Alliance, University Of Development Alternative, Bogra, Bangladesh

**627 - ABSENCE OF IFN-GAMMA LEADS TO AN ENHANCED COGNITIVE PHENOTYPE**

Susana Monteiro - Filipa Ferreira - Vitor Pinto - Susana Roque - Daniela Calçada - Mónica Morais

Margarida Correia-neves - João José Cerqueira

Life And Health Sciences Research Institute (icvs), School Of Health Sciences - Universidade Do Minho, Braga, Portugal

**315 - STRESS ALTERS CYTOKINE PROFILE OF THE SKIN: PROSPECTIVE LINKS TO NNCS REGULATION**

Frank Risto Rommel <sup>(1)</sup> - Badrinarayanan Raghavan <sup>(1)</sup> - Susanne Tumala <sup>(1)</sup> - Uwe Gielert <sup>(2)</sup>

Eva Milena Johanne Peters <sup>(3)</sup>

Psychoneuroimmunology Laboratory, Department Of Psychosomatic Medicine And Psychotherapy, Justus Liebig University, Giessen, Germany <sup>(1)</sup> - Department Of Dermatology, Justus Liebig University, Giessen, Germany <sup>(2)</sup> - Psychoneuroimmunology Laboratory, Department Of Psychosomatic Medicine And Psychotherapy & Center For Internal Medicine And Dermatology, Justus Liebig University & Charité-university Medicine, Giessen & Berlin, Germany <sup>(3)</sup>

**492 - NOCTURNAL SHIFT WORK ALTERS SLEEP PATTERN OF ADULTS**

Francieli Silva Ruiz - Iona Z Zimberg - Marcus Mvl Santos - Ulisses A Andrade - Lia Ra Bittencourt - Sergio Tufik

Marco Tulio Mello

Universidade Federal De Sao Paulo, Universidade Federal De Sao Paulo, Sao Paulo, Brazil

**374 - EXPERIMENTAL HUMAN ENDOTOXEMIA: A MODEL TO DISENTANGLE THE IMMUNE-TO-BRAIN COMMUNICATION**

Manfred Schedlowski - Jan-sebastian Grigoleit - Harald Engler

Institute Of Medical Psychology And Behavioral Immunobiology, University Hospital Essen, Essen, Germany

**372 - TEACH THE T CELLS: HOW LEARNING CAN SHAPE IMMUNITY**

Manfred Schedlowski - Katharina Böschke - Laura Lückemann - Harald Engler - Martin Hadamitzky

Institute Of Medical Psychology And Behavioral Immunobiology, University Hospital Essen, Essen, Germany

---

**TECHNOLOGY TALK UBIQUITIN**

16:45 - 17:30 PLENARY ROOM (KONGRESS SAAL)

Chair: Scott Zamvil

**16:45 THE ROLE OF UBIQUITIN NETWORKS IN INFLAMMATION**

Ivan Dikic

## DAY 3 Tuesday | November 11<sup>th</sup> 2014

### PATHOGENIC T-CELLS

08:15 - 09:30 PLENARY ROOM (KONGRESS SAAL)

Chairs: Roberto Furlan, Roland Liblau

- 08:15      **HETEROGENEITY AND REDUDANCY IN AUTOIMMUNE PATHOGENESIS: IS THE ATTEMPT TO IDENTIFY A FACTOR UNIVERSALLY REQUIRED FOR T CELL ENCEPHALITOGENESITY A QUIXOTIC QUEST?**  
Benjamin Segal
- 08:53      **CLASS AND SPECIFICITY OF THE HUMAN T CELL RESPONSE IN HEALTH AND DISEASE**  
Federica Sallusto

### COFFEE BREAK

09:30 - 10:00 POSTERHALL (RHEINFOYER)

### NEUROIMMUNOLOGY OF BRAIN TUMORS

10:00 - 11:45 ROOM A (KONGRESS SAAL)

Chairs: Heinz Wiendl, Luca Battistini

- 10:00      **TARGETING A DRIVER MUTATION GLIOMA WITH A PEPTIDE VACCINE AGAINST IDH1R132H**  
Michael Platten
- 10:23      **PERSONALIZED IMMUNOTHERAPY FOR BRAIN TUMORS**  
Wolfgang Wick
- 10:45      **EPIDERMAL GROWTH FACTOR VARIANT III-DIRECTED IMMUNOTHERAPY OF GLIOBLASTOMA**  
Michael Weller
- 11:08      **MECHANISMS OF TUMOR INVASION OF EVASIVE RESITANCE TO ANTI-ANGIOGENESIS THERAPY**  
Amparo Acker-Palmer
- 11:30      **57 - A MOUSE MODEL FOR PARANEOPLASTIC NEUROLOGICAL SYNDROME: FROM ANTI-TUMOR IMMUNITY TO AUTOIMMUNITY TARGETING NEURONS**  
Christina Gebauer <sup>(1)</sup> - Beatrice Pignolet <sup>(1)</sup> - Lidia Yshii <sup>(1)</sup> - Guillaume Martin-blondel <sup>(1)</sup> - Britta Engelhardt <sup>(2)</sup> - David Brassat <sup>(1)</sup> - Roland Liblau <sup>(1)</sup>  
Cptp, Inserm U1043, Hopital Purpan/université Paul Sabatier, Toulouse, France <sup>(1)</sup> - Theodor Kocher Institut, University Of Bern, Bern, Switzerland <sup>(2)</sup>

### EMERGING TOPICS IN NEUROIMMUNOLOGY

10:00 - 11:45 ROOM B (GUTENBERGSAAL 1)

Chairs: Francesca Aloisi, Bert 't Hart

- 10:00      **NON-CODING RNA IN REGULATION OF AUTOIMMUNE DEMYELINATION**  
Marcin P. Mycko
- 10:23      **NEUROIMMUNOLOGY OF REMYELINATION**  
V Wee Yong
- 10:45      **MOLECULAR AND CELLULAR MECHANISMS OF IMMUNE MODULATION BY MS THERAPAUTICS**  
Scott Zamvil

11:08 **HARVESTING FROM THE GUT MICROBIOME: THE ROLE IN REGULATING CNS DEMYELINATION**  
Lloyd Kasper

11:30 **642 - EXTRACELLULAR VESICLE-MEDIATED TRANSFER OF GENETIC INFORMATION BETWEEN THE HEMATOPOIETIC SYSTEM AND THE BRAIN IN RESPONSE TO INFLAMMATION**  
Kirsten Ridder <sup>(1)</sup> - Sascha Keller <sup>(2)</sup> - Maria Dams <sup>(1)</sup> - Anne-kathleen Rupp <sup>(2)</sup> - Jessica Schlaudraff <sup>(3)</sup> - Domenico Del Turco <sup>(3)</sup> - Julia Starmann <sup>(4)</sup> - Jadranka Macas <sup>(1)</sup> - Darja Karpova <sup>(5)</sup> - Kavi Devraij <sup>(1)</sup> - Candan Depboylu <sup>(6)</sup> - Britta Landfried <sup>(1)</sup> - Bernd Arnold <sup>(7)</sup> - Karl H. Plate <sup>(1)</sup> - Günter Höglinger <sup>(8)</sup> - Holger Sültmann <sup>(4)</sup> - Peter Altevogt <sup>(2)</sup> - Stefan Momma <sup>(1)</sup>  
Institute Of Neurology (edinger Institute), Frankfurt University Medical School, Frankfurt Am Main, Germany <sup>(1)</sup> - Tumor Immunology Program, German Cancer Research Center (dkfz), Heidelberg, Germany <sup>(2)</sup> - Institute Of Clinical Neuroanatomy, Frankfurt University Medical School, Frankfurt Am Main, Germany <sup>(3)</sup> - Unit Cancer Genome Research, German Cancer Research Center (dkfz), Heidelberg, Germany <sup>(4)</sup> - German Red Cross Blood Service Baden-württemberg-hessen And Institute For Transfusion Medicine And Immunohematology, Frankfurt University Medical School, Frankfurt Am Main, Germany <sup>(5)</sup> - Department Of Neurology, Philipps University Marburg, Marburg, Germany <sup>(6)</sup> - Division Molecular Immunology, German Cancer Research Center (dkfz), Heidelberg, Germany <sup>(7)</sup> - German Center For Neurodegenerative Diseases E.v. (dzne), Technical University Munich (tum), Munich, Germany <sup>(8)</sup>

---

## CROSSTALK OF THE IMMUNE AND NERVOUS SYSTEM I

10:00 - 11:45 ROOM C (GUTENBERGSAAL 2)

Chairs: Christine Stadelmann-Nessler, Rogier Hintzen

10:00 **MECHANISMS OF IMMUNE MEDIATED TISSUE INJURY IN THE CENTRAL NERVOUS SYSTEM**  
Hans Lassmann

10:23 **BALANCE BETWEEN NEUROINFLAMMATION AND NEUROPROTECTION**  
Ralph Gold

10:45 **ADAPTIVE IMMUNITY IN MULTIPLE SCLEROSIS: WHAT WE KNOW AND WHAT WE DON'T KNOW (YET)**  
Reinhard Hohlfeld

11:08 **VIRUS-INDUCED DEMYELINATING CNS DISEASE**  
Burkhard Ludewig

11:30 **48 - THE NOVEL TH17-ASSOCIATED CYTOKINE IL-26 MEDIATES BBB BREAKDOWN AND NEUROINFLAMMATION**  
Bieke Broux - Lamia Hachehouche - Hania Kébir - Simone Terouz - Lyne Bourbonniere - Alexandre Prat  
Crchum, Université De Montreal, Montreal, Canada

---

## INDUSTRY SPONSORED: HOW IS IMMUNOPATHOGENESIS OF MS DEFINING NEW TREATMENT STRATEGIES?

12:00 - 13:00 PLENARY ROOM (KONGRESS SAAL)

Chair: Hans Peter Hartung

12:00 **WELCOME AND INTRODUCTION**  
Hans Peter Hartung

12:05 **IMMUNOPATHOGENESIS OF MS - THE ROLE OF LYMPHOCYTES**  
Sven Meuth

12:24 **ALMETUZUMAB MECHANISM OF ACTION - CHANGING THE BALANCE OF THE IMMUNE SYSTEM**  
Johanne Kaplan

- 12:42      **HOW IMMUNOMODULATION TRANSLATES INTO DURABLE CLINICAL BENEFIT - OVERVIEW OF ALEMTUZUMAB IN ACTIVE RRMS**  
Krzysztof Selmaj

---

THE NEWSON-DAVIS LECTURE

13:00 - 13:45 PLENARY ROOM (KONGRESS SAAL)

Chair: Roland Liblau

- 13:00      **AUTOIMMUNE ENCEPHALITIS: FROM SYMPTOM TO SYNAPSE**  
JOSEP DALMAU

---

NEUROKINE SPONSORED: MECHANISMS AND THERAPIES OF CNS DISEASE II

13:45 - 15:15 ROOM A (KONGRESS SAAL)

Chair: Carlo Avolio

- 13:45      **474 - CHARACTERIZING OLIGODENDROCYTE LINEAGE CELL FUNCTION BY FLOW CYTOMETRY IN ANIMAL MODELS OF DEMYELINATION**  
Andrew P. Robinson - Jane M. Rodgers - Gwen E. Goings - Stephen D. Miller  
Northwestern University, University, Chicago, United States
- 14:00      **200 - ROLE OF ENDOGENOUS NEURAL PRECURSOR CELLS IN DEMYELINATION AND REMYELINATION AFTER CUPRIZONE-INDUCED INJURY.**  
Erica Butti <sup>(1)</sup> - Giulia Berera <sup>(1)</sup> - Francesca Ruffini <sup>(1)</sup> - Linda Chaabane <sup>(1)</sup> - Giorgia Dina <sup>(2)</sup> - Angelo Quattrini <sup>(2)</sup> - Giancarlo Comi <sup>(3)</sup> - Gianvito Martino <sup>(1)</sup>  
Neuroimmunology Unit, Division Of Neuroscience, Inspe, San Raffaele Hospital, Milan, Italy <sup>(1)</sup> - Neuropathology Unit, Division Of Neuroscience, Inspe, San Raffaele Hospital, Milan, Italy <sup>(2)</sup> - Department Of Neurology And Neurophysiology, Inspe, San Raffaele Hospital, Milan, Italy <sup>(3)</sup>
- 14:15      **358 - DMF MODULATES PATHOGENIC B CELL FUNCTION IN CHRONIC CNS AUTOIMMUNE DISEASE**  
Sarah Traffehn - Imke Metz - Wolfgang Brück - Martin Weber  
Institute Of Neuropathology, University Medical Center Göttingen, Göttingen, Germany
- 14:30      **222 - THE IMMUNE-MODULATORY EFFECTS OF FINGOLIMOD ON PHENOTYPE AND FUNCTION OF B CELLS FROM PATIENTS WITH MULTIPLE SCLEROSIS**  
Shiri Blumenfeld <sup>(1)</sup> - Elsebeth Staun-ram <sup>(1)</sup> - Ariel Miller <sup>(2)</sup>  
Technion- Israel Institute Of Technology, University, Haifa, Israel <sup>(1)</sup> - Neuroimmunology Unit & Multiple Sclerosis Center, Carmel Medical Center, Hospital, Haifa, Israel <sup>(2)</sup>
- 14:45      **229 - NATALIZUMAB ANALOGON THERAPY IN A B CELL-DEPENDENT EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS MODEL OF MULTIPLE SCLEROSIS**  
Darius Häusler - Stefan Nessler - Niels Kruse - Wolfgang Brück - Imke Metz  
Department Of Neuropathology, University Medical Center Göttingen, Göttingen, Germany
- 15:00      **124 - MATRIX METALLOPROTEINASES CAUSE BLOOD-BRAIN BARRIER DISRUPTION IN CENTRAL NERVOUS SYSTEM TUBERCULOSIS.**  
Sara Brilha <sup>(1)</sup> - Catherine W. M. Ong <sup>(2)</sup> - Jon S. Friedland <sup>(1)</sup>  
Section Of Infectious Diseases And Immunity, Imperial College London, London, United Kingdom <sup>(1)</sup> - Department Of Medicine, National University Health System, Singapore, Singapore <sup>(2)</sup>

---

## NEUROINFLAMMATION II

13:45 - 15:15 ROOM B (GUTENBERGSAAL 1)

Chair: Pavel Stourac

- 13:45      575 - INHIBITION OF SOLUBLE TNF PROTECTS MICE AGAINST BRAIN INFLAMMATION AND DEMYELINATION IN A CUPRIZONE MODEL FOR MULTIPLE SCLEROSIS**  
Maria Karamita <sup>(1)</sup> - Chris Barnum <sup>(2)</sup> - Ray Tesi <sup>(3)</sup> - David Szymkowski <sup>(4)</sup> - Malu Tansey <sup>(5)</sup> Lesley Probert <sup>(6)</sup>  
Laboratory Of Molecular Genetics, Hellenic Pasteur Institute, Athens, Greece <sup>(1)</sup> - School Of Medicine, Emory University, Atlanta Ga, United States <sup>(2)</sup> - Fprt Bio, Frt Bio, Washington, United States <sup>(3)</sup> - Xencor, Xencor, Monrovia Ca, United States <sup>(4)</sup> - School Of Medicine, Emory, Atlanta Ga, United States <sup>(5)</sup> - Laboratoru Of Molecular Genetics, Hellenic Pasteur Institute, Athens, Greece <sup>(6)</sup>
- 14:00      525 - DYSREGULATION OF THE APOE-TGFB PATHWAY LEADS TO LOSS OF THE MICROGLIAL HOMEOSTATIC SIGNATURE IN NEUROLOGIC DISEASES INCLUDING MS, ALS AND AD**  
Suzanne Krasemann Krasemann - Charlotte Madore - Ron Cialic Cialic - Zain Fanek Fanek David Greco Greco - Pauline Wu - Camille Doykan - Howard Weiner - Oleg Butovsky  
Brigham And Women's Hospital, Harvard Medical School, Boston, United States
- 14:15      127 - FACTOR XII DRIVES CNS AUTOIMMUNITY VIA CD87-MEDIATED MODULATION OF DENDRITIC CELLS**  
Kerstin Göbel <sup>(1)</sup> - Chloi Magdalini Asaridou <sup>(1)</sup> - Susann Pankratz <sup>(1)</sup> - Stefan Bittner <sup>(1)</sup> - Alexander M. Herrmann <sup>(1)</sup> - Johanna Breuer <sup>(1)</sup> - Martin Herold <sup>(1)</sup> - Heinz Wiendl <sup>(1)</sup> - Triantafyllos Chavakis <sup>(2)</sup> Christoph Kleinschnitz <sup>(3)</sup> - Sven G. Meuth <sup>(1)</sup>  
Department Of Neurology, University Of Münster, Münster, Germany <sup>(1)</sup> - Department Of Clinical Pathobiochemistry, Department Of Medicine And Institute For Clinical Chemistry And Laboratory Medicine, University Clinic Carl Gustav Carus, Technical University Of Dresden, Dresden, Germany <sup>(2)</sup> - Department Of Neurology, University Hospital Würzburg, Würzburg, Germany <sup>(3)</sup>
- 14:30      67 - UVB LIGHT ATTENUATES THE SYSTEMIC IMMUNE RESPONSE IN CNS AUTOIMMUNITY**  
Johanna Breuer <sup>(1)</sup> - Nicholas Schwab <sup>(1)</sup> - Tilman Schneider-hohendorf <sup>(1)</sup> - Martin Marziniak <sup>(1)</sup> Hema Mohan <sup>(1)</sup> - Urvashi Bhatia <sup>(1)</sup> - Catharina Groß <sup>(1)</sup> - Björn Clausen <sup>(2)</sup> - Carsten Weishaupt <sup>(3)</sup> Thomas Luger <sup>(3)</sup> - Sven Meuth <sup>(1)</sup> - Karin Loser <sup>(3)</sup> - Heinz Wiendl <sup>(1)</sup>  
Department Of Neurology, University Of Münster, Münster, Germany <sup>(1)</sup> - Institute For Molecular Medicine, Johannes Gutenberg-university Mainz, Mainz, Germany <sup>(2)</sup> - Department Of Dermatology, University Of Münster, Münster, Germany <sup>(3)</sup>
- 14:45      574 - DIFFERENTIAL CONTRIBUTIONS OF MICROGLIAL AND NEURONAL IKKBETA IN SYNAPTIC PLASTICITY AND ASSOCIATIVE LEARNING IN MICE**  
Vasiliki Kyrargyri <sup>(1)</sup> - German Vega-flores <sup>(2)</sup> - Agnès Gruart <sup>(2)</sup> - José M. Delgado-garcía <sup>(2)</sup> Lesley Probert <sup>(1)</sup>  
Laboratory Of Molecular Genetics, Hellenic Pasteur Institute, Athens, Greece <sup>(1)</sup> - Division Of Neurosciences, Pablo De Olavide University, Seville, Spain <sup>(2)</sup>
- 15:00      154 - MCAM IDENTIFIES INFLAMMATORY ENCEPHALITOGENIC CD8 T LYMPHOCYTES PRESENTING A HIGH CYTOTOXIC CAPACITY**  
Catherine Larochelle <sup>(1)</sup> - Marc-andre Lecuyer <sup>(1)</sup> - Jorge Ivan Alvarez <sup>(1)</sup> - Marc Charabati <sup>(1)</sup> Hania Kebir <sup>(1)</sup> - Olivia Saint-laurent <sup>(1)</sup> - Romain Cayrol <sup>(1)</sup> - Pierre Duquette <sup>(2)</sup> - Ken Flanagan <sup>(3)</sup> Nathalie Arbour <sup>(1)</sup> - Alexandre Prat <sup>(1)</sup>  
Crchum, University Of Montreal, Montreal, Canada <sup>(1)</sup> - Chum, University Of Montreal, Montreal, Canada <sup>(2)</sup> - Prothema, Prothema, San Francisco, United States <sup>(3)</sup>



## CLINICAL AND IMMUNOLOGICAL RESEARCH

13:45 - 15:15 ROOM C (GUTENBERGSAAL 2)

Chair: Pablo Villoslada

- 13:45 402 - A NOVEL NON-RAPID-EYE MOVEMENT (REM) AND REM PARASOMNIA WITH SLEEP BREATHING DISORDER ASSOCIATED WITH ANTIBODIES TO IGLON5 AND TAU DEPOSITS AT POST- MORTEM STUDY**  
 Lidia Sabater <sup>(1)</sup> - Carles Gaig <sup>(2)</sup> - Ellen Gelpí <sup>(3)</sup> - Luis Bataller <sup>(4)</sup> - Jan Lewerenz <sup>(5)</sup>  
 Estefania Torres-vega <sup>(6)</sup> - Angeles Contreras <sup>(7)</sup> - Bruno Giometto <sup>(8)</sup> - Yaroslau Compta <sup>(9)</sup>  
 Alex Iranzo <sup>(2)</sup> - Joan Santamaria <sup>(2)</sup> - Josep Dalmau <sup>(10)</sup> - Francesc Graus <sup>(11)</sup>  
 Institut D'investigacions Biomèdiques August Pi I Sunyer (idibaps), Hospital Clinic De Barcelona, Barcelona, Spain <sup>(1)</sup>  
 Department Of Neurology, Multidisciplinary Sleep Disorders Unit, Idibaps, Hospital Clinic De Barcelona, Barcelona, Spain <sup>(2)</sup> - Neurological Tissue Bank Of The Biobanc-hospital Clinic-idibaps Barcelona, Hospital Clinic, Barcelona, Spain <sup>(3)</sup>  
 Department Of Neurology, Instituto De Investigacion Sanitaria La Fe Department Of Neurology, Hospital Universitari I Politècnic La Fe, Valencia, Spain <sup>(4)</sup> - Department Of Neurology, Ulm University, Ulm, Germany <sup>(5)</sup> - Instituto De Investigacion Sanitaria La Fe, Hospital Universitari I Politècnic La Fe, Valencia, Spain <sup>(6)</sup> - Department Of Neurology, Hospital Morales Messeguer, Murcia, Spain <sup>(7)</sup> - Department Of Neurology, Regional Hospital "ca Foncello", Treviso, Italy <sup>(8)</sup> - Department Of Neurology, Hospital Clinic De Barcelona, Barcelona, Spain <sup>(9)</sup> - Department Of Pennsylvania, Philadelphia, Pa, Usa And Institut Catalana De Recerca I Estudis Avançats, Idibaps, Hospital Clinic De Barcelona, Barcelona, Spain <sup>(10)</sup> - Department Of Neurology, Idibaps, Hospital Clinic De Barcelona, Barcelona, Spain <sup>(11)</sup>
- 14:00 266 - T CELL SMAD7 MODULATES THE GUT IMMUNE RESPONSE DURING SPONTANEOUS OPTICOSPINAL ENCEPHALOMYELITIS**  
 Steffen Haupeltshofer <sup>(1)</sup> - Alexandra Wolf <sup>(2)</sup> - Xiomara Pedreitturia <sup>(1)</sup> - Ralf Gold <sup>(1)</sup> - Ingo Kleiter <sup>(1)</sup>  
 Department Of Neuroimmunology, St. Josef Hospital, Bochum, Germany <sup>(1)</sup> - Department Of Neuroimmunology, Ruhr-universität, Bochum, Germany <sup>(2)</sup>
- 14:15 293 - GALECTIN-1 PLAYS AN ESSENTIAL ROLE IN INTRAVENOUS TOLERANCE INDUCTION IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**  
 Elisabeth Rose Mari - Javad Rasouli - Guang-xian Zhang - Bogoljub Ciric - A.m. Rostami  
 Thomas Jefferson University, Department Of Neurology, Philadelphia, United States
- 14:30 53 - NOVEL MECHANISMS OF GLUCOCORTICOIDS IN THE TREATMENT OF MULTIPLE SCLEROSIS**  
 Henrike J. Fischer <sup>(1)</sup> - Nils Schweingruber <sup>(1)</sup> - Fred Lühder <sup>(2)</sup> - Mikael Simons <sup>(3)</sup> - Peter Huppke <sup>(4)</sup> - Holger M. Reichardt <sup>(1)</sup>  
 Institute For Cellular And Molecular Immunology, University Of Göttingen Medical School, Göttingen, Germany <sup>(1)</sup>  
 Department Of Neuroimmunology, Institute For Multiple Sclerosis Research, University Of Göttingen Medical School, Göttingen, Germany <sup>(2)</sup> - Department Of Neurology, University Of Göttingen Medical School, Göttingen, Germany <sup>(3)</sup> - Department Of Pediatrics And Pediatric Neurology, University Of Göttingen Medical School, Göttingen, Germany <sup>(4)</sup>
- 14:45 390 - DC SPECIFIC SMAD7 DEFICIENCY PROMOTES DIFFERENTIATION OF TOLEROGENTIC DCS ABLE TO ATTENUATE EAE**  
 Dominika Lukas <sup>(1)</sup> - Nir Yogev <sup>(1)</sup> - Junda M. Kel <sup>(2)</sup> - Lara Jungmann <sup>(3)</sup> - Marco Prinz <sup>(3)</sup>  
 Ingo Kleiter <sup>(4)</sup> - Björn E. Clausen <sup>(1)</sup> - Ari Waisman <sup>(1)</sup>  
 Institute For Molecular Medicine, University Medical Center Of The Johannes Gutenberg University, Mainz, Germany <sup>(1)</sup> - Department Of Immunology, Erasmus Mc, University Medical Center, Rotterdam, Netherlands <sup>(2)</sup> - Department Of Neuropathology & Centre For Biological Signaling Studies, University Of Freiburg, Freiburg, Germany <sup>(3)</sup>  
 Department Of Neurology, St. Josef-hospital, Ruhr-university Bochum, Bochum, Germany <sup>(4)</sup>
- 15:00 219 - BRAIN-DERIVED MICROVESICLES CONFER SICKNESS BEHAVIOURS BY SWITCHING ON THE ACUTE PHASE RESPONSE IN THE LIVER**  
 Yvonne Couch <sup>(1)</sup> - Matthew C Evans <sup>(1)</sup> - Chris Gardiner <sup>(2)</sup> - Ian Sargent <sup>(2)</sup> - Patrick Losey <sup>(1)</sup>  
 Kate L Lambertsen <sup>(3)</sup> - Daniel C Anthony <sup>(1)</sup>  
 Department Of Pharmacology - Experimental Neuropathology, University Of Oxford, Oxford, United Kingdom <sup>(1)</sup>  
 Nuffield Department Of Obstetrics And Gynaecology, University Of Oxford, Oxford, United Kingdom <sup>(2)</sup> - Institute For Molecular Medicine, University Of Southern Denmark, Odense, Denmark <sup>(3)</sup>

---

COFFEE BREAK & POSTER SESSION | IMMUNOLOGICAL MECHANISMS

15:15 - 16:45 POSTERHALL (RHEINFOYER)

**473 - EVALUATION OF TREGS IN ACHR- AND MUSK-MYASTHENIA GRAVIS: FUNCTIONAL IMPAIRMENT AND MODULATION BY VITAMIN-D3 AND IL21**

Mahdi Alahgholi Hajibehzad

Department Of Physiology, Istanbul University, Istanbul Medical Faculty, Istanbul, Turkey

**241 - INTESTINAL PERMEABILITY IN MULTIPLE SCLEROSIS**

Viviana Annibali <sup>(1)</sup> - Claudia Policano <sup>(1)</sup> - Maria Chiara Buscarinu <sup>(1)</sup> - Luana Lionetto <sup>(2)</sup> - Rosella Mechelli <sup>(1)</sup> - Matilde Capi <sup>(2)</sup> - Carlo Mattei <sup>(1)</sup> - Eleonora Piras <sup>(3)</sup> - Daniela F. Angelini <sup>(3)</sup> - Ivan Monteleone <sup>(4)</sup> - Giovanni Monteleone <sup>(4)</sup> Luca Battistini <sup>(3)</sup> - Maurizio Simmaco <sup>(5)</sup> - Giovanni Ristori <sup>(1)</sup> - Marco Salvetti <sup>(1)</sup>

Centre For Experimental Neurological Therapies (centers) - Dep. Of Neurosciences, Mental Health And Sensory Organs., Sapienza, University Of Rome, S. Andrea Hospital Site., Rome, Italy <sup>(1)</sup> - Diagnostic Molecular Advanced Unit., S. Andrea Hospital, Rome, Italy <sup>(2)</sup> - Neuroimmunology Unit., Santa Lucia Foundation., Rome, Italy <sup>(3)</sup> - Department Of Systems Medicine., University Of Tor Vergata., Rome, Italy <sup>(4)</sup> - Diagnostic Molecular Advanced Unit - Dep. Of Neurosciences, Mental Health And Sensory Organs., Sapienza, University Of Rome, S. Andrea Hospital Site., Rome, Italy <sup>(5)</sup>

**366 - UNRAVELING THE REGULATORY ROLE OF NK CELLS ON T-CELL EFFECTOR FUNCTIONS: IMPLICATIONS FOR CNS AUTOIMMUNITY.**

Eric Armentani <sup>(1)</sup> - Alice Laroni <sup>(1)</sup> - Federico Ivaldi <sup>(2)</sup> - Roopali Gandhi <sup>(3)</sup> - Ilaria Gandoglia <sup>(1)</sup> - Emanuela Marcenaro <sup>(4)</sup> Simona Sivori <sup>(4)</sup> - Alessandro Moretta <sup>(4)</sup> - Nicole Kerlero De Rosbo <sup>(1)</sup> - Howard L. Weiner <sup>(3)</sup> - Antonio Uccelli <sup>(1)</sup>

Dinogmi, University Of Genoa, Genoa, Italy <sup>(1)</sup> - Abc-advanced Biotchenology Center, Aou Sanmartino, Genoa, Italy <sup>(2)</sup> Harvard Medical School, Harvard, Boston, United States <sup>(3)</sup> - Dimes, University Of Genoa, Genoa, Italy <sup>(4)</sup>

**121 - IMMUNE CELL ENTRY AND FUNCTION IN RETINAL REPAIR**

Inbal Benhar - Kitty Reemst - Michal Schwartz

Department Of Neurobiology, Weizmann Institute Of Science, Rehovot, Israel

**204 - MECHANISMS UNDERLYING INDUCTION OF ANTIBODY-MEDIATED DEMYELINATION IN MULTIPLE SCLEROSIS**

Carsten Tue Berg - Reza M. H Khorrooshi - Nasrin Asgari - Trevor Owens

Department Of Neurobiology, University Of Southern Denmark, Odense, Denmark <sup>(1)</sup>

**191 - TOLERANCE INDUCTION BY A FORCED EXPRESSION OF MOG-PEPTIDE IN THE CONTEXT OF EAE**

Stefan Berl - Nir Yogev - Ari Waisman

Institute For Molecular Medicine, Johannes Gutenberg-university Mainz, Mainz, Germany

**223 - MONOCYTE DERIVED MICROVESICLES IN PATIENTS WITH MULTIPLE SCLEROSIS. EFFECTS OF CURRENT IMMUNE TREATMENTS FOR THE DISEASE**

Maria Blonda <sup>(1)</sup> - Roberta Grasso <sup>(1)</sup> - Valeria Di Francescantonio <sup>(1)</sup> - Maria Teresa Sollazzo <sup>(1)</sup> - Luigi Maria Specchio <sup>(1)</sup> Roberto Furlan <sup>(2)</sup> - Carlo Avolio <sup>(1)</sup>

Dept. Of Medical And Surgical Sciences, University Of Foggia, Foggia, Italy <sup>(1)</sup> - Neuroimmunology Unit, Institute Of Experimental Neurology, Division Of Neuroscience, San Raffaele Scientific Institute, Milano, Italy <sup>(2)</sup>

**243 - RECURRENT OPTIC NEURITIS IS CHARACTERISED BY ANTI-MOG ANTIBODIES: A FOLLOW-UP STUDY**

Konstantina Chalmoukou <sup>(1)</sup> - Haris Alexopoulos <sup>(1)</sup> - Sofia Akrivou <sup>(1)</sup> - Panos Stathopoulos <sup>(1)</sup> - Markus Reindl <sup>(2)</sup> Marinos Dalakas <sup>(1)</sup>

Neuroimmunology Unit, Department Of Pathophysiology, Faculty Of Medicine, National And Kapodistrian University Of Athens, Athens, Greece <sup>(1)</sup> - Clinical Department Of Neurology, Innsbruck Medical University, Innsbruck, Austria <sup>(2)</sup>

**389 - PERIPHERAL TRANSCRIPTIONAL CONTROL IN MULTIPLE SCLEROSIS: HEPATOCYTE NUCLEAR FACTOR 4 ALPHA REGULATES IMMUNE CELL ACTIVATION AND AUTOIMMUNITY**

Marco Di Dario <sup>(1)</sup> - Ramesh Menon <sup>(1)</sup> - Emanuela Colombo <sup>(1)</sup> - Marta Radaelli <sup>(2)</sup> - Vittorio Martinelli <sup>(2)</sup> Giancarlo Comi <sup>(2)</sup> - Cinthia Farina <sup>(1)</sup>

Institute Of Experimental Neurology (inspe), San Raffaele Scientific Institute, Milan, Italy <sup>(1)</sup> - Department Of Neurology, San Raffaele Scientific Institute, Milan, Italy <sup>(2)</sup>

### **615 - THE PATHWAY TOLL LIKE RECEPTOR 2 - CD44: A PATHOGENETIC MECHANISM AND THERAPEUTIC TARGET FOR INFLAMMATION IN AUTOIMMUNE DISEASE**

Gabriele Di Sante <sup>(1)</sup> - Mariagrazia Valentini <sup>(1)</sup> - Alessia Piermattei <sup>(1)</sup> - Giuseppe Migliara <sup>(2)</sup> - Barbara Tolusso <sup>(3)</sup> - Gabriela Constantin <sup>(4)</sup> - Ezio Giorda <sup>(5)</sup> - Giovanni Delogu <sup>(6)</sup> - Francesco Ria <sup>(1)</sup>

Istituto Di Patologia Generale, Università Cattolica Del Sacro Cuore, Roma, Italy <sup>(1)</sup> - Istituto Di Patologia Generale, Università Cattolica Del Sacro Cuore, Roma, Italy <sup>(2)</sup> - Istituto Di Reumatologia E Scienze Affini, Università Cattolica Del Sacro Cuore, Roma, Italy <sup>(3)</sup> - Istituto Di Patologia Generale, Università Di Verona, Verona, Italy <sup>(4)</sup> - Istituto Di Patologia Generale, Bambino Gesù, Roma, Italy <sup>(5)</sup> - Istituto Di Microbiologia, Università Cattolica Del Sacro Cuore, Roma, Italy <sup>(6)</sup>

### **340 - ACTIVATION OF ENCEPHALITOGENIC T CELLS IN A MOG-INDUCED MARMOSSET EAE MODEL IS REGULATED BY LINKED SUPPRESSION**

Karin Dijkman <sup>(1)</sup> - Anwar Jagessar <sup>(1)</sup> - Erwin Blezer <sup>(2)</sup> - Robert Weissert <sup>(3)</sup> - Bert 't Hart <sup>(1)</sup>

Department Of Immunobiology, Biomedical Primate Research Centre, Rijswijk, Netherlands <sup>(1)</sup> - Image Sciences Institute, University Medical Centre Utrecht, Utrecht, Netherlands <sup>(2)</sup> - Department Of Neurology, University Of Regensburg, Regensburg, Germany <sup>(3)</sup>

### **143 - BENEFICIAL EFFECTS OF SHORT CHAIN FATTY ACIDS ON THE COURSE OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Alexander Duscha <sup>(1)</sup> - Johannes Berg <sup>(1)</sup> - Lisa Hinz <sup>(1)</sup> - Jan Thöne <sup>(1)</sup> - Seray Demir <sup>(1)</sup> - Ralf Gold <sup>(1)</sup> - Aiden Haghikia <sup>(1)</sup>

Department Of Neurology, Ruhr-universität, Bochum, Germany <sup>(1)</sup>

### **134 - ANTIBODIES TO DNA REPAIR PROTEINS IN HANDL PATIENTS**

Ece Erdag <sup>(1)</sup> - Erdem Tuzun <sup>(1)</sup> - Murat Kurtuncu <sup>(2)</sup> - Burcak Vural <sup>(1)</sup>

Institute For Experimental Medicine, Istanbul University, Istanbul, Turkey <sup>(1)</sup> - Faculty Of Medicine, Istanbul University, Istanbul, Turkey <sup>(2)</sup>

### **192 - AFFINITY-DEPENDENT EFFECTS OF TERIFLUNOMIDE AND IMPACT ON T CELL METABOLISM**

Melanie Eschborn <sup>(1)</sup> - Maren Lindner <sup>(1)</sup> - Vilmos Posevitz <sup>(1)</sup> - Dietmar Zehn <sup>(2)</sup> - Heinz Wiendl <sup>(1)</sup> - Luisa Klotz <sup>(1)</sup>

Department Of Neurology, University Hospital Münster, Münster, Germany <sup>(1)</sup> - Swiss Vaccine Research Institute, University Hospital Lausanne, Lausanne, Switzerland <sup>(2)</sup>

### **237 - A GLOBAL IMMUNE DEFICIT IN ALZHEIMER AND MILD COGNITIVE IMPAIRMENT DISCLOSED BY A NOVEL DATA MINING PROCESS**

Maira Gironi

Inspe, Ospedale San Raffaele, Milano, Italy

### **553 - DOES DEPENDENT INHIBITION OF IMMUNE MEDIATED DEMYELINATION BY IVIG**

Meike Winter - Christine Baksmeier - Hans-peter Hartung - Norbert Goebels

Department Of Neurology, Heinrich-heine-university, Duesseldorf, Germany

### **174 - ENDOPLASMIC RETICULUM-STRESS INDUCED BY INFLAMMATION IN SKELETAL MUSCLE CELLS IS ASSOCIATED WITH PROTEIN ACCUMULATION AND REDUCED BY METHYLENE BLUE: IMPLICATIONS FOR INCLUSION BODY MYOSITIS**

Christina Haas <sup>(1)</sup> - Jana Zschuentzsch <sup>(2)</sup> - Sven Thoms <sup>(3)</sup> - Jens Schmidt <sup>(2)</sup>

Department Of Neuroimmunology, Institute For Multiple Sclerosis Research And Hertie Foundation, University Medical Center Göttingen, Göttingen, Germany <sup>(1)</sup> - Clinic For Neurology, University Medical Center Göttingen, Göttingen, Germany <sup>(2)</sup> - Clinic For Pediatrics, University Medical Center Göttingen, Göttingen, Germany <sup>(3)</sup>

### **530 - LATENT GAMMAHERPEVIRUS INFECTION FACILITATES MULTIPLE SCLEROSIS THROUGH IMMUNE REGULATION**

Marc Horwitz <sup>(1)</sup> - Citlali Marquez Hernandez <sup>(2)</sup> - Costanza Casiraghi <sup>(2)</sup> - Iryna Shanina <sup>(2)</sup>

Microbiology And Immunology - Life Sciences Institute, University Of British Columbia, Vancouver, Canada <sup>(1)</sup> - Microbiology And Immunology - Life Sciences Institute, Ubc, Vancouver, Canada <sup>(2)</sup>

### **565 - PROINFLAMMATORY CYTOKINES, MICRORNAS AND SCHIZOPHRENIA**

Sehba Husain-krautter <sup>(1)</sup> - Juan Gallego <sup>(2)</sup> - Anil Malhotra <sup>(2)</sup> - Thomas Rothstein <sup>(1)</sup>

Feinstein Institute For Medical Research, North Shore-long Island Jewish Health System, Manhasset, United States <sup>(1)</sup> - Zucker Hillside Hospital, North Shore-long Island Jewish Health System, Glen Oaks, United States <sup>(2)</sup>

**396 - ANTI-MURINE CD52 ANTIBODY TREATMENT DOES NOT ADVERSELY AFFECT THE MIGRATORY ABILITY OF IMMUNE CELLS**

Evis Havari <sup>(1)</sup> - Michael J Turner <sup>(1)</sup> - James C Dodge <sup>(2)</sup> - Christopher Treleaven <sup>(2)</sup> - Lamya S Shihabuddin <sup>(2)</sup>  
Bruce L Roberts <sup>(1)</sup> - Johanne M Kaplan <sup>(1)</sup> - William M Siders <sup>(1)</sup>

Neuroimmunology Research, Genzyme, A Sanofi Company, Framingham, Ma, United States <sup>(1)</sup> - Neuroscience, Genzyme, A Sanofi Company, Framingham, Ma, United States <sup>(2)</sup>

**177 - INCREASED NEUTRALIZATION CAPACITY OF TNF ALPHA IN SERA OF MS PATIENTS MAY PLAY A ROLE IN - MS PATHOGENESIS AND IS REVERSED BY THERAPY WITH INTERFERON-B**

Karin Fainberg <sup>(1)</sup> - Keren Regev <sup>(2)</sup> - Olga Dorman <sup>(1)</sup> - Arnon Karni <sup>(3)</sup>

Neuroimmunology Laboratory, Tel Aviv Medical Center, Tel Aviv, Israel <sup>(1)</sup> - Neuroimmunology Laboratory, Tel Aviv Medical Center, Tel Aviv, Republic Of Belarus <sup>(2)</sup> - Neuroimmunology Laboratory, Tel Aviv Medical Center, Sackler's medical School, Tel Aviv University, Tel Aviv, Israel <sup>(3)</sup>

**385 - LYMPHOCYTE SUBSET DYNAMICS FOLLOWING ALEMTUZUMAB TREATMENT IN PATIENTS WHO RELAPSED ON A PRIOR THERAPY**

Lloyd H Kasper <sup>(1)</sup> - Douglas L Arnold <sup>(2)</sup> - Alasdair J Coles <sup>(3)</sup> - Hans-peter Hartung <sup>(4)</sup> - Eva Havrdova <sup>(5)</sup>  
Krzysztof W Selmaj <sup>(6)</sup> - Jeffrey Palmer <sup>(7)</sup> - David H Margolin <sup>(7)</sup> - Michael A Panzara <sup>(7)</sup> - D Alastair S Compston <sup>(8)</sup>

Geisel School Of Medicine At Dartmouth, Geisel School Of Medicine, Hanover, United States <sup>(1)</sup> - Department Of Neurology And Neurosurgery, Montréal Neurological Institute, Mcgill University, Montréal, Québec, Canada <sup>(2)</sup> - University Of Cambridge, Addenbrooke's Hospital, Cambridge, United Kingdom <sup>(3)</sup> - Department Of Neurology And Center For Neuropsychiatry, Heinrich-heine University, Düsseldorf, Germany <sup>(4)</sup> - Charles University In Prague, First Medical Faculty, Prague, Czech Republic <sup>(5)</sup> - Department Of Neurology, Medical University Of Łódź, Łódź, Poland <sup>(6)</sup> - Genzyme, A Sanofi Company, -, Cambridge, Ma, United States <sup>(7)</sup> - Department Of Clinical Neurosciences, University Of Cambridge, Cambridge, United Kingdom <sup>(8)</sup>

**482 - VAV1 CONTROLS T CELL POLARIZATION AND SUSCEPTIBILITY TO CENTRAL NERVOUS SYSTEM AUTOIMMUNITY**

Sahar Kassem <sup>(1)</sup> - Guillaume Gaud <sup>(1)</sup> - Anne Dejean <sup>(1)</sup> - Isabelle Bernard <sup>(1)</sup> - Gilbert J Fournie <sup>(1)</sup> - Bernard Malissen <sup>(2)</sup>  
Céline Colacios <sup>(1)</sup> - Abdelhadi Saoudi <sup>(1)</sup>

Inserm U1043, Université Paul Sabatier, Toulouse, France <sup>(1)</sup> - Cimi, Université Aix Marseille, Marseille, France <sup>(2)</sup>

**331 - ROLE OF MENINGEAL LYMPHOID FOLLICLE-LIKE STRUCTURES IN THE CNS INFLAMMATORY DISORDERS**

Izumi Kawachi <sup>(1)</sup> - Mariko Hokari <sup>(1)</sup> - Etsuji Saji <sup>(1)</sup> - Yasuko Toyoshima <sup>(2)</sup> - Akiko Yokoseki <sup>(1)</sup> - Akiyoshi Kakita <sup>(2)</sup> - Hitoshi Takahashi <sup>(2)</sup>  
Masatoyo Nishizawa <sup>(1)</sup>

Department Of Neurology, Brain Research Institute, Niigata University, Niigata, Japan <sup>(1)</sup> - Department Of Pathology, Brain Research Institute, Niigata University, Niigata, Japan <sup>(2)</sup>

**539 - THE ROLE OF HYALURONAN AND 4-METHYLBELLIFERONE TREATMENT IN MULTIPLE SCLEROSIS**

Hedwich F Kuipers - Mary Rieck - Lawrence Steinman - Paul L Bollyky

Stanford University, Stanford University Medical Center, Stanford, Ca, United States

**509 - TRYPTOPHAN-2,3-DIOXYGENASE IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS.**

Tobias V. Lanz <sup>(1)</sup> - Simon Becker <sup>(1)</sup> - Simeon Iwantscheff <sup>(1)</sup> - Carl Grabitz <sup>(1)</sup> - Laura-ines Böhler <sup>(1)</sup>

Wolfgang Wick <sup>(2)</sup> - Michael Platten <sup>(2)</sup>

Ccu Neuroimmunology And Brain Tumor Immunology, German Cancer Research Center (dkfz), Heidelberg, Germany <sup>(1)</sup>

Department Of Neurooncology, University Hospital Heidelberg, Heidelberg, Germany <sup>(2)</sup>

**360 - SOLUBLE BCMA IS SHED FROM B CELLS BY GAMMA-SECRETASE, FUNCTIONS AS APRIL-SPECIFIC DECOY AND REFLECTS INTRATHECAL IG-PRODUCTION IN MULTIPLE SCLEROSIS**

Sarah A. Laurent <sup>(1)</sup> - Franziska Hoffmann <sup>(1)</sup> - Peer-hendrik Kuhn <sup>(2)</sup> - Stephanie M. Hauck <sup>(3)</sup> - Mohsen Khademi <sup>(4)</sup>  
Tomas Olsson <sup>(4)</sup> - Hans-walter Pfister <sup>(5)</sup> - Frank Weber <sup>(6)</sup> - Reinhard Hohlfeld <sup>(1)</sup> - Stefan F. Lichtenthaler <sup>(2)</sup>

Edgar Meinl <sup>(1)</sup>

Institute Of Clinical Neuroimmunology, Ludwig Maximilian University, Munich, Germany <sup>(1)</sup> - Neuroproteomics, Technical University, Munich, Germany <sup>(2)</sup> - Research Unit Protein Science, Helmholtz Zentrum, Munich, Germany <sup>(3)</sup> - Division Of Clinical Neuroscience, Karolinska University Hospital, Stockholm, Sweden <sup>(4)</sup> - Department Of Neurology, Klinikum Grosshadern, Ludwig Maximilian University, Munich, Germany <sup>(5)</sup> - Neurology, Max-planck-institute Of Psychiatry, Munich, Germany <sup>(6)</sup>

**516 - CRITICAL CONTRIBUTION FROM ANTIGEN PRESENTING CELLS FOR ENCEPHALITOGENIC T CELLS**

Priscilla Lee - Alan Smith - Yuhong Yang - Amanda Selhorst - Michael Racke - Amy Lovett-racke

Wexner Medical Center, The Ohio State University, Columbus, United States

**81 - ELEVATED NKG2D LIGANDS EXPRESSION IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**Laurine Legroux <sup>(1)</sup> - Camille Pittet <sup>(1)</sup> - Gabrielle Deblois <sup>(1)</sup> - Chanel Cadieux-dion <sup>(1)</sup> - Alma N Mohebiany <sup>(2)</sup>Diane Beauseigle <sup>(1)</sup> - Nathalie Arbour <sup>(1)</sup>Université De Montréal, Crchum, Montreal, Canada <sup>(1)</sup> - Universität Mainz, Johannes Gutenberg, Mainz, Germany <sup>(2)</sup>**201 - MOLECULAR ANALYSIS OF THE CLEC16A AUTOIMMUNE RISK LOCUS**Ingvild Sørum Leikfoss <sup>(1)</sup> - Pankaj Keshari <sup>(1)</sup> - Steffan D. Bos <sup>(2)</sup> - Anna M. Eriksson <sup>(3)</sup> - Anja Bjølgerud <sup>(2)</sup>Vibeke Sundvold-gjerstad <sup>(4)</sup> - Greger Abrahamsen <sup>(4)</sup> - Anne Spurkland <sup>(4)</sup> - Hanne F. Harbo <sup>(1)</sup> - Tone Berge <sup>(1)</sup>Department Of Neurology, Oslo University Hospital, Oslo, Norway <sup>(1)</sup> - Institute Of Clinical Medicine, University Of Oslo, Oslo, Norway <sup>(2)</sup>Institute Of Biosciences, University Of Oslo, Oslo, Norway <sup>(3)</sup> - Institute Of Basic Medical Science, University Of Oslo, Oslo, Norway <sup>(4)</sup>**381 - "SUPERIOR" DOMINANT PEPTIDE ITSELF SHUT DOWN THE REACTIVATION OF AN ANIMAL MODEL OF MULTIPLE SCLEROSIS THROUGH LATER ACTIVATION OF ANTIGEN-SPECIFIC REGULATORY CELLS: APPLICATION FOR INVERSE VACCINE.**

Youwei Lin

National Institute Of Neuroscience, National Center Of Neurology And Psychiatry, Tokyo, Japan

**104 - INTEGRATIVE ANALYSIS OF DNA METHYLATION AND GENE EXPRESSION IDENTIFIES DISTINCT PROFILES AMONG IMMUNE CELLS SUBSETS**Shimrat Mamrut <sup>(1)</sup> - Nili Avidan <sup>(1)</sup> - Elsebeth Staun-ram <sup>(1)</sup> - Elizabeta Ginzburg <sup>(1)</sup> - Frédérique Truffault <sup>(2)</sup>Mélinée Frenkian <sup>(2)</sup> - Sonia Berrih-aknin <sup>(2)</sup> - Ariel Miller <sup>(3)</sup>Rappaport Faculty Of Medicine, Technion-israel Institute Of Technology, University, Haifa, Israel <sup>(1)</sup> - Research Unit (inserm U974/cnrsUmr7215/ /upmc Um76/aim) - Institute Of Myology Pitié-salpêtrière, University, Paris, France <sup>(2)</sup> - Division Of NeuroimmunologyAnd Multiple Sclerosis Center, Carmel Medical Center, Hospital, Haifa, Israel <sup>(3)</sup>**393 - ORAL TOLERANCE INDUCTION IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS WITH CANDIDA EXPRESSING A SPECIFIC MOG PEPTIDE**Anne K. Mausberg <sup>(1)</sup> - Christoph Bürth <sup>(2)</sup> - Maximilian K. Heininger <sup>(1)</sup> - Mark Stettner <sup>(1)</sup>Joachim Ernst <sup>(2)</sup> - Bernd C. Kieseier <sup>(1)</sup>Department Of Neurology, Heinrich-heine-university, Duesseldorf, Germany <sup>(1)</sup>Department Of Molecular Mycology, Heinrich-heine-university, Duesseldorf, Germany <sup>(2)</sup>**255 - C-TYPE LECTINS ON MYELOID CELLS GOVERN SUSCEPTIBILITY TO EAE IN RATS**

Marie Ndiaye - Sevasti Flytzani - Andreas Warnecke - Andre Ortlieb - Tomas Olsson - Maja Jagodic

Karolinska Institute, Karolinska University Hospital, Stockholm, Sweden

**480 - A TH17/LYMPHOTOXIN AXIS ENABLES CYTOKINE PRODUCTION BY BRAIN MENINGEAL STROMAL CELLS AND PROPAGATES DE NOVO CNS-INTRINSIC T CELL RESPONSES DURING INFLAMMATION**Natalia Pikor <sup>(1)</sup> - Jillian Astarita <sup>(2)</sup> - Robert Kay <sup>(1)</sup> - Shannon Turley <sup>(2)</sup> - Jennifer Gommerman <sup>(1)</sup>Department Of Immunology, University Of Toronto, Toronto, Canada <sup>(1)</sup> - Department Of Cancer Immunology And Aids,Dana Farber Cancer Institute, Boston, United States <sup>(2)</sup>**41 - BAFF EXPRESSION IN THE HUMAN MONOCYTE CELL LINE THP-1: DIFFERENTIAL REGULATION BY INTERFERONS, IL-10, AND TNF**Samia Ragheb <sup>(1)</sup> - Robert Lisak <sup>(2)</sup>Oakland University, Oakland University William Beaumont School Of Medicine (ouwb), Rochester, Michigan, United States <sup>(1)</sup>Wayne State University, Detroit Medical Center, Detroit, United States <sup>(2)</sup>**536 - LLAMA-DERIVED NANOBODIES CAN ACT AS P2X7 ANTAGONISTS IN VITRO AND IN VIVO**Björn Rissiek <sup>(1)</sup> - Welbeck Danquah <sup>(2)</sup> - Domenica Iacenda <sup>(1)</sup> - Maike Cordes <sup>(1)</sup> - Friedrich Koch-nolte <sup>(2)</sup> - Tim Magnus <sup>(1)</sup>Department Of Neurology, University Medical Center Hamburg-eppendorf, Hamburg, Germany <sup>(1)</sup> - Department Of Immunology,University Medical Center Hamburg-eppendorf, Hamburg, Germany <sup>(2)</sup>

