



15th World Congress on Inflammation

New Frontiers in Inflammation:
from Translational Research to Clinic

June 5th-8th **Rome**
Ergife Hotel Palace

 wci2022.org

Advance Program





15th World Congress
on Inflammation
New Frontiers in Inflammation:
from Translational Research to Clinic

15th World Congress on Inflammation

New Frontiers in Inflammation: from Translational Research to Clinic

Scientific Secretariat



**SIF - Italian Society
of Pharmacology**

Via Giovanni Pascoli 3
20129 Milan - Italy
Ph +39 02 29520311
@ sif.farmacologia@sigr.it

Organizing Secretariat



Adria Congrex Srl

Via Sassonia, 30
47922 Rimini - Italy
Ph +39 0541 305873
@ congress@wci2022.org

Committees

Scientific Programme Committee

Bernardini	Renato	Italy
Bruscoli	Stefano	Italy
Bucci	Mariarosaria	Italy
Cirino	Giuseppe	Italy
Cuzzocrea	Salvatore	Italy
Esposito	Emanuela	Italy
Fornai	Matteo	Italy
Molteni	Raffaella	Italy
Norata	Danilo	Italy
Racagni	Giorgio	Italy
Riccardi	Carlo	Italy
Sortino	Maria Angela	Italy
Vergnolle	Nathalie	France

Steering Committee

Cirino	Giuseppe
Cuzzocrea	Salvatore
Racagni	Giorgio (<i>Chair</i>)
Riccardi	Carlo
Sortino	Maria Angela

IAIS Executive Committee

President:

Dr. Nathalie Vergnolle
Digestive Health Research Institute, France

Vice-President:

Prof. Jason McDougall
Dalhousie University, Halifax, Canada

Past President:

Prof. Graham Wallace
University of Birmingham, UK

Treasurer:

Prof. John L. Wallace
Antibe Therapeutics

Secretary:

Prof. Mauro Teixeira
Bel Horizonte University, Brazil

Communication:

Arpita Maiti, AbbVie



Welcome Message of the Steering Committee

The 15th World Congress on Inflammation (WCI2022) will be in Rome for the first time in 2022.

The Congress will bring together researchers, clinicians, industry representatives, advocacy groups, and decision-makers across the field of inflammation.

WCI2022 will include latest developments in basic, translational and clinical research on inflammation, including cell biology, signalling, genetic, inflammatory/autoimmune diseases, new biomarkers and new therapeutics approaches for human diseases.

The biennial WCI Congress, that will bring together a number of Scientific Societies within the International Association of Inflammation Societies and others Scientific Societies who attend the Congress, will represent a key opportunity to share knowledge across borders and professional disciplines as we work towards a common goal of improving the understanding and therapeutic control of inflammatory diseases.

The congress will enhance the international community's knowledge base and will provide new opportunities for international collaboration.

On behalf of the Congress Organising Committee, we would like to invite you to attend and support the WCI 2022 here in Italy from 5-8 June, 2022. The congress will be hosted for the first time in Italy, in Rome and will be organized in Hotel Ergife.

**Giuseppe Cirino
Salvatore Cuzzocrea
Giorgio Racagni
Carlo Riccardi
Maria Angela Sortino**

Welcome Message of the President of the IAIS

Dear Friends and Colleagues,

The World Congress of Inflammation 2022 (WCI-2022) to be held in Rome, Italy, from June 5th to 8th 2022 promises to be an unforgettable event that will bring together delegates from all over the world with a common interest: inflammation research and treatment of inflammation-related diseases. The congress co-organized by the International Association of Inflammation Societies (IAIS) and the Italian Society of Pharmacology (SIF) will gather international leaders at the forefront of inflammation research, presenting the most recent advances in both basic science and clinical translation. Considerable advances have been made in our comprehension of inflammation-related diseases, and recent scientific breakthroughs have paved the way to novel therapeutic approaches. This congress will provide a unique opportunity for networking, educational and scientific exchanges for government, academic, clinical, industry, or health care professionals. We value and encourage the active participation and contribution of all professionals interested in inflammation.

Attending the conference will also provide the delegates with a unique opportunity to enjoy eternal and magnificent Rome, during one of the most pleasant season.

We look forward to welcoming you at WCI-2022, for a never-to-be-forgotten professional and life experience.

Nathalie VERGNOLLE
President of the IAIS

PROGRAM AT A GLANCE

DAY ONE - Sunday 5 June 2022	
PLENARY ROOM	
17.30	Opening Ceremony
18.00	Plenary Lecture Inflammation, a metanarrative from cancer to COVID-19 <i>Alberto Mantovani (Italy)</i>

DAY TWO - Monday 6 June 2022			
	Orange Room	Tarragona Room	Cesarea Room
9.00	Novel insights and new therapeutic strategies in inflammation	Brain-immune communication: in search of innovative targets for CNS diseases	Sex and Gender differences
10.30	Break		
11.00	Targeting intestinal inflammation with nutraceutical approaches for the treatment of metabolic, neurological and digestive diseases	Nuclear receptors in control of inflammation	Microglial involvement in brain physiopathology: mechanisms and strategies for innovative therapeutic intervention
12.30	Plenary Lecture Targeting neuroinflammation: novel therapeutic approaches for neuropathic pain <i>Daniela Salvemini (USA)</i>		
13.30	Break		
14.30	Thromboinflammation as an emerging key actor in diseases related to COVID-19	Advances in neutrophil biology	Joint Symposium Italy-Canada-Brazil: Novel hydrogen sulfide-based safe and effective anti-inflammatory and analgesic drugs
16.00	Break		
16.30	Oral Communications Neuroinflammation	Oral Communications New perspectives in Cardiovascular inflammation	Oral Communications New aspects in the treatment of autoimmune diseases, psoriasis, and rheumatoid arthritis
18.30	Poster Session		

PROGRAM AT A GLANCE

DAY THREE - Tuesday 7 June 2022			
	Orange Room	Tarragona Room	Cesarea Room
9.00	Role of inflammation in cancerogenesis	Immunometabolism and inflammation	New advances in targeting the resolution of inflammation
10.30	Break		
11.00		The microbiota-gut-inflammasome-brain axis in neurodegenerative disorders	Gene and cell therapy in inflammation
11.30	Lecture		
12.00	Lecture		
12.30	Lecture		
13.00	Break		
14.30	Vascular inflammation (inflammatory based vascular disease)	Mechanisms and treatment of inflammatory pain	Systemic inflammation in acute and chronic diseases
16.00	Break		
16.30	Oral Communications New advances in respiratory diseases and infections	Oral Communications Advances in Inflammation-Resolution Mechanisms in Health and Disease	Oral Communications New perspectives in the pathophysiology of gastrointestinal disorders
18.30	Poster Session		

DAY FOUR - Wednesday 8 June 2022				
	Orange Room	Tarragona Room	Cesarea Room	Pola Room
9.00	New regulatory mode of innate immunity	New precision pathway or evidence based medicine crisis	Microbiota and inflammation: mechanisms and potential treatments	Oral Communications Pain 1
10.30	Break			
11.00	Oral Communications Pain 2	Oral Communications Cancer and immunotherapy	Oral Communications New therapeutic approaches to control inflammation	
12.00	Plenary Lecture Glucocorticoids and inflammation <i>Carlo Riccardi (Italy)</i>			
13.00	Closing Ceremony			



Sunday, June 5th 2022

Plenary Room

17.30-18.00 Opening Ceremony

18.00-19.00 Plenary Lecture

Chair: *Giuseppe Cirino (Italy)*

Inflammation, a metanarrative from cancer to COVID-19

Alberto Mantovani (Italy)

Monday, June 6th 2022 - Morning Sessions

Orange Room

**09.00-10.30 NOVEL INSIGHTS AND NEW THERAPEUTIC STRATEGIES
IN INFLAMMATION**

Chairs: *Salvatore Cuzzocrea (Italy), Carlo Riccardi (Italy)*

**The Inhibition of Prolyl Oligopeptidase as New Target to
Counteract Inflammation**

Michela Campolo (Italy)

**Glucocorticoid Induced Leucine Zipper (GILZ) and peptides
as new drugs for treatment of inflammatory diseases**

Stefano Bruscoli (Italy)

**Natural compounds as regulators of macrophage
metabolism**

Alexandra Kiemer (Germany)

**Targeting inflammation to reduce cardiovascular disease
risk: a realistic clinical prospect?**

Pasquale Maffia (United Kingdom)

**Tryptophan metabolites as therapeutic options in
autoimmune/chronic inflammatory diseases**

Ciriana Orabona (Italy)

Monday, June 6th 2022 - Morning Sessions
Tarragona Room

09.00-10.30 BRAIN-IMMUNE COMMUNICATION: IN SEARCH OF INNOVATIVE TARGETS FOR CNS DISEASES

Chairs: *Raffaella Molteni (Italy), Salvatore Oddo (USA)*

The immune system on the TRAIL of Alzheimer's disease

Giuseppina Cantarella (Italy)

mTOR/S6K1 at the crossroad between aging and Alzheimer's disease

Salvatore Oddo (USA)

Dysregulation of brain lipid signalling and neuroinflammation in a maternal immune activation model of schizophrenia

Marco Pistis (Italy)

Neuroinflammation as potential target for stress-related disorders

Raffaella Molteni (Italy)

Potential effects of a synthetic FPR2 agonist on neuroinflammation in two mouse model of autism spectrum disorders

Claudia Cristiano (Italy)



Monday, June 6th 2022 - Morning Sessions

Cesarea Room

09.00-10.30 **SEX AND GENDER DIFFERENCES**

Chairs: *Elisabetta Vegeto (Italy), Nathalie Vergnolle (France)*

Gender and Cancer Inflammation

Binita Chakraborty (USA)

Gender and intestine inflammation

Theresa Pizarro (USA)

Innate immunity and reproductive capacity

Ana Zenclussen (Germany)

Sex differences in brain inflammation

Robert Harris (Sweden) . TBC

10.30-11.00 **Break**

Monday, June 6th 2022 - Morning Sessions

Orange Room

11.00-12.30 TARGETING INTESTINAL INFLAMMATION WITH NUTRACEUTICAL APPROACHES FOR THE TREATMENT OF METABOLIC, NEUROLOGICAL AND DIGESTIVE DISEASES

Chairs: *Matteo Fornai (Italy), Carmelo Scarpignato (Italy)*

New H₂S-releasing drugs to target microbiota dysbiosis during gut inflammatory disease

André Buret (Canada)

Nutritional therapeutic strategies to immune mediated intestinal disease

Wouter de Jonge (The Netherlands)

Gut-brain axis: Microbiota modulation in IBS and neurological disorders

Federica Facciotti (Italy)

Small intestinal nutrient sensing and the impact on energy balance and glucose homeostasis

Tony Lam (Canada)



Monday, June 6th 2022 - Morning Sessions

Tarragona Room

11.00-12.30 NUCLEAR RECEPTORS IN CONTROL OF INFLAMMATION

Chairs: *Mariarosaria Bucci (Italy), Marco Racchi (Italy)*

Glucocorticoid Receptor and the control of inflammation and metabolism in sepsis

Claude Libert (Belgium)

Glucocorticoid Receptors: Physiological Rheostats Controlling Inflammation *In Vivo*

John A. Cidlowsky (USA)

Glucocorticoid-Induced Leucine Zipper beyond the immune system

Simona Ronchetti (Italy)

Steroid-producing immune cells in inflammation and immunity

Bidesh Mahata (United Kingdom)

Monday, June 6th 2022 - Morning Sessions

Cesarea Room

11.00-12.30 **MICROGLIAL INVOLVEMENT IN BRAIN PHYSIOPATHOLOGY: MECHANISMS AND STRATEGIES FOR INNOVATIVE THERAPEUTIC INTERVENTION**

Chairs: *Michela Matteoli (Italy)*, *Susanna Rosi (USA)*

How microglia affect synaptic function?

