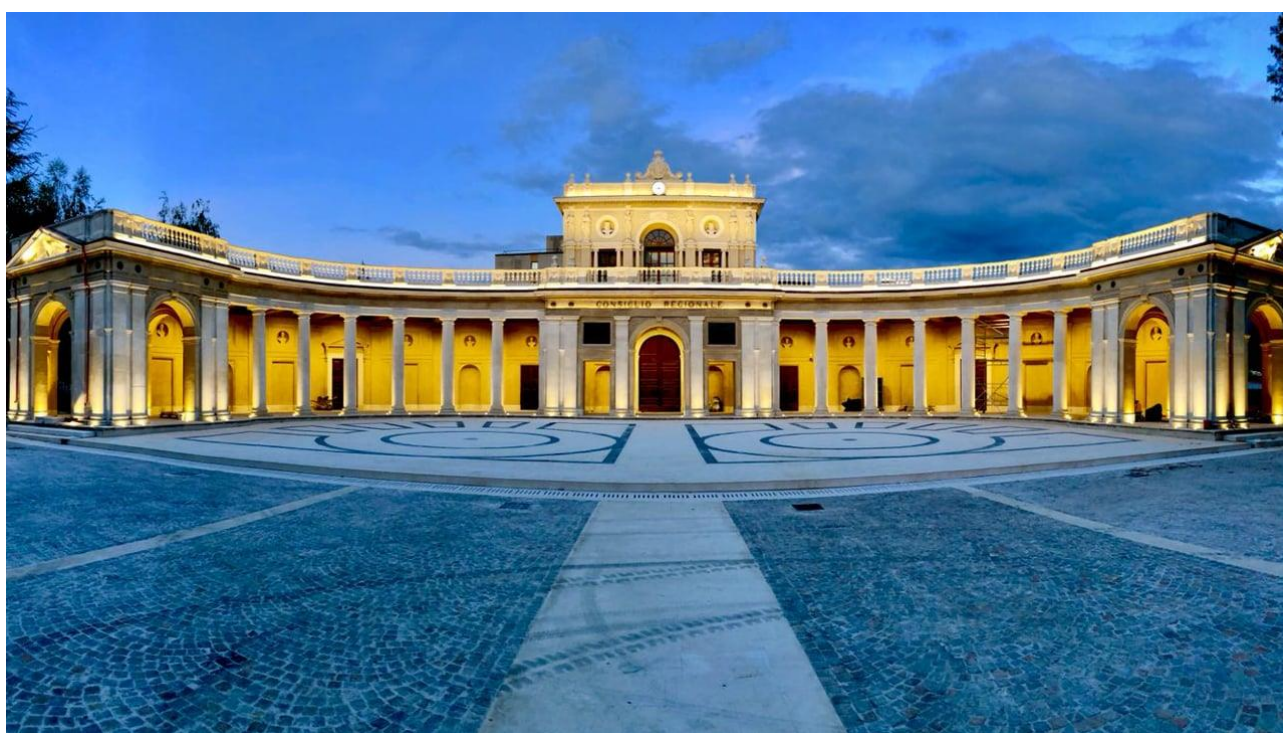




96° CONGRESSO NAZIONALE

25 - 28 Aprile 2024



Palazzo dell'Emiciclo

Via Michele Iacobucci, 4

L'Aquila

Informazioni:

<https://www.sibsperimentale.it/96-congresso-sibs-laquila-25-28-aprile-2024/>

CON IL PATROCINIO E IL CONTRIBUTO DI:



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Prof. GUIDO MACCHIARELLI

PRESIDENTESSA DEL CONGRESSO
Prof.ssa Maria Grazia Palmerini

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Stefano Burgio; Olga Maria Manna; Emiliana Minenna

DELEGATO SIBS-1925 ALLA FISV
Corrado Calì

JOURNAL OF BIOLOGICAL RESEARCH – EDITORS IN CHIEF
Gian Luigi Mariottini; Dragana Nikolic

Programma in sintesi

25 Aprile	26 Aprile	27 Aprile	28 Aprile
8:00 Assemblea dei soci (prima convocazione)	9:00 II Sessione “AGING”	9:00 VIII Sessione “NEUROSCIENZE”	9:00 Round Table “La SIBS verso il Centenario” presso il <u>Forte Spagnolo dell’Aquila</u>
	10:20 III Sessione “AMBIENTE E SALUTE”	10:05 IX Sessione “NUTRIZIONE”	
	12:20 Lettura “QUAGLIARIELLO”	10:50 X Sessione “ONCOLOGIA”	12:00 Conclusioni del Congresso e dei lavori
16:30 Registrazioni	15:00 IV Sessione “AMBIENTI ACQUATICI”	14:30 XI Sessione “STRESS CELLULARE”	
17:00 Avvio dei lavori	15:50 V Sessione “BIOLOGIA DELLA RIPRODUZIONE E INFERTILITÀ	15:50 XII Sessione “MISCELLANEA”	
17:15 Saluti delle Autorità	16:50 VI Sessione “MEDICINA RIGENERATIVA”	17:15 Assemblea dei Soci (Seconda convocazione)	
17:40 I Sessione “ANTROPOLOGIA	18:10 VII Sessione “MICRO- E NANOVESCICOLE”		
19:00 Conclusioni	19:00 Conclusioni	19:00 Conclusioni	

ITALIANO / INGLESE

La lingua ufficiale è l'italiano.

Tuttavia, se preferito, è consentito effettuare le proprie comunicazioni in lingua inglese.

RESPECT

È mandatorio il rispetto dei tempi assegnati.

Chi sforerà sarà interrotto dai Moderatori che hanno il dovere di assicurare la puntuale conclusione delle Sessioni.

OPEN COFFEE STATION

Sarà disponibile nelle giornate del 26 e del 27 aprile nelle vicinanze della sala del Convegno in orari che saranno comunicati dagli organizzatori ad inizio dei lavori

NUMERI

144 iscritti, 101 comunicazioni orali di cui 67 da ricercatori con meno di 35 anni. 23 premi in palio.

PREMI

Gli speaker che concorrono all'assegnazione dei premi sono contrassegnati dal simbolo (π) dopo il cognome. Il numero di premi da assegnarsi è indicato all'inizio di ogni sessione. I premi saranno proposti dai Moderatori di ciascuna Sessione al Presidente del Congresso e al Presidente della SIBS e assegnati da questi ultimi.

Tutti i premi consistono nell'iscrizione gratuita al Congresso del 2025.

LETTURA “GAETANO QUAGLIARIELLO”



La “Lettura Quagliariello” sarà tenuta dal **Prof. Mauro Piacentini** e avrà come titolo il seguente: << Meccanismi molecolari della necroptosi: il ruolo della Translutaminasi di tipo 2 >>

Mauro Piacentini è Professore ordinario di Biologia Cellulare e dello Sviluppo presso l'Università degli Studi di Roma “Tor Vergata” dal 2000. Dal 1998 è direttore del laboratorio di Biologia Cellulare e Microscopia Elettronica dell'Istituto Nazionale per le Malattie Infettive IRCCS “Lazzaro Spallanzani”. Dal 2018 è anche Presidente del Comitato Tecnico Sanitario del Ministero della Salute. È attivamente coinvolto in numerose collaborazioni scientifiche con rilevanti istituzioni internazionali (Karolinska in Svezia, Institute Gustave Roussy in Francia, Newcastle University in UK, Accademia delle Scienze in Russia, Università Federale di Sao Paulo in Brasile, Debrecen University in Ungheria).

È stato presidente dell'European Cell Death Organization (2002-2005). Le numerose proficue collaborazioni internazionali gli hanno permesso di ottenere nel 2007, fra gli altri, il massimo riconoscimento Europeo per la ricerca in collaborazione “Descart Award”. È uno dei fondatori e senior editor della rivista Cell Death and Differentiation (IF 12.4) ed è Editor-in Chief della rivista Cell Death and Disease (IF 9.0) entrambe pubblicate da Springer/Nature.

La produzione scientifica consta di oltre 370 articoli peer reviewed (H-index scopus: 83, con oltre 60.000 citazioni) pubblicati sulle più importanti riviste internazionali (Nature, Science, Nature Medicine, Nature Cell Biology, Journal of Experimental Medicine, PNAS, ecc).

Ha presentato numerose relazioni scientifiche su invito in importanti convegni nazionali ed internazionali (Gordon Conference, Nobel Conference, Philippe Laudat Conference, ECDO Conference ecc). Gli interessi scientifici sono stati focalizzati sullo studio dei meccanismi molecolari che regolano i fenomeni di morte cellulare e autofagia e il loro ruolo nella patogenesi del cancro (Head and Neck, Epatocarcinoma, Melanoma, Neuroblastoma) e delle malattie infettive (HIV, HCV, MTB). Ha ricevuto numerosi finanziamenti nazionali (AIRC, Telethon, Ministero Salute, Ministero dell'Università, CNR, Istituto Superiore di Sanità, Regione Lazio, Fondazione Fibrosi Cistica) ed internazionali (9 progetti Europei, Mega-Grant dall'Accademia delle Scienze Russe) per un totale superiore ai 10 milioni di euro.

LETTURA “MASSIMO COCCHI”



La “Lettura Cocchi” del Congresso di quest’anno sarà tenuta dalla Prof.ssa Anna Di Cosmo e avrà come titolo il seguente: << Invertebrate Welfare >>.

L’interesse e la passione per la Zoologia si sono manifestati precocemente durante gli studi universitari indirizzando non solo la formazione, ma anche gli interessi di ricerca e le scelte lavorative di Anna Di Cosmo. Laureata in Scienze Biologiche cum laude con una tesi in Zoologia, presso l’Università degli Studi di Napoli “Federico II. Nella prima fase della sua attività scientifica si è occupata dei meccanismi alla base della regolazione del comportamento osmoregolativo di molluschi gasteropodi., proseguendo con studi su diversi modelli animali quali molluschi, crostacei, rettili e mammiferi, e più recentemente collaborando a ricerche di etologia canina.

In qualità di ricercatore responsabile di un “tavolo di studio” ha frequentato la Stazione Zoologica di Napoli, Anton Dohrn, a partire dagli anni ‘80 dove ha continuato la sua formazione incontrando scienziati del calibro di John Zachary Young, Martin Wells e John Brian Messenger che a Napoli trascorsero lunghi periodi di ricerca dedicata allo studio dei molluschi cefalopodi, dando inizio ad una scuola napoletana di cui ben presto Anna Di Cosmo entrò a far parte, riprendendo ed estendendo le ricerche iniziate da Martin Wells sulle cause prossime alla base del comportamento riproduttivo di *Octopus vulgaris*, il polpo comune.