**489 - LFA-1 INTEGRIN CONTROLS TH1 AND TH17 INTRAPARENCHYMAL MOTILITY BEHAVIOR IN THE CENTRAL NERVOUS SYSTEM DURING EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Barbara Rossi - Silvia Dusi - Antonella Amoroso - Genny Piacentino - Gabriela Constantin  
Department Of Pathology And Diagnostics, University Of Verona, Verona, Italy

**83 - HMGB1 AND RAGE IN SKELETAL MUSCLE INFLAMMATION: IMPLICATIONS FOR PROTEIN ACCUMULATION IN INCLUSION BODY MYOSITIS (IBM)**

Ingrid E. Muth <sup>(1)</sup> - Konstanze Kleinschnitz <sup>(2)</sup> - Peter Balcarek <sup>(3)</sup> - Arne Wrede <sup>(4)</sup> - Olivia Schreiber <sup>(5)</sup> - Stephan Zierz <sup>(6)</sup>  
Marinos C. Dalakas <sup>(7)</sup> - Reinhard E. Voll <sup>(8)</sup> - Jens Schmidt <sup>(1)</sup>

Clinic For Neurology, University Medical Centre Göttingen, Göttingen, Germany <sup>(1)</sup> - Department Of Neuroimmunology, University Medical Centre Göttingen, Göttingen, Germany <sup>(2)</sup> - Department Of Trauma Surgery, University Medical Centre Göttingen, Göttingen, Germany <sup>(3)</sup> - Department Of Neuropathology, University Medical Centre Göttingen, Göttingen, Germany <sup>(4)</sup> - Friedrich-baur-institute, University Of München, München, Germany <sup>(5)</sup> - Department Of Neurology, University Of Halle, Halle, Germany <sup>(6)</sup>  
Neuroimmunology Unit, Dept. Of Pathophysiology, University Of Athens Medical School, Athens, Greece <sup>(7)</sup>  
Department Of Rheumatology And Clinical Immunology, University Medical Centre Freiburg, Freiburg, Germany <sup>(8)</sup>

**383 - THE ROLE OF TNF IN CONTROLLING THE SPONTANEOUS DEVELOPMENT OF AUTOIMMUNE NEUROINFLAMMATION**

Nora Schweizer <sup>(1)</sup> - Cinzia Tiberi <sup>(2)</sup> - Elisabeth Rushing <sup>(2)</sup> - Hans Welzl <sup>(3)</sup> - Mirjana Wojtal <sup>(1)</sup> - Tobias Suter <sup>(1)</sup>

Neuroimmunology And Ms Research, University Hospital Zurich, Zurich, Switzerland <sup>(1)</sup> - Neuropathology, University Hospital Zurich, Zurich, Switzerland <sup>(2)</sup> - Institute For Anatomy, University Hospital Zurich, Zurich, Switzerland <sup>(3)</sup>

**460 - CASPASE-1 SIGNALING LINKS MONOCYTE ACTIVATION AND PYROPTOTIC LYMPHOCYTOPENIA AFTER ACUTE BRAIN INJURY**

Vikramjeet Singh - Stefan Roth - Gemma Llovera - Arthur Liesz

Institut Für Schlaganfall- Und Demenzforschung (isd), Klinikum Der Universität München, München, Germany

**414 - SCHWANN CELL LOCOMOTION DURING PERIPHERAL NERVE INFLAMMATION**

Mark Stettner - Sandra Labus - Jan-philipp Weinberger - Thomas Dehmel - Angelika Derksen - Anne K Mausberg  
Bernd C Kieseier

Department Of Neurology, Heinrich-heine-university, Dusseldorf, Germany

**354 - TH1 POLARIZATION OF T CELLS INJECTED INTO THE CEREBROSPINAL FLUID INDUCES BRAIN IMMUNOSURVEILLANCE**

Itai Strominger - Yair Fisher - Shva Biton - Anna Nemirovsky - Rona Baron - Alon Monsonego

The Shraga Segal Dept. Of Microbiology, Immunology, And Genetics, Faculty Of Health Sciences, Ben Gurion University Of The Negev, Beer Sheva, Israel

**231 - THE INFLAMMASOME PYRIN CONTRIBUTES TO PERTUSSIS TOXIN-INDUCED IL-1 $\beta$  SYNTHESIS, NEUTROPHIL INTRAVASCULAR CRAWLING AND AUTOIMMUNE ENCEPHALOMYELITIS**

Luc Vallières <sup>(1)</sup> - Aline Dumas <sup>(1)</sup> - Nathalie Amiable <sup>(1)</sup> - Juan Pablo De Rivero Vaccari <sup>(2)</sup> - Jae Jin Chae <sup>(3)</sup>

Robert W. Keane <sup>(4)</sup> - Steve Lacroix <sup>(1)</sup>

Laval University, Chu De Quebec, Quebec, Canada <sup>(1)</sup> - The Miami Project To Cure Paralysis, University Of Miami, Miami, United States <sup>(2)</sup>  
Medical Genetics Branch, National Human Genome Research Institute, Bethesda, United States <sup>(3)</sup> - Department Of Physiology And Biophysics, University Of Miami, Miami, United States <sup>(4)</sup>

**612 - MS-ASSOCIATED GENE CLEC16A USES THE MOLECULAR MACHINERY OF LATE ENDOSOMAL BIOGENESIS TO CONTROL HLA-II EXPRESSION IN APC**

Marvin M. Van Luijn <sup>(1)</sup> - Karim L. Kreft <sup>(1)</sup> - Marlieke L. Jongsma <sup>(2)</sup> - Steven W. Mes <sup>(1)</sup> - Annet F. Wierenga-wolf <sup>(1)</sup>

Marjan Van Meurs <sup>(1)</sup> - Marie-josé Melief <sup>(1)</sup> - Rik Van Der Kant <sup>(2)</sup> - Lennert Janssen <sup>(2)</sup> - Hans Janssen <sup>(2)</sup>

John J. Priatel <sup>(3)</sup> - Rusung Tan <sup>(3)</sup> - Jacques Neefjes <sup>(2)</sup> - Jon D. Laman <sup>(1)</sup> - Rogier Q. Hintzen <sup>(1)</sup>

Erasmus Mc, University Medical Center Rotterdam, Ms Centre Erasmus, Rotterdam, Netherlands <sup>(1)</sup> - The Netherlands Cancer Institute, Division Of Cell Biology, Amsterdam, Netherlands <sup>(2)</sup> - Child And Family Research Institute, University Of British Columbia, Vancouver, Canada <sup>(3)</sup>



## **261 - SURFEN, A PROTEOGLYCAN ANTAGONIST, REDUCES LYSOLECITHIN-INDUCED DEMYELINATION WITH RELATED EFFECTS ON MACROPHAGE FUNCTION**

Jordan Warford <sup>(1)</sup> - Laurence Madara <sup>(2)</sup> - David Hoskin <sup>(3)</sup> - Alexander Easton <sup>(4)</sup>

Department Of Pathology, Dalhousie University, Halifax, Ns, Canada <sup>(1)</sup> - Department Of Microbiology And Immunology, Dalhousie University, Halifax, Nova Scotia, Canada <sup>(2)</sup> - Departments Of Pathology, Microbiology And Immunology, And Surgery, Dalhousie University, Halifax, Nova Scotia, Canada <sup>(3)</sup> - Departments Of Pathology, Microbiology And Immunology, And Neurosurgery, Dalhousie University, Halifax, Nova Scotia, Canada <sup>(4)</sup>

## **555 - PYTMS: A USEFUL MODELING TOOL FOR COMMON POST-TRANSLATIONAL MODIFICATIONS**

Andreas Warnecke <sup>(1)</sup> - Tatyana Sandalova <sup>(2)</sup> - Adnane Achour <sup>(2)</sup> - Robert A. Harris <sup>(1)</sup>

Centre For Molecular Medicine, Department Of Clinical Neuroscience, Applied Immunology & Immunotherapy, Karolinska University Hospital Solna, Karolinska Institutet, Stockholm, Sweden <sup>(1)</sup> - Science For Life Laboratory, Department Of Medicine Solna, Karolinska Institutet, Stockholm, Sweden <sup>(2)</sup>

## **190 - THE ASSESSMENT OF IMMUNOMODULATORY EFFECTS OF CELL THERAPY IN MULTIPLE SCLEROSIS PATIENTS AFTER AUTOLOGOUS MESENCHYMAL/STROMAL STEM CELLS TRANSPLANTATION**

Marina Zafranskaya <sup>(1)</sup> - Alexander Fedulov <sup>(2)</sup> - Marija Yurkevich <sup>(1)</sup> - Svetlana Kulinich <sup>(1)</sup> - Halina Ivanchik <sup>(3)</sup>  
Alexei Borisov <sup>(4)</sup> - Tatiana Kachan <sup>(2)</sup> - Darya Nizheharodava <sup>(1)</sup>

Belarusian Medical Academy Of Post-graduate Education, Belarusian Medical Academy Of Post-graduate Education, Minsk, Republic Of Belarus <sup>(1)</sup> - Belarusian State Medical University, Belarusian State Medical University, Minsk, Republic Of Belarus <sup>(2)</sup> - Belarusian Medical Academy Of Post-graduate Education, Belarusian Medical Academy Of Post-graduate Education, Minsk, Republic Of Belarus <sup>(3)</sup> - Belarusian State Medical University, Belarusian State Medical University, Minsk, Republic Of Belarus <sup>(4)</sup>

## **15 - NEURITOGENIC TH17 CELLS IN GUILLAIN-BARRÉ SYNDROME AND EXPERIMENTAL AUTOIMMUNE NEURITIS**

Hongliang Zhang - Xu Wang - Jie Zhu

Neuroscience Center, Department Of Neurology, The First Hospital, Jilin University, Changchang, China

## **COFFEE BREAK & POSTER SESSION | GENETICS**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

## **513 - GENE EXPRESSION IN SMOKING AND NON-SMOKING PATIENTS WITH MULTIPLE SCLEROSIS**

Cecilie Ammitzboell - Rikke Ratzer - Lars Börnsen - Freja Bekner - Per Soelberg Sorensen - Jeppe Romme Christensen  
Helle Bach Soendergaard - Finn Sellebjerg

Danish Multiple Sclerosis Center, University Of Copenhagen, Rigshospitalet, Copenhagen, Denmark

## **194 - METHYLATION PROFILES OF UNTREATED MS PATIENTS AND CONTROLS FOR WHOLE BLOOD, CD4+ AND CD8+ T CELLS SHOW NO CONSISTENT CHANGE OF METHYLATION LEVELS IN MS.**

Steffan D Bos <sup>(1)</sup> - Christian M Page <sup>(1)</sup> - Bettina K Andreassen <sup>(2)</sup> - Emon Elboudwarej <sup>(3)</sup> - Marte W Gustavsen <sup>(4)</sup>  
Farren Briggs <sup>(3)</sup> - Hong Quach <sup>(3)</sup> - Ingvild Leikfoss <sup>(1)</sup> - Anja Bjølgerud <sup>(1)</sup> - Tone Berge <sup>(4)</sup> - Hanne F Harbo <sup>(4)</sup>

Lisa Barcellos <sup>(3)</sup>

Institute Of Clinical Medicine, University Of Oslo, Oslo, Norway <sup>(1)</sup> - Institute Of Basic Medical Sciences, University Of Oslo, Oslo, Norway <sup>(2)</sup> - Division Of Epidemiology, University Of California, Berkeley, Berkeley, United States <sup>(3)</sup> - Department Of Neurology, Oslo University Hospital, Oslo, Norway <sup>(4)</sup>

## **387 - SNPS IN THE SOCS1 AREA ARE STRONGLY ASSOCIATED WITH MULTIPLE SCLEROSIS AND MAY AFFECT REGULATORY T CELLS AND DENDRITIC CELLS**

Aitzkoa Lopez De Lapuente <sup>(1)</sup> - Maria Jesus Pinto <sup>(2)</sup> - Manuel Comabella <sup>(3)</sup> - Alfredo Antigüedad <sup>(4)</sup> - Ianire Astobiza <sup>(5)</sup>  
Iraide Alloza <sup>(5)</sup> - Oscar Fernandez <sup>(2)</sup> - Koen Vandenbroeck <sup>(6)</sup>

Universidad Del País Vasco, Universidad Del País Vasco, Zamudio, Spain <sup>(1)</sup> - Clinical Neurosciences Institute, Hospital Regional Universitario Carlos Haya, Málaga, Spain <sup>(2)</sup> - Centre D'esclerosi Múltiple De Catalunya, Cem-cat Unitat De Neuroimmunologia Clínica, Hospital Universitari Vall D'hebron, Barcelona, Spain <sup>(3)</sup> - Servicio De Neurología, Hospital De Basurto, Hospital De Basurto, Bilbao, Spain <sup>(4)</sup> - Universidad Del País Vasco, Universidad Del País Vasco, Leioa, Spain <sup>(5)</sup> - Ikerbasque Basque Foundation For Science, Universidad Del País Vasco, Bilbao, Spain <sup>(6)</sup>



**455 - EPSTEIN BARR VIRUS NUCLEAR ANTIGEN 2 BINDING SITES DISTRIBUTION OVERLAP WITH MS-ASSOCIATED REGIONS**

Vito Ag Ricigliano <sup>(1)</sup> - Adam Handel <sup>(2)</sup> - Viviana Annibali <sup>(3)</sup> - Claudia Policano <sup>(3)</sup> - Giovanni Ristori <sup>(3)</sup>  
Marco Salvetti <sup>(3)</sup> - Rosella Mechelli <sup>(3)</sup>

Neuroimmunology Unit, Fondazione Santa Lucia (i.r.c.c.s.), Rome, Italy <sup>(1)</sup> - The Weatherall Institute Of Molecular Medicine, University Of Oxford, John Radcliffe Hospital, Oxford OX3 9ds, United Kingdom <sup>(2)</sup> - Centre For Experimental Neurological Therapies (centers), Department Of Neurosciences, Mental Health And Sensory Organs, Sapienza University Of Rome, Rome, Italy <sup>(3)</sup>

**450 - CHARACTERIZATION OF ZFP36L1 IN THE CONTEXT OF MULTIPLE SCLEROSIS AND FUNCTIONAL IMMUNOLOGICAL CONSEQUENCES ASSOCIATED WITH THE SUSCEPTIBILITY TO THE DISEASE**

Linda Ottoboni <sup>(1)</sup> - Khadir Radassi <sup>(2)</sup> - Philip De Jager <sup>(3)</sup> - Giancarlo Comi <sup>(1)</sup> - Cinthia Farina <sup>(1)</sup> - Gianvito Martino <sup>(1)</sup>  
Institute Of Experimental Neurology, San Raffaele Hospital, Milan, Italy <sup>(1)</sup> - Neurology, Yale School Of Medicine, Milan, Italy <sup>(2)</sup>  
Center For Neurologic Diseases, Brigham And Women's Hospital, Boston, United States <sup>(3)</sup>

**75 - FROM TRANSCRIPTOME TO IMPRINTING: HOW DOES PARENT-OF-ORIGIN EFFECT CD4+ T CELL ACTIVATION?**

Sabrina Ruhrmann <sup>(1)</sup> - Marie N'diaye <sup>(1)</sup> - Petra Bergman <sup>(1)</sup> - Victor Guryev <sup>(2)</sup> - Maja Jagodic <sup>(1)</sup>

Department Of Clinical Neuroscience, Karolinska Institute, Stockholm, Sweden <sup>(1)</sup> - European Research Institute For The Biology Of Ageing, University Medical Center Groningen/university Of Groningen, Groningen, Netherlands <sup>(2)</sup>

**521 - THE CD33 ALZHEIMER'S DISEASE LOCUS: CORRECTING THE FUNCTIONAL CONSEQUENCES OF THE RISK ALLELE USING SMALL MOLECULES**

Katie J Ryan <sup>(1)</sup> - Justin D Boyd <sup>(2)</sup> - Vanessa Laversenne <sup>(2)</sup> - Gail Chan <sup>(1)</sup> - Phoebe Winn <sup>(1)</sup> - Michael Frangieh <sup>(1)</sup>  
Maria Cimpean <sup>(1)</sup> - Alison Mchenry <sup>(1)</sup> - Lori B Chibnik <sup>(1)</sup> - Marcie A Glicksman <sup>(2)</sup> - Philip L Dejager <sup>(1)</sup>  
Elizabeth M Bradshaw <sup>(1)</sup>

Center For Neurological Diseases, Brigham And Women's Hospital / Harvard Medical School, Boston, United States <sup>(1)</sup> - Laboratory For Drug Discovery In Neurodegeneration, Harvard Neurodiscovery Center / Brigham And Women's Hospital, Boston, United States <sup>(2)</sup>

**592 - COPY NUMBER VARIATIONS IN T CELL RECEPTOR LOCI ARE ASSOCIATED WITH SUSCEPTIBILITY TO MULTIPLE SCLEROSIS AND NEUROMYELITIS OPTICA**

Shinya Sato <sup>(1)</sup> - Ken Yamamoto <sup>(2)</sup> - Takuya Matsushita <sup>(1)</sup> - Noriko Isobe <sup>(1)</sup> - Yuji Kawano <sup>(1)</sup> - Kyoko Iinuma <sup>(1)</sup>  
Tomomi Yonekawa <sup>(1)</sup> - Katsuhisa Masaki <sup>(1)</sup> - Satoshi Yoshimura <sup>(1)</sup> - Ryo Yamasaki <sup>(3)</sup> - Jun-ichi Kira <sup>(1)</sup>

Department Of Neurology, Neurological Institute, Graduate School Of Medical Sciences, Kyushu University, Fukuoka, Japan <sup>(1)</sup>  
Division Of Genomics, Research Center For Transomics Medicine, Medical Institute Of Bioregulation, Kyushu University, Fukuoka, Japan <sup>(2)</sup> - Department Of Neurological Therapeutics, Neurological Institute, Graduate School Of Medical Sciences, Kyushu University, Fukuoka, Japan <sup>(3)</sup>

**348 - CHARACTERIZATION OF GENETIC VARIANTS IN THE NFKBIA PROMOTER REGION IN MULTIPLE SCLEROSIS**

Jun Yan <sup>(1)</sup> - Judith Greer <sup>(1)</sup> - Pamela McCombe <sup>(1)</sup> - Michael Pender <sup>(2)</sup> - Anzgene Consortium <sup>(3)</sup>

Uq,centre For Clinical Research, University Of Queensland, Brisbane, Australia <sup>(1)</sup> - School Of Medicine, University Of Queensland, Brisbane, Australia <sup>(2)</sup> - Ms Research Australia, Consortium, Sydney, Australia <sup>(3)</sup>

---

**COFFEE BREAK & POSTER SESSION | MIRNA**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

**395 - IDENTIFICATION OF MICRORNA CHANGES IN THE THIRD TRIMESTER OF PREGNANCY COMPARED TO THE POST-PARTUM PERIOD IN MULTIPLE SCLEROSIS PATIENTS**

Helle Bach Søndergaard <sup>(1)</sup> - Laura Airas <sup>(2)</sup> - Joy Mendel-hartvig <sup>(1)</sup> - Per Soelberg Sørensen <sup>(1)</sup> - Finn Sellebjerg <sup>(1)</sup>

Danish Multiple Sclerosis Center, Copenhagen University Hospital Rigshospitalet, Copenhagen, Denmark <sup>(1)</sup>  
Department Of Neurology, Turku University Hospital, Turku, Finland <sup>(2)</sup>

**144 - EFFECT OF MS-RELATED MIRNA ON ASTROCYTIC PROLIFERATION**

Johannes Berg - Xenia Bytko - Christina Waldhoff - Lisa Hinz - Ralf Gold - Aiden Haghikia

Department Of Neurology, Ruhr-universität Bochum, Bochum, Germany

**36 - DECREASED MIR-219 EXPRESSION IN MS: CLINICAL IMPLICATIONS?**

Ilona Bruinsma <sup>(1)</sup> - Susan Van Vugt <sup>(1)</sup> - Hanneke Ter Burg <sup>(1)</sup> - Timothy Van De Lisdonk <sup>(1)</sup> - Evert-jan Kooi <sup>(2)</sup>  
 Sergio Baranzini <sup>(3)</sup> - Xuhuai Ji <sup>(4)</sup> - Jeroen Geurts <sup>(2)</sup> - Rogier Hintzen <sup>(5)</sup> - Marcel Verbeek <sup>(1)</sup> - Lawrence Steinman <sup>(4)</sup>  
 Brigit De Jong <sup>(1)</sup>

Radboud University Medical Center, Hospital, Nijmegen, Netherlands <sup>(1)</sup> - Vu Medical Center, Hospital, Amsterdam, Netherlands <sup>(2)</sup>  
 Ucsf, University, San Francisco, United States <sup>(3)</sup> - Stanford University, University, Stanford, United States <sup>(4)</sup> - Erasmusmc, Hospital,  
 Rotterdam, Netherlands <sup>(5)</sup>

**76 - METHYLOME CHARACTERIZATION OF CD4+T CELLS IN MULTIPLE SCLEROSIS - ESTABLISHING A ROLE FOR MIR-21 IN AUTOIMMUNE DISEASE**

Sabrina Ruhrmann <sup>(1)</sup> - Eliane Piket <sup>(1)</sup> - Petra Bergman <sup>(1)</sup> - Lara Kular <sup>(1)</sup> - Julio Cesar Cetrulo Lorenzi <sup>(1)</sup> - Shahin Aeinehband <sup>(1)</sup> - Roham Parsa <sup>(1)</sup> - David Gomez-cabrero <sup>(2)</sup> - Jesper Tegnér <sup>(2)</sup> - Fredrik Piehl <sup>(1)</sup> - Maja Jagodic <sup>(1)</sup>

Department Of Clinical Neuroscience, Karolinska Institute, Stockholm, Sweden <sup>(1)</sup> - Department Of Medicine, The Unit Of  
 Computational Medicine, Karolinska Institute, Stockholm, Sweden <sup>(2)</sup>

**COFFEE BREAK & POSTER SESSION | NEUROINFLAMMATION**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

**485 - AN IMPORTANT ROLE FOR PROKINETICIN 2 IN AUTOIMMUNE CNS DEMYELINATION**

Mhamad Abou-hamdan <sup>(1)</sup> - Massimo Costanza <sup>(1)</sup> - Elena Fontana <sup>(2)</sup> - Silvia Musio <sup>(1)</sup> - Marco Di Dario <sup>(3)</sup>  
 Cenzo Congiu <sup>(4)</sup> - Valentina Onnis <sup>(4)</sup> - Roberta Lattanzi <sup>(5)</sup> - Lucia Negri <sup>(5)</sup> - Pietro Luigi Poliani <sup>(2)</sup> - Cinthia Farina <sup>(3)</sup>  
 Gianfranco Balboni <sup>(4)</sup> - Lawrence Steinman <sup>(6)</sup> - Rosetta Pedotti <sup>(1)</sup>

Neuroimmunology And Neuromuscular Disorder Unit, Neurological Institute Foundation Irccs Carlo Besta, Milan, Italy <sup>(1)</sup> - Department  
 Of Pathology, University Of Brescia, Brescia, Italy <sup>(2)</sup> - Institute Of Experimental Neurology, San Raffaele Scientific Institute, Milan,  
 Italy <sup>(3)</sup> - Department Of Life And Environmental Sciences, Pharmaceutical, Pharmacological And Nutraceutical Sciences Unit,  
 University Of Cagliari, Cagliari, Italy <sup>(4)</sup> - Department Of Physiology And Pharmacology Vittorio Ersamer, Sapienza University Of  
 Rome, Rome, Italy <sup>(5)</sup> - Department Of Neurology, Stanford University, Stanford, United States <sup>(6)</sup>

**158 - EXPRESSION OF ADAMTS-9 IN THE CENTRAL NERVOUS SYSTEM IN MULTIPLE SCLEROSIS AND ITS RELATIONSHIP TO CLEAVAGE OF AGGECAN AND VERSICAN**

Esadawi Abuneeza <sup>(1)</sup> - Alison Cross <sup>(2)</sup> - Gail Haddock <sup>(2)</sup> - Rowena Bunning <sup>(3)</sup> - Nicola Woodroffe <sup>(4)</sup>

Phd Student, Sheffield Hallam University, Sheffield, United Kingdom <sup>(1)</sup> - Senior Lecturer In Biomedical Science, Sheffield Hallam  
 University, Sheffield, United Kingdom <sup>(2)</sup> - Principal Lecturer In Cell Biology, Sheffield Hallam University, Sheffield, United Kingdom <sup>(3)</sup>  
 Professor Of Neuroimmunology And Head Of The Bmrc, Sheffield Hallam University, Sheffield, United Kingdom <sup>(4)</sup>

**63 - TWO-PORE DOMAIN POTASSIUM CHANNELS ARE NOVEL TARGETS FOR AUTOIMMUNE MYOPATHIES BY INFLUENCING BASIC CELLULAR PARAMETERS IN MURINE MUSCLE CELLS.**

Ali Maisam Afzali - Stefan Bittner - Tobias Ruck - Alexander Herrmann - Sarah Glumm - Janette Iking  
 Heinz Wiendl - Sven G. Meuth

Department Of Neurology, University Hospital Münster, Münster, Germany

**263 - A ROLE FOR INFLAMMATION IN THE PROGRESSION OF AGE-RELATED HEARING LOSS**

Akosua Agyemang-prempeh Agyemang-prempeh <sup>(1)</sup> - Carl Verschuur Verschuur <sup>(1)</sup> - Tracey A Newman Newman <sup>(2)</sup>

Hearing And Balance Centre, Institute Of Sound And Vibration Research, University Of Southampton, Southampton, United Kingdom <sup>(1)</sup>  
 Institute For Life Sciences, Faculty Of Medicine, University Of Southampton, Southampton, United Kingdom <sup>(2)</sup>

**600 - DIET-INDUCED OBESITY ENHANCES THE SEVERITY OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

J. Jennifer Ahn <sup>(1)</sup> - Xavier Revelo <sup>(2)</sup> - Daniel A. Winer <sup>(2)</sup> - Shannon E. Dunn <sup>(2)</sup>

Department Of Immunology, University Of Toronto, Toronto, Canada <sup>(1)</sup> - Toronto General Research Institute, University Health  
 Network, Toronto, Canada <sup>(2)</sup>

**239 - BOTH CD4+ AND CD8+ T -CELL CLONES INFILTRATE THE BRAIN IN A CASE OF BILATERAL RASMUSSEN ENCEPHALITIS.**

Faiez Al Nimer

Neuroimmunology And Multiple Sclerosis Research, Department Of Neurology, University Hospital Zurich, Zurich, Switzerland

**132 - LOSS OF FUNCTION DUE TO NEUROINFLAMMATION: A ROLE FOR OXYGEN THERAPY?**

Mario Amatruda <sup>(1)</sup> - Alina Matis <sup>(1)</sup> - Maren Lindner <sup>(2)</sup> - Christopher Linington <sup>(2)</sup> - Kenneth Smith <sup>(1)</sup>

Institute Of Neurology, University College London, London, United Kingdom <sup>(1)</sup> - Institute Of Infection, Immunity And Inflammation, University Of Glasgow, Glasgow, United Kingdom <sup>(2)</sup>

**382 - ASSESSING OF ANTI-INFLAMMATORY EFFECT OF SMALL NETTLE' (URTICA URENS) INCREASING POLARITY EXTRACTS**

Sevki Arslan <sup>(1)</sup> - Gulsum Terzioglu <sup>(1)</sup> - Serkan Elcil <sup>(2)</sup> - Hasalettin Deligoz <sup>(2)</sup> - Alaattin Sen <sup>(1)</sup>

Department Of Biology, Pamukkale University, Denizli, Turkey <sup>(1)</sup> - Department Of Chemistry, Pamukkale University, Denizli, Turkey <sup>(2)</sup>

**345 - THE ROLE OF CCR6 IN ISCHEMIC STROKE**

Priyadharshini Arunachalam - Mathias Gelderblom - Tim Magnus

Department Of Neurology (experimental Research In Stroke And Inflammation -ersi ), Universitätsklinikum Hamburg-eppendorf, Hamburg, Germany

**334 - EFFECTS OF NUTRITION ON LEUCOCYTE INFILTRATION AND NEUROGENESIS AFTER STROKE IN AGED RATS**

Romy Baguhl <sup>(1)</sup> - Christy Joseph <sup>(2)</sup> - Theofilos Tsakmakides <sup>(1)</sup> - Alexander Dressel <sup>(1)</sup>

Department Of Neuroimmunology, Clinic Of Neurology, University Medicine Greifswald, Greifswald, Germany <sup>(1)</sup> - Department Of Pathology, University Medicine Greifswald, Greifswald, Germany <sup>(2)</sup>

**558 - DEFINING THE ROLE OF IL-23 IN AUTOIMMUNE NEUROINFLAMMATION**

Melania Balzarolo <sup>(1)</sup> - Andrew L. Croxford <sup>(1)</sup> - Tom Hartwig <sup>(1)</sup> - Pavel Pelczar <sup>(2)</sup> - Burkhard Becher <sup>(1)</sup>

Institute Of Experimental Immunology, University Of Zurich, Zurich, Switzerland <sup>(1)</sup> - Institute Of Laboratory Animal Science, University Of Zurich, Zurich, Switzerland <sup>(2)</sup>

**88 - A NOVEL CONNECTION OF AUTOPHAGY RELATED GENE 7 TO MULTIPLE SCLEROSIS AND EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Rasmus Berglund <sup>(1)</sup> - Melanie Thessen Hedreul <sup>(1)</sup> - Roham Parsa <sup>(2)</sup> - Petra Bergman <sup>(1)</sup> - Maja Jagodic <sup>(1)</sup>

Tomas Olsson <sup>(1)</sup> - Andre Ortlieb Guerreiro Cacaïs <sup>(1)</sup> - Jenny Link <sup>(3)</sup> - Mohsen Khademi <sup>(1)</sup> - Ingrid Kockum <sup>(3)</sup>

Juliane Becher <sup>(4)</sup> - Francesco Cecconi <sup>(4)</sup>

Dept. Of Clinical Neuroscience. Neuroimmunology Unit, Karolinska Institute, Stockholm, Sweden <sup>(1)</sup> - Dept. Of Clinical Neuroscience, Applied Immunology, Karolinska Institute, Stockholm, Sweden <sup>(2)</sup> - Dept. Of Clinical Neuroscience. Multiple Sclerosis Research Group, Karolinska Institute, Stockholm, Sweden <sup>(3)</sup> - Laboratory Of Molecular Neuroembryology, Irccs Fondazione, Santa Lucia, Rome, Italy <sup>(4)</sup>

**327 - CNS TISSUE RESPONSE TO INFLAMMATION**

Sabina Berl - Ari Waisman

Molecular Medicine, Johannes-gutenberg-university, Mainz, Germany

**635 - EFFECT OF NATALIZUMAB TREATMENT ON CIRCULATING CD4+CD62L+ T-CELLS IN MULTIPLE SCLEROSIS PATIENTS.**

Antonio Bertolotto <sup>(1)</sup> - Fabiana Marnetto <sup>(1)</sup> - Marzia Caldano <sup>(1)</sup> - Alessandra Lugaresi <sup>(2)</sup> - Michela Spadaro <sup>(1)</sup>

Aou San Luigi Gozaga, Clinical Neurobiology Unit, Regional Referring Multiple Sclerosis Center (cresm), Orbassano, Turin, Italy <sup>(1)</sup> Dept Neuroscience, Imaging And Clinical Sciences, University 'g. D'annunzio', Chieti, Italy <sup>(2)</sup>

**307 - NEUROPATHOLOGICAL EVALUATION OF FOUR DANISH CASES OF CLIPPERS: EVIDENCE OF GENERALIZED NEUROINFLAMMATION BUT NO PRE-LYMPHOMA**

Morten Blaabjerg <sup>(1)</sup> - Bjarne Winther Kristensen <sup>(2)</sup> - Daniel Kondziella <sup>(3)</sup> - Bjørg Morell Kernn-jespersen <sup>(3)</sup>

Mette Lindelof <sup>(4)</sup> - Zsolt Illes <sup>(1)</sup>

Department Of Neurology, Odense University Hospital, Odense, Denmark <sup>(1)</sup> - Department Of Pathology, Odense University Hospital, Odense, Denmark <sup>(2)</sup> - Department Of Neurology, Copenhagen University Hospital, Copenhagen, Denmark <sup>(3)</sup> - Department Of Neurology, Herlev Hospital, Herlev, Denmark <sup>(4)</sup>

**437 - SEX DEPENDENT INFLUENCES OF APOLIPOPROTEIN E ON THE EXPRESSION OF ATP-BINDING CASSETTE TRANSPORTERS DURING EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Anne Böhme - Lisa Schrewe - Ralf Gold - Andrew Chan

Department Of Neurology, Ruhr-universität Bochum, Bochum

**568 - MATERNAL OBESITY DECREASES GFAP EXPRESSION IN HYPOTHALAMIC ASTROCYTES FROM RAT PUPS**

Andreia Joaquim <sup>(1)</sup> - Cideli De Paula Coelho <sup>(1)</sup> - Maria De Fátima Monteiro Martins <sup>(1)</sup> - Elizabeth Teodorov <sup>(2)</sup>

Eduardo Fernandes Bondan <sup>(1)</sup> - Leoni Vilano Bonamin <sup>(1)</sup> - Maria Martha Bernanrdi <sup>(1)</sup>

University Paulista, Department Of Veterinary Medicine, São Paulo, Brazil <sup>(1)</sup> - Federal University Of Abc, Mathematics, Computing And Cognition Center, São Paulo, Brazil <sup>(2)</sup>

**18 - PROPENTOFYLLINE DECREASES GFAP IMMUNOREACTIVITY IN ASTROCYTES AFTER GLIOTOXIC INJURY IN THE RAT BRAINSTEM**

Eduardo Fernandes Bondan - Dossa Pietro Domingues

Department Of Environmental And Experimental Pathology, University Paulista, São Paulo, Brazil

**45 - PROPENTOFYLLINE DECREASES THE PRODUCTION OF TNF-ALPHA AND IL-1BETA IN THE RAT BRAINSTEM AFTER A GLIOTOXIC INJURY INDUCED BY ETHIDIUM BROMIDE**

Eduardo Fernandes Bondan

University Paulista, Department Of Veterinary Medicine, São Paulo, Brazil

**19 - PROPENTOFYLLINE INHIBITS LIPID PEROXIDATION AND IMPROVES OLIGODENDROCYTE REMYELINATION FOLLOWING GLIOTOXIC INJURY IN THE RAT BRAINSTEM**

Eduardo Fernandes Bondan <sup>(1)</sup> - Deborah Eileen Menezes Baliellas <sup>(2)</sup> - Caio Fernando Monteiro Gimenez <sup>(2)</sup> - Maria De Fátima Monteiro Martins <sup>(2)</sup> - Alvaro Augusto Feitosa Pereira <sup>(2)</sup> - Marcelo Paes Barros <sup>(2)</sup> - Sandra Castro Poppe <sup>(3)</sup>

Department Of Environmental And Experimental Pathology; University Paulista, Department Of Veterinary Medicine, University

Cruzeiro Do Sul, São Paulo, Brazil <sup>(1)</sup> - Department Of Veterinary Medicine, University Cruzeiro Do Sul, São Paulo, Brazil <sup>(2)</sup>

Department Of Veterinary Medicine, University Cruzeiro Do Sul, University Paulista, São Paulo, Brazil <sup>(3)</sup>

**47 - EPHRIN B1 AND B2 ARE ESSENTIAL FOR THE PATHOGENICITY AND MIGRATION CAPACITY OF TH17 CELLS IN EAE AND MS**

Bieke Broux - Luo Hongyu - Soufiane Ghannam - Catherine Larochelle - Wei Jin - Yan Hu - Xuehai Wang

Yujia Wang - Jianping Wu - Alexandre Prat

Crchum, Université De Montreal, Montreal, Canada

**407 - CHARACTERIZATION OF TH17 CELLS IN MULTIPLE SCLEROSIS PATIENTS AND HEALTHY CONTROLS**

Ulrike Bühler - René Gollan - Patrick Belikan - Frauke Zipp - Volker Siffrin

Department Of Neurology, Johannes Gutenberg University, Mainz, Germany

**138 - TIM-3 AND PD-1: REGULATORS OF ADAPTIVE IMMUNITY IN MULTIPLE SCLEROSIS**

Joachim Burman <sup>(1)</sup> - Emma Svensson <sup>(2)</sup> - Moa Fransson <sup>(2)</sup> - Angelica Loskog <sup>(2)</sup> - Sara Mangsbo <sup>(2)</sup>

Department Of Neuroscience, Uppsala University, Uppsala, Sweden <sup>(1)</sup> - Department Of Immunology, Genetics And Pathology,

Uppsala University, Uppsala, Sweden <sup>(2)</sup>

**299 - ACHIEVING SPECIFICITY IN THE GLIAL CELL RESPONSE TO THE GP130 CYTOKINES**

Meng-ping Hsu <sup>(1)</sup> - Ricardo Frausto <sup>(1)</sup> - Stefan Rose-john <sup>(2)</sup> - Iain L. Campbell <sup>(1)</sup>

School Of Molecular Bioscience, University Of Sydney, Sydney, Australia <sup>(1)</sup> - Department Of Biochemistry, University Of Kiel, Kiel, Germany <sup>(2)</sup>

**431 - GUT DYSBIOSIS AFFECTS EARLY INFLAMMATORY BRAIN RESPONSE TO THEILER'S MURINE ENCEPHALOMYELITIS VIRUS INFECTION**

Francisco J Carrillo-salinas <sup>(1)</sup> - Ana Feliú <sup>(1)</sup> - Miriam Mecha <sup>(1)</sup> - Leyre Mestre <sup>(2)</sup> - Antonio Alcamí <sup>(2)</sup> - Carmen Espejo <sup>(3)</sup>

Xavier Montalban <sup>(4)</sup> - Jose Carlos Álvarez-carmelo <sup>(5)</sup> - Luisa María Villar <sup>(5)</sup> - Carmen Guaza <sup>(1)</sup>

Neuroimmunology Group, Instituto Cajal, Csic, Madrid, Spain <sup>(1)</sup> - Centro De Biología Molecular Severo Ochoa, Csic-uam, Madrid,

Spain <sup>(2)</sup> - Servei De Neurologia-neuroimmunologia. Centre D'esclerosi Múltiple De Catalunya (cemcat), Vall D'hebron Institut De

Recerca (vhir), Hospital Universitari Vall D'hebron, Barcelona; Universitat Autònoma De Barcelona, 08193 Bellaterra (cerdanyola) <sup>(3)</sup>

Servei De Neurologia-neuroimmunologia. Centre D'esclerosi Múltiple De Catalunya (cemcat), Vall D'hebron Institut De Recerca (vhir),

Hospital Universitari Vall D'hebron, Barcelona; Universitat Autònoma De Barcelona, 08193 Bellaterra (cerdanyola) <sup>(4)</sup>

Departments Of Neurology And Immunology, Hospital Universitario Ramón Y Cajal, Madrid, Spain <sup>(5)</sup>

**208 - FASUDIL AMELIORATES DISEASE PROGRESSION IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS, ACTING POSSIBLY THROUGH IMMUNOMODULATION EFFECT**

Chun-yun Liu <sup>(1)</sup> - Shang-de Guo <sup>(1)</sup> - Jie-zhong Yu <sup>(1)</sup> - Yan-hua Li <sup>(1)</sup> - Hui Zhang <sup>(1)</sup> - Zhi Chai <sup>(2)</sup> - Qing Wang <sup>(2)</sup>  
Ling Feng <sup>(1)</sup> - Jian-jun Huang <sup>(3)</sup> - Qian-jin Feng <sup>(2)</sup> - Bao-guo Xiao <sup>(4)</sup> - Cun-gen Ma <sup>(2)</sup>

Institute Of Brain Science, Department Of Neurology, Medical School, Shanxi Datong University, Datong, China <sup>(1)</sup> - "2011" Collaborative Innovation Center/department Of Encephalopathy And National Major Clinical Department Of Ministry Of Health, Shanxi University Of Traditional Chinese Medicine, Taiyuan, China <sup>(2)</sup> - Department Of Neurosurgery, First Hospital, Datong Coalmine Group, Datong, China <sup>(3)</sup> - Institute Of Neurology, Huashan Hospital, Institutes Of Brain Science And State Key Laboratory Of Medical Neurobiology, Fudan University, Shanghai, China <sup>(4)</sup>

**397 - DISSECTING THE ROLE OF ALZHEIMER'S DISEASE SUSCEPTIBILITY LOCI IN PRIMARY HUMAN MONOCYTES: A COMPLEX INTERPLAY BETWEEN TREM1, TREM2 AND CD33**

Gail Chan

Center For Neurologic Diseases, Brigham And Women's Hospital, Boston, Ma, United States

**531 - CHARACTERIZATION OF MCAM CONTRIBUTION TO NEUROINFLAMMATION USING A NEW MURINE KNOCKOUT MODEL**

Marc Charabati

Centre De Recherche Du Centre Hospitalier De L'université De Montréal (crchum), Université De Montréal, Montreal, Canada

**226 - INFLUENCE OF EFFECTOR MOLECULES RELEASED BY TH1 AND TH17 CELLS ON GLIAL CELLS**

Prajeeth Chittappen Kandiylil <sup>(1)</sup> - Julius Kornisch <sup>(1)</sup> - Reza Khorooshi <sup>(2)</sup> - Henrik Toft-hansen <sup>(2)</sup> - Kirsten Löhr <sup>(3)</sup>  
Trevor Owens <sup>(2)</sup> - Jochen Huehn <sup>(3)</sup> - Martin Stangel <sup>(1)</sup>

Clinical Neuroimmunology And Neurochemistry, Department Of Neurology, Hannover Medical School, Hannover, Germany <sup>(1)</sup>  
Neurobiology, Institute Of Molecular Medicine, University Of Southern Denmark, Odense, Denmark <sup>(2)</sup> - Experimental Immunology, Helmholtz Centre For Infection Research, Braunschweig, Germany <sup>(3)</sup>

**246 - THE IMPACT OF NEUROINFLAMMATION ON TAU PATHOLOGY IN HEALTHY AGING AND NEURODEGENERATION**

Alexander. W. Collcutt - Jessica. L. Teeling - Ayodeji. A. Asuni

Centre For Biological Sciences, University Of Southampton, Southampton, United Kingdom

**367 - FINGOLIMOD MAY SUPPORT NEUROPROTECTION VIA BLOCKADE OF ASTROCYTE S1P AND CYTOKINE SIGNALING CASCADES IN MULTIPLE SCLEROSIS**

Emanuela Colombo <sup>(1)</sup> - Marco Di Dario <sup>(1)</sup> - Eleonora Capitolo <sup>(1)</sup> - Linda Chaabane <sup>(1)</sup> - Jia Newcombe <sup>(2)</sup>  
Gianvito Martino <sup>(1)</sup> - Cinthia Farina <sup>(1)</sup>

Institute Of Experimental Neurology (inspe), San Raffaele Scientific Institute, Milan, Italy <sup>(1)</sup> - Neuroresource, Ucl Institute Of Neurology, London, United Kingdom <sup>(2)</sup>

**102 - SHEDDING MICROVESICLES RELEASED BY A HUMAN MICROGLIAL CELL LINE (CHME-5): A GOOD PLATFORM FOR STUDYING THE BIOLOGY OF THE SYSTEM.**

Federico Colombo <sup>(1)</sup> - Annamaria Finardi <sup>(2)</sup> - Gabriella Racchetti <sup>(2)</sup> - Roberto Furlan <sup>(2)</sup>

San Raffaele Scientific Institute, Università Vita-salute San Raffaele, Milano, Italy <sup>(1)</sup>

San Raffaele Scientific Institute, Ospedale San Raffaele, Milano, Italy <sup>(2)</sup>

**420 - NEUTROPHILS INDUCE ALZHEIMER'S-LIKE DISEASE VIA LFA-1-INTEGRIN AND NEUTROPHIL EXTRACELLULAR TRAPS**

Elena Zenaro <sup>(1)</sup> - Enrica Pietronigro <sup>(1)</sup> - Vittorina Della Bianca <sup>(1)</sup> - Gennj Piacentino <sup>(1)</sup> - Alessio Montresor <sup>(1)</sup>  
Ermanna Turano <sup>(2)</sup> - Bruno Bonetti <sup>(2)</sup> - Gabriela Constantin <sup>(1)</sup>

Department Of Pathology And Diagnostics, University Of Verona, Verona, Italy <sup>(1)</sup> - Department Of Neurological Sciences, University Of Verona, Verona, Italy <sup>(2)</sup>

**484 - GENE EXPRESSION ANALYSIS OF HISTAMINE RECEPTORS IN PERIPHERAL BLOOD MONONUCLEAR CELLS FROM CLINICALLY-ISOLATED SYNDROME AND MULTIPLE SCLEROSIS PATIENTS**

Massimo Costanza <sup>(1)</sup> - Marco Di Dario <sup>(2)</sup> - Cinthia Farina <sup>(2)</sup> - Rosetta Pedotti <sup>(1)</sup>

Neuroimmunology And Neuromuscular Disorder Unit, Neurological Institute Foundation Irccs C. Besta, Milan, Italy <sup>(1)</sup> - Institute Of Experimental Neurology (inspe), San Raffaele Scientific Institute, Milan, Italy <sup>(2)</sup>

**573 - INFLAMMATION-INDUCED DEPRESSION: EVIDENCE AND MECHANISMS**

Robert Dantzer - Elisabeth Vichaya - Adam Walker

Md Anderson Cancer Center, University Of Texas, Houston, United States

**499 - PERSISTENT ACIDOSIS AFFECTS ELECTROPHYSIOLOGICAL TRANSMISSION AND SYNAPTIC HOMEOSTASIS OF NEURONAL NETWORKS**Roberta De Ceglia <sup>(1)</sup> - Linda Chaabane <sup>(1)</sup> - Emilia Biffi <sup>(2)</sup> - Andrea Brgamaschi <sup>(1)</sup> - Giancarlo Ferrigno <sup>(2)</sup> - Stefano Amadio <sup>(3)</sup> - Ubaldo Del Carro <sup>(3)</sup> - Stefano Taverna <sup>(4)</sup> - Giancarlo Comi <sup>(5)</sup> - Veronica Bianchi <sup>(6)</sup> - Patrizia D'adamo <sup>(6)</sup> Gianvito Martino <sup>(1)</sup> - Andrea Menegon <sup>(7)</sup> - Luca Muzio <sup>(1)</sup>

Neuroimmunology Unit, Institute Of Experimental Neurology (inspe), Division Of Neuroscience, San Raffaele Scientific Institute, Milan, Italy <sup>(1)</sup> - Neuroengineering And Medical Robotics Laboratory, Department Of Electronics, Information And Bioengineering, Politecnico Di Milano, Milan, Italy <sup>(2)</sup> - Neurophysiology Unit, Division Of Neuroscience, San Raffaele Scientific Institute, Milan, Italy <sup>(3)</sup> Department Of Neuroscience And Brain Technologies, Istituto Italiano Di Tecnologia, Genoa, Italy <sup>(4)</sup> - Department Of Neurology, Institute Of Experimental Neurology (inspe), Vita Salute San Raffaele University, Milan, Italy <sup>(5)</sup> - Dulbecco Telethon Institute, Division Of Neuroscience, San Raffaele Scientific Institute, Milan, Italy <sup>(6)</sup> - Advanced Light And Electron Microscopy Bio-imaging Centre, Experimental Imaging Centre, San Raffaele Scientific Institute, Milan, Italy <sup>(7)</sup>

**416 - CYTOKINE RELEASE INHIBITOR DRUG, CRID3, INHIBITS THE NLRP3 INFLAMMASOME IN GLIA.**Colin Dempsey <sup>(1)</sup> - Rebecca Coll <sup>(2)</sup> - Avril Robertson <sup>(3)</sup> - Matthew Cooper <sup>(3)</sup> - Luke O'Neill <sup>(2)</sup> - Marina Lynch <sup>(1)</sup>

Trinity College Institute Of Neuroscience, University Of Dublin, Trinity College, Dublin, Ireland <sup>(1)</sup> - Trinity Biomedical Sciences Institute, University Of Dublin, Trinity College, Dublin, Ireland <sup>(2)</sup> - Institute For Molecular Bioscience, University Of Queensland, Brisbane, Australia <sup>(3)</sup>

**637 - IN THE SEARCH FOR MOLECULAR HALLMARKS OF NEUROINFLAMMATION IN BRAIN DISEASES**Richard Reynolds <sup>(1)</sup> - Owain W Howell <sup>(2)</sup> - Roberta Magliozzi <sup>(3)</sup> - David T. Dexter <sup>(1)</sup> - Pascal Durrenberger <sup>(1)</sup>

Imperial College London, Division Of Brain Sciences, Hammersmith Campus, Burlington Danes Building, Du Cane Road, London, United Kingdom <sup>(1)</sup> - Swansea University, Department Of Neurology And Molecular Neuroscience, Institute Of Life Sciences, Swansea, United Kingdom <sup>(2)</sup> - University Of Rome, Department Of Cell Biology And Neuroscience, Istituto Superiore Di Sanita, Rome, Italy <sup>(3)</sup>

**322 - ROLE OF EARLY ACTIVATED MICROGLIA DURING ONSET OF AUTOIMMUNE OPTIC NEURITIS**

Richard Fairless - Sarah K. Williams - Aleksandar Stojic - Ricarda Diem

Department Of Neuro-oncology, University Of Heidelberg, Heidelberg, Germany

**411 - NEW INSIGHTS ABOUT ANKRD55 IN THE EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS MODEL OF MULTIPLE SCLEROSIS**Ana Feliú <sup>(1)</sup> - Miriam Mecha <sup>(1)</sup> - Francisco Javier Carrillo-salinas <sup>(1)</sup> - Nerea Ugidos <sup>(2)</sup> - Koen Vandebroek <sup>(3)</sup> Carmen Guaza <sup>(1)</sup>

Csic, Cajal Institute, Madrid, Spain <sup>(1)</sup> - Upv/ehu, University Of The Basque Country, Leioa, Spain <sup>(2)</sup> - Upv/ehu, University Of The Basque Country. Ikerbasque, Basque Foundation Of Science, Leioa. Bilbao, Spain <sup>(3)</sup>

**483 - LACK OF NG2 EXPRESSION ON IMMUNE CELLS AND OLIGODENDROCYTES PROGENITOR CELLS MODULATES EAE PHENOTYPE**Giovanni Ferrara <sup>(1)</sup> - Sara Morando <sup>(1)</sup> - Mariella Errede <sup>(2)</sup> - Francesco Girolamo <sup>(2)</sup> - Valentina Boldrin <sup>(3)</sup> - Simona Casazza <sup>(1)</sup> - Nicolò Panini <sup>(3)</sup> - Eugenio Erba <sup>(3)</sup> - Roberto Perris <sup>(4)</sup> - Caterina Bendotti <sup>(3)</sup> - Tiziana Mennini <sup>(3)</sup> Livia Garzetti <sup>(5)</sup> - Roberto Furlan <sup>(5)</sup> - Nicole Kerlero De Rosbo <sup>(1)</sup> - Daniela Virgintino <sup>(2)</sup> - Antonio Uccelli <sup>(1)</sup>

Department Of Neurosciences, Rehabilitation Ophthalmology, Genetics And Maternal-infantile Sciences,, University Of Genoa, Genova, Italy <sup>(1)</sup> - Department Of Basic Medical Sciences, Human Anatomy And Histology Unit, University Of Bari School Of Medicine, University Of Bari, Bari, Italy <sup>(2)</sup> - Department Of Biochemistry And Molecular Pharmacology,, Mario Negri Institute, Milan, Italy <sup>(3)</sup> Department Of Genetics, Microbiology And Anthropology,, University Of Parma, Parma, Italy <sup>(4)</sup> - Institute Of Experimental Neurology, Division Of Neuroscience, San Raffaele Scientific Institute, Milan, Italy <sup>(5)</sup>

**448 - EARLY IMMUNE RESPONSE IN MPTP -INDUCED NEUROINFLAMMATION IN THE MOUSE MYENTERIC PLEXUS AND CENTRAL NERVOUS SYSTEM**Catherine Fontaine-lavallée <sup>(1)</sup> - Benoît Aubé <sup>(1)</sup> - Mélissa Côté <sup>(1)</sup> - Steve Lacroix <sup>(2)</sup> - Denis Soulet <sup>(3)</sup>

Centre De Recherche Du Chu De Québec - Pavillon Chul, Laval University, Quebec, Canada <sup>(1)</sup> - Faculté De Médecine, Département De Médecine Moléculaire, Laval University, Quebec, Canada <sup>(2)</sup> - Faculté De Médecine, Département De Psychiatrie Et Neurosciences, Laval University, Quebec, Canada <sup>(3)</sup>