Michela Matteoli (Italy)

Microglia-mediated mechanisms underlying synaptic loss and cognitive impairment after brain injury

Susanna Rosi (USA)

Targeting microglia in epilepsy

Rita Citraro (Italy)

MED1/BDNF/TrkB pathway is involved in thalamic hemorrhage-induced pain and depression by regulating microglia

Livio Luongo (Italy)

Sodium pentaborate pentahydrate prevents Ips-induced neuroinflammation in microglial cells

Demet Sinem Guden (Turkey)

Monday, June 6th 2022 - Morning Sessions

Plenary Room

12.30-13.30 **Plenary Lecture**

Chair: *Salvatore Cuzzocrea (Italy)*

Targeting neuroinflammation: novel therapeutic approaches for neuropathic pain

Daniela Salvemini (USA)

13.30-14.30 **Break**



Monday, June 6th 2022 - Afternoon Sessions
Orange Room

**14.30-16.00 THROMBOINFLAMMATION AS AN EMERGING KEY ACTOR
IN DISEASES RELATED TO COVID-19**

Chairs: *Xavier Norel (France), Veronique Witko-Sarsat (France)*

**Blood platelets and thromboinflammation in severe
COVID-19 patients**

Bernard Payrastre (France)

Cellular and molecular interplay of platelets in severe COVID

Morgane Bomsel (France)

**Thromboinflammation and COVID-19:
the pivotal involvement of endothelial cells**

David Smadja (France)

**Thromboinflammation and venous thrombosis : a trouble
associated with Covid-19**

Grace Thomas (France)

Monday, June 6th 2022 - Afternoon Sessions

Tarragona Room

14.30-16.00 ADVANCES IN NEUTROPHIL BIOLOGY

Chairs: *Sylvain Georges Bourgoïn (Canada), Marc Pouliot (Canada)*

Immune complex-induced apoptosis and concurrent immune complex clearance are anti-inflammatory neutrophil functions

Sonja Vermeren (United Kingdom)

Neutrophils in lupus: an explosive cocktail

Marc Pouliot (Canada)

New tales of out-of-body experiences: neutrophil extracellular traps or the secrets of weaving chromatin webs

Patrick McDonald (Canada)

Lessons from neutrophil-specific Arf6 conditional KO mice: impact on migration and immune-metabolic functions

Sylvain Georges Bourgoïn (Canada)



Monday, June 6th 2022 - Afternoon Sessions

Cesarea Room

14.30-16.00 JOINT SYMPOSIUM ITALY-CANADA-BRAZIL: NOVEL HYDROGEN SULFIDE-BASED SAFE AND EFFECTIVE ANTI-INFLAMMATORY AND ANALGESIC DRUGS

Chairs: *André Buret (Canada), Giuseppe Cirino (Italy)*

Emerging trends of hydrogen sulphide in somatic and visceral inflammatory pain

Larissa Santos (Brazil)

The cross talk between hydrogen sulphide and nitric oxide in vascular tone

Raffaella Sorrentino (Italy)

Hydrogen sulphide and microbiome: from toxicity to therapy

André Buret (Canada)

16.00-16.30 Break

Monday, June 6th 2022 - Afternoon Sessions

16.30-18.30 SESSION ORAL COMMUNICATIONS

Orange Room

NEUROINFLAMMATION

Chairs: *Giuseppina Cantarella (Italy), Marco Pistis (Italy)*

Physiological and biochemical changes in NRF2 pathway in aged animals subjected to brain injury

Cordaro M. (Italy), D'Amico R., Marino A., Di Paola R., Cuzzocrea S.

Age-associated dysregulation of leukocyte trafficking during acute inflammation: A potential therapeutic role for PEPITEM?

Hopkin S. (United Kingdom), Pezhman L. Nathan P., Manning JE., Begum J., Rainger GE., Mcgettrick HM., Iqbal AJ., Chimen M.

The role of SUN11602, a bFGF mimetic, to modulate the inflammatory pathway and calcium-binding proteins in an *in vivo* model of Parkinson's Disease

Casili G. (Italy), Ardizzone A., Bova V., Campolo M., Lanza M., Filippone A., Esposito E., Paterniti I.

Influence of enteric dopaminergic pathways and innate immunity in mouse and human intestinal inflammation

Cerantola S. (Italy), Faggin S., Caputi V., Bosi A., Banfi D., Rambaldo A., Porzionato A., Cortese V., Giaroni C., Savarino EV., Giron MC.

mTOR inhibitor, but not dexamethasone nor fingolimod, counteracts disease evolution in a mouse model of progressive multiple sclerosis

Buonvicino D. (Italy), Pratesi S., Ranieri G., Pistolesi A., Guasti D., Chiarugi A.

TRAIL-R deficient mice are protected from neurotoxic effects of amyloid- β

Di Benedetto G. (Italy), Burgaletto C., Serapide MF., Munafò A., Bellanca CM., Di Mauro R., Bernardini R., Cantarella G.

Intestinal histomorphological and molecular alterations in patients with Parkinson's disease: results from a pilot study

Bellini G. (Italy), Benvenuti L., Segnani C., Ippolito C., Frosini D., Pancetti A., Rettura F., D'Antongiovanni V., Pellegrini C., Ceravolo R., Bernardini N., Bellini M., Fornai M.



The potent inhibition of Irrk-2 kinase activity by PF06447475 reduces neuronal damage and immune response after spinal cord trauma

Filippone A. (Italy), Mannino D., Cucinotta L., Paterniti I., Esposito E., Campolo M.

MAO-a inhibition by metaxalone reverts il-1 β -induced inflammatory phenotype in microglial cells

Pallio G. (Italy), Mannino F., Irrera N., Bitto A., Minutoli L., Altavilla D., Squadrito F.

Potential effect of *Hericium erinaceus* and *Coriolus versicolor* in preventing the neurological changes of Parkinson's disease that develop following traumatic brain injury

Siracusa R. (Italy), Ontario M., Fusco R., Impellizzeri D., Scuto M., Trovato A., Di Paola R., Calabrese V., Cuzzocrea S.

16.30-18.30 SESSION ORAL COMMUNICATIONS

Tarragona Room

NEW PERSPECTIVES IN CARDIOVASCULAR INFLAMMATION

Chairs: *Vincenzo Brancaleone (Italy), Pasquale Maffia (United Kingdom)*

Retention of the NLRP3 inflammasome-primed neutrophils in the bone marrow is essential for myocardial infarction-induced granulopoiesis

Sreejit G., Nooti SK., Jagers RM., Athmanathan B., Park KO., Al-Sharea A., Johnson J., Dahdah A., Lee MKS., Ma J., Murphy AJ., Nagareddy PR. (USA)

Mechano-redox regulation of the Mac-1 de-adhesion by protein disulfide isomerase

Dupuy A., Aponteco C., Graeter F., Hogg PJ., Passam FJ., Chiu J. (Australia)

Galectin-9 facilitates enhanced recruitment of leukocytes from peripheral arterial disease patients

Krautter F. (United Kingdom), Antonopoulos A., Chimen M., Tiwari A., Haslam S., Iqbal AJ. (United Kingdom)

Involvement of cytokines in heart failure-associated kidney dysfunction: a focus on the renal ion channels

Coppola MA. (Italy), Imbrici P., Camerino GM., Conte E., De Angelis A., Berrino L., De Luca A., Liantonio A.

Longitudinal association of glyca inflammatory biomarker with carotid and femoral intima-media thickness in brazilian adults: a 9-year follow-up

Tebar W. (Brazil), Meneghini V., Lotufo PA., Santos IS., Bensenor IM.

Pharmacological inhibition of fak-pyk2 pathway protects against the hyper-inflammatory state in sepsis and prolongs mice survival

Ferreira Alves G. (Italy), Aimaretti E., Einaudi G., Mastrocola R., Garcia de Oliveira J., Collotta D., Porchietto E., Aragno M., Cifani C., Sordi R., Thiemermann C., Fernandes D., Collino M.

Cystathionine β -synthase /NO pathway drives the inflammatory response in L-cysteine-induced paw oedema in mouse

Mitidieri E. (Italy), Vellecco V., Vanacore D., Turnaturi C., Cirino G., Bucci M., Sorrentino R., D'Emmanuele di Villa Bianca R.

Mechanisms of cleavage and secretion of pepitem, a novel immunoregulatory peptide

Nathan P. (United Kingdom), Chimen M., Itoh Y., Mcgettrick H., Rainger GE.

Dapagliflozin ameliorates diastolic dysfunction in an animal model of heart failure

Cappetta D. (Italy), De Angelis A., Telesca M., Bellocchio G., Urbanek K., Berrino L.

Relaxation of human coronary arteries, role of Omega 3, RVD1, RVD5 and MARI

Bouhadoun A. (France), Manikpurage HD., Urbach V., Longrois D. Norel X.

16.30-18.30 SESSION ORAL COMMUNICATIONS

Cesarea Room

NEW ASPECTS IN THE TREATMENT OF AUTOIMMUNE DISEASES, PSORIASIS, AND RHEUMATOID ARTHRITIS

Chairs: *Alessandra Bitto (Italy), Elisabetta Panza (Italy)*

OMEGA-3, bioactive lipid mediators and the control of joint inflammation

Cecconello C. (United Kingdom), Perretti M., Norling L.

Neutrophil extracellular traps trigger an enhanced pro-inflammatory response in macrophage subpopulations in rheumatoid arthritis patients

Melbouci D., Seninet S., Boissier MC., Segura E., Decker P. (France)

Impact of yoga-based lifestyle intervention on markers of immune aging in Rheumatoid arthritis

Gautam S. (India), Kumar U. Mishra R. Dada R.



Association between insulin resistance and skeletal muscle mitochondrial content in individuals with rheumatoid arthritis

Hanaoka BY. (USA), Benedict J., Brock G., Smith-Johnston KE., Sammy M.

Risk factors for systemic lupus erythematosus: clinic based case-control study

Ibragimov K. (Uzbekistan), Sultonov II., Ziyadullayev SX., Islamova KA., Axmedov IA.

The epigenetic and transcriptional regulation of GM-CSF-induced CCL17 production by dexamethasone

Lupancu T. (Australia), Lee MC., Hamilton J., Achuthan A.

Synthesis and biological characterization of a novel N-terminal peptide (new-IL-17) derived from interleukin-17A

Rauci F., Saviano A., Mansour AA., Casillo GM., Panza E., Vellecco V., Bucci M., Cirino G., Iqbal AJ., Maione F. (Italy)

Association between psoriasis and thyroid dysfunction: a quantile regression approach

Meneghini V. (Brazil), Tebar WR., Janovsky CC., Lotufo PA., Bensenor IM.

Enhanced NAMPT-Mediated NAD Salvage Pathway contributes to psoriasis pathogenesis by amplifying epithelial auto-inflammatory circuits: possible implications in the co-morbid condition of obesity

Mercurio L. (Italy), Morelli M., Scarponi C., Albanesi C., Madonna S.

Characterization of Blood Mucosal Associated Invariant T (MAIT) cells in Axial Spondyloarthritis and of resident MAITs from control axial entheses

Rosine N., Rowe H., Koturan S., Yahia-Cherbal H., Leloup C., Watad A., Berenbaum F., Sellam J., Dougados M., Aïmanianda Bopaiah V., Cuthbert R., Bridgewood C., Newton D., Bianchi E., Rogge L., Mcgonagle D., Miceli-Richard C. (France)

Monday, June 6th 2022

18.30-19.30 POSTER SESSIONS

The long non-coding RNA H19 as a regulator of macrophage-aging

Schymik H., Bachmann RW., Kiemer A., Hoppstädter J. (Germany)

Human gut biofilm disorganization and behavioral changes during age and frailty

Le Cosquer GL., Meunier E. (France), Deraison C., Vergnolle N., Motta JP.

SACUBITRIL/VALSARTAN effects in an ageing-related experimental model of heart failure

De Angelis A. (Italy), Cappetta D., Telesca M., Bellocchio G., Urbanek K., Berrino L.

Deficiency of toll-like receptor 4 signaling in small intestine neuromuscular dysfunctions during ageing

Faggini S. (Italy), Cerantola S., Caputi V., Dal Prà A., Caldana G., Bosi A., Giaroni C., Zusso M., Savarino E., Giron MC.

Predictive factors of prognosis in shock patients

Yu WS., Choi SH. (Republic of Korea), Kim AY., Kim KH., Roh YC., Cho YD.

The role of aseptic nonspecific inflammation in the pathogenesis of endometrial hyperplasia

Karapetyan OV., Kovalenko EP., Linvinova SV., Makalish TP., Zyablitskaya EY., Kubyshkin AV. (Russia) Aliev LL., Fomochkina II., Golubinskaya EP.

Anti-inflammatory effects of β -cry on 5FU-induced cytokine production in hOMF

Oseko F. (Japan), Yamamoto T., Takizawa S., Adachi K., Kanamura N.

Adipose tissue dysregulation leads to chronic systemic inflammation

Rausch J. (USA)

IKK inhibition increases effectiveness of hdac inhibitors in ovarian cancer by suppressing IL-8 expression

Vancurova I. (USA), Gatla H., Vancura A.

The concentration of monomeric C-reactive protein in serum correlates with the degree of bone loss in multiple myeloma

Zvereva M. (Russia), Semochkin S., Saburova O., Melnikov I., Gabbasov Z.

Single-shot LC-MS of microsampled dried whole blood to detect over 1600 proteins improves blood biomarker studies

Herbert BR. (Australia), Molloy MP.

The relationship of laboratory parameters with the characteristics of β -adrenergic receptors in patients with cardiorespiratory pathology

Smolyakova EV. (Russia)

Investigating new pathways of lipid clearance in primary and ipsc-derived foam cells

Begum J. (United Kingdom), Chimen M., Lezama D., Sarkar S., Iqbal A., Rainger G.

The H₂S-Donor erucin protects endothelium against LPS-induced inflammation

Citi V. (Italy), Piragine E., Ciccone V., Montanaro R., Filippelli A., Testai L., Matteo R., Righetti L., Di Cesare Mannelli L., Ghelardini C., Pagnotta E., Brancaleone V., Morbidelli L., Calderone V., Martelli A.

Inflammation caused by SARS-COV-2: role of the endothelium injury

Melkumyants A. (Russia), Buryachkovskaya L., Antonova O., Lomakin N., Ermishkin V.

The role of monomeric C-reactive protein in the assessment of residual inflammatory cardiovascular risk in patients with subclinical carotid atherosclerosis

Melnikov I. (Russia), Kozlov S., Pogorelova O., Tripoten M., Balakhonova T., Saburova O., Khamchieva L., Avtaeva Y., Zvereva M., Prokofieva L., Kuznetsova T., Guseva O., Gabbasov Z.

The BET inhibitor JQ1 protects septic mice from organ damage by counteracting inflammatory abnormalities

Murzio C. (Italy), Ferreira Alves G., Aimaretti E., Einaudi G., Collotta D., Porchietto E., Mastrocola R., Aragno M., Cifani C., Penna F., Collino M.

Components of il-6 trans-signaling in patients with acute decompensated heart failure

Samoilova EV. (Russia), Mindzaev DR., Zhirov IV., Nasonova SN., Tereschenko SN., Korotaeva AA.

Cobalt chloride excessive consumption shows cardiotoxicity in male wistar rats

Sataeva T. (Russia), Kubyshkin A., Zadnipyany I.

Early Stage Diabetic Critical Limb Ischemia is Associated with Altered Frequency and Function of Natural Killer Cells

Spinetti G. (Italy), Riccio F., Palano MT, Sangalli E., Gallazzi M. Sambado L., Veronesi A., Durante E., Guido M., Chiorino G., Sambataro M., Bruno A.

The impact of pollination of causally significant allergens in patients with seasonal rhinitis, hypertension and obesity on the level of systemic inflammation, lipopolysaccharide-binding protein and the soluble form of CD14 receptors

Usachenko YV. (Russia), Beloglazov VA., Kubyshkin AV., Gordienko AI.

Novel Action of Galectin-9 as a Potential Thrombo-Inflammation Mediator

Zhi Z. (United Kingdom), Kavanagh D., Bourne J., Rayes J., Watson S., Iqbal A.

Cardiovascular immune-inflammatory markers and cellular aging in the general population

Baragetti A. (Italy), Cicolari S., Da Dalt L., Svecla M., Bonacina F., Pellegatta F., Grigore L., Norata GD., Catapano AL.

Exogenous sialidases and their role in the development of atherosclerosis

Bezsonov E. (Russia), Kashirskikh D., Sukhorukov V., Myasoedova V., Melnichenko A., Orekhova V., Khotina V., Orekhov A.

Beneficial action of metformin on endothelial-dependent vascular function in a mouse model of type 1 diabetes

Vellecco V. (Italy), Manzo OL., Sasset L., Rubinelli L., Panza E., Casillo GM., Smimmo M., Cirino G., Di Lorenzo A., Bucci M.

Prophylactic and therapeutic immunomodulatory effects of omega-3 fatty acids in patients with differentiated thyroid cancer scheduled for radioiodine ablation

Fariadian S. (Iran), Amirkhani Z., Alavi M., Kalani M., Alavianmehr A.

Pre-clinical evaluation of beneficial effects of bradykinin B1 receptor antagonist (R-954) in endometriotic mice

Carvalho PR., Carvalho RR. Paiva JP., Sirois P., Fernandes PD. (Brazil)

N-OCTADECANOYL-5-HYDROXYTRYPTAMIDE reduces inflammatory responses induced by $\alpha\beta 1$ -42 in microglial cells

Giorno TB., Moreira IG., Rezende CM., Fernandes PD. (Brazil)

Isatin, N-METHYLISATIN and oxopropylisatin: characterization of the anti-inflammatory effect

Silva JF., Giorno TB., Silva BV., Fernandes PD. (Brazil)

New molecules hybrids of capsaicin-curcumin as potential anti-inflammatory prototypes

Paiva JP., Carvalho PR., Etienne R., Viegas FP., Viegas C., Fernandes PD. (Brazil)

Leukocyte integrin antagonists as a novel option to treat inflammatory diseases

Baiula M. (Italy), Giraldi V., Giacomini D., Spampinato S.

New models of human dendritic cell biology

Elahi Z. (Australia), Angel PW., Choi J., Butcher S., Wells C.

Identification of Sulfavant A as first synthetic TREM2 ligand discloses a homeostatic response of Dendritic Cells after receptor engagement

Fontana A. (Italy), Manzo E., Gallo C., Barra G., Ziaco M., Fioretto L., Mercogliano M., Nuzzo G.

Tyrosol-derived phenolic compounds prevent hepatic fibrogenesis through the modulation of ros-producing napdh-oxidases

Gabbia D., Carpi S., Sarcognato S., Zanutto I., Polini B., Sayaf K. (Italy), Digiacomio M., Nieri P., Russo FP., Guido M., De Martin S.

The role of IGF-1 in rats with chronic toxic hepatitis

Rykalo N., Oliinyk YU. (Ukraine)

Gender-related differences in liver fibrogenesis and regeneration: a focus on inflammation and immune system activation

Sayaf K. (Italy), Zanutto I., Gabbia D., Alberti D., Pasqual G., De Martin S., Russo FP.

Adenosine A3 receptor (A3AR) agonist for the treatment of bleomycin- induced lung fibrosis in mice

Sgambellone S. (Italy), Durante M., Masini E., Salvemini D., Lucarini L.

Development of autologous macrophage-encapsulated gellan fluid gel for prevention from ocular surface scarring

Alqahtani M. (United Kingdom), Wallace G., Rauz S.

***Ulva pertusa* extract modulates inflammation and improves antioxidant response in experimental murine colitis**

Ardizzone A. (Italy), Mannino D., Filippone A., Campolo M., Cuzzocrea S., Esposito E.

Anti-inflammatory activity of paronychia argentea methanolic extract against acetic acid-induced ulcerative colitis in mice and its potential use as natural drug

Adjadj M. (Algeria), Djarmouni M., Baghiani A.

Beneficial effects of a novel therapeutic natural compound for the restoration of the intestinal barrier function in an *in vivo* model of multiple food intolerances

Basilotta R. (Italy), Casili G., Lanza M., Ardizzone A., Paterniti I., Campolo M., Cuzzocrea S., Esposito E.

Anti-inflammatory activity of paronychia argentea methanolic extract against acetic acid-induced ulcerative colitis in mice and its potential use as natural drug

Adjadj M. (Algeria), Djarmouni M., Baghiani A.

Systemic inflammation in acute pancreatitis is modulated by changes in proteins carried by circulating exosomes

Carrascal M., Areny-balagueró A., De-madaria E., Cárdenas-jaén K., García-rallado G., Rivera R., Martín-mateos R., Pascual-moreno I., Gironella M., Abian J., Closa D. (Spain)

Antiulcerogenic effect of *Helix aspersa muller* snail secretion filtrate against ethanol-induced gastric ulcer in mice

Crupi R. (Italy), Gugliandolo E, Peritore AF., Di Paola R., Cuzzocrea S.

Evaluation of the anti-inflammatory effect of two novel P2x4 receptor antagonists, NC-2600 and NP-1815-PX, in a model of DNBS-induced experimental colitis

Di Salvo C. (Italy), D'Antongiovanni V., Pellegrini C., Benvenuti L., Fornai M., Bertani L., Nemeth ZH., Haskó G., Antonioli L.

LINS01007, a new histamine H4R antagonist, reduces inflammatory process and severity of dss-induced colitis, in mice

Lippi BK., Balbino AM., Fernandes GA., Azevedo GA., Negreiros NG., Landgraf MA., Fernandes JP., Landgraf RG. (Brazil)

Vitamin D receptor expression and signaling in intestinal epithelial cells of ulcerative colitis

Kellermann L. (Denmark), Maciag G., Hansen SL., Pedersen MT., Bergenheim F., Riis LB., Jensen KB., Nielsen OH.

Venlafaxine as an Adjuvant Therapy for IBD Patients with Anxious and Depressive Symptoms: A Randomized Controlled Trial

Chang LC. (China), Yan ZY.

Carbonic anhydrase IV selective inhibitors counteract the development of colitis-associated visceral pain in rats

Pariso C. (Italy), Lucarini E., Nocentini A., Bonardi A., Chiaramonte N., Micheli L., Toti A., Ferrara V., Carrino D., Pacini A., Waheed A., Romanelli MN., Supuran CT., Ghelardini C., Di Cesare Mannelli L.

Anti-inflammatory cytokines expression by $\gamma\delta^+$ intraepithelial T lymphocytes in untreated Celiac Disease

Rotondi Aufiero V. (Italy), Mazzarella G., Iacomino G., Iannaccone I., Iaquinto I., Giardullo N.

A PVR fusion construct alleviates DSS-induced colitis

Saha S. (Canada), Sparkes A., Matus El., Garipey J.

Macrophage population phenotyping shows predictive potential in malignization of *H. pylori*-associated chronic gastritis

Sataeva T. (Russia), Kubyshkin A., Golubinskaya E., Fomochkina I., Maligina V., Makalish T.

Effectiveness and safety profile of biological therapy in inflammatory bowel disease: real life data from an active pharmacovigilance project

Barbieri MA. (Italy), Viola A., Cutroneo PM., Fries W., Spina E.

***Rhus coriaria* L. as potential nutraceutical against *H. pylori*-related inflammation**

Martinelli G. (Italy), Angarano M., Piazza S., Magnavacca A., Fumagalli M., Khalilpour S., Sangiovanni E., Dell'Agli M.

Gilz synthetic peptides as a new tool for the treatment of inflammatory bowel disease

Paglalunga M. (Italy), Viana de Barros Z., Febo M., Iannello V., Bereshchenko O., Riccardi C., Migliorati G., Ronchetti S., Bruscoli S.

Tuberculosis spondylodiscitis: the imaging findings

Ben Tekaya R. (Tunisie), Hachfi H., Brahem M., Younes M.

Effect of sulodexide on circulating blood cells in patients with mild COVID-19

Buryachkovskaya L. (Russia), Lomakin N., Melkumyants A.

Characterization of ZIKV-mitochondria interplay on primary astrocytes in different animal models

Souza Y. (Brazil), Gomes L., Polonio C., Silva P., Cunha M., Muxel S., Peron JP.

The role of mTOR complexes in astrocytes during Zika virus infection

Gomes De Oliveira L. (Brazil), Souza Angelo Y., Manganelli Polonio C., Ghabdan Zanluqui N., Muxel S., Schatzmann Peron JP.

Study of the sex differences in inflammatory diseases in children

Popotas AP. (Belgium), Lefèvre NL., Corazza FC., Casimir GC.

CD18 regulates monocyte differentiation into alternatively activated macrophages during chronic schistosomiasis

Souza CA. (Brazil), Elias-oliveira JE., Fontanari CA., Rodriguez VE., Gardinassi LU., Faccioli LU.

Mesenchymal Stem Cells Demonstrated Direct Impact on Airway Immune Cell Populations in Influenza A Virus-infected Mice

Tan Y. (Canada), Souza-Moreira L., Wang Y., Salkhordeh M., Florian M., McIntyre L., Stewart D., Mei S.

Pathogen associated modulation of soluble mucosal addressin cell adhesion molecule

Kasarpalkar N. (India), Deb B., Kumar P., Patel V., Savardekar L., Agrawal S., Shastri J., Bhor VM.

Red blood cells or erythrocytes as modulators of neutrophil activity and formation of neutrophil extracellular traps (NETs)

Such A., Kolaczowska E. (Poland)

Sequential multiparametric assessment of the dynamics of leukocytes, serum biomarkers and extracellular vesicles in septic patients admitted into the intensive care unit

Martí-Chillón GJ. (Spain), Muntión S., González-Robledo J., Martín-González F., Preciado S., Osugui L., Flores J., Navarro-Bailón A., Almeida J., Sagredo V., Blanco JF., Sánchez-Guijo F.

Does fever increase or decrease blood circulation?

Mathai Y. (India), Kunnathazhath MR.

Fever is not a symptom in COVID-19. None of the diseases require fever as its symptom

Mathai Y. (India), Kunnathazhath MR.

Evaluation of the microRNAs in the immunopathogenesis of microcephaly caused by ZIKV

Polonio CP. (Brazil), Muxel SM., Zanluqui NZ., Oliveira LO., Angelo YA., Peron JP.

Lipoxins promote tissue repair and regeneration

Andrews D. (Ireland), Oremek M., De Gaetano M., Brennan E., Rossi AG., Godson C.

Resolvin D1 epimer affects polymorphonuclear cells in a mouse model of peritonitis

Brezovec N. (Slovenia), Perše M., Erman A., Kojc N., Sodin-Šemrl S., Čučnik S., Lakota K.

Epithelial Cell Regulation of Macrophage Function Within the Pulmonary Micro-Environment

Gachanja N. (United Kingdom), Rossi A., Dorward D., Lucas C.

Study for the identification of peptides as proteasome and/or immunoproteasome inhibitors by the phage display technique

Samuels N., De La Guardia, Fernandez PLL., Gonzalez Y. (Panama)

Asymmetric synthesis and biological screening of LIPOXIN-A4 mimetics: identification of two novel pro-resolving agents

De Gaetano M. (Ireland), Tighe C., Gahan K., Zanetti A., Butler E., Cacace A., Marai M., Gaffney A., Brennan E., Chen J., Newson J., Gilroy D., Perretti M., Leroy X., Guiry P., Godson C.

Network-based comparison of lipid mediator pathways from single-cell RNA-seq data

Hoch M. (Germany), Smita S., Cesnulevicius K., Schultz M., Lescheid D., Wolkenhauer O., Gupta S.,

Glutathione peroxidases - key enzymes for lipid mediator balance?

Koeberle SC. (Germany), Kipp AP, Koeberle A., Werz O.

Respiratory and metabolic peculiarities of LPS-induced inflammation on background of type 2 diabetes

Aliiev R. (Ukraine), Kozlovska M., Zavgorodnii M., Topchaniuk L., Nosar V., Vasylenko M., Rozova K., Tsapenko P., Sydorenko A., Portnychenko A.

A new approach to correction of pulmonary tissue ultrastructure damage under experimental pneumonia

Aliiev R. (Ukraine), Shapovalova A., Rozova K.

The role of intercellular interactions of components of the local lung defense system in remodeling of lung tissue in secondary tuberculosis

Golybinskaya EP., Kalfa MA., Kramar TV., Ermola YA., Kubyshkin AV. (Russia), Zyablitskaya EY.

Role of sphingosine-1-phosphate in sex-specific asthma features

Granato E. (Italy), Cerqua I., Riemma MA., Rossi A., Sorrentino R., Nani MF., Ferraro G., Cirino G., Roviezzo F.

Model of experimental bronchopneumonia in rats

Penskyy PY. (Ukraine), Lytvynets ML., Musyenko DO., Ziablitsev DS.

Role of adenosine A3 receptor (A3AR) in the modulation of bleomycin- induced lung fibrosis in mice

Sgambellone S. (Italy), Lucarini L., Durante M., Masini E., Salvemini D.

PRE-clinical evaluation of select herbal extracts for mitigating SARS COV-2 associated pathologies

Babele P. (India), Dikshit M.

Smoking cessation does not revert smoke-induced lung-inflammation *in vivo*

Colarusso C. (Italy), Terlizzi M., Pinto A., Sorrentino R.

Barriolides: non-antibacterial compounds with epithelial barrier enhancing properties and anti-inflammatory effects *in vitro*

Kricker JA. (Iceland), Valdimarsdottir B., Joelsson JP., Ingthorsson S., Parnham MJ., Sigurdsson S., Arason AJ., Baldursson O., Gardarsson FR., Page CP., Lehmann F., Gudjonsson T.

Ultrasound interest in the assessment of enthesitis in patients with spondyloarthritis

Ben Tekaya R. (Tunisie), Brahem M., Souissi M., Ftima AR., Hariz A., Hachfi H., Jerbi S., Younes M.

Dynamics of saa receptors expression in mouse embryonic fibroblastis and their signalling

Borovnik K. (Slovenia), Brezovec N., Mrak-poljak K., Manček-keber M., Lainček D., Sodin-emrl S., Čučnik S., Lakota K.

Osteoregulatory peptide repairs bone in health and age related musculoskeletal disease

Lewis J., Frost K. (United Kingdom), Neag G., Jones S., Mahmood A., Edwards J., Naylor A., Mcgettrick H.

Antisense technologies in the treatment of rheumatoid arthritis

Makalish TP., Temirova ZZ., Oberemok VV., Zyablitskaya EY., Shaimardanova LR., Fomochkina II., Kubyshkin AV. (Russia)

Diet quality and disease activity in rheumatoid arthritis

McGarrity-Yoder M. (USA), Insel K., Crane T., Pace T.

Biopsychosocial determinants of disease experience in rheumatoid arthritis

McGarrity-Yoder M. (USA)

Targeting monoamine oxidase b dampens inflammation in a pseudogout mouse model

Venegas Celedon FC. (Italy), Luisetto R., Sanchez-Rodriguez R., Canton M., Viola A.



Immunopeptide as a new therapy for rheumatoid arthritis

Wahid M. (United Kingdom), Lewis JW., Abudu O., McGettrick HM.

Age-associated B cells from early rheumatoid arthritis patients have a chemokine receptor profile associated with migration to inflamed synovium

Vidal-Pedrola G., Wilson IL. (United Kingdom), Mcgettrick HM., Naamane N., Scheel-toellner D., Pratt AG., Mellor AL., Isaacs JD., Anderson AE.

Regulatory T cells identity during chronic inflammation in patients with rheumatoid arthritis or spondyloarthritis

Mebrek L., Abaab T., Boissier MC., Semerano L., Biton J., Bessis N. (France)

An unsupervised analysis identifies a specific impact of biologics on lymphocytes phenotypes in axial spondyloarthritis

Rosine N. (France), Millot G., Koturan S., Leloup C., Yahia-Cherbal H., Bianchi E., Miceli-Richard C., Rogge L.

Modeling of dendritic cell vaccines immunotherapy for ovarian cancer

Paberale E. (Lithuania), Mlynska A., Krasko JA., Zilionyte K., Pasukoniene V., Zymantaite E.

Tuesday, June 7th 2022 - Morning Sessions
Orange Room

09.00-10.30 ROLE OF INFLAMMATION IN CANCEROGENESIS

Chairs: *Stefano Bruscoli (Italy), Csaba Szabo (Switzerland)*

Intestinal barrier disruption orchestrates inflammatory host-microbiome cross-talk, driving colorectal cancer development

Geert van Loo (Belgium)

Transcriptional control of inflammation and Cancer

Gioacchino Natoli (Italy)

Upregulation of H₂S production in tumor cells promotes cellular bioenergetics and tumor cell proliferation and migration, maintains mesenchymal tumor cell phenotype and modulates the tumor microenvironment

Csaba Szabo (Switzerland)

Autoimmune cholangitis fuels cancer immunosurveillance in the biliary tract

Jonathan Pol (France)

Necroptosis in inflammation and cancer

Manolis Pasparakis (Germany)



Tuesday, June 7th 2022 - Morning Sessions
Tarragona Room

09.00-10.30 IMMUNOMETABOLISM AND INFLAMMATION

Chairs: *Phil Hansbro (Australia), Matthew Sweet (Australia)*

gp130 receptor activation: the Yin & Yang of Immunometabolism

Mark Febbraio (Australia)

Diet, Gut microbiota and Immunometabolism

Laurence Macia (Australia)

Macrophage activation and metabolism in 3D

Katrina Binger (Australia)

TFEB integrates mitochondrial metabolism and inflammation

Nirmal Robinson (Australia)

Tuesday, June 7th 2022 - Morning Sessions
Cesarea Room

09.00-10.30 NEW ADVANCES IN TARGETING THE RESOLUTION OF INFLAMMATION

Chairs: *Emanuela Esposito (Italy), Gyorgy Hasko (USA)*

Adenosine in sepsis: a critical pro-resolutive mediator

Gyorgy Hasko (USA)

Mediators of resolution in the context of viral and bacterial infection of the lung

Mauro Teixeira (Brazil)

Resolution Pharmacology - novel therapeutic management of inflammation

Mauro Perretti (United Kingdom)

Intestinal epithelial barrier alterations associated with high fat diet-induced obesity: role of enteric glial nlrp3 inflammasome

Vanessa D'Antongiovanni (Italy)

Hydrogen sulfide and annexin A1 pathway: an interplay in vascular function?

Vincenzo Brancaleone (Italy)

10.30-11.00 Break



Tuesday, June 7th 2022 - Morning Sessions

Orange Room

11.30-12.00 **Lecture**

Interleukin 23: a key cytokine in inflammatory diseases

Alessandro Armuzzi (Italy), Andrea Chiricozzi (Italy)

12.00-12.30 **Lecture**

**Targeting the JAK_STAT pathway in rheumatoid arthritis:
biological and clinical relevance**

Giuliana Guggino (Italy)

12.30-13.00 **Lecture**

Enoxaparin in inflammation: should we be surprised?

Filippo Drago (Italy)

Tuesday, June 7th 2022 - Morning Sessions
Tarragona Room

11.00-12.30 THE MICROBIOTA-GUT-INFLAMMASOME-BRAIN AXIS IN NEURODEGENERATIVE DISORDERS

Chairs: *Pascal Derkinderen (France), Giuseppe Esposito (Italy)*

Gut-directed NLRP3 inflammasome inhibition for the treatment of neurodegenerative disorders

Carolina Pellegrini (Italy)

How do macrophages respond to danger?

Gloria Lopez-Castejon (United Kingdom)

Is Parkinson's disease a chronic low grade inflammatory bowel disorder?

Pascal Derkinderen (France)

The human expobiome: the gut microbiome-derived molecular complex and its role in immune system modulation

Paul Wilmes (Luxembourg)



Tuesday, June 7th 2022 - Morning Sessions
Cesarea Room

11.00-12.30 GENE AND CELL THERAPY IN INFLAMMATION

Chairs: *Francesca Fallarino (Italy), Valerio Orlando (Kingdom of Saudi Arabia)*

Role of Epigenomics in inflammation noncoding RNA and Epigenome homeostasis in Aging/rejuvenation and tissue regeneration

Valerio Orlando (Kingdom of Saudi Arabia)

Inflammation and oxidative stress in skeletal muscle degeneration: cell-based therapies and drug discovery

Maurilio Sampolesi (Belgium)

Gene therapy for the treatment of inflammatory diseases: a reality or just a mirage?

Alessandra Mortellaro (Italy)

Modulation of hematopoietic stem cells by glucocorticoids in physiologic and inflammatory conditions

Oxana Bereshchenko (Italy)

7th June 2022 - Afternoon Sessions
Orange Room

14.30-16.00 VASCULAR INFLAMMATION (INFLAMMATORY BASED VASCULAR DISEASE)

Chairs: *Antonella De Angelis (Italy), Anna Rita Di Lorenzo (USA)*

Targeting shingolipid metabolism in vascular dysfunctions
Anna Rita Di Lorenzo (USA)

Des-CYS-tiny of the dysfunctional endothelium
Iris Sofia Bibli (Germany)

Pin1 as a molecular switch in vascular physiology and pathology
Cristina Lanni (Italy)

New panacea for heart failure? The case of neprilysin
Antronella De Angelis (Italy)

The low-density lipoprotein receptor fuels MTORC1 activation in CD8 T cells
Giuseppe Danilo Norata (Italy)

7th June 2022 - Afternoon Sessions
Tarragona Room

14.30-16.00 MECHANISMS AND TREATMENT OF INFLAMMATORY PAIN

Chairs: *Jason J. McDougall (Canada), Nathalie Vergnolle (France)*

Sensitization of joint nociceptors by protease activated receptor-4 in post-traumatic osteoarthritis
Jason J. McDougall (Canada)

Proteolytic pathways as target for inflammatory pain treatment
Nathalie Vergnolle (France)

Chemogenetic silencing of nociceptive neurons in inflammatory pain
Christophe Altier (Canada)

Macrophage-mediated mechanisms in arthritis pain
Marzia Malcangio (United Kingdom)



7th June 2022 - Afternoon Sessions

Cesarea Room

14.30-16.00 **SYSTEMIC INFLAMMATION IN ACUTE AND CHRONIC DISEASES**

Chairs: *Liwu Li (USA), Siquan Sun (USA)*

Molecular control of cytokine generation in TLR8-activated neutrophils

Marco Cassatella (Italy)

Innate immune memory dynamics that governs the polarization and/or resolution of inflammation

Liwu Li (USA)

Role of metabolism in the control of immunological self-tolerance and susceptibility to infections

Claudio Procaccini (Italy)

Therapeutic targeting inflammation-New insights on an old target

Siquang Sun (USA)

16.00-16.30 **Break**

Tuesday, June 7th 2022 - Afternoon Sessions

16.30-18.30 SESSION ORAL COMMUNICATIONS

Orange Room

NEW ADVANCES IN RESPIRATORY DISEASES AND INFECTIONS

Chair: *Rosalinda Sorrentino (Italy)*

Evaluation of the ability of human neutrophils to detect cutibacterium acnes in osteoarticular infections

Thoraval L. (France), Ferrari A., Varin-Simon J., Gangloff SC., Mongaret C., Reffuveille F., Velard F.

sMAdCAM:il-6 ratio influences disease progression and anti-viral responses in Sars-Cov-2 infection

Bhowmick S. (India), Kasarpalkar N., Bhor VM., Jagtap D., Sagvekar P., Kulkarni B., Pathak M., Chatterjee N., Dolas P., Palav H., Kaginkar S., Bhagat S., Munshi I., Parikh S., Agrawal S., Pawar C., Kaneria M., Mahale SD., Shastri J., Patel V.

Melatonin treatment immunomodulates inflammatory response against influenza a virus infection and decreases susceptibility upon secondary bacterial infection

Del Sarto JL. (Brazil), Mathias EM., Masemann D., Luciana LP., Goncalves AP., Alexandre VM., Börgeling Y., Ludwig S., Teixeira MM.

Microparticle fusion renders non-responsive cells susceptible to inflammatory signaling

Papareddy P. (Sweden)

Targeting the lung epithelial barrier to inhibit neutrophilic inflammation

Kricker JA., Ingthorsson S., Parnham MJ. (Iceland), Valdimarsdottir B., Joelsson JP., Sigurdsson S., Gardarsson FR., Page CP., Baldursson O., Lehmann F., Gudjonsson T.

Modeling of acute aspiration bronchopneumonia

Penskyi P. (Ukraine), Lytvynets M., Musiienko D., Ziablitsev S.

SNPs of bitter taste receptors as predictive marker of Asthma

Talmon M. (Italy), Mocchetti C., Fresu LG.

Synergic effect of the combined therapy montelukast-formoterol in experimental model of Asthma

Cerqua I. (Italy), Granato E., Muscarà M., Perissutti E., Santagata V., Fiorino F., Frecentese F., Cirino G., Petti A., Pavese R., Caliendo G., Severino B., Roviezzo F.

Vasorelaxations induced by nucleoside di- and tri-phosphates in pulmonary arteries derived from non-ph and ph patients

Abdelazeem H., Guyard A., Castier Y., Tran-Dinh A., Silverstein A., Longrois D., Norel X. (France)

16.30-18.30 SESSION ORAL COMMUNICATIONS

Tarragona Room

ADVANCES IN INFLAMMATION-RESOLUTION MECHANISMS IN HEALTH AND DISEASE

Chair: *Michela Campolo (Italy), Massimo Collino (Italy)*

Targeting Adenosine Receptor by Polydeoxyribonucleotide: An Effective Therapeutic Strategy to Induce White-to-Brown Adipose Differentiation and to Curb Obesity

Mannino F., Pallio G., Altavilla D., Minutoli L., Squadrito F., Bitto A., Irrera N. (Italy)

Tolerogenic education of inflammatory cDC2 via activation of tryptophan metabolism in mature cDC1

Gargaro M. (Italy), Scalisi G., Manni G., Mencarelli G., Ricciuti D., Pieroni B., Briseño C., Kim S., Servillo G., Giacchè N., Colliva C., Pellicciari R., Colonna M., Murphy KM., Fallarino F.

Sugar-induced metaflammation: a comparative analysis between dietary fructose and galactose and protective effects evoked by prebiotic fructooligosaccharides in rats

Collotta D. (Italy), Almasri F., Murzio C., Aimaretti E., Aragno M., Mastrocola R., Frank J. Collino M.

Comparing the mode of action of a multicomponent medication Tr14 with single component diclofenac using the Atlas of Inflammation Resolution (AIR)

Hoch M. (Germany), Smita S., Cesnulevicius K., Schultz M., Lescheid D., Wolkenhauer O., Gupta S.

Itaconic acid inhibits formation of neutrophil extracellular traps (NETs)

Burczyk G., Cichon I., Kolaczowska E. (Poland)

STE20 kinases in regulation of liver meta-inflammation

Mahlapuu M. (Sweden), Kurhe Y., Caputo M., Cansby E., Xia Y., Kumari S., Anand S., Howell B., Marschall H.

Metabolite signatures can define disease, response to glucocorticoid treatment and fatigue in patients with PMR

Manning JE. (United Kingdom), Harris E., Mathieson H., Sorensen L., Luqmani R., Mcgettrick HM., Morgan A., Young SP., Mackie SL.

Resolution of inflammation versus proinflammatory status in human acute heart failure and cardiogenic shock

Reina-Couto M. (Portugal), Silva-Pereira C., Pereira-Terra P., Quelhas-Santos J., Serrão P., Afonso J., Martins S., Pinho D., Roncon-Albuquerque R., Artur Paiva J., Albino-Teixeira A., Sousa T.

Glia-dependent changes along the gut-brain axis are linked to anxiogenic and depressive-like behaviors in mice on a high-fat diet

Seguella L. (Italy), Corpetti C., Del Re A., Palenca I., Pesce M., Sarnelli G., Gulbransen B., Esposito G.

16.30-18.30 SESSION ORAL COMMUNICATIONS

Cesarea Room

NEW PERSPECTIVES IN THE PATHOPHYSIOLOGY OF GASTROINTESTINAL DISORDERS

Chairs: *Luca Antonioli (Italy), Gyorgy Haskó (USA)*

The role of glucocorticoid-induced leucine zipper (GILZ) in liver fibrosis: suppression of leukocyte recruitment via the CCR2-CCL2 pathway

Febo M. (Italy), Paglialunga M., Viana De Barros Z., Iannello V., Riccardi C., Migliorati G., Bruscoli S., Bereshchenko O.

Neutralization of nicotinamide phosphoribosyltransferase (eNAMPT) ameliorates experimental colitis: possible intervention on macrophage plasticity

Colombo G. (Italy), Genazzani A., Porta Chiara C., Travelli C.



A new co-micronized compound of ultramicronized-Palmitoylethanolamide and Polydatin protects against inflammatory bowel disease through SIRT1/Nrf2 and NF- κ B pathway

Peritore A.F. (Italy), D'Amico R., Siracusa R., Di Paola R., Cuzzocrea S., Impellizzeri D.

Iron Regulatory Protein 1 Plays a Key Role in the Development of Inflammatory Bowel Disease

Fahoum L. (Israel), Moshe Belizowsky S., Meyron-holtz E.

A case of mesenteric panniculitis presenting with recurrent atypical pain

Sekerci A. (Turkey)

Intestinal wound healing delay inflammatory bowel diseases, involvement of epithelial elastase-2

Demeurs M. (France), Rolland C., Edir A., Seguy C., Rousset P., Portier G., Vergnolle N., Deraison C.

eNAMPT as a pro-inflammatory cytokine in autoimmune gastritis

Fagiani F. (Italy), Colombo G., Voltan D., Pasini A., Lenti M., Di Sabatino A.

Chymotrypsin activity signals to intestinal epithelial cells

Guignard S. (France), Sagnat D., Rolland C., Saifeddine M., Mihara K., Ambli M., Sebbag M., Deraison C., Hollenberg M., Vergnolle N., Bonnart C.

Enteric alpha-synuclein impairs intestinal epithelial barrier through inflammasome signalling activation in prodromal stages of Parkinson's disease

Pellegrini C. (Italy), D'Antongiovanni V., Antonioli L., Benvenuti L., Miraglia F., Rota L., Di Salvo C., Testa G., Capsoni S., Carta G., Cattaneo A., Colla E., Blandizzi C., Fornai M.

The role of SCFAs on microbiota composition in a mouse model of NTG-induced

Lanza M. (Italy), Filippone A., Casili G., Scuderi S., Paterniti I., Campolo M., Cuzzocrea S., Esposito E.

Tuesday, June 7th 2022

18.30-19.30 POSTER SESSIONS

Synthetic liver-X receptor ligands attenuate oxysterol induced inflammation in placental endothelial cells in gestational diabetes mellitus

George M. (Austria), Lang M., Babalola J., Gali CC., Amersdorfer CT., Stracke A., Wadsack C.

Metabolic-cognitive syndrome and its correction in experiment

Petrenko V., Fomochkina I., Shevandova A., Kubishkin A. (Russia)

Study of morphological changes in the liver and intestine during experimental metabolic syndrome in rats

Petrenko V., Shevandova A., Sayenko Yu., Khalilova A., Kubishkin A., Fomochkina I. (Russia)

An *in vivo* study on the effects of BRD4 pharmacological targeting against diet-induced metaflammation

Porchietto E. (Italy), Fornelli C., Mastrocola R., Ferreira Alves G., Aimaretti E., Einaudi G., Murzio C., Collotta D., Aragno M., Cifani C., Penna F., Collino M.

Beneficial effects of the pharmacological modulation of metaflammation by etodolac in an *in-vivo* model of diet-induced metabolic derangements

Einaudi G. (Italy), Ferreira Alves G., Collotta D., Bertinaria M., Aimaretti E., Fornelli C., Mastrocola R., Cifani C., Aragno M., Penna F., Collino M.

Adiponectin and leptin genes polymorphisms' synthropic responsibility for the metabolic syndrome development

Kubishkin KA. (Russia), Shramko SI., Ageeva EA., Maliy K., Repinskaya I., Tarimov C., Fomochkina I., Gurtovaya A., Shekhar S.

Molecular diagnostic of the metabolic syndrome and its correction with grape polyphenols and azilsartan in experimental study

Petrenko V., Kubishkin A. (Russia), Fomochkina I., Shevandova A., Shramko Y., Sorokina L.

Investigating the metabolic plasticity of inflammatory neutrophils

Arienti S. (United Kingdom), Coelho P., Sadiku P., Willson J., Dockrell D., Whyte M., Rossi A., Walmsley S.

Calcium supplementation improves muscle function and irisin in mice

Ficarra G. (Italy), Lauro R., Giorgi D., Irrera N., Di Mauro D., Trimarchi F., Bitto A.

Maternal malnutrition during pregnancy increases susceptibility to infections in adult offspring by compromising the phagocytic activity of alveolar macrophages

Azevedo G., Negreiros N., Gil NL., Balbino AM., Silva MM., Landgraf MA., Landgraf RG. (Brazil)

Antioxidant and anti-inflammatory effect of lycopene to be used for the treatment of osteoporosis

Gasparo I. (Italy), Mannino F., Irrera N., Bitto A.

Nuclear receptors mediating inflammation and vascular function in endothelial cells in Gestational Diabetes Mellitus

George M. (Austria), Lang M., Tam-Amersdorfer C., Passegger C., Strobl H., Wadsack C.

Biochemical and molecular evaluations of the protective effect of cashew nuts (*Anacardium occidentale* L.) on multi-organ damage induced by hyperhomocysteinemia

Impellizzeri D. (Italy), Siracusa R., Cordaro M., Fusco R., D' Amico R., Mandalari G., Di Paola R., Cuzzocrea S.

Adenosine (a metabokine) based targeting of macrophages during *Klebsiella pneumoniae* B5055 induced acute lung infection

Kumar V. (India), Chhibber S.

Intrauterine food restriction prejudices the lipogenic pathway, in mesenteric adipocytes from adulthood rats

Andreotti S., Komino AC., Silva FF., Gil NL., Azevedo GA., Reis GB., Sertié RL., Lima FB., Landgraf RG., Landgraf MA. (Brazil)

Melatonin administration after irisin silencing affects adipose tissue metabolic and inflammatory pathways

Lauro R. (Italy), Ficarra G., Mannino F., Irrera N., Bitto A.

The invertebrate *ciona robusta* as a model for studying inflammatory mechanisms

Liberti A. (Italy), Pollastro C., Marino R., Spagnuolo A., Sordino P.

Elucidating the role of endothelial galectins in leukocyte trafficking

Lightfoot A. (United Kingdom), Joeh E., Krautter F., Huang M., Mcgettrick HM., Iqbal AJ.

The mechanisms involved in differential responses and outcomes of identical mice to sepsis

Martelossi Cebinelli G. (Brazil), Barbim Donate P., Nascimento D., Alves Damasceno LE., Curto Tavares A., Mattar Cunha T., Alves Filho JC., Queiroz Cunha F.

Molecular diagnostic of the metabolic syndrome and its correction with grape polyphenols and azilsartan in experimental study

Petrenko V., Fomochkina I., Shevandova A., Korienko N., Kubishkin A. (Russia)

Morning plasma cortisol and circulating inflammatory cytokine levels: a mendelian randomisation study

Rajasundaram S. (United Kingdom), Rahman R.P., Woolf B., Zhao S.S., Gill D.

Mechanisms involved in the effects of linoleic fatty acid on wound healing in diabetic mice: focus on the inflammatory response

Fernandes J. (Brazil), Sagioratto R., Burger B., Robles T., Rodrigues H.

The Regulation of the RNA-binding protein IMP2 in macrophage activation

Schymik H. (Germany), Dahlem C., Kiemer A.

Modification of azithromycin for the synthesis of sca donors, covalently linked macrolide conjugates and non-antibiotic immunomodulators

Straß S. (Germany), Fischer T., Geiselhart N., Schwamborn A., Laux J., Guse J., Burnet M.

Activation of reactive oxygen species generation systems upon contact of blood with hemosorbents

Sviridov E. (Russia), Sorokin D., Burkova N., Kuznetsov S.

Inhibition of PI3K δ and mTOR enhances irinotecan-associated intestinal mucositis

Lopes MH., Nobre LM., Cajado AG., Carvalho LL., Pereira AF., Cesario FR., Silva JM., Bandeira AM., Alves AP., Lima-Júnior RC., Wong DV. (Brazil)

Effects of Biomechanical force on cells derived from oral mucosa

Yamamoto T. (Japan), Adachi T., Adachi K., Asai T., Naito K., Oseko F., Kanamura N.

Chronic, low-grade inflammation triggers tryptophan metabolism in an experimental model of obesity

Mondanelli G. (Italy), Panfili E., Volpi C., Pallotta MT., Orabona C.

Role of sterol element binding protein 1C (SREBP1c) at the crossroad between Tregulatory cell's function and fatty acid metabolism

Bonacina F. (Italy), Procaccini C., Audano M., Pedretti S., Fraire S., Catapano AL., Mitro N., Matarese G., Norata GD.

Baricitinib counteracts metaflammation thus protecting against diet-induced metabolic abnormalities in mice

Collotta D. (Italy), Hull W., Mastrocola R., Chiazza F., Cento AS., Murphy C., Verta R., Ferreira Alves G., Gaudioso G., Fava F., Aragno M., Tuohy K., Thiemermann C., Collino M.

The lysine deacetylase HDAC7 is a molecular switch controlling macrophage metabolism and inflammation

Sweet MJ. (Australia)



***In-vitro* validation of a fixed combination of serenoa repens and urtica dioica for the therapy of benign prostatic hyperplasia (BPH)**

Giacomini I. (Italy), Saponaro M., Cocetta V., Morandin G., Carnevali I., Berretta M., Orso G., Ragazzi E., Montopoli M.

The effect of anti-inflammatory drugs on the neutrophils extracellular traps formation

Kazimirskii AN. (Russia), Salmasi JM., Poryadin GV., Kukes IV.

Mechanisms of post-covid inflammation

Kazimirskii AN. (Russia), Salmasi JM., Poryadin GV.

A synthetic peptide designed to neutralise lipopolysaccharides attenuates metaflammation and diet-induced metabolic derangements in mice

Mohammad S. (United Kingdom), Zoubi SA., Collotta D., Krieg N., Wissuwa B., Alves G., Purvis GS., Norata GD., Baragetti A., Catapano AL., Solito E., Zechendorf E., Schürholz T., Vargas WC., Brandenburg K., Coldewey M., Collino M., Yaqoob MM., Martin L., Thiemeermann C.

SIP concentration is increased in serum from CFTR-F508del patients regardless of inflammatory status

Sergheraert J. (France), Jourdain M-L., Guillaume C., Braux J., Mauprivez C., Hubert D., Audonnet S., Gangloff SC., Jacquot J., Velard F.

Investigating Novel Targets for Modulating Neutrophil and Macrophage Activity in Models of Acute and Chronic Inflammation

Fernando AJ. (United Kingdom), Mansell A., Lucas C., Dorward D., Murphy C., Dhaliwal K., Rossi A.

The role of ionotropic glutamate receptor NMDAR ON $\alpha\beta$ T cells from mouse intestinal mucosa

Garcia De Oliveira M. (Brazil), Tardelli Andreoni R., Ghabdan Zanluqui N., Manganeli Polonio C., Gomes De Oliveira L., De Faria L., Francisco T., De Souza AY., Hyppolito B., Da Silva P., Machado Rezende R., Schatzmann Peron J.

Depression Exacerbates Dextran Sulfate Sodium-Induced Colitis via IRF5-Mediated Macrophage Polarization Toward the M1 Phenotype

Chang L. (China), Yan ZY.

Indoxyl Sulfate affects intestinal homeostasis and immune response in mice regulating inflammatory response and oxidative stress

Magliocca G. (Italy), Rapa SF., Popolo A., Iovane V., Paciello O., Di Iorio BR., Autore G., Nishijima F., Marzocco S.

Clues For Dysbiosis in IBD: Pro-inflammatory Role of Epithelial Thrombin On Gut Microbiota Biofilms

Meunier E. (France), Le Cosquer GC., Deraison C., Vergnolle N., Motta JP.

Issues of correction of intestinal microbiocenosis in different aspects of treatment of liver oncological diseases

Sorokina L., Kubyshkin A. (Russia), Fomochkina I., Gorbunov A., Regan O., Rebik A.

Design and application of novel intracellular delivered macrolide short chain fatty acid derivatives

Straß S. (Germany), Schwamborn A., Geiselhart N., Fischer T., Dengler M. Burnet M.

NLRC4 inflammasome-mediated regulation of eosinophilic functions

Akkaya I., Oylumlu E., Ozel I., Uzel G., Durmus L., Ciraci C. (Turkey)

Acute intravascular hemolysis induces caspase-1 activity, S100A8 release and cytokine generation *in vivo*

Brito PL. (Brazil), Gotardo EMFA., Costa Leonardo F., Costa FF., Conran N.

Safety profile of drugs used in non-small-cell lung cancer: an analysis from the italian pharmacovigilance database

Barbieri MA. (Italy), Sorbara EE., Cicala G., Santoro V., Cutroneo PM., Franchina T.

A soluble activator that favors the *ex vivo* expansion of CD8+CD27+ T Cells

Matus E. (Canada), Sparkes A., Gariépy J.

Contribution of ascitic extracellular vesicles to inflammation: a pilot study in ovarian cancer

Ravegnini G. (Italy), Gorini F., Dondi G., Perrone AM., De Iaco P., Angelini S., Hrelia P.

Nucleated fish erythrocyte extracellular traps (FEETs) release is an evolutionary conserved immune defence process

Rinaldi G. (Scotland), Robb CT., Rossi AG.

Insights into indoleamine 2,3-dioxygenase 1 non-enzymic function in human cancer

Rossini S. (Italy), Suvieri C., Mondanelli G., Pallotta MT., Grohmann U.

Evaluation of a CD200R antibody with agonistic activity

Scott EM. (United Kingdom), Matthews MF., Bullers SJ., Jackson-Wood M., Wood O., Paluch C., Cornall RJ., Davis SJ., Murray LA.

Extrusion of apoptotic cells limits epithelial inflammation

Duszyc K. (Australia), Von Pein J., Ramnath D., Hall T., Sweet M., Schroder K., Yap A.

Evidence for a novel prognostic-value of IDO2 in non-small cell lung cancer patients
Suvieri C. (Italy), Mandarano M., Bellezza G., Rossini S., Carvalho A., Grohmann U., Volpi C.

Auraptene-induced cytotoxicity mechanisms in human malignant glioblastoma (U87) cells: role of reactive oxygen species (ROS)
Afshari A. (Iran)

Immunomodulatory effect of fluvoxamine during sepsis
Angenendt da Costa LH. (Brazil), Trajano IP., Branco LG.

Adverse drug reactions with drugs used in multiple sclerosis: an analysis from the Italian pharmacovigilance database
Barbieri MA. (Italy), Sorbara EE., Battaglia A., Cicala G., Rizzo V., Spina E., Cutroneo PM.

Effect of SUN11602, a BFGF mimetic, in an *in vivo* model of traumatic brain injury
Bova V. (Italy), Ardizzone A., Casili G., Cucinotta L., Campolo M., Cuzzocrea S., Esposito E.

Effect of BAY-117082, a NLRP3 inflammasome inhibitor, in a mouse model of nitroglycerin (NTG)-induced migraine
Campolo M. (Italy), Scuderi SA., Filippone A., Lanza M., Casili G., Paterniti I., Cuzzocrea S., Esposito E.

Mitochondrial dysfunctions induced by inflammatory milieu in hypothalamic POMC neurons
Liao Y., Lim Y., Chu P., Chen S. (Taiwan)

Effects of pentoxifylline and hypertonic saline on the SH-SY5Y cells in HYPOXIA
Yu WS., Choi SH. (Republic of Korea), Park SJ., Kim KH., Park CY.

Investigation of memory loss cases in SARS-COV-2 infection: an ionic imbalance link
Da Silva P. (Brazil), Peron JPS.

Sulfavant A: a novel modulator of microglia activity
Franco A. (Italy), Gallo C., Manzo E., Verrillo L., Miano MG., Fontana A., Canzoniero LM.

CAPE, 6-MSITC and PQM130 are all able to reduce neuroinflammation and cognitive decline in a mouse model of AD. Is Alzheimer's Disease triggered by neuroinflammation?
Graziosi A. (Italy)

Ellagic and puniceic acids extracted from *Punica granata* reduce inflammation in an *in vitro* model of excitotoxicity
Imbesi C. (Italy), Mannino F., Irrera N., Bitto A.

K.RAS as a new pharmacological target for the treatment of glioblastoma progression
Mannino D. (Italy), Filippone A., Basilotta R., Campolo M., Esposito E.

A vegetal mixture composed by *Zingiber officinale*, *Echinacea purpurea* and *Centella asiatica* against neuroinflammation evoked by LPS in MICE

Micheli L. (Italy), Lucarini E., Toti A., Ferrara V., Olivero G., Pittaluga A., Di Cesare Mannelli L., Ghelardini C.

Inhibition of microglia over-activation improves brain development and behavior in a mouse model of CDKL5 deficiency disorder

Mottolese N. (Italy), Tassinari M., Galvani G., Loi M., Medici G., Candini G., Ferrara D., Trazzi S., Ciani E.

Neuroimmune activation of the olfactory bulb is regulated by time of day

Pearson G. (USA), Falcy B., Wang J., Akli S., Karatsoreos I.

Sphingosine-1-phosphate receptors and glutamate release in mice cortical nerve endings and glial particles

Roggeri A. (Italy), Cisani F., Vallarino G., Usai C., Pittaluga A.

The PPAR α agonist fenofibrate reduces proinflammatory chemokines levels in a maternal immune activation model of schizophrenia

Santoni M. (Italy), Mostallino R., Castelli MP., Pistis M.

A retrospective analysis of 25 patients with neuroinflammation of the brain, its impact on brain plasticity and current evidence-based management

Gupta A. (United States)

GSK343, an inhibitor of histone methyltransferase enhancer of zeste homolog 2(EZH2), reduces glioblastoma progression

Scuderi SA. (Italy), Lanza M., Bova V., Paterniti I., Esposito E.

Optogenetic and pharmacological approaches to improve cognitive functions in experiment

Shevandova A., Petrosyan T., Petrenko V., Kubyshkin A. (Russia), Oleinik V., Fomochkina I., Sorokina L.

Impact of the oral administration of ellagic acid microdispersion in aged brain

Vallarino G. (Italy), Cisani F., Roggeri A., Olivero G., Turrini F., Boggia R., Pittaluga A.

The effect of carbacetam on the condition of hypothalamic tissues in experimental traumatic brain injury

Ziablitsev SV. (Ukraine) Panova TI., Starodubska OO., Ziablitsev DS., Khudolya SO.

Targeting the miRNA-155/TNFSF10 network restrains inflammatory response in the retina in a mouse model of Alzheimer's disease

Burgaletto C. (Italy), Platania CBM., Di Benedetto G., Munafò A., Giurdanella G., Federico C., Caltabiano R., Saccone S., Conti F., Bernardini R., Bucolo C., Cantarella G.



Astrocyte pro-inflammatory activation by atp mediates via P2 different types

Ivanova A., Gorbacheva L. (Russia)

AMBRA1 and LC3B stimulation by ellagic and punicic acids promote mitophagy and autophagy following kainic acid induced excitotoxicity in neuronal cells

Mannino F. (Italy), Imbesi C., Irrera N., Pallio G., Altavilla D., Squadrito F., Bitto A.

An investigation of the HIV Tat C31S and R57S mutation on peripheral immune marker levels in South African participants: a pilot study

Williams ME. (South Africa) Ruhanya V., Paul RH., Ipser JC., Stein DJ., Joska JA., Naudé PJ.

Comparative analysis of changes in lysozyme activity in acute pain of different genesis

Ovsyannikov VG., Alekseev VV., Toropkina JE., Alekseeva NS. (Russia), Alekseeva NA., Boichenko AE.

Spinal cord stimulation acts on inflammatory state and improves quality of life of patients with chronic pain

D' Agnelli S. (Italy), Amodeo G., Bellini V., Baciarello M., Verduci B., Sacerdote P., Bignami EG.

SIRT1 modulation during acute inflammatory pain: the role of ROS

Ilari S. (Italy), Lauro F., Giancotti LA., Dagostino C., Malafoglia V., Gliozzi M., Tafani M., Palma E., Tomino C., Salvemini D., Mollace V., Muscoli C.,

Hydroxytyrosol treatment ameliorates reserpine-induced fibromyalgia: evaluation of pain, oxidative stress and inflammation

Di Paola RP. (Italy), Ontario M., Fusco R., Scuto M., Trovato A., Calabrese V., Cuzzocrea S.

Activity of Pertuzumab Administration on a Rodent Model of Endometriosis

Genovese T. (Italy), Fusco R., Cuzzocrea S., Di Paola R.

Carbonic anhydrase IV selective inhibitors counteract the development of colitis-associated visceral pain in rats

Lucarini E. (Italy), Nocentini A., Bonardi A., Chiaramonte N., Micheli L., Parisio C., Toti A., Ferrara V., Ciampi C., Margiotta F., Carrino D., Pacini A., Romanelli MN., Supuran CT., Ghelardini C., Di Cesare Mannelli L.

Neuroinflammation in osteoarthritis pain in adult and old mice: effect of morphine treatment

Verduci B. (Italy), Amodeo G., Franchi S., D'Agelli S., Bignami EG., Sacerdote P.

N-palmitoylethanolamine counteracts neuroinflammation driven by morphine in a preclinical model of persistent pain

Micheli L. (Italy), Lucarini E., Toti A., Ferrara V., Ciampi C., Margiotta F., Di Cesare Mannelli L., Ghelardini C.

The anti-proliferative and pro-apoptotic effect of genistein in BRAFV600E wild-type melanoma cells are mediated by egfr down-regulation

Bauso LV. (Italy), Cali G., Gasparo I., Mannino F., Bitto A., Irrera N.

Effects of oleic and linoleic acids in cytokines production by dendritic cells

Burger B. (Brazil), Sagiorato R., Silva J., Ramos N., Rodrigues H.

Effect of melatonin in an *in vitro* model of psoriasis using reconstructed human epidermis

Cucinotta L. (Italy), Scuderi S., Mannino D., Paterniti I., Esposito E.

MIR-146A modulates TLR1/2 and 4 induced inflammation and links it with proliferation and lipid production via the indirect regulation of GNG7 in human SZ95 sebocytes

Dull K. (Hungary), Poliska SZ., Fazekas F., Deak D., Kovacs D., Szegedi A., Zouboulis CC., Torocsik D.

Association of HDL particle subfractions and psoriasis: results from the brazilian longitudinal study of adults health (ELSA-BRASIL)

Meneghini V. (Brazil), Tebar WR., Janovsky CC., Lotufo PA., Bensenor IM.

Association between C-reactive protein and glyca inflammation biomarkers with lipid profile in adults with and without psoriasis

Tebar WR. (Brazil), Meneghini V., Lotufo PA., Santos IS., Bensenor IM.

Biochemical Evaluations of the protective effects of *Helix aspersa muller* snail secretion filtrate in a mouse model of excisional wound

D' Amico R. (Italy), Gugliandolo E., Crupi R., Di Paola R., Cuzzocrea S.

***In vitro* validation of the traditional use of *Hamamelis virginiana* L. against skin inflammation**

Piazza S. (Italy), Martinelly G., Magnavacca A., Fumagalli M., Terno M., Canilli L., Dell' Agli M., Sangiovanni E.

CMT4 is a subunit of the il-17 receptor mediating autoimmune pathology

Pribikova M. (Czech Republic), Draber P.

TBK1 and IKK ϵ kinases are negative regulators of il-17-mediated signaling

Semberova T. (Czech Republic), Draber P.



Wednesday, June 8th 2022 - Morning Sessions

Orange Room

09.00-10.30 NEW REGULATORY MODE OF INNATE IMMUNITY

Chairs: *Kenji Kabashima (Japan), Tetsuya Taga (Japan)*

Immune cell behavior and functions in the neurological recovery

Minako Ito (Japan)

Pathogenesis of atopic dermatitis in terms of innate and acquired immunity

Kenji Kabashima (Japan)

Towards understanding the mechanism of fibrosis onset

Takashi Satoh (Japan)

The liver-brain-gut neural arc in the homeostasis of the gut

Takanori Kanai (Japan)

Wednesday, June 8th 2022 - Morning Sessions
Tarragona Room

**9.00-10.30 NEW PRECISION PATHWAY OR EVIDENCE BASED
MEDICINE CRISIS**

Chairs: Nikita V. Lomakin (Russia) - Liudmila I. Buryachkovskaya (Russia)

New approaches of anti-inflammatory strategy in COVID-19 patients

Kirill Zykov (Russia)

Supporting frontline clinicians in the time of the pandemic: rapid response pharmacology team

Dmitriy Sychoy (Russia)

Blood cells visualization as a cornerstone of risk stratification and therapeutic approaches in Coronavirus patients Nikita V. Lomakin (Russia)

Nikita V. Lomakin (Russia)

Inflammation and cancer progression: are there perspectives for target therapy?

Anatoly Kubishkin (Russia)



Wednesday, June 8th 2022 - Morning Sessions

Cesarea Room

9.00-10.30 **MICROBIOTA AND INFLAMMATION: MECHANISMS AND POTENTIAL TREATMENTS**

Chairs: *Celine Deraison (France), Nathalie Vergnolle (France)*

Biofilms in health and chronic inflammation of the Gut

Jean-Paul Motta (France)

Modulation of intestinal immune responses by eubiotic or dysbiotic microbiota

Federica Facciotti (Italy)

The use of microbiota as vaccines against chronic inflammatory diseases

Benoit Chassaing (France)

Microbiota modulation in functional gastrointestinal disorders

Giovanni Barbara (Italy)

10.30-11.00 **Break**

Wednesday, June 8th 2022 - Morning Sessions

9.00-10.30 SESSION ORAL COMMUNICATIONS

Pola Room

PAIN 1

Chairs: *Emanuela Esposito (Italy), Livio Luongo (Italy)*

Dissecting the functional cross-talk between mu opioid receptor (MOR) and EphB1 receptor in neuronal cell models under basal conditions and following prolonged exposure to TNF-ALPHA

Bedini A. (Italy), Spampinato S.

The role of prokineticin system in chemotherapy-induced neuropathy and mood alterations

Franchi S. (Italy), Amodeo G., Verduci B., Maftei D., Lattanzi R., Sacerdote P.

Phenotype of dorsal root ganglia macrophages in a model of arthritis pain

Oggero S. (United Kingdom), Zeboudj L., Dalli J., Perretti M., Malcangio M.

Intra-articular khellin loaded in ascosomes as a strategy against inflammatory articular disease: pain relieving and protective effects in rat osteoarthritis

Micheli L. (Italy), Di Cesare Mannelli L., Cinci L., Vanti G., Bilia AR., Toti A., Lucarini E., Parisio C., Ferrara V., Ghelardini C.

Hydroxytyrosol protects against Cyclophosphamide-Induced Hemorrhagic Cystitis through Upregulation of Nrf2 Expression

Fusco R. (Italy), Ontario M., Scuto M., Trovato A., Impellizzeri D., Di Paola R., Calabrese V., Cuzzocrea S.



Wednesday, June 8th 2022 - Morning Sessions

11.00-12.00 SESSION ORAL COMMUNICATIONS

Orange Room

PAIN 2

Chairs: *TBD*

Serotonergic modulation of MGLU2/3 autoreceptors in the spinal cord: a novel approach for the cure of neuropathic pain

Olivero G. (Italy), Cisani F., Roggeri A., Vallarino G., Usai C., Garrone B., Tongiani S., Di Giorgio FP., Pittaluga A.

Micronized N-palmitoyl-D-glucosamine and cyclophosphamide-induced cystitis - preliminary results

Gugliandolo E. (Italy), Crupi R., Peritore A., Di Paola R., Cuzzocrea S.

Neutrophil formyl peptide receptors (FPRs) as novel pharmacological targets for rheumatoid arthritis: preclinical assessment

Lucarini E. (Italy), Parisio C., Micheli L., Toti A., Ferrara V., Ciampi C., Margiotta F., Cinci L., Crocetti L., Vergelli C., Giovannoni MP., Di Cesare Mannelli L., Ghelardini C.

N-Palmitoyl-D-glucosamine, a natural monosaccharide-based glycolipid, inhibits TLR4 and prevents LPS-induced inflammation and neuropathic pain in mice

Iannotta M., Belardo C., Trotta MC., Iannotti FA., Vitale R., Maisto R., Boccella S., Infantino R., Ricciardi F., Mirto BF., Ferraraccio F., Panarese I., Amodio P., Tunisi L., Cristino L., D' Amico M., Di Marzo V., Luongo L., Maione S., Guida F. (Italy)

11.00-12.00 SESSION ORAL COMMUNICATIONS

Tarragona Room

CANCER AND IMMUNOTHERAPY

Chairs: *Cristina Travelli (Italy), Geert van Loo (Belgium)*

Inhibitory effects of growth hormone-releasing hormone antagonist MIA-690 on progression and growth of colorectal cancer in mice

Recinella L. (Italy), Leone S., Chiavaroli A., Veschi S., Di Valerio V., Lattanzio R., Orlando G., Ferrante C., Gesmundo I., Granata R., Cai R., Sha W., Schally AV., Brunetti L.

The cytokine eNAMPT regulates triple negative breast cancer progression by controlling T-cell suppressive phenotype

Travelli C. (Italy), Colombo G., Voltan D., Fagiani F., Sangaletti S., Genazzani AA.

Role of advanced glycation end products in evoking systemic chronic inflammation in adult Hodgkin lymphoma survivors

Aimaretti E. (Italy), Felicetti F., Dal Bello F., Cassader M., Einaudi G., Fagioli F., Aragno M., Collino M., Brignardello E.

Neutrophils and annexin A1 secretion: involvement in the melanoma metastasis

Sandri S. (Italy), Bichels Hebeda C., Fronza Broering M., De Paula Silva M., Facure Moredo L., Barros M., Molina A., Pedreira Duprat Neto J., Damas Gil C., Poliselli Farsky S.

Secondary synchronous diagnosis of multiple myeloma, systemic lupus erythematosus after breast cancer treatment: a case report

Chen PH. (Taiwan), Tung, Lin, Huang, Ni



11.00-12.00 SESSION ORAL COMMUNICATIONS

Cesarea Room

NEW THERAPEUTIC APPROACHES TO CONTROL INFLAMMATION

Chairs: *TBD*

ON104, a next-generation antibody targeting oxidized macrophage migration inhibitory factor (OXMIF), in experimental models of glomerulonephritis and rheumatoid arthritis

Landlinger CL. (Austria), Ferhat M., Rossmüller G., Predecki M., Tam F., Nicoletti FN., Schinagl AS., Thiele M.

Benchmarking and developing human pluripotent stem cell models of macrophage biology

Rajab N. (Australia), Angel PW., Butcher SK., Choi J., Wells CA.

Intramuscular exposure to ricin toxin leads to endothelial glycocalyx shedding and microcirculatory dysfunction

Sapozhnikov AS. (Israel), Gal Y., Evgy Y., Aftalion M., Katalan S., Sabo T., Kronman C., Falach R.

Agonistic nanobodies and antibodies to human vista

Sparkes A. (Canada), Ma YH., Saha S., Gariépy J.

Impact of CU²⁺ doping on the acute inflammatory response to ceramic biomaterials

Thoraval L., Thiébault E., Siboni R., Moniot A., Guillaume C., Jacobs A., Nedelec JM., Renaudin G., Descamps S., Marchat D., Gangloff SC., Braux J., Velard F. (France)

The cytokine enamppt regulates breast cancer migration and invasion

Voltan D. (Italy), Colombo G., Fagiani F., Racchi M., Lanni C., Travelli C.



Wednesday, June 8th 2022 - Morning Sessions

Plenary Room

12.00-13.00

Plenary Lecture

Chair: *Giorgio Racagni (Italy)*

Glucocorticoids and inflammation

Carlo Riccardi (Italy)

13.00

Closing Ceremony

CONGRESS VENUE

Hotel Ergife Palace
Via Aurelia, 619
00165 ROME - Italy
info@ergifepalacehotel.com
Tel: +39 06 66441

REGISTRATION FEES

Fee Types	Standard from December 21, 2021	Onsite
Delegates Registration	€ 750,00	€ 800,00
Delegates Day registration	€ 354,00	€ 354,00
Students Registration	€ 410,00	€ 410,00

Registration entitlements:

- Admission to all conference sessions 5-8 June 2022
- Morning tea and afternoon tea daily (excluding Sunday and Thursday)
- Approved Delegate materials
- Opening Ceremony and Welcome Reception held on 5 June 2022

COVID-19 FREE CONGRESS

All necessary precautions will be taken to ensure the health and safety of all Conference attendees and staff.

Access to the Congress Centre of Hotel Ergife Palace is regulated by the provisions of the law decree of 23 July 2021 in force from 6 August 2021 and will be allowed only to those who are in possession of a valid **COVID-19 Green Certificate** according to the legal provisions at the time of the event.

BY TRAIN

The Hotel Ergife is to be found 10 km from the Termini Station and is surely the best choice for those travelling by train. Inside the station take METRO line A direction Battistini. Get off at Cornelia. From Cornelia you can walk for approximately 800 meters along the Via Aurelia or you can take Bus No. 246 for two stops. From the bus stop the hotel is 10 minutes walking.

BY AIR

From the airport Leonardo da Vinci (Fiumicino) a direct train (Leonardo Express) leaves from the airport every 30 minutes and links Fiumicino to Rome Termini from early in the morning until 22.00. Once at Termini it is possible to take the METRO line A direction Battistini, Cornelia stop. From Cornelia take Bus No. 246 for only two stops.

BY CAR

At the motorway exit take Il Grande Raccordo Anulare towards Fiumicino. Exit No. 1 direction Aurelia-Città del Vaticano. Then turn left after about 3 km onto Via Lombardi.

CME ACCREDITATION (for Italian participants only)

The event will be submitted for accreditation by the Italian Ministry of Health. Adria Congrex Srl will act as the Organizing Secretariat.

To qualify for CME credits, participants are required to attend at least 90% of the accredited sessions. Attendance will be recorded at the beginning and end of the scientific sessions.

Participants also need to duly fill in their personal data together with the evaluation forms, and return them to the Organizing Secretariat at the end of the event. In case of incorrect, incomplete or incomprehensible information, participants will not receive any credits.



wci2022.org

Organizing Secretariat



Adria Congrex Srl

Via Sassonia, 30 - 47922 Rimini - Italy
Ph +39 0541 305873 - @ congress@wci2022.org