Affascinata da questi straordinari animali si è dedicata a studiare e chiarire, a vari livelli, i complessi comportamenti dei cefalopodi *Loligo vulgaris* (calamaro), *Sepia officinalis* (seppia) concentrando, negli ultimi anni, il suo interesse su *Octopus vulgaris*. La sua attività di ricerca è stata ed è indirizzata a comprendere ed approfondire i meccanismi alla base dell’evoluzione del comportamento animale. L’innovativo approccio neuro-eto/ecologico adottato, ha consentito ad Anna Di Cosmo di estendere il contesto ad un più ampio scenario, stabilendo legami causali tra lo stimolo sensoriale, i processi neurali coinvolti, il comportamento e le conseguenze a livello demografico e di comunità delle decisioni prese dai singoli individui.

Attualmente il suo interesse è volto a comprendere come geni selezionati contribuiscano alla regolazione delle dinamiche eto/ecologiche alla base delle strategie riproduttive, di predazione e di interazione con l’ambiente di animali marini, studiare l’influenza reciproca tra geni ed ambiente nel determinare lo sviluppo del comportamento con il fine ultimo quello della conservazione della biodiversità e delle problematiche relative alla convivenza dell’uomo con gli animali selvatici e domestici.

96° CONGRESSO DELLA SOCIETÀ ITALIANA DI BIOLOGIA SPERIMENTALE - SIBS 1925

L'Aquila, 25 – 28 aprile 2024

Palazzo dell'Emiciclo

PROGRAMMA DEI LAVORI

25 aprile 2024

16:30 Apertura della segreteria congressuale e registrazione degli iscritti

17:00 Apertura dei lavori congressuali

17.15 Saluti delle Autorità

17:40 I SESSIONE: ANTROPOLOGIA

Si assegna n° 1 premio

Moderatori: Maria Grazia Bridelli; Emma Rabino Massa; Luca Ventura

17:41 – 17:49 THE CLOSE RELATIONSHIP BETWEEN COMPARATIVE ANTHROPOLOGY AND URBAN BIODIVERSITY IN FORENSIC PRACTICE

Paolo BONIVENTO

RYSA srl – via E. Ferrari 16, 25030 RONCADELLE (BS)

17:51 – 17:59 WHAT CAN INFRARED SPECTROSCOPY (FTIR) TELL US ABOUT THE PRESERVATION STATE OF ANTHROPOLOGICAL REMAINS OF ARCHAEOLOGICAL INTEREST?

Maria Grazia BRIDELLI

Department of Mathematical, Physical and Computer Sciences, University of Parma, 43124, Parma, Italy

18:01 – 18:09 THE PRIMATOLOGICAL COLLECTION OF THE MUSEUM OF ANTHROPOLOGY OF TURIN: DENTAL MORPHOLOGY AND ITS INCIDENCE IN PERIODONTAL DISEASE

Alberto PELUSO, Emma RABINO MASSA

Museum of Anthropology, University of Turin

18:11 – 18:19 BRUCELLA LYMPHADENITIS IN THE BLESSED SANTE FROM MONTEFABBRI (1343-1394). ADVANCED MORPHOLOGICAL AND ANALYTICAL INVESTIGATION

Martina POLIDORI¹ (π), Cinzia MERCURIO¹, Lorenzo ARRIZZA², Maria Grazia PALMERINI², Antonio FORNACIARI³, Gino FORNACIARI⁴, Giancarlo MANDOLINI⁵, Luca VENTURA¹

¹U.O.C. Anatomia Patologica, Ospedale San Salvatore, L'Aquila; ²Centro di Microscopie, Università dell'Aquila; ³Divisione di Paleopatologia, Dipartimento di Ricerche Traslazionali e Nuove Tecnologie in Medicina e Chirurgia, University of Pisa; ⁴Accademia Maria Luisa di Borbone, Viareggio; ⁵Convento dei Frati Minori di Santa Maria delle Grazie, Fano.

18:21 – 18:29 EFFECTS OF URBAN VS. EXTRA-URBAN ENVIRONMENTS ON GROWTH AND PHYSICAL DEVELOPMENT: A STUDY ON A 11-YEARS-OLD PIEDMONT SAMPLE

Francesco SGUAIZER (π), Alessia MORONI, Margherita MICHELETTI CREMASCO

Department of Life Sciences and Systems Biology, University of Torino, Italy

18:31 – 18:39 THE “WHITE PLAGUE” IN THE MONASTERY OF THE CLARISE HERMITS IN FARA IN SABINA: PALEOPATHOLOGICAL AND METAGENOMIC ASPECTS

Mirko TRAVERSARI¹, Elisabetta CILLI², Federico BRUNO³, Alessia RISDONNA³, Enrico PETRELLA⁴, Gianandrea PASQUINELLI¹, Luca VENTURA⁵

¹Dipartimento di Scienze Mediche e Chirurgiche (DIMEC), Università di Bologna; ²Dipartimento di Beni Culturali (DBC), Università di Bologna; ³Radiologia Interventistica e Neuroradiologia, Ospedale San Salvatore, L'Aquila; ⁴U.O. di Radiologia Ospedale Morgagni-Pierantoni, Forlì; ⁵Anatomia Patologica, Ospedale San Salvatore, L'Aquila.

- 18:41 – 18:49 **CHOLELITHIASIS IN THE MUMMIES OF THE POOR CLARES HERMITS' MONASTERY OF FARA IN SABINA (17th CENTURY)**
Luca VENTURA¹, Federico BRUNO², Anna AVITABILE², Alessia RISDONNA², Irene FAENZA³, Enrico PETRELLA⁴, Gianandrea PASQUINELLI⁵, Mirko TRAVERSARI⁵
¹UOC Anatomia Patologica, Ospedale San Salvatore, L'Aquila; ²UOC Radiologia Interventistica e Neuroradiologia, Ospedale San Salvatore, L'Aquila; ³Dipartimento di Scienze Biomediche e Neuromotorie (DIBINEM), Università di Bologna; ⁴UO Radiologia Ospedale Morgagni-Pierantoni, Forlì; ⁵Dipartimento di Scienze Mediche e Chirurgiche (DIMEC), Università di Bologna.
- 18:50 – 19:00 **Conclusioni della prima giornata e informazioni di servizio sulla seconda**
 Francesco Cappello, Maria Grazia Palmerini

26 aprile 2024

8:45 Apertura della segreteria congressuale

8:55 **Avvio dei lavori**
 Francesco Cappello, Maria Grazia Palmerini

9:00 II SESSIONE: AGING

Si assegnano n° 3 premi

Moderatori: Margherita Maioli; Pier Giorgio Mastroberardino; Antonella Pantaleo

- 9:01 – 9:09 **EVALUATION OF THE REPARATIVE EFFECTS OF PROBIOTIC *STREPTOCOCCUS THERMOPHILUS* ON HYDROGEN PEROXIDE-INDUCED AGING IN HUMAN DERMAL FIBROBLASTS**
Francesca Rosaria AUGELLO (π), Serena ARTONE, Alessia CIAFARONE, Serena ALTAMURA, Valeria CIUMMO, Francesca LOMBARDI, Paola PALUMBO, Maria Grazia CIFONE, Benedetta CINQUE
 Department of Life, Health and Environmental Sciences, University of L'Aquila, L'Aquila (Italy).
- 9:11 – 9:14 **GENOTOXIC STRESS INDUCED BY MECHANICAL FORCE IN CELLULAR MODELS OF PARKINSON'S DISEASE**
Mariano CATANESI¹, Chiara MILANESE², Pier Giorgio MASTROBERARDINO^{1,2,3}
¹Department of Life, Health, and Environmental Sciences, University of L'Aquila, 67100 L'Aquila, Italy. ²IFOM-ETS, the AIRC Institute for Molecular Oncology, Via Adamello 16, 20139 Milano, Italy. ³Erasmus MC Rotterdam, 3015CN Rotterdam, The Netherlands.
- 9:16 – 9:24 **CACO-2/HT-29 CELL CO-CULTURE MIMICKING THE INTESTINAL BARRIER IS A TUNABLE MODEL FOR GUT AGING**
Elena DONETTI¹, Paola BENDINELLI¹, Anita FERRARETTO^{1,2}
¹Department of Biomedical Sciences for Health, University of Milan, Via Mangiagalli 31, 20133, Milan, Italy; ²Laboratory of Experimental Biochemistry & Molecular Biology, IRCCS Istituto Galeazzi-Sant'Ambrogio, Via Cristina Belgioioso 173 - 20157, Milan, Italy.
- 9:26 – 9:29 **MICROGRAVITY-INDUCED A-SYNUCLEIN AGGREGATION: UNRAVELING PATHWAYS, OXIDATIVE STRESS, AND LYSOSOMAL DYNAMICS IN NEUROBLASTOMA CELLS AND GBA-KO MODELS**
Mohammed Amine EL FAQIR¹ (π), Giuseppe URAS^{1,2}, Veronica LENTINI¹, Alessia MANCA¹, Nicola DEIANA¹, Antonella PANTALEO¹
¹Department of Biomedical Sciences, University of Sassari, Viale San Pietro 43/B, 07100 Sassari, Italy; ²Department of Clinical and Movement Neurosciences, Institute of Neurology, University of College London, London NW3 2PF, UK.
- 9:31 – 9:34 **LRRK2, A KINASE IMPLICATED IN CANCER AND NEURODEGENERATION, PARTICIPATES IN DNA REPAIR**
Stefania FARINA^{1,2} (π), Sander BARNHOORN¹, Cesar Ernesto PAYAN GOMEZ³, Simone Pigliacelli², Martina SETTE², Pier Giorgio MASTROBERARDINO^{1,2,4}

¹Department of Molecular Genetics, Erasmus Medical Center, Rotterdam; ²Dipartimento di Medicina Clinica, Sanità Pubblica, Scienze della Vita e dell'Ambiente, Università degli Studi dell'Aquila, L'Aquila; ³Universidad Nacional de Colombia, Bogotá; ⁴IFOM, Istituto Fondazione di Oncologia Molecolare ETS, Milano