#### **34 - THE ROLE OF REFLEX CONTROL OF IMMUNITY IN THE ANTICONVULSIVE EFFECTS OF VAGUS NERVE STIMULATION**

Federica Frigerio - Mattia Maroso - Teresa Ravizza - Valentina Iori - Alberto Pauletti - Annamaria Vezzani  
Department Of Neuroscience, Irccs-mario Negri Institute For Pharmacological Research, Milan, Italy

#### **71 - DICAM: A NOVEL MOLECULAR EFFECTOR IN NEUROINFLAMMATION**

Soufiane Ghannam - Jorge Ivan Alvarez - Hania Kebir - Lyne Bourbonnière - Alexandre Prat <sup>(1)</sup>  
Crchum, Université De Montreal, Montreal, Canada <sup>(1)</sup>

#### **311 - POSSIBLE ROLE OF MIRNAS IN THE MODULATION OF NEUROINFLAMMATION BY MESENCHYMAL STEM CELLS**

Debora Giunti - Benedetta Parodi - Chiara Marini - Nicole Kerlero De Rosbo - Antonio Uccelli  
Department Of Neurosciences, Rehabilitation, Ophthalmology, Genetics, Maternal And Child Health, University Of Genoa, Genoa, Italy

#### **150 - TWO-PHOTON MICROSCOPY AND NEUROINFLAMMATION: CROSSTALK BETWEEN T CELLS AND NEURONS**

Rene Gollan - Ulrike Bühler - Catherine Larochelle - Frauke Zipp - Volker Siffrin  
Neurology Department, Johannes Gutenberg University Medical Center, Mainz, Germany

#### **203 - MYELIN SPECIFIC T CELLS INDUCE INFLAMMASOME ACTIVATION IN MICROGLIA IN ZONES OF AXONAL DEGENERATION**

Manuela Marion Grebing <sup>(1)</sup> - Helle Hvilsted Nielsen <sup>(2)</sup> - Christina Fenger <sup>(1)</sup> - Bettina Hjelm Clausen <sup>(1)</sup> - Christian Ulrich Von Linstow <sup>(1)</sup> - Katrine Tækker Jensen <sup>(1)</sup> - Martin Söderman <sup>(1)</sup> - Kate Lykke Lambertsen <sup>(1)</sup> - Mads Thomassen <sup>(3)</sup> - Torben A. Kruse <sup>(3)</sup> - Bente Finsen <sup>(1)</sup>  
Institute For Molecular Medicine, University Of Southern Denmark, Odense C, Denmark <sup>(1)</sup> - Department Of Neurology, Odense University Hospital, Odense C, Denmark <sup>(2)</sup> - Department Of Clinical Genetics, Odense University Hospital, Odense C, Denmark <sup>(3)</sup>

#### **522 - THE PATHOPHYSIOLOGICAL ROLE OF CYTOTOXIC CD8 T CELLS IN SUSAC SYNDROME**

Urvashi Bhatia - Tilman Schneider-hohendorf - Anita Posevitz-fejfar - Nicholas Schwab - Sven G. Meuth  
Heinz Wiendl - Ilka Kleffner - Catharina C. Gross  
Department Of Neurology, University Hospital Münster, Münster, Germany

#### **106 - IMPACT OF MINOCYCLINE AND ESTABLISHED MS MEDICATIONS ON EMMPRIN, A NEW FACTOR IMPLICATED IN MS IMMUNOPATHOGENESIS**

Jennifer N Hahn - Janet Wang - Claudia Silva - V. Wee Yong  
Hotchkiss Brain Institute, University Of Calgary, Calgary, Canada

#### **599 - NEUROPROTECTION BY BLOCKING CXCR2 AFTER CEREBRAL ISCHEMIA IN HYPERCHOLESTEROLEMIC MICE**

Josephine Herz <sup>(1)</sup> - Pascal Sabellek <sup>(2)</sup> - Dirk M. Hermann <sup>(2)</sup> - Thorsten R. Doeppner <sup>(2)</sup>  
Department Of Neurology And Department Of Pediatrics I, University Hospital Essen, Essen, Germany <sup>(1)</sup> - Department Of Neurology, University Hospital Essen, Essen, Germany <sup>(2)</sup>

#### **52 - INVESTIGATING THE ROLE OF CYSTATIN C IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS.**

Vahid Hoghooghi <sup>(1)</sup> - Shalina S Ousman <sup>(2)</sup>  
Faculty Of Medicine, Department Of Neuroscience, University Of Calgary, Calgary, Canada <sup>(1)</sup> - Faculty Of Medicine, Department Of Clinical Neurosciences, University Of Calgary, Calgary, Canada <sup>(2)</sup>

#### **153 - SODIUM CHLORIDE-HIGH DIET PROMOTES PRO-INFLAMMATORY MACROPHAGE ACTIVATION AND AGGRAVATES CENTRAL NERVOUS SYSTEM AUTOIMMUNITY**

Stephanie Hücke <sup>(1)</sup> - Melanie Eschborn <sup>(1)</sup> - Annika Engbers <sup>(1)</sup> - Heinz Wiendl <sup>(1)</sup> - Luisa Klotz <sup>(1)</sup>  
Department Of Neurology, University Of Muenster, Muenster, Germany <sup>(1)</sup>

#### **507 - THE BILE ACID RECEPTOR FXR CONTROLS CNS AUTOIMMUNITY IN AN IL-10-DEPENDENT FASHION**

Stephanie Hücke <sup>(1)</sup> - Martin Herold <sup>(1)</sup> - Marie Liebmann <sup>(1)</sup> - Anita Posevitz-fejfar <sup>(1)</sup> - Tanja Kuhlmann <sup>(2)</sup> - Heinz Wiendl <sup>(1)</sup> - Luisa Klotz <sup>(1)</sup>  
Department Of Neurology, University Hospital Münster, Münster, Germany <sup>(1)</sup> - Institute Of Neuropathology, University Hospital Münster, Münster, Germany <sup>(2)</sup>



### **265 - IMMUNE COMPLEXES AND LIPOPOLYSACCHARIDE INDUCE MICROGLIAL ACTIVATION AND RETINAL INFLAMMATION: IMPLICATIONS FOR AGE-RELATED MACULAR DEGENERATION**

Paul Ibbett <sup>(1)</sup> - Salome Murinello <sup>(1)</sup> - Andrew J. Lotery <sup>(2)</sup> - V. Hugh Perry <sup>(1)</sup> - Jessica L. Teeling <sup>(1)</sup>

Centre For Biological Sciences, University Of Southampton, Southampton, United Kingdom <sup>(1)</sup> - Clinical Neurosciences, University Of Southampton, Southampton, United Kingdom <sup>(2)</sup>

### **207 - INFLAMMATORY RESPONSES AND PLAQUE DEPOSITION IN EARLY STAGE ALZHEIMER'S PATHOLOGY IN MICE**

Laura Ilkjær - Alicia Babcock - Christa Løth Myhre - Bente Fiinsen

Institute Of Molecular Medicine, University Of Southern Denmark, Odense, Denmark

### **268 - LEUKEMIA INHIBITORY FACTOR SHIFTS THE IMMUNE BALANCE TOWARDS REGULATORY T CELLS**

Kris Janssens <sup>(1)</sup> - Chris Van Den Haute <sup>(2)</sup> - Veerle Baekelandt <sup>(2)</sup> - Jack Van Horsen <sup>(3)</sup> - Bart Vanwijmeersch <sup>(1)</sup>

Piet Stinissen <sup>(1)</sup> - Jerome Hendriks <sup>(1)</sup> - Helena Slaets <sup>(1)</sup> - Niels Hellings <sup>(1)</sup>

Biomedical Research Institute, Hasselt University, Diepenbeek, Belgium <sup>(1)</sup> - Laboratory For Neurobiology And Gene Therapy, Katholieke Universiteit Leuven, Leuven, Belgium <sup>(2)</sup> - Department Of Molecular Cell Biology And Immunology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands <sup>(3)</sup>

### **430 - FUNCTIONAL ANALYSES OF TRANSMIGRATED MONOCYTE-DERIVED CD123+ DENDRITIC CELLS ACROSS THE INFLAMED BLOOD-BRAIN BARRIER ENDOTHELIUM**

Takahiro Katayama - Akiko Nakano - Igal Ifergan - Hania Kebir - Marc-andré Lécuyer - Catherine Larochelle

Jorge Ivan Alvarez - Alexandre Prat

Chum Research Center, Université De Montréal, Montréal, Canada

### **534 - IBUDIDAST INHIBITS IL-17**

Kiyokazu Kawabe - Masaru Yanagihashi - Ken Ikeda - Yasuo Iwasaki

Department Of Neurology, Toho University Omori Medical Centre, Tokyo, Japan

### **259 - DIETARY TRYPTOPHAN IS REQUIRED FOR CNS INFILTRATION OF ENCEPHALITOGENIC T CELLS**

Melanie Keil <sup>(1)</sup> - Maren Paulsen <sup>(2)</sup> - Jana Sonner <sup>(1)</sup> - Iris Oezen <sup>(1)</sup> - Theresa Schumacher <sup>(1)</sup> - Jürgen G. Okun <sup>(3)</sup>

Albrecht Stenzinger <sup>(4)</sup> - Philip Rosenstiel <sup>(2)</sup> - Wolfgang Wick <sup>(5)</sup> - Michael Platten <sup>(5)</sup>

Ccu Neuroimmunology And Brain Tumor Immunology, German Cancer Research Center, Heidelberg, Germany <sup>(1)</sup> - Institute Of Clinical Molecular Biology, University Kiel, Kiel, Germany <sup>(2)</sup> - Ccu Metabolic Center, Children's Hospital, Heidelberg, Germany <sup>(3)</sup> - Department Of Pathology, University Heidelberg, Heidelberg, Germany <sup>(4)</sup> - Department Of Neurooncology, University Hospital Heidelberg, Heidelberg, Germany <sup>(5)</sup>

### **535 - REGULATION OF RE-MYELINATION AND/OR MYELIN REPAIR BY METHYL CPG BINDING PROTEIN 2 AND BRAIN DERIVED NEUROTROPHIC FACTOR IN AN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS MODEL OF MULTIPLE SCLEROSIS**

Tina Khorshid Ahmad - Crystal Acosta - Claudia Cortes - Michael Namaka

University Of Manitoba, Faculty Of Pharmacy, Winnipeg, Canada

### **362 - CLINICAL AND RADIOLOGICAL CHARACTERISTICS OF SIX PATIENTS WITH TUMEFACTIVE DEMYELINATING LESIONS**

Munire Kilinc Toprak - Seda Kibaroglu - Eda Derle - Ulku Sibel Benli

Baskent University Faculty Of Medicine, Baskent University Faculty Of Medicine, Ankara, Turkey

### **493 - TILTING THE BALANCE OF M1/M2 MICROGLIAL PHENOTYPES: INHIBITION OF EZH2 LEADS TO DECREASED M1 AND ENHANCED M2 PHENOTYPE**

Edward Koellhoffer - Rodney Ritzel - Jeremy Grenier - Louise McCullough

University Of Connecticut Health Center, University Of Connecticut Health Center, Farmington, United States

### **131 - AMELIORATING EFFECTS OF HCA 3551, ALPHA 4 INTEGRIN ANTAGONIST, ON THEILER'S MURINE ENCEPHALOMYELITIS VIRUS (TMEV) -INDUCED DEMYELINATING DISEASE**

Yuta Hirano <sup>(1)</sup> - Kunitoshi Kobayashi <sup>(1)</sup> - Hiroki Tomiki <sup>(1)</sup> - Motoki Ichikawa <sup>(2)</sup> - Chung-sung Koh <sup>(3)</sup>

Department Of Biomedical Laboratory Sciences, Graduate School Of Medicine, Shinshu University, Matsumoto, Japan <sup>(1)</sup> - School Of Health Sciences, Shinshu University, Matsumoto, Japan <sup>(2)</sup> - Department Of Biomedical Laboratory Sciences, School Of Health Sciences, Shinshu University, Matsumoto, Japan <sup>(3)</sup>

**538 - DIFFERENTIAL PHOSPHORYLATION OF ALPHA B-CRYSTALLIN IN ASTROCYTES AND OLIGODENDROCYTES SUGGESTS A DIVERSITY IN ITS BIOLOGICAL FUNCTION**

Hedwich F Kuipers <sup>(1)</sup> - Jane Yoon <sup>(1)</sup> - Johannes Winderl <sup>(1)</sup> - Jack Van Horssen <sup>(2)</sup> - May H Han <sup>(1)</sup> - Theo D Palmer <sup>(1)</sup> - Lawrence Steinman <sup>(1)</sup>

Stanford University, Stanford University Medical Center, Stanford, Ca, United States <sup>(1)</sup> - Vu University, Vu University Medical Center, Amsterdam, Netherlands <sup>(2)</sup>

**566 - PHARMACO-MODULATION OF INFLAMMATORY RESPONSE INDUCED BY THE KV1.3 CHANNEL LIGANDS**

Fatima Laraba-djebari - Zahida Taibi-djennah

Usthb, Faculty Of Biological Sciences, Laboratory Of Cellular And Molecular, Usthb, Algiers, Algeria

**254 - NEUROINFLAMMATION MEDIATED BY NF-KAPPAB ACTIVATION IN ASTROCYTES INDUCES NON-CELL-AUTONOMOUS PURKINJE CELL DEGENERATION**

Michael Lattke <sup>(1)</sup> - Alexander Magnutzki <sup>(1)</sup> - Paul Walther <sup>(2)</sup> - Boris Ferger <sup>(3)</sup> - Thomas Wirth <sup>(1)</sup> - Bernd Baumann <sup>(1)</sup>

Institute Of Physiological Chemistry, Ulm University, Ulm, Germany <sup>(1)</sup> - Central Facility For Electron Microscopy, Ulm University, Ulm, Germany <sup>(2)</sup> - Cns Diseases Research, Boehringer Ingelheim Pharma Gmbh & Co. Kg, Biberach A.d. Riss, Germany <sup>(3)</sup>

**280 - MICROGLIA PHENOTYPES IN THE SPINAL CORDS OF AGING AND OBESE MICE: COMORBIDITY WITH ALTERED SENSORY RESPONSE**

Seunghwan Lee - Yasi Wu - Xiang Qun Shi - Ji Zhang

The Alan Edwards Centre For Research On Pain, Mcgill University, Montreal, Canada

**458 - MESENCHYMAL STEM CELLS OVEREXPRESSING IL-13 DECREASE LESION SIZE AND DEMYELINATION AFTER SPINAL CORD INJURY**

Dearbhaile Dooley <sup>(1)</sup> - Evi Lemmens <sup>(1)</sup> - Tim Vangansewinkel <sup>(1)</sup> - Stefanie Lemmens <sup>(1)</sup> - Nathalie De Vocht <sup>(2)</sup>

Debbie Le Blon <sup>(2)</sup> - Peter Ponsaerts <sup>(2)</sup> - Sven Hendrix <sup>(1)</sup>

Biomedical Research Institute, Hasselt University, Diepenbeek, Belgium <sup>(1)</sup> - Laboratory Of Experimental Hematology, Vaccine And Infectious Disease Institute (vaxinfecio), University Of Antwerp, Antwerp, Belgium <sup>(2)</sup>

**297 - MICROGLIAL HETEROGENEITY IN A MOUSE MODEL OF AMYOTROPHIC LATERAL SCLEROSIS: A SINGLE-CELL TRANSCRIPTOME ANALYSIS**

Coral-ann Lewis <sup>(1)</sup> - Preetheeban Thavaneetharajah <sup>(1)</sup> - Charles Krieger <sup>(2)</sup> - Fabio Rossi <sup>(1)</sup>

Biomedical Research Centre, University Of British Columbia, Vancouver, Canada <sup>(1)</sup> - Department Of Biomedical Physiology And Kinesiology, Simon Fraser University, Burnaby, Canada <sup>(2)</sup>

**341 - THE NUCLEAR RECEPTOR NUR77 RESTRICTS T CELL RESPONSES AND LIMITS CENTRAL NERVOUS SYSTEM AUTOIMMUNITY**

Marie Liebmann <sup>(1)</sup> - Stephanie Hucke <sup>(1)</sup> - Tanja Kuhlmann <sup>(2)</sup> - Heinz Wiendl <sup>(1)</sup> - Luisa Klotz <sup>(1)</sup>

Department Of Neurology, University Of Muenster, Muenster, Germany <sup>(1)</sup> - Department Of Neuropathology, University Of Muenster, Muenster, Germany <sup>(2)</sup>

**162 - UP-REGULATION OF DORSAL ROOT GANGLIA BDNF AND TRKB RECEPTOR IN INFLAMMATORY PAIN**

Ya-tin Lin <sup>(1)</sup> - Long-sun Ro <sup>(2)</sup> - Hung-li Wang <sup>(1)</sup> - Jin-chung Chen <sup>(1)</sup>

Graduate Institute Of Biomedical Sciences, Chang Gung University, Taoyuan, Taiwan, Province Of China <sup>(1)</sup> - Department Of Neurology, Chang Gung Memorial Hospital, Taoyuan, Taiwan, Province Of China <sup>(2)</sup>

**526 - DYSREGULATION OF THE HOMEOSTATIC MICROGLIA SIGNATURE IN GERM-FREE MICE**

Charlotte Madore <sup>(1)</sup> - Zain Fanek <sup>(1)</sup> - David Greco <sup>(1)</sup> - Olga Kinner <sup>(1)</sup> - Vladimir Yelisseyev <sup>(2)</sup> - Lynn Bry <sup>(2)</sup>

Oleg Butovsky <sup>(1)</sup>

Center For Neurologic Diseases, Brigham And Women's Hospital/harvard Medical School, Boston, United States <sup>(1)</sup>

Department Of Pathology, Brigham And Women's Hospital/harvard Medical School, Boston, United States <sup>(2)</sup>

**528 - HIV-1 VPR ACTIVATES THE NLRP3 INFLAMMASOME IN PRIMARY HUMAN MICROGLIA**

Manmeet Mamik <sup>(1)</sup> - Jesse Chisholm <sup>(1)</sup> - Brienne Mckenzie <sup>(2)</sup> - John Walsh <sup>(2)</sup> - Christopher Power <sup>(1)</sup>

Department Of Medicine, University Of Alberta, Edmonton, Canada <sup>(1)</sup> - Department Of Medical Microbiology And Immunology, University Of Alberta, Edmonton, Canada <sup>(2)</sup>

### **325 - DIFFERENTIAL POLARIZATION BETWEEN RESIDENT MICROGLIA AND BRAIN INFILTRATING MACROPHAGES IN MOUSE MODELS OF ALZHEIMER'S DISEASE**

Elodie Martin - Bertrand Fontaine - Cecile Delarasse

Brain And Spine Institute (icm), Hopital Pitié-salpêtrière, Paris, France

### **376 - THE CENTRAL NERVOUS SYSTEM MICROENVIRONMENT IMPRINTS MICROGLIAL INABILITY TO SWITCH FROM PRO- TO ANTI- INFLAMMATORY PHENOTYPE**

Orit Matcovitch <sup>(1)</sup> - Merav Cohen <sup>(1)</sup> - Eyal David <sup>(2)</sup> - Zohar Barnett-itzhaki <sup>(2)</sup> - Hadas Keren-shaul <sup>(2)</sup>

Ronnie Blecher-gonen <sup>(2)</sup> - Diego Adhemar Jaitin <sup>(2)</sup> - Antonio Sica <sup>(3)</sup> - Ido Amit <sup>(2)</sup> - Michal Schwartz <sup>(1)</sup>

Department Of Neurobiology, Weizmann Institute Of Science, Rehovot, Israel <sup>(1)</sup> - Department Of Immunology, Weizmann Institute Of Science, Rehovot, Israel <sup>(2)</sup> - Humanitas Clinical And Research Center, Rozzano, Milan, Italy, Discaff, University Of Piemonte Orientale A. Avogadro, Novara, Italy <sup>(3)</sup>

### **579 - PERIPHERAL INFLAMMATION AFFECTS THE CENTRAL NERVOUS SYSTEM AND BIOLOGY OF THE BRAIN**

Alison Mccoll <sup>(1)</sup> - Carolyn Thomson <sup>(1)</sup> - Gerard Graham <sup>(1)</sup> - Jonathan Cavanagh <sup>(2)</sup>

Institute Of Infection, Immunity & Inflammation, University Of Glasgow, Glasgow, United Kingdom <sup>(1)</sup> - Institute Of Neuroscience & Psychology, University Of Glasgow, Glasgow, United Kingdom <sup>(2)</sup>

### **82 - ACTIVATION OF MULTIPLE INFLAMMASOMES WITHIN THE CENTRAL NERVOUS SYSTEM DURING EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS AND MULTIPLE SCLEROSIS**

Brienne Mckenzie <sup>(1)</sup> - Stacey Reinke <sup>(2)</sup> - William Branton <sup>(2)</sup> - Jian-qiang Lu <sup>(3)</sup> - Christopher Power <sup>(2)</sup>

Department Of Medical Microbiology And Immunology, University Of Alberta, Edmonton, Canada <sup>(1)</sup>

Department Of Medicine, University Of Alberta, Edmonton, Canada <sup>(2)</sup> - Department Of Laboratory Medicine And Pathology, University Of Alberta, Edmonton, Canada <sup>(3)</sup>

### **351 - FTY720 PROTECTS AGAINST PATHOLOGY ASSOCIATED WITH INFECTION-INDUCED T CELL MIGRATION INTO THE BRAIN IN A MOUSE MODEL OF ALZHEIMER'S DISEASE**

Roisin Mcmanus <sup>(1)</sup> - Mieszko Wilk <sup>(2)</sup> - Sarah Higgins <sup>(2)</sup> - Kingston Mills <sup>(2)</sup> - Marina Lynch <sup>(1)</sup>

Trinity College Institute Of Neuroscience, Trinity College Dublin, Dublin, Ireland <sup>(1)</sup> - School Of Biochemistry And Immunology, Trinity College Dublin, Dublin, Ireland <sup>(2)</sup>

### **541 - NEW PLAYERS FOR THE ALTERNATIVE ACTIVATION OF MICROGLIA: BEYOND ARGINASE-1**

Miriam Mecha <sup>(1)</sup> - Ana Feliú <sup>(1)</sup> - Francisco Javier Carrillo-salinas <sup>(1)</sup> - Ainhua Rueda-zubiaurre <sup>(2)</sup>

Silvia Ortega-gutierrez <sup>(2)</sup> - Maria Luz López Rodríguez <sup>(2)</sup> - Carmen Guaza <sup>(1)</sup>

Instituto Cajal, Csic, Madrid, Spain <sup>(1)</sup> - Departamento De Química Orgánica I, Facultad De Ciencias Químicas, Universidad Complutense De Madrid, Madrid, Spain <sup>(2)</sup>

### **267 - THE EFFECTS OF FUMARIC ACID ESTERS ON INFLAMMATORY RESPONSES IN HUMAN MICROGLIA.**

Mackenzie Michell-robinson <sup>(1)</sup> - Craig Moore <sup>(2)</sup> - Jack Antel <sup>(1)</sup>

Montreal Neurological Institute, McGill University, Montreal, Canada <sup>(1)</sup> - Health Sciences Centre, Memorial University, St. John's, Canada <sup>(2)</sup>

### **375 - SERUM FROM APP/PS1 MICE NEGATIVELY IMPACTS ON BBB INTEGRITY LEADING TO ENHANCED MACROPHAGE INFILTRATION AND EXACERBATION OF INFLAMMATION**

Aedin M. Minogue <sup>(1)</sup> - Raasay S. Jones <sup>(1)</sup> - James P. Barrett <sup>(1)</sup> - Marina A. Lynch <sup>(1)</sup>

Trinity College Institute Of Neuroscience, Trinity College Dublin, Dublin, Ireland <sup>(1)</sup>

### **51 - IMPAIRMENT OF THalamo-CORTICAL NETWORK ACTIVITIES IN ANIMAL MODELS OF MULTIPLE SCLEROSIS**

Venu Narayanan <sup>(1)</sup> - Cerina Manuela <sup>(1)</sup> - Kerstin Göbel <sup>(1)</sup> - Theimo Daldrop <sup>(2)</sup> - Patrick Meuth <sup>(2)</sup>

Thomas Seidenbecher <sup>(2)</sup> - Thomas Budde <sup>(2)</sup> - Hans-christian Pape <sup>(2)</sup> - Sven Meuth <sup>(1)</sup>

Neuropathophysiology, Albert-schweitzer Campus 1, Gebäude A10, 48149 Münster, Germany, Westfälische Wilhelms Universität Münster, Muenster, Germany <sup>(1)</sup> - Institute For Physiology1, Westfälische Wilhelms Universität Münster, Muenster, Germany <sup>(2)</sup>

### **619 - RADICAL ANTIOXIDANTS LIMIT BLOOD-BRAIN BARRIER ACTIVATION AND AMELIORATE DISEASE IN MODELS OF MULTIPLE SCLEROSIS**

Sarah Neil - Elena Cavazzi - Negar Farzam-kia - Jacqueline Quandt

Brain Research Centre, University Of British Columbia, Vancouver, Canada

**66 - SUPPRESSION OF SPINAL CORD INJURY ON HUMAN MESENCHYMAL STEM/PROGENITOR CELLS (MSCS) MEDIATED BY PITUITARY ADENYLATE CYCLASE ACTIVATING POLYPEPTIDE (PACAP)**

Hirokazu Ohtaki <sup>(1)</sup> - Tomomi Tsumuraya <sup>(1)</sup> - Atsushi Sato <sup>(1)</sup> - Zhifang Xu <sup>(1)</sup> - Kazuyuki Miyamoto <sup>(1)</sup> - Jun Watanabe <sup>(1)</sup> Tomoya Nakamachi <sup>(2)</sup> - Hitoshi Hashimoto <sup>(3)</sup> - Seiji Shioda <sup>(1)</sup>

Department Of Anatomy, Showa University School Of Medicine, Tokyo, Japan <sup>(1)</sup> - Laboratory Of Regulatory Biology, Graduate School Of Science And Engineering, University Of Toyama, Toyama, Japan <sup>(2)</sup> - Laboratory Of Molecular Neuropharmacology, Graduate School Of Pharmaceutical Sciences, Osaka University, Osaka, Japan <sup>(3)</sup>

**197 - NORADRENALINE-MEDIATED PROTECTION AGAINST TNF-ALPHA-INDUCED NEURONAL ATROPHY**

Eimear O'Neill - Jennifer Day - Thomas Connor - Andrew Harkin

Trinity College Institute Of Neuroscience, Trinity College Dublin, Dublin, Ireland

**505 - INTERFERON BETA 1A TREATMENT INDUCES THE PRESENCE OF AUTOACTIVE ANTIBODIES (ARAB) IN PATIENTS WITH RELAPSING-REMITTING MULTIPLE SCLEROSIS (RRMS)**

Chrysostomos Papastergios <sup>(1)</sup> - Emmanouil Karamouzos <sup>(1)</sup> - Ioannis Markakis <sup>(1)</sup> - Christiana Kaliouli <sup>(2)</sup> Pappa Eleni <sup>(2)</sup> - Georgios Gekas <sup>(1)</sup>

Neurology Clinic, General Hospital Of Nikaia-piraeus "ag. Panteleimon", Nikaia-piraeus, Greece <sup>(1)</sup> - Immunology Department, General Hospital Of Nikaia-piraeus "ag. Panteleimon", Nikaia-piraeus, Greece <sup>(2)</sup>

**313 - MONOMETHYL FUMARATE INHIBITS THE NFKB PATHWAY AND PRO-INFLAMMATORY CYTOKINE EXPRESSION IN MICROGLIA THROUGH HCA2 SIGNALING VIA THE AMPK/SIRT AXIS**

Benedetta Parodi <sup>(1)</sup> - Christian Cordano <sup>(1)</sup> - Sara Morando <sup>(1)</sup> - Alberto Bragoni <sup>(1)</sup> - Debora Giunti <sup>(1)</sup> - Cesare Usai <sup>(2)</sup> Diego Centonze <sup>(3)</sup> - Nicole Kerlero De Rosbo <sup>(1)</sup> - Robert H. Scannevin <sup>(4)</sup> - Antonio Uccelli <sup>(1)</sup>

Neuroimmunology Unit - Department Of Neurosciences, Ophthalmology And Genetics, University Of Genoa, Genoa, Italy <sup>(1)</sup> - Institute Of Biophysics, National Research Council, University Of Genoa, Genoa, Italy <sup>(2)</sup> - Department Of Neurosciences, Tor Vergata University Of Rome, Rome, Italy <sup>(3)</sup> - Biogen Idec, 14 Cambridge Center, Cambridge, Ma, United States <sup>(4)</sup>

**159 - THE ROLE OF NFATC2 IN CHRONIC AUTOIMMUNE NEUROINFLAMMATION**

Magdalena Paterka <sup>(1)</sup> - Valerie Staudt <sup>(2)</sup> - Eva Reuter <sup>(1)</sup> - Frauke Zipp <sup>(1)</sup> - Tobias Bopp <sup>(2)</sup>

Department Of Neurology, University Medical Center Mainz, Mainz, Germany <sup>(1)</sup> - Institute For Immunology, University Medical Center Mainz, Mainz, Germany <sup>(2)</sup>

**247 - THE ROLE OF T CELL-ACTIVATION IN NEUROMYELITIS OPTICA LESION FORMATION**

Maria Pohl

Department Of Neuroimmunology, Center For Brain Research, Medical University Vienna, Vienna, Austria

**68 - OXYSTEROLS PROMOTE ENCEPHALITOGENTIC CD4+ T CELLS MIGRATION DURING NEUROINFLAMMATION**

Fanny Chalmin <sup>(1)</sup> - Viviane Rochemont <sup>(2)</sup> - Carla Lippens <sup>(2)</sup> - Doron Merkler <sup>(2)</sup> - Stéphanie Hugues <sup>(2)</sup> - Caroline Pot <sup>(1)</sup>

Department Of Neurology, Geneva University Hospitals, Geneva, Switzerland <sup>(1)</sup> - Department Of Pathology And Immunology, Geneva University, Geneva, Switzerland <sup>(2)</sup>

**490 - IFNBETA SECRETED BY MICROGLIA MEDIATES CLEARANCE OF MYELIN DEBRIS ASSOCIATED WITH CNS AUTOIMMUNITY**

Ann-kathrin Pulm <sup>(1)</sup> - Magdalena Kocur <sup>(1)</sup> - Reiner Schneider <sup>(2)</sup> - Jens Bauer <sup>(1)</sup> - Sonja Kropp <sup>(1)</sup> - Micheal Gliem <sup>(2)</sup> Jens Ingwersen <sup>(2)</sup> - Judith Alferink <sup>(3)</sup> - Timour Prozorovski <sup>(2)</sup> - Orhan Aktas <sup>(2)</sup> - Stefanie Scheu <sup>(1)</sup>

Institute Of Medical Microbiology And Hospital Hygiene, Heinrich-heine University, Düsseldorf, Germany <sup>(1)</sup> - Department Of Neurology, Heinrich-heine Universität, Düsseldorf, Germany <sup>(2)</sup> - Department Of Psychiatry And Psychotherapy, University Of Muenster, Germany, University Of Münster, Münster <sup>(3)</sup>

**240 - FORMATION OF MENINGEAL TERTIARY LYMPHOID-LIKE STRUCTURES FOLLOWING ACUTE SPINAL CORD INJURY SUPPORTS CHRONIC INFLAMMATION IN THE INJURED CENTRAL NERVOUS SYSTEM**

Catarina Raposo - Merav Cohen - Michal Schwartz

Weizmann Institute Of Science, Department Of Neurobiology, Rehovot, Israel

**481 - CHANGES IN MICROGLIAL PROLIFERATION RATE IN GFAP-IL10TG MICE FOLLOWING PERFORANT PATHWAY TRANSECTION**

Mireia Recasens Torné <sup>(1)</sup> - Beatriz Almolda <sup>(1)</sup> - Ian Campbell <sup>(2)</sup> - Berta Gonzalez <sup>(1)</sup> - Bernardo Castellano <sup>(1)</sup>

Department Of Cell Biology, Physiology And Immunology, Institute Of Neurosciences, Autonomous University Of Barcelona, Bellaterra, Spain <sup>(1)</sup> - School Of Molecular Bioscience, University Of Sydney, Nsw, Australia, Sydney, Australia <sup>(2)</sup>

### 166 - GESTATIONAL EXPOSURE TO BISPHENOL-A INCREASES SUSCEPTIBILITY OF ADULT MICE TO DEVELOPMENT OF EAE

James Rogers <sup>(1)</sup> - Claudia Silva <sup>(1)</sup> - Luanne Metz <sup>(1)</sup> - Olga Kovalchuk <sup>(2)</sup> - V. Wee Yong <sup>(1)</sup>

Hotchkiss Brain Institute, University Of Calgary, Calgary, Canada <sup>(1)</sup> - Department Of Biological Sciences, University Of Lethbridge, Lethbridge, Canada <sup>(2)</sup>

### 198 - THE ROLE OF MICROGLIA AND INFLAMMATION IN AN ANIMAL MODEL OF ALS

Chiara Rossi <sup>(1)</sup> - Annamaria Finardi <sup>(2)</sup> - Andrea Cugurra <sup>(1)</sup> - Andrea Bergamaschi <sup>(2)</sup> - Roberto Furlan <sup>(2)</sup>

Angelo Quattrini <sup>(3)</sup> - Giancarlo Comi <sup>(4)</sup> - Gianvito Martino <sup>(2)</sup> - Luca Muzio <sup>(2)</sup>

Neuroimmunology Unit, Division Of Neuroscience, Institute Of Experimental Neurology (inspe), Università Vita Salute San Raffaele, Milano, Italy <sup>(1)</sup> - Neuroimmunology Unit, Division Of Neuroscience, Institute Of Experimental Neurology (inspe), Ospedale San Raffaele, Milano, Italy <sup>(2)</sup> - Experimental Pathology Unit, Division Of Neuroscience, Institute Of Experimental Neurology, Ospedale San Raffaele, Milano, Italy <sup>(3)</sup> - Division Of Neuroscience, Institute Of Experimental Neurology (inspe), Ospedale San Raffaele, Milano <sup>(4)</sup>

### 26 - THE NKG2D SIGNALING PATHWAY IS A POSSIBLE THERAPEUTIC TARGET FOR AUTOIMMUNE MYOSITIS.

Tobias Ruck - Ali Maisam Afzali - Stefan Bittner - Sven G. Meuth - Heinz Wiendl

Department Of Neurology, University Of Münster, Münster, Germany

### 452 - CHARACTERIZATION OF TETRASPANIN-2 EXPRESSING CELLS IN THE MOUSE

Christina Ruland <sup>(1)</sup> - Julia Patzig <sup>(2)</sup> - Katharina Lahl <sup>(3)</sup> - Veronika Lukacs-kornek <sup>(4)</sup> - Arezoo Fattahi-mehr <sup>(1)</sup>

Stefanie Scheu <sup>(5)</sup> - Andreas Zimmer <sup>(6)</sup> - Tanja Kuhlmann <sup>(7)</sup> - Hauke Werner <sup>(2)</sup> - Irmgard Förster <sup>(8)</sup>

Tim Sparwasser <sup>(9)</sup> - Judith Alferink <sup>(1)</sup>

Department Of Psychiatry, University Hospital Münster, Münster, Germany <sup>(1)</sup> - Department Of Neurogenetics, Max Planck Institute Of Experimental Medicine, Göttingen, Germany <sup>(2)</sup> - Laboratory Of Immunology And Vascular Biology, Department Of Pathology, Stanford University School Of Medicine, Stanford, California, United States <sup>(3)</sup> - Department Of Medicine Ii, Saarland University Medical Center, Homburg, Germany <sup>(4)</sup> - Institute Of Medical Microbiology And Hospital Hygiene, University Of Düsseldorf, Düsseldorf, Germany <sup>(5)</sup> - Institute Of Molecular Psychiatry, University Of Bonn, Bonn, Germany <sup>(6)</sup> - Institute Of Neuropathology, University Hospital Münster, Münster, Germany <sup>(7)</sup> - Department Of Immunology And Environment, Life & Medical Sciences Institute (limes), University Of Bonn, Bonn, Germany <sup>(8)</sup> - Institute Of Infection Immunology, Twincore, Centre For Experimental And Clinical Infection Research, Hannover, Germany <sup>(9)</sup>

### 405 - RGC-32 REGULATES TGF- BETA INDUCED EXTRACELLULAR MATRIX EXPRESSION IN REACTIVE ASTROCYTES

Cosmin Tegla <sup>(1)</sup> - Cornelia Cudrici <sup>(1)</sup> - Dallas Boodhoo <sup>(1)</sup> - Alvaro Martin <sup>(1)</sup> - Adam Sugarman <sup>(1)</sup> - Jacob Danoff <sup>(1)</sup>

Violeta Rus <sup>(2)</sup> - Horea Rus <sup>(1)</sup>

University Of Maryland, School Of Medicine, Dept. Neurology, Baltimore, United States <sup>(1)</sup> - University Of Maryland, School Of Medicine, Dept. Internal Medicine, Baltimore, United States <sup>(2)</sup>

### 205 - AGE-SPECIFIC SUSCEPTIBILITY TO NEUROINFLAMMATION DURING POST-NATAL DEVELOPMENT

Inês Sá-pereira <sup>(1)</sup> - Yvonne Couch <sup>(1)</sup> - Daniel C. Anthony <sup>(1)</sup> - Helen B. Stolp <sup>(2)</sup>

Experimental Neuropathology, Department Of Pharmacology, University Of Oxford, Oxford, United Kingdom <sup>(1)</sup>

Centre For The Developing Brain, Department Of Perinatal Imaging & Health, King's College London, London, United Kingdom <sup>(2)</sup>

### 59 - R-FLURBIPROFEN ATTENUATES EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS IN MICE

Katja Schmitz <sup>(1)</sup> - Natasja Debruin <sup>(2)</sup> - Philipp Bishay <sup>(1)</sup> - Julia Männich <sup>(1)</sup> - Annett Häussler <sup>(1)</sup> - Nerea Ferreirós <sup>(1)</sup>

Jörn Lötsch <sup>(1)</sup> - Alfred Ultsch <sup>(3)</sup> - Michael J. Parnham <sup>(2)</sup> - Gerd Geisslinger <sup>(1)</sup> - Irmgard Tegeder <sup>(1)</sup>

Pharmazentrum Frankfurt, Goethe University Hospital, Institute Of Clinical Pharmacology, Frankfurt, Germany <sup>(1)</sup> - Project Group Translational Medicine And Pharmacology (ime-tmp), Fraunhofer Institute Of Molecular Biology And Applied Ecology, Frankfurt, Germany <sup>(2)</sup> - Databionics Research Group, University Of Marburg, Frankfurt, Germany <sup>(3)</sup>

### 339 - ANTI-NEUROINFLAMMATORY EFFECT OF BUTANOLIC SUBEXTRACT OF CAPPARIS OVATA WATER EXTRACT USED AS AN ALTERNATIVE AND COMPLEMENTARY TREATMENT FOR MULTIPLE SCLEROSIS

Alaattin Sen <sup>(1)</sup> - Gulacti Topcu <sup>(2)</sup> - Ozden Ozgun <sup>(1)</sup> - Ufuk Kolak <sup>(3)</sup> - Isil Hacibekiroglu <sup>(4)</sup> - Gurbet Celik <sup>(1)</sup>

Sevki Arslan <sup>(1)</sup>

Biology Department, Faculty Of Arts & Sciences, Pamukkale University, Denizli, Turkey <sup>(1)</sup> - Department Of Pharmacognosy & Phytochemistry, Faculty Of Pharmacy, Bezmialem Vakif University, Istanbul, Turkey <sup>(2)</sup> - Department Of Analytical Chemistry, Faculty Of Pharmacy, Istanbul University, Istanbul, Turkey <sup>(3)</sup> - Department Of Analytical Chemistry, Faculty Of Pharmacy, Bezmialem Vakif University, Istanbul, Turkey <sup>(4)</sup>

**117 - ENHANCED LEVELS OF IL-27 AND IL-27R IN THE CENTRAL NERVOUS SYSTEM OF MULTIPLE SCLEROSIS PATIENTS**

Vincent S  n  cal <sup>(1)</sup> - Diane Beauseigle <sup>(1)</sup> - Raphael Schneider <sup>(1)</sup> - Craig Moore <sup>(2)</sup> - Alexandre Prat <sup>(1)</sup>

Jia Newcombe <sup>(3)</sup> - Samuel Ludwin <sup>(4)</sup> - Jack P. Antel <sup>(2)</sup> - Nathalie Arbour <sup>(1)</sup>

Research Center-chum, Universit   De Montr  al, Montr  al, Canada <sup>(1)</sup> - Montreal Neurological Institute, McGill University, Montr  al, Canada <sup>(2)</sup> - Ucl Institute Of Neurology, University College London, London, United Kingdom <sup>(3)</sup> - Department Of Neuropathology, Queen's University, Kingston, Canada <sup>(4)</sup>

**451 - PROINFLAMMATORY MONOCYTE PRODUCTION AND DISTRIBUTION ARE MODULATED BY ALPHA7 AND ALPHA9 NICOTINIC ACETYLCHOLINE RECEPTORS**

Alain Simard <sup>(1)</sup> - Wei Jiang <sup>(2)</sup> - Barbara Morley <sup>(3)</sup>

Department Of Chemistry And Biochemistry And Centre De Formation M  dicale Du Nouveau-brunswick, Universit   De Moncton, Moncton, Canada <sup>(1)</sup> - Neurology Department, Tianjin Medical University General Hospital, Tianjin, China <sup>(2)</sup> - Center For Hereditary Communication Disorders, Boys Town National Research Hospital, Omaha, United States <sup>(3)</sup>

**157 - IMPAIRED REMISSION FROM AUTOIMMUNE NEUROINFLAMMATION UPON T CELL-SPECIFIC KNOCKOUT OF THE STRESS KINASE GCN2**

Jana Sonner <sup>(1)</sup> - Melanie Keil <sup>(1)</sup> - Tobias Lanz <sup>(1)</sup> - Iris Oezen <sup>(1)</sup> - Theresa Schumacher <sup>(1)</sup> - Felix Sahm <sup>(2)</sup>

Wolfgang Wick <sup>(3)</sup> - Michael Platten <sup>(3)</sup>

Ccu Neuroimmunology And Brain Tumor Immunology, German Cancer Research Center, Heidelberg, Germany <sup>(1)</sup> - Department Of Neuropathology, University Hospital Heidelberg, Heidelberg, Germany <sup>(2)</sup> - Department Of Neurooncology, University Hospital Heidelberg, Heidelberg, Germany <sup>(3)</sup>

**112 - ROLE OF 5-LIPOXYGENASE IN THE INFLAMED CNS**

Hong Qiu

Department Of Dermatology, University Of California, Sacramento, United States

**110 - PLATELETS PROMOTE PATHOGENIC T CELL DIFFERENTIATION IN MS AND EAE**

Sarah Christin Starossom <sup>(1)</sup> - Tatyana Veremeyko <sup>(2)</sup> - Howard L Weiner <sup>(1)</sup> - Eugene D. Ponomarev <sup>(1)</sup>

Center For Neurologic Diseases, Brigham And Womens Hospital, Harvard Medical School, Boston, United States <sup>(1)</sup>

School Of Biomedical Sciences, Chinese University Of Hong Kong, Hong Kong, Hong Kong <sup>(2)</sup>

**264 - CHANGES IN CHONDROITIN SULFATE PROTEOGLYCANS IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Erin L. Stephenson - James A. Rogers - Michael B. Keough - V. Wee Yong

Hotchkiss Brain Institute, University Of Calgary, Alberta, Canada

**520 - NICOTINE ACETYLCHOLINE RECEPTORS MODULATE BONE MARROW-DERIVED MONOCYTE DIFFERENTIATION**

St  phanie St-pierre <sup>(1)</sup> - Patrick Roy <sup>(1)</sup> - Wei Jiang <sup>(2)</sup> - Camille Champigny <sup>(1)</sup> - Alain R. Simard <sup>(1)</sup>

Universit   De Moncton, Universit   De Moncton, Moncton, Canada <sup>(1)</sup> - Tianjin Medical University, General Hospital, Tianjin, China <sup>(2)</sup>

**524 - HUMAN B CELL AND GLIAL CELL INTERACTIONS: IMPLICATIONS TO THE COMPARTMENTALIZED CNS INFLAMMATION OF MULTIPLE SCLEROSIS (MS)**

Hanane Touil <sup>(1)</sup> - Craig Stephen Moore <sup>(2)</sup> - Rui Li <sup>(2)</sup> - Antonia Kobert <sup>(2)</sup> - Luke Healy <sup>(2)</sup> - Alexandre Prat <sup>(3)</sup>

Jennifer L. Gommerman <sup>(4)</sup> - Jack Antel <sup>(5)</sup> - Amit Bar-or <sup>(6)</sup>

Montreal Neurological Institut (mni), McGill University, Montreal, Canada <sup>(1)</sup> - Montreal Neurological Institute, McGill University, Montreal, Canada <sup>(2)</sup> - Centre De Recherche Du Centre Hospitalier De L'universit   De Montreal, Universit   De Montreal, Montreal, Canada <sup>(3)</sup> - Department Of Immunology, University Of Toronto,, University Of Toronto, Toronto, Canada <sup>(4)</sup> - Montreal Neurological Institute, McGill University, Montreal, Canada <sup>(5)</sup> - Montreal Neurological Institut, McGill University, Montreal, Canada <sup>(6)</sup>

**193 - EMERGING ROLES FOR NEUROPEPTIDES IN NEURO-IMMUNE REGULATION IN AMYOTROPHIC LATERAL SCLEROSIS: LESSONS FROM THE SUPEROXIDE DISMUTASE 1-G93A MOUSE MODEL**

Eberhard Weihe - Cornelia Ringer - Burkhard Schuetz

Institute Of Anatomy & Cell Biology, Philipps-university-marburg, Marburg, Germany



### **61 - POSTOPERATIVE DELIRIUM IN ELDERLY HIP FRACTURE PATIENTS: PREOPERATIVE CSF PROTEOME SUGGESTS A NEUROINFLAMMATORY RESPONSE**

Dunja Westhoff <sup>(1)</sup> - Joost Witlox <sup>(2)</sup> - Inge Cm Hoogland <sup>(1)</sup> - Corneli Van Aalst <sup>(3)</sup> - Leo Koenderman <sup>(3)</sup>

David J Van Westerloo <sup>(4)</sup> - Diederik Van De Beek <sup>(5)</sup> - Willem A Van Gool <sup>(6)</sup>

Neuroinfection Amsterdam, Academic Medical Center / University Of Amsterdam, Amsterdam, Netherlands <sup>(1)</sup>

Department Of Geriatrics, Medical Center Alkmaar, Alkmaar, Netherlands <sup>(2)</sup> - Department Of Respiratory Medicine, University

Medical Center Utrecht / University Of Utrecht, Utrecht, Netherlands <sup>(3)</sup> - Department Of Intensive Care Medicine, Leiden University

Medical Center / University Of Leiden, Leiden, Netherlands <sup>(4)</sup> - Neuroinfection Amsterdam, Academic Medical Center / University

Of Amsterdam, Amsterdam, Netherlands <sup>(5)</sup> - Department Of Neurology, Academic Medical Center / University Of Amsterdam,

Amsterdam, Netherlands <sup>(6)</sup>

### **120 - INNATE CELL MODULATOR MIS416 SUPPRESSES CNS DISEASE IN EAE**

Madeleine White <sup>(1)</sup> - Gill Webster <sup>(2)</sup> - Anne La Flamme <sup>(1)</sup>

School Of Biological Sciences, Victoria University Of Wellington, Wellington, New Zealand <sup>(1)</sup> - Innate Immunotherapeutics, Innate

Immunotherapeutics, Auckland, New Zealand <sup>(2)</sup>

### **176 - REDUCED LEVEL OF SIALYLATED IGG ANTIBODY IN THE CSF OF PATIENTS WITH MULTIPLE SCLEROSIS**

Tara Curley <sup>(1)</sup> - Tiffany Pointon <sup>(1)</sup> - Hayden Collins <sup>(1)</sup> - Kathryn Dennison <sup>(1)</sup> - Gina Im <sup>(1)</sup> - Michael Graner <sup>(2)</sup>

David Wagner <sup>(3)</sup> - Xiaoli Yu <sup>(1)</sup>

School Of Medicine, Neurology, University Of Colorado, Aurora, Co, United States <sup>(1)</sup> - School Of Medicine, Neurosurgery, University Of

Colorado, Aurora, Co, United States <sup>(2)</sup> - School Of Medicine, Webb-waring Center, University Of Colorado, Aurora, Co, United States <sup>(3)</sup>

### **572 - ANTI-CD73 ANTIBODIES ARE SUFFICIENT TO PREVENT RATHER THAN TREAT EXPERIMENTAL AUTOIMMUNE NEURITIS**

Hongliang Zhang <sup>(1)</sup> - Wei Wu <sup>(2)</sup> - Xiujuan Wu <sup>(1)</sup> - Quo Vadis <sup>(3)</sup>

Neuroscience Center, Department Of Neurology, The First Hospital Of Jilin University, Changchun, China <sup>(1)</sup>

Department Of Neurosurgery, The First Hospital Of Jilin University, Changchun, China <sup>(2)</sup>

Medical School, Harvard University, Massachusetts, United States <sup>(3)</sup>

### **25 - COMPARATIVE STUDY ON FULMINANT AND SPORADIC GUILLAIN-BARRÉ SYNDROME IN NORTHEAST CHINA**

Ying Wang <sup>(1)</sup> - Guihong Li <sup>(2)</sup> - Siyu Yang <sup>(2)</sup> - Xiaoyi Gu <sup>(2)</sup> - Xinyu Li <sup>(2)</sup> - Mingyang Liu <sup>(2)</sup> - Xiujuan Wu <sup>(1)</sup>

Xiaokun Wu <sup>(1)</sup> - Hongliang Zhang <sup>(1)</sup>

Neuroscience Center, Department Of Neurology, The First Hospital Of Jilin University, Changchun, China <sup>(1)</sup> - Norman Bethune Health

Science Center, Jilin University, Changchun, China <sup>(2)</sup>

### **569 - INDUCING ALTERNATIVELY ACTIVATED MACROPHAGES (M2) AMELIORATE EXPERIMENTAL AUTOIMMUNE NEURITIS IN TOLL-LIKE RECEPTOR 2 DEFICIENT MICE**

Hongliang Zhang <sup>(1)</sup> - Wei Wu <sup>(2)</sup> - Xiujuan Wu <sup>(1)</sup> - Quo Vadis <sup>(3)</sup>

Neuroscience Center, Department Of Neurology, The First Hospital Of Jilin University, Changchun, China <sup>(1)</sup> - Department Of

Neurosurgery, The First Hospital Of Jilin University, Changchun, China <sup>(2)</sup> - Medical School, Harvard University, Massachusetts,

United States <sup>(3)</sup>

### **571 - TOLL-LIKE RECEPTOR 4 DEFICIENCY AMELIORATES EXPERIMENTAL AUTOIMMUNE NEURITIS BY DOWNREGULATING CLASSICALLY ACTIVATED MACROPHAGES (M1)**

Hongliang Zhang <sup>(1)</sup> - Wei Wu <sup>(2)</sup> - Xiujuan Wu <sup>(1)</sup> - Quo Vadis <sup>(3)</sup>

Neuroscience Center, Department Of Neurology, The First Hospital Of Jilin University, Changchun, China <sup>(1)</sup> - Department Of

Neurosurgery, The First Hospital Of Jilin University, Changchun, China <sup>(2)</sup> - Medical School, Harvard University, Massachusetts,

United States <sup>(3)</sup>

---

## **TECHNOLOGY TALK TRANSLATION IN MS RESEARCH**

16:45 - 17:30 PLENARY ROOM (KONGRESS SAAL)

Chair: Alexander Flügel

### **16:45 TRANSLATION OF GENETIC FINDINGS IN MS**

Lars Fugger

## **DAY 4** Wednesday | November 12<sup>th</sup> 2014

---

### GENERAL MECHANISMS OF INFLAMMATION

08:15 - 09:30 PLENARY ROOM (KONGRESS SAAL)

**Chairs:** Gianvito Martino, Amit Bar-Or

**08:15        MOLECULAR BASIS FOR THE POST-ISCHEMIC INFLAMMATION IN THE BRAIN**  
AKIHIKO YOSHIMURA

**08:53        THE ROLE OF DISTINCT EFFECTOR T CELL SUBSETS IN CNS AUTOIMMUNE DISEASE**  
JOAN GOVERMAN

---

### COFFEE BREAK

09:30 - 10:00 POSTERHALL (RHEINFOYER)

---

### CROSSTALK OF THE IMMUNE AND NERVOUS SYSTEM II

10:00 - 11:45 ROOM A (KONGRESS SAAL)

**Chairs:** Bente Finsen, Detlef Schuppan

**10:00        INNATE IMMUNITY AND CNS INFLAMMATION**  
Samia J. Khoury

**10:23        SITES OF BBB DAMAGE**  
Ingo Bechmann

**10:45        ANTIGEN ENCAPSULATED BIODEGRADABLE PLG NANOPARTICLES FOR TOLEROGENIC TREATMENT OF AUTOIMMUNE DISEASE - MECHANISMS AND CLINICAL PROSPECTS**  
Stephen Miller

**11:08        THE MYELOID SIDE OF THE BRAIN**  
Marco Prinz

**11:30        142 - DECIPHERING THE ROLE OF ENDOGENOUS NEURAL STEM/PROGENITOR CELLS IN EXPERIMENTAL SPINAL CORD INJURY TO IDENTIFY NEW THERAPEUTIC TARGETS**  
Antonio Tomasso <sup>(1)</sup> - Melania Cusimano <sup>(2)</sup> - Elena Brambilla <sup>(2)</sup> - Gianvito Martino <sup>(2)</sup>  
Vita-salute San Raffaele University, San Raffaele Scientific Institute, Milan, Italy <sup>(1)</sup> - Neuroimmunology Unit, Division Of Neuroscience, Institute Of Experimental Neurology (inspe), San Raffaele Scientific Institute, Milan, Italy <sup>(2)</sup>

---

### T CELLS IN NEUROIMMUNE DISEASES

10:00 - 11:45 ROOM B (GUTENBERGSAAL 1)

**Chairs:** Jon Laman, Frauke Zipp

**10:00        POSITIVE AND NEGATIVE SIGNALS OF IL-17 IN THE INDUCTION OF CNS INFLAMMATION**  
Ari Waisman

**10:23        PLASTICITY OF TH17 CELLS IN CNS AUTOIMMUNITY**  
Thomas Korn

- 10:45 **TH17 CELLS IN THE INDUCTION OF CNS AUTOIMMUNITY**  
Vijay Kuchroo
- 11:08 **S1P SIGNALING IN CNS AUTOIMMUNITY**  
May Han
- 11:30 **160 - INTRAVITAL IMAGING OF T CELL ACTIVATION IN THE CNS DURING AUTOIMMUNITY**  
Naoto Kawakami <sup>(1)</sup> - Marija Pesic <sup>(1)</sup> - Marsilius Mues <sup>(2)</sup> - Ingo Bartholomäus <sup>(2)</sup>  
Nikolaos Kyratsous <sup>(1)</sup> - Hartmut Wekerle <sup>(2)</sup>  
Institute Of Clinical Neuroimmunology, Ludwig-maximilians University Munich, Munich, Germany <sup>(1)</sup> -  
Neuroimmunology, Max-planck Institute Of Neurobiology, Martinsried, Germany <sup>(2)</sup>

## ALZHEIMER'S DISEASE AND MICROGLIA CELLS

10:00 - 11:45 ROOM C (GUTENBERGSAAL 2)

Chairs: Monica Carson, Dimitrios Karussis

- 10:00 **PROBING MICROGLIA FUNCTIONS IN CONTEXT**  
Steffen Jung
- 10:23 **THE ROLE OF CENTRAL (MICROGLIA) AND PERIPHERAL (MONOCYTES) INNATE IMMUNITY IN THE PATHOGENESIS AND TREATMENT OF ALZHEIMER'S DISEASE**  
Howard Weiner
- 10:45 **INNATE IMMUNE ACTIVATION IN ALZHEIMER'S DISEASE**  
Michael Heneka
- 11:08 **MICROGLIA ACTIONS IN ALZHEIMER'S DISEASE**  
Frank Heppner
- 11:30 **189 - AGING-INDUCED IMMUNOLOGICAL SIGNATURE OF THE BRAIN'S CHOROID PLEXUS NEGATIVELY REGULATES NEUROGENESIS AND COGNITIVE FUNCTION**  
Aleksandra Deczkowska <sup>(1)</sup> - Kuti Baruch <sup>(1)</sup> - Eyal David <sup>(2)</sup> - Joseph M. Castellano <sup>(3)</sup>  
Omer Miller <sup>(1)</sup> - Alexander Kertser <sup>(1)</sup> - Tamara Berkutzki <sup>(1)</sup> - Zohar Itzhaki <sup>(2)</sup> - Dana Bezalel <sup>(2)</sup>  
Tony Wyss-coray <sup>(3)</sup> - Ido Amit <sup>(2)</sup> - Michal Schwartz <sup>(1)</sup>  
Department Of Neurobiology, Weizmann Institute Of Science, Rehovot, Israel <sup>(1)</sup> - Department Of Immunology,  
Weizmann Institute Of Science, Rehovot, Israel <sup>(2)</sup> - Department Of Neurology And Neurological Sciences, Stanford  
University School Of Medicine, Stanford, United States <sup>(3)</sup>

## LUNCH BREAK

12:00 - 13:00 POSTERHALL (RHEINFOYER)

## THE IMMUNOLOGY LECTURE

13:00 - 13:45 PLENARY ROOM (KONGRESS SAAL)

Chair: Ari Waisman

- 13:00 **CYTOKINES: HOW NEUROIMMUNOLOGY TRANSFORMED INFLAMMATION RESEARCH**  
Burkhard Becher

---

## HERTIE SPONSORED: AUTOIMMUNITY IN THE CNS

13:45 - 15:15 ROOM A (KONGRESS SAAL)

Chair: Orhan Aktas

- 13:45      **INTRODUCTION**  
Eva Koch
- 13:50      **MICROGLIA ARE UNIQUE TISSUE PHAGOCYTES WITH HIGH SELF-RENEWING CAPACITY**  
Julia Bruttger
- 14:07      **IMMUNE-MEDIATED NEURODEGENERATION IN EAE AND MS**  
Volker Siffrin
- 14:24      **CORTICAL INVOLVEMENT IN MULTIPLE SCLEROSIS: AN INSIGHT INTO NEURONAL PATHOLOGY**  
Doron Merkler
- 14:41      **MECHANISMS OF EARLY NEURODEGENERATION IN AUTOIMMUNE OPTIC NEURITIS**  
Ricarda Diem
- 14:58      **IMPACT OF GLUTAREDOXIN TREATMENT ON MYELIN-DAMAGES UPON NEUROINFLAMMATION**  
Carsten Berndt

---

## T CELLS AND DISEASE MODELS

13:45 - 15:15 ROOM B (GUTENBERGSAAL 1)

Chair: Ariel Miller

- 13:45      **235 - A NEW ANIMAL MODEL OF SPONTANEOUS AUTOIMMUNE PERIPHERAL POLYNEUROPATHY: IMPLICATIONS FOR GUILLAIN BARRÉ SYNDROME**  
Mu Yang <sup>(1)</sup> - Anthony Ranoine <sup>(2)</sup> - Xiang Qun Shi <sup>(1)</sup> - Sylvie Fournier <sup>(2)</sup> - Ji Zhang <sup>(3)</sup>  
Department Of Neurology And Neurosurgery And Alan Edwards Centre For Research On Pain, McGill University, Montreal, Canada <sup>(1)</sup> - Department Of Microbiology And Immunology, McGill University, Montreal, Canada <sup>(2)</sup> - Department Of Neurology And Neurosurgery, Alan Edwards Centre For Research On Pain And Faculty Of Dentistry, McGill University, Montreal, Canada <sup>(3)</sup>
- 14:00      **394 - INTERFERON-GAMMA-PRODUCING NATURAL KILLER CELLS ARE PATHOGENIC IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS BY PROMOTING M1 MACROPHAGE ACTIVATION AND VLA-4 EXPRESSION ON CD4+ T CELLS**  
Niamh Mc Guinness <sup>(1)</sup> - Lara S. Dungan <sup>(2)</sup> - Marina. A. Lynch <sup>(1)</sup> - Kingston H.g. Mills <sup>(2)</sup>  
Trinity College Institute Of Neuroscience, University Of Dublin, Trinity College Dublin, Dublin, Ireland <sup>(1)</sup>  
Immune Regulation Research Group, School Of Biochemistry And Immunology, Trinity Biomedical Sciences Institute, University Of Dublin, Trinity College, Dublin, Ireland <sup>(2)</sup>
- 14:15      **559 - CASEIN KINASE 2 GOVERNS THE MOLECULAR DECISION BETWEEN TH17 CELL AND TREG CELL DEVELOPMENT AND CONTROLS ENCEPHALITIS OF TH17 CELLS IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**  
Esther Witsch <sup>(1)</sup> - Alexander Ulges <sup>(2)</sup> - Katharina Birkner <sup>(1)</sup> - Gautam Pramanik <sup>(1)</sup> - Frauke Zipp <sup>(1)</sup> - Tobias Bopp <sup>(2)</sup>  
Department Of Neurology, University Medical Center Of The Johannes Gutenberg-university, Mainz, Germany <sup>(1)</sup>  
Research Center Immunotherapy, University Medical Center Of The Johannes Gutenberg-university, Mainz, Germany <sup>(2)</sup>
- 14:30      **363 - IL-1 RECEPTOR TYPE I AND TYPE II DIFFERENTIALLY REGULATE EAE PATHOGENESIS**  
Ilgiz Mufazalov - Carsten Schelmbauer - Janina Kuschmann - Tommy Regen  
Christopher Hackenbruch - Ari Waisman  
Institute For Molecular Medicine, JGU Medical Center, Mainz, Germany

- 14:45 523 - ABNORMAL RESPONSES OF CD8+CD161HIGH MUCOSAL ASSOCIATED INVARIANT T (MAIT) CELLS AND CCR2+CCR5+ CD4 T CELLS CONTRIBUTE TO DISRUPTED BALANCE OF EFFECTOR AND REGULATORY T CELLS IN PEDIATRIC-ONSET MS**  
 Mukanthu Nyirenda <sup>(1)</sup> - Rui Li <sup>(1)</sup> - Craig Moore <sup>(1)</sup> - Ayal Rozenberg <sup>(1)</sup> - Ayman Rezk <sup>(1)</sup> - Trina Johnson <sup>(2)</sup> - Dessa Sadovnick <sup>(3)</sup> - Douglas Arnold <sup>(1)</sup> - Ruth Ann Marrie <sup>(4)</sup> - Brenda Banwell <sup>(5)</sup> - Amit Bar-or <sup>(1)</sup>  
 Neuroimmunology Unit, Montreal Neurological Institute, McGill University, Montreal, Canada <sup>(1)</sup> - Experimental Therapeutics Program, Montreal Neurological Institute, McGill University, Montreal, Canada <sup>(2)</sup> - Division Of Neurology, Department Of Medical Genetics, University Of British Columbia, British Columbia, Canada <sup>(3)</sup> - Departments Of Internal Medicine And Community Health, University Of Manitoba, Manitoba, Canada <sup>(4)</sup> - Division Of Neurology, Children's Hospital Of Philadelphia, Philadelphia, United States <sup>(5)</sup>
- 15:00 328 - TIM-1 IS A NOVEL TRAFFICKING RECEPTOR CONTROLLING T CELL RECRUITMENT IN THE CNS AND INDUCTION OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**  
 Stefano Angiari <sup>(1)</sup> - Tiziano Donnarumma <sup>(1)</sup> - Barbara Rossi <sup>(1)</sup> - Silvia Dusi <sup>(1)</sup> - Enrica Pietronigro <sup>(1)</sup> - Elena Zenaro <sup>(1)</sup> - Vittorina Della Bianca <sup>(1)</sup> - Gennj Piacentino <sup>(1)</sup> - Paul Rennert <sup>(2)</sup> - Sheng Xiao <sup>(3)</sup> - Jose M. Casasnovas <sup>(4)</sup> - Vijay K. Kuchroo <sup>(3)</sup> - Gabriela Constantin <sup>(1)</sup>  
 Department Of Pathology And Diagnostics, University Of Verona, Verona, Italy <sup>(1)</sup> - Department Of Molecular Discovery And Immunobiology, Biogen Idec Inc., Cambridge, Ma, United States <sup>(2)</sup> - Center For Neurological Diseases, Brigham And Women's Hospital, Harvard Medical School, Boston, Ma, United States <sup>(3)</sup> - Centro Nacional De Biotecnologia, Cnb-csic, Campus Uam, Madrid, Spain <sup>(4)</sup>

## B CELLS AND INFECTIONS

13:45 - 15:15 ROOM C (GUTENBERGSAAL 2)

Chair: Manuel Comabella

- 13:45 296 - "CYTOKINE DEFINED" B CELL SUBSETS IN MULTIPLE SCLEROSIS**  
 Rui Li <sup>(1)</sup> - Simon Fillatreau <sup>(2)</sup> - Jennifer Gommerman <sup>(3)</sup> - Alexandre Prat <sup>(4)</sup> - Amit Bar-or <sup>(1)</sup>  
 Montreal Neurological Institute, McGill University, Montreal, Canada <sup>(1)</sup> - Deutsches Rheuma-forschungszentrum, Leibniz Institute, Berlin, Germany <sup>(2)</sup> - Dept. Of Immunology, University Of Toronto, Toronto, Canada <sup>(3)</sup> - Chum Research Centre, Notre-dame Hospital/montreal University, Montreal, Canada <sup>(4)</sup>
- 14:00 392 - COMPARISON OF PERIPHERAL AND CNS B CELL POPULATIONS IN NMO AND ITS IMPLICATIONS FOR B CELL TRAFFICKING USING NEXT GENERATION SEQUENCING**  
 Markus Kowarik <sup>(1)</sup> - Joe Brown <sup>(2)</sup> - Scott Wemlinger <sup>(3)</sup> - Hannah Schumann <sup>(3)</sup> - Alanna Ritchie <sup>(3)</sup> - Ken Jones <sup>(2)</sup> - Greg Owens <sup>(3)</sup> - Jeffrey Bennett <sup>(4)</sup>  
 Klinikum Rechts Der Isar, Neurologische Klinik, Tu-münchen, München, Germany <sup>(1)</sup> - Department Of Bioinformatics, University Of Colorado, Denver, United States <sup>(2)</sup> - Department Of Neurology, University Of Colorado, Denver, United States <sup>(3)</sup> - Department Of Neurology And Ophthalmology, University Of Colorado, Denver, United States <sup>(4)</sup>
- 14:15 438 - CB2 MODULATES SUSCEPTIBILITY TO EXPERIMENTAL CEREBRAL MALARIA THROUGH A CCL17-DEPENDENT MECHANISM**  
 Hannah Ahrends <sup>(1)</sup> - Sabine Specht <sup>(2)</sup> - Beatrix Schumak <sup>(2)</sup> - Kim Schmidt <sup>(2)</sup> - Ramona Lundt <sup>(1)</sup> - Andrea Kemter <sup>(1)</sup> - David M. Otte <sup>(1)</sup> - Stefanie Scheu <sup>(3)</sup> - Irmgard Förster <sup>(4)</sup> - Achim Hoerauf <sup>(2)</sup> - Önder Albayram <sup>(1)</sup> - Andreas Zimmer <sup>(1)</sup> - Judith Alferink <sup>(1)</sup>  
 Institute Of Molecular Psychiatry, University Of Bonn, Bonn, Germany <sup>(1)</sup> - Institute Of Medical Microbiology, Immunology And Parasitology, University Hospital Bonn, Bonn, Germany <sup>(2)</sup> - Institute Of Medical Microbiology And Hospital Hygiene, University Of Düsseldorf, Düsseldorf, Germany <sup>(3)</sup> - Department Of Immunology And Environment, Life & Medical Sciences Institute (limes), Bonn, Germany <sup>(4)</sup>
- 14:30 225 - BRAIN-INFILTRATING JC VIRUS-SPECIFIC CD8+ EFFECTOR T CELLS COUNTERACT CD4+ T CELL IMMUNE ESCAPE OF NEUROTROPIC JC VIRUS VARIANT**  
 Ivan Jelcic <sup>(1)</sup> - Ilijas Jelcic <sup>(1)</sup> - Christian Kempf <sup>(2)</sup> - Fabienne Largey <sup>(1)</sup> - Raquel Planas <sup>(1)</sup> - Sven Schippling <sup>(1)</sup> - Mireia Sospedra <sup>(1)</sup> - Roland Martin <sup>(1)</sup>  
 Neuroimmunology And Multiple Sclerosis Research Section, Department Of Neurology, University Hospital Zurich, Zurich, Switzerland <sup>(1)</sup> - Institute Of Neuropathology, University Hospital Zurich, Zurich, Switzerland <sup>(2)</sup>

**14:45      65 - THE CNS BARRIERS DIFFERENTIALLY REGULATE THE MIGRATION OF B CELLS**  
Laure Michel <sup>(1)</sup> - Jorge Ivan Alvarez <sup>(1)</sup> - Hania Kebir <sup>(1)</sup> - Lyne Bourbonnière <sup>(1)</sup> - Josée Poirier <sup>(2)</sup>  
Pierre Duquette <sup>(2)</sup> - Amit Bar-or <sup>(3)</sup> - Jennifer Gommerman <sup>(4)</sup> - Alexandre Prat <sup>(1)</sup>  
Centre De Recherche Du Chum, University Of Montréal, Montréal, Canada <sup>(1)</sup> - Department Of Neurology, Chum,  
Montréal, Canada <sup>(2)</sup> - Department Of Neurology And Neurosurgery, Mcgill University, Montréal, Canada <sup>(3)</sup>  
Department Of Immunology, University Of Toronto, Toronto, Canada <sup>(4)</sup>

**15:00      251 - MOLECULAR MECHANISMS GOVERNING COMPLEMENT ACTIVATION  
IN NEUROMYELITIS OPTICA**  
John Soltys <sup>(1)</sup> - Scott Wemlinger <sup>(2)</sup> - Alanna Ritchie <sup>(2)</sup> - Hannah Schumann <sup>(2)</sup> - Gregory Owens <sup>(2)</sup>  
Jeffrey Bennett <sup>(3)</sup>  
University Of Colorado, University Of Colorado School Of Medicine Neuroscience And Medical Scientist Training  
Programs, Aurora, Co, United States <sup>(1)</sup> - University Of Colorado, University Of Colorado School Of Medicine  
Department Of Neurology, Aurora, Co, United States <sup>(2)</sup> - University Of Colorado, University Of Colorado School Of  
Medicine Department Of Neurology And Ophthalmology, Aurora, Co, United States <sup>(3)</sup>

---

**COFFEE BREAK & POSTER SESSION | BRAIN TUMOURS AND PARANEOPLASTIC**  
15:15 - 16:45 POSTERHALL (RHEINFOYER)

**620 - DEFINING AN IMMUNE SIGNATURE PREDICTIVE OF GLIOMA PROGRESSION**  
Elena Bazzoli <sup>(1)</sup> - Francesca Calabria <sup>(2)</sup> - Giovanni Ciriello <sup>(3)</sup> - Ermanna Turano <sup>(2)</sup> - Alessia Farinazzo <sup>(2)</sup>  
Elisabetta Maffioletti <sup>(4)</sup> - Nadia Cattane <sup>(4)</sup> - Massimo Gennarelli <sup>(4)</sup> - Claudio Ghimenton <sup>(5)</sup> - Bruno Bonetti <sup>(6)</sup>  
Ircs Fatebenefratelli Centro San Giovanni Di Dio, Brescia - University Of Verona, Dept Of Neurological And Movement Sciences,  
Verona <sup>(1)</sup> - University Of Verona - Dept Of Neurological And Movement Sciences, Verona, Verona, Italy <sup>(2)</sup> - Memorial Sloan-kettering  
Cancer Center, Mskcc, New York, United States <sup>(3)</sup> - Ircs Fatebenefratelli Centro San Giovanni Di Dio, Ircs Fatebenefratelli Centro San  
Giovanni Di Dio, Brescia, Italy <sup>(4)</sup> - University Of Verona, Verona, Verona, Italy <sup>(5)</sup> - University Of Verona, Dept Of Neurological And  
Movement Sciences, Verona, Verona, Italy <sup>(6)</sup>

**256 - IN SITU PROXIMITY LIGATION ASSAY TO EVALUATE PRESENTATION OF A MUTATED CD4 EPITOPE IN  
HUMAN GLIOMA TISSUE**  
Lukas Bunse <sup>(1)</sup> - Theresa Schumacher <sup>(1)</sup> - Felix Sahm <sup>(2)</sup> - Stefan Pusch <sup>(2)</sup> - Iris Oezen <sup>(1)</sup> - Andreas Von Deimling <sup>(2)</sup>  
Wolfgang Wick <sup>(3)</sup> - Michael Platten <sup>(3)</sup>  
Ccu Neuroimmunology And Brain Tumor Immunology, German Cancer Research Center, Heidelberg, Germany <sup>(1)</sup> - Department  
Of Neuropathology, University Hospital Heidelberg, Heidelberg, Germany <sup>(2)</sup> - Department Of Neurooncology, University Hospital  
Heidelberg, Heidelberg, Germany <sup>(3)</sup>

**476 - RI ANTIBODY SYNDROME ASSOCIATED WITH AN UNUSUAL NEUROENDOCRINE TUMOR**  
Georgios Dervenoulas  
2nd Department Of Neurology, Attikon University Hospital, University Of Athens, Athens, Greece

**467 - ANTI-YO ANTIBODY, ASSOCIATED WITH PARANEOPLASTIC CEREBELLAR DEGENERATION,  
SPECIFICALLY PRODUCES PURKINJE CELL DEATH BY BINDING** to the 62 kDa intracellular Yo antigen.  
John E. Greenlee  
George E. Wahlen Veterans Affairs Health Care System, University Of Utah Health Sciences Center, Salt Lake City, United States

**93 - IDENTIFICATION OF SEPTIN COMPLEX AS AN AUTOANTIBODY TARGET IN PARANEOPLASTIC  
CEREBELLAR ATAXIA**  
Ramona Bahtz - Inga-madeleine Blöcker - Nora Begemann - Yvonne Denno - Stephan Tiede - Bianca Teegen -  
Winfried Stöcker - Christian Probst - Lars Komorowski  
Institute Of Experimental Immunology, Euroimmun Ag, Lübeck, Germany

**540 - A CASE OF AN INFILTRATIVE ASTROCYTOMA IN A SUICIDAL WOMAN**  
Vasilena Petrova  
Department Of Nerve Diseases, Military Medical Academy, Sofia, Bulgaria



### **185 - GUILLAIN BARRE SYNDROME AND LAMBERT EATON MYASTHENIC SYNDROME COEXISTING AS A NEW PARANEOPLASTIC NEUROLOGIC SYNDROME?**

Milena Rodriguez Alvarez <sup>(1)</sup> - Mark Younan <sup>(1)</sup> - Irfanali Kugasia <sup>(2)</sup> - Vipul L. Shah <sup>(1)</sup> - David Sternman <sup>(1)</sup>

Lincoln Medical Center, Affiliated To Weill Cornell Medical College, Ny, United States <sup>(1)</sup> - Lincoln Medical Center, Affiliated To Weill Cornell Medical College, Ny, United States <sup>(2)</sup>

### **590 - PARANEOPLASTIC CEREBELLAR DEGENERATION: AUTO-ANTIBODIES CAUSE DAMAGE TO PURKINJE CELLS BY CHANGING THE CALCIUM HOMEOSTASIS**

Manja Schubert <sup>(1)</sup> - Tilo Eichler <sup>(2)</sup> - Mette Haugen <sup>(3)</sup> - Christian Vedeler <sup>(1)</sup>

Department Of Neurology / Department Of Clinical Medicine (k1), Haukeland University Hospital / University Of Bergen, Bergen, Norway <sup>(1)</sup> - Department Of Clinical Medicine (k1), University Of Bergen, Bergen, Norway <sup>(2)</sup> - Department Of Neurology, Haukeland University Hospital, Bergen, Norway <sup>(3)</sup>

### **501 - MUTANT IDH1R132H BEARS A MUTATION-SPECIFIC CD4 T CELL EPITOPE SUITABLE FOR VACCINATION OF HUMAN CNS TUMORS**

Theresa Schumacher <sup>(1)</sup> - Lukas Bunse <sup>(1)</sup> - Stefan Pusch <sup>(2)</sup> - Felix Sahn <sup>(2)</sup> - Andreas Von Deimling <sup>(2)</sup>

Wolfgang Wick <sup>(3)</sup> - Michael Platten <sup>(3)</sup>

Ccu Neuroimmunology And Brain Tumor Immunology, German Cancer Research Center, Heidelberg, Germany <sup>(1)</sup> - Department Of Neuropathology, University Hospital Heidelberg, Heidelberg, Germany <sup>(2)</sup> - Department Of Neurooncology, University Hospital Heidelberg, Heidelberg, Germany <sup>(3)</sup>

### **56 - CLINICAL MANIFESTATIONS OF ANTI-NMDAR ENCEPHALITIS: CASE SERIES AND PRACTICAL RECOMMENDATIONS FOR TREATMENT**

Saeed Shahbeigi <sup>(1)</sup> - Amir Ali Sepehry <sup>(2)</sup> - Joel Oger <sup>(3)</sup>

Neuroimmunology Fellow From Ubc, Ubc, Vancouver, Canada <sup>(1)</sup> - 2. University Of British Columbia (ubc), College For Interdisciplinary Studies, Graduate Program In Neuroscience; Vancouver, Canada, Ubc, Vancouver, Canada <sup>(2)</sup> - Ubc Division Of Neurology, Department Of Medicine, Vancouver, Canada, Ubc, Vancouver, Canada <sup>(3)</sup>

### **594 - ROLE OF NANOVESICLES FROM MACROPHAGES/MICROGLIA IN THE CROSS-TALK BETWEEN GLIOMA CELLS AND MICROENVIRONMENT.**

Ermanna Turano - Alessia Farinazzo - Edoardo Bistaffa - Bruno Bonetti - Elena Bazzoli

Dept. Of Neurological And Movement Sciences, University Of Verona, Verona, Italy

## **COFFEE BREAK & POSTER SESSION | INFECTIONS**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

### **163 - HUMAN HERPES VIRUS 6 IN HUMAN EPILEPSY: DATA FROM SURGICAL RESECTIONS**

Bridgette Jeanne Billioux <sup>(1)</sup> - Emily Leibovitch <sup>(1)</sup> - Giovanna Brunetto <sup>(1)</sup> - Irene Dustin <sup>(2)</sup> - Sara Inati <sup>(3)</sup>

John Schreiber <sup>(2)</sup> - Chigo Eze <sup>(2)</sup> - Kareem Zaghloul <sup>(4)</sup> - Steve Jacobson <sup>(1)</sup> - William Theodore <sup>(2)</sup>

Neuroimmunology Branch, National Institute Of Neurological Disorders And Stroke, National Institutes Of Health, Bethesda, United States <sup>(1)</sup> - Clinical Epilepsy Section, National Institute Of Neurological Disorders And Stroke, National Institutes Of Health, Bethesda, United States <sup>(2)</sup> - Eeg Laboratory, National Institute Of Neurological Disorders And Stroke, National Institutes Of Health, Bethesda, United States <sup>(3)</sup> - Surgical Neurology Branch, National Institute Of Neurological Disorders And Stroke, National Institutes Of Health, Bethesda, United States <sup>(4)</sup>

### **478 - LY6CHI MONOCYTES GOVERN CEREBRAL TOXOPLASMOSIS**

Aindrila Biswas - Ildiko Rita Dunay

Institute Of Medical Microbiology, Otto-von-guericke University, Magdeburg, Germany

### **361 - PERIPHERAL SYMPATHECTOMY AFFECTS THE COURSE AND SEVERITY OF FRIEND RETROVIRUS INFECTION IN MICE**

Dominique Bloemker <sup>(1)</sup> - Kathrin Gibbert <sup>(2)</sup> - Adriana Del Rey <sup>(3)</sup> - Ulf Dittmer <sup>(2)</sup> - Manfred Schedlowski <sup>(1)</sup> - Harald Engler <sup>(1)</sup>

Institute Of Medical Psychology And Behavioral Immunobiology, University Hospital Essen, Essen, Germany <sup>(1)</sup> - Institute Of Virology, University Hospital Essen, Essen, Germany <sup>(2)</sup> - Department Of Immunophysiology, Institute Of Physiology And Pathophysiology, Philipps University Of Marburg, Marburg, Germany <sup>(3)</sup>

#### **422 - DROPLET DIGITAL PCR FOR THE PRECISE QUANTIFICATION OF HTLV-1**

Breanna Caruso - Giovanna Brunetto - Raya Massoud - Emily Leibovitch - Steven Jacobson  
Ninds, Nih, Bethesda, United States

#### **582 - RISK FACTORS FOR IMMUNOSUPPRESSION-ASSOCIATED INFECTIONS IN AQUAPORIN-4 ANTIBODY MEDIATED NEUROMYELITIS OPTICA SPECTRUM DISORDERS**

Fan Cheng <sup>(1)</sup> - Jithin George <sup>(1)</sup> - J Rocha <sup>(2)</sup> - George Tackley <sup>(1)</sup> - John Revis <sup>(1)</sup> - Paddy Waters <sup>(1)</sup> - John Elston <sup>(3)</sup>  
Jacqueline Palace <sup>(1)</sup> - Nicola Jones <sup>(4)</sup> - Maria Isabel Leite <sup>(1)</sup>

Nuffield Department Of Clinical Neurosciences, University Of Oxford, Uk, John Radcliffe Hospital, University Of Oxford, Oxford, United Kingdom <sup>(1)</sup> - Department Of Clinical Neurology, Hospital S. Marcos, Braga, Portugal, Braga, Portugal <sup>(2)</sup> - The Oxford Eye Hospital, John Radcliffe Hospital, University Of Oxford, Uk, Oxford, United Kingdom <sup>(3)</sup> - Department Of Infectious Diseases, John Radcliffe Hospital, University Of Oxford, Uk, Oxford, United Kingdom <sup>(4)</sup>

#### **245 - PLASMA HEME LEVELS CORRELATE WITH IP-10 LEVELS DURING FATAL CEREBRAL MALARIA IN ODISHA, INDIA**

Esther Dalko

Ciil, Cnrs Umr 8204, Inserm U1019, Institut Pasteur De Lille, Pres Université Lille Nord De France, Lille, France

#### **337 - VIRUS INFECTION VIA THE OLFACTORY ROUTE TRIGGERS PRIMARILY ASTROCYTES WITHIN THE OLFACTORY BULB TO EXPRESS IFN-BETA WHICH TRIGGERS IFNAR THROUGHOUT THE BRAIN**

Claudia N. Detje <sup>(1)</sup> - Stefan Lienenklaus <sup>(2)</sup> - Julia Heinrich <sup>(1)</sup> - Claudia Soldner <sup>(1)</sup> - Michael G. Tovey <sup>(3)</sup> - Siegfried Weiss <sup>(2)</sup> - Ulrich Kalinke <sup>(1)</sup>

Institute For Experimental Infection Research, Twincore, Centre For Experimental And Clinical Infection Research, Hannover, Germany <sup>(1)</sup>  
Molecular Immunology, Helmholtz Centre For Infection Research, Braunschweig, Germany <sup>(2)</sup> - Laboratory Of Viral Oncology, Cnrs, Villejuif, France <sup>(3)</sup>

#### **418 - REGULATORY T CELLS IN CNS TOXOPLASMA GONDII INFECTION**

Tajie Harris

University Of Virginia, University, Charlottesville, United States

#### **613 - NEURONS ARE HOST CELLS FOR MYCOBACTERIUM TUBERCULOSIS**

Philippa J Randall <sup>(1)</sup> - Nai-jen Hsu <sup>(1)</sup> - Dirk Lang <sup>(2)</sup> - Susan Cooper <sup>(2)</sup> - Boipelo Sebesho <sup>(1)</sup> - Nasiema Allie <sup>(1)</sup>  
Roanne Keeton <sup>(1)</sup> - Ngiambudulu Francisco <sup>(1)</sup> - Sumayah Salie <sup>(1)</sup> - Antoinette Labuschagne <sup>(1)</sup> - Valerie Quesniaux <sup>(3)</sup>  
Bernhard Ryffel <sup>(3)</sup> - Lauriston Kellaway <sup>(2)</sup> - Muazzam Jacobs <sup>(1)</sup>

Division Of Immunology, Department Of Clinical Laboratory Sciences And The Iidmm, Faculty Of Health Sciences, University Of Cape Town, Cape Town, South Africa <sup>(1)</sup> - Department Of Human Biology, Faculty Of Health Sciences, University Of Cape Town, Cape Town, South Africa <sup>(2)</sup> - Experimental And Molecular Immunology And Neurogenetics, University Of Orleans And Cnrs Umr7355, Orleans, France <sup>(3)</sup>

#### **463 - VIRAL LOAD AND T-HELPER-1-CELL CYTOKINES IN MYALGIC ENCEPHALOMYELITIS**

Irina Malashenkova <sup>(1)</sup> - Sergey Krynskiy <sup>(2)</sup> - Daniil Ogurtsov <sup>(2)</sup> - Nikita Hailov <sup>(1)</sup> - Galina Kazanova <sup>(1)</sup> - Olga Gurskaya <sup>(2)</sup>  
Maria Jarova <sup>(2)</sup> - Igor Zuikov <sup>(2)</sup> - Elvira Domonova <sup>(3)</sup> - O.yu Silveystrova <sup>(3)</sup> - Nikolay Didkovskiy <sup>(2)</sup>

Laboratory Of Immunology, National Research Center Kurchatov Institute, Moscow, Russian Federation <sup>(1)</sup> - Laboratory Of Clinical Immunology, Science Research Institution Of Physical-chemical Medicine, Moscow, Russian Federation <sup>(2)</sup> - Department Of Molecular Diagnostics, Central Research Institute For Epidemiology, Of Rospotrebnadzor Moscow, Russian Federation <sup>(3)</sup>

#### **429 - CHARACTERIZATION OF EPSTEIN-BARR VIRUS GENOTYPES IN MULTIPLE SCLEROSIS THROUGH NEXT GENERATION SEQUENCING APPROACHES**

Giulia Coarelli <sup>(1)</sup> - Caterina Manzari <sup>(2)</sup> - Anita Annesse <sup>(2)</sup> - Eleni Anastasiadou <sup>(3)</sup> - Claudia Policano <sup>(1)</sup> - Anna Maria D'Erchia <sup>(2)</sup> - Ernesto Picardi <sup>(2)</sup> - Maria Chiara Buscarinu <sup>(1)</sup> - Viviana Annibali <sup>(1)</sup> - Vito Ag Ricigliano <sup>(1)</sup> - Antonia Tullo <sup>(4)</sup> - Pankaj Trivedi <sup>(3)</sup> - Graziano Pesole <sup>(5)</sup> - Giovanni Ristori <sup>(1)</sup> - Marco Salvetti <sup>(1)</sup> - Rosella Mechelli <sup>(1)</sup>

Centre For Experimental Neurological Therapies (centers), Department Of Neurosciences, Mental Health And Sensory Organs, Faculty Of Medicine And Psychology, Sapienza University Of Rome, Italy <sup>(1)</sup> - Department Of Biosciences, Biotechnology And Biopharmaceutical, Bari University, Bari, Italy <sup>(2)</sup> - Department Of Experimental Medicine, Sapienza University Of Rome, Rome, Italy <sup>(3)</sup> - Institute For Biomedical Technologies, National Research Council, Bari, Italy <sup>(4)</sup> - Department Of Biosciences, Biotechnology And Biopharmaceutical, Bari University, Bari, Italy Institute Of Biomembranes And Bioenergetics, National Research Council, Bari, Italy <sup>(5)</sup>

**506 - CMV INFECTION FACILITATES EAE DEVELOPMENT IN RESISTANT BALB/C MICE**

Jelena Milovanovic <sup>(1)</sup> - Marija Milovanovic <sup>(1)</sup> - Aleksandar Arsenijevic <sup>(1)</sup> - Bojana Stojanovic <sup>(1)</sup> - Branka Popovic <sup>(2)</sup>  
 Nebojsa Arsenijevic <sup>(1)</sup> - Stipan Jonjic <sup>(2)</sup> - Miodrag L. Lukic <sup>(1)</sup>

Center For Molecular Medicine And Stem Cell Research, Faculty Of Medicine University Of Kragujevac, Kragujevac, Serbia <sup>(1)</sup>  
 Department For Histology And Embryology, Center For Proteomics, School Of Medicine, University Of Rijeka, Rijeka, Croatia <sup>(2)</sup>

**401 - PATHOLOGICAL FEATURES OF INFLAMMATORY PML IN NON-HIV PATIENTS, COMPARED TO CLASSICAL PML-IRIS IN HIV PATIENTS**

Helena Radbruch <sup>(1)</sup> - Hélène Gros <sup>(2)</sup> - Klara Kaden <sup>(1)</sup> - Klemens Ruprecht <sup>(3)</sup> - Werner Stenzel <sup>(1)</sup>

Institut Für Neuropathologie, Charité, Berlin, Germany <sup>(1)</sup> - Infectious Diseases, Robert Ballanger General Hospital, Aulnay Sous Bois, France <sup>(2)</sup> - Klinik Für Neurologie, Charité, Berlin, Germany <sup>(3)</sup>

**283 - IMMUNE CELL RECRUITMENT TO THE BRAIN DURING CNS TB**

Anna Ritter

School Of Medicine And Public Health, University Of Wisconsin-madison, Madison, United States

**623 - INDUCTION AND RECRUITMENT OF MYELIN-SPECIFIC CD4 T CELLS DURING PERSISTENT JHMV INFECTION**

Carine Savarin - Cornelia Bergmann - Stephen Stohlman

Lerner Research Institute, Cleveland Clinic, Cleveland, United States

**622 - IMMUNO-REGULATORY ROLE OF TNF IN CENTRAL NERVOUS SYSTEM TUBERCULOSIS**

Boipelo Sebeshe - Lauriston Kellaway - Muazzam Jacobs

University Of Cape Town, University, Cape Town, South Africa

**290 - EBV NUCLEAR ANTIGEN-1 EPIOTOPE REACTIVE TO INTRATHECAL ANTIBODIES IN THE CEREBROSPINAL FLUID OF PATIENTS WITH MULTIPLE SCLEROSIS**

Hayden Collins <sup>(1)</sup> - Dicle Gunaydin <sup>(1)</sup> - Kayo Tamanito <sup>(1)</sup> - Nadeen Ibrahim <sup>(1)</sup> - Antonina Dolei <sup>(2)</sup> - Xiaoli Yu <sup>(1)</sup>

University Of Colorado Anschutz Medical Campus, Neurology, University Of Colorado Anschutz Medical Campus, Aurora, United States <sup>(1)</sup> - University Of Sassari, Department Of Biomedical Sciences And Centre Of Excellence For Biotechnology Development And Biodiversity Research, University Of Sassari, Sassari, Italy <sup>(2)</sup>

---

**COFFEE BREAK & POSTER SESSION | MECHANISMS OF CNS DISEASE**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

**42 - ASTROCYTE DEFORMATION AND NEUROVASCULAR DISRUPTION - PATHOLOGICAL MECHANISM THAT MEDIATE NEURONAL INJURY AND CORTICAL DAMAGE IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Rina Aharoni - Raya Eilam - Michael Sela - Ruth Arnon

The Weizmann Institute Of Science, University, Rehovot, Israel

**413 - CLIPPERS SYNDROME: CASE REPORT**

Ayşe Altintas - Bengi Gul Alpaslan - Ugur Uygunglu

Cerrahpasa Medical School, Istanbul University, Istanbul, Turkey

**421 - MYD88 SIGNALING MEDIATES THE EFFECTS OF THE INNATE IMMUNE RESPONSE IN CEREBELLAR SHORT-TERM SYNAPTIC PLASTICITY**

Alonso Barrantes-freer <sup>(1)</sup> - Lena Sünke Mortensen <sup>(2)</sup> - Melanie Lohrberg <sup>(3)</sup> - Alexander Götz <sup>(1)</sup>

Uwe-karsten Hanisch <sup>(1)</sup> - Luis A. Pardo <sup>(4)</sup> - Wolfgang Brück <sup>(1)</sup> - Christine Stadelmann-nessler <sup>(1)</sup>

Institut Of Neuropathology, University Medical Center Göttingen (umg), Göttingen, Germany <sup>(1)</sup> - Abt. Molekulare Neurobiologie, Max Planck Institut Für Experimentelle Medizin, Göttingen, Germany <sup>(2)</sup> - Masters Programm Molekulare Medizin, University Medical Center Göttingen (umg), Göttingen, Germany <sup>(3)</sup> - Abt. Onkophysiologie, Max-planck Institut Für Experimentelle Medizin, Göttingen, Germany <sup>(4)</sup>

**258 - IMPACT OF DIETARY METABOLISM BY GUT MICROBIOTA ON THE PATHOGENESIS OF SPONTANEOUS AUTOIMMUNE ENCEPHALOMYELITIS**

Kerstin Berer <sup>(1)</sup> - Inés Martínez <sup>(2)</sup> - Alesia Walker <sup>(3)</sup> - Philippe Schmitt-kopplin <sup>(3)</sup> - Jens Walter <sup>(2)</sup>

Hartmut Wekerle <sup>(1)</sup> - Gurumoorthy Krishnamoorthy <sup>(1)</sup>

Department Of Neuroimmunology, Max Planck Institute Of Neurobiology, Munich, Germany <sup>(1)</sup> - Department Of Agricultural, Food And Nutritional Science, University Of Alberta, Edmonton, Canada <sup>(2)</sup> - Research Unit Analytical Biogeochemistry, Helmholtz Zentrum München, Munich, Germany <sup>(3)</sup>

### **80 - NEUROPATHIC PAIN-INDUCED DEPRESSIVE-LIKE BEHAVIOR IS ASSOCIATED WITH MYELIN REMODELING AND IMPAIRED NEUROGENESIS**

Anna Dellarole <sup>(1)</sup> - Paul Morton <sup>(1)</sup> - Roberta Brambilla <sup>(1)</sup> - Winston Walters <sup>(1)</sup> - Spencer Summer <sup>(1)</sup>

Danielle Bernardes <sup>(2)</sup> - Mariagrazia Grilli <sup>(3)</sup> - John Bethea <sup>(2)</sup>

The Miami Project To Cure Paralysis, University Of Miami, Miami, - <sup>(1)</sup> - Biology Department, Drexel University, Philadelphia, United States <sup>(2)</sup> - Department Of Pharmaceutical Sciences, University Of Piemonte Orientale, Novara, Italy <sup>(3)</sup>

### **91 - THALAMO-CORTICAL NETWORKING DURING DE- AND REMYELINATION EVENTS IN THE CUPRIZONE MODEL OF MULTIPLE SCLEROSIS: A VOLTAGE-SENSITIVE DYE STORY**

Manuela Cerina <sup>(1)</sup> - Venu Narayanan <sup>(1)</sup> - Kerstin Göbel <sup>(1)</sup> - Patrick Meuth <sup>(1)</sup> - Erwin J. Speckmann <sup>(2)</sup> - Ali Gorji <sup>(2)</sup>

Nikoo Ghaffarian <sup>(1)</sup> - Thomas Budde <sup>(2)</sup> - Sven G. Meuth <sup>(1)</sup>

Clinic Of Neurology - Neurophysiology, University Hospital Münster, Münster, Germany <sup>(1)</sup> - Institute Of Physiology I, Münster University, Münster, Germany <sup>(2)</sup>

### **233 - THE WAKEFULNESS PROMOTING AGENT MODAFINIL AMELIORATES EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Lynn Bedford <sup>(1)</sup> - James Crooks <sup>(1)</sup> - Manjit Kaur Braitch <sup>(2)</sup> - Ranjithmenon Muraleedharan <sup>(1)</sup> - Bruno Gran <sup>(3)</sup>

Cris Constantinescu <sup>(3)</sup>

University Of Nottingham, University Of Nottingham, Nottingham, United Kingdom <sup>(1)</sup> - University Of Birmingham, University Of Nottingham, Birmingham, United Kingdom <sup>(2)</sup> - University Of Nottingham, Queen's Medical Centre, University Of Nottingham, Nottingham, United Kingdom <sup>(3)</sup>

### **227 - AGE-RELATED CHANGES IN INTESTINAL PERMEABILITY AND GUT MICROBIOTA AFTER ISCHEMIC STROKE**

Joshua Crapser - Rodney Ritzel - Sarah Doran - Edward Koellhoffer - Anita Patel - Brett Friedler - Mccullough Louise

University Of Connecticut Health Center, University Of Connecticut Health Center, Farmington, United States

### **179 - PATHOLOGICAL MECHANISMS IN PATIENTS WITH ANTIBODIES TO GLYCINE RECEPTORS**

Sarah Crisp <sup>(1)</sup> - John Rothwell <sup>(1)</sup> - Angela Vincent <sup>(2)</sup> - Dimitri M. Kullmann <sup>(1)</sup>

Institute Of Neurology, University College London, London, United Kingdom <sup>(1)</sup> - Nuffield Department Of Clinical Neurosciences, John Radcliffe Hospital, Oxford, United Kingdom <sup>(2)</sup>

### **370 - DETECTION OF ANTIBODIES AGAINST THE N-METHYL-D-ASPARTATE RECEPTOR IN A SUB-GROUP OF PATIENTS DIAGNOSED WITH TOURETTE'S SYNDROME**

Priyamvada Dua <sup>(1)</sup> - Leslie Jacobson <sup>(2)</sup> - Andrew Church <sup>(3)</sup> - Davide Martino <sup>(1)</sup> - Sofia Sisay <sup>(1)</sup> - Angela Vincent <sup>(2)</sup>

Bethan Lang <sup>(2)</sup> - Gavin Giovannoni <sup>(1)</sup> - Ute Meier <sup>(1)</sup>

Centre For Neuroscience And Trauma, Queen Mary University Of London, London, United Kingdom <sup>(1)</sup> - Division Of Clinical Neurology, University Of Oxford, Oxford, United Kingdom <sup>(2)</sup> - Institute Of Neurology, University College London, London, United Kingdom <sup>(3)</sup>

### **287 - ACUTE SEIZURES DURING VIRAL ENCEPHALITIS ARE DUE TO IL-6-PRODUCING MACROPHAGES**

Matthew Cusick <sup>(1)</sup> - Jane Libbey <sup>(1)</sup> - Dipan Patel <sup>(2)</sup> - Karen Wilcox <sup>(2)</sup> - Robert Fujinami <sup>(1)</sup>

University Of Utah, Department Of Pathology, Salt Lake City, United States <sup>(1)</sup> - University Of Utah, Department Of Pharmacology And Toxicology, Salt Lake City, United States <sup>(2)</sup>

### **135 - TRPM2 CATION CHANNEL REGULATES DETRIMENTAL IMMUNE CELL INVASION IN ISCHEMIC STROKE**

Mathias Gelderblom <sup>(1)</sup> - Nico Melzer <sup>(2)</sup> - Benjamin Schattling <sup>(3)</sup> - Eva Göb <sup>(4)</sup> - Gordon Hicking <sup>(2)</sup> - Priyadharshini

Arunachalam <sup>(1)</sup> - Stefan Bittner <sup>(2)</sup> - Friederike Ufer <sup>(5)</sup> - Alexander M. Herrmann <sup>(2)</sup> - Christian Bernreuther <sup>(6)</sup>

Markus Glatzel <sup>(6)</sup> - Christian Gerloff <sup>(1)</sup> - Christoph Kleinschnitz <sup>(4)</sup> - Sven G. Meuth <sup>(2)</sup> - Manuel A. Frieze <sup>(5)</sup>

Tim Magnus <sup>(1)</sup>

Department Of Neurology, University Medical Center Hamburg-eppendorf, Hamburg, Germany <sup>(1)</sup> - Department Of Neurology, University Of Muenster, Muenster, Germany <sup>(2)</sup> - Center For Molecular Neurobiology, University Medical Center Hamburg-eppendorf, Hamburg, - <sup>(3)</sup> - Department Of Neurology, University Hospital Wuerzburg, Wuerzburg, Germany <sup>(4)</sup> - Center For Molecular Neurobiology, University Medical Center Hamburg-eppendorf, Hamburg, Germany <sup>(5)</sup> - Institute Of Neuropathology, University Medical Center Hamburg-eppendorf, Hamburg, Germany <sup>(6)</sup>

### **561 - IN VIVO CNS CHRONIC INFUSION OF AQP4-IGG INDUCES NMO-LIKE LESIONS AND MOTOR BEHAVIORAL CHANGES IN RAT VIA ASTROCYTOPATHY AND GLUTAMATE HOMEOSTASIS DISTURBANCE**

Pascale Giraudon

Lyon Neuroscience Research Center, University Of Lyon, Lyon, France

## **276 - CHARACTERIZING THE ROLE OF INTEGRIN ALPHA8 IN MEDIATING CD4+ T LYMPHOCYTE MIGRATION ACROSS THE BLOOD BRAIN BARRIER IN MULTIPLE SCLEROSIS**

Elizabeth Gowing <sup>(1)</sup> - Steve Gendron <sup>(1)</sup> - Marc-andré Lécuyer <sup>(1)</sup> - Simone Terouz <sup>(1)</sup> - Alexandre Prat <sup>(1)</sup>  
Centre De Recherche Du Centre Hospitalier De L'université De Montréal (crchum), Université De Montréal, Montréal, Canada <sup>(1)</sup>

## **542 - IMAGING OF PATHOLOGICAL EFFECTS OF AQUAPORIN-4 SPECIFIC ANTIBODIES EX VIVO AND IN VIVO**

Marina Herwerth <sup>(1)</sup> - Rajneesh Srivastava <sup>(1)</sup> - Suhakar Reddy Kalluri <sup>(1)</sup> - Thomas Misgeld <sup>(2)</sup> - Bernhard Hemmer <sup>(1)</sup>  
Neurologische Klinik Und Poliklinik Rechts Der Isar, Technische Universität, München, Germany <sup>(1)</sup> - Institute Of Neuronal Cell Biology, Technische Universität, München, Germany <sup>(2)</sup>

## **556 - ANALYSIS OF AUTO-ANTIBODIES IN SCHIZOPHRENIA**

Carolyn Hoffmann <sup>(1)</sup> - Matthew J Lindemann <sup>(2)</sup> - Vincent C Ramsperger <sup>(2)</sup> - Lakshmanan Suresh <sup>(2)</sup> - Jo Stevens <sup>(1)</sup>  
Mario Losen <sup>(1)</sup> - Peter Molenaar <sup>(1)</sup> - Marc H De Baets <sup>(1)</sup> - Marc De Hert <sup>(3)</sup> - Jim Van Os <sup>(1)</sup> - Bart Bp Rutten <sup>(1)</sup>  
Pilar Martinez-martinez <sup>(1)</sup>  
Department Of Psychiatry And Neuropsychology, Maastricht University, Maastricht, Netherlands <sup>(1)</sup> - Immco Diagnostics, Inc., New York, United States <sup>(2)</sup> - University Psychiatric Centre Catholic University Leuven, Catholic University Leuven, Leuven, Belgium <sup>(3)</sup>

## **543 - ANALYSIS OF PATHOGENIC AUTOANTIBODIES AGAINST THE N-METHYL-D-ASPARTATE GLUTAMATE RECEPTOR IN SCHIZOPHRENIA**

Carolyn Hoffmann <sup>(1)</sup> - Gisela Nogales-gadea <sup>(1)</sup> - Jo Stevens <sup>(1)</sup> - Mario Losen <sup>(1)</sup> - Andrei Szoke <sup>(2)</sup> - Marion Leboyer <sup>(2)</sup>  
Marc De Hert <sup>(3)</sup> - Nico J M Van Beveren <sup>(4)</sup> - Peter Molenaar <sup>(1)</sup> - Wim A Buurman <sup>(1)</sup> - Marc H De Baets <sup>(1)</sup>  
Bart B F Rutten <sup>(1)</sup> - Jim Van Os <sup>(1)</sup> - Pilar Martinez-martinez <sup>(1)</sup>  
Department Of Psychiatry And Neuropsychology, Maastricht University, Maastricht, Netherlands <sup>(1)</sup> - Pôle De Psychiatrie, Hôpital Henri Mondor – Albert Chenevier – Assistance Publique – Hôpitaux De Paris, Université Paris-est Créteil, Créteil, France <sup>(2)</sup> - University Psychiatric Centre Catholic University Leuven, Catholic University Leuven, Campus Kortenberg, Leuven, Belgium <sup>(3)</sup> - Department Of Psychiatry, Erasmus University Medical Center, Rotterdam, Netherlands <sup>(4)</sup>

## **304 - FACTOR H AUTOANTIBODIES IN NEUROMYELITIS OPTICA**

Zsolt Illes <sup>(1)</sup> - Barbara Uzonyi <sup>(2)</sup> - Mihaly Jozsi <sup>(2)</sup>  
Institute Of Clinical Research And Department Of Neurology, University Of Southern Denmark, Odense, Denmark <sup>(1)</sup>  
Mta-elte Immunology Research Group, Department Of Immunology, Eötvös Loránd University, Budapest, Hungary <sup>(2)</sup>

## **306 - LONGITUDINAL SEROLOGICAL AND CLINICAL DATA INDICATE THAT SLE ACTIVITY MAY CONTRIBUTE TO NMO RELAPSES**

Zsolt Illes <sup>(1)</sup> - Katalin T. Kovacs <sup>(2)</sup> - Sudhakar R. Kalluri <sup>(3)</sup> - Tunde Csepány <sup>(4)</sup> - Yvonne Schaefer <sup>(3)</sup>  
Magdolna Simo <sup>(5)</sup> - Laszlo Rokusz <sup>(6)</sup> - Timea Berki <sup>(7)</sup> - Bernhard Hemmer <sup>(3)</sup>  
Institute Of Clinical Research And Department Of Neurology, University Of Southern Denmark, Odense, Denmark <sup>(1)</sup> - Department Of Rheumatology And Immunology, University Of Pecs, Pecs, Hungary <sup>(2)</sup> - Clinic Of Neurology, Technische Universität München, Munich, Germany <sup>(3)</sup> - Department Of Neurology, University Of Debrecen, Debrecen, Hungary <sup>(4)</sup> - Department Of Neurology, Semmelweis University, Budapest, Hungary <sup>(5)</sup> - 1st Department Of Internal Medicine, Military Hospital - State Health Centre, Budapest <sup>(6)</sup>  
Department Of Immunology And Biotechnology, University Of Pecs, Pecs, Hungary <sup>(7)</sup>

## **435 - SULFATIDES AUTOREACTIVITY IN MULTIPLE SCLEROSIS**

Maria Ivanova <sup>(1)</sup> - Amir Tukhvatulin <sup>(2)</sup> - Alina Dzharullaeva <sup>(2)</sup> - Denis Logunov <sup>(2)</sup> - Maria Zakharova <sup>(1)</sup>  
Research Center Of Neurology, Russian Academy Of Medical Sciences, Moscow, Russian Federation <sup>(1)</sup> - Gamaleya Research Institute Of Epidemiology And Microbiology, Ministry Of Health Of The Russian Federation, Moscow, Russian Federation <sup>(2)</sup>

## **136 - REGULATION OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS BY GUT RESIDENT T CELLS**

Atsushi Kadowaki <sup>(1)</sup> - Sachiko Miyake <sup>(2)</sup> - Asako Chiba <sup>(2)</sup> - Takashi Yamamura <sup>(1)</sup>  
National Center Of Neurology And Psychiatry, Hospital, Tokyo, Japan <sup>(1)</sup> - Juntendo University Graduate School Of Medicine, University, Tokyo, Japan <sup>(2)</sup>

## **172 - EXPRESSION OF EMMPRIN ON ASTROCYTES: RELEVANCE TO NORMAL AND DISEASED BRAIN**

Deepak Kaushik - Claudia Silva - Janet Wang - Wee Yong  
Hotchkiss Brain Institute, University Of Calgary, Calgary, Alberta, Canada

## **447 - THE ROLE OF NG2 AND OPC IN INDUCTION AND DEVELOPMENT OF CNS INFLAMMATION**

Khalad Karram - Maja Kitic - Nicole Israel - Florian Wanke - Florian C. Kurschus - Ari Waisman  
Institute For Molecular Medicine, University Medical Center Of The Johannes Gutenberg University Mainz, Mainz, Germany

**388 - CLINICAL FEATURES OF SARCOID MYELOPATHY FOCUSING ON AGE, DISTRIBUTION, AND CONCOMITANT SPINAL DISEASE**

Hiroshi Kuroda <sup>(1)</sup> - Kazuo Fujihara <sup>(2)</sup> - Yasuto Itoyama <sup>(3)</sup> - Masashi Aoki <sup>(1)</sup>

Department Of Neurology, Tohoku University Graduate School Of Medicine, Sendai, Japan <sup>(1)</sup> - Department Of Multiple Sclerosis Therapeutics, Tohoku University Graduate School Of Medicine, Sendai, Japan <sup>(2)</sup> - National Center Of Neurology And Psychiatry, National Center Hospital, Tokyo, Japan <sup>(3)</sup>

**356 - FIBROBLAST GROWTH FACTOR 9 AND ITS DOWNSTREAM REGULATORS IN THE PATHOGENESIS OF MULTIPLE SCLEROSIS.**

Daniel Mcelroy <sup>(1)</sup> - Katja Thuemmler <sup>(1)</sup> - Maren Lindner <sup>(1)</sup> - Cornelia Schuh <sup>(2)</sup> - Hans Lassmann <sup>(2)</sup>  
Christopher Linington <sup>(1)</sup>

Institute Of Infection, Immunity, & Inflammation, University Of Glasgow, Glasgow, United Kingdom <sup>(1)</sup>  
Center For Brain Research, Medical University Of Vienna, Vienna, Austria <sup>(2)</sup>

**220 - REGIONAL DIFFERENCES IN VISCOELASTICITY IN NORMAL AND INFLAMED MOUSE BRAIN**

Jason Millward <sup>(1)</sup> - Jing Guo <sup>(2)</sup> - Dominique Berndt <sup>(1)</sup> - Jürgen Braun <sup>(2)</sup> - Ingolf Sack <sup>(2)</sup> - Carmen Infante-duarte <sup>(1)</sup>

Institute For Medical Immunology, Charité - Universitätsmedizin Berlin, Berlin, Germany <sup>(1)</sup> - Department Of Radiology, Charité - Universitätsmedizin Berlin, Berlin, Germany <sup>(2)</sup>

**527 - ACTIVATED T CELLS INDUCE OLIGODENDROCYTE PROGENITOR CELLS PROLIFERATION BY RELEASING VEGF-A**

Elliot Choi - Tonguang Wang - Avindra Nath

National Institutes Of Health, NINDS, Bethesda, United States

**434 - KEY ROLE OF TREM-2 ON MICROGLIA IN CUPRIZONE-INDUCED DEMYELINATION MODEL**

Claudia Cantoni <sup>(1)</sup> - Karel Otero <sup>(2)</sup> - Bryan Bollman <sup>(1)</sup> - Anne Cross <sup>(1)</sup> - Laura Piccio <sup>(1)</sup>

Department Of Neurology, Washington University In St Louis, St Louis, United States <sup>(1)</sup> - Biogen, Biogen, Boston, United States <sup>(2)</sup>

**466 - FLUORESCENCE LIFETIME IMAGING REVEALS NADPH OXIDASE OVERACTIVATION AS A MECHANISM OF MULTIPLE SCLEROSIS PATHOGENESIS**

Helena Radbruch <sup>(1)</sup> - Agata Mossakowski <sup>(1)</sup> - Julian Pohlen <sup>(1)</sup> - Raluca Niesner <sup>(2)</sup>

Institut Für Neuropathologie, Charité, Berlin, Germany <sup>(1)</sup> - Ag Biophysical Analytics, Drfz, Berlin, Germany <sup>(2)</sup>

**302 - DUAL ACTIVITY OF INTERFERON GAMMA IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Lilian Reyes <sup>(1)</sup> - Juan Tichauer <sup>(2)</sup> - Eric Acuña <sup>(2)</sup> - Claudia Cárcamo <sup>(3)</sup> - Patrizia De Sarno <sup>(4)</sup> - Chander Raman <sup>(5)</sup>  
Rodrigo Naves <sup>(2)</sup>

Department Of Biological And Chemistry Sciences, Universidad San Sebastián, Santiago, Chile <sup>(1)</sup> - Institute Of Biomedical Sciences, Universidad De Chile, Santiago, Chile <sup>(2)</sup> - Department Of Neurology, Pontificia Universidad Católica De Chile, Santiago, Chile <sup>(3)</sup>  
Department Of Psychiatry And Behavioral Neurobiology, University Of Alabama At Birmingham, Birmingham, Alabama, United States <sup>(4)</sup>  
Departments Of Medicine And Microbiology, University Of Alabama At Birmingham, Birmingham, Alabama, United States <sup>(5)</sup>

**196 - IMMUNOLOGICAL STUDIES OF INFLAMMATORY BASAL GANGLIA DISORDERS**

Hiroshi Sakuma <sup>(1)</sup> - Eri Nakahara <sup>(1)</sup> - Tomohiro Suzuki <sup>(1)</sup> - Kuniko Kohyama <sup>(1)</sup> - Masaharu Hayashi <sup>(1)</sup>

Department Of Brain Development And Neural Regeneration, Tokyo Metropolitan Institute Of Medical Science, Tokyo, Japan <sup>(1)</sup>

**357 - NON-LYTIC AUTOANTIBODY MEDIATED EFFECTS ON MYELINATION ARE ASSOCIATED WITH INCREASED PRO-INFLAMMATORY CHEMOKINE EXPRESSION**

Tiia Semenoff - Katie Chapple - Christopher Linington - Katja Thuemmler

Institute Of Infection, Immunity And Inflammation, University Of Glasgow, Glasgow, United Kingdom

**146 - A DUAL ROLE FOR FIBROBLAST GROWTH FACTOR 9 IN MULTIPLE SCLEROSIS: INHIBITION OF (RE) MYELINATION AND INDUCTION OF PRO-INFLAMMATORY ENVIRONMENT**

Katja Thuemmler <sup>(1)</sup> - Daniel Mcelroy <sup>(1)</sup> - Maren Lindner <sup>(1)</sup> - Ariel Arthur <sup>(1)</sup> - Christina Elliott <sup>(1)</sup> - Anna Williams <sup>(2)</sup> - Edgar Meinel <sup>(3)</sup> - Hans Lassmann <sup>(4)</sup> - Christopher Linington <sup>(1)</sup>

Institute Of Infection, Immunity And Inflammation, University Of Glasgow, Glasgow, United Kingdom <sup>(1)</sup> - Mrc Centre For Inflammation Research, University Of Edinburgh, Edinburgh, United Kingdom <sup>(2)</sup> - Institute For Clinical Neuroimmunology, Ludwig Maximilian University, Munich, Germany <sup>(3)</sup> - Brain Research Institute, Department Of Neuroimmunology, University Of Vienna, Vienna, Germany <sup>(4)</sup>



**386 - INCREASED EXPRESSION KIR 4.1 POTASSIUM CHANNEL IN EXPERIMENTAL MODELS OF DEMYELINATION.**

Laura Turati - Chiara Cordiglieri - Chiara Toscani - Francesca Andreetta - Pia Bernasconi - Renato Mantegazza  
Fulvio Baggi

Neurology Iv Unit, Neurological Institute "Carlo Besta", Milan, Italy

**391 - DIFFERENTIAL TGF-BETA SIGNALING IN GLIAL SUBSETS UNDERLIES IL-6-MEDIATED EPILEPTOGENESIS IN MICE**

Ekaterina Vinogradov <sup>(1)</sup> - Nitzan Tagel Levy <sup>(1)</sup> - Dan Milikovsky <sup>(2)</sup> - Gytis Baranuskas <sup>(2)</sup> - Yaron David <sup>(2)</sup>

Maya Ketzev <sup>(2)</sup> - Shai Abutbul <sup>(1)</sup> - Itai Weissberg <sup>(2)</sup> - Ilya Fleidervish <sup>(2)</sup> - Alon Friedman <sup>(2)</sup> - Alon Monsonego <sup>(1)</sup>

The Shraga Segal Dept. Of Microbiology And Immunology, Faculty Of Health Sciences And The National Institute Of Biotechnology In The Negev, Ben-gurion University, Beer-sheva, Israel <sup>(1)</sup> - The Dept. Of Physiology And Neurobiology, Zlotowski Center For Neuroscience, Ben-gurion University, Beer-sheva, Israel <sup>(2)</sup>

**87 - MOLECULAR MECHANISMS OF OXIDATIVE TISSUE INJURY DIFFER BETWEEN MULTIPLE SCLEROSIS AND EXPERIMENTAL DISEASE MODELS**

Isabella Wimmer - Cornelia Schuh - Simon Hametner - Jan Bauer - Monika Bradl - Hans Lassmann

Center For Brain Research/ Department Of Neuroimmunology, Medical University Of Vienna, Vienna, Austria

**301 - INTERFERON-BETA CONFERS PROTECTIVE EFFECTS AGAINST ISCHEMIC STROKE THROUGH ITS ANTI-INFLAMMATORY PROPERTIES**

Ping-chang Kuo - Barbara Scofield - Jui-hung Yen

Indiana University School Of Medicine, Indiana University, Fort Wayne, In, United States

**546 - IL-17A PROMOTES MYELIN LOSS AND INFLAMMATORY RESPONSE DURING CUPRIZONE-INDUCED DEMYELINATION**

Julian Zimmermann <sup>(1)</sup> - Michael Emrich <sup>(1)</sup> - Marius Krauthausen <sup>(1)</sup> - Simon Saxe <sup>(1)</sup> - Michael Heneka <sup>(2)</sup>

Iain Campbell <sup>(3)</sup> - Marcus Müller <sup>(1)</sup>

Dept. Of Neurology, University Hospital Of Bonn, Bonn, Germany <sup>(1)</sup> - Clinical Neuroscience, University Hospital Of Bonn, Bonn, Germany <sup>(2)</sup> - School Of Molecular Bioscience, University Of Sydney, Sydney, Australia <sup>(3)</sup>

---

**COFFEE BREAK & POSTER SESSION | NEURODEGENERATION**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

**271 - AXONAL TRANSPORT DEFICITS DURING AUTOIMMUNE OPTIC NEURITIS**

Jovana Bojceviski - Sarah K Williams - Ricarda Diem - Richard Fairless

Neuro-oncology, University Clinic Heidelberg, Heidelberg, Germany

**156 - OXIDATIVE STRESS ALTERS MITOCHONDRIA AT THE NODES OF RANVIER OF EX VIVO TRANSECTED AXONS**

Elena Bros <sup>(1)</sup> - Jason Millward <sup>(1)</sup> - Raluca Niesner <sup>(2)</sup> - Friedemann Paul <sup>(3)</sup> - Carmen Infante-duarte <sup>(1)</sup>

Institute For Medical Immunology, Charité Universitätsmedizin, Berlin, Germany <sup>(1)</sup> - Deutsches Rheuma-forschungszentrum, Drfz, Berlin, Germany <sup>(2)</sup> - Neurocure Clinical Research Center, Charité Universitätsmedizin, Berlin, Germany <sup>(3)</sup>

**149 - HIGH GLUTATHIONE-S-TRANSFERASE 4 ALPHA EXPRESSION PROMOTES NERVE CELL SURVIVAL IN NEURODEGENERATIVE DISORDERS**

Karl Carlström - Faiez Al Nimer - Mikael Ström - Fredrik Piehl

Department Of Clinical Neuroscience, Karolinska Institute, Stockholm, Sweden

**457 - BENEFICIAL ROLE OF REGULATORY T CELLS IN A MOUSE MODEL OF ALZHEIMER'S DISEASE**

Cira Dansokho <sup>(1)</sup> - Dylla Ait Ahmed <sup>(1)</sup> - Cécile Toly-ndour <sup>(1)</sup> - Saba Aid <sup>(2)</sup> - Thomas Chaigneau <sup>(1)</sup> - Vanessa Calle <sup>(1)</sup>

Nicolas Cagnard <sup>(3)</sup> - Martin Holzenberger <sup>(2)</sup> - Eliane Piaggio <sup>(4)</sup> - Pierre Aucouturier <sup>(1)</sup> - Guillaume Dorothée <sup>(1)</sup>

Inserm UmrS 938, Laboratory Immune System, Neuroinflammation And Neurodegenerative Diseases, Saint-antoine Hospital, Paris, France <sup>(1)</sup> - Inserm UmrS 938, Laboratory Neuroendocrine Mechanisms Of Longevity And Age-related Diseases, Saint-antoine Hospital, Paris, France <sup>(2)</sup> - Faculty Of Medicine Paris Descartes, Bioinformatics Platform, Necker Hospital, Paris, France <sup>(3)</sup> - Inserm U932, Laboratory Of Immunology, Curie Institute, Paris, France <sup>(4)</sup>

**550 - MODULATION OF THE ENDOCANNABINOID SYSTEM AND PAX1-MEDIATED NEUROINFLAMMATION IN AN IN VITRO MODEL OF ALZHEIMER'S DISEASE**

Steven Fagan <sup>(1)</sup> - Veronica A. Campbell <sup>(2)</sup>

Trinity College Institute Of Neuroscience, University Of Dublin, Trinity College, Department Of Physiology, Dublin, Ireland <sup>(1)</sup>

Trinity College Institute Of Neuroscience, Department Of Physiology, University Of Dublin, Trinity College, Dublin, Ireland <sup>(2)</sup>

**310 - GENE EXPRESSION ANALYSIS OF RETINAL NEURONS IN EXPERIMENTAL AUTOIMMUNE OPTIC NEURITIS**

Sabine Herold <sup>(1)</sup> - Prateek Kumar <sup>(1)</sup> - Sven Wichert <sup>(2)</sup> - Mathias Baehr <sup>(1)</sup> - Moritz Rossner <sup>(2)</sup> - Katharina Hein <sup>(1)</sup>

University Medicine Goettingen, Neurology, Goettingen, Germany <sup>(1)</sup> - Clinic For Psychiatry And Physiology, Clinic For Psychiatry And

Physiology, Munich, Germany <sup>(2)</sup>

**324 - A ROLE FOR THE COMPLEMENT ALTERNATIVE PATHWAY IN THE PATHOLOGY OF MULTIPLE SCLEROSIS GREY MATTER LESIONS**

Lewis M. Watkins <sup>(1)</sup> - Samantha Loveless <sup>(2)</sup> - James Neal <sup>(3)</sup> - Mark I. Rees <sup>(1)</sup> - Neil Robertson <sup>(2)</sup>

Richard Reynolds <sup>(4)</sup> - B. Paul Morgan <sup>(3)</sup> - Owain W. Howell <sup>(1)</sup>

Institute Of Life Sciences, Swansea University, Swansea, United Kingdom <sup>(1)</sup> - Institute Of Psychological Medicine And Clinical

Neurosciences, Cardiff University, Cardiff, United Kingdom <sup>(2)</sup> - Institute Of Infection & Immunity, Cardiff University, Cardiff, United

Kingdom <sup>(3)</sup> - Division Of Brain Sciences, Imperial College London, London, United Kingdom <sup>(4)</sup>

**326 - ROLE OF PURINERGIC RECEPTORS IN ALZHEIMER'S DISEASE: INSIGHTS FROM ANIMAL MODELS**

Elodie Martin <sup>(1)</sup> - Majid Amar <sup>(1)</sup> - Ihsen Youssef <sup>(1)</sup> - Jean Kanellopoulos <sup>(2)</sup> - Bertrand Fontaine <sup>(1)</sup>

Benoit Delatour <sup>(1)</sup> - Delarasse Cecile <sup>(1)</sup>

Brain And Spine Institute (icm), Hopital Pitié-salpêtrière, Paris, France <sup>(1)</sup> - University Paris Sud, University Paris Sud, Orsay, France <sup>(2)</sup>

**634 - COMPLEX NEURO-IMMUNOLOGY CHALLENGES IN RESOURCE LIMITED HEALTH SETTINGS**

Joshua Ngwang Menang <sup>(1)</sup> - Samuel Njimogu <sup>(2)</sup> - Edward Ngwa <sup>(1)</sup>

Calmef Health Centre, Calmef Health Centre, Tiko, Cameroon <sup>(1)</sup> - Bingo Annex Bamenda, St Louis University Of Medicine And Health

Sciences, Bamenda, Cameroon <sup>(2)</sup>

**169 - INHIBITION OF KYNURENINE 3-MONOOXYGENASE IN EAE**

Iris Oezen <sup>(1)</sup> - Iris Mildenerberger <sup>(1)</sup> - Michael Platten <sup>(2)</sup>

Ccu Neuroimmunology And Brain Tumor Immunology, German Cancer Research Center, Heidelberg, Germany <sup>(1)</sup>

Department Of Neurooncology, University Hospital Heidelberg, Heidelberg, Germany <sup>(2)</sup>

**364 - ASTROCYTIC DYSFUNCTION INDUCED BY L-ALPHAAMINOADIPIC ACID REDUCES MEASURES OF NEURONAL COMPLEXITY IN VITRO; RESCUE BY NMDA RECEPTOR ANTAGONISTS**

Eileen O'toole - Marika Doucet - Andrew Harkin

Trinity College Institute Of Neuroscience, Trinity College Dublin, Dublin, Ireland

**161 - NEW IL-22 FUNCTION AND ITS RELEVANCE IN MS**

Guillaume Perriard

Laboratory Of Neuro-immunology, Neuroscience Research Center, University Hospital (chuv), Lausanne, Switzerland

**498 - PROBING THE BIOCHEMICAL COMPOSITION OF NORMAL APPEARANCE WHITE MATTER, ACTIVE AND CHRONIC LESIONS FROM MULTIPLE SCLEROSIS CASES USING VIBRATIONAL SPECTROSCOPY**

Ines Ramos <sup>(1)</sup> - Rachel Walter <sup>(2)</sup> - Julie Simpson <sup>(2)</sup> - Nicola Woodroffe <sup>(3)</sup> - Fiona Lyng <sup>(1)</sup>

Centre For Radiation And Environmental Science, Focas Research Institute, Dublin Institute Of Technology, Dublin, Ireland <sup>(1)</sup>

Sheffield Institute For Translational Neuroscience, University Of Sheffield, Sheffield, United Kingdom <sup>(2)</sup> - Biomedical Research Centre,

Sheffield Hallam University, Sheffield, United Kingdom <sup>(3)</sup>

**238 - UV IRRADIATION-MEDIATED SYSTEMIC IMMUNE SUPPRESSION THROUGH AHR SIGNALLING**

Chiara Redaelli <sup>(1)</sup> - Caroline Pilz <sup>(1)</sup> - Anja Kunze <sup>(2)</sup> - Knut Schaeckel <sup>(2)</sup> - Gernot Poschet <sup>(3)</sup> - Bernd Arnold <sup>(4)</sup>

Wolfgang Wick <sup>(5)</sup> - Michael Platten <sup>(5)</sup>

Ccu Neuroimmunology And Brain Tumor Immunology, German Cancer Research Center, Heidelberg, Germany <sup>(1)</sup> - Laboratory Of

Experimental Dermatology, Medical Faculty, University Heidelberg, Heidelberg, Germany <sup>(2)</sup> - Department Of Plant Molecular Biology,

Centre For Organismal Studies, Heidelberg, Germany <sup>(3)</sup> - Department Of Molecular Immunology, German Cancer Research Center,

Heidelberg, Germany <sup>(4)</sup> - Department Of Neurooncology, University Hospital Heidelberg, Heidelberg, Germany <sup>(5)</sup>

**86 - ANTI-INFLAMMATORY THERAPY VIA CD163-MACROPHAGES IN THE 6-OHDA PARKINSON'S DISEASE MODEL**Noemie Tentillier <sup>(1)</sup> - Anders Etzerodt <sup>(2)</sup> - Mads Olesen <sup>(1)</sup> - Filiz Sila Rizalar <sup>(1)</sup> - Søren K Moestrup <sup>(2)</sup>Marina Romero-ramos <sup>(1)</sup>Cns Disease Modeling Group, Neurodin, Dept Biomedicine, Aarhus University, Aarhus, Denmark <sup>(1)</sup>Dept Biomedicine, Aarhus University, Aarhus, Denmark <sup>(2)</sup>**544 - AXONAL DAMAGE AND PROTECTION DURING EARLY REMYELINATION IN MULTIPLE SCLEROSIS AND AN ANIMAL MODEL**

Verena Schultz - Uta Scheidt - Franziska Paap - Wolfgang Brueck - Andreas Junker

Department Of Neuropathology, University Medical Center Goettingen, Goettingen, Germany

**269 - EARLY SIGNS OF CELLULAR STRESS IN THE INDUCTION PHASE OF AUTOIMMUNE OPTIC NEURITIS**

Aleksandar Stojic - Sarah Williams - Ricarda Diem - Richard Fairless

Neuro-oncology, University Clinic Heidelberg, Heidelberg, Germany

**404 - THE SPHINGOSINE-1-PHOSPHATE RECEPTOR AGONIST FTY720 PROMOTES PERIPHERAL NERVE REGENERATION**

Fabian Szezanowski - Angelika Derksen - Gerd Meyer Zu Hörste - Hans-peter Hartung - Bernd C. Kieseier

Department Of Neurology, Heinrich Heine University, Düsseldorf, Germany

**46 - CORRELATION OF CONCENTRATIONS OF GLUTAMATE IN SERUM SAMPLES AND DISABILITY IN MULTIPLE SCLEROSIS**Ekaterina Terskikh <sup>(1)</sup> - Valentina Alifirova <sup>(1)</sup> - Svetlana Ivanova <sup>(2)</sup> - Anastasia Ryazantseva <sup>(1)</sup> - Marina Titova <sup>(1)</sup>Irina Zhukova <sup>(1)</sup> - Anastasia Boyko <sup>(2)</sup>Syberian State Medical University, Hospital Of Syberian State Medical University, Tomsk, Russian Federation <sup>(1)</sup> - Institute Of MentalHealth, Hospital Of Institute Of Mental Health, Tomsk, Russian Federation <sup>(2)</sup>**511 - EVALUATION OF HUMORAL AUTOIMMUNITY IN EXPERIMENTAL CERVICAL SPINAL CORD INJURY**Antigona Ulndreaj <sup>(1)</sup> - Apostolia Tzekou <sup>(2)</sup> - Andrea J. Mothe <sup>(3)</sup> - Mohammad Khazaei <sup>(2)</sup> - Charles H. Tator <sup>(1)</sup>Michael G. Fehlings <sup>(1)</sup>Institute Of Medical Science, University Of Toronto, Toronto, Canada <sup>(1)</sup> - Division Of Genetics And Development, Toronto WesternResearch Institute, Toronto, Canada <sup>(2)</sup> - Division Of Genetics And Development, Toronto Western Research Institute, Toronto, Canada <sup>(3)</sup>**644 - GPR84 DEFICIENCY REDUCES MICROGLIOSIS, BUT ACCELERATES DENDRITIC DEGENERATION AND COGNITIVE DECLINE IN A MOUSE MODEL OF ALZHEIMER'S DISEASE**

Lusine Bozoyan - Julie Audoy-rémus - Aline Dumas - Mohammed Filali - Steve Lacroix - Serge Rivest

Marie-ève Tremblay - Luc Vallières

Laval University, Chu De Québec, Québec, Canada

---

**COFFEE BREAK & POSTER SESSION | REPAIR**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

**171 - PLASTIC RESPONSE OF MATURE OLIGODENDROCYTES FOLLOWING CNS DAMAGE**Giuseppe Locatelli <sup>(1)</sup> - Arianna Baggiolini <sup>(2)</sup> - Bettina Schreiner <sup>(2)</sup> - Burkhard Becher <sup>(2)</sup> - Thorsten Buch <sup>(3)</sup>Institute Of Clinical Neuroimmunology, Ludwig-maximilian Universität München, Zürich, Germany <sup>(1)</sup> - Institute Of ExperimentalImmunology, University Of Zürich, Zurich, Switzerland <sup>(2)</sup> - Institute For Medical Microbiology, Immunology And Hygiene, TechnischeUniversität München, Munich, Germany <sup>(3)</sup>**292 - REGULATORY T CELLS PROMOTE CNS MYELIN REGENERATION IN VIVO**Yvonne Dombrowski <sup>(1)</sup> - Thomas O'hagan <sup>(1)</sup> - Marie Dittmer <sup>(1)</sup> - Peter Bankhead <sup>(2)</sup> - Anna Williams <sup>(3)</sup>Rebecca J. Ingram <sup>(1)</sup> - Chao Zhao <sup>(4)</sup> - Robin Jm Franklin <sup>(4)</sup> - Denise Fitzgerald <sup>(1)</sup>Centre For Infection And Immunity, Queen's University Belfast, Belfast, United Kingdom <sup>(1)</sup> - Centre For Cancer Research And CellBiology, Queen's University Belfast, Belfast, United Kingdom <sup>(2)</sup> - Mrc Centre For Regenerative Medicine, University Of Edinburgh,Edinburgh, United Kingdom <sup>(3)</sup> - Wellcome Trust-mrc Cambridge Stem Cell Institute, University Of Cambridge, Cambridge, UnitedKingdom <sup>(4)</sup>

**178 - DIFFERENTIAL SCREENING-SELECTED GENE ABERRATIVE IN NEUROBLASTOMA (DAN) PRODUCTION IN CNS OF MS PATIENTS MAY SUPPORT NEUROGENESIS/ OLIGODENDROGENESIS**

Keren Regev <sup>(1)</sup> - Karin Fainberg <sup>(1)</sup> - Olga Dorman <sup>(1)</sup> - Avi Gadoth <sup>(2)</sup> - Arnon Karni <sup>(3)</sup>

Neuroimmunology Laboratory, Tel Aviv Medical Center, Tel Aviv, Israel <sup>(1)</sup> - Department Of Neurology, Tel Aviv Medical Center, Tel Aviv, Israel <sup>(2)</sup> - Neuroimmunology Laboratory, Tel Aviv Medical Center, Sackler's Medical School, Tel Aviv University, Tel Aviv, Israel <sup>(3)</sup>

**173 - ENHANCEMENT OF THE ACTIVITY OF M2-POLARIZED MACROPHAGES/MICROGLIA PROMOTES RECOVERY FROM DEMYELINATION**

Manoj Mishra - Khalil Rawji - Michael B. Keough - Yan Fan - V. Wee Yong

Hotchkiss Brain Institute, University Of Calgary, Calgary, Canada

---

**COFFEE BREAK & POSTER SESSION | STEM CELLS**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

**284 - NEURAL STEM CELL TRANSPLANTATION PROMOTES POST-ISCHEMIC NEURONAL PLASTICITY BY REGULATING THE EXPRESSION OF GLUTAMATE TRANSPORTERS.**

Marco Bacigaluppi <sup>(1)</sup> - Gianluca Luigi Russo <sup>(1)</sup> - Luca Peruzzotti-jametti <sup>(1)</sup> - Silvia Rossi <sup>(2)</sup> - Erica Butti <sup>(1)</sup>

Roberta De Ceglia <sup>(1)</sup> - Caterina Motta <sup>(2)</sup> - Luca Muzio <sup>(1)</sup> - Giancarlo Comi <sup>(1)</sup> - Diego Centonze <sup>(2)</sup>

Roberto William Invernizzi <sup>(3)</sup> - Dirk Matthias Hermann <sup>(4)</sup> - Gianvito Martino <sup>(1)</sup>

Neuroimmunology Unit, Institute Of Experimental Neurology, University Vita Salute San Raffaele And San Raffaele Hospital, Milan, Italy <sup>(1)</sup> - Department Of Neuroscience, Neurologic Clinic, Tor Vergata University, Rome, Italy <sup>(2)</sup> - Neurochemistry And Behavior, Irccs-istituto Di Ricerche Farmacologiche "mario Negri", Milano, Italy <sup>(3)</sup> - Department Of Neurology, University Hospital Essen, Essen, Germany <sup>(4)</sup>

**589 - MESENCHYMAL STEM CELLS NANOVESICLES: AN INNOVATIVE THERAPEUTIC APPROACH FOR NEUROPROTECTION AND NEUROREGENERATION**

Bruno Bonetti <sup>(1)</sup> - Alessia Farinazzo <sup>(1)</sup> - Stefano Angiari <sup>(2)</sup> - Ermanna Turano <sup>(1)</sup> - Elena Bazzoli <sup>(1)</sup>

Gabriela Constantin <sup>(2)</sup>

Dept Of Neuroscience, University Of Verona, Verona, Italy <sup>(1)</sup> - Dept Of Pathology, University Of Verona, Verona, Italy <sup>(2)</sup>

**514 - INTRATHECAL TRANSPLANTATION OF NEURAL PRECURSOR CELLS IMPAIRS THE EFFECTOR PHASE OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS.**

Donatella De Feo <sup>(1)</sup> - Arianna Merlini <sup>(1)</sup> - Elena Brambilla <sup>(1)</sup> - Cecilia Laterza <sup>(1)</sup> - Francesca Ruffini <sup>(1)</sup> - Ramesh

Menon <sup>(1)</sup> - Cinthia Farina <sup>(1)</sup> - Giancarlo Comi <sup>(1)</sup> - Melanie Greter <sup>(2)</sup> - Gianvito Martino <sup>(1)</sup>

Neuroimmunology Unit, Institute Of Experimental Neurology, University Vita Salute San Raffaele And San Raffaele Hospital, Milan, Italy <sup>(1)</sup> - Institute Of Experimental Immunology, University Of Zurich, Zürich, Switzerland <sup>(2)</sup>

**586 - IS INTRA-MUSCULAR TRANSPLANTATION OF HUMAN PLACENTAL STROMAL CELLS A FEASIBLE APPROACH FOR CELL THERAPY IN MULTIPLE SCLEROSIS?**

Nina Fainstein <sup>(1)</sup> - Ilona Shapiro <sup>(1)</sup> - Maria Tzirlin <sup>(2)</sup> - Tamir Ben-hur <sup>(1)</sup> - Raphael Gorodetsky <sup>(2)</sup>

Department Of Neurology, Hadassah Hebrew University Medical Center, Jerusalem, Israel <sup>(1)</sup> - Department Of Oncology, Hadassah Hebrew University Medical Center, Jerusalem, Israel <sup>(2)</sup>

**409 - THE CANNABINOID SYSTEM IN HUMAN MESENCHYMAL CELLS**

Coral González García <sup>(1)</sup> - Laura Román Vega <sup>(1)</sup> - Lucía Campos Ruiz <sup>(1)</sup> - Elvira Ramil Tojeiro <sup>(1)</sup> - Mercedes Zurita

Castillo <sup>(2)</sup> - Concepción Aguayo Ferrer <sup>(2)</sup> - Antonio J. Sánchez López <sup>(1)</sup> - Juan Antonio García-merino <sup>(1)</sup>

University Hospital Puerta De Hierro Research Institute (neuroimmunology Unit), Hospital Puerta De Hierro, Majadahonda/ Madrid, Spain <sup>(1)</sup> - University Hospital Puerta De Hierro Research Institute (neuroscience Unit), Hospital Puerta De Hierro, Majadahonda/ Madrid, Spain <sup>(2)</sup>

**415 - THERAPEUTIC POTENTIAL OF HUMAN MESENCHYMAL CELLS FROM MULTIPLE SCLEROSIS PATIENTS IN EAE**

Coral González García <sup>(1)</sup> - Laura Román Vega <sup>(1)</sup> - Lucía Campos Ruiz <sup>(1)</sup> - Elvira Ramil Tojeiro <sup>(1)</sup> - Mercedes Zurita

Castillo <sup>(2)</sup> - Concepción Aguayo Ferrer <sup>(2)</sup> - Antonio J. Sánchez López <sup>(1)</sup> - Juan Antonio García-merino <sup>(1)</sup>

University Hospital Puerta De Hierro Research Institute (neuroimmunology Unit), Hospital Puerta De Hierro, Majadahonda/ Madrid, Spain <sup>(1)</sup> - University Hospital Puerta De Hierro Research Institute (neuroscience Unit), Hospital Puerta De Hierro, Majadahonda/ Madrid, Spain <sup>(2)</sup>

## **289 - EXTRACELLULAR VESICLES FROM NEURAL STEM CELLS TRANSFER THE IFN- $\gamma$ /IFNGR1 COMPLEX TO ACTIVATE STAT1-DEPENDENT SIGNALLING IN TARGET CELLS**

Nunzio Iraci <sup>(1)</sup> - Chiara Cossetti <sup>(1)</sup> - Tim Mercer <sup>(2)</sup> - Tommaso Leonardi <sup>(3)</sup> - Emanuele Alpi <sup>(4)</sup> - Denise Drago <sup>(4)</sup> Clara Alfaro-cervello <sup>(1)</sup> - Harpreet Saini <sup>(3)</sup> - Matthew Davis <sup>(3)</sup> - Julia Schaeffer <sup>(1)</sup> - Werner Muller <sup>(5)</sup> - Jose Manuel Garcia-verdugo <sup>(6)</sup> - Suresh Mathivanan <sup>(7)</sup> - Angela Bachi <sup>(4)</sup> - Anton Enright <sup>(3)</sup> - John Mattick <sup>(8)</sup> - Stefano Pluchino <sup>(1)</sup> Clinical Neurosciences, University Of Cambridge, Cambridge, United Kingdom <sup>(1)</sup> - Institute For Molecular Bioscience, University Of Queensland, St Lucia, Australia <sup>(2)</sup> - The EMBL-European Bioinformatics Institute, Wellcome Trust Genome Campus, Hinxton, United Kingdom <sup>(3)</sup> - Biomolecular Mass Spectrometry Unit, Division Of Genetics And Cell Biology, San Raffaele Scientific Institute, Milan, Italy <sup>(4)</sup> - Faculty Of Life Sciences, University Of Manchester, Manchester, United Kingdom <sup>(5)</sup> - Departamento De Neurobiología Comparada, Universidad De Valencia, Valencia, Spain <sup>(6)</sup> - Department Of Biochemistry, La Trobe University, Victoria, Australia <sup>(7)</sup> The Garvan Institute, The Garvan Institute, Darlinghurst, Australia <sup>(8)</sup>

## **101 - MESENCHYMAL STEM CELLS (MSC) DERIVED FROM MICE WITH EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS (EAE) SUPPRESS EAE AND HAVE SIMILAR BIOLOGICAL PROPERTIES WITH MSC FROM HEALTHY DONORS**

Ibrahim Kassis Kassis - Panayiota Petrou - Dimitrios Karussis

Hadassah-hebrew University Medical Center, Hadassah-hebrew University Medical Center, Jerusalem, Israel

## **453 - GENERATION AND CHARACTERIZATION OF IPSC-DERIVED NEURONS FROM MULTIPLE SCLEROSIS PATIENTS**

Cecilia Laterza <sup>(1)</sup> - Roberta De Ceglia <sup>(1)</sup> - Lorenzo Pinzani <sup>(1)</sup> - Francesca Ruffini <sup>(1)</sup> - Chiara Paola Zoia <sup>(2)</sup> Michael Peitz <sup>(3)</sup> - Gianvito Martino <sup>(1)</sup>

Neuroimmunology Unit, Inspe, Ospedale San Raffaele, Milano, Italy <sup>(1)</sup> - Department Of Surgery & Translational Medicine, University Of Milano-bicocca, Monza, Italy <sup>(2)</sup> - Institute Of Reconstructive Neurobiology, University Of Bonn, Bonn, Germany <sup>(3)</sup>

## **433 - ANALYSIS OF THE INTERFERON GAMMA MODULATED PATHWAYS RELATED TO THE THERAPEUTIC PLASTICITY OF BONE MARROW-DERIVED MESENCHYMAL STEM CELLS THROUGH A SILAC-BASED PROTEOMIC APPROACH**

Laura Lovato <sup>(1)</sup> - Cristina Neri <sup>(2)</sup> - Valeria Marzano <sup>(3)</sup> - Giovanni Novi <sup>(1)</sup> - Stefano Levi Mortera <sup>(2)</sup> - Chiara Cavaliere <sup>(4)</sup> Anna Laura Capriotti <sup>(4)</sup> - Luisa Pieroni <sup>(2)</sup> - Nicole Kerlero De Rosbo <sup>(1)</sup> - Andrea Urbani <sup>(2)</sup> - Antonio Uccelli <sup>(1)</sup>

Department Of Neurology, Ophthalmology And Genetics, University Of Genoa, Genoa, Italy <sup>(1)</sup> - Proteomic And Metabonomic Laboratory, Santa Lucia Foundation, Rome, Italy <sup>(2)</sup> - Department Of System Medicine And Department Of Experimental Medicine And Surgery, University Of Rome Tor Vergata, Rome, Italy <sup>(3)</sup> - Department Of Chemistry, Sapienza University, Rome, Italy <sup>(4)</sup>

## **262 - INFLUENCE OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS ON THE LOCALIZATION AND VIABILITY OF NEURAL STEM CELLS AFTER INTRATHECAL TRANSPLANTATION**

Arianna Merlini <sup>(1)</sup> - Donatella De Feo <sup>(1)</sup> - Francesca Ruffini <sup>(1)</sup> - Elena Brambilla <sup>(1)</sup> Giancarlo Comi <sup>(2)</sup> - Gianvito Martino <sup>(1)</sup>

Neuroimmunology Unit, Institute Of Experimental Neurology, San Raffaele Scientific Institute, Milan, Italy <sup>(1)</sup>

Department Of Neurology And Institute Of Experimental Neurology, San Raffaele Scientific Institute, Milan, Italy <sup>(2)</sup>

## **218 - CYTOKINES PRODUCTION IN MULTIPLE SCLEROSIS PATIENTS AFTER INTRAVENOUS INFUSION OF AUTOLOGOUS MESENCHYMAL STEM CELLS**

Darya Nizheharodava - Mariya Yurkevich - Halina Ivanchyk - Svetlana Kulinich - Marina Zafranskaya

Belarussian Medical Academy Of Post-graduate Education, Bio-medical Research Center, Minsk, Republic Of Belarus

## **581 - STUDY OF PHENOTYPIC CHANGES IN CORTICAL NEURON CULTURES INDUCED BY MESENCHYMAL STEM CELLS CM DURING NEUROPROTECTION AGAINST GLUTAMATE-INDUCED CELL DEATH**

Irini Papazian

Hellenic Pasteur Institute, Laboratory Of Molecular Genetics, Athens, Greece

## **50 - INJECTION OF NEXT-GENERATION DIRECTLY-INDUCED NEURAL STEM CELLS (INSCS) INDUCES RECOVERY IN A MOUSE MODEL OF MULTIPLE SCLEROSIS**

Luca Peruzzotti-jametti <sup>(1)</sup> - Giulia Mallucci <sup>(1)</sup> - Gillian Tannahill <sup>(1)</sup> - Bing Huang <sup>(1)</sup> - Yenel Bernard Lakes <sup>(2)</sup> Elena Giusto <sup>(1)</sup> - Matteo Donega' <sup>(1)</sup> - Beatrice Balzarotti <sup>(1)</sup> - Frank Edenhofer <sup>(3)</sup> - Stefano Pluchino <sup>(1)</sup>

John Van Geest Centre For Brain Repair And Wellcome Trust-medical Research Council Stem Cell Institute, Department Of Clinical Neurosciences, University Of Cambridge, Cambridge, United Kingdom <sup>(1)</sup> - Institute Of Reconstructive Neurobiology, University Of Bonn, Bonn, Germany <sup>(2)</sup> - Institute For Anatomy And Cell Biology, University Of Würzburg, Würzburg, Germany <sup>(3)</sup>

**230 - EFFECTS OF INTERFERON-BETA ON NEURAL STEM CELLS AND IN A MOUSE MODEL OF MULTIPLE SCLEROSIS**

Sarah Stahlke <sup>(1)</sup> - Judith Metzdorf <sup>(2)</sup> - Xiomara Pedreitturia <sup>(1)</sup> - Simon Van Leeuwen <sup>(3)</sup> - Andreas Faissner <sup>(3)</sup>  
Ralf Gold <sup>(1)</sup> - Ingo Kleiter <sup>(1)</sup>

Neuroimmunologie, St. Josef Hospital, Bochum, Germany <sup>(1)</sup> - Neuroimmunologie, Ruhr-universität, Bochum, Germany <sup>(2)</sup>  
Zellmorphologie Und Molekulare Neurobiologie, Ruhr-universität, Bochum, Germany <sup>(3)</sup>

**349 - CHARACTERIZATION OF AD-MSC GENETICALLY MODIFIED TO PRODUCE IFNBETA. EFFECTIVENESS IN RR-EAE MODEL**

Margarita Suardiaz García <sup>(1)</sup> - Carmen Marín-bañasco <sup>(1)</sup> - Karim Benabdellah <sup>(2)</sup> - Laura Leyva Fernandez <sup>(1)</sup>  
Begoña Oliver Martos <sup>(1)</sup> - Maria Jesus Pinto Medel <sup>(1)</sup> - Francisco Martín Molina <sup>(2)</sup> - Oscar Fernández Fernández <sup>(3)</sup>

Instituto De Biomedicina De Málaga (ibima), H.r.u. Of Málaga, U.g.c. Of Neuroscience, Research Laboratory, Málaga, Spain <sup>(1)</sup> - Genyo. Centre For Genomics And Oncological Research:, University Of Granada/andalucian Regional Government, Pts Granada., Granada, Spain <sup>(2)</sup> - Instituto De Biomedicina De Málaga (ibima), H.r.u. Of Málaga, U.g.c. Of Neuroscience, Málaga, Spain <sup>(3)</sup>

**428 - INVESTIGATION OF THE IMPACT OF INTRAVENOUS INJECTION OF MESENCHYMAL STEM CELLS FROM MOUSE BONE MARROW ON MUSCLE WEAKNESS AND IMMUNOLOGICAL PARAMETERS IN EXPERIMENTAL AUTOIMMUNE MYASTHENIA GRAVIS MODEL**

Canan Aysel Ulusoy <sup>(1)</sup> - Melike Kucukerden <sup>(1)</sup> - Selin Turan <sup>(1)</sup> - Gulben Gurkan <sup>(2)</sup> - Ismail Ogulur <sup>(2)</sup>  
Tunc Akkoc <sup>(2)</sup> - Erdem Tuzun <sup>(1)</sup>

Institute For Experimental Medicine, Istanbul University, Istanbul, Turkey <sup>(1)</sup> - Marmara Medical Faculty, Marmara University, Istanbul, Turkey <sup>(2)</sup>

**487 - BONE MARROW MESENCHYMAL STEM CELL-DERIVED SECRETED FACTORS PROMOTE THE PROLIFERATION OF ADULT SUBVENTRICULAR ZONE-NEURAL STEM CELLS AND FOSTER THEIR STEMNESS IN VITRO UNDER PATHOGENIC CONDITIONS.**

Androniki Voulgari-kokota <sup>(1)</sup> - Annalisa Buffo <sup>(2)</sup> - Nicole Kerlero De Rosbo <sup>(1)</sup> - Antonio Uccelli <sup>(1)</sup>

Department Of Neuroscience, Ophthalmology And Genetics, University Of Genoa, Genoa, Italy <sup>(1)</sup> - Dept. Of Neuroscience, Neuroscience Institute Cavalieri Ottolenghi (nico), University Of Turin Regione Gonzole 10, Turin, Italy <sup>(2)</sup>

---

**COFFEE BREAK & POSTER SESSION | T-CELLS**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

**371 - CHEMOKINE RECEPTOR CCR7 ON CD4+ T CELLS PLAYS A CRUCIAL ROLE IN THE INDUCTION OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Patrick Belikan - Ulrike Buehler - Jérôme Birkenstock - Christina Wolf - Frauke Zipp - Volker Siffrin

Department Of Neurology, University Medical Center Of The Johannes Gutenberg University Of Mainz, Mainz, Germany

**425 - CD4+ T AFFINITY AND CROSS-REACTIVITY BETWEEN MOG AND NFM DURING THE POLYCLONAL RESPONSE OF MOG INDUCED DEMYELINATING AUTOIMMUNE DISEASE**

Lori Blanchfield - Brian Evavold

Emory University, Department Of Microbiology And Immunology, Atlanta, Georgia, United States

**278 - CCL2 CHEMOKINE IN T CELL TOLERANCE AND PROTECTION AGAINST EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Oriane Cédile <sup>(1)</sup> - Morten Løbner <sup>(1)</sup> - Henrik Toft-hansen <sup>(1)</sup> - Ida Frank <sup>(1)</sup> - Agnieszka Włodarczyk <sup>(1)</sup>

Magali Irla <sup>(2)</sup> - Trevor Owens <sup>(1)</sup>

Institute Of Molecular Medicine, University Of Southern Denmark, Odense, Denmark <sup>(1)</sup>

Centre D'immunologie De Marseille-luminy - Cimi, Aix Marseille Université 2, Marseille, France <sup>(2)</sup>

**224 - DEEP SEQUENCING OF T-CELL RECEPTOR REPERTOIRE REVEALS ENRICHMENT OF HIGHLY EXPANDED CLONOTYPES IN CEREBROSPINAL FLUID FROM MULTIPLE SCLEROSIS**

Alessandra De Paula Alves Sousa <sup>(1)</sup> - Richard Nicholas <sup>(2)</sup> - Kory Johnson <sup>(1)</sup> - Sam Darko <sup>(3)</sup> - David Price <sup>(4)</sup>

Daniel Douek <sup>(3)</sup> - Paolo Muraro <sup>(5)</sup> - Steven Jacobson <sup>(6)</sup>

National Institute Of Neurological Disorders And Stroke, Nih, Bethesda, United States <sup>(1)</sup> - Imperial College London, Ic, London, United Kingdom <sup>(2)</sup> - National Institute Of Allergy And Infectious Diseases, Nih, Bethesda, United States <sup>(3)</sup> - Cardiff University School Of Medicine, University Of Cardiff, Cardiff, United Kingdom <sup>(4)</sup> - Imperial College London, Ic, London, United Kingdom <sup>(5)</sup> - National Institute Of Neurological Disorders And Stroke, Nih, Bethesda, United States <sup>(6)</sup>



**502 - INFLUENCE OF REGULATORY T CELLS ON OLIGODENDROCYTE LINEAGE CELLS IN VITRO**

Marie Dittmer <sup>(1)</sup> - Thomas O'hagan <sup>(1)</sup> - Peter Bankhead <sup>(2)</sup> - Yvonne Dombrowski <sup>(1)</sup> - Denise C. Fitzgerald <sup>(1)</sup>  
 Centre For Infection And Immunity, Queen's University Belfast, Belfast, United Kingdom <sup>(1)</sup> - Centre For Cancer Research And Cell Biology, Queen's University Belfast, Belfast, United Kingdom <sup>(2)</sup>

**99 - HUMAN T CELLS IN SILICO: MODELLING THE ELECTROPHYSIOLOGICAL BEHAVIOUR OF T CELLS IN HEALTH AND DISEASE**

Petra Ehling <sup>(1)</sup> - Patrick Meuth <sup>(1)</sup> - Paul Eichinger <sup>(1)</sup> - Alexander Herrmann <sup>(1)</sup> - Tatyana Kanyshkova <sup>(2)</sup>  
 Stefan Bittner <sup>(1)</sup> - Thomas Budde <sup>(2)</sup> - Sven G. Meuth <sup>(1)</sup>  
 Neurology, University, Münster, Germany <sup>(1)</sup> - Physiology I, University, Münster, Germany <sup>(2)</sup>

**295 - ROLE OF NUCLEAR RECEPTORS IN DIFFERENTIATION OF MOG-SPECIFIC TH17 CELLS AND MOG-INDUCED EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Hans Faber <sup>(1)</sup> - Gurumoorthy Krishnamoorthy <sup>(2)</sup> - Helena S. Domingues <sup>(2)</sup> - Peter Weber <sup>(1)</sup>  
 Benno Pütz <sup>(1)</sup> - Frank Weber <sup>(1)</sup>  
 Max Planck Institute, Of Psychiatry, Munich, Germany <sup>(1)</sup> - Max Planck Institute Of Neurobiology, Department Of Neuroimmunology, Martinsried, Germany <sup>(2)</sup>

**626 - HIGH EXPRESSION OF CYTOTOXIC MOLECULES AND TH1 BIAS OF CIRCULATING T CELLS IN PATIENTS WITH MULTIPLE SCLEROSIS UNDER FINGOLIMOD TREATMENT**

Chihiro Fujii <sup>(1)</sup> - Yoichiro Okada <sup>(2)</sup> - Kimitoshi Kimura <sup>(2)</sup> - Masanori Nakagawa <sup>(1)</sup> - Sadayuki Matsumoto <sup>(3)</sup>  
 Ryosuke Takahashi <sup>(2)</sup> - Hirofumi Ochi <sup>(4)</sup> - Takayuki Kondo <sup>(2)</sup> - Toshiki Mizuno <sup>(1)</sup>  
 Department Of Neurology, Graduate School Of Medical Science, Kyoto Prefectural University Of Medicine, Kyoto, Japan <sup>(1)</sup>  
 Department Of Neurology, Kyoto University Graduate School Of Medicine, Kyoto, Japan <sup>(2)</sup> - Department Of Neurology, Tazuke Kofukai Foundation, Medical Research Institute, Kitano Hospital, Osaka, Japan <sup>(3)</sup> - Department Of Neurology And Geriatric Medicine, Ehime University Graduate School Of Medicine, Toon, Japan <sup>(4)</sup>

**583 - DEFECTIVE CD55 COSTIMULATION IN MULTIPLE SCLEROSIS - A PRELIMINARY STUDY.**

Ruhcha Sutavani <sup>(1)</sup> - Bruno Gran <sup>(2)</sup> - Ian Spendlove <sup>(3)</sup>  
 College Of Life Sciences, University Of Dundee, Dundee, United Kingdom <sup>(1)</sup> - Division Of Clinical Neuroscience, University Of Nottingham School Of Medicine, Nottingham, United Kingdom <sup>(2)</sup> - Division Of Cancer And Stem Cells, University Of Nottingham School Of Medicine, Nottingham, United Kingdom <sup>(3)</sup>

**129 - T CELL RECEPTORS OF "MUCOSAL-ASSOCIATED INVARIANT T" CELLS IN MULTIPLE SCLEROSIS BRAIN LESIONS**

Kathrin Held <sup>(1)</sup> - Latika Bhonsle <sup>(1)</sup> - Wakiro Sato <sup>(1)</sup> - Geraldine Rühl <sup>(1)</sup> - David Axel Laplaud <sup>(2)</sup>  
 Reinhard Hohlfeld <sup>(1)</sup> - Klaus Dornmair <sup>(1)</sup>  
 Institute For Clinical Neuroimmunology, Klinikum Der Universität München, München, Germany <sup>(1)</sup>  
 Service De Neurologie, Chu De Nantes, Nantes, France <sup>(2)</sup>

**517 - T CELL RESPONSES TO THE INWARD RECTIFYING POTASSIUM CHANNEL KIR4.1 IN MULTIPLE SCLEROSIS PATIENTS**

Sudhakar Reddy Kalluri - Anita Krysta - Rajneesh Srivastava - Carina Novak - Rebecca Selter - Verena Loleit  
 Viola Biberacher - Dorothea Buck - Thomas Korn - Bernhard Hemmer  
 Department Of Neurology, Klinikum Rechts Der Isar, Technische Universität, Munich, Munich, Germany

**617 - INDUCTION OF PRO-INFLAMMATORY CYTOKINE PRODUCTION IN THYMOCYTES BY THE IMMUNE RESPONSE MODIFIERS IMIQUIMOD AND GARDIQUIMOD™**

Harald Hofstetter - Andreas Weber - Corinna Zimmermann - Bernd Kieseier - Hans Peter Hartung  
 Department Of Neurology, Heinrich Heine University, Düsseldorf, Germany

**211 - IN VIVO MAINTENANCE OF HUMAN REGULATORY T CELLS DURING CD25 BLOCKADE.**

David J. Huss <sup>(1)</sup> - Devangi S. Mehta <sup>(2)</sup> - Akanksha Sharma <sup>(1)</sup> - Xiaojun You <sup>(3)</sup> - Katherine A. Riester <sup>(3)</sup>  
 James P. Sheridan <sup>(4)</sup> - Lakshmi S. Amaravadi <sup>(2)</sup> - Jacob S. Elkins <sup>(5)</sup> - Jason D. Fontenot <sup>(1)</sup>  
 Immunology Research, Biogen Idec, Cambridge, United States <sup>(1)</sup> - Translational Sciences, Biogen Idec, Cambridge, United States <sup>(2)</sup>  
 Biostatistics, Biogen Idec, Cambridge, United States <sup>(3)</sup> - Translational Medicine, Abbvie Biotherapeutics Inc., Redwood City, United States <sup>(4)</sup> - Clinical Development, Biogen Idec, Cambridge, United States <sup>(5)</sup>

**359 - CANNABIDIOL EFFECTS ON MRNA LEVELS AND SIGNALING PATHWAYS IN MOG-35-55 ACTIVATED ENCEPHALITOGENIC T CELLS**

Ewa Kozela <sup>(1)</sup> - Nathali Kaushansky <sup>(2)</sup> - Giovanni Coppola <sup>(3)</sup> - Daniel Geschwind <sup>(3)</sup> - Zvi Vogel <sup>(1)</sup> - Ana Juknat <sup>(1)</sup>

Sackler School Of Medicine, Tel Aviv University, Tel Aviv, Israel <sup>(1)</sup> - Neurobiology Department, Weizmann Institute Of Science, Rehovot, Israel <sup>(2)</sup> - Department Of Neurology, UCLA, Los Angeles, United States <sup>(3)</sup>

**329 - THE ROLE OF NFKAPPAB INDUCING KINASE (NIK) IN THE PATHOGENICITY OF EAE**

Sonja Lacher <sup>(1)</sup> - Florian Mair <sup>(2)</sup> - Nicole Israel <sup>(1)</sup> - Sabrina Rodewald <sup>(1)</sup> - Burkhard Becher <sup>(2)</sup> - Ari Waisman <sup>(1)</sup>

Institute For Molecular Medicine, University Medical Center Of The Johannes Gutenberg-university Mainz, Mainz, Germany <sup>(1)</sup>  
Institute Of Experimental Immunology, University Of Zurich, Zürich, Switzerland <sup>(2)</sup>

**175 - CHEMOKINE-INDUCED TRAFFICKING OF T CELLS INTO THE MENINGES THROUGH THE BRAIN "GATES"**

Antoine Louveau - Sachin Gadani - Tajie Harris - Jonathan Kipnis

Center For Brain Immunology And Glia, Department Of Neuroscience, University Of Virginia, Charlottesville, United States

**216 - CRITICAL ROLE OF THYMOCYTE-DERIVED BRAIN-DERIVED NEUROTROPHIC FACTOR IN T CELL MATURATION**

Fred Lühder <sup>(1)</sup> - Ralf Linker <sup>(2)</sup> - De-hyung Lee <sup>(2)</sup> - Holger Reichardt <sup>(3)</sup> - Ursula Bommhardt <sup>(4)</sup> - Ralf Gold <sup>(5)</sup>

Alexander Flügel <sup>(1)</sup>

Department Of Neuroimmunology, Institute For Multiple Sclerosis Research, University Of Göttingen, Göttingen, Germany <sup>(1)</sup>

Department Of Neurology, Friedrich-alexander University Erlangen, Erlangen, Germany <sup>(2)</sup> - Department Of Cellular And Molecular Immunology, University Of Göttingen, Göttingen, Germany <sup>(3)</sup> - Institute For Molecular And Clinical Immunology, Otto-guericke University Magdeburg, Magdeburg, Germany <sup>(4)</sup> - Department Of Neurology, St. Josef-hospital/ruhr-university Bochum, Bochum, Germany <sup>(5)</sup>

**471 - COGNITIVE PERFORMANCE AMONG OLDER INDIVIDUALS ASSOCIATED WITH THE PERIPHERAL EFFECTOR MEMORY CD4+ T CELLS**

Cláudia Miranda - Susana Roque - Nadine Santos - Carlos Portugal-nunes - Patrício Costa - Joana Palha

Nuno Sousa - Margarida Correia-neves

Life And Health Sciences Research Institute (icvs), School Of Health Sciences, University Of Minho, Braga, Portugal

**470 - IN VIVO VISUALIZATION OF THE ROLE OF CHEMOKINES IN MIGRATORY T CELLS DURING CNS INFLAMMATION.**

Francesca Odoardi - Christian Schläger - Henrike Körner - Michael Haberl - Dmitri Lodygin - Alexander Flügel

Institute For Multiple Sclerosis Research, Department Of Neuroimmunology, university Medical Centre Göttingen, Göttingen, Germany

**510 - THE ROLE OF SOLUBLE FACTORS SECRETED FROM TREG CELLS IN CENTRAL NERVOUS SYSTEM MYELINATION**

Thomas P O'hagan <sup>(1)</sup> - Yvonne Dombrowski, <sup>(1)</sup> - Peter Bankhead <sup>(1)</sup> - Eimear Linehan <sup>(1)</sup> - Adrien Kissenpfennig <sup>(1)</sup>

Anna Williams <sup>(2)</sup> - Denise C Fitzgerald <sup>(1)</sup>

Cij, The Queen's University Belfast, Belfast, United Kingdom <sup>(1)</sup> - Mrc Centre For Regenerative Medicine, The University Of Edinburgh, Edinburgh, United Kingdom <sup>(2)</sup>

**130 - VAV1 CONTROLS INFLAMMATION IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS (EAE)**

Andre Ortlieb Guerreiro-cacais <sup>(1)</sup> - Marie N'diaye <sup>(1)</sup> - Rasmus Berglund <sup>(1)</sup> - Amennai Daniel Beyeen <sup>(2)</sup>

Maja Jagodic <sup>(1)</sup> - Tomas Olsson <sup>(1)</sup>

Neuroimmunology Unit, Department Of Clinical Neuroscience, Karolinska University Hospital, Stockholm, Sweden <sup>(1)</sup>

Novartis, Novartis, Stockholm, Sweden <sup>(2)</sup>

**547 - PROPERTIES AND MOLECULAR CHARACTERISTIC OF IMMUNE REGULATION OF HUMAN THYMUS-DERIVED CD4+HLA-G+ REGULATORY T CELLS IN VITRO AND IN VIVO**

Susann Pankratz - Alexander M. Herrmann - Stefan Bittner - Sven G. Meuth - Heinz Wiendl

Department Of Neurology, University Of Muenster, Muenster, Germany

**236 - METHODOLOGICAL APPROACH TO IDENTIFY AND ISOLATE DISEASE RELEVANT BRAIN-INFILTRATING T CELL CLONES IN MULTIPLE SCLEROSIS PATIENTS**

Raquel Planas <sup>(1)</sup> - Yaneth Ortiz <sup>(1)</sup> - Imke Metz <sup>(2)</sup> - Núria Vilarrasa <sup>(1)</sup> - Brenda Reinhart <sup>(1)</sup> - Christoph Heesen <sup>(3)</sup>

Wolfgang Brück <sup>(2)</sup> - Roland Martin <sup>(1)</sup> - Mireia Sospedra <sup>(1)</sup>

Neuroimmunology And Multiple Sclerosis Research Section, Department Of Neurology, University Hospital Zurich, Zurich, Switzerland <sup>(1)</sup>

Department Of Neuropathology, University Medical Center, Georg August University, Göttingen, Germany <sup>(2)</sup> - Institute For

Neuroimmunology And Clinical Ms Research (inims), University Medical Center Hamburg-eppendorf, Hamburg, Germany <sup>(3)</sup>

### **69 - OXYSTEROLS ARE EXPRESSED IN T LYMPHOCYTES AND IMPAIR TYPE 1 REGULATORY CD4 T-CELL DIFFERENTIATION**

Fanny Chalmin <sup>(1)</sup> - Nishta Budoo <sup>(2)</sup> - Rochemont Viviane <sup>(2)</sup> - Doron Merkler <sup>(2)</sup> - Caroline Pot <sup>(1)</sup>

Department Of Neurology, Geneva University Hospitals, Geneva, Switzerland <sup>(1)</sup> - Department Of Pathology And Immunology, Geneva University, Geneva, Switzerland <sup>(2)</sup>

### **607 - INVESTIGATING THE OREXIN/HYPOCRETIN SPECIFIC T CELL RESPONSE IN PATIENTS WITH NARCOLEPSY WITH CATAPLEXY**

Melanie Ramberger - Birgit Högl - Thomas Mitterling - Birgit Frauscher - Markus Reindl - Andreas Lutterotti

Clinical Department Of Neurology, Innsbruck Medical University, Innsbruck, Austria

### **115 - CENTRAL NERVOUS SYSTEM REPAIR REQUIRES BOTH EFFECTOR AND REGULATORY T CELLS WITH DISTINCT TEMPORAL AND SPATIAL PROFILES**

Catarina Raposo - Michal Schwartz

Weizmann Institute Of Science, Department Of Neurobiology, Rehovot, Israel

### **378 - NR4A2 CONTROLS PATHOGENIC "SWITCHED" TH17 CELLS IN THE CNS DURING AUTOIMMUNE INFLAMMATION**

Ben Raveney - Shinji Oki - Takashi Yamamura

National Institute Of Neuroscience, Ncnp, Tokyo, Japan

### **486 - CD8 T CELL RECRUITMENT IN THE NORMAL AGING CNS**

Rodney Ritzel - Anita Patel - Josh Crapser - Louise Mccullough

University Of Connecticut Health Center, University Of Connecticut Health Center, Farmington, United States

### **548 - PLASMACYTOID DENDRITIC CELLS INDUCE AN IMMUNOREGULATORY T HELPER 9 PROFILE IN MULTIPLE SCLEROSIS**

Gabriella Ruocco <sup>(1)</sup> - Silvia Rossi <sup>(2)</sup> - Caterina Motta <sup>(2)</sup> - Giulia Macchiarulo <sup>(2)</sup> - Francesca Barbieri <sup>(2)</sup> - Marco De Bardi <sup>(1)</sup>

Giovanna Borsellino <sup>(1)</sup> - Maria Grazia Grasso <sup>(3)</sup> - Serena Ruggieri <sup>(4)</sup> - Claudio Gasperini <sup>(4)</sup> - Roberto Furlan <sup>(5)</sup>

Diego Centonze <sup>(2)</sup> - Luca Battistini <sup>(1)</sup> - Elisabetta Volpe <sup>(1)</sup>

Neuroimmunology Unit, Santa Lucia Foundation, Rome, Italy <sup>(1)</sup> - Neuroimmunology And Synaptic Plasticity Laboratory Units - Department Of Neuroscience, Santa Lucia Foundation - University Tor Vergata, Rome, Italy <sup>(2)</sup> - Multiple Sclerosis Centre, Santa Lucia Foundation, Rome, Italy <sup>(3)</sup> - Department Of Neuroscience "Iancisi", San Camillo Hospital, Rome, Italy <sup>(4)</sup> - Neuroimmunology Unit, San Raffaele Scientific Institute, Milan, Italy <sup>(5)</sup>

### **398 - IS THERE A CORRELATION BETWEEN CD39+CD25+ T LYMPHOCYTES AND FOXP3 ISOFORMS IN MULTIPLE SCLEROSIS?**

Manolo Sambucci <sup>(1)</sup> - Francesca Gargano <sup>(1)</sup> - Marco De Bardi <sup>(1)</sup> - Claudio Gasperini <sup>(2)</sup> - Serena Ruggieri <sup>(2)</sup>

Veronica De Rosa <sup>(3)</sup> - Giuseppe Matarese <sup>(4)</sup> - Giovanna Borsellino <sup>(1)</sup> - Luca Battistini <sup>(1)</sup>

Neuroimmunology Unit, Ircs Santa Lucia Foundation, Rome, Italy <sup>(1)</sup> - Department Of Neuroscience "Iancisi", San Camillo Hospital, Rome, Italy <sup>(2)</sup> - Laboratorio Di Immunologia, Istituto Di Endocrinologia E Oncologia Sperimentale, Consiglio Nazionale Delle Ricerche (ieos-cnr), Napoli, Italy <sup>(3)</sup> - Department Of Medicine And Surgery, University Of Salerno, "baronissi Campus", Salerno, Italy <sup>(4)</sup>

### **33 - ALPHA-SYNUCLEIN IMMUNIZATION, IN ABSENCE OF ALPHA-SYNUCLEIN OVER-EXPRESSION OR NEURAL PATHOLOGY, MODIFIES MICROGLIA ACTIVATION PATTERNS AND T CELLS' ACTIVATION PROFILES**

Marina Romero-ramos <sup>(1)</sup> - Josefine Christiansen <sup>(1)</sup> - Vanesa Sanchez-guajardo <sup>(2)</sup>

Cns Disease Modeling Group, Neurodin, Department Of Biomedicine, Aarhus University, Aarhus, Denmark <sup>(1)</sup> - Neuroimmunology Of Degenerative Disease Group, Neurodin, Department Of Biomedicine, Aarhus University, Aarhus, Denmark <sup>(2)</sup>

### **188 - CHEMOKINE RECEPTOR EXPRESSIONS ON T CELLS IN CHRONIC INFLAMMATORY DEMYELINATING POLYNEUROPATHY**

Wakiro Sato <sup>(1)</sup> - Toshimasa Aranami <sup>(1)</sup> - Norio Chihara <sup>(1)</sup> - Ryotaro Ikeguchi <sup>(1)</sup> - Tomoko Okamoto <sup>(2)</sup>

Takashi Yamamura <sup>(1)</sup>

Department Of Immunology, National Institute Of Neuroscience, National Center Of Neurology And Psychiatry (ncnp), Tokyo, Japan <sup>(1)</sup>

Department Of Neurology, National Center Hospital, National Center Of Neurology And Psychiatry (ncnp), Tokyo, Japan <sup>(2)</sup>

**300 - LAQUINIMOD PREVENTS DISABILITY PROGRESSION IN A MODEL OF SPONTANEOUS CHRONIC EAE AND INTERFERES WITH DEVELOPMENT OF FOLLICULAR HELPER T CELLS**

Michel Varrin-doyer <sup>(1)</sup> - Ulf Schulze Topp Hoff <sup>(1)</sup> - Kara Pekarek <sup>(1)</sup> - Raymond A. Sobel <sup>(2)</sup> - Scott S. Zamvil <sup>(1)</sup>

Department Of Neurology, University Of California, San Francisco, San Francisco, United States <sup>(1)</sup>

Department Of Pathology, Stanford University, Stanford, United States <sup>(2)</sup>

**27 - CTLA-4IG TREATMENT AFTER IMMUNIZATION EXACERBATES EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**

Isabel Vogel - Ahmad Kasran - Stefaan Van Gool - Jan Ceuppens

Ku Leuven, Department Of Microbiology And Immunology, Laboratory Of Clinical Immunology, Leuven, Belgium

**49 - NEUROPROTECTIVE ROLE OF REGULATORY T CELLS IN PARKINSON'S DISEASE: EFFECT OF COP-1/ALPHA-SYNUCLEIN VACCINATION ON PATHOLOGY PROGRESSION**

Marianne Von Euler Chelpin - Marina Romero-ramos - Vanesa Sanchez-guajardo

Aarhus University, Dept. Biomedicine, Aarhus University, Aarhus, Denmark

**576 - MITIGATED TREGS AND AUGMENTED TH17 CELLS AND CYTOKINES ARE ASSOCIATED WITH SEVERITY OF EXPERIMENTAL AUTOIMMUNE NEURITIS**

Xu Wang <sup>(1)</sup> - Xiang-yu Zheng <sup>(1)</sup> - Chi Ma <sup>(2)</sup> - Xiao-ke Wang <sup>(3)</sup> - Jiang Wu <sup>(1)</sup> - Abdu Adem <sup>(4)</sup> - Jie Zhu <sup>(1)</sup>

Hong-liang Zhang <sup>(1)</sup>

Jilin University, Department Of Neurology, The First Hospital Of Jilin University, Changchun, China <sup>(1)</sup> - Jilin University, Department Of Neurosurgery, The First Hospital Of Jilin University, Changchun, China <sup>(2)</sup> - Jilin University, Department Of Neurosurgery, The Second Hospital Of Jilin University, Changchun, China <sup>(3)</sup> - United Arab Emirates University, Faculty Of Medicine And Health Sciences, United Arab Emirates University, Al Ain, United Arab Emirates <sup>(4)</sup>

**368 - EXPRESSION OF THE G-PROTEIN COUPLED RECEPTOR EB12 IN T CELLS IS HIGHLY REGULATED AND CONFERS PATHOGENICITY TO MYELIN SPECIFIC TH17 CELLS**

Florian Wanke <sup>(1)</sup> - Andrew L. Croxford <sup>(2)</sup> - André P. Heinen <sup>(1)</sup> - Stephanie Firmenich <sup>(1)</sup> - Sonja Moos <sup>(1)</sup>

Nicole Israel <sup>(1)</sup> - Denise Tischner <sup>(3)</sup> - Sonja Reißig <sup>(1)</sup> - Christian Reichhold <sup>(1)</sup> - Khalad Karram <sup>(1)</sup> - Ilgiz Mufazalov <sup>(1)</sup>

Tanja Kuhlmann <sup>(4)</sup> - Nina Wetschurck <sup>(3)</sup> - Andreas Sailer <sup>(5)</sup> - Klaus Rajewski <sup>(6)</sup> - Stefano Casola <sup>(7)</sup>

Ari Waisman <sup>(1)</sup> - Florian C. Kurschus <sup>(1)</sup>

Institute For Molecular Medicine, Johannes Gutenberg-university, Mainz, Germany <sup>(1)</sup> - Institute Of Experimental Immunology - Neuro- And Tumormmunology, University Of Zurich, Zurich, Switzerland <sup>(2)</sup> - Department Of Pharmacology, Max-planck-institute For Heart And Lung Research, Bad Nauheim, Germany <sup>(3)</sup> - Institute For Neuropathology, University Of Münster, Münster, Germany <sup>(4)</sup> - Developmental & Molecular Pathways, Novartis Institutes For Biomedical Research, Basel, Switzerland <sup>(5)</sup> - Max-delbrück-center For Molecular Medicine, Max-delbrück-center For Molecular Medicine, Berlin, Germany <sup>(6)</sup> - Ifom-ieu Campus, Ifom-ieu Campus, Milan, Italy <sup>(7)</sup>

**147 - INHIBITING ERK NUCLEAR TRANSLOCATION IN TH17 CELLS LEADS TO DOWNREGULATION OF GM-CSF**

Katharina Birkner <sup>(1)</sup> - Mathias Engelhardt <sup>(1)</sup> - Maruf Hasan <sup>(1)</sup> - Vijay Tiwari <sup>(2)</sup> - Frauke Zipp <sup>(1)</sup> - Esther Witsch <sup>(1)</sup>

Universitätsmedizin Der Johannes Gutenberg-universität, Klinik Und Poliklinik Für Neurologie, Mainz, Germany <sup>(1)</sup>

Institute Of Molecular Biology, Johannes Gutenberg-universität, Mainz, Germany <sup>(2)</sup>

**109 - INTERACTION OF INTERFERON BETA-1B AND CXCR4 ON T CELLS IN MULTIPLE SCLEROSIS**

Tanja Wostradowski <sup>(1)</sup> - Viktoria Gudi <sup>(1)</sup> - J.a. Lindquist <sup>(2)</sup> - Sabine Lindquist <sup>(3)</sup> - Martin Stangel <sup>(1)</sup>

Clinic Of Neurology, Medical School Hannover, Hannover, Germany <sup>(1)</sup> - Department Of Nephrology, Hypertension, Diabetes, And Endocrinology, Otto-von-guericke- University, Magdeburg, Germany <sup>(2)</sup> - Department Of Neurochemistry And Molecular Biology, Leibniz-institute For Neurobiology, German Center For Neurodegenerative Disorders, Magdeburg, Germany <sup>(3)</sup>

**462 - IFN-GAMMA RESPONSE AGAINST MEASLES VIRUS PEPTIDES IN SUBACUTE SCLEROSING PANENCEPHALITIS PATIENTS**

Sibel P. Yentür <sup>(1)</sup> - Suzan Adin-cinar <sup>(2)</sup> - Candan Gürses <sup>(3)</sup> - Veysi Demirbilek <sup>(4)</sup> - Safa Baris <sup>(5)</sup> - Semih Ayta <sup>(6)</sup>

Ümit Kuru <sup>(7)</sup> - Zuhale Yapici <sup>(3)</sup> - Serap Uysal <sup>(8)</sup> - Ozlem Cokar <sup>(9)</sup> - Aysen Gokyigit <sup>(3)</sup> - Guher Saruhan-direskeneli <sup>(1)</sup>

Department Of Physiology, Istanbul Medical Faculty, Istanbul University, Istanbul, Turkey <sup>(1)</sup> - Institute For Experimental And Medical Research, Department Of Immunology, Istanbul University, Istanbul, Turkey <sup>(2)</sup> - Department Of Neurology, Istanbul Medical Faculty, Istanbul University, Istanbul, Turkey <sup>(3)</sup> - Department Of Neurology, Cerrahpasa Medical Faculty, Istanbul University, Istanbul, Turkey <sup>(4)</sup> - Department Of Pediatrics, Marmara Medical Faculty, Marmara University, Istanbul, Turkey <sup>(5)</sup> - Department Of Neurology, Maltepe Medical Faculty, Maltepe University, Istanbul, Turkey <sup>(6)</sup> - Department Of Pediatrics, Bayrampasa Hospital, Istanbul, Turkey <sup>(7)</sup> - Department Of Pediatrics, Cerrahpasa Medical Faculty, Istanbul University, Istanbul, Turkey <sup>(8)</sup> - Department Of Neurology, Haseki Hospital, Istanbul, Turkey <sup>(9)</sup>

#### **464 - DIFFERENTIAL CYTOKINE CHANGES IN MYASTHENIA GRAVIS PATIENTS WITH ANTIBODIES AGAINST ACHR AND MUSK**

Vuslat Yilmaz <sup>(1)</sup> - Piraye Oflazer <sup>(2)</sup> - Fikret Aysal <sup>(3)</sup> - Hacer Durmus <sup>(2)</sup> - Kostas Poulos <sup>(4)</sup> - Yesim Parman <sup>(2)</sup> Erdem Tuzun <sup>(5)</sup> - Feza Deymeer <sup>(2)</sup> - Guher Saruhan-direskeneli <sup>(1)</sup>

Department Of Physiology, Istanbul University, Istanbul Medical Faculty, Istanbul, Turkey <sup>(1)</sup> - Department Of Neurology, Istanbul University, Istanbul Medical Faculty, Istanbul, Turkey <sup>(2)</sup> - Department Of Neurology, Bakirkoy Research And Training Hospital For Psychiatric And Neurological Diseases, Istanbul, Turkey <sup>(3)</sup> - Department Of Pharmacy, University Of Patras, School Of Health Sciences, Patras, Greece <sup>(4)</sup> - Institute For Experimental And Medical Research, Istanbul University, Istanbul, Turkey <sup>(5)</sup>

#### **16 - AUGMENTED TH17 CELLS AND IL-17A ARE ASSOCIATED WITH SEVERITY OF EXPERIMENTAL AUTOIMMUNE NEURITIS**

Hongliang Zhang

Neuroscience Center, Department Of Neurology, The First Hospital Of Jilin University, Changchun, China

#### **649 - N-LINKED-GLYCOSYLATION IS CRITICAL FOR DIFFERENTIATION AND FUNCTION OF INDUCED REGULATORY T CELLS.**

Johannes Mörike, Aleksandar Madjovski, Maria-Eloisa Mierswa-Silva, Evelyn Dubois and Felix Bischof

Center of Neurology, Hertie-Institute for Clinical Brain Research, University of Tübingen, Tübingen, Germany

#### **COFFEE BREAK & POSTER SESSION | THERAPIES**

15:15 - 16:45 POSTERHALL (RHEINFOYER)

#### **43 - ENHANCED MYELINATION IN AUTOIMMUNITY AND IN NORMAL DEVELOPMENT INDUCED BY IMMUNOMODULATORY TREATMENT**

Rina Aharoni - Raya Eilam - Renana From - Dekel D Bar Lev - Michael Sela - Ruth Arnon

The Weizmann Institute Of Science, University, Rehovot, Israel

#### **332 - KREBS CYCLE POTENTIATION HAS IMMUNOSUPPRESSIVE EFFECTS AND INHIBITS EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS DEVELOPMENT**

Stefano Angiari <sup>(1)</sup> - Simona L. Budui <sup>(1)</sup> - Simone D. Bach <sup>(1)</sup> - Barbara Rossi <sup>(1)</sup> - Elena Zenaro <sup>(1)</sup> - Enrica Pietronigro <sup>(1)</sup> Vittorina Della Bianca <sup>(1)</sup> - Silvia Dusi <sup>(1)</sup> - Gennj Piacentino <sup>(1)</sup> - Tommaso Carlucci <sup>(1)</sup> - Carlo Laudanna <sup>(2)</sup>

Gabriela Constantin <sup>(1)</sup>

Department Of Pathology And Diagnostics, University Of Verona, Verona, Italy <sup>(1)</sup> - The Center For Biomedical Computing (cbmc), University Of Verona, Verona, Italy <sup>(2)</sup>

#### **609 - CONTROL OF AUTOIMMUNE NEUROINFLAMMATION BY NANOPARTICLE-BASED MYELIN-ANTIGEN DELIVERY TO LIVER SINUSOIDAL ENDOTHELIAL CELLS**

Antonella Carambia <sup>(1)</sup> - Barbara Freund <sup>(2)</sup> - Dorothee Schwinge <sup>(1)</sup> - Oliver T. Bruns <sup>(3)</sup> - Sunhild C. Salmen <sup>(4)</sup> - Harald Ittrich <sup>(5)</sup> - Rudolph Reimer <sup>(6)</sup> - Markus Heine <sup>(2)</sup> - Samuel Huber <sup>(1)</sup> - Christian Waurisch <sup>(7)</sup> - Alexander Eychmüller <sup>(7)</sup> David C. Wraith <sup>(8)</sup> - Thomas Korn <sup>(9)</sup> - Peter Nielsen <sup>(2)</sup> - Horst Weller <sup>(4)</sup> - Christoph Schramm <sup>(1)</sup> - Stefan Lüth <sup>(1)</sup> Ansgar W. Lohse <sup>(1)</sup> - Joerg Heeren <sup>(2)</sup> - Johannes Herkel <sup>(1)</sup>

Department Of Medicine I, University Medical Centre Hamburg-eppendorf, Hamburg, Germany <sup>(1)</sup> - Department Of Biochemistry And Molecular Cell Biology, University Medical Centre Hamburg-eppendorf, Hamburg, Germany <sup>(2)</sup> - Department Of Chemistry, Massachusetts Institute Of Technology, Cambridge, Ma 02139, United States <sup>(3)</sup> - Institute Of Physical Chemistry, University Of Hamburg, Hamburg, Germany <sup>(4)</sup> - Department Of Diagnostic And Interventional Radiology, University Medical Centre Hamburg-eppendorf, Hamburg, Germany <sup>(5)</sup> - Department Of Electron Microscopy And Micro Technology, Heinrich-pette Institute, Hamburg, Germany <sup>(6)</sup> - Physical Chemistry, Tu Dresden, Dresden, Germany <sup>(7)</sup> - Cellular And Molecular Medicine, University Of Bristol, Bristol, United Kingdom <sup>(8)</sup> - Department Of Neurology, Tu München, Munich, Germany <sup>(9)</sup>

#### **168 - IL-27 AND IL-35 AS GENE THERAPY OF NEUROINFLAMMATION**

Giacomo Casella - Annamaria Finardi - Roberto Furlan

Istituto Scientifico San Raffaele, Università Vita E Salute San Raffaele, Milano, Italy

#### **598 - FLAVANOL (-)-EPICATECHIN PROTECTS AGAINST HEMORRHAGIC STROKE BY MODULATING NF-E2-RELATED FACTOR 2-DEPENDENT AND -INDEPENDENT PATHWAYS**

Che-feng Chang - Suzy Cho - Jian Wang

Department Of Anesthesiology And Critical Care Medicine, The Johns Hopkins University School Of Medicine, Baltimore, United States

### **39 - TREATING MULTIPLE SCLEROSIS AND CEREBRAL PALSY WITH CHOROQUINE**

Colin Crawford <sup>(1)</sup> - Peter Hardwicke <sup>(2)</sup>

Retired, Imperial College, London, United Kingdom <sup>(1)</sup> - Department Of Biochemistry And Molecular Biology, Southern Illinois Medical School, Carbondale, United States <sup>(2)</sup>

### **603 - EXPERIENCE OF SWITCHING FROM IVIG TO "MANUAL PUSH" SCIG IN 6 PATIENTS WITH CIDP**

Michael Cumberbatch - Amanda Cox

Department Of Neurology, Addenbrooke's Hospital, Cambridge, United Kingdom

### **417 - CORRELATION OF FINGOLIMOD INDUCED LYMPHOPENIA AND PHYSICAL MEASURES IN MS PATIENTS**

Thomas Dehmel <sup>(1)</sup> - Clemens Warnke <sup>(1)</sup> - Ryan Ramanujam <sup>(2)</sup> - Kathleen Wolfram <sup>(1)</sup> - Verena I. Leussink <sup>(1)</sup>

Hans-peter Hartung <sup>(1)</sup> - Bernd C. Kieseier <sup>(1)</sup>

Department Of Neurology, Heinrich-heine-university, Düsseldorf, Germany <sup>(1)</sup> - Department Of Clinical Neuroscience, Karolinska Institute, Stockholm, Sweden <sup>(2)</sup>

### **73 - FUMARATE TREATMENT IN PATIENTS WITH PROGRESSIVE FORMS OF MS: FIRST RESULTS OF A SINGLE-CENTER OBSERVATIONAL STUDY.**

Gisa Ellrichmann - Katrin Straßburger-krogias - Christos Krogias - Ralf Gold

Dept Of Neurology, St. Josef Hospital / Ruhr-university Bochum, Bochum, Germany

### **74 - LAQUINIMOD TREATMENT IN A MOUSE MODEL OF HUNTINGTONS'S DISEASE: A NEW NEUROPROTECTIVE THERAPY?**

Gisa Ellrichmann <sup>(1)</sup> - Christiane Reick <sup>(2)</sup> - Carsten Saft <sup>(1)</sup> - Jan Thöne <sup>(3)</sup> - Liat Hayardeny <sup>(4)</sup> - Ralf Gold <sup>(1)</sup>

Dept Of Neurology, St. Josef Hospital / Ruhr-university Bochum, Bochum, Germany <sup>(1)</sup> - Center Of Clinical Research, Ruhr-university Bochum, Bochum, Germany <sup>(2)</sup> - Dept Of Neurology, Universitätsklinikum Essen / University Of Duisburg-essen, Essen, Germany <sup>(3)</sup> - Tevapharm, Tel Aviv University, Tel Aviv, Israel <sup>(4)</sup>

### **567 - GENETIC ENGINEERING OF A TNFR2 AGONIST TO PROMOTE IMMUNEMODULATION AND NEUROPROTECTION**

Roman Fischer - Maelle Duffey - Nathalie Peters - Oliver Seifert - Olaf Maier - Roland Kontermann - Klaus Pfizenmaier

Institute Of Cell Biology And Immunology, University Stuttgart, Stuttgart, Germany

### **439 - DO NK CELLS PLAY A ROLE IN THE POSSIBLE ASSOCIATION BETWEEN NATALIZUMAB TREATMENT AND THE DEVELOPMENT OF MELANOMA?**

Ilaria Gandoglia <sup>(1)</sup> - Alice Laroni <sup>(1)</sup> - Paolo Carrega <sup>(2)</sup> - Nicole Kerlero De Rosbo <sup>(1)</sup> - Eric Armentani <sup>(1)</sup>

Federico Ivaldi <sup>(1)</sup> - Giovanni Luigi Mancardi <sup>(1)</sup> - Guido Ferlazzo <sup>(3)</sup> - Antonio Uccelli <sup>(1)</sup>

Department Of Neurosciences, Rehabilitation, Ophthalmology, Genetics, Maternal And Child Health, University Of Genoa, Genoa, Italy <sup>(1)</sup> - Laboratory Of Clinical And Experimental Immunology, Giannina Gaslini Institute, Genoa, Italy <sup>(2)</sup> - Laboratory Of Immunology And Biotherapy, Department Of Human Pathology, University Of Messina, Messina, Italy <sup>(3)</sup>

### **312 - THIOPALMITOYLATED ALTERED PEPTIDE LIGANDS CAN SUCCESSFULLY TREAT ESTABLISHED DISEASE IN AN ANIMAL MODEL OF MULTIPLE SCLEROSIS**

Nancy Cloake <sup>(1)</sup> - Elisabeth Trifilieff <sup>(2)</sup> - Judith Greer <sup>(1)</sup>

Uq Centre For Clinical Research, The University Of Queensland, Brisbane, Australia <sup>(1)</sup> - Laboratoire D'imagerie Et De Neurosciences Cognitives, Universite De Strasbourg/cnrs, Strasbourg, France <sup>(2)</sup>

### **343 - SELECTIVE MANIPULATION OF THE CD28 CO-STIMULATION PATHWAY PREVENTS EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS INDUCTION IN THE RHESUS MONKEY**

Krista Haanstra <sup>(1)</sup> - Karin Dijkman <sup>(1)</sup> - Nikki Van Driel <sup>(1)</sup> - Noun Bashir <sup>(1)</sup> - Jan Bauer <sup>(2)</sup> - Bert 't Hart <sup>(1)</sup> - Bernard Vanhove <sup>(3)</sup>

Department Immunobiology, Biomedical Primate Research Centre, Rijswijk, Netherlands <sup>(1)</sup> - Center For Brain Research, Medical University Of Vienna, Vienna, Austria <sup>(2)</sup> - Umr-s 1064, Institut National De La Santé Et De La Recherche Médicinale, Nantes, France <sup>(3)</sup>

### **350 - ENHANCED IN VIVO EFFICACY OF A LONG-LIFE TYPE I INTERFERON SUPERAGONIST IN A MOUSE MODEL OF MULTIPLE SCLEROSIS**

Daniel Harari <sup>(1)</sup> - Nadine Kallweit <sup>(2)</sup> - Renne Abramovich <sup>(1)</sup> - Keren Sasson <sup>(1)</sup> - Alla Zozulya <sup>(3)</sup> - Paul Smith <sup>(3)</sup> - Martin Schlapschy <sup>(2)</sup> - Rina Aharoni <sup>(1)</sup> - Mario Köster <sup>(4)</sup> - Raya Eliam <sup>(1)</sup> - Arne Skerra <sup>(2)</sup> - Gideon Schreiber <sup>(1)</sup>

The Weizmann Institute Of Science, ---, Rehovot, Israel <sup>(1)</sup> - Munich Center For Integrated Protein Science (cips-m) & Lehrstuhl Für Biologische Chemie, Technische Universität München, Freising-weihenstephan, Germany <sup>(2)</sup> - Ms Platform, Merck-serono, ---, Geneva, Switzerland <sup>(3)</sup> - Helmholtz Centre For Infection Research, Dept. Gene Regulation And Differentiation, Braunschweig, Germany <sup>(4)</sup>



**419 - EFFECT OF INTRAVENOUS IMMUNOGLOBULINS ON NATURAL KILLER CELLS**

Maximilian K Heininger <sup>(1)</sup> - Gerd Meyer Zu Horste <sup>(2)</sup> - Steffen Cordes <sup>(3)</sup> - Mark Stettner <sup>(1)</sup> - Anne K. Mausberg <sup>(1)</sup>  
 Bernd C. Kieseier <sup>(1)</sup>

Department Of Neurology, Heinrich-heine-university, Duesseldorf, Germany <sup>(1)</sup> - Center For Neurologic Diseases, Brigham & Women's Hospital, Harvard Medical School, Boston, United States <sup>(2)</sup> - Department Of Hematology Oncology & Tumorimmunology, Charite, Berlin, Germany <sup>(3)</sup>

**164 - THE DNA METHYLATION INHIBITOR DECITABINE COMPLETELY BLOCKS AUTOIMMUNE MEDIATED CNS DEMYELINATION**

Kristof Thewissen - Jerome Hendriks - Piet Stinissen - Helena Slaets - Niels Hellings

Biomedical Research Institute, Hasselt University, Diepenbeek, Belgium

**596 - THERAPEUTIC ANTIVIRAL T CELLS NONCYTOPATHICALLY CLEAR PERSISTENTLY INFECTED MICROGLIA FOLLOWING CONVERSION INTO ANTIGEN PRESENTING CELLS**

Jasmin Herz - Dorian McGavern

National Institutes Of Health, National Institutes Of Neurological Disorder And Stroke (ninds), Bethesda, United States

**139 - NEUROPROTECTIVE EFFECTS OF A XANTHINE OXIDASE INHIBITOR IN PROGRESSIVE EAE BY AMELIORATING MITOCHONDRIAL DYSFUNCTION**

Josephe Archie Honorat <sup>(1)</sup> - Makoto Kinoshita <sup>(2)</sup> - Tatsusada Okuno <sup>(1)</sup> - Kazushiro Takata <sup>(1)</sup> - Toru Koda <sup>(1)</sup>

Akiko Namba <sup>(1)</sup> - Satoru Tada <sup>(2)</sup> - Takashi Shirakura <sup>(3)</sup> - Hideki Mochizuki <sup>(1)</sup> - Saburo Sakoda <sup>(4)</sup> - Yuji Nakatsuji <sup>(1)</sup>

Department Of Neurology, Osaka University Graduate School Of Medicine, Suita, Japan <sup>(1)</sup> - Department Of Neurology, Osaka General Medical Center, Osaka, Japan <sup>(2)</sup> - Pharmaceutical Development Research Laboratories, Teijin Pharma Ltd, Tokyo, Japan <sup>(3)</sup>  
 Department Of Neurology, Toneyama National Hospital, Toyonaka, Japan <sup>(4)</sup>

**333 - EFFECT OF MONOMETHYL-FUMARATE ON EXPERIMENTAL STROKE**

Zsolt Illes <sup>(1)</sup> - Bettina H. Clausen <sup>(2)</sup> - Bente Finsen <sup>(2)</sup> - Helle H. Nielsen <sup>(3)</sup> - Louise Lundberg <sup>(2)</sup> - Kate L. Lambertsen <sup>(2)</sup>

Institute Of Clinical Research And Department Of Neurology, University Of Southern Denmark, Odense, Denmark <sup>(1)</sup>

Department Of Neurobiology Research, Institute Of Molecular Medicine, University Of Southern Denmark, Odense, Denmark <sup>(2)</sup>

Department Of Neurology, Odense University Hospital, Odense, Denmark <sup>(3)</sup>

**346 - PROGNOSIS AND THERAPY OF MYASTHENIA GRAVIS IN CHILDREN AND ADOLESCENTS.**

Yun Jing - Qian Wu - Ran Li

Neurology Department, Beijing Tongren Hospital, Capital Medical University, Beijing, China

**167 - CONCENTRATION DEPENDENT INHIBITORY EFFECT OF A NUCLEOSIDE-BASED ANALOG, 2, 2-BIS-HYDROXYMETHYL-CYCLOPROPAVIR, AGAINST HUMAN HERPESVIRUS-6 REPLICATION**

Naomi Lee - Emily Leibovitch - Steven Jacobson

National Institute Of Neurological Disorders And Stroke, N/a, Bethesda, United States

**545 - TESTING DIRECT NEUROPROTECTIVE EFFECTS OF CURRENT MS THERAPEUTIC COMPOUNDS WITH INTRAVITAL TWO PHOTON LASER SCANNING MICROSCOPY**

Dirk Luchtman - Erik Ellwardt - Volker Siffrin - Frauke Zipp

Johannes Gutenberg-universität Mainz, Universitätsmedizin Der Johannes Gutenberg-universität Mainz, Mainz, Germany

**54 - FASUDIL AMELIORATES DISEASE PROGRESSION IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS, ACTING POSSIBLY THROUGH IMMUNOMODULATION EFFECT**

Chun-yun Liu <sup>(1)</sup> - Shang-de Guo <sup>(1)</sup> - Jie-zhong Yu <sup>(1)</sup> - Yan-hua Li <sup>(1)</sup> - Hui Zhang <sup>(1)</sup> - Qing Wang <sup>(2)</sup> - Zhi Chai <sup>(2)</sup>

Ling Feng <sup>(1)</sup> - Jian-jun Huang <sup>(3)</sup> - Qian-jin Feng <sup>(2)</sup> - Bao-guo Xiao <sup>(4)</sup> - Cun-gen Ma <sup>(1)</sup>

Institute Of Brain Science, Department Of Neurology, Medical School, Shanxi Datong University, Datong, China <sup>(1)</sup> - "2011"

Collaborative Innovation Center/department Of Encephalopathy And National Major Clinical Department Of Ministry Of Health,

Shanxi University Of Traditional Chinese Medicine, Taiyuan, China <sup>(2)</sup> - Department Of Neurosurgery, First Hospital, Datong Coalmine

Group, Datong, China <sup>(3)</sup> - Institute Of Neurology, Huashan Hospital, Institutes Of Brain Science And State Key Laboratory Of Medical Neurobiology, Fudan University, Shanghai, China <sup>(4)</sup>

**187 - EFFECT OF ETHYL PYRUVATE ON CENTRAL NERVOUS SYSTEM INFLAMMATION**

Djordje Miljkovic <sup>(1)</sup> - Filip Petkovic <sup>(1)</sup> - Jana Blazevski <sup>(1)</sup> - Miljana Momcilovic <sup>(1)</sup> - Neda Djedovic <sup>(1)</sup>  
Marija Mostarica Stojkovic <sup>(2)</sup> - Ivan Spasojevic <sup>(3)</sup>

Institute For Biological Research "sinisa Stankovic", University Of Belgrade, Belgrade, Serbia <sup>(1)</sup> - Institute Of Microbiology And Immunology, School Of Medicine, University Of Belgrade, Belgrade, Serbia <sup>(2)</sup> - Life Sciences Department, Institute For Multidisciplinary Research, University Of Belgrade, Belgrade, Serbia <sup>(3)</sup>

**632 - MENTAL HEALTH PROBLEMS TREATED WITH MEDICINAL PLANTS BY THE KHYANG OF CHITTAGONG HILL TRACTS WITHIN BANGLADESH: FROM BENCH TO BEDSIDE**

Md. Ariful Haque Mollik

Peoples Integrated Alliance, University Of Development Alternative, Bogra, Bangladesh

**468 - DIMETHYL FUMARATE ALTERS MICROGLIA PHENOTYPE AND PROTECTS NEURONS AGAINST PROINFLAMMATORY TOXIC MICROENVIRONMENTS**

Haiyan Peng - Maria Matos - Brian T. Wipke - Moore H. Arnold - Robert H. Scannevin

Neurology Research, Biogen Idec, Cambridge, Ma

**170 - TREATMENT OF IBM WITH ALEMTUZUMAB: MOLECULAR TREATMENT EFFECTS IN SKELETAL MUSCLE**

Karsten Schmidt <sup>(1)</sup> - Konstanze Kleinschnitz <sup>(2)</sup> - Goran Rakocevic <sup>(3)</sup> - Marinos C. Dalakas <sup>(4)</sup> - Jens Schmidt <sup>(2)</sup>

Clinic For Neurology, University Medical Centre, Göttingen, Germany <sup>(1)</sup> - Department Of Neuroimmunology, Institute For Multiple Sclerosis Research And Hertie Foundation, University Medical Centre, Göttingen, Germany <sup>(2)</sup> - Department Of Neurology, Jefferson Hospital, Philadelphia, United States <sup>(3)</sup> - Neuroimmunology Unit, Department Of Pathophysiology, University Of Athens Medical School, Athens, Greece <sup>(4)</sup>

**512 - THERAPEUTIC IMPLICATIONS OF APOLIPOPROTEIN E GENOTYPE IN AUTOIMMUNE INFLAMMATORY DISEASES OF THE CENTRAL NERVOUS SYSTEM**

Lisa Schrewe - Ralf Gold - Andrew Chan

Dept. Neurology, St. Josef-hospital, Ruhr-university, Bochum, Germany

**377 - CELL-INTRINSIC ESTROGEN RECEPTOR ALPHA ACTIVATION IN FOXP3NEG CD4+ T CELLS CONTROLS TH1/TH17 DIFFERENTIATION IN TRANS AND PROTECTS FROM CNS AUTOIMMUNITY**

Laffont Sophie - Garnier Laure - Rouquié Nelly - Guéry Jean-charles

Centre De Physiopathologie De Toulouse-purpan, Inserm U1043, Cnrs U5282, University Of Toulouse, Toulouse, France

**461 - TREATMENT WITH ATX-MS-1467 AMELIORATES PATHOLOGICAL CHANGES AND INHIBITS CYTOKINE PRODUCTION IN MOUSE MODEL OF MULTIPLE SCLEROSIS**

Adriano L.S. Souza <sup>(1)</sup> - Stefan Rudin <sup>(1)</sup> - Keith Mitchell <sup>(1)</sup> - Rui Chang <sup>(1)</sup> - Danielle Graham <sup>(1)</sup> - Shuning Huang <sup>(1)</sup> - Ji-kyung Choi <sup>(2)</sup> - Dongzi Yu <sup>(1)</sup> - Bruce Jenkins <sup>(2)</sup> - Joseph Mandeville <sup>(2)</sup> - Guangping Dai <sup>(2)</sup> - Mike Webb <sup>(3)</sup> - Blake Tomkinson <sup>(1)</sup> - Tammy Dellovade <sup>(1)</sup>

Neurology Etip, Translational & Biomarker Research Group, Emd Serono Research And Development Institute, Inc., Billerica, United States <sup>(1)</sup> - Athinoula A. Martinos Center For Biomedical Imaging, Massachusetts General Hospital, Charlestown, United States <sup>(2)</sup> - Neurology Etip, Neuroimmunology Group, Emd Serono Research And Development Institute, Inc., Billerica, United States <sup>(3)</sup>

**410 - NATALIZUMAB NEUTRALISING ANTIBODIES CAN MIMICK A PML IN MS PATIENTS - REVIEW OF 4 CASES**

Wanet Thomas <sup>(1)</sup> - Capron Brigitte <sup>(1)</sup> - Urbain Etienne <sup>(2)</sup> - Jacquemotte Nancy <sup>(3)</sup> - Seeldrayers Pierrette <sup>(1)</sup>

Chu Charleroi, Chu Charleroi, Charleroi, Belgium <sup>(1)</sup> - Grand Hopital De Charleroi, Grand Hopital De Charleroi, Charleroi, Belgium <sup>(2)</sup> - Centre De Santé Des Fagnes Chimay, Centre De Santé Des Fagnes Chimay, Chimay, Belgium <sup>(3)</sup>

**497 - SHORT TERM FINGOLIMOD TREATMENT DECREASES SOLUBLE VLA 4 LEVELS IN MS PATIENTS**

Erdem Tuzun <sup>(1)</sup> - Canan Aysel Ulusoy <sup>(1)</sup> - Selin Turan <sup>(1)</sup> - Arda Orcen <sup>(1)</sup> - Berrak Yetimler <sup>(1)</sup> - Deniz Akbas-demir <sup>(2)</sup>  
Melike Kucukerden <sup>(1)</sup> - Hazal Haytural <sup>(1)</sup> - Recai Turkoglu <sup>(2)</sup>

Institute For Experimental Medicine, Istanbul University, Istanbul, Turkey <sup>(1)</sup> - Haydarpasa Medical Faculty, Haydarpasa Hospital, Istanbul, Turkey <sup>(2)</sup>

**126 - INHIBITION OF RELAPSING EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS IN BIOZZI ABH MICE USING A MOUSE CD52-SPECIFIC MONOCLONAL ANTIBODY**

Stephanie Von Kutzleben <sup>(1)</sup> - Gareth Pryce <sup>(1)</sup> - Nathalie Chretien <sup>(2)</sup> - Michael Turner <sup>(2)</sup> - William Siders <sup>(2)</sup>  
David Baker <sup>(1)</sup>

Institute Of Cellular And Molecular Sciences, Queen Mary University Of London, London, United Kingdom <sup>(1)</sup> - Genzyme Corporation, Framingham, Massachusetts, United States <sup>(2)</sup>

---

**HIGHLIGHT IN NEUROIMMUNOLOGY - GENETICS IN MS**

16:45 - 17:30 PLenary ROOM (KONGRESS SAAL)

Chair: Trevor Owens

16:45        **THE GENETIC ANALYSIS OF MULTIPLE SCLEROSIS**  
              Alastair Compston

## **DAY 5 Thursday | November 13<sup>th</sup> 2014**

---

### **NEW DEVELOPMENTS IN AUTOIMMUNITY**

08:15 - 09:30 PLENARY ROOM (KONGRESS SAAL)

**Chairs:** V Wee Yong, Jack Antel

- 08:15 THE AUTOIMMUNOME: AN INTEGRATED VIEW OF GENETIC SUSCEPTIBILITY STUDIES**  
Sergio Baranzini
- 08:40 TRANSLATIONAL EPIDEMIOLOGY - NOVEL OPPURTUNITIES IN NEUROIMMUNOLOGY**  
Jan Hillert
- 09:05 ON THE ORIGIN OF AUTOANTIBODIES**  
Antonio Lanzavecchia

---

### **COFFEE BREAK**

09:30 - 10:00 POSTERHALL (RHEINFOYER)

---

### **NEUROBIOLOGY IN NEUROIMMUNE DISEASES**

10:00 - 11:45 ROOM A (KONGRESS SAAL)

**Chairs:** Antonio Uccelli, Michal Schwartz

- 10:00 ION AT THE BRAIN'S CHOROID PLEXUS A NOVEL NEGATIVE PLAYER IN BRAIN AGEING AND NEURODEGENERATIVE DISEASES**  
Michal Schwartz
- 10:23 NEUROGENESIS OR NOT NEUROGENESIS: THIS IS THE QUESTION**  
Gianvito Martino
- 10:45 REMYELINATION IN THE CENTRAL NERVOUS SYSTEM: A ROLE FOR IMMUNE CUES?**  
Catherine Lubetzki
- 11:08 IMMUNE-INHIBITORY MECHANISMS TO PREVENT NEURAL DAMAGE**  
Heinz Wiendl
- 11:30 465 - CNS-TARGETED IL-6 PRODUCTION LEADS TO HIGHER RECRUITMENT OF PRO-INFLAMMATORY T-HELPER CELLS AFTER FACIAL NERVE AXOTOMY**  
Nàdia Villacampa <sup>(1)</sup> - Beatriz Almolda <sup>(1)</sup> - Iain Camobell <sup>(2)</sup> - Berta González <sup>(1)</sup>  
Bernardo Castellano <sup>(1)</sup>  
Department Of Cell Biology, Physiology And Immunology, Institute Of Neurosciences, Universitat Autònoma De Barcelona, Bellaterra, Spain <sup>(1)</sup> - School Of Molecular Bioscience, University Of Sydney, Sydney, Australia <sup>(2)</sup>

---

### **ANTIBODIES IN NEUROLOGIC AUTOIMMUNE DISORDERS**

10:00 - 11:45 ROOM B (GUTENBERGSAAL 1)

**Chairs:** Edgar Meinl, Angela Vincent

- 10:00 IL-6 DEPENDENT PLASMABLASTS SECRETING AUTOANTIBODIES IN THE PATHOGENESIS OF NEUROMYELITIS OPTICA**  
Takashi Yamamura

- 10:23      **THE ROLE OF INFLAMMATION IN EPILEPSY: NEW THERAPAUTIC PERSPECTIVES**  
Annamaria Vezzani
- 10:45      **TO LOOK FOR A NEEDLE IN A HAYSTACK: AUTOANTIBODIES IN MULTIPLE SCLEROSIS**  
Bernhard Hemmer
- 11:08      **ANTI-GLYCOLIPID ANTIBODIES IN AUTOIMMUNE NEUROPATHIES:  
CLINICAL AND PATHOPHYSIOLOGICAL STUDIES**  
Hugh Willison
- 11:30      **426 - B CELL ANTIGEN PRESENTATION IS SUFFICIENT TO DRIVE NEURO-INFLAMMATION  
IN AN ANIMAL MODEL OF MULTIPLE SCLEROSIS**  
Chelsea Parker <sup>(1)</sup> - Angela Archambault <sup>(1)</sup> - Julia Sim <sup>(1)</sup> - Stephen Ferris <sup>(1)</sup> - Pandelakis Koni <sup>(2)</sup>  
Christopher Linington <sup>(3)</sup> - John Russell <sup>(1)</sup> - Gregory Wu <sup>(1)</sup>  
Washington University In St. Louis, Washington University In St. Louis, St. Louis, United States <sup>(1)</sup> - Cancer Immunology,  
Inflammation And Tolerance Program, Cancer Center And Department Of Medicine, Georgia Regents  
University, Augusta, United States <sup>(2)</sup> - University Of Glasgow, University Of Glasgow, Glasgow, United Kingdom <sup>(3)</sup>

## TREATMENTS - PROS AND CONS (ACTRIMS)

10:00 - 11:45 ROOM C (GUTENBERGSAAL 2)

Chair: Bernd C. Kieseier

- 10:00      Hans Peter Hartung
- 10:21      Ludwig Kappos
- 10:42      **NOVEL TREATMENTS FROM THE PERSPECTIVE OF ANTI-INFLAMMATORY  
AND NEUROPROTECTIVE EFFECTS**  
Frauke Zipp
- 11:03      **BIOMARKERS: WHAT HAVE WE LEARNED FROM TREATMENTS - ACTRIMS**  
Suhayl Dhib-jalbut
- 11:24      **EMERGING INSIGHTS INTO B CELL: T CELL: MYELOID INTERACTIONS AND IMPLICATION TO  
THERAPEUTIC TARGETS IN CNS INFLAMMATION**  
Amit Bar-Or

## LUNCH BREAK

12:00 - 13:00 POSTERHALL (RHEINFOYER)

## THE MONTALCINI LECTURE

13:00 - 13:45 PLENARY ROOM (KONGRESS SAAL)

Chairs: Alastair Compston,

- 13:00      **OLIGODENDROCYTES AND THE PROTECTION OF AXONAL INTEGRITY IN MYELIN DISEASE**  
Klaus-Armin Nave

## CLOSING

13:45 - 15:15 PLENARY ROOM (KONGRESS SAAL)



We're steadfast in our commitment to the MS community, with experts dedicated to delivering new approaches for confronting this disease now and in the future.

Genzyme is committed to working harder so patients can live better—because in the fight against MS, we're all in this together. And, guess what? We're not backing down.

**Multiple sclerosis is not just a disease—it's a challenge**

*Challenge accepted.*



## Author Index

|                        |            |                                 |                    |                                |        |
|------------------------|------------|---------------------------------|--------------------|--------------------------------|--------|
| H. Scannevin Robert    | 93         | Airas Laura                     | 46                 | Ariño Helena                   | 17     |
| Ali Sepehry Amir       | 65         | Akkoc Tunc                      | 76                 | Arip Masita                    | 25     |
| H. Scannevin Robert    | 56         | Akrivou Sofia                   | 40                 | Armentani Eric                 | 40; 82 |
| A Andrade Ulisses      | 34         | Aktas Orhan                     | 20; 56             | Arnold Bernd                   | 36; 72 |
| A Buurman Wim          | 69         | Alastair S Compston D           | 42                 | Arnold Douglas                 | 63     |
| A Glicksman Marcie     | 46         | Alba Merce                      | 17                 | Arnon Ruth                     | 67; 81 |
| A Newman Newman Tracey | 47         | Albayram Önder                  | 63                 | Arsenijevic Aleksandar         | 19; 67 |
| A Panzara Michael      | 42         | Alcamí Antonio                  | 49                 | Arsenijevic Nebojsa            | 19; 67 |
| A Warren Edward        | 16         | Alexopoulos Haris               | 40                 | Arslan Sevki                   | 48; 57 |
| A. Asuni Ayodeji.      | 50         | Alexopoulos Harry               | 17                 | Arthur Ariel                   | 70     |
| A. Campbell Veronica   | 72         | Alferink Judith                 | 56; 57; 63         | Arunachalam Priyadharshini     | 48; 68 |
| A. Frieze Manuel       | 26; 68     | Alifirova Valentina             | 73                 | Ase Ariel                      | 29     |
| A. Harris Robert       | 45         | Allaire Norm                    | 28                 | Asgari Nasrin                  | 40     |
| A. Honorat Josephe     | 25         | Allie Nasiema                   | 66                 | Astarita Jillian               | 43     |
| A. Kato Takahiro       | 32         | Alloza Iraide                   | 45                 | Astobiza Ianire                | 45     |
| A. Kruse Torben        | 52         | Almolda Beatriz                 | 14; 30; 56; 86     | Aubé Benoît                    | 51     |
| A. Laurent Sarah       | 42         | Alpi Emanuele                   | 75                 | Aucouturier Pierre             | 71     |
| A. Lynch Marina        | 55         | Altevogt Peter                  | 36                 | Augusto Feitosa Pereira Alvaro | 49     |
| A. Lynch Marina.       | 62         | Altintas Ayse                   | 20; 67             | Avidan Nili                    | 43     |
| A. Pardo Luis          | 67         | Alvarez Jorge                   | 22                 | Avolio Carlo                   | 37; 40 |
| A. Riester Katherine   | 77         | Amadio Stefano                  | 51                 | Axel Laplaud David             | 77     |
| A. Rogers James        | 58         | Amar Majid                      | 72                 | Axtell Robert                  | 33     |
| A. Sobel Raymond       | 80         | Amatruda Mario                  | 48                 | Aysal Fikret                   | 81     |
| A. Winer Daniel        | 47         | Amiable Nathalie                | 44                 | Aysel Ulusoy Canan             | 76; 84 |
| Abadier Michael        | 23         | Aminian Atefeh                  | 16                 | Ayta Semih                     | 80     |
| Abe Masaaki            | 24         | Amit Ido                        | 55; 61             | B Chibnik Lori                 | 46     |
| Abrahamsen Greger      | 43         | Ammitzboell Cecilie             | 45                 | B F Rutten Bart                | 69     |
| Abramovich Renne       | 82         | Amor Sandra                     | 15; 30             | B Nutman Thomas                | 16     |
| Abuneeza Esadawi       | 47         | Amoruso Antonella               | 24; 44             | B. Keough Michael              | 58; 74 |
| Abutbul Shai           | 71         | Anastasiadou Eleni              | 66                 | Babcock Alicia                 | 53     |
| Acharjee Shaona        | 14         | Andreetta Francesca             | 22; 71             | Bach Soendergaard Helle        | 45     |
| Achour Adnane          | 45         | Angiari Stefano                 | 63; 74; 81         | Bachi Angela                   | 75     |
| Acosta Crystal         | 53         | Annese Anita                    | 16; 66             | Bacigaluppi Marco              | 23; 74 |
| Acuña Eric             | 70         | Annibali Viviana                | 16; 40; 46; 66     | Baehr Mathias                  | 72     |
| Adem Abdu              | 80         | Antel Jack                      | 15; 22; 29; 55; 58 | Baekelandt Veerle              | 53     |
| Adzemovic Milena       | 24         | Antigüedad Alfredo              | 45                 | Baggi Fulvio                   | 71     |
| Aeinehband Shahin      | 47         | Antonio Gerardo Ricigliano Vito | 16                 | Baggiolini Arianna             | 73     |
| Ag Ricigliano Vito     | 46; 66     | Aoki Masashi                    | 70                 | Baguhl Romy                    | 48     |
| Aguilar Esther         | 17; 32     | Aranami Toshimasa               | 79                 | Bahtz Ramona                   | 18; 64 |
| Aharoni Rina           | 67; 81; 82 | Arbour Nathalie                 | 22; 38; 43; 58     | Bai Jing                       | 27     |
| Ahrends Hannah         | 63         | Archambault Angela              | 87                 | Bajramovic Jeffrey             | 27; 28 |
| Ai Youxi               | 31         | Archie Honorat Josephe          | 21; 83             | Baker David                    | 85     |
| Aid Saba               | 71         | Ariful Haque Mollik Md.         | 34; 84             | Bakhshandepour Gholamreza      | 26     |

|                      |                        |                       |                        |                        |                |
|----------------------|------------------------|-----------------------|------------------------|------------------------|----------------|
| Baksmeier Christine  | 41                     | Belabani Chahrazed    | 29                     | Bjølgerud Anja         | 43; 45         |
| Balboni Gianfranco   | 47                     | Belikan Patrick       | 49; 76                 | Blaabjerg Morten       | 48             |
| Balcarek Peter       | 44                     | Benabdellah Karim     | 76                     | Blanchfield Lori       | 76             |
| Balint Bettina       | 21                     | Bendix Ivo            | 31                     | Blatti Claudia         | 23; 24         |
| Balzarolo Melania    | 48                     | Bendotti Caterina     | 51                     | Blauth Kevin           | 17             |
| Balzarotti Beatrice  | 75                     | Benhar Inbal          | 40                     | Blazevski Jana         | 84             |
| Bando Yoshio         | 33                     | Bennett Jeffrey       | 17; 63; 64             | Blezer Erwin           | 41             |
| Bankhead Peter       | 73; 77; 78             | Berer Kerstin         | 67                     | Bliederhäuser Corinna  | 30             |
| Banwell Brenda       | 29; 63                 | Berera Giulia         | 37                     | Blieberhaeuser Corinna | 28             |
| Baranuskas Gytis     | 71                     | Berg Johannes         | 41; 46                 | Bloemker Dominique     | 65             |
| Baranzini Sergio     | 33; 47; 85             | Bergamaschi Andrea    | 57                     | Blonda Maria           | 40             |
| Barat Corine         | 23                     | Berge Tone            | 43; 45                 | Bloreaga Bogdan        | 18             |
| Barbieri Francesca   | 79                     | Berger Thomas         | 19                     | Blumenfeld Shiri       | 37             |
| Barcellos Lisa       | 45                     | Berglund Rasmus       | 48; 78                 | Böhme Anne             | 49             |
| Barger Zeke          | 14                     | Bergman Petra         | 46; 47; 48             | Bojcevski Jovana       | 71             |
| Barrington Torben    | 20                     | Bergmann Cornelia     | 17; 67                 | Boldrin Valentina      | 51             |
| Baris Safa           | 80                     | Berki Tímea           | 20; 69                 | Bollman Bryan          | 70             |
| Barnum Chris         | 38                     | Berkutski Tamara      | 61                     | Bommhardt Ursula       | 78             |
| Baron Rona           | 44                     | Berl Sabina           | 48                     | Bonetti Bruno          | 50; 64; 65; 74 |
| Bar-Or Amit          | 59; 87                 | Berl Stefan           | 40                     | Böning Daniel          | 23             |
| Barrera Iliana       | 14                     | Berlin Roseann        | 17                     | Bonnin Alexandre       | 18             |
| Bartholomäus Ingo    | 61                     | Bernard Isabelle      | 42                     | Boodhoo Dallas         | 57             |
| Bartos Ales          | 18                     | Bernard Lakes Yenai   | 75                     | Bopp Tobias            | 56; 62         |
| Baruch Kuti          | 61                     | Bernardes Danielle    | 68                     | Borisov Alexei         | 45             |
| Baser Hatice         | 19                     | Bernasconi Pia        | 71                     | Borisow Nadja          | 28             |
| Bashinskaya Vitalina | 20; 21                 | Berndt Dominique      | 70                     | Börnsen Lars           | 45             |
| Bashir Noun          | 82                     | Bernreuther Christian | 68                     | Borowski Kathrin       | 18; 21         |
| Basnyat Pabitra      | 21                     | Berthele Achim        | 20                     | Borsellino Giovanna    | 79             |
| Bataller Luis        | 39                     | Bertolotto Antonio    | 20; 48                 | Boscacci Rémy          | 23; 24         |
| Battistini Luca      | 11; 16; 35; 40; 79     | Bethea John           | 31; 68                 | Bösche Katharina       | 33; 34         |
| Bauer Jan            | 71; 82                 | Bezalel Dana          | 61                     | Boschert Ursula        | 27             |
| Bauer Jens           | 56                     | Bhatia Urvashi        | 38; 52                 | Bosoi Ciprian          | 32             |
| Baulina Natalia      | 21                     | Bhonsle Latika        | 77                     | Bourbonniere Lyne      | 22; 36         |
| Baumann Bernd        | 54                     | Bianchi Veronica      | 51                     | Bourbonnière Lyne      | 23; 32; 52; 64 |
| Bazzoli Elena        | 64; 65; 74             | Biberacher Viola      | 77                     | Bowie Andrew           | 27             |
| Beauseigle Diane     | 43; 58                 | Biffi Emilia          | 51                     | Boyko Alexey           | 20; 21         |
| Becher Burkhard      | 15; 27; 28; 48; 73; 78 | Bilkova Zuzana        | 18                     | Boyko Anastasia        | 73             |
| Becher Juliane       | 48                     | Bin Jenea             | 22                     | Bozoyan Lusine         | 73             |
| Bechmann Ingo        | 15; 60                 | Bing Chow Han         | 25                     | Bp Rutten Bart         | 69             |
| Becker Simon         | 42                     | Birkenstock Jérôme    | 76                     | Bradl Monika           | 71             |
| Bedell Barry         | 15                     | Birkner Katharina     | 62; 80                 | Bradshaw Elizabeth     | 27             |
| Bedford Lynn         | 68                     | Bishay Philipp        | 57                     | Bragoni Alberto        | 56             |
| Bee Eow Gaik         | 25                     | Bistaffa Edoardo      | 65                     | Braiotta Gino          | 20             |
| Begemann Nora        | 21; 64                 | Biswas Aindrita       | 65                     | Brambilla Elena        | 60; 74; 75     |
| Behrens Janina       | 28                     | Biton Shva            | 44                     | Brambilla Roberta      | 68             |
| Bekner Freja         | 45                     | Bittner Stefan        | 38; 47; 57; 68; 77; 78 | Branton William        | 55             |

|                   |                                   |                      |                    |                          |            |
|-------------------|-----------------------------------|----------------------|--------------------|--------------------------|------------|
| Brassat David     | 35                                | C Beck Hans          | 15                 | Castilló Joaquín         | 20         |
| Braun Jürgen      | 70                                | C Dodge James        | 42                 | Castro Poppe Sandra      | 49         |
| Breit Samuel      | 16                                | C Evans Matthew      | 39                 | Cattane Nadia            | 64         |
| Brenner Talma     | 17                                | C Fitzgerald Denise  | 78                 | Cavaliere Chiara         | 75         |
| Breuer Johanna    | 22; 23; 38                        | C Kieseier Bernd     | 44                 | Cavanagh Jonathan        | 55         |
| Breur Marjolein   | 30                                | C Ramsperger Vincent | 69                 | Cavazzi Elena            | 55         |
| Brgamaschi Andrea | 51                                | C. Bernard Claude    | 18                 | Cayrol Romain            | 38         |
| Briggs Farren     | 45                                | C. Bullard Daniel    | 23                 | Cecconi Francesco        | 48         |
| Brigitte Capron   | 84                                | C. Dalakas Marinos   | 44; 84             | Cecile Delarasse         | 72         |
| Brilha Sara       | 37                                | C. Fitzgerald Denise | 77                 | Cédile Oriane            | 76         |
| Brimberg Lior     | 17; 18                            | C. Gross Catharina   | 52                 | Celik Gurbet             | 57         |
| Bros Elena        | 71                                | C. Kieseier Bernd    | 43; 73; 82; 83; 87 | Centonze Diego           | 56; 74; 79 |
| Broux Bieke       | 36; 49                            | C. Kurschus Florian  | 69; 80             | Cerina Manuela           | 68         |
| Brown David       | 16                                | C. Ludolph Albert    | 28; 30             | Ceuppens Jan             | 80         |
| Brown Joe         | 63                                | C. Rosenkranz Sina   | 26                 | Chaabane Linda           | 37; 50; 51 |
| Brück Wolfgang    | 12; 18; 24; 30; 32; 37;<br>67; 78 | C. Salmen Sunhild    | 81                 | Chai Zhi                 | 50; 83     |
| Brücke Thomas     | 18                                | C. Schmitt Patricia  | 14                 | Chaigneau Thomas         | 71         |
| Brueck Wolfgang   | 73                                | C. Wraith David      | 81                 | Chalmin Fanny            | 56; 79     |
| Bruinsma Ilona    | 33; 47                            | Caballero Eva        | 17                 | Chalmoukou Konstantina   | 40         |
| Brun Susana       | 31                                | Cagnard Nicolas      | 71                 | Champigny Camille        | 58         |
| Brunetto Giovanna | 65; 66                            | Calabria Francesca   | 64                 | Chan Andrew              | 49; 84     |
| Brüning Jens      | 15                                | Calçada Daniela      | 34                 | Chan Gail                | 27; 46; 50 |
| Bry Lynn          | 54                                | Caldano Marzia       | 48                 | Chang Rui                | 84         |
| Bsibsi Malika     | 15                                | Calle Vanessa        | 71                 | Chapman Joab             | 31         |
| Buch Thorsten     | 15; 73                            | Camobell Iain        | 86                 | Chapple Katie            | 70         |
| Buck Dorothea     | 22; 77                            | Campbell Iain        | 30; 71             | Charabati Marc           | 38; 50     |
| Budde Thomas      | 55; 68; 77                        | Campbell Ian         | 56                 | Chavakis Triantafyllos   | 38         |
| Budoo Nishta      | 79                                | Campbell Sandra      | 16                 | Checa Begona             | 16         |
| Buehler Ulrike    | 76                                | Canales Mathieu      | 29                 | Chegini Leila            | 26         |
| Bufe Bernd        | 30                                | Cantoni Claudia      | 15; 70             | Cheng Fan                | 66         |
| Buffo Annalisa    | 76                                | Capi Matilde         | 40                 | Chiara Buscarinu Maria   | 16; 40; 66 |
| Bühler Ulrike     | 49; 52                            | Capitolo Eleonora    | 50                 | Chiba Asako              | 69         |
| Bülöw Mie         | 25                                | Caputo Domenico      | 19; 28             | Chiba Atsuro             | 25; 26     |
| Bunning Rowena    | 47                                | Carambia Antonella   | 81                 | Chihara Norio            | 79         |
| Bunse Lukas       | 64; 65                            | Cárcamo Claudia      | 70                 | Chisholm Jesse           | 54         |
| Burgoon Mark      | 20                                | Carlström Karl       | 71                 | Cho Suzy                 | 81         |
| Burm Saskia       | 27                                | Carlucci Tommaso     | 81                 | Choi Elliot              | 70         |
| Burman Joachim    | 49                                | Carmant Lionel       | 32                 | Chretien Nathalie        | 31; 85     |
| Burns Evans       | 29                                | Carrega Paolo        | 82                 | Christiansen Josefine    | 79         |
| Bürth Christoph   | 43                                | Caruso Breanna       | 66                 | Christin Starossom Sarah | 58         |
| Butovsky Oleg     | 29; 38; 54                        | Carvajal Alexander   | 17                 | Chudyka Daria            | 23         |
| Buttgereit Anne   | 27                                | Casazza Simona       | 51                 | Cialic Cialic Ron        | 38         |
| Butti Erica       | 37; 74                            | Casella Giacomo      | 81                 | Cimpean Maria            | 27; 46     |
| Bytko Xenia       | 46                                | Casiraghi Costanza   | 41                 | Ciric Bogoljub           | 39         |
| C Anthony Daniel  | 16; 39                            | Casola Stefano       | 80                 | Ciriello Giovanni        | 64         |
|                   |                                   | Castellano Bernardo  | 14; 30; 56; 86     | Ciuta Cecile             | 32         |

|                     |                                |                       |                |                                  |                    |
|---------------------|--------------------------------|-----------------------|----------------|----------------------------------|--------------------|
| Clausen Björn       | 38                             | Cristina Ortega María | 27             | David Yaron                      | 71                 |
| Clemente Diego      | 27; 29                         | Crook Kenneth         | 27             | Davis Matthew                    | 75                 |
| Clerici Mario       | 19; 28                         | Crooks James          | 68             | Davis Mollie                     | 20                 |
| Cloake Nancy        | 16; 82                         | Cross Alison          | 47             | Day Jennifer                     | 56                 |
| Clover Linda        | 17                             | Cross Anne            | 15; 70         | De Fátima Monteiro Martins Maria | 49                 |
| Cm Hoogland Inge    | 59                             | Csepany Tunde         | 69             | De Paula Coelho Cideli           | 49                 |
| Coarelli Giulia     | 66                             | Cudna Agnes           | 23             | Deblois Gabrielle                | 43                 |
| Cohen Merav         | 55; 56                         | Cudrici Cornelia      | 57             | Debradant Birgit                 | 25                 |
| Cokar Ozlem         | 80                             | Cugurra Andrea        | 57             | Debruin Natasja                  | 33; 57             |
| Colacios Céline     | 42                             | Cullen Patrick        | 28             | Deczkowska Aleksandra            | 61                 |
| Coll Rebecca        | 51                             | Cumberbatch Michael   | 82             | Degn Matilda                     | 17; 22; 30         |
| Collins Hayden      | 59; 67                         | Curley Tara           | 59             | Dehmel Thomas                    | 16; 44; 82         |
| Colombo Emanuela    | 40; 50                         | Cusick Matthew        | 68             | Deisenhammer Florian             | 19                 |
| Colombo Federico    | 50                             | Cusimano Melania      | 60             | Dejana Elisabetta                | 24                 |
| Comabella Manuel    | 20; 45                         | D Andersen Beatrice   | 30             | Dejean Anne                      | 42                 |
| Comi Giancarlo      | 23; 37; 40; 46; 51; 57; 74; 75 | D Bos Steffan         | 45             | Delarasse Cecile                 | 55                 |
| Compta Yaroslau     | 39                             | D Boyd Justin         | 46             | Delatour Benoit                  | 72                 |
| Congiu Cenzo        | 47                             | D Palmer Theo         | 54             | Deligoz Hasalettin               | 48                 |
| Connolly Mary       | 32                             | D. Bach Simone        | 81             | Dellarole Anna                   | 68                 |
| Connor Thomas       | 33; 56                         | D. Bos Steffan        | 43             | Dellovade Tammy                  | 84                 |
| Consortium Anzgene  | 46                             | D. Dijkstra Christine | 28             | Delogu Giovanni                  | 41                 |
| Constantin Gabriela | 24; 41; 44; 50; 63; 74; 81     | D. Fontenot Jason     | 28; 77         | Delorenzi Mauro                  | 29                 |
| Constantinescu Cris | 68                             | D. Hammond Matthew    | 31             | Demir Seray                      | 41                 |
| Contreras Angeles   | 39                             | D. Laman Jon          | 44             | Demirbilek Veysi                 | 80                 |
| Cooper Matthew      | 51                             | D. Miller Stephen     | 37             | Dempsey Colin                    | 51                 |
| Cooper Susan        | 66                             | D. Ponomarev Eugene   | 58             | Deniz Günnur                     | 20                 |
| Coppola Giovanni    | 78                             | Dai Guangping         | 84             | Dennison Kathryn                 | 59                 |
| Cordano Christian   | 56                             | Dalakas Marinos       | 17; 40         | Denno Yvonne                     | 21; 64             |
| Cordes Maike        | 43                             | Daldrup Theimo        | 55             | Dental Clelia                    | 23                 |
| Cordes Steffen      | 83                             | Dalko Esther          | 66             | Depboylu Candan                  | 36                 |
| Cordiglieri Chiara  | 71                             | Dalmau Josep          | 17; 19; 32; 39 | Derksen Angelika                 | 44; 73             |
| Cortes Claudia      | 53                             | Damoiseaux Jan        | 19             | Derle Eda                        | 53                 |
| Cossetti Chiara     | 75                             | Damotte Vincent       | 13             | Dervenoulas Georgios             | 64                 |
| Costa Patrício      | 78                             | Dams Maria            | 36             | Deutsch Urban                    | 23; 24             |
| Costa Riu Carme     | 20                             | Daniel Gerhard        | 18             | Devraij Kavi                     | 36                 |
| Costanza Massimo    | 47; 50                         | Daniels Brian         | 23             | Deymeer Feza                     | 81                 |
| Côté Mélissa        | 51                             | Danoff Jacob          | 57             | Diamond Betty                    | 17; 18             |
| Couch Yvonne        | 16; 39; 57                     | Danquah Welbeck       | 43             | Didkovskiy Nikolay               | 66                 |
| Cox Amanda          | 82                             | Dansokho Cira         | 71             | Diem Ricarda                     | 14; 51; 62; 71; 73 |
| Cox Donal           | 27                             | Dantzer Robert        | 12; 51         | Dijkman Karin                    | 18; 41; 82         |
| Crapser Josh        | 79                             | Danzer Karin          | 30             | Dijkstra Christine               | 30                 |
| Crapser Joshua      | 68                             | Darin Niklas          | 12             | Dina Giorgia                     | 37                 |
| Crawford Colin      | 82                             | Darko Sam             | 76             | Disano Krista                    | 17                 |
| Crisp Sarah         | 68                             | Darlington Peter      | 22             | Dittmer Marie                    | 73; 77             |
|                     |                                | Dastidar Prasun       | 21             | Dittmer Ulf                      | 65                 |
|                     |                                | David Eyal            | 55; 61         | Djedovic Neda                    | 84                 |

|                     |                |                                  |                    |                                |                        |
|---------------------|----------------|----------------------------------|--------------------|--------------------------------|------------------------|
| Doi Shizuki         | 29             | Ehling Petra                     | 77                 | F. Angelini Daniela            | 16; 40                 |
| Dolei Antonina      | 67             | Eichinger Paul                   | 77                 | F. Charo Israel                | 24                     |
| Dombrowski Yvonne   | 73; 77; 78     | Eichler Tilo                     | 65                 | F. Fragoso Maria               | 28                     |
| Dombrowski, Yvonne  | 78             | Eijsink Vivian                   | 33                 | F. Harbo Hanne                 | 43                     |
| Domonova Elvira     | 66             | Eilam Raya                       | 67; 81             | F. Lichtenthaler Stefan        | 42                     |
| Donega' Matteo      | 75             | Eileen Menezes Baliellas Deborah | 49                 | Faber Bart                     | 18                     |
| Donnarumma Tiziano  | 63             | Einstein Ofira                   | 31                 | Faber Hans                     | 77                     |
| Dooley Dearbhaile   | 54             | Eisel Uli                        | 14                 | Fabian Michelle                | 21                     |
| Doran Sarah         | 68             | Ekmekci Ozgul                    | 25                 | Fagan Steven                   | 72                     |
| Dorman Olga         | 42; 74         | Elboudwarej Emon                 | 45                 | Faigle Wolfgang                | 33                     |
| Dornmair Klaus      | 77             | Elcil Serkan                     | 48                 | Fainberg Karin                 | 42; 74                 |
| Dorothee Guillaume  | 71             | Eleni Pappa                      | 56                 | Fainstein Nina                 | 31; 74                 |
| Doucet Marika       | 72             | Elger Christian                  | 17                 | Fairless Richard               | 14; 51; 71; 73         |
| Douek Daniel        | 76             | Eliam Raya                       | 82                 | Faissner Andreas               | 76                     |
| Doykan Camille      | 38             | Elibol Bülent                    | 26                 | Fan Yan                        | 74                     |
| Dræby Dina          | 28             | Elliott Christina                | 70                 | Fanek Fanek Zain               | 38                     |
| Drago Denise        | 75             | Ellman Dite                      | 31                 | Fanek Zain                     | 38; 54                 |
| Dressel Alexander   | 48             | Ellrichmann Gisa                 | 33; 82             | Farina Cinthia                 | 28; 40; 46; 47; 50; 74 |
| Drexhage Joost      | 24             | Ellwardt Erik                    | 14; 83             | Farinazzo Alessia              | 64; 65; 74             |
| Dreykluft Angela    | 23             | Elovaara Irina                   | 21                 | Farrell Colleen                | 21                     |
| Dua Priya           | 26             | Elston John                      | 66                 | Favorov Alexander              | 21                     |
| Dua Priyamvada      | 68             | Elyaman Wassim                   | 15; 27             | Favorova Olga                  | 20; 21                 |
| Duffey Maelle       | 82             | Emrich Michael                   | 71                 | Fechner Kai                    | 18; 21                 |
| Dumas Aline         | 44; 73         | Engbers Annika                   | 52                 | Fedulov Alexander              | 45                     |
| Dunn Shannon        | 29             | Engelhardt Britta                | 11; 13; 23; 24; 35 | Feher Gergely                  | 25                     |
| Dunne Aisling       | 27             | Engelhardt Mathias               | 80                 | Fehniger Todd                  | 15                     |
| Duquette Pierre     | 38; 64         | Engler Harald                    | 33; 34; 65         | Feldmann Linda                 | 15                     |
| Durmus Hacer        | 81             | Enright Anton                    | 75                 | Feliú Ana                      | 49; 51; 55             |
| Durrenberger Pascal | 51             | Erba Eugenio                     | 51                 | Feng Jiachun                   | 27                     |
| Duscha Alexander    | 41             | Erdag Ece                        | 20; 41             | Feng Ling                      | 50; 83                 |
| Dusi Silvia         | 24; 44; 63; 81 | Eriksson Ulf                     | 24                 | Fenger Christina               | 52                     |
| Dustin Irene        | 65             | Ernst Joachim                    | 43                 | Ferger Boris                   | 54                     |
| Dzharullaeva Alina  | 69             | Errede Mariella                  | 51                 | Ferlazzo Guido                 | 82                     |
| E. Clausen Björn    | 39             | Eschborn Melanie                 | 41; 52             | Fernandes Bondan Eduardo       | 49                     |
| E. Dunn Shannon     | 47             | Espejo Carmen                    | 49                 | Fernandez Oscar                | 45                     |
| E. Goings Gwen      | 37             | Espiño Mercedes                  | 19                 | Fernando Monteiro Gimenez Caio | 49                     |
| E. Greenlee John    | 64             | Etienne Urbain                   | 84                 | Ferrara Giovanni               | 51                     |
| E. Hauser Anja      | 19             | Etzerodt Anders                  | 73                 | Ferreira Filipa                | 34                     |
| E. Muth Ingrid      | 44             | Evangelakou Panagiota            | 22                 | Ferreiros Nerea                | 33                     |
| E. Voll Reinhard    | 44             | Evavold Brian                    | 76                 | Ferreirós Nerea                | 57                     |
| Easton Alexander    | 45             | Eychmüller Alexander             | 81                 | Ferrigno Giancarlo             | 51                     |
| Eberle Max          | 33             | Eze Chigo                        | 65                 | Ferris Stephen                 | 87                     |
| Edenhofer Frank     | 75             | F Dowell Scott                   | 16                 | Fiinsen Bente                  | 53                     |
| Edwards Taylor      | 20             | F Harbo Hanne                    | 45                 | Filali Mohammed                | 73                     |
| Efroni Sol          | 29             | F Kuipers Hedwich                | 42; 54             | Fillatreau Simon               | 63                     |
| Eggen Bart          | 15             | F Lipka Alexander                | 25                 | Finardi Annamaria              | 50; 57; 81             |

|                       |                                |                    |            |                      |                                    |
|-----------------------|--------------------------------|--------------------|------------|----------------------|------------------------------------|
| Fink Katarina         | 12                             | Gadoth Avi         | 74         | Gliem Micheal        | 56                                 |
| Finsen Bente          | 52; 83                         | Gaig Carles        | 39         | Glumm Sarah          | 47                                 |
| Firmenich Stephanie   | 80                             | Galicía Georgina   | 17         | Göb Eva              | 68                                 |
| Fischer Roman         | 14; 82                         | Gallego Juan       | 41         | Göbel Kerstin        | 38; 55; 68                         |
| Fisher Yair           | 44                             | Gallizioli Mattia  | 23         | Goebels Norbert      | 17; 41                             |
| Fissolo Nicolas       | 20                             | Gandhi Roopali     | 40         | Gokyigit Aysen       | 80                                 |
| Fitzgerald Denise     | 73                             | Gandoglia Ilaria   | 40; 82     | Gold Ralf            | 33; 39; 41; 46; 49; 76; 78; 82; 84 |
| Flanagan Ken          | 23; 38                         | Gardiner Chris     | 39         | Gollan Rene          | 52                                 |
| Fleidervish Ilya      | 71                             | Gargano Francesca  | 79         | Gollan René          | 49                                 |
| Flügel Alexander      | 78                             | Garron Carrie      | 31         | Gomez Fabian         | 21                                 |
| Flytzani Sevasti      | 43                             | Garzetti Livia     | 51         | Gommerman Jennifer   | 43; 63; 64                         |
| Fontaine Bertrand     | 13; 55; 72                     | Gasperini Claudio  | 79         | Gonzalez Berta       | 30; 56                             |
| Fontaine François     | 32                             | Gaud Guillaume     | 42         | González Berta       | 14; 86                             |
| Fontana Elena         | 47                             | Gebauer Christina  | 23; 35     | Goodkin Howard       | 32                                 |
| Förster Irmgard       | 57; 63                         | Geerts Dirk        | 13         | Gorji Ali            | 68                                 |
| Forsthuber Thomas     | 22                             | Geisler Carsten    | 30         | Gorodetsky Raphael   | 74                                 |
| Fouka Pinelopi        | 17                             | Geisslinger Gerd   | 31; 33; 57 | Götz Alexander       | 67                                 |
| Fournier Sylvie       | 62                             | Gekas Georgios     | 56         | Gouverneur Veronique | 16                                 |
| Francisco Ngiambudulu | 66                             | Gelderblom Mathias | 48; 68     | Gowing Elizabeth     | 69                                 |
| Frangieh Michael      | 27; 46                         | Gelfand Jeffrey    | 18         | Grabitz Carl         | 42                                 |
| Frank Ida             | 76                             | Gelpí Ellen        | 39         | Graham Danielle      | 84                                 |
| Fransson Moa          | 49                             | Gendron Steve      | 69         | Graham Gerard        | 55                                 |
| Frauenknecht Katrin   | 31                             | Gennarelli Massimo | 64         | Gran Bruno           | 68; 77                             |
| Frauscher Birgit      | 79                             | George Jithin      | 66         | Graner Michael       | 20; 59                             |
| Fraussen Judith       | 19                             | Gerald Christophe  | 21         | Granieri Letizia     | 20                                 |
| Frausto Ricardo       | 49                             | Gerdes Lisa        | 19         | Grassivaro Francesca | 28                                 |
| Frenkian Mélinée      | 43                             | Gerloff Christian  | 68         | Grasso Roberta       | 40                                 |
| Freund Barbara        | 81                             | Gerritsen Wouter   | 15; 30     | Graus Francesc       | 17; 32; 39                         |
| Friedler Brett        | 68                             | Geschwind Daniel   | 78         | Grazia Grasso Maria  | 79                                 |
| Friedman Alon         | 71                             | Geschwind Michael  | 18         | Greco David          | 38; 54                             |
| Frigerio Federica     | 52                             | Geurts Jeroen      | 33; 47     | Greco Greco David    | 38                                 |
| From Renana           | 81                             | Ghaffarian Nikoo   | 68         | Greer Judith         | 16; 46; 82                         |
| Fujihara Kazuo        | 70                             | Ghannam Soufiane   | 23; 49; 52 | Grenier Jeremy       | 53                                 |
| Fujii Chihiro         | 77                             | Ghimenton Claudio  | 64         | Greter Melanie       | 11; 27; 74                         |
| Fujiki Naoto          | 29                             | Gibbert Kathrin    | 65         | Grilli Mariagrazia   | 68                                 |
| Fujinami Robert       | 68                             | Gieler Uwe         | 34         | Gros Hélène          | 67                                 |
| Fujioka Toshiki       | 31                             | Ginzburg Elizabeta | 43         | Groß Catharina       | 38                                 |
| Fukazawa Toshiyuki    | 29                             | Giometto Bruno     | 20; 39     | Gross Catharina      | 23                                 |
| Furlan Roberto        | 12; 34; 40; 50; 51; 57; 79; 81 | Giorda Ezio        | 41         | Grozdanov Veselin    | 28; 30                             |
| G. Fehlings Michael   | 73                             | Giovannoni Gavin   | 26; 68     | Gruart Agnès         | 14; 38                             |
| G. Meuth Sven         | 38; 47; 52; 57; 68; 77; 78     | Giraudon Pascale   | 68         | Grummel Verena       | 22                                 |
| G. Okun Jürgen        | 53                             | Girolamo Francesco | 51         | Grützke Berit        | 16                                 |
| G. Tovey Michael      | 66                             | Gironi Maira       | 41         | Gu Xiaoyi            | 27; 59                             |
| Gadani Sachin         | 78                             | Giunti Debora      | 52; 56     | Guaza Carmen         | 49; 51; 55                         |
|                       |                                | Giusto Elena       | 75         | Gudi Viktoria        | 80                                 |
|                       |                                | Glatzel Markus     | 68         |                      |                                    |



|                         |        |                       |                        |                       |                |
|-------------------------|--------|-----------------------|------------------------|-----------------------|----------------|
| Guenzi Eric             | 14     | Hardwicke Peter       | 82                     | Herold Sabine         | 72             |
| Gul Alpaslan Bengi      | 67     | Harkin Andrew         | 33; 56; 72             | Herrmann Alexander    | 47; 77         |
| Gunaydin Dicle          | 67     | Harris Robert         | 29                     | Herrmann Andreas      | 14             |
| Günther Robert          | 19     | Harris Tajie          | 66; 78                 | Herrmann Ralf         | 31             |
| Guo Jing                | 70     | Hart Prue             | 16                     | Hertwig Laura         | 28             |
| Gurkan Gulben           | 76     | Hartwig Tom           | 28; 48                 | Herwerth Marina       | 69             |
| Gürses Candan           | 80     | Haruki Hiroyo         | 24                     | Herz Jasmin           | 83             |
| Gurskaya Olga           | 66     | Hasan Maruf           | 80                     | Herz Josephine        | 52             |
| Guryev Victor           | 46     | Hashimoto Hitoshi     | 56                     | Hicking Gordon        | 68             |
| H Han May               | 54     | Hassanpour Masoud     | 16                     | Hidalgo Juan          | 14             |
| H Kasper Lloyd          | 42     | Hategan Alina         | 16                     | Higgins Sarah         | 55             |
| H Margolin David        | 42     | Haugen Mette          | 65                     | Hintzen Rogier        | 47             |
| H. Arnold Moore         | 84     | Haugen Morten         | 17                     | Hinz Lisa             | 41; 46         |
| H. Clausen Bettina      | 83     | Hauptelshofer Steffen | 39                     | Hirano Makito         | 18             |
| H. Nielsen Helle        | 83     | Häusler Darius        | 37                     | Hirano Yuta           | 53             |
| H. Plate Karl           | 36     | Häussler Annett       | 57                     | Hjelm Clausen Bettina | 52             |
| H. Sansing Lauren       | 31     | Havari Evis           | 42                     | Hoerauf Achim         | 63             |
| H. Scannevin Robert     | 84     | Havrdova Eva          | 29; 42                 | Hofer Markus          | 14             |
| H. Tator Charles        | 73     | Hayakari Ryo          | 29; 30                 | Hoffmann Carolin      | 69             |
| H. Weishaupt Jochen     | 28; 30 | Hayardeny Liat        | 82                     | Hoffmann Franziska    | 17; 19; 42     |
| Haanstra Krista         | 82     | Hayashi Masaharu      | 70                     | Hofman Sam            | 18             |
| Haas Christina          | 41     | Haytural Hazal        | 84                     | Hofstetter Harald     | 77             |
| Haberl Michael          | 78     | Healy Luke            | 58                     | Höftberger Romana     | 19; 20         |
| Hachehouche Lamia       | 22; 36 | Heeren Joerg          | 81                     | Hoghooghi Vahid       | 52             |
| Hachiya Yasuo           | 25     | Heesen Christoph      | 22; 78                 | Högl Birgit           | 79             |
| Hacibekiroglu Isil      | 57     | Heijmans Nicole       | 18                     | Höglinger Günter      | 36             |
| Hackenbruch Christopher | 62     | Heijnen Priscilla     | 28; 30                 | Hohendorf Tilman      | 23             |
| Hadamitzky Martin       | 33; 34 | Heikema Astrid        | 28                     | Hohlfeld Reinhard     | 19; 42; 77     |
| Haddad Elie             | 32     | Hein Katharina        | 72                     | Hokari Mariko         | 42             |
| Haddock Gail            | 47     | Heine Markus          | 81                     | Holm Thomas           | 28             |
| Haeussler Annett        | 31     | Heinemann Christina   | 14                     | Holman David          | 23             |
| Haghikia Aiden          | 41; 46 | Heink Sylvia          | 14                     | Holtman Inge          | 15             |
| Hagiwara Wataru         | 31     | Heinrich Julia        | 66                     | Holzenberger Martin   | 71             |
| Hagman Sanna            | 21     | Held Kathrin          | 77                     | Hongyu Luo            | 49             |
| Hailov Nikita           | 66     | Hellings Niels        | 19; 53; 83             | Horakova Dana         | 29             |
| Hainke Undine           | 30     | Helminen Mika         | 21                     | Horn Katharina        | 19             |
| Hallböök Tove           | 12     | Hemmer Bernhard       | 12; 14; 22; 69; 77; 86 | Horwitz Marc          | 41             |
| Hamada Yukihiro         | 18     | Hendriks Jerome       | 19; 53; 83             | Hoskin David          | 45             |
| Hamann Dörte            | 20     | Hendrix Sven          | 54                     | Hou Xinlin            | 31             |
| Hametner Simon          | 71     | Heneka Michael        | 61; 71                 | Hromadkova Lenka      | 18             |
| Han May                 | 33; 61 | Hengerer Bastian      | 28                     | Hu Yan                | 49             |
| Handel Adam             | 46     | Henry Rebecca         | 28                     | Huang Bing            | 75             |
| Hanip Rafia Md          | 25     | Henseleit Korinna     | 26                     | Huang Jianhua         | 31             |
| Hanja Stürmer Klarissa  | 22     | Herkel Johannes       | 81                     | Huang Shuning         | 84             |
| Hanwell Heather         | 29     | Herold Martin         | 38; 52                 | Huber Samuel          | 81             |
| Harari Daniel           | 82     |                       |                        | Hucke Stephanie       | 16; 23; 52; 54 |

|                        |                    |                           |                    |                         |        |
|------------------------|--------------------|---------------------------|--------------------|-------------------------|--------|
| Huehn Jochen           | 50                 | Ivan Alvarez Jorge        | 38; 52; 53; 64     | Jennifer Ahn J.         | 47     |
| Huerta Patricio        | 17                 | Ivanchik Halina           | 45                 | Jesus Pinto Maria       | 45; 76 |
| Hugh Perry V.          | 53                 | Ivanchyk Halina           | 75                 | Ji Xuhuai               | 33; 47 |
| Hugues Stéphanie       | 56                 | Ivanova Maria             | 69                 | Jiang Wei               | 58     |
| Huizinga Ruth          | 28                 | Ivanova Svetlana          | 73                 | Jin Chae Jae            | 44     |
| Huppert Julia          | 32                 | Iwantscheff Simeon        | 42                 | Jin Wei                 | 49     |
| Hupperts Raymond       | 19                 | Iwasaki Yasuo             | 32; 53             | Jing Yun                | 83     |
| Huppke Peter           | 39                 | J Coles Alasdair          | 42                 | Jm Franklin Robin       | 73     |
| Hvilsted Nielsen Helle | 15; 20; 52         | J Fournie Gilbert         | 42                 | Joaquim Andreia         | 49     |
| I. Leussink Verena     | 82                 | J Lamorte Michael         | 31                 | Johnson Kory            | 76     |
| I. Rees Mark           | 72                 | J Lindemann Matthew       | 69                 | Johnson Tory            | 16     |
| Iacenda Domenica       | 43                 | J Randall Philippa        | 66                 | Johnson Trina           | 29; 63 |
| Ibbett Paul            | 53                 | J Ryan Katie              | 46                 | Jones Ken               | 63     |
| Ibrahim Nadeen         | 67                 | J Turner Michael          | 31; 42             | Jones Nicola            | 66     |
| Ichikawa Motoki        | 53                 | J. Fischer Henrike        | 39                 | Jongen Peter            | 19     |
| Ifergan Igal           | 53                 | J. Huss David             | 28; 77             | Jonjic Stipan           | 67     |
| Iinuma Kyoko           | 46                 | J. Ingram Rebecca         | 73                 | Jordan Holger           | 31     |
| Ikeda Ken              | 32; 53             | J. Klaver Elsenoor        | 28                 | José Cerqueira João     | 34     |
| Ikeda Tokuhei          | 26                 | J. Lotery Andrew          | 53                 | Joseph Christy          | 48     |
| Ikeguchi Ryotaro       | 79                 | J. Mothe Andrea           | 73                 | Jozsi Mihaly            | 69     |
| Iking Janette          | 47                 | J. Parnham Michael        | 31; 33; 57         | Jujavarapu Harsha       | 23     |
| Ilkjær Laura           | 53                 | J. Priatel John           | 44                 | Juknat Ana              | 78     |
| Illes Zsolt            | 15; 25; 48; 69; 83 | J. Speckmann Erwin        | 68                 | Jung Steffen            | 61     |
| Illés Zsolt            | 20                 | J. Titulaer Maarten       | 32                 | Jungmann Lara           | 39     |
| Im Gina                | 59                 | J. Tremblay Michel        | 23                 | Junker Andreas          | 73     |
| Imaizumi Tadaatsu      | 29; 30             | Jacobs Bart               | 28                 | K Andreassen Bettina    | 45     |
| Imitola Jaime          | 27                 | Jacobs Muazzam            | 66; 67             | K Heininger Maximilian  | 83     |
| Inati Sara             | 65                 | Jacobson Leslie           | 17; 68             | K Kuchroo Vijay         | 15     |
| Inglese Matilde        | 21                 | Jacobson Steve            | 65                 | K Mausberg Anne         | 44     |
| Ingwersen Jens         | 56                 | Jacobson Steven           | 66; 76; 83         | K Moestrup Søren        | 73     |
| Inoue Masashi          | 31                 | Jagessar Anwar            | 18; 41             | K Williams Sarah        | 71     |
| Iori Valentina         | 52                 | Jagodic Maja              | 43; 46; 47; 48; 78 | K. Heininger Maximilian | 43     |
| Iraci Nunzio           | 75                 | Jain Anajana              | 31                 | K. Kuchroo Vijay        | 63     |
| Irani Sarosh           | 18                 | Jain Ankit                | 32                 | K. Mausberg Anne        | 43; 83 |
| Iranzo Alex            | 39                 | Jalilzadeh Ghazal         | 26                 | K. Williams Sarah       | 14; 51 |
| Irla Magali            | 76                 | Jankovicova Barbora       | 18                 | Kachan Tatiana          | 45     |
| Isaac Sandrine         | 32                 | Janssen Hans              | 44                 | Kaden Klara             | 67     |
| Isabel Leite M.        | 20                 | Janssen Lennert           | 44                 | Kadowaki Atsushi        | 69     |
| Isabel Leite Maria     | 26; 66             | Janssens Kris             | 53                 | Kakita Akiyoshi         | 42     |
| Ishida Chiho           | 26                 | Jarius Sven               | 20                 | Kalinke Ulrich          | 66     |
| Isobe Noriko           | 46                 | Jarova Maria              | 66                 | Kaliouli Christiana     | 56     |
| Israel Nicole          | 69; 78; 80         | Jeanne Billieux Bridgette | 65                 | Kallweit Nadine         | 82     |
| Itoyama Yasuto         | 70                 | Jeganathan Venkatesh      | 17                 | Kanba Shigenobu         | 32     |
| Ittrich Harald         | 81                 | Jelcic Ilijas             | 18; 33; 63         | Kanda Takashi           | 24     |
| Itzhaki Zohar          | 61                 | Jelcic Ivan               | 18; 63             | Kanellopoulos Jean      | 72     |
| Ivaldi Federico        | 40; 82             | Jenkins Bruce             | 84                 | Kang Chia Yuen          | 25     |

|                       |                    |                        |                    |                             |                    |
|-----------------------|--------------------|------------------------|--------------------|-----------------------------|--------------------|
| Kano Osamu            | 32                 | Khazaei Mohammad       | 73                 | Kornisch Julius             | 50                 |
| Kanyshkova Tatyana    | 77                 | Khorooshi Reza         | 50                 | Kosehasanogullari Görkem    | 19                 |
| Kap Yolanda           | 18                 | Kibaroglu Seda         | 53                 | Köster Mario                | 82                 |
| Karamita Maria        | 38                 | Kidd Grahame           | 24                 | Kovacs Norbert              | 25                 |
| Karamouzos Emmanouil  | 56                 | Kieseier Bernd         | 16; 77             | Kovalchuk Olga              | 57                 |
| Karandreas Nikos      | 22                 | Kikuchi Seiji          | 29                 | Kowalak Jeffery             | 16                 |
| Karasoy Hatice        | 25                 | Kimura Kimitoshi       | 77                 | Kowarik Markus              | 63                 |
| Karni Arnon           | 42; 74             | Kinner Olga            | 54                 | Kozela Ewa                  | 78                 |
| Karpova Darja         | 36                 | Kinoshita Makoto       | 83                 | Kral Vlastimil              | 20                 |
| Karram Khalad         | 69; 80             | Kinsara Angham         | 29                 | Krasemann Krasemann Suzanne | 38                 |
| Karussis Dimitrios    | 75                 | Kinzel Silke           | 18                 | Krauthausen Marius          | 71                 |
| Kasran Ahmad          | 80                 | Kipnis Jonathan        | 12; 78             | Kremmer Elisabeth           | 22                 |
| Kassem Sahar          | 42                 | Kiselev Ivan           | 20                 | Krieger Charles             | 54                 |
| Kassis Kassis Ibrahim | 75                 | Kissenpfennig Adrien   | 78                 | Krishnamoorthy Gurumoorthy  | 67; 77             |
| Kassubek Jan          | 28                 | Kitic Maja             | 69                 | Krogias Christos            | 82                 |
| Kastrukoff Lorne      | 32                 | Kleffner Ilka          | 52                 | Kropp Sonja                 | 56                 |
| Katayama Takahiro     | 53                 | Klein Robyn            | 23                 | Krüger Martin               | 15                 |
| Kato Tomoko           | 25                 | Kleinschnitz Christoph | 38; 68             | Krummrei Ulrike             | 20                 |
| Katzav Aviva          | 31                 | Kleinschnitz Konstanze | 44; 84             | Kruse Niels                 | 37                 |
| Kaufmann Annika       | 30                 | Kleiter Ingo           | 39; 76             | Krynskiy Sergey             | 66                 |
| Kaushansky Nathali    | 78                 | Klingbeil Christine    | 20                 | Krysta Anita                | 22; 77             |
| Kaushik Deepak        | 69                 | Klotz Luisa            | 16; 23; 41; 52; 54 | Kuchroo Vijay               | 29                 |
| Kawabe Kiyokazu       | 32; 53             | Kobayashi Kunitoshi    | 53                 | Kucukerden Melike           | 20; 76; 84         |
| Kawachi Izumi         | 42                 | Kobert Antonia         | 58                 | Kugasia Irfanali            | 65                 |
| Kawakami Naoto        | 61                 | Koch Linda             | 15                 | Kuhlmann Tanja              | 23; 52; 54; 57; 80 |
| Kawano Yuji           | 46                 | Kockum Ingrid          | 12; 48             | Kuipers Hedwich             | 33                 |
| Kay Robert            | 43                 | Kocur Magdalena        | 56                 | Kulakova Olga               | 20; 21             |
| Kazanov Galina        | 66                 | Koda Toru              | 21; 25; 83         | Kular Lara                  | 47                 |
| Kearney Neil          | 27                 | Koellhoffer Edward     | 53; 68             | Kuleskaya Natalia           | 34                 |
| Kebir Hania           | 32; 38; 52; 53; 64 | Koenderman Leo         | 59                 | Kulig Paulina               | 28                 |
| Kébir Hania           | 23; 36             | Kohyama Kuniko         | 70                 | Kulinich Svetlana           | 45; 75             |
| Keeton Roanne         | 66                 | Kolak Ufuk             | 57                 | Kumada Satoko               | 25                 |
| Keil Melanie          | 53; 58             | Kolarova Michala       | 18                 | Kumanogoh Atsushi           | 21; 25             |
| Kellaway Lauriston    | 66; 67             | Kolasa Marcin          | 21                 | Kumar Prateek               | 72                 |
| Keller Sascha         | 36                 | Kolster Manuela        | 26                 | Kümpfel Tania               | 19                 |
| Keminer Oliver        | 22                 | Komai Kiyonobu         | 26                 | Kunze Anja                  | 72                 |
| Kempe Karina          | 31                 | Komorowski Lars        | 18; 21; 64         | Kurihara Eiji               | 25                 |
| Kempf Christian       | 63                 | Kondo Takayuki         | 77                 | Kuroda Hiroshi              | 70                 |
| Kemter Andrea         | 63                 | Kondova Ivela          | 27                 | Kurtuncu Murat              | 41                 |
| Kennedy Timothy       | 22                 | Kondziella Daniel      | 48                 | Kuru Ümit                   | 80                 |
| Kersemans Veerle      | 16                 | Koni Pandelakis        | 87                 | Kuschmann Janina            | 62                 |
| Kertser Alexander     | 61                 | Konno Shingo           | 31                 | Kusunoki Susumu             | 18; 25             |
| Keshari Pankaj        | 43                 | Kontermann Roland      | 14; 82             | Kuwahara Motoi              | 18                 |
| Keßler Jöran          | 19                 | Kooij Gijs             | 28                 | Kuzmanov Ivan               | 23                 |
| Ketzef Maya           | 71                 | Korn Thomas            | 14; 77; 81         | Kyrargyri Vasiliki          | 38                 |
| Khademi Mohsen        | 42; 48             | Körner Henrike         | 78                 | Kyratsous Nikolaos          | 61                 |

|                        |                        |                       |            |                         |            |
|------------------------|------------------------|-----------------------|------------|-------------------------|------------|
| L Arnold Douglas       | 42                     | Laudanna Carlo        | 81         | Løbner Morten           | 76         |
| L Bollyky Paul         | 42                     | Laura Capriotti Anna  | 75         | Locatelli Giuseppe      | 15; 16; 73 |
| L Dejager Philip       | 46                     | Laure Garnier         | 84         | Lodygin Dmitri          | 78         |
| L Frederiksen Jette    | 17; 22; 25; 30         | Laurent Sarah         | 19         | Logunov Denis           | 69         |
| L Lambertsen Kate      | 39                     | Lauria Giuseppe       | 22         | Löhr Kirsten            | 50         |
| L Roberts Bruce        | 31; 42                 | Laversenne Vanessa    | 46         | Lohrberg Melanie        | 67         |
| L Weiner Howard        | 58                     | Leboyer Marion        | 69         | Loleit Verena           | 77         |
| L. Bennett Jeffrey     | 18; 24                 | Lee Naomi             | 83         | Losen Mario             | 69         |
| L. Benson Bryan        | 24                     | Lee Priscilla         | 43         | Loser Karin             | 38         |
| L. Budui Simona        | 81                     | Lee Seunghwan         | 54         | Losey Patrick           | 39         |
| L. Campbell Iain       | 14; 49                 | Lee Youjin            | 15         | Loskog Angelica         | 49         |
| L. Croxford Andrew     | 48; 80                 | Legroux Laurine       | 43         | Lötsch Jörn             | 57         |
| L. Gommerman Jennifer  | 58                     | Leibovitch Emily      | 65; 66; 83 | Louise Mcculloug        | 68         |
| L. Holmes Gregory      | 32                     | Leikfoss Ingvild      | 45         | Louveau Antoine         | 78         |
| L. Jongsma Marlieke    | 44                     | Lelios Iva            | 27         | Lovato Laura            | 75         |
| L. Kreft Karim         | 44                     | Lemmens Evi           | 54         | Loveless Samantha       | 72         |
| L. Lambertsen Kate     | 83                     | Lemmens Stefanie      | 54         | Lu Haiyan               | 24         |
| L. Shah Vipul          | 65                     | Leonardi Tommaso      | 75         | Lublin Fred             | 21         |
| L. Stephenson Erin     | 58                     | Leppert David         | 16         | Luchtman Dirk           | 14; 83     |
| L. Teeling Jessica     | 53                     | Lewerenz Jan          | 39         | Lückemann Laura         | 33; 34     |
| L. Teeling Jessica.    | 50                     | Leypoldt Frank        | 32         | Ludwin Samuel           | 15; 29; 58 |
| L. Weiner Howard       | 40                     | Li Guihong            | 27; 59     | Lugaresi Alessandra     | 48         |
| Laan Lisa              | 28                     | Li Hui                | 16         | Luger Thomas            | 38         |
| Labus Sandra           | 44                     | Li Ran                | 83         | Lühder Fred             | 39; 78     |
| Labuschagne Antoinette | 66                     | Li Rui                | 29; 58; 63 | Luigi Mancardi Giovanni | 82         |
| Lacher Sonja           | 78                     | Li Xinyu              | 27; 59     | Luigi Poliani Pietro    | 47         |
| Lacroix Steve          | 44; 51; 73             | Li Zhilin             | 34         | Luigi Russo Gianluca    | 23; 74     |
| Lahl Katharina         | 57                     | Libbey Jane           | 68         | Lukas Dominika          | 39         |
| Laman Jon              | 28                     | Liblau Roland         | 23; 35     | Lumpe Katharina         | 31         |
| Lamb Favelle           | 12                     | Liebmann Marie        | 52; 54     | Lund Harald             | 29         |
| Lambertsen Kate        | 31                     | Lienenklaus Stefan    | 28; 66     | Lundberg Louise         | 83         |
| Landfried Britta       | 36                     | Liesz Arthur          | 44         | Lundt Ramona            | 63         |
| Lang Bethan            | 17; 18; 68             | Lin Youwei            | 43         | Lüth Stefan             | 81         |
| Lang Dirk              | 66                     | Lindelof Mette        | 48         | Lutterotti Andreas      | 19; 79     |
| Lanz Tobias            | 58                     | Lindner Maren         | 41; 48; 70 | Luz Avital              | 31         |
| Largey Fabienne        | 18; 63                 | Lindquist Sabine      | 80         | Lvovs Dmitrijs          | 21         |
| Larochelle Catherine   | 22; 23; 38; 49; 52; 53 | Linehan Eimear        | 78         | Lyck Lise               | 31         |
| Laroni Alice           | 40; 82                 | Linington Christopher | 48; 70; 87 | Lyck Ruth               | 23; 24     |
| Larouche Sandra        | 22; 23                 | Link Jenny            | 48         | Lykke Lambertsen Kate   | 52         |
| Lassman Hans           | 19; 70; 71             | Linker Ralf           | 33; 78     | Lynch Marina            | 27; 51; 55 |
| Lassmann Hans          | 19; 70; 71             | Lionetto Luana        | 40         | Lyng Fiona              | 72         |
| Laterza Cecilia        | 74; 75                 | Lippens Carla         | 56         | M Bonefeld Charlotte    | 30         |
| Lattanzi Roberta       | 47                     | Lisak Robert          | 43         | M Bradshaw Elizabeth    | 46         |
| Lattke Michael         | 54                     | Liu Kangding          | 27         | M Dickens Alex          | 16         |
| Lau Allan              | 32                     | Liu Mingyang          | 27; 59     | M Kaplan Johanne        | 31; 42     |
|                        |                        | Llovera Gemma         | 44         | M Page Christian        | 45         |

|                          |            |                           |                                        |                           |                |
|--------------------------|------------|---------------------------|----------------------------------------|---------------------------|----------------|
| M Siders William         | 31; 42     | Mandeville Joseph         | 84                                     | Mattei Carlo              | 40             |
| M Villar Luisa           | 19; 22     | Mangsbo Sara              | 49                                     | Mattei Gianluca           | 16             |
| M. Casasnovas Jose       | 63         | Mannara Francesco         | 32                                     | Matthias Hermann Dirk     | 74             |
| M. Castellano Joseph     | 61         | Männich Julia             | 33; 57                                 | Mattick John              | 75             |
| M. Danzer Karin          | 28         | Mantegazza Renato         | 22; 71                                 | Mayer Cathrin             | 19             |
| M. Eriksson Anna         | 43         | Manton Sean               | 20                                     | Mayo Lior                 | 29             |
| M. H Khorooshi Reza      | 40         | Manuela Cerina            | 55                                     | Mccoll Alison             | 55             |
| M. H. Khorooshi Reza     | 28         | Manzari Caterina          | 66                                     | Mccombe Pamela            | 46             |
| M. Hauck Stephanie       | 42         | Marcenaro Emanuela        | 40                                     | Mccullough Louise         | 53; 79         |
| M. Hermann Dirk          | 52         | Mareckova Helena          | 29                                     | Mcelroy Daniel            | 70             |
| M. Herrmann Alexander    | 38; 68; 78 | Maria Czarna Bahl Justyna | 21                                     | Mcgavern Dorian           | 83             |
| M. Kel Junda             | 39         | Maria Specchio Luigi      | 40                                     | Mchenry Alison            | 46             |
| M. Kullmann Dimitri      | 68         | María Villar Luisa        | 49                                     | Mckenzie Brienne          | 54; 55         |
| M. Minogue Aedin         | 55         | Marignier Romain          | 20                                     | Mcmanus Roisin            | 55             |
| M. Otte David            | 63         | Marini Chiara             | 52                                     | Mebius Reina              | 24             |
| M. Ransohoff Richard     | 24         | Marion Grebing Manuela    | 52                                     | Mecha Miriam              | 49; 51; 55     |
| M. Reichardt Holger      | 39         | Markakis Ioannis          | 56                                     | Mechelli Rosella          | 16; 40; 46; 66 |
| M. Rodgers Jane          | 37         | Marnetto Fabiana          | 48                                     | Medynets Marie            | 16             |
| M. Tietz Silvia          | 24         | Maroso Mattia             | 52                                     | Meinl Edgar               | 19; 42; 70; 86 |
| M. Watkins Lewis         | 72         | Martens Gerard            | 33                                     | Melzer Nico               | 17; 68         |
| Ma Chi                   | 80         | Martha Bernanrdi Maria    | 49                                     | Mendozzi Laura            | 19; 28         |
| Ma Li                    | 34         | Martin Alvaro             | 57                                     | Menegon Andrea            | 51             |
| Macas Jadranka           | 36         | Martin Elodie             | 55; 72                                 | Mennini Tiziana           | 51             |
| Macchiarulo Giulia       | 79         | Martin Nellie             | 30                                     | Menon Ramesh              | 28; 40; 74     |
| Madar Simone             | 17         | Martin Roland             | 18; 19; 33; 63; 78                     | Mercer Tim                | 75             |
| Madara Laurence          | 45         | Martinelli Vittorio       | 40                                     | Merkler Doron             | 56; 79         |
| Mader Simone             | 18         | Martínez Inés             | 67                                     | Merlini Arianna           | 74; 75         |
| Madore Charlotte         | 38; 54     | Martino Davide            | 68                                     | Mestre Leyre              | 49             |
| Maffioletti Elisabetta   | 64         | Martino Gianvito          | 23; 28; 37; 46; 50; 51; 57; 60; 74; 75 | Metz Imke                 | 37; 78         |
| Magdalini Asaridou Chloi | 38         | Marventano Ivana          | 19; 28                                 | Metz Luanne               | 57             |
| Magliozzi Roberta        | 51         | Marzano Valeria           | 75                                     | Metzdorf Judith           | 76             |
| Magnus Tim               | 43; 48; 68 | Marziniak Martin          | 38                                     | Meuth Patrick             | 55; 68; 77     |
| Magnutzki Alexander      | 54         | Masaki Katsuhisa          | 46                                     | Meuth Sven                | 14; 36; 38; 55 |
| Maier Olaf               | 14; 82     | Mascanfroni Ivan          | 29                                     | Michel Julia              | 24             |
| Mair Florian             | 78         | Massoud Raya              | 66                                     | Michel Laure              | 64             |
| Maisam Afzali Ali        | 47; 57     | Matarese Giuseppe         | 79                                     | Migliara Giuseppe         | 41             |
| Makumbi Issa             | 16         | Matcovitch Orit           | 55                                     | Mildenberger Iris         | 72             |
| Malashenkova Irina       | 66         | Mathias Amandine          | 29                                     | Milena Johanne Peters Eva | 34             |
| Maldonado Rafael         | 32         | Mathivanan Suresh         | 75                                     | Milikovsky Dan            | 71             |
| Malhotra Anil            | 41         | Matis Alina               | 48                                     | Miljkovic Djordje         | 84             |
| Malhotra Sunny           | 20         | Matos Maria               | 84                                     | Miller Ariel              | 37; 43; 62     |
| Malissen Bernard         | 42         | Matschulat Adeline        | 17                                     | Miller Omer               | 61             |
| Mallucci Giulia          | 75         | Matsumiya Tomoh           | 29; 30                                 | Mills Kingston            | 55             |
| Malviya Manish           | 17         | Matsumoto Sadayuki        | 77                                     | Millward Jason            | 28; 70; 71     |
| Mamik Manmeet            | 54         | Matsushita Takuya         | 46                                     | Milovanovic Jelena        | 19; 67         |
| Mamrut Shimrat           | 43         |                           |                                        | Milovanovic Marija        | 19; 67         |

|                     |                    |                            |                |                       |                                |
|---------------------|--------------------|----------------------------|----------------|-----------------------|--------------------------------|
| Minami Naoya        | 29                 | Müller Andreas             | 32             | Niino Masaaki         | 29                             |
| Mindorf Swantje     | 21                 | Müller Kathrin             | 30             | Nijland Philip        | 24                             |
| Ming Ching Yee      | 25                 | Müller Marcus              | 71             | Nikbin Behrouz        | 26                             |
| Miranda Cláudia     | 78                 | Muller Werner              | 75             | Nilsson Ingrid        | 24                             |
| Misgeld Thomas      | 69                 | Munoz David                | 26             | Nishinakamura Ryuichi | 27                             |
| Mishra Manoj        | 74                 | Muraleedharan Ranjithmenon | 68             | Nishizawa Masatoyo    | 42                             |
| Mitchell Keith      | 84                 | Muraro Paolo               | 76             | Nizheharodava Darya   | 45; 75                         |
| Mitsui Yoshiyuki    | 18                 | Murinello Salome           | 53             | Nonaka Takayuki       | 29                             |
| Mitterling Thomas   | 79                 | Musio Silvia               | 47             | Novak Carina          | 77                             |
| Miyake Sachiko      | 69                 | Muzio Luca                 | 28; 51; 57; 74 | Novi Giovanni         | 75                             |
| Miyamoto Katsuichi  | 25                 | Mvl Santos Marcus          | 34             | Novrup Hans           | 31                             |
| Miyamoto Kazuyuki   | 56                 | Myrtinger John             | 32             | Nozaki Ichiro         | 26                             |
| Miyazaki Yusei      | 29                 | N Hahn Jennifer            | 52             | Nur Yuceyar Ayse      | 25                             |
| Mizee Mark          | 13; 24             | N Mohebiany Alma           | 43             | Nurtdinov Ramil       | 20                             |
| Mizrachi Tehila     | 17                 | N. Detje Claudia           | 66             | Nyirenda Mukanthu     | 29; 63                         |
| Mizuno Toshiki      | 77                 | N. Lavrik Inna             | 32             | Nytrova Petra         | 20                             |
| Mochizuki Hideki    | 21; 25; 83         | Nacken Peter               | 15             | Obermeier Birgit      | 24                             |
| Modvig Signe        | 22; 30             | Najari Abbas               | 26             | Ochi Hirofumi         | 77                             |
| Mohammad Mohammad   | 16                 | Nakagawa Masanori          | 77             | Ochi Ryutaro          | 29                             |
| Mohan Hema          | 23; 38             | Nakahara Eri               | 70             | Odoardi Francesca     | 78                             |
| Möhle Luisa         | 32                 | Nakamachi Tomoya           | 56             | Oehninger Carlos      | 21                             |
| Molenaar Peter      | 69                 | Nakano Akiko               | 22; 53         | Oezen Iris            | 53; 58; 64; 72                 |
| Molnar Tihamer      | 25                 | Nakatsuji Yuji             | 21; 25; 83     | OfIZER Piraye         | 81                             |
| Momcilovic Miljana  | 84                 | Namaka Michael             | 53             | Oger Joel             | 65                             |
| Momma Stefan        | 36                 | Namba Akiko                | 21; 83         | Ogulur Ismail         | 76                             |
| Monsonogo Alon      | 44; 71             | Nancy Jacquemotte          | 84             | Ogurtsov Daniil       | 66                             |
| Montalban Xavier    | 20; 49             | Narayanan Venu             | 55; 68         | Ohba Atsuko           | 25                             |
| Monteiro Susana     | 34                 | Nath Avindra               | 16; 70         | Ohgidani Masahiro     | 32                             |
| Monteleone Giovanni | 40                 | Nau Roland                 | 30             | Ohtaki Hirokazu       | 56                             |
| Monteleone Ivan     | 40                 | Naves Rodrigo              | 70             | Oishi Mariko          | 24                             |
| Montresor Alessio   | 50                 | Ndiaye Marie               | 43             | Okada Yoichiro        | 77                             |
| Moore Craig         | 15; 29; 55; 58; 63 | Neal James                 | 72             | Okamoto Tomoko        | 79                             |
| Moos Sonja          | 80                 | Neefjes Jacques            | 44             | Oki Shinji            | 79                             |
| Morais Mónica       | 34                 | Negri Lucia                | 47             | Okuno Tatsusada       | 21; 25; 83                     |
| Morando Sara        | 51; 56             | Negrotto Laura             | 20             | Olah Marta            | 27                             |
| Mørch Marlene       | 28                 | Neil Sarah                 | 55             | Olesen Mads           | 73                             |
| Moreira Isabel      | 26                 | Nejatollahi Foroogh        | 26             | Olsson Tomas          | 11; 12; 13; 24; 42; 43; 48; 78 |
| Moretta Alessandro  | 40                 | Nelly Rouquié              | 84             | Olympiou Margarita    | 32                             |
| Mori Yuki           | 22                 | Nemirovsky Anna            | 44             | Onnis Valentina       | 47                             |
| Morley Barbara      | 58                 | Neri Cristina              | 75             | Orang Torach          | 26                             |
| Morton Paul         | 68                 | Nessler Stefan             | 24; 32; 37     | Orcen Arda            | 20; 84                         |
| Mossakowski Agata   | 70                 | Newcombe Jia               | 50; 58         | Ortiz Yaneth          | 78                             |
| Motozaki Yuko       | 26                 | Nibber Anjan               | 18             | Ortlieb Andre         | 43; 48; 78                     |
| Motta Caterina      | 74; 79             | Nicholas Richard           | 76             | Otero Karel           | 70                             |
| Mues Marsilius      | 61                 | Nielsen Peter              | 81             | Otten Susanne         | 31                             |
| Mufazalov Ilgiz     | 62; 80             | Niesner Raluca             | 19; 70; 71     |                       |                                |



|                           |                    |                            |                |                    |                                                |
|---------------------------|--------------------|----------------------------|----------------|--------------------|------------------------------------------------|
| Otto Benjamin             | 22                 | Patel Dipan                | 68             | Pinto Vitor        | 34                                             |
| Ottoboni Linda            | 46                 | Paterka Magdalena          | 56             | Pinzani Lorenzo    | 75                                             |
| Ottow Mendel              | 28                 | Patzig Julia               | 57             | Piras Eleonora     | 16; 40                                         |
| Ouelet Michel             | 23                 | Paul Friedemann            | 19; 20; 28; 71 | Pittet Camille     | 43                                             |
| Oukka Mohamed             | 14                 | Paul Morgan B.             | 72             | Pittman Quentin    | 14                                             |
| Owens Greg                | 63                 | Pauletti Alberto           | 52             | Planaguma Jesus    | 32                                             |
| Owens Gregory             | 17; 64             | Paulsen Maren              | 53             | Planas Raquel      | 63; 78                                         |
| Owens Trevor              | 28; 30; 40; 50; 76 | Pedotti Rosetta            | 47; 50         | Platten Michael    | 42; 53; 58; 64; 65; 72                         |
| Ozakbas Serkan            | 19                 | Pedreitturia Xiomara       | 39; 76         | Pless Ole          | 22                                             |
| Ozcelik Pinar             | 19                 | Peferoen Laura             | 15; 30         | Pluchino Stefano   | 75                                             |
| Ozgun Ozden               | 57                 | Peitz Michael              | 75             | Podjaski Cornelia  | 22                                             |
| P Kristensen Lars         | 15                 | Pekarek Kara               | 80             | Poelmans Geert     | 33                                             |
| P. Antel Jack             | 58                 | Pelczar Pavel              | 48             | Pohl Maria         | 56                                             |
| P. Barrett James          | 55                 | Pellegrino Rosa Christiane | 25             | Pohlan Julian      | 70                                             |
| P. Heinen André           | 80                 | Pender Michael             | 16; 46         | Pointon Tiffany    | 20; 59                                         |
| P. Robinson Andrew        | 37                 | Peng Haiyan                | 84             | Poirier Josée      | 64                                             |
| P. Ruf Wolfgang           | 28                 | Perinat Therese            | 23             | Policano Claudia   | 16; 40; 46; 66                                 |
| P. Sheridan James         | 77                 | Perriard Guillaume         | 29; 72         | Politis Panos      | 17                                             |
| P. Yentür Sibel           | 80                 | Perris Roberto             | 51             | Polman Chris       | 33                                             |
| Paap Franziska            | 73                 | Peschl Patrick             | 19             | Polonsky Bailey    | 20                                             |
| Pache Florence            | 28                 | Pesic Marija               | 61             | Ponsaerts Peter    | 54                                             |
| Paes Barros Marcelo       | 49                 | Pesole Graziano            | 66             | Popovic Branka     | 67                                             |
| Pahnke Jens               | 32                 | Peter Hartung Hans         | 36; 77; 87     | Poschet Gernot     | 72                                             |
| Palace Jacqueline         | 20; 26; 66         | Petermann Franziska        | 14             | Posevitz Vilmos    | 23; 41                                         |
| Palermo Antonia           | 16                 | Peters Nathalie            | 82             | Pot Caroline       | 56; 79                                         |
| Palha Joana               | 78                 | Petkovic Filip             | 84             | Poulos Kostas      | 81                                             |
| Palle Pushpalatha         | 30                 | Petrou Panayiota           | 75             | Power Christopher  | 54; 55                                         |
| Palmer Jeffrey            | 42                 | Petrova Vasilena           | 64             | Pramanik Gautam    | 62                                             |
| Pan Wei                   | 27                 | Pfizenmaier Klaus          | 14; 82         | Prat Alexandre     | 22; 23; 32; 36; 38; 49; 52; 53; 58; 63; 64; 69 |
| Pande Nilesh              | 31                 | Phares Timothy             | 17             | Price David        | 76                                             |
| Pang Petti                | 31                 | Piacentino Gennj           | 50; 63; 81     | Prinz Immo         | 32                                             |
| Panini Nicolò             | 51                 | Piacentino Genny           | 44             | Prinz Marco        | 39; 60                                         |
| Pankratz Susann           | 38; 78             | Piaggio Eliane             | 71             | Probert Lesley     | 38                                             |
| Pantaleo Giuseppe         | 29                 | Piancone Federica          | 19; 28         | Probst Christian   | 18; 20; 21; 64                                 |
| Pantelyushin Stanislav    | 28                 | Picardi Ernesto            | 66             | Prozorovski Timour | 56                                             |
| Paola Zoia Chiara         | 75                 | Piccio Laura               | 15; 70         | Pryce Gareth       | 85                                             |
| Papastergios Chrysostomos | 56                 | Piehl Fredrik              | 12; 47; 71     | Pusch Gabriella    | 25                                             |
| Papazian Irini            | 75                 | Piermattei Alessia         | 41             | Pusch Stefan       | 64; 65                                         |
| Papp Viktoria             | 25                 | Pieroni Luisa              | 75             | Pütz Benno         | 77                                             |
| Parigger Silvia           | 18                 | Pierrette Seeldrayers      | 84             | Q. Hintzen Rogier  | 44                                             |
| Parker Chelsea            | 87                 | Pietronigro Enrica         | 50; 63; 81     | Qiu Hong           | 58                                             |
| Parman Yesim              | 81                 | Pignolet Beatrice          | 35             | Quach Hong         | 45                                             |
| Parodi Benedetta          | 52; 56             | Pignolet Béatrice          | 23             | Quandt Jacqueline  | 55                                             |
| Parsa Roham               | 47; 48             | Piket Eliane               | 47             | Quattrini Angelo   | 37; 57                                         |
| Patel Anita               | 68; 79             | Pikor Natalia              | 43             | Quesniaux Valerie  | 66                                             |
| Patel Bonny               | 29                 | Pilz Caroline              | 72             |                    |                                                |

|                         |            |                     |                |                       |                |
|-------------------------|------------|---------------------|----------------|-----------------------|----------------|
| Quintana Francisco      | 29         | Reichardt Holger    | 78             | Roschitzki Bernd      | 33             |
| Qun Shi Xiang           | 54; 62     | Reichhold Christian | 80             | Rose Mari Elisabeth   | 39             |
| R Aceng Jane            | 16         | Reick Christiane    | 33; 82         | Rosello Alicia        | 26             |
| R Johnson Kory          | 16         | Reijkerk Arie       | 13; 23; 24     | Rosenstiel Philip     | 53             |
| R Lee Paul              | 16         | Reimer Rudolph      | 81             | Rossaint Jan          | 23             |
| R Sibson Nicola         | 16         | Reindl Markus       | 19; 20; 40; 79 | Rossi Barbara         | 24; 44; 63; 81 |
| R. Barnum Scott         | 23         | Reinhart Brenda     | 78             | Rossi Chiara          | 57             |
| R. Doeppner Thorsten    | 52         | Reinke Stacey       | 55             | Rossi Fabio           | 54             |
| R. Dunay Ildiko         | 32         | Reißig Sonja        | 80             | Rossi Silvia          | 74; 79         |
| R. Mizze Mark           | 23         | Reiter Cory         | 17             | Rossner Moritz        | 72             |
| R. Simard Alain         | 58         | Rennert Paul        | 63             | Rostásy Kevin         | 19             |
| Ra Bittencourt Lia      | 34         | Rentzos Michael     | 22             | Roth Stefan           | 44             |
| Racchetti Gabriella     | 50         | Rentzsch Kristin    | 20             | Roth Valerie          | 28             |
| Racke Michael           | 43         | Reuter Eva          | 56             | Rothstein Thomas      | 41             |
| Radaelli Marta          | 40         | Revelo Xavier       | 47             | Rothwell John         | 68             |
| Radassi Khadir          | 46         | Revis John          | 66             | Rouwette Myrthe       | 19             |
| Radbruch Helena         | 19; 67; 70 | Reyes Lilian        | 70             | Rovaris Marco         | 19; 28         |
| Raghavan Badrinarayanan | 34         | Reynolds Richard    | 51; 72         | Roy Patrick           | 58             |
| Ragheb Samia            | 43         | Rezk Ayman          | 63             | Rozenberg Ayal        | 29; 63         |
| Rajewski Klaus          | 80         | Ria Francesco       | 41             | Ruck Tobias           | 47; 57         |
| Rakocevic Goran         | 84         | Ribes Sandra        | 30             | Rudin Stefan          | 84             |
| Raman Chander           | 70         | Ricard Jerome       | 31             | Rudolph Henriette     | 24             |
| Ramanujam Ryan          | 82         | Ricny Jan           | 18             | Ruffini Francesca     | 37; 74; 75     |
| Ramberger Melanie       | 19; 79     | Ridder Kirsten      | 36             | Ruggieri Serena       | 79             |
| Ramos Ines              | 72         | Rieck Mary          | 42             | Rühl Geraldine        | 77             |
| Ranjbar Shaghayegh      | 26         | Ringer Cornelia     | 58             | Ruhrmann Sabrina      | 46; 47         |
| Ranoine Anthony         | 62         | Ripova Daniela      | 18             | Ruitenber Marc        | 16             |
| Rao Vijayaraghava       | 15         | Rissiek Björn       | 43             | Ruiz Anne             | 20             |
| Rao Vijayraghava        | 29         | Risto Rommel Frank  | 34             | Ruland Christina      | 57             |
| Raphael Itay            | 22         | Ristori Giovanni    | 16; 40; 46; 66 | Ruocco Gabriella      | 79             |
| Raposo Catarina         | 56; 79     | Rita Dunay Ildiko   | 65             | Ruprecht Klemens      | 28; 67         |
| Rasouli Javad           | 39         | Ritchie Alanna      | 17; 63; 64     | Rus Horea             | 57             |
| Ratzer Rikke            | 45         | Ritter Anna         | 67             | Rus Violeta           | 57             |
| Raveney Ben             | 79         | Ritzel Rodney       | 53; 68; 79     | Rushing Elisabeth     | 44             |
| Ravizza Teresa          | 52         | Rivest Serge        | 73             | Russell John          | 87             |
| Rawji Khalil            | 74         | Robertson Avril     | 51             | Ryan Katie            | 27             |
| Rebeix Isabelle         | 13         | Robertson Neil      | 72             | Ryazantseva Anastasia | 73             |
| Recasens Mireia         | 30; 56     | Robson Simon        | 29             | Ryffel Bernhard       | 66             |
| Redaelli Chiara         | 72         | Rocha J             | 66             | S Ousman Shalina      | 52             |
| Reddy Jay               | 15         | Rochemont Viviane   | 56             | S Shihabuddin Lamya   | 42             |
| Reddy Kalluri Sudhakar  | 22; 77     | Rodewald Sabrina    | 78             | S. Amaravadi Lakshmi  | 77             |
| Reddy Kalluri Suhakar   | 69         | Rogers James        | 57             | S. Domingues Helena   | 77             |
| Redlich Sandra          | 30         | Rokusz Laszlo       | 69             | S. Dungan Lara        | 62             |
| Reemst Kitty            | 40         | Romano Silvia       | 16             | S. Elkins Jacob       | 77             |
| Regen Tommy             | 32; 62     | Romero Silvina      | 28             | S. Friedland Jon      | 37             |
| Regev Keren             | 42; 74     | Roque Susana        | 34; 78         | S. Jones Raasay       | 55             |

|                       |                |                       |                    |                      |                |
|-----------------------|----------------|-----------------------|--------------------|----------------------|----------------|
| S. Mehta Devangi      | 77             | Schambers Laura       | 20                 | Schweingruber Nils   | 39             |
| S. Reinboth Barbara   | 31             | Schanda Kathrin       | 19; 20             | Schweizer Nora       | 44             |
| S. Weber Martin       | 15; 18         | Scharf Madeleine      | 21                 | Schwinge Dorothee    | 81             |
| S. Zamvil Scott       | 18; 80         | Schattling Benjamin   | 68                 | Scofield Barbara     | 71             |
| Sabag Avishag         | 31             | Schedlowski Manfred   | 33; 34; 65         | Sebesho Boipelo      | 66; 67         |
| Sabater Lidia         | 39             | Scheffel Jörg         | 30                 | Seguela Philippe     | 29             |
| Sabbagh Mike          | 22             | Scheidt Uta           | 73                 | Séguin Rosanne       | 15             |
| Sabellek Pascal       | 52             | Schelmbauer Carsten   | 62                 | Sehitoglu Elcin      | 20             |
| Sack Ingolf           | 70             | Scheu Stefanie        | 56; 57; 63         | Sehr Tony            | 30             |
| Sadovnick Dessa       | 63             | Schiffmann Susanne    | 33                 | Seidenbecher Thomas  | 55             |
| Saft Carsten          | 33; 82         | Schipping Sven        | 63                 | Seifert Oliver       | 82             |
| Sahm Felix            | 58; 64; 65     | Schirmer Lucas        | 22                 | Sejvar James         | 16             |
| Sailer Andreas        | 80             | Schläger Christian    | 78                 | Sela Michael         | 67; 81         |
| Saini Harpreet        | 75             | Schlapschy Martin     | 82                 | Selchen Daniel       | 26             |
| Saiz Albert           | 17; 20         | Schlaudraff Jessica   | 36                 | Selhorst Amanda      | 43             |
| Saji Etsuji           | 42             | Schluep Myriam        | 29                 | Sellebjerg Finn      | 22; 45; 46     |
| Sakoda Saburo         | 21; 83         | Schlumberger Wolfgang | 21                 | Selter Rebecca       | 77             |
| Sakuma Hiroshi        | 25; 70         | Schlüngel Sabrina     | 19                 | Selva Sean           | 17             |
| Salie Sumayah         | 66             | Schmidt Jens          | 41; 44; 84         | Semenoff Tiia        | 70             |
| Salveti Marco         | 16; 40; 46; 66 | Schmidt Karsten       | 84                 | Sen Alaattin         | 48; 57         |
| Sambucci Manolo       | 79             | Schmidt Kim           | 63                 | Seneca Nicholas      | 16             |
| Samsom Janneke        | 28             | Schmidt Mike          | 31                 | Sénécal Vincent      | 58             |
| Samukawa Makoto       | 18             | Schmitz Katja         | 31; 57             | Serdar Meray         | 31             |
| Sandalova Tatyana     | 45             | Schneider Raphael     | 26; 58             | Shahbeigi Saeed      | 26; 65         |
| Sano Yasutero         | 24             | Schneider Reiner      | 56                 | Shakiba Yadollah     | 26             |
| Sano Yasuteru         | 24             | Schramm Christoph     | 81                 | Shanina Iryna        | 41             |
| Sanon Nathalie        | 32             | Schrank Bertold       | 18                 | Shapiro Ilona        | 74             |
| Santamaria Joan       | 39             | Schreiber Gideon      | 82                 | Sharma Akanksha      | 77             |
| Santos Ernestina      | 26             | Schreiber John        | 65                 | Shen Donghui         | 27             |
| Santos Nadine         | 78             | Schreiber Olivia      | 44                 | Shimizu Fumitaka     | 24             |
| Saoudi Abdelhadi      | 42             | Schreiner Bettina     | 15; 73             | Shimoda Konomi       | 25             |
| Saresella Marina      | 19; 28         | Schrewe Lisa          | 49; 84             | Shioda Seiji         | 56             |
| Sargent Ian           | 39             | Schroten Horst        | 24                 | Shirai Ikuko         | 25             |
| Saschenbrecker Sandra | 20             | Schubert Manja        | 65                 | Shirakura Takashi    | 83             |
| Sasson Keren          | 82             | Schuetz Burkhard      | 58                 | Shrivastava Kalpana  | 30             |
| Sato Atsushi          | 56             | Schuh Cornelia        | 70; 71             | Sibel Benli Ulku     | 53             |
| Sato Shinya           | 46             | Schuh Elisabeth       | 19                 | Sica Antonio         | 55             |
| Sato Wakiro           | 77; 79         | Schultheiß Thorsten   | 30                 | Sicsic Camille       | 17             |
| Savarin Carine        | 67             | Schultz Verena        | 73                 | Siders William       | 85             |
| Saveriano Alexander   | 29             | Schumacher Theresa    | 53; 58; 64; 65     | Siffrin Volker       | 49; 52; 76; 83 |
| Sawchenko Paul        | 16             | Schumak Beatrix       | 63                 | Sifringer Marco      | 31             |
| Saxe Simon            | 71             | Schumann Hannah       | 63; 64             | Sila Rizalar Filiz   | 73             |
| Schaefer Yvonne       | 69             | Schumann Timo         | 30                 | Silva Claudia        | 52; 57; 69     |
| Schaeffer Julia       | 75             | Schütze Sandra        | 30                 | Silva Ruiz Francieli | 34             |
| Schaekel Knut         | 72             | Schwab Nicholas       | 22; 23; 38; 52     | Sim Julia            | 87             |
| Schäfer Yvonne        | 22             | Schwartz Michal       | 40; 55; 56; 61; 79 | Simard Alain         | 58             |

|                              |                    |                       |                |                              |                    |
|------------------------------|--------------------|-----------------------|----------------|------------------------------|--------------------|
| Simmaco Maurizio             | 40                 | Stathopoulos Panos    | 40             | Takahashi Ryosuke            | 77                 |
| Simo Magdolna                | 69                 | Staudt Valerie        | 56             | Takata Kazushiro             | 21; 25; 83         |
| Simons Mikael                | 39                 | Stefan Bittner        | 24             | Takeshita Yukio              | 24                 |
| Simpson Julie                | 72                 | Steinman Lawrence     | 33; 42; 47; 54 | Talmon Sonja                 | 31                 |
| Singh Vikramjeet             | 44                 | Stenzel Werner        | 67             | Tamanito Kayo                | 67                 |
| Sisay Sofia                  | 26; 68             | Stenzinger Albrecht   | 53             | Tan Matt                     | 26                 |
| Siva Aksel                   | 20                 | Stephen Moore Craig   | 58             | Tan Rusung                   | 44                 |
| Sivori Simona                | 40                 | Sternman David        | 65             | Tannahill Gillian            | 75                 |
| Skacikova Lucia              | 29                 | Stettner Mark         | 43; 44; 83     | Tansey Malu                  | 38                 |
| Skerra Arne                  | 82                 | Stevens Jo            | 69             | Taverna Stefano              | 51                 |
| Slaets Helena                | 53; 83             | Stinissen Piet        | 19; 53; 83     | Teegen Bianca                | 18; 21; 64         |
| Sloma Ido                    | 29                 | Stöcker Winfried      | 18; 20; 21; 64 | Tegeder Irmgard              | 31; 57             |
| Smith Alan                   | 43                 | Stohlman Stephen      | 67             | Tegla Cosmin                 | 57                 |
| Smith Cassaundra             | 17                 | Stojanovic Bojana     | 19; 67         | Tegnér Jesper                | 47                 |
| Smith Kenneth                | 48                 | Stojic Aleksandar     | 51; 73         | Tentillier Noemie            | 73                 |
| Smith Paul                   | 82                 | Stroh Albrecht        | 14             | Teodorescu Roxana            | 21                 |
| Sobel Raymond                | 33                 | Ström Mikael          | 71             | Teodorov Elizabeth           | 49                 |
| Söderman Martin              | 52                 | Strominger Itai       | 44             | Teresa Sollazzo Maria        | 40                 |
| Soelberg Sorensen Per        | 45                 | Stürner Klarissa      | 28             | Terouz Simone                | 22; 23; 32; 36; 69 |
| Soldner Claudia              | 66                 | Sugarman Adam         | 57             | Terskikh Ekaterina           | 73                 |
| Soltys John                  | 17; 64             | Sültmann Holger       | 36             | Terzioglu Gulsum             | 48                 |
| Somers Klaartje              | 19                 | Summer Spencer        | 68             | Tesi Ray                     | 38                 |
| Somers Veerle                | 19                 | Sünke Mortensen Lena  | 67             | Thavaneetharajah Preetheeban | 54                 |
| Sommer Clemens               | 31                 | Suresh Lakshmanan     | 69             | Theodore William             | 65                 |
| Soneson Charlotte            | 29                 | Sutavani Ruhcha       | 77             | Thewissen Kristof            | 83                 |
| Sonner Jana                  | 53; 58             | Suter Tobias          | 44             | Thien Lim Thien              | 25                 |
| Sophie Laffont               | 84                 | Suzuki Kotoko         | 25             | Thom Vivian                  | 26                 |
| Sorokin Lydia                | 13; 23             | Suzuki Tomohiro       | 70             | Thomaidis Thomas             | 22                 |
| Sørum Leikfoss Ingvild       | 43                 | Svensson Emma         | 49             | Thomas Eva                   | 32                 |
| Sospedra Mireia              | 18; 19; 63; 78     | Szakacs Attila        | 12             | Thomas Katja                 | 30                 |
| Soulet Denis                 | 51                 | Szapary Laszlo        | 25             | Thomas Wanet                 | 84                 |
| Sousa Nuno                   | 78                 | Szezanowski Fabian    | 73             | Thomassen Mads               | 52                 |
| Spadaro Melania              | 19                 | Szoke Andrei          | 69             | Thoms Sven                   | 41                 |
| Spadaro Michela              | 48                 | Szymkowski David      | 31; 38         | Thomson Carolyn              | 55                 |
| Spampinato Simona            | 24                 | T. Bruns Oliver       | 81             | Thöne Jan                    | 41; 82             |
| Sparwasser Tim               | 13; 57             | T. Dexter David       | 51             | Thue Lillevang Søren         | 20                 |
| Spasojevic Ivan              | 84                 | T. Wipke Brian        | 84             | Thuemmler Katja              | 70                 |
| Specht Sabine                | 63                 | Tackley George        | 66             | Tian Li                      | 34                 |
| Spendlove Ian                | 77                 | Tada Satoru           | 83             | Tiberi Cinzia                | 44                 |
| Spurkland Anne               | 43                 | Tækker Jensen Katrine | 52             | Tichauer Juan                | 70                 |
| Srivastava Rajneesh          | 22; 69; 77         | Tafferner Nadja       | 33             | Tiede Stephan                | 21; 64             |
| Stadelmann Christine         | 18; 24; 32; 36; 67 | Tagel Levy Nitzan     | 71             | Tischner Denise              | 80                 |
| Stadelmann-Nessler Christine | 36                 | Takada Kazuo          | 18             | Titova Marina                | 73                 |
| Stahlke Sarah                | 76                 | Takahashi Eri         | 29             | Tiwari Vijay                 | 80                 |
| Stangel Martin               | 50; 80             | Takahashi Hitoshi     | 42             | Tolosa Eva                   | 26                 |
| Starmann Julia               | 36                 | Takahashi Kazuya      | 26             | Tolusso Barbara              | 41                 |

|                       |                            |                          |                |                                         |                |
|-----------------------|----------------------------|--------------------------|----------------|-----------------------------------------|----------------|
| Tomasso Antonio       | 60                         | Ultsch Alfred            | 57             | W Selmaj Krzysztof                      | 42             |
| Tomiki Hiroki         | 53                         | Umeton Renato            | 16             | W. Collcutt Alexander.                  | 50             |
| Tomkinson Blake       | 84                         | Ummenthum Kimberley      | 30             | W. Howell Owain                         | 72             |
| Topcu Gulacti         | 57                         | Unger Mandy              | 21             | W. Kamphuis Wouter                      | 23             |
| Toscani Chiara        | 71                         | Unger Wendy              | 13             | W. Keane Robert                         | 44             |
| Touil Hanane          | 58                         | Urbani Andrea            | 75             | W. Lohse Ansgar                         | 81             |
| Toyoshima Yasuko      | 42                         | Uruha Akinori            | 25             | W. M. Ong Catherine                     | 37             |
| Traffehn Sarah        | 37                         | Usai Cesare              | 56             | W. Mes Steven                           | 44             |
| Tredwell Matthew      | 16                         | Uygunoglu Ugur           | 67             | Wagner David                            | 59             |
| Treleaven Christopher | 42                         | Uysal Serap              | 80             | Waisman Ari 14; 32; 39; 40; 48; 62; 69; |                |
| Trifilieff Elisabeth  | 31; 82                     | Uzonyi Barbara           | 69             | 78; 80                                  |                |
| Trivedi Pankaj        | 66                         | V. Lanz Tobias           | 42             | Waldhoff Christina                      | 46             |
| Truffault Frédérique  | 43                         | Vadis Quo                | 59             | Walker Adam                             | 51             |
| Tsai Jenny            | 26                         | Valentini Mariagrazia    | 41             | Walker Alesia                           | 67             |
| Tsakmakides Theofilos | 48                         | Vallieres Luc            | 44             | Walsh John                              | 54             |
| Tsareva Ekaterina     | 20; 21                     | Vallières Luc            | 73             | Walter Jens                             | 67             |
| Tsonis Anastasios     | 22                         | Vandenbroeck Koen        | 45; 51         | Walter Rachel                           | 72             |
| Tsumuraya Tomomi      | 56                         | Vangansewinkel Tim       | 54             | Walters Winston                         | 68             |
| Tue Berg Carsten      | 28; 40                     | Vanhove Bernard          | 82             | Walther Paul                            | 54             |
| Tufik Sergio          | 34                         | Vanwijmeersch Bart       | 53             | Wang Janet                              | 52; 69         |
| Tukhvatulin Amir      | 69                         | Vedeler Christian        | 20; 65         | Wang Jian                               | 81             |
| Tulio Mello Marco     | 34                         | Verbeek Marcel           | 47             | Wang Qing                               | 50; 83         |
| Tuller Friederike     | 20                         | Veremeyko Tatyana        | 58             | Wang Shengzhi                           | 18             |
| Tullo Antonia         | 66                         | Verschuur Verschuur Carl | 47             | Wang Tonguang                           | 70             |
| Tumala Susanne        | 34                         | Vestweber Dietmar        | 23             | Wang Wei Tsai Vicky                     | 16             |
| Turan Selin           | 76; 84                     | Veth Jennifer            | 27             | Wang Xu                                 | 45; 80         |
| Turano Ermanna        | 50; 64; 65; 74             | Vezzani Annamaria        | 52; 86         | Wang Xuehai                             | 49             |
| Turati Laura          | 71                         | Vichaya Elisabeth        | 51             | Wang Ying                               | 27; 59         |
| Turkoglu Recai        | 20; 84                     | Vieira Silvio            | 29             | Wang Yujia                              | 49             |
| Turley Shannon        | 43                         | Vilano Bonamin Leoni     | 49             | Wang Zhengzheng                         | 27             |
| Turner Michael        | 85                         | Vilarrasa Núria          | 78             | Wanke Florian                           | 69; 80         |
| Tuzun Erdem           | 20; 41; 76; 81; 84         | Villacampa Nàdia         | 86             | Warford Jordan                          | 45             |
| Tyagi Richa           | 16                         | Vincent Angela           | 17; 18; 20; 68 | Warnecke Andreas                        | 43; 45         |
| Tzartos John          | 22                         | Vinogradov Ekaterina     | 71             | Warnes Gary                             | 26             |
| Tzartos Socrates      | 22                         | Virgintino Daniela       | 51             | Warnke Clemens                          | 82             |
| Tzekou Apostolia      | 73                         | Viviane Rochemont        | 79             | Watanabe Jun                            | 56             |
| Tzirlin Maria         | 74                         | Vogel Daphne             | 30             | Waters Paddy                            | 66             |
| Ubeda Carles          | 32                         | Vogel Isabel             | 80             | Waters Patrick                          | 20             |
| Uccelli Antonio       | 40; 51; 52; 56; 75; 76; 82 | Vogel Zvi                | 78             | Waurisch Christian                      | 81             |
| Uchibori Ayumi        | 25; 26                     | Vöikar Vootele           | 34             | Webb Mike                               | 27; 84         |
| Ufer Friederike       | 68                         | Volpe Bruce              | 17             | Weber Andreas                           | 77             |
| Ugidos Nerea          | 51                         | Volpe Elisabetta         | 79             | Weber Frank                             | 42; 77         |
| Ulbricht Carolin      | 19                         | Vural Atay               | 26             | Weber Martin                            | 37             |
| Ulges Alexander       | 62                         | Vural Burcak             | 41             | Weber Peter                             | 77             |
| Ulndreaj Antigona     | 73                         | W Gustavsen Marte        | 45             | Webster Gill                            | 59             |
|                       |                            | W Howell Owain           | 51             | Wee Yong V.                             | 52; 57; 58; 74 |

|                            |                                                    |                     |                    |                        |                                        |
|----------------------------|----------------------------------------------------|---------------------|--------------------|------------------------|----------------------------------------|
| Weihe Eberhard             | 58                                                 | Woodroffe Nicola    | 47; 72             | Yssel Justin           | 33                                     |
| Weiner Howard              | 38                                                 | Wostradowski Tanja  | 80                 | Yu Dongzi              | 84                                     |
| Weishaupt Carsten          | 38                                                 | Wrede Arne          | 44                 | Yu Xiaoli              | 20; 59; 67                             |
| Weiss Ronen                | 31                                                 | Wrzos Claudia       | 24; 32             | Yu Xueyang             | 27                                     |
| Weiss Siegfried            | 28; 66                                             | Wu Chuan            | 15                 | Yung Hor Jyh           | 25                                     |
| Weissberg Itai             | 71                                                 | Wu Gregory          | 87                 | Yurkevich Marija       | 45                                     |
| Weissert Robert            | 41                                                 | Wu Jiang            | 80                 | Yurkevich Mariya       | 75                                     |
| Wekerle Hartmut            | 61; 67                                             | Wu Jianping         | 49                 | Z Zimberg Iona         | 34                                     |
| Weller Horst               | 81                                                 | Wu Linmin           | 27                 | Zafranskaya Marina     | 45; 75                                 |
| Welzl Hans                 | 44                                                 | Wu Pauline          | 38                 | Zaghloul Kareem        | 65                                     |
| Wemlinger Scott            | 63; 64                                             | Wu Qian             | 83                 | Zakharova Maria        | 69                                     |
| Werner Hauke               | 57                                                 | Wu Wei              | 27; 59             | Zamvil Scott           | 18; 34; 35                             |
| Westhoff Dunja             | 59                                                 | Wu Xiaokun          | 27; 59             | Zarbock Alexander      | 23                                     |
| Wettschureck Nina          | 80                                                 | Wu Xiujuan          | 27; 59             | Zehn Dietmar           | 41                                     |
| Weydt Patrick              | 30                                                 | Wu Yan              | 29                 | Zeitelhofer Manuel     | 24                                     |
| White Madeleine            | 59                                                 | Wu Yasi             | 54                 | Zenaro Elena           | 50; 63; 81                             |
| Wichert Sven               | 72                                                 | Xiao Sheng          | 63                 | Zhang Hongliang        | 27; 45; 59; 81                         |
| Wick Wolfgang              | 35; 42; 53; 58; 64; 65; 72                         | Xing Fei            | 29; 30             | Zhang Hui              | 50; 83                                 |
| Widman Guido               | 17                                                 | Xu Zhifang          | 56                 | Zhang Ji               | 54; 62                                 |
| Wiendl Heinz               | 16; 17; 22; 23; 37; 38; 41; 47; 52; 54; 57; 78; 86 | Yamamoto Ken        | 46                 | Zhang Xingmei          | 29                                     |
| Wilcox Karen               | 68                                                 | Yamamura Takashi    | 69; 79             | Zhao Chao              | 73                                     |
| Wildemann Brigitte         | 16                                                 | Yamasaki Ryo        | 46                 | Zhu Jie                | 27; 45; 80                             |
| Wilk Mieszko               | 55                                                 | Yan Jun             | 16; 46             | Zhukova Irina          | 73                                     |
| William Invernizzi Roberto | 74                                                 | Yan Shuai           | 27                 | Ziemssen Tjalf         | 30                                     |
| Williams Anna              | 70; 73; 78                                         | Yanagihashi Masaru  | 32; 53             | Zierz Stephan          | 44                                     |
| Williams Glyn              | 27                                                 | Yang Mu             | 62                 | Zimmer Andreas         | 57; 63                                 |
| Williams Sarah             | 73                                                 | Yang Siyu           | 27; 59             | Zimmermann Corinna     | 77                                     |
| Willing Anne               | 26                                                 | Yang Yuhong         | 43                 | Zimmermann Julian      | 71                                     |
| Wills Bridget              | 18                                                 | Yelisseyev Vladimir | 54                 | Zipp Frauke            | 14; 49; 52; 56; 60; 62; 76; 80; 83; 87 |
| Wimmer Isabella            | 71                                                 | Yeste Ada           | 29                 | Zisimopoulou Paraskevi | 22                                     |
| Winderl Johannes           | 54                                                 | Yetimler Berrak     | 84                 | Zondler Lisa           | 28; 30                                 |
| Winkler Anne               | 18; 24                                             | Yilmaz Vuslat       | 81                 | Zouvelou Vasiliki      | 22                                     |
| Winn Phoebe                | 27; 46                                             | Yogev Nir           | 32; 39; 40         | Zozulya Alla           | 82                                     |
| Winter Meike               | 41                                                 | Yokoseki Akiko      | 42                 | Zschuentzsch Jana      | 41                                     |
| Wirth Thomas               | 54                                                 | Yonekawa Tomomi     | 46                 | Zufall Frank           | 30                                     |
| Witlox Joost               | 59                                                 | Yong Wee            | 52; 57; 58; 69; 74 | Zuikov Igor            | 66                                     |
| Witsch Esther              | 14; 62; 80                                         | Yoon Jane           | 54                 | Zujovic Violetta       | 13                                     |
| Witte Maarten              | 15                                                 | Yoshida Hidemi      | 29; 30             | Zuliani Luigi          | 20                                     |
| Wlodarczyk Agnieszka       | 30; 76                                             | Yoshida Shigetaka   | 33                 |                        |                                        |
| Wojtal Mirjana             | 44                                                 | Yoshimura Satoshi   | 46                 |                        |                                        |
| Wolf Alexandra             | 39                                                 | Yoshioka Yoshichika | 22                 |                        |                                        |
| Wolf Christina             | 76                                                 | You Xiaojun         | 77                 |                        |                                        |
| Wolffram Kathleen          | 82                                                 | Younan Mark         | 65                 |                        |                                        |
| Woodhall Mark              | 20                                                 | Yousefvand Masoud   | 26                 |                        |                                        |
|                            |                                                    | Youssef Ihssen      | 72                 |                        |                                        |
|                            |                                                    | Yshii Lidia         | 23; 35             |                        |                                        |



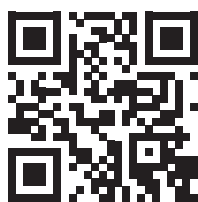


**Accepting Applications in the Spring of 2015**  
**The Biogen Idec Multiple Sclerosis  
Registry Research Fellowship Program**

We seek to bolster real-world evidence approaches to understanding MS by supporting the training of scientists in MS registry research. This grant is available to all accredited medical institutions or academic medical schools with experience in MS or MS registries outside the United States.

For more information visit the Biogen Idec Grants Office website ([www.grantsoffice.biogenidec.com](http://www.grantsoffice.biogenidec.com)) or contact us by phone (+1 617-914-1299) or email ([grantsoffice@biogenidec.com](mailto:grantsoffice@biogenidec.com)).

**biogen idec.**



[mainz.isnicongress.org](http://mainz.isnicongress.org)