



«Inflammatory-based diseases, neurodegeneration and metabolic disorders: from bench to the bedside»

University of Messina
Department of Chemical, Biological, Pharmaceutical and Environmental Sciences
Messina



**Auditorium «Vittorio Ricevuto»
January 22-23 2026**

22 January 2026

Auditorium "Vittorio Ricevuto", Polo Papardo

09:00 - 09.20 Registration and welcome reception

09:20 - 09:30 Introduction e greetings

Introduction PRIN2020 "Regulation of autophagy by N-acylethanolamines as a promising approach for the treatment of inflammatory-based diseases: from neurodegeneration to metabolic disorders"

Paterniti I., Romano A., Travelli C. and Panza E.

Opening Lecture

Chairperson: Paterniti I.

09:30 - 10:00 *Linking synaptic dysfunction and inflammation in early Parkinson's disease*

Gardoni F., University of Milan

Oral Communications

"Neural Crosstalk in Neurodegeneration: From Molecular Mechanisms to Pharmacological Targets"

Chairpersons: Grilli M and Esposito E.

10:00 - 10:15 *Ultramicronized palmitoylethanolamide restores astrocyte-neuron metabolic coupling in a transgenic mouse model of Alzheimer's disease*
Scuderi C., University of Rome

10:15 - 10:30 *Endocannabinoids and congeners in plastic changes associated with pathological pain*
Luongo L. University of Campania "L. Vanvitelli"

10:30 - 10:45 *Unmasking Alzheimer's Disease: The multifactorial puzzle beyond protein misfolding*
Balducci C., Mario Negri Institute IRCCS

10:45 - 11:00 *Role of microglia in oligotau-induced neurodegeneration: opposite roles of PrP^c and TGF- β 1 signaling*
Gullotta G. IRCCS Oasi Maria SS Onlus, Troina (EN)

11:00 - 11:15 *From neuroinflammation to protein dyshomeostasis: the role of astroglial calcineurin in Alzheimer's disease*
Saverio V., University of Piemonte Orientale "Amedeo Avogadro"

11.15 - 11.30 **Round Table and General discussion of the session**

Caraci A., Gardoni F., Copani A., Esposito E., Sortino M., Sottile F., D'Avella D.

11:30-11:45 Coffee break 

Plenary Lecture

Chairperson: D'Avella D.

11:45 - 12:15 *Neuromodulation, immunity and chronic inflammation*

Landi A., University of Padova

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Plenary Lecture

Chairperson: Cirino G.

12:15 – 12:45 *Resolution Pharmacology: a new approach to the management of chronic diseases*
Perretti M., William Harvey Research Institute, London

12:45 - 14.30 **Lunch** 

Oral Communications

"Metabolic Diseases: Molecular Insights and Pharmacological Perspectives"

Chairpersons: Gaetani S. and Bucci M.

14:30 - 14:45 *Pharmacological modulation of paracannabinoid signaling in a rodent model of diet-induced obesity: insights into multi-organ dysfunction*
Friuli M., Link Campus University, Rome

14:45 - 15:00 *Defective protein persulfidation in obesity-associated skeletal muscle dysfunction: role of SIRT-1*
Vellecco V., University of Naples Federico II

15:00 - 15:15 *Targeting the central histaminergic system to counteract obesity-associated cognitive deficits*
Provensi G., University of Florence

15:15 - 15:30 *Rewiring metabolic organ networks in obesity: from mechanisms to therapy*
Pirozzi C., University of Naples Federico II

15:30 - 15:45 *Targeting NPY pathways for metabolic disorders: insights from limbic Npy1r deletion*
Einaudi G., University of Camerino

15:45 - 16:00 **Round table and General discussion of the session**
Gaetani, Bucci, Meli, Lutz

16:00 - 16:15 **Coffee break** 

Plenary Lecture

Chairperson: Romano A.

16:15 - 16:45 *Gut hormones in the treatment of metabolic diseases*
Thomas Lutz, University of Zurich

16:45 - 19:00 **Short communications**

Chairpersons: Smeriglio A. and Campolo M.

19:00 **Conclusions**

20:00 **Dinner**

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Plenary Lecture

Chairperson: Panza E.

09:00 – 09:30 *Thrombin chronic inflammation: new roles for an old player*
Vergnolle N., University of Toulouse

Oral Communication

"Inflammatory based diseases: Novel Therapeutic Strategies"

Chairperson: Bruscoli S and Meli R.

09:30 - 09:45 *ER-mitochondrial contacts as a novel therapeutic target to control cell metabolism and function in neurodegeneration and beyond*
Lim D., University of Piemonte Orientale "Amedeo Avogadro"

09:45 - 10:00 *Breaking Barriers: How Leukemia Drive Neuroinflammation*
Bereshchenko O., University of Perugia

10:00 - 10:15 *Targeting the Gut Microbiota-Endocannabinoidome Axis to Counteract Inflammation and Cellular Dysfunctions in Incurable Rare Disorders*
Iannotti F., Institute of Biomolecular Chemistry, CNR Napoli

10:15 - 10:30 *Divergent recovery of the gut-brain axis across acute, recovery and chronic phases of DSS-induced intestinal inflammation*
Lanni C., University of Pavia

10:30 - 10:45 **Coffee break** 

Plenary Lecture

Chairperson: Travelli C.

10:45 – 11:15 *Enteric nervous system: an immunoregulatory gatekeeper in the gut*
Matteoli G., Translational Research Center for Gastrointestinal Disorders, Belgium

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Oral Communication

"Inflammatory Pathologies: New Therapeutic Frontiers and Signal Network Dynamics"

Chairpersons: Lanni C. and Trombetta D.

11:15 - 11:30 *Novel insights in the control of vascular inflammation: cross-talk between gaseous molecules and resolution pathways*
Brancaleone V., University of Basilicata

11:30 - 11:45 *Defining the role of distinct intestinal macrophage subsets in tissue repair and fibrosis*
Cicia D., Translational Research Center for Gastrointestinal Disorders, Belgium

11:45 - 12:00 *Myeloid cell plasticity at the crossroads of inflammation and therapy response*
Porta C., University of Piemonte Orientale "Amedeo Avogadro"

12:00 - 12:15 *NLRP3 inflammasome and NF- κ B pathway as molecular drivers of inflammatory diseases*
Irrera N., University of Messina

12:15-12:30 **Round table and General discussion of the session**
Gaetani, Bucci, Meli, Lutz

12:00-13:00 **Conclusions and Lunch**

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16:45 - 19:00 Short communication

Chairpersons: Smeriglio A. and Campolo M.

- Targeting enteric glial calcineurin reduces inflammation and provides additional indirect effects on macrophage activation
Merlo Sara
- An *in vitro* model of etoposide-induced senescent microglia: focus on metabotropic glutamate receptors
Costantino Giuseppe
- Hypoxia impacts the early microglial response to the β -amyloid peptide involving SIRT1 and mitochondrial function
Lipari Cristiana
- Hybrid PLGA/randomly methylated β -cyclodextrin nanoparticles improve the effectiveness of methylene blue in an *in vitro* Alzheimer's disease model
De Gaetano Federica
- RIPK1 mediates neuroinflammation in Alzheimer's disease
Saitta Alessandra
- ATM-Silenced SH-SY5Y Cells as a Model for Sterile Neuroinflammation
Mosca Claudia
- Spontaneous Neuronal Differentiation and Synaptic Network Formation Driven by Conductive P3HT Films: A Bioelectronic Approach to Neural Regeneration
Munaò Serena
- Neuroprotective effects of PEA and OEA in a murine model of Parkinson' disease
Cucinotta Laura
- Senotherapeutic effects of quercetin against H_2O_2 -induced senescence in SH-SY5Y neuronal cells
Salomone Federica
- HSV-1 triggers a replication-dependent inflammatory response that mediates crosstalk between immune and neuronal cellular models
Trischitta Paola
- Immune checkpoint inhibitors and neuroinflammatory adverse events: from mechanism to management
Speranza Desirèe
- Mapping the resolution of gut-immune-brain axis disruptions post-DSS withdrawal
Gualtieri Chiara

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16:45 - 19:00 **Short communication**

Chairpersons: Smeriglio A. and Campolo M.

- *Extracellular NAMPT leads to myelopoiesis in vitro and in vivo acting on the Bone Marrow-Gut axis dysregulation in Inflammatory Bowel Disease*
Balestrero Federica
- *Disruption of Epithelial Barrier Integrity via Altered GILZ/c- Rel/RACK1 Signaling in Inflammatory Bowel Disease*
Limosani Roberta
- *Pharmacological modulation of the paracannabinoid system as a protective strategy against high-fat diet-induced autophagy dysregulation*
Campagna Alessia
- *Protective Effects of Chlorogenic Acid on in vitro Adipocyte Senescence and Metabolic Dysfunction*
Molonia Sofia
- *The nicotinamide phosphoribosyltransferase (NAMPT) as a novel therapeutic target for the treatment of glioblastoma multiforme (GBM)*
Buccellini Alessia
- *Cyclodextrin-Hyaluronic Acid Bioconjugate for Diclofenac Delivery in Inflammatory Diseases*
Sgambellone Natalia
- *OXER1 as a Therapeutic Target in Triple Negative-Inflammatory Breast Cancer (TN-IBC): From Tumor Progression to Immune Microenvironment Modulation*
Oliviero Chiara
- *Variable Virus-Driven Inflammation Across Distinct Cell Lines Generated In Vitro as Models of Distinct Stages of HTLV-1 Infection/Transformation*
Stefanizzi Valeria



SCIENTIFIC AND ORGANIZATIONAL COMMITTEE :

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