- 9:36 – 9:39 **ANTI-AGING ACTIVITY OF CITRUS BERGAMIA EXTRACT IN HUMAN ERYTHROCYTES**
Alessia FLORAMO (π), Sara SPINELLI, Angela MARINO, Alessia REMIGANTE, Rossana MORABITO
Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy
- 9:41 – 9:49 **INVESTIGATING THE SYNERGISTIC EFFECTS OF FUNCTIONAL FOODS ON SARCOPENIA AND INFLAMMAGING: A PROMISING STRATEGY FOR PROMOTING HEALTHY AGING**
Noemi MARGUGLIO¹ (π), Sara BALDASSANO¹, Luigi DI ROSA¹, Denise PANZECA¹, Sonya VASTO^{1,2}
¹Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), University of Palermo, Palermo, Italy. ²Euro-Mediterranean Institutes of Science and Technology (IEMEST), Palermo, Italy.
- 9:51 – 9:54 **PROTECTIVE ROLE OF AÇAÏ BERRIES AGAINST AGE-RELATED OXIDATIVE STRESS IN HUMAN ERYTHROCYTES**
Teresina PELLEGRINO (π), Alessia REMIGANTE, Sara SPINELLI, Rossana MORABITO, Angela MARINO
Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy
- 9:56 – 10:04 **ELECTROSPUN NANOFIBERS AND NATURAL COMPOUNDS: A NEW DEVICE TO COUNTERACT SKIN AGING**
Diletta SERRA^{1,2} (π), Giuseppe GARRONI¹, Sara CRUCIANI¹ and Margherita MAIOLI^{1,3}
¹Department of Biomedical Sciences, University of Sassari, Viale San Pietro 43/B, 07100 Sassari, Italy. ²R&D Laboratory Center, InoCure s.r.o., Politických Vezíu 935/13, 110 00 Prague, Czech Republic. ³Center for Developmental Biology and Reprogramming-CEDEBIOR, Department of Biomedical Sciences, University of Sassari, Viale San Pietro 43/B, 07100 Sassari, Italy.
- 10:06 – 10:14 **AGING-RELATED OXIDATIVE STRESS AFFECTS KIR2.1 FUNCTION: PROTECTIVE ROLE OF MELATONIN**
Sara SPINELLI¹ (π), Alessia REMIGANTE¹, Silvia DOSSENA², Angela MARINO¹, Rossana MORABITO¹
¹Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy. ²Institute of Pharmacology and Toxicology, Paracelsus Medical University, Salzburg, Austria.
- 10:16 – 10:19 **ROLE OF NAD METABOLISM IN THE OVARIAN AGING: INSIGHTS FROM HUMAN GRANULOSA CELLS**
Teresa Vergara (π), Martina Placidi, Valeria Cordone, Giovanni Casoli, Andrea Bianchi, Stefano Falone, Giovanna Di Emidio, Carla Tatone
University of L'Aquila, Dept. of Life, Health and Environmental Science

10:20 **III SESSIONE: AMBIENTE E SALUTE**

Si assegnano n° 3 premi

Moderatori: Sara Baldassano; Elisabetta Benedetti; Carla Gentile

- 10:21 – 10:29 **COMPARISON BETWEEN CONVENTIONAL AND BIODEGRADABLE PLASTICS: EFFECTS OF NANO- AND MICROPLASTICS ON DEVELOPING ZEBRAFISH LARVAE**
Maria Denise AMICO^{1*}, Federica SCALIA^{1*}, Fabiano CAPPARUCCI², Carmelo IARIA², Lucia LONGHITANO³, Rosario BARONE¹, Alessandro PITRUZZELLA¹, Marianna

MARINO⁴, Antonietta SANTORO⁴, Francesca RAPPA¹, Francesco CAPPELLO^{1,5}, Antonella MARINO GAMMAZZA¹, Marta A. SZYCHLINSKA⁶.

¹Department of Biomedicine, Neuroscience and Advanced Diagnostics (BIND), University of Palermo, Italy; ²Department of Chemical, Biological, Pharmacological and Environmental Sciences, University of Messina, Italy; ³Department of Biomedical and Biotechnological Sciences, University of Catania, Catania, Italy; ⁴Department of Medicine, Surgery and Dentistry, "Scuola Medica Salernitana", University of Salerno, Italy; ⁵Euro-Mediterranean Institute of Science and Technology (IEMEST), Palermo, Italy; ⁶Department of Precision Medicine in Medical, Surgical and Critical Care (Me.Pre.C.C.), University of Palermo, Italy. *Equal contribution.

10:31 – 10:34 **UNVEILING NATURE'S HIDDEN ARSENAL: EVALUATION OF THE ANTIBACTERIAL POTENTIAL OF MICROALGAE AND CYANOBACTERIA EXTRACTS**

Matteo BANTI^a (π), Ilaria RESCI^b, Barbara TURCHI^{b,c}, Simona RAPPOSELLI^a, Paola NIERI^{a,d}, Filippo FRATINI^{b,c}, Clementina MANERA^{a,c,d}

^aDepartment of Pharmacy, University of Pisa, Via Bonanno, 6, 56126 Pisa, Italy;

^bDepartment of Veterinary Science, University of Pisa, Viale delle Piagge 2, Pisa, Italy;

^cInterdepartmental Research Center Nutrafood "Nutraceuticals and Food for Health", University of Pisa, Pisa, Italy; ^dInterdepartmental Center of Marine Pharmacology (MarinePHARMA), University of Pisa.

10:36 – 10:39 **DISTRIBUTION OF TERMITES (DICTYOPTERA, ISOPTERA) IN TRIESTE (FRIULI VENEZIA GIULIA, ITALY): THE STUDY OF THE SPREAD ON THE URBAN TERRITORY IN CORRELATION TO PEST CONTROL ACTIVITIES AND CLIMATE CHANGE**

Antonella DIGOGLIU¹ (π), Paolo BONIVENTO²

¹Università degli Studi di Sassari – Dipartimento di Biologia; ²RYSA srl – via E. Ferrari 16, 25030 RONCADELLE (BS)

10:41 – 10:49 **PHYTOCHEMICAL PROFILING AND INVESTIGATION OF FUNCTIONAL PROPERTIES IN SPONTANEOUSLY GROWN SICILIAN SUMAC (Rhus coriaria L.) FRUITS**

Lorenza LA ROSA¹, Enrico VIOLA², Giuseppe MANNINO³, Graziella SERIO¹, Giuliana GAROFALO², Rosario SCHICCHI², Luca SETTANNI², Raimondo GAGLIO², Carla GENTILE¹

¹Department of Biological, Chemical and Pharmaceutical Sciences and Technologies, University of Palermo, ²Department of Agricultural, Food and Forest Sciences, University of Palermo, ³Innovation Centre, Department of Life Sciences and Systems Biology, University of Turin.

10:51 – 10:59 **QUINOXYFEN 1995-2019 IS THE STORY'S END? EVALUATION OF ITS ADVERSE EFFECTS ON HEAD SIZE AND NERVOUS SYSTEM GENES INVOLVED IN SYNAPTIC MATURATION**

Annamaria IANNETTA¹ (π), Giovanni ANGELOZZI¹, Tommaso SILVESTRINI¹, Michele AMORENA¹, William GENTILE¹, Martina BOZZELLI², Marco MINACORI¹

¹Department of Bioscience and Agro-Food and Environmental Technology, University of Teramo, Teramo, Italy; ²Fondazione Università degli Studi di Teramo, Teramo, Italy.

11:01 – 11:04 **EFFECTS OF FLUID EXTRACT OF BOSWELLIA SACRA GUMMI-RESIN (BosLiq®) ON EPCs' FUNCTIONS**

Lorenza LA ROSA¹ (π), Estelle OBERLIN², Graziella SERIO¹, Andrea OCCHIPINTI³, Georges UZAN², Nassim AROUCHE², Sina NASERIAN², Carla GENTILE¹

¹Department of Biological, Chemical and Pharmaceutical Sciences and Technologies, University of Palermo, Viale delle Scienze Ed 16, 90128 Palermo, Italy; ²INSERM UMRS-MD 1197, Université Paris-Saclay, Hôpital Paul Brousse, Villejuif, France; ³Abel Nutraceuticals S.R.L., 10148 Turin, Italy.

11:06 – 11:14 **ENVIRONMENTAL BIOSENSOR SYSTEM: ORGAN-ON-A-CHIP FOR THE ANALYSIS OF POLLUTANTS ON THE RESPIRATORY MUCOSA (BIORESYSTEM)**

Olga Maria MANNA¹ (π), Stefano BURGIO², Francesco LOPRESTI³, Maria TESTA³, Domiziana PICONE¹, Adelaide CARISTA¹, Giorgia INTILI¹, Alberto FUCARINO⁴, Alessandro PITRUZZELLA¹, Francesco CAPPELLO¹, Vincenzo LA CARRUBBA³, Fabio BUCCHIERI¹

¹Department of Biomedicine, Neurosciences and Advanced Diagnostics (BIND), Institute of Human Anatomy and Histology, University of Palermo, 90141, Palermo, Italy;

²Euro-Mediterranean Institute of Science and Technology (IEMEST), 90139, Palermo, Italy; ³Department of Engineering, University of Palermo, 90141, Palermo, Italy; ⁴Faculty of Psychology, eCampus University, 22060 Novedrate, Italy.

11:16 – 11:24 **IMPACT OF BETANIN DEGRADATION PRODUCTS ON ROS SIGNALING, PROLINE ACCUMULATION, AND PHYTOHORMONE LEVELS IN GERMINATING ARABIDOPSIS**

Giuseppe MANNINO¹ (π), Noemi GATTI¹, Carla GENTILE²

¹Department of Life Sciences and Systems Biology, Plant Physiology Unit, University of Turin, Via Quarelo 15/A, 10135 Turin, Italy; ²Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), University of Palermo, Viale delle Scienze, 90128 Palermo, Italy.

11:26 – 11:34 **HARMFUL EFFECTS OF TWO PHACS AT REALISTIC DOSES ON MYTILUS GALLOPROVINCIALIS (LAMARCK, 1819)**

Lucia Therese MARCIANO¹ (π), Giuseppe DE MARCO², Mariano DARA^{1,3}, Mery TERRANOVA², Matteo CAMMARATA^{1,3}, Maria Giovanna PARISI^{1,3}, Maria MAISANO²

¹Department of Earth and Marine Sciences (DiSTeM), University of Palermo, Palermo, Italy; ²Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy; ³NBFC, National Biodiversity Future Center, Palermo, Italy

11:36 – 11:44 **EXPOSURE TO PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) IN BELGIAN FLANDERS: A CASE STUDY OF SANDER LUCIOPERCA**

Miriam PORRETTI¹ (π), Lies TEUNEN², Marieke DESENDER², Giuseppa DI BELLA³, Caterina FAGGIO^{1,4}, Els VAN HOECK⁵, Laure JOLY⁵.

¹University of Messina, Department of Chemical, Biological, Pharmaceutical and Environmental Sciences (CHIBIOFARAM), 98166, Messina, Italy; ²Research Institute for Nature and Forest, Dwersbos 28, 1630 Linkebeek, Belgium; ³University of Messina, Department of Biomedical, Dental, Morphological and Functional Images Sciences (BIOMORF), 98100, Messina, Italy; ⁴Department of Ecosustainable Marine Biotechnology, Stazione Zoologica Anton Dohrn, Naples, Italy; ⁵Organic Contaminants and Additives, Scientific Institute of Public Health, Sciensano, 1050, Brussels, Belgium.

11:46 – 11:54 **FROM LAB TO TRACK: THE TAOPATCH® BIOMARKER AND PERFORMANCE DETECTION TECHNOLOGIES**

Andrea PAGLIARO¹, Anna ALIOTO¹, Giuseppe MESSINA², Alessandra AMATO³, Sara BALDASSANO⁴, and Patrizia PROIA¹

¹Department of Psychology, Educational Science and Human Movement, Sport and Exercise Sciences Research Unit, University of Palermo, Italy. ²Department of Human Sciences and Promotion of the Quality of Life San Raffaele University Rome (Italy). ³Department of Biomedical and Biotechnological Sciences, Section of Anatomy, Histology and Movement Science, School of Medicine, University of Catania, Via S. Sofia n°97, 95123 Catania, Italy. ⁴Department of Biological Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), University of Palermo, Palermo, 90128, Italy.

11:56 – 12:04 **LINKING NANOPARTICLES TO EMBRYONIC DEFORMITIES: EXPLORING THE TERATOGENICITY OF ZINC OXIDE NANOPARTICLES**

Tommaso SILVESTRINI¹ (π), Valbona ALIKO², Grejsi GJONAJ², Ledia VASJARI², Ambra KARAJ², Federica IMPELLITTERI³, Caterina FAGGIO⁴, Erman S. ISTIFLI⁵, Elisabetta BENEDETTI⁶, Silvana ZUGARO⁶, Annamaria IANNETTA¹, Monia PERUGINI¹

¹University of Teramo, Department of Bioscience and Technology for Food, Agriculture and Environment, Teramo, Italy; ²University of Tirana, Faculty of Natural Sciences,

Department of Biology, Tirana, Albania; ³University of Messina, Department of Veterinary Sciences, Messina, Italy; ⁴University of Messina, Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, Messina, Italy; ⁵University of Cukurova, Department of Biology, Adana, Turkey; ⁶Department of Life, Health and Environmental Sciences, University of L'Aquila, L'Aquila, Italy.

12:06 – 12:14 **IN VITRO AND IN VIVO ASSESSMENT OF GLYPHOSATE IN NORMOXIA AND HYPOXIA CONDITIONS**

Silvana ZUGARO¹ (π), Giovanni ANGELOZZI², Marcella MASSIMINI³, Anna Maria CIMINI¹, Leonardo DELLA SALDA³, Marco MINACORI², Mara MASSIMI¹, Monia PERUGINI², Elisabetta BENEDETTI¹

¹Department of Life, Health and Environmental Sciences, University of L'Aquila, L'Aquila, Italy; ²University of Teramo, Department of Bioscience and Technology for Food, Agriculture and Environment, Teramo, Italy; ³University of Teramo Department of Veterinary Medicine, Teramo, Italy.

12:20 – 12:59

LETTURA MAGISTRALE “GAETANO QUAGLIARIELLO”

Prof. Mauro PIACENTINI, Roma

Meccanismi molecolari della necroptosi: il ruolo della Translutaminasi di tipo 2

Moderatori: Anna Maria Cimini, Guido Macchiarelli, Maria Grazia Palmerini

13:00 – 15:00 **Pausa**

15:00 **IV SESSIONE: AMBIENTI ACQUATICI**

Si assegna n° 1 premio

Moderatori: Paolo Bonivento; Caterina Faggio; Monia Perugini

15:01 – 15:04 **SHAPE ANALYSIS AND MORPHOMETRY OF SAGITTAL OTOLITH IN FIVE CRYPTIC MACROURIDAE SPECIES FROM CENTRAL MEDITERRANEAN SEA**

Marco ALBANO¹, Claudio D'IGLIO², Sergio FAMULARI², Dario DI FRESCO², Mariachiara COSTANZO², Alex CARNEVALE², Nunziacarla SPANO², Serena SAVOCA², Gioele CAPILLO²

¹Dipartimento di Scienze Veterinarie, Università degli Studi di Messina; ²Dipartimento di Scienze Chimiche, Biologiche, Farmaceutiche ed Ambientali, Università degli Studi di Messina.

15:06 – 15:09 **DEFENSE SYSTEM IN THE PRIMARY REPRODUCTIVE STAGES OF THE OVARY IN SCORPAENA PORCUS (LINNAEUS, 1758)**

Alessio ALESCI¹, Sebastian MARINO¹, Claudio D'IGLIO¹, Anthea MILLER², Jorge M.O. FERNANDES³, Gioele CAPILLO¹

¹Department of Chemical, Biological, Pharmaceutical, and Environmental Sciences, University of Messina, Messina, Italy; ²Department of Veterinary Sciences, University of Messina, Messina, Italy; ³Institute of Marine Sciences, CSIC, Barcelona, Spain.

15:11 – 15:19 **EFFECTS OF ERICARIA BRACHYCARPA EXTRACT ON THE DEVELOPMENT OF ARBACIA LIXULA SEA URCHIN EMBRYOS**

Rosario BADALAMENTI¹ (π), Chiara MARTINO^{1,2}, Roberto CHIARELLI¹, Antonio PALUMBO PICCIONELLO¹, Manuela MAURO¹, Vincenzo ARIZZA^{1,2}, Mirella VAZZANA^{1,2}

¹Dipartimento di Scienze e Tecnologie Biologiche Chimiche e Farmaceutiche (STEBICEF), Università degli studi di Palermo, Via Archirafi 18, 90123 Palermo (Italia); ²National Biodiversity Future Center (NBFC), 90133, Palermo, Italy.

15:21 – 15:29 **PHYSIOLOGICAL AND CELLULAR RESPONSES OF A SYNTHETIC PRESERVATIVE IN PERSONAL CARE FORMULATIONS ON AQUATIC ORGANISMS**

Federica IMPELLITTERI¹ (π), Cristiana Roberta MULTISANTI¹, Kristian RIOLO², Giorgia ZICARELLI², Giuseppe PICCIONE¹, Alessia GIANNETTO², Caterina FAGGIO^{2,3}

¹Department of Veterinary Sciences, University of Messina, Viale Giovanni Palatucci snc, 98168 Messina, Italy; ²Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy; ³Department of Eco-sustainable Marine Biotechnology, Stazione Zoologica Anton Dohrn, Naples, Italy.

15:31 – 15:39 **A PROMISING NOVEL AQUATIC MODEL FOR ASSESSING CELLULAR AND PHYSIOLOGICAL RESPONSE TO PERSONAL CARE PRODUCT ADDITIVES**

Cristiana Roberta MULTISANTI¹ (π), Kristian RIOLO², Federica IMPELLITTERI¹, Salvatore GIACOBBE², Giuseppe PICCIONE¹, Caterina FAGGIO^{2,3}, Alessia GIANNETTO²

¹Department of Veterinary Sciences, University of Messina, Viale Giovanni Palatucci snc, 98168 Messina, Italy; ²Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy; ³Department of Eco-sustainable Marine Biotechnology, Stazione Zoologica Anton Dohrn, Naples, Italy.

15:41 – 15:49 **WATER-SOLUBLE POLYMERS (POLYVINYL ALCOHOL AND POLYETHYLENE GLYCOL): A NEW THREAT TO THE AQUATIC ENVIRONMENT? EVALUATION OF EMBRYOTOXICOLOGICAL EFFECT ON ZEBRAFISH AND AFRICAN CLAWED FROG**

Giorgia ZICARELLI¹ (π), Barbora RIESOVA², Renata HESOVA², Federica IMPELLITTERI³, Jana BLAHOVA², Caterina FAGGIO^{1,4}, Pavla LAKDAWALA²

¹University of Messina, Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, Viale Ferdinando Stagno D'Alcontres 31, 98166 Messina, Italy; ²Department of Animal Protection and Welfare & Veterinary Public Health, Faculty of Veterinary Hygiene and Ecology, University of Veterinary Sciences Brno, Palackeho tr. 1946/1, 612 42 Brno, Czech Republic; ³Department of Veterinary Sciences, University of Messina, Viale Giovanni Palatucci snc, 98168 Messina, Italy; ⁴Department of Eco-sustainable Marine Biotechnology, Stazione Zoologica Anton Dohrn, Naples, Italy.

15:50 **V SESSIONE: BIOLOGIA DELLA RIPRODUZIONE E INFERTILITÀ**

Si assegnano n° 2 premi

Moderatori: Giovanna Di Emidio; Stefania Nottola; Maria Grazia Palmerini

15:51 – 15:59 **A PCOS MOUSE MODEL SHOWS EVIDENCE OF GLYCATIVE AND OXIDATIVE DAMAGE AT THE BRAIN LEVEL**

Giovanni CASOLI¹ (π), Teresa VERGARA¹, Martina PLACIDI¹, Andrea BIANCHI¹, Ilaria Antenisca MASCITTI¹, Domenica COCCIOLO¹, Maria Grazia PALMERINI¹, Stefano FALONE¹, Giovanna DI EMIDIO¹, Arturo BEVILACQUA², Carla TATONE¹

¹University of L'Aquila- L'Aquila- Italy, Dept. of Life- Health and Environmental Science, L'Aquila, Italy; ²Sapienza University of Rome- Italy, Dept. of Dynamic, Clinical Psychology and Health, Rome, Italy.

16:01 – 16:09 **SEASONAL EFFECTS ON SARDA SHEEP OOCYTES QUALITY: ULTRASTRUCTURAL EVIDENCE**

Mariacarla DE RUBEIS¹ (π), Sara SUCCU², Valentina SATTA³, Luisa BOGLIOLO², Giovanni G. LEONI³, Maria Grazia PALMERINI⁴, Stefania Annarita NOTTOLA¹ and Guido MACCHIARELLI⁴

¹Dept of Anatomy, Histology, Forensic Medicine and Orthopaedics, La Sapienza University, Rome, Italy; ²Dept of Veterinary Medicine, University of Sassari, Italy; ³Dept of Biomedical Sciences, University, Sassari, Italy; ⁴Dept of Life, Health and Environmental Sciences, L'Aquila University, Italy.

16:11 – 16:19 **EFFECTS OF ENDOCRINE DISRUPTORS (EDs) ON THE ULTRASTRUCTURE OF MAMMALIAN OOCYTES**

Marta GATTI¹ (π), Maria Grazia PALMERINI², Manuel BELLÌ³, Stefania Annarita NOTTOLA¹, Guido MACCHIARELLI²

¹Dept. of Anatomy, Histology, Forensic Medicine and Orthopaedics, Sapienza University of Rome, Italy; ²Dept. of Life, Health and Environmental Sciences, University of L'Aquila, Italy; ³Dept. of Human Sciences and Promotion of the Quality of Life, San Raffaele Roma Open University, Rome, Italy.

16:21 – 16:29 **EFFECTS OF L-CARNITINES ON THE MORPHO-FUNCTIONALITY OF THE FEMALE REPRODUCTIVE SYSTEM IN A POLYCYSTIC OVARY SYNDROME (PCOS) MOUSE MODEL**

Ilaria Antenisca MASCITTI (π), Domenica COCCIOLOONE, Silvia ZACCARDI, Carla TATONE, Giovanna DI EMIDIO, Martina PLACIDI, Guido MACCHIARELLI, Maria Grazia PALMERINI

Department of Life, Health and Environmental Sciences, University of L'Aquila, Italy.

16:31 – 16:39 **BENEFICIAL EFFECTS OF D CHIRO INOSITOL ADMINISTRATION IN A MOUSE MODEL OF ENDOMETRIOSIS**

Martina PLACIDI¹ (π), Teresa VERGARA¹, Giovanni CASOLI¹, Andrea BIANCHI¹, Domenica COCCIOLOONE¹, Maria Grazia PALMERINI¹, Ilaria Antenisca MASCITTI¹, Arturo BEVILACQUA², Carla TATONE¹, Giovanna DI EMIDIO¹

¹*Department of Life, Health and Environmental Science, University of L'Aquila, L'Aquila, Italy.* ²*Department of Dynamic, Clinical Psychology and Health, Sapienza University of Rome, Rome, Italy.*

16:41 – 16:49 **HYPOXIA AND INFLAMMATION INDUCE TESTICULAR DAMAGE INFERTILITY IN FABRY'S DISEASE**

*Luigi SANSONE^{1,3}, *Federica BARRECA², Manuel BELLI^{1,3}, Michele AVENTAGGIATO², Andrea RUSSO⁴, Giulietta A. PERRONE⁵, Matteo A. RUSSO¹, **Marco TAFANI², **Andrea FRUSTACI¹

¹*IRCCS San Raffaele, Rome, Italy,* ²*University of Rome, Sapienza, Rome, Italy,* ³*San Raffaele University of Rome, Rome, Italy* ⁴*Department of Pathologic Anatomy, IRCCS Regina Elena, Rome, Italy,* ⁵*San Filippo Neri Hospital, Rome, Italy.*

16:50 **VI SESSIONE: MEDICINA RIGENERATIVA**

Si assegna n° 1 premio

Moderatori: Giovanna Calabrese; Patrizia Proia; Sonya Vasto

16:51 – 16:59 **OSTEOGENIC DIFFERENTIATION OF hADMSCs ON METHACRYLATED GELLAN GUM (GG-MA) SCAFFOLDS FOR TISSUE REGENERATION**

Luana Vittoria BAUSO¹ (π), Serena MUNAÒ¹, Ugo D'Amora², Maria Grazia RAUCCI², Luigi AMBROSIO², Giovanna CALABRESE¹

¹*Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Viale Ferdinando Stagno d'Alcontres 31, 98168 Messina, Italy.*

²*Institute of Polymers, Composites and Biomaterials, National Research Council, 80125 Naples, Italy.*

17:01 – 17:09 **NEW REGENERATIVE AND ANTI-AGING MEDICINE APPROACH BASED ON SINGLE STRAND ALPHA-1 COLLAGEN**

Luigi DI ROSA¹, Sara BALDASSANO¹, Noemi MARGUGLIO¹, Denise PANZECA¹, Patrik DRID³, Patrizia PROIA², Sonya VASTO¹.

¹*Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), University of Palermo, Palermo, Italy;* ²*Faculty of Sport and Physical Education, University of Novi Sad, Novi Sad, Serbia.* ³*Department of Psychological, Pedagogical and Educational Sciences, Sport and Exercise Sciences Research Unit, University of Palermo, Palermo, Italy.*

17:11 – 17:19 **A NEW STRATEGY FOR TISSUE REGENERATION WITH SPHEROIDS OF ADIPOSE STEM CELLS**

Anna Barbara DI STEFANO¹, Marco TRAPANI¹, Emanuela MUSCOLINO², Clelia DISPENZA², Francesco MOSCHELLA¹, Francesca TOIA^{1,3}, Adriana CORDOVA^{1,3}

¹*BIOPLAST- Laboratory of BIOlogy and regenerative medicine-PLASTic surgery, University of Palermo, Department of Surgical, Oncological and Stomatological Sciences, 90127 Palermo, Italy.* ²*Department of Engineering, University of Palermo, 90128 Palermo, Italy.* ³*Plastic and Reconstructive Surgery Unit, University of Palermo, Department of Surgical, Oncological and Stomatological Sciences, 90127 Palermo, Italy.*

- 17:21 – 17:29 **ANTI-INFLAMMATORY AND REGENERATIVE POTENTIAL OF COMPLEX MAGNETIC FIELDS (CMF) IN A CO-CULTURE OF DENTAL PULP STEM CELLS (DPSCs) AND INFLAMED MACROPHAGES**
Marialucia GALLORINI¹, Noemi MENCARELLI¹, Natalia DI PIETRO², Alessandro CIPOLLINA³, Marco MANTARRO⁴, Adriano PIATTELLI⁵, Amelia CATALDI^{1,6}
¹Department of Pharmacy, "G. d' Annunzio" University of Chieti-Pescara, Chieti, Italy. ²Department of Medical, Oral and Biotechnological Sciences, "G. d' Annunzio" University of Chieti-Pescara, Chieti, Italy. ³Private Practice, Sciacca (AG), Italy. ⁴MFI Srl Medicina Fisica Integrata, Rome, Italy. ⁵Saint Camillus International University for Health Sciences (Unicamillus), Rome, Italy. ⁶UdA TechLab, "G. d' Annunzio" University of Chieti-Pescara, Chieti, Italy.
- 17:31 – 17:39 **REGENERATIVE PROPERTIES OF *H. ITALICUM* ON WOUND HEALING IN VITRO**
Giuseppe GARRONI¹ (π), Diletta SERRA^{1,2}, Sara CRUCIANI¹, Margherita MAIOLI^{1,3}
¹Department of Biomedical Sciences, University of Sassari, Viale San Pietro 43/B, 07100 Sassari, Italy. ²R&D Laboratory Center, InoCure s.r.o., Politických Vezíu 935/13, 110 00 Prague, Czech Republic. ³Center for Developmental Biology and Reprogramming-CEDEBIOR, Department of Biomedical Sciences, University of Sassari, Viale San Pietro 43/B, 07100 Sassari, Italy.
- 17:41 – 17:49 **ODONTOBLASTS DERIVED FROM DOG ENDOMETRIAL STEM CELLS ENCAPSULATED IN FIBRIN GEL ASSOCIATED WITH BMP-2 FOR DENTIN REGENERATION**
Davide GERARDI¹ (π), Elham HOVEIZI², Hadi NADDAF³, Sina AHMADIANFAR³, Sara BERNARDI¹, Serena BIANCHI¹ and Guido MACCHIARELLI¹
¹Department of Life Health and Environmental Sciences, University of L'Aquila, 67100 L'Aquila, Italy. ²Department of Biology, Faculty of Science, Shahid Chamran University of Ahvaz, Ahvaz 6135783151, Iran. ³Department of Clinical Sciences, Faculty of Veterinary, Shahid Chamran University of Ahvaz, Ahvaz 6135783151, Iran.
- 17:51 – 17:54 **NEURAL DIFFERENTIATION OF THE SH-SY5Y HUMAN NEUROBLASTOMA CELL LINE ON P3HT POLYMER THIN FILM**
Valeria LA FAUCI¹ (π), Luana BAUSO¹, Clelia LONGO¹, Paola CAMPIONE², Grazia Maria Lucia MESSINA, Giovanna CALABRESE¹
¹Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Viale Ferdinando Stagno d'Alcontres 31, 98168 Messina, Italy. ²Department of Chemical Sciences, University of Catania, Viale Andrea Doria 6, 95125, Catania, Italy.
- 17:56 – 17:59 **DOPAMINE MODIFIED ALGINATE HYDROGEL FOR CARTILAGE REGENERATION**
Alessia MANCA¹, Arianna DE MORI², Marta ROLDO²
¹Department of Biomedical Science, University of Sassari, Italy; ²School of Pharmacy and Biomedical Sciences, University of Portsmouth, St Michael's Building, White Swan Road, Portsmouth, PO1 2DT, United Kingdom.
- 18:01 – 18:09 **EVALUATION OF CELL PHYSIOLOGICAL RESPONSES IN 3D OSTEOBLAST SPHEROIDS**
Maria Giovanna RIZZO¹, Marika CORDARO², Enrico GUGLIANDOLO³, Dario MORGANTI⁴, Roberta FUSCO¹, Ylenia MARINO¹, Gianluca A. FRANCO³, Barbara FAZIO⁴, Rosanna DI PAOLA³, Sabrina CONOCI^{1,4,5}.
¹Dipartimento di Scienze Chimiche, Biologiche, Farmaceutiche, ed Ambientali - Università degli Studi di Messina; ²Dipartimento di Scienze Biomediche, Odontoiatriche e delle Immagini Morfologiche e Funzionali - Università degli Studi di Messina; ³Dipartimento di Scienze Veterinarie - Università degli Studi di Messina; ⁴URT LAB-SENS, Dipartimento di Scienze Fisiche e Tecnologia della Materia CNR; ⁵Dipartimento di Chimica, G. Giacomini - Università di Bologna.

18:10 VII SESSIONE: MICRO- E NANOVESEICOLE

Si assegna n° 1 premio

Moderatori: Celeste Caruso Bavisotto; Vincenza Dolo; Vincenzo Vestuto

- 18:11 – 18:14 **ELABORATION OF A SYSTEMATIC APPROACH FOR THE BIOENGINEERING OF TUMOR-DERIVED EXTRACELLULAR VESICLES: INCORPORATING PRELIMINARY IN VITRO RESULTS FOR TARGETED CHEMOTHERAPEUTIC DELIVERY IN MALIGNANT PLEURAL MESOTHELIOMA**
Stefano BURGIO^{1, 2} (π), Celeste CARUSO BAVISOTTO¹, Olga Maria MANNA¹, Domiziana PICONE¹, Giorgia INTILI¹, Adelaide CARISTA¹, Fabio BUCCHIERI¹, Alessandro PITRUZZELLA¹, Antonio PALUMBO PICCIONELLO³, Francesco CAPPELLO^{1, 2}
¹Department of Biomedicine, Neurosciences and Advanced Diagnostics (BIND), Institute of Human Anatomy and Histology, University of Palermo, 90141, Palermo, Italy. ²Euro-Mediterranean Institute of Science and Technology (IEMEST), 90139, Palermo, Italy; ³Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), University of Palermo, Viale delle Scienze, Ed. 17, 90128 Palermo, Italy.
- 18:16 – 18:24 **DISSECTING THE ROLE OF EXTRACELLULAR VESICLES IN OVARIAN CANCER MICROENVIRONMENT**
Fabrizio FONTANA¹, Gaia GIANNITTI¹, Sara MARCHESI¹, Emanuela CAROLLO², Patrizia SARTORI¹, David CARTER², Patrizia LIMONTA¹
¹University of Milan, Italy. ²Oxford Brookes University, United Kingdom
- 18:26 – 18:34 **UNLEASH THE POTENTIAL OF FOURIER-TRANSFORM INFRARED (FTIR) SPECTROSCOPY TO STUDY EXTRACELLULAR VESICLES IN BREAST CANCER**
Giuseppina POPPA (π), Giulia DI FAZIO, Sandra D'ASCENZO, Vincenza DOLO, Ilaria GIUSTI
¹Department of Life, Health and Environmental Sciences, University of L'Aquila, 67100, L'Aquila, Italy.
- 18:36 – 18:44 **UNRAVELING THE POTENTIAL ROLE OF A SMALL EXTRACELLULAR VESICLE LYOPHILIZED ENRICHED IN IMMUNE AND INFLAMMATORY REGULATOR FACTORS AS IMMUNORESPONSE MODULATOR IN PATIENTS SUFFERING FROM AUTOIMMUNE THYROID DISEASES**
Laura TOMASELLO¹, Valentina GUARNOTTA^{1,3}, Giorgio ARNALDI^{1,3}, Carla GIORDANO^{1,3}, Giuseppe PIZZOLANTI^{1,2,3}
¹Dipartimento Promozione della Salute, Materno-Infantile, di Medicina Interna e Specialistica di Eccellenza "G. D'Alessandro" (proMISE), Università di Palermo; ²Advanced Technologies Network (ATeN) Center, Università di Palermo; ³Laboratorio di Immuno-Endocrinologia, AOUP Paolo Giaccone, Palermo.
- 18:46 – 18:49 **MULTIOMIC PROFILING AND NEUROPROTECTIVE BIOACTIVITY OF SALVIA HAIRY ROOT-DERIVED EXTRACELLULAR VESICLES IN A PARKINSON'S DISEASE MODEL**
Mariapia VIETRI¹ (π), Vincenzo VESTUTO¹, Marisa CONTE¹, Francesca MESENTIERI^{2,3}, Valentina SANTORO¹, Mariaevelina ALFIERI⁴, Maria MOROS^{5,6}, Maria Rosaria MIRANDA¹, Chiara AMANTE¹, Matteo DELLI CARRI¹, Pietro CAMPIGLIA¹, Fabrizio DAL PIAZ^{5,6}, Pasquale DEL GAUDIO¹, Nunziatina DE TOMMASI¹, Antonietta LEONE¹, Ornella MOLTEDO¹, Giacomo PEPE¹, Elisa CAPPETTA¹, Alfredo AMBROSONE¹
¹Department of Pharmacy, University of Salerno, 84084, Fisciano, Italy. ²Department of Medicine, Surgery and Dentistry "Scuola Medica Salernitana", University of Salerno, 84081 Baronissi, Italy. ³Operative Unit of Clinical Pharmacology, University Hospital "San Giovanni di Dio e Ruggi d'Aragona", 84131 Salerno, Italy. ⁴Clinical Pathology, Pausilipon Hospital, A.O.R.N Santobono-Pausilipon, 80123, Naples, Italy. ⁵Instituto de Nanociencia y Materiales de Aragón (INMA), CSIC-Universidad de Zaragoza, Zaragoza, Spain. ⁶Biomedical Research Networking Center in Bioengineering, Biomaterials and Nanomedicine (CIBER-BBN), Spain
- 18:50 – 19:00 **Conclusioni della seconda giornata e informazioni di servizio della terza**
 Francesco Cappello, Maria Grazia Palmerini

27 aprile 2024

8:45 Apertura della segreteria congressuale

8:55 **Avvio dei lavori**
Francesco Cappello, Maria Grazia Palmerini

9:00 **VIII SESSIONE: NEUROSCIENZE**

Si assegnano n° 2 premi

Moderatori: Giuseppe Giglia; Chiara Porro; Antonietta Santoro

9:01 – 9:04 **INTRANASAL DELIVERY OF NGF RESCUES HEARING IMPAIRMENT IN AGED SAMP8 MICE**

Vanessa CASTELLI (π), Michele D'ANGELO, Eleonora MACERONI, Marta Sofia SCENNA, Housen KACEM, Annamaria CIMINI

Department of Life, Health and Environmental Sciences, University of L'Aquila, L'Aquila, Italy.

9:06 – 9:09 **PROTECTIVE EFFECT OF NGF IN THE DIABETIC RETINOPATHY**

Michele D'ANGELO, Vanessa CASTELLI, Giorgia LOMBARDOZZI, Chiara GIORGI, Fabrizio AMMANNITO, Annamaria CIMINI

Department of Life, Health and Environmental Sciences, University of L'Aquila, L'Aquila, Italy.

9:11 – 9:19 **UNRAVELING THE “METABOLIC SYNDROME AND COGNITIVE IMPAIRMENT” DETRIMENTAL LOOP: WHAT ROLE FOR MEDITERRANEAN PHYTONUTRIENTS?**

Giuditta GAMBINO¹ (π), Danila DI MAJO¹, Nicolò RICCIARDI¹, Mario ALLEGRA², Giuseppe FERRARO¹, Pierangelo SARDO¹ and Giuseppe GIGLIA¹.

¹*Department of Biomedicine, Neuroscience and Advanced Diagnostics, University of Palermo, Italy.* ²*Department of Biological, Chemical and Pharmacological Sciences, University of Palermo, Italy.*

9:21 – 9:29 **EXPLORING THE ROLE OF OXIDATIVE STRESS IN PARKINSON'S DISEASE PATHOGENESIS: INSIGHTS FROM MICROGRAVITY STUDIES**

Veronica LENTINI¹ (π), Giuseppe URAS^{1, 2}, Mohammed Amine EL FAQIR¹, Alessia MANCA¹, Nicola DEIANA¹, Antonella PANTALEO¹

¹*Department of Biomedical Sciences, University of Sassari, Viale San Pietro 43/B, 07100 Sassari, Italy;* ²*Department of Clinical and Movement Neurosciences, Institute of Neurology, University of College London, London NW3 2PF, UK.*

9:31 – 9:39 **ENDOCANNABINOID AND KISSPEPTIN SYSTEMS STIMULATION REDUCE ADULT NEUROGENESIS BY MODULATING ERK1/2 SIGNALLING PATHWAY**

Marianna Marino¹ (π), Andrea Viggiano¹, Paola Di Pietro¹, Raffaella D'Auria¹, Carmine Vecchione¹, Rosaria Meccariello², Antonietta Santoro¹

¹*Dipartimento di Medicina, Chirurgia e Odontoiatria “Scuola Medica Salernitana” Università di Salerno, Via S. Allende 84081 Baronissi (SA), Italy.* ²*Dipartimento di Scienze Motorie e del Benessere, Università di Napoli Parthenope, Via Medina 40, 80133 Napoli, Italy.*

9:41 – 9:44 **SERUM NEUROFILAMENTS LIGHT CHAIN AS PROMISING BIOMARKER FOR DIAGNOSIS AND MONITORING OF ATTR DISEASE**

Francesca POLITO¹, Concetta Ida SAOCA¹, Laura LICITRI¹, Vincenzo MACAIONE¹, Margherita TORRE¹, Loredana GRASSO¹, Anna MAZZEO², M'hammed AGUENNOUZ¹

¹*Department of Clinical and Experimental Medicine - Section of VEQ, Immunometry and laboratory diagnosis services - University of Messina, Italy.* ²*Department of Clinical and Experimental Medicine – Section of Neurology- University of Messina, Italy.*

9:46 – 9:54 **IRISIN ATTENUATES NEUROINFLAMMATION TARGETING NLPR3 INFLAMMASOME**

Francesca Martina FILANNINO^{1*}, Melania RUGGIERO^{2*}, Maria Antonietta PANARO², Dario Domenico LOFRUMENTO³, Tarek Benameur⁴, Antonia CIANCIULLI², Rosa CALVELLO², Federico ZOILA¹, Chiara PORRO¹

¹Department of Clinical and Experimental Medicine, University of Foggia, I-71100 Foggia, Italy. ²Department of Biosciences, Biotechnologies and Environment, University of Bari, I-70125 Bari, Italy. ³Department of Biological and Environmental Sciences and Technologies, Section of Human Anatomy, University of Salento, I-73100 Lecce, Italy. ⁴Department of Biomedical Sciences, College of Medicine, King Faisal University, Al-Ahsa 31982, Saudi Arabia.

9:56 – 10:04 **DISSECTING THE NEURONAL FEATURES OF PARKINSON'S DISEASE**
Giuseppe URAS^{1,2,3} (π), Sara LUCAS-DEL-POZO^{2,3}, Federico FIERLI^{2,3}, Veronica LENTINI¹, Sofia KOLETSI^{2,3}, Pierluigi CABONI⁴, Cristina MANIS⁴, Anthony VH SCHAPIRA^{2,3}, Antonella PANTALEO¹

¹Department of Biomedical Sciences, University of Sassari, Viale San Pietro 43/B 07100 Sassari, Italy. ² Department of Clinical and Movement Neurosciences, UCL Queen Square Institute of Neurology, London, UK. ³ Aligning Science Across Parkinson's (ASAP) Collaborative Research Network, Chevy Chase, Maryland, USA. ⁴Dipartimento di Scienze della Vita e dell'Ambiente, Università di Cagliari, via Ospedale 72, 09124 Cagliari, Italy.

10:05 IX SESSIONE: NUTRIZIONE

Sì assegna n° 1 premio

Moderatori: Danila Di Majo; Marialucia Gallorini; Giuditta Gambino

10:06 – 10:14 **HOW GOLDEN TOMATO JUICE SUPPLEMENTATION AFFECTS LEPTIN LEVELS AND OXI-INFLAMMATION IN RATS WITH METABOLIC SYNDROME**
Danila DI MAJO¹, Giuseppe GIGLIA¹, Giuseppe FERRARO¹, Pierangelo SARDO¹, Mario ALLEGRA², Francesco POLLARA¹, Francesca RAPPA¹, Monica FRINCHI¹, Valentina DI LIBERTO¹, Giuditta GAMBINO¹

¹Dipartimento di Biomedicina Neuroscienze e Diagnostica Avanzata, Università di Palermo; ²Dipartimento di Scienze e Tecnologie Biologiche Chimiche e Farmaceutiche, Università di Palermo.

10:16 – 10:24 **FROM THE ANALYSIS OF THE HAIR BULB TO THE RESTORATION OF THE IDEAL CONDITIONS OF WELL-BEING OF THE ORGANISM**
Giuseppe MAFFI¹, Cristina GERVASONI², Paolo BONIVENTO³

¹ MG Management & Consulting – via Pietro Perfetti 7 – 29121 PIACENZA; ² BMT Research srl – via Enzo Ferrari 16 – 25030 RONCADELLE (BS); ³ RYSA srl – via Enzo Ferrari 16 – 25030 RONCADELLE (BS).

10:26 – 10:34 **IN VITRO EVALUATION OF THE POTENTIAL SYNERGISTIC EFFECTS OF COLLAGEN AND HYALURONIC ACID (TendoGenIAL™) ON HUMAN TENDON-DERIVED CELLS AND MACROPHAGES**

Noemi MENCARELLI¹ (π), Gaetano DI FAZIO², Dora ARENA², Marida SALAMONE², Amelia CATALDI^{1,3}, Simone CARRADORI¹, Marialucia GALLORINI¹

¹Department of Pharmacy, "G. d' Annunzio" University of Chieti-Pescara, 66100, Chieti, Italy; ²Idi S.r.l., Via Goffredo Mameli, 12, 95020 Aci Bonaccorsi, Catania, Italy; ³UdA TechLab, "G. d' Annunzio" University of Chieti-Pescara, 66100, Chieti, Italy.

10:36 – 10:39 **CHEMICAL COMPOSITION AND BIOCHEMICAL CHARACTERIZATION OF COFFEE SILVER SKIN EXTRACTS OBTAINED BY GREEN TECHNOLOGY**

Maria Rosaria MIRANDA¹ (π), Vincenzo VESTUTO¹, Manuela Giovanna BASILICATA¹, Giovanna AQUINO¹, Manuela RODRIQUEZ², Giacomo PEPE¹, Pietro CAMPIGLIA¹

¹ Department of Pharmacy, University of Salerno, Via G. Paolo II, Fisciano, 84084 Salerno, Italy; ² Department of Pharmacy, University of Naples Federico II, C.so Umberto I, 80138 Naples, Italy.

10:41 – 10:49 **NUTRITIONAL INTERVENTION WITH LETTUCE FUNCTIONALIZED BY SEAWEED EXTRACT TO PREVENTING MINERALS DEFICIENCY IN HEALTHY POPULATION**

Denise PANZECA¹ (π), Sonya VASTO^{1,2}, Luigi DI ROSA¹, Patrizia PROIA³, Noemi MARGUGLIO¹, Sara BALDASSANO¹

¹Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), University of Palermo, Palermo, Italy. ²Euro-Mediterranean Institutes of Science and Technology (IEMEST), Palermo, Italy. ³Department of Psychological, Pedagogical and Educational Sciences, Sport and Exercise Sciences Research Unit, University of Palermo, Palermo, Italy.

10:50 X SESSIONE: ONCOLOGIA

Si assegnano n° 3 premi

Moderatori: Francesco Giansanti; Ilaria Giusti; Alessandra Lo Cicero

10:51 – 10:59 A PROSPECTIVE STUDY ON GLIOBLASTOMA MULTIFORME: FOCUS ON THE ROLE OF THE CCT COMPLEX SUBUNIT 5

Maria Antonella AUGELLO¹ (π), Giusi ALBERTI¹, Alessandra Maria VITALE¹, Giuseppa D'AMICO¹, Radha SANTONOCITO¹, Rosario BARONE¹, Francesco CAPPELLO^{1,2}, Celeste CARUSO BAVISOTTO^{1,2}, Federica SCALIA¹

¹Department of Biomedicine, Neuroscience and Advanced Diagnostics (BIND), University of Palermo, 90127 Palermo, Italy; ²Euro-Mediterranean Institute of Science and Technology (IEMEST), 90139 Palermo, Italy.

11:01 – 11:09 THE LNCRNA H19 MODULATES ALTERNATIVE SPLICING OF GTPASE-RAC1 IN COLORECTAL CANCER CELLS

Maria Magdalena BARRECA¹, Aurora CORDARO¹, Marco LORIA¹, Chiara ZICHITTELLA¹, Nicolina SCIARAFFA², Claudia CORONNELLO², Goffredo ARENA³, Riccardo ALESSANDRO¹, Alice CONIGLIARO¹

¹Dept. BIND University of Palermo, Italy; ²Fondazione Ri.MED, Palermo, Italy; ³McGill University Health Centre, Montréal, Canada.

11:11 – 11:19 MIMICKING GLIOBLASTOMA MULTIFORME MICROANATOMICAL ARCHITECTURE VIA PATIENT-DERIVED 3D SPHEROIDS

Celeste CARUSO BAVISOTTO^{1,2}, Alessandra Maria VITALE¹, Giuseppa D'AMICO¹, Radha SANTONOCITO¹, Federica SCALIA¹, Sabrina DAVID¹, Giovanni TRINGALI³, Ilaria GIUSTI⁴, Vincenza DOLO⁴, Claudia CAMPANELLA¹, Antonella MARINO GAMMAZZA¹, Francesca RAPPA¹, Rosario BARONE¹, Francesco CAPPELLO^{1,2}

¹Section of Human Anatomy, Department of Biomedicine, Neuroscience and Advanced Diagnostics (BIND), University of Palermo, 90127 Palermo, Italy; ²Euro-Mediterranean Institute of Science and Technology (IEMEST), 90139 Palermo, Italy; ³Department of Neurosurgery, National Relevance and High Specialization Hospital Trust ARNAS Civico, Palermo, Italy; ⁴Department of Life, Health and Environmental Sciences, University of L'Aquila, 67100 L'Aquila, Italy.

11:21 – 11:24 APTAMER-BASED THERAPEUTIC TARGETING FOR GLIOBLASTOMA

Martina COLASANTE (π), Luana DI LEANDRO, Manuela D'ADDARIO, Anna Maria CIMINI, Francesco GIANSAANTI, Rodolfo IPPOLITI

Università degli Studi dell'Aquila, Dipartimento Mesva

11:26 – 11:29 MORPHOLOGICAL AND MOLECULAR CHARACTERIZATION OF BREAST CANCER ORGANIDS AFTER TREATMENT WITH MITOCHONDRIAL SIRTUINS MODULATORS

Mario CRISTINA^{1,2} (π), Federica BARRECA², Manuel BELLI^{1,3}, Luigi SANSONE, Emanuela FRUSTACI^{2,5}, Andrea RUSSO⁴ and Marco TAFANI².

¹IRCCS San Raffaele, Rome, Italy, ²University of Rome, Sapienza, Rome, Italy, ³San Raffaele University of Rome, Rome, Italy ⁴Dep. of Pathologic Anatomy, IRCCS Regina Elena, Rome, Italy, ⁵Parco Scientifico Technoscience Latina, Italy.

11:31 – 11:34 SELECTIVE HDAC6 AND PROTEASOME INHIBITION IN COLON CANCER CELLS: THE EFFECTS ON LIPID METABOLISM

Marzia FRANZO¹ (π), Gabriella LO CICERO¹, Antonietta NOTARO², Giampaolo PRATELLI¹, Federica AFFRANCHI², Sonia EMANUELE¹

¹Department of Biomedicine, Neurosciences and Advanced Diagnostics (Bi.N.D.), Biochemistry Building, University of Palermo, Palermo, Italy; ²Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), Section of Chemistry, University of Palermo, Italy.

11:36 – 11:39 CYTOTOXIC EFFECT OF A NOVEL METAL SCHIFF BASE COMPLEX ON HEPG2 HUMAN TUMOR CELLS.

Daniela GANCI¹ (π), Giulia ABRUSCATO, Giampaolo BARONE, Riccardo BONSIGNORE, Roberto CHIARELLI, Claudio LUPARELLO.
Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), University of Palermo, Palermo, Italy

11:41 – 11:44 NOVEL ULTRASTRUCTURAL INSIGHTS INTO CLEAR CELL CARCINOMA OF THE PANCREAS (CCCP): A CASE REPORT

Valentina GIANANTE¹ (π), Luca DI ANGELO¹, Chiara CALABRESE¹, Paolo DE SANCTIS¹, Paolo REGI², Filippo Maria MARTELLI², Gianmarco STATI¹, Rossano LATTANZIO^{3,4}, Saverio ALBERTI⁵, Emanuela GUERRA^{1,4} and Roberta DI PIETRO^{1,6}.
¹Department of Medicine and Aging Sciences, Section of Biomorphology, “G. d’Annunzio” University of Chieti-Pescara, Via dei Vestini 31, 66100 Chieti, Italy; ²“P. Pederzoli” Hospital, Via Monte Baldo, 24, 37019 Peschiera del Garda (VR), Italy; ³Department of Innovative Technologies in Medicine & Dentistry, “G. d’Annunzio” University of Chieti-Pescara, 66100 Chieti, Italy; ⁴Laboratory of Cancer Pathology, Center for Advanced Studies and Technology (CAST), “G. d’Annunzio” University of Chieti-Pescara, Via L. Polacchi 11, 66100 Chieti, Italy; ⁵Unit of Medical Genetics, Department of Biomedical Sciences - BIOMORF, University of Messina, Via Consolare Valeria, 98125 Messina, Italy; ⁶Sbarro Institute for Cancer Research and Molecular Medicine, Center for Biotechnology, Department of Biology, College of Science and Technology, Temple University, Philadelphia, PA 19122, USA.

11:46 – 11:49 INHIBITION OF PDE4D PREVENTS MIGRATION OF HCC CELLS THROUGH MODULATION OF IGF2/H19 CLUSTER

Lara LIZZI¹ (π), Nadia PANERA², Vincenzo SIMONE¹, Alberto MASSIMI¹, Anna ALISI², Mara MASSIMI¹
¹Department of Life, Health and Environmental Sciences, University of L’Aquila, L’Aquila, Italy; ²Research Unit of Genetics of Complex Phenotypes, Bambino Gesù Children Hospital, Rome, Italy.

11:51 -11:59 EXTRACELLULAR MATRIX ORGANIZATION IN 3D PRIMARY TUMOR SPHEROID AND THE ROLE IN DOXORUBICIN RESPONSE.

Alessandra LO CICERO¹, Simona CAMPORA¹, Gabriele LO BUGLIO¹, Francesco LA MONICA¹, Margot LO PINTO², Simone Dario SCILABRA², Giulio GHERSI^{1,3}.
¹Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), University of Palermo, Palermo, Italy. ²Proteomics Group of Ri.MED Foundation, Research Department IRCCS ISMETT (Istituto Mediterraneo per i Trapianti e Terapie ad Alta Specializzazione), Palermo, Italy. ³Abiel srl, Palermo, Italy

12:01 – 12:09 ROLE OF EXTRACELLULAR VESICLES IN THE TUMOUR MICROENVIRONMENT AND MULTIDRUG RESISTANCE

Salvatrice RIGOGLIUSO, Paola POMA, Manuela LABBOZZETTA, Lucia CONDORELLI, Alessandra CUSIMANO, Gabriella SCHIERA, Monica NOTARBARTOLO
Dipartimento STEBICEF Università degli Studi di Palermo

12:11 – 12:19 BIOCHEMICAL CHARACTERIZATION OF LYCIUM BARBARUM EXTRACT MECHANISM: PYROPTOSIS INDUCTION IN BREAST CANCER CELLS WITH RESCUING HEALTHY COMPARTMENT FROM OXIDATIVE STRESS

Vincenzo VESTUTO¹ (π), Maria Rosaria MIRANDA¹, Manuela Giovanna BASILICATA¹, Pasquale MARINO², Michele MANFRA², Giacomo PEPE¹, Pietro CAMPIGLIA¹
¹Department of Pharmacy, University of Salerno, Via G. Paolo II, Fisciano, 84084 Salerno, Italy; ² Department of Science, University of Basilicata, Viale dell’Ateneo Lucano 10, 85100 Potenza, Italy.

12:21 – 12:29 **LONG NON-CODING RNA H19 FAVOURS APOPTOSIS INDUCED BY THE HISTONE DEACETYLASE INHIBITOR ITF2357 (GIVINOSTAT) IN COLON CANCER CELLS**
Chiara ZICHITTELLA¹ (π), Marco LORIA¹, Adriana CELESIA², Diana DI LIBERTO², Chiara CORRADO¹, Riccardo ALESSANDRO^{1,3}, Sonia EMANUELE², Alice CONIGLIARO¹

¹Department of Biomedicine, Neurosciences and Advanced Diagnostics (Bi.N.D.), Section of Biology and Genetics, University of Palermo, Italy. ²Department of Biomedicine, Neurosciences and Advanced Diagnostics (Bi.N.D.), Biochemistry Building, University of Palermo, Palermo, Italy. ³Institute for Biomedical Research and Innovation (IRIB), National Research Council (CNR), 90146 Palermo, Italy.

12:30 – 14:30 **Pausa**

14:30 **XI SESSIONE: STRESS CELLULARE**

Si assegnano n° 2 premi

Moderatori: Elena Donetti; Stefania Grimaudo; Rossana Morabito

14:31 – 14:39 **EFFECT OF AQUEOUS EXTRACTS FROM *P. OCEANICA* SEAGRASS ON MOUSE MACROPHAGES AND HUMAN BLOOD BRAIN BARRIER.**

Giulia ABRUSCATO¹ (π), Manuela MAURO¹, Vincenzo ARIZZA^{1,2}, Mirella VAZZANA^{1,2}, Aiti VIZZINI^{1,2}, Fabien GOSSELET³, Pietra CANDELA³ and Claudio LUPARELLO^{1,2}

¹Department of Biological, Chemical and Pharmaceutical Sciences and Technologies, University of Palermo, Palermo, Italy; ²NBFC, National Biodiversity Future Center, Palermo 90133, Italy; ³Laboratoire de la Barrière Hémato-Encephalique, UR2465, Université d'Artois, F-62300, Lens, France.

14:41 – 14:49 **EFFECT OF MELATONIN ON HEPATIC ALTERATIONS IN A BTBR T + Itpr3tf/J MOUSE MODEL OF AUTISM**

Giorgia COMINELLI¹ (π), Caterina FRANCO¹, Gaia FAVERO^{1,2}, Daniela PINTO³, Fabio RINALDI³, Rita REZZANI^{1,2,4}

¹Anatomy and Physiopathology Division, Department of Clinical and Experimental Sciences, University of Brescia, 25123 Brescia, Italy. ²Interdipartimental University Center of Research "Adaption and Regeneration of Tissues and Organs - ARTO", University of Brescia, 25123 Brescia, Italy. ³Human Microbiome Advanced Project Institute, 20129 Milan, Italy. ⁴Italian Society for the Study of Orofacial Pain (Società Italiana Studio Dolore Orofaciale -SISDO), 25123 Brescia, Italy.

14:51 – 14:59 **CELLULAR AND MOLECULAR MECHANISMS RELATED TO AAPH EFFECTS IN HUMAN ERYTHROCYTES: BENEFICIAL ROLE OF ANTHOCYANIN EXTRACTED FROM CALLISTEMON CITRINUS**

Alessia REMIGANTE, Sara SPINELLI, Angela MARINO, Rossana MORABITO
Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy

15:01 – 15:09 **EXPOSURE TO NANO-PLASTICS PROVOKES OXIDATIVE STRESS AFTER INTERNALIZATION IN HUMAN ERYTHROCYTES: ROLE OF ESTROGEN RECEPTORS**

Alessia REMIGANTE¹ (π), Sara SPINELLI¹, Lucrezia GAMBARDELLA², Silvia DOSSENA³, Angela MARINO¹, Elisabetta STRAFACE², Rossana MORABITO¹

¹ Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy. ² Biomarkers Unit, Center for Gender-Specific Medicine, Istituto Superiore di Sanità, Rome, 00161, Italy. ³ Institute of Pharmacology and Toxicology, FIZ - Regenerative Medicine & Novel Therapies, Paracelsus Medical University, Salzburg, 5020, Austria.

15:11 – 15:19 **CHARACTERIZATION OF 2D HaCaT CELL MODEL EXPOSED TO A PSORIATIC PROINFLAMMATORY MICROENVIRONMENT**

Federica RIVA¹, Franz BARUFFALDI-PREIS², Chiara PORRO³, Stefania RECALCATI⁴, Elena GAMMELLA⁴, Francesca PRIGNANO⁵, Elena DONETTI⁴

¹Department of Public Health, Experimental and Forensic Medicine, Histology and Embryology Unit, University of Pavia, Pavia, Italy; ²Plastic Surgery Unit, Ospedale Niguarda Ca' Granda, Milan, Italy; ³Department of Clinical and Experimental Medicine, University of Foggia, Foggia, Italy; ⁴Department of Biomedical Sciences for Health, University of Milan, Milan, Italy; ⁵Department of Health Sciences, Section of Dermatology, University of Florence, Florence, Italy.

15:21 – 15:29 **BLACK PERSIMMON (*Diospyros digyna* JACQ.) EXTRACTS MITIGATE IL-1 β -INDUCED INFLAMMATORY RESPONSE IN INTESTINAL EPITHELIAL CELLS WHILE PRESERVING EPITHELIUM BARRIER FUNCTION**

Graziella SERIO¹ (π), Roberto CHIARELLI¹, Fabiana GERACI¹, Giuseppe MANNINO², Lorenza LA ROSA¹, Cinzia Margherita BERTEA², Carla GENTILE¹

¹Department of Biological, Chemical and Pharmaceutical Sciences and Technologies, University of Palermo, Viale delle Scienze Ed 16, 90128 Palermo (Italy); ²Department of Life Sciences and System Biology, University of Turin, Via Quarello 15/A, 10135 Turin (Italy).

15:31 – 15:39 **NANO-ZnO-ERYTHROCYTE DUET INTERPLAY: UNRAVELING THE MOLECULAR MECHANISMS OF ZINC NANOPARTICLES IN HUMAN ERYTHROCYTE TOXICITY**

Erion SUKAJ¹, Eldores SULA¹, Federica IMPELLITTERI², Caterina FAGGIO², Valbona ALIKO³

¹Western Balkans University, department of Medical Laboratory Sciences and Imaging, Tirana Albania; ²University of Messina, department of Chemical, Biological, Pharmaceutical and Environmental Sciences, Messina, Italy; ³University of Tirana Faculty of Natural sciences, department of Biology, Tirana Albania.

15:41 – 15:49 **H₂O₂-INDUCED OXIDATIVE STRESS IMPAIRS BAND 3 PROTEIN FUNCTION IN HUMAN ERYTHROCYTES: PROTECTIVE ