Scientific program

Day 1 | Monday May 5th

Congress Opening
(14:15 – 14:30)

Welcome Remarks

Marinella Clerico, Simona Rolla, Gabriela Constantin, Diego Centonze & Roberto Furlan

Opening Lecture *"Neuroimmunology passion lives here"*
(14:30 – 15:30)
Chairs: Marinella Clerico *(University of Turin- Turin, Italy)* & Roberto Furlan *(INSpe San Raffaele Scientific Institute - Milan, Italy)*

14:30 – 15:00 **Welcome to XXXIII AINI Congress**
Robert Nisticò *(AIFA President – Rome, Italy)*

15:00 – 15:30 **Perspectives of MS and NMO persons and patient organizations**
Mario Alberto Battaglia *(University of Siena – Siena, Italy)*

15:30 – 16:00 *Coffee Break*

Non-ECM Industry Seminars
(16:00 – 17:30)

16:00 – 16:30 **Ocrelizumab subcutaneous, a new option for patients**
Juan Acosta *(Global Medical Scientific Leader Multiple Sclerosis, Roche)*

16:30 – 17:00 **ITAKOS: an observational Italian study on ofatumumab with a new exploratory endpoint**
Renato Turrini *(Medical Head Neurosciences, Novartis Italy)*

17:00 – 17:30 **Advancements in neurology**
Pascal Rufi *(Global Medical Lead Pipeline Products, Speciality Care Multiple Sclerosis,Sanofi)*

Day 2 | Tuesday May 6th

Neuroimmunology in novel contexts *"Un bicerin con Cavour"*
(09:00 – 11:00)
Chairs: Paola Cavalla *(Dipartimento di Neuroscienze Rita Levi Montalcini - Turin, Italy)* & Diana Ferraro *(Ospedale Civile di Baggiovara Azienda Ospedaliero-Universitaria di Modena – Modena, Italy)*

09:00-09:30 **Immune control of cardiovascular function**
Daniela Carnevale *(La Sapienza University, Rome, Italy)*

09:30-10:00 **Neurofilaments and beyond to monitor disease activity in Multiple Sclerosis?**
Jens Kuhle *(Institution University Hospital – Basel, Switzerland)*

Oral Presentations

10:00-10:12	**707	miR-124-3p influences in a gender-dependent manner early progression in MS** Ettore Dolcetti *(IRCSS Neuromed – Pozzilli, Italy/University of Rome Tor Vergata – Rome, Italy)*
10:12-10:24	**725	Innate immunity in Multiple Sclerosis: training by the microbiota** Silvia Corbisiero *(IRCCS Fondazione Santa Lucia – Rome, Italy)*
10:24-10:36	**771	Analysis of bone marrow-resident T-cells in multiple sclerosis** Jens Geginat *(Fondazione Istituto Nazionale di Genetica Molecolare Romeo ed Enrica Invernizzi - Milan, Italy)*
10:36-10:48	**756	B cell subset dynamics and regulation of serum cytokines during pregnancy and early post-partum in women with Multiple Sclerosis** Severa Martina *(Istituto Superiore di Sanità - Rome, Italy)*
10:48-11:00	**738	Elevated Kappa Index predicts transition to high-efficacy therapies in Multiple Sclerosis** Simone Marcheselli *(University of Modena and Reggio Emilia - Modena, Italy)*
11:00-11:30	*Coffee Break*

Immune inflammation in aging and neurodegenerative disorders *"A look toward the holy grail"*
(11:30 – 13:15)
Chairs: **Giovanna Borsellino** *(IRCCS Fondazione Santa Lucia - Rome, Italy)* & **Massimiliano Di Filippo** *(University of Perugia – Perugia, Italy)*

11:30-12:00	**Alterations of the neuroimmune communication in neurodegenerative diseases** Gabriela Constantin *(University of Verona – Verona, Italy)*
12:00-12:30	**The immunity of intestinal aging** Francesco Neri *(University of Torino – Turin, Italy)*

Oral Presentations

12:30-12:42	**753	Copper in immunity and neuroinflammation** Davide De Federicis *(IRCCS San Raffaele Hospital - Milan, Italy)*
12:42-12:54	**790	Effects of anti-CD20 therapy on T lymphocyte-dependent synaptic excitotoxity in Multiple Sclerosis** Georgia Mandolesi *(University of Rome San Raffaele/IRCCS San Raffaele Roma - Rome, Italy)*
12:54-13:06	**774	GrK+ CD103- Trm CD8+ T cells negatively impact Alzheimer's disease development** Eleonora Terrabuio *(University of Verona – Verona, Italy)*
13:15-14:15	*Lunch*

AINI Quality Control *"EQAS 2025"*
(14:15 – 15:00)
Chair: Alessia di Sapio *(University of Torino – Turin, Italy)*

14:15-15:00   **Report of EQAS 2025 Results**

Roberto Furlan *(INSpe San Raffaele Scientific Institute - Milan, Italy)*

NODES Session: Omics & Artificial Intelligence in Brain diseases *"Punt e Mes"*
(15:00 – 17:00)
Chairs: Eleonora Cocco *(Università degli Studi di Cagliari – Cagliari, Italy)* & Cinthia Farina *(IRCCS San Raffaele Scientific Institute - Milan, Italy)* & Simona Rolla *(University of Turin – Turin, Italy)*

15:00-15:30   **Decoding Neuroimmunology: from omics data to digital twins**

Francesca Cordero *(University of Torino – Turin, Italy)*

15:30-16:00   **An evolutionary origins of MS? Data from ancient DNA studies**

Lars Fugger *(Oxford University – Oxford, UK)*

16:00-16:30   **Virtual Brain modelling in Brain diseases**

Egidio D'Angelo *(University of Pavia – Pavia, Italy)*

Oral Presentations

16:30-16:42   **709 | Tracking EBV-specific T-cell receptor sequences from published data in the CNS and periphery of Multiple Sclerosis patients**

Roberta Amoriello *(University of Florence - Florence, Italy)*

16:42-16:54   **782 | Gut microbiota signatures at the onset of Multiple Sclerosis as predictive markers of disease progression**

Alessandro Maglione *(University of Torino - Turin, Italy)*

Poster Session I & Coffee *"New obsession"*
(17:00 – 18:30)
Chairs: Martina Severa *(ISS - Rome, Italy)* & Claudio Procaccini *(EOS-CNR - Naples, Italy)* & Rosella Mechelli *(IRCCS San Raffaele - Rome, Italy)*

706 | Choroid plexus involvement in progressive multiple sclerosis: insights from neuropathology and CSF analysis
Marina Mastantuono *(University of Verona – Verona, Italy)*

711 | A Combined Biomarker Panel Reflecting Immune Activation and Axonal Damage for Stratifying Early Multiple Sclerosis Patients at Risk of Progression
Maria Ilenia De Bartolo *(Sapienza University of Rome – Rome, Italy/IRCCS Neuromed – Pozzilli, Italy)*

712 | Exploring neurofilaments heavy chains (NfH) as a potential biomarker of disease progression in multiple sclerosis: A Multimodal analysis
Elena Barusolo *(University of Verona – Verona, Italy)*

715 | Specialized Pro-resolving lipid Mediators modulate choroid plexus inflammatory activity in Multiple Sclerosis

Veronica Ceci *(IFT-CNR/IRCCS Santa Lucia Foundation – Rome, Italy)*

716 | Altered hematopoiesis in the skull bone marrow in a mouse model of Parkinson's disease

Marta Bottero *(Dipartimento di Meidicna Sperimentale (DIMES) – Genoa, Italy)*

717 | Rubik: a fluorescent reporter to label and manipulate specific neuronal populations in neurological disorders

Giada Pessina *(University of Genoa – Genoa, Italy)*

718 | tDCS promotes myelin repair and plasticity in the mouse motor cortex

Enrica Boda *(University of Turin – Turin, Italy)*

719 | Identifying predictors of response in Multiple Sclerosis subjects treated with anti-CD20: ocrelizumab overcomes FcγRIIIA-V158F–associated resistance

Davide Mele *(University of Campania "Luigi Vanvitelli" – Naples, Italy)*

722 | Maresin-1 promotes neuroprotection and modulates inflammatory responses in preclinical models of multiple sclerosis.

Giulia Carrera *(IRCCS Santa Lucia Foundation/University of Rome Tor Vergata – Rome, Italy)*

724 | MiR-150-5p and miR-146a-5p as biomarkers for monitoring patient-specific response to innovative targeted therapies in Myasthenia Gravis

Alessia Berni *(Fondazione IRCCS Istituto Neurologico Carlo Besta – Milan, Italy)*

733 | Alemtuzumab, but not ocrelizumab, induces complement-dependent cytotoxicity and increases sterile inflammatory markers in people with multiple sclerosis

Giada Maria Giunta *(Fondazione IRCCS Istituto Neurologico Carlo Besta – Milan, Italy)*

735 | Quantitative Analysis of AQP4 and MOG Antibodies Titres: Correlation with Relapses

Martina Nasello *(University of Oxford – Oxford, UK/Sapienza University of Rome – Rome, Italy)*

736 | Periprandial high fat diet feeding impacts the blood count of neutrophils via cholinergic receptor nicotinic alpha 7 activation

Giovanni Battista Vingiani *(University of Milan – Milan, Italy)*

737 | Establishing Stable Acetylcholine Receptor Expression in RD Cells Using the PiggyBac System: Improving Platforms for Functional Assays

Veronica Morcone *(Università Cattolica del Sacro Cuore – Rome, Italy)*

739 | First demyelinating attack in children: a single-center experience

Alessandro Santagostino Barbone *(University of Genova – Genoa, Italy)*

740 | Phenotypical analysis of innate immune system in neuropathy by antibodies anti-myelin associated glycoprotein

Anastasia Lechiara *(IRCCS Ospedale Policlinico San Martino – Genoa, Italy)*

742 | The role of irisin in regulating inflammasome-mediated neuroinflammation in Ab42-stimulated 3D or 2D human microglial cell lines

Marina Saresella *(IRCCS Fondazione Don Carlo Gnocchi – Milan, Italy)*

746 | Upregulation of the transcriptional repressor REST/NRSF as a protective mechanism against neuroinflammation in a mouse model of Multiple Sclerosis

Giorgio Grasselli *(IRCCS Ospedale Policlinico San Martino/Italian Institute of Technology/University of Genoa – Genoa, Italy)*

754 | Unraveling the inflammation–degeneration tangle in early MS: insights from ferritin, neurogranin, TREM2 and retinal ganglion cell layer
Annamaria Greco *(University of Foggia – Foggia, Italy)*

759 | Targeting astrocyte CTR1 to promote tissue homeostasis under CNS neuroinflammation
Emanuela Colombo *(IRCCS San Raffaele Hospital – Milan, Italy)*

760 | Activation of Somatostatin-Expressing AgRP Neurons contribute to the pathogenesis of experimental autoimmune encephalomyelitis
Eleonora Cornacchia *(University of Genoa – Genoa, Italy)*

761 | Deep Spatial Phenotyping of Microglia in Human Alzheimer's Disease Brain Tissue
Dusan Zencak *(Akoya Biosciences – Marlbourough, MA, USA)*

763 | Comparison between technologies and biological approaches for CSF and serum NFL quantification: a further step towards implementation in clinical practice
Cecilia Irene Bava *(A.O.U. San Luigi Gonzaga – Orbassano, Italy)*

764 | sNFL as additional biomarker for clinical management of multiple sclerosis
Lucia Giorgi *(San Luigi Gonzaga University Hospital – Orbassano, Italy)*

765 | BB-CRESM: a structured institutional biobank for quality research in Multiple Sclerosis
Lucia Giorgi *(Neuroscience Institute Cavalieri Ottolenghi (NICO) – Orbassano, Italy)*

767 | ANTI-INFLAMMATORY PROPERTIES OF PLANT-DERIVED BIOACTIVE MOLECULES IN NEUROINFLAMMATORY AND NEURODEGENERATIVE DISEASES
Pallab Majumder *(University of Verona – Verona, Italy)*

772 | INTERLEUKIN-9 REDUCES INTERLEUKIN-1B-MEDIATED NF-kB ACTIVATION IN HUMAN MACROPHAGES AND MICROGLIA.
Simona Mazzella di Regnella *(IRCSS Fondazione Santa Lucia – Rome, Italy)*

777 | Inhibition of peptidylarginine deiminases reduces cognitive decline and alleviates neuropathological changes in a mouse model of Alzheimer's disease
Enrica Caterina Pietronigro *(University of Verona – Verona, Italy)*

778 | Organotypic brain and spinal cord slice cultures as a novel approach for investigating neuroinflammation and neurotoxicity
Antonella Calore *(University of Verona – Verona, Italy)*

779 | Impact of dopamine receptor D2 on immune cells - driven synaptic alterations in multiple sclerosis
Alice Tartacca *(University of Rome Tor Vergata – Rome, Italy)*

783 | Neurofilament light chain levels quantified by Simoa® and Lumipulse™: a comparative study
Vanessa Chiodega *(University of Verona – Verona, Italy)*

787 | Integrated analysis of transcriptomic studies identifies shared molecular signatures and therapeutic targets in MS white matter pathology
Gianmarco Abbadessa *(University of Campania Luigi Vanvitelli – Naples, Italy/Imperial College London – London, UK)*

Day 3 | Wednesday May 7th

Environmental factors in the onset, progression and therapy of Multiple Sclerosis *"The magic triangle"*
(09:00 – 11:00)
Chairs: Marco Salvetti *(La Sapienza University - Rome, Italy)* & Matilde Inglese *(University of Genova – Genoa, Italy)*

09:00-09:30	**Gut microbiota and its implication in Multiple Sclerosis: considerations on etiopathogenesis, progression and therapy** Anne-Katrin Pröbstel *(University of Basel – Basel, Switzerland)*
09:30-10:00	**EBV: a virological point of view could help the immunological one?** David Lembo *(University of Torino – Turin, Italy)*
10:00-10:30	**Dietary metabolites in the resolution of immune inflammation** Valerio Chiurchiù *(IRCCS Fondazione Santa Lucia - Rome, Italy)*

Oral Presentations

10:30-10:42	**720	Acute particulate matter (PM10) exposure selectively triggers behavioral alterations in the presymptomatic Experimental Autoimmune Encephalomyelitis (EAE) mouse model of Multiple Sclerosis** Enrica Boda *(University of Turin -Turin, Italy)*
10:42-10:54	**785	Analysis of EBNA2-regulated genes in MS: a study of blood and CNS tissue** Rosella Mechelli *(Università San Raffaele Roma/IRCCS San Raffaele - Rome, Italy)*
10:54-11:06	**741	Microbiota-derived metabolome: towards a non-invasive biomarker of multiple sclerosis** Davide Maioli *(University of Genoa – Genoa, Italy)*
11:00-11:30	*Coffee Break*

Brain borders *"Avanti Savoia"*
(11:30 – 13:15)
Chairs: Luca Battistini *(Santa Lucia Foundation IRCCS - Rome, Italy)* & Gabriela Constantin *(University of Verona – Verona, Italy)*

11:30-12:00	**Meningeal inflammation as a network** Jonathan Kipnis *(University of Washington in St. Louis – St.Louis, MO, USA)*
12:00-12:30	**Meningeal inflammation as a picture** Roberta Magliozzi *(University of Verona – Verona, Italy)*

Oral Presentations

12:30-12:42	**780	Soluble CD27 is an intrathecal biomarker of T-cell-mediated lesion activity in multiple sclerosis** Maria Teresa Cencioni *(Imperial College London – London, UK)*
12:42-12:54	**776	A role for neutrophil-macrophage axis in meningeal inflammation during demyelination disorders** Barbara Rossi *(University of Verona - Verona, Italy)*

XXXIII**AINI**CONGRESS
TORINO
5/8 maggio 2025

ASSOCIAZIONE
ITALIANA
NEUROIMMUNOLOGIA

12:54-13:06 **710 | Modulation of Nerve Growth Factor signaling impacts microglial phenotype**
Giulia Borgonovo *(Bio@SNS Laboratory of Biology, Scuola Normale Superiore - Pisa, Italy)*

13:15-14:30 *Lunch*

Auto-antibodies mediated diseases in neurology *"Merenda sinojra"*
(14:30 – 17:00)
Chairs: Sara Mariotto *(University of Verona – Verona, Italy)* & Eleonora Virgilio *(University of Torino – Turin, Italy)*

14:30-15:00 **Detection and functional characterization of autoantibodies against neuronal proteins**
Jakob Kreye *(Charité University Medicine - Berlin, Germany)*

15:00-15:30 **Antibody targets against glial surface proteins in demyelinating disorders**
Matteo Gastaldi *(IRCCS Mondino Foundation & University of Pavia - Pavia, Italy)*

15:30-16:00 **Pathogenic mechanism in MUSK myasthenia and other IgG4 related disorders**
Maartje G Huijbers *(Leiden University Medical Center - Leiden, the Netherlands)*

Oral Presentations

16:00-16:12 **703 | Extensive characterization of HSV1 antibody responses in herpes encephalitis reveals compartmentalization in CSF and predicts development of post-herpes autoimmune encephalitis**
Marianna Spatola *(University of Barcelona, Spain and Caixa Research Institute (CRI) - Barcelona, Spain)*

16:12-16:24 **714 | Identification of a Novel Metabolically Active B Cell Cluster in Refractory Myasthenia Gravis: Insights into Plasma Cell Precursors and Therapy Resistance Biomarkers**
Jacopo Morroni *(Fondazione Policlinico Universitario "A. Gemelli" IRCCS - Rome, Italy)*

16:24-16:48 **744 | Complement factor C5a, and granulocyte and astrocyte markers in CSF associate with disability in myelin oligodendrocyte glycoprotein antibody-associated disease and neuromyelitis optica spectrum disorder, and differentiate in acute stages versus MS**
David Leppert *(University Hospital and University of Basel – Basel, Switzerland)*

16:48-17:00 **773 | Serological quantitative, qualitative and functional profiling and neurofilaments as biomarkers in autoimmune encephalitis with LGI1 and CASPR2 antibodies**
Pietro Businaro *(University of Pavia - Pavia, Italy)*

17:00-17:12 **723 | FcRn Inhibition by Efgartigimod in Myasthenia Gravis: evidence for immunoregulatory effects beyond IgG reduction**
Maria Cristina Tarasco *(Fondazione IRCCS Istituto Neurologico Carlo Besta - Milan, Italy/ University of Milano-Bicocca - Monza, Italy)*

Poster II & Coffee *"New Obsession"*
(17:15-18:30)
Chairs: Martina Severa *(ISS - Rome, Italy)* & Claudio Procaccini *(EOS-CNR - Naples, Italy)* & Rosella Mechelli *(IRCCS San Raffaele - Rome, Italy)*

699 | IL-1β Contributes to Neurological Disability in NMOSD AQP4+ Patients
Antonio Bruno *(IRCSS Neuromed – Pozzilli, Italy)*

701 | Leishmania infantum Infection Inhibits NLRP3 Inflammasome Activation: An In Vitro Model for Investigating Neuroinflammation in Microglia

Francesca La Rosa *(IRCCS Fondazione Don Carlo Gnocchi – Milan, Italy)*

702 | Fc-glycosylation profiles in NMDAR encephalitis identify brain-compartmentalized antibody responses, predict outcomes and track with post-herpetic, tumor-related or idiopathic origin.

Marianna Spatola *(University of Barcelona, Spain and Caixa Research Institute (CRI) – Barcelona, Spain)*

704 | Meningeal inflammation and tertiary lymphoid-like structure as secreted hideout of latent Epstein-Barr virus infection inducing B cell expansion in multiple sclerosis

Benedetta Bellini *(University of Verona – Verona, Italy)*

705 | Research of anti-acetylcholine antibodies using different methods in patients clinically compatible with Myasthenia Gravis.

Anastasia Lechiara *(IRCCS Ospedale Policlinico San Martino – Genoa, Italy)*

708 | INVESTIGATING THE INTERACTION BETWEEN THE GENETIC RISK VARIANT BAFF-VAR AND EBV REACTIVATION IN MULTIPLE SCLEROSIS: IMPLICATIONS FOR IMMUNE DYSREGULATION

Chiara Meloni *(Istituto Superiore di Sanità – Rome, Italy)*

713 | Epstein-Barr virus DNA detection in brain tissue sections from donors with progressive multiple sclerosis

LUCIA BENINCASA *(Istituto Superiore di Sanità – Rome, Italy)*

721 | Understanding Acute Symptomatic Seizure secondary to Autoimmune Encephalitis: a new experimental in vitro approach.

Alessio Passalacqua *(Charitè-Universitatsmedizin – Berlin, Germany)*

728 | Longitudinal changes in [18F]FDG PET brain metabolism as a prognostic marker in autoimmune encephalitis

Luana Benedetti *(IRCCS Ospedale Policlinico San Martino – Genoa, Italy)*

729 | Characterization of virus-induced bystander T cells in multiple sclerosis patients

Alice Verdiani *(IRCSS Fondazione Santa Lucia – Rome, Italy)*

730 | advancing neuromyelitis optica spectrum disorder therapy through antigen-specific regulatory t cells enrichment and cryopreservation

Sara Cestari *(Experimental and Clinical Research Center (ECRC)/Charité-Universitätsmedizin/Max Delbrück Center for Molecular Medicine in the Helmholtz Association (MDC) – Berlin, Germany)*

732 | Analysis of an innovative fluid biomarker panel for early prediction of Progression Independent of Relapse Activity (PIRA) in Multiple Sclerosis (MS)

Edoardo Dalmato Schilke *(Fondazione IRCCS San Gerardo Dei Tintori – Monza, Italy/University of Milano-Bicocca – Milan, Italy)*

734 | Early network and behavioral dysfunctions in experimental neuroinflammation: the role of IFN-gamma

Laura Bellingacci *(Unviersity of Perugia – Perugia, Italy)*

745 | Association Between Schizophrenia Severity and Inflammatory Biomarkers: A Hospital-Based Cross-Sectional Comparative Study

susanna de stefano *(Tor Vergata University Hospital/University of Rome Tor Vergata – Rome, Italy)*

747 | Extracellular vesicles enhance IL4 anti-inflammatory properties in BV2 murine microglial cell line

Chiara Frigè *(IRCCS Ospedale San Raffaele – Milan, Italy)*

748 | the dual role of btk inhibitors in multiple sclerosis treatment: clinical efficacy and modulation of ebv-host interactions

yuanyuan zou *(Università La Sapienza – Rome, Italy)*

750 | Effectiveness and Safety of Cladribine in a Real-World Multiple Sclerosis Cohort: A Single-Center Retrospective Study

Sabrina Al Qudsi *(University of Genoa – Genoa, Italy)*

751 | Sex differences in the humoral response to vaccine in multiple sclerosis a meta-analysis

Davide Maioli *(University of Genoa – Genoa, Italy)*

755 | Vaccination with Mycobacterium Tuberculosis protects from autoimmune neuroinflammation.

Alessia Lupoli *(IRCCS Ospedale San Raffaele – Milan, Italy)*

758 | Response to diphtheria and pertussis vaccination in untreated or anti-CD20 exposed Multiple Sclerosis pregnant women

Lisa De Pasquale *(Istituto Superiore di Sanità – Rome, Italy/University of Modena and Reggio Emilia – Modena, Italy)*

766 | Effects of Ozanimod on T cell - mediated synaptic excitotoxicity in relapsing-remitting multiple sclerosis.

Federica Palmerio *(University of Rome Tor Vergata/IRCCS San Raffaele Roma – Rome, Italy)*

768 | John Cunningham Virus (JCV) serostatus discrepancy by two different tests: impact on the clinicians and patients choices in a cohort Multiple Sclerosis patients treated with natalizumab

Paola Cavalla *(University of Turin/AOU Città della Salute e della Scienza – Turin, Italy)*

769 | Longitudinal changes in gut microbiome composition in individuals with Multiple Sclerosis undergoing Dimethyl Fumarate therapy: a one-year follow-up study

Rachele Rosso *(University of Turin – Orbassano, Italy)*

770 | Comparative Analysis of Paranodal Antibody Assays in Autoimmune Nodopathies: Diagnostic Accuracy and Inter-Laboratory Agreement

Federica Zuliani *(IRCCS Mondino Foundation – Pavia, Italy)*

775 | Physical exercise modulates T cell-mediated excitotoxicity in multiple sclerosis: a potential role for the vagus nerve

alessandra Musella *(University of Rome San Raffaele/IRCCS San Raffaele Roma – Rome, Italy)*

781 | Diet-Induced Metabolic Reprogramming Alters Immune Responses and Disease Progression in EAE
Vincenzo Di Marino *(Università di Napoli "Federico II" – Naples, Italy)*

786 | ANALYSIS OF THE MODULATION AND ABLATION OF S100B GENE ON GLIAL CELLS: EFFECTS ON MULTIPLE SCLEROSIS

Mariangela Ruggirello *(University of Perugia – Perugia, Italy/University "Cattolica del Sacro Cuore" of Rome – Rome, Italy)*

788 | KFLC index performance across MS spectrum: a monocentric study
Francesca Napoli *(Tor Vergata University Hospital – Rome, Italy)*

789 | Low immunoglobulin G levels influence the risk of pneumonia in a real-world cohort of Multiple Sclerosis patients treated with anti CD20 monoclonal Antibodies

Paola Cavalla *(University of Turin/Health and Science City University Hospital of Turin – Turin, Italy)*

Day 4 | Thursday May 8th

Immunology of neuropsychiatric disorders *"Pronfondo rosso"*
(09:30-11:45)
Chairs: Francesco Benedetti *(Ospedale San Raffaele - Milan, Italy)* & Diego Centonze *(Tor Vergata University - Rome, Italy)*

9:30-10:00 | **Increased inflammation in depression and other psychiatric conditions: a biological point of view on diseases and on effectiveness of treatments**
Valeria Mondelli *(King's College of London - London, UK)*

10:00-10:30 | **Role of innate immunity in the control of mood and cognition**
Cristina Limatola *(La Sapienza University - Rome, Italy)*

Oral Presentations

10:30-10:42 | **749 | The role of neuroaxonal damage and circuit disconnection in the pathogenesis of psychiatric symptoms in multiple sclerosis**
Silvia Sperandei *(University of Perugia – Perugia, Italy)*

10:42-10:54 | **752 | Immune activation during pregnancy drives TREM2 dysregulation and synaptic defects via maternal Type-I Interferon responses**
Matteo Bizzotto *(IRCCS Humanitas Research Hospital – Milan, Italy)*

10:54-11:06 | **700 | Apolipoprotein E regulates microglial remodeling of hypothalamic myelin in obesity**
Emily R McGrath *(University of California – San Francisco, CA, USA)*

11:06-11:18 | **762 | Longitudinal serum NFL and GFAP dynamics in AQP4 positive and negative NMOSD patients treated with Rituximab and Tocilizumab: a real-world experience**
Cecilia Irene Bava *(A.O.U. San Luigi Gonzaga – Orbassano, Italy)*

11:18-11:30 | **726 | Exploring the influence of prior disease activity in OCT dynamics after treatment onset in multiple sclerosis patients**
Valeria Zancan *(Vall Hebron University Hospital & Research Institute (VHIR) – Barcelona, Spain/Sapienza University of Rome – Rome, Italy)*

11:30-11:42 | **791 | Neurofilament light chains reflect grey matter pathology and intrathecal inflammation in early multiple sclerosis**
Francesca Gabriele *(University of L'Aquila – L'Aquila, Italy)*

AINI Winners, ECM & closing remarks
(11:45-12:30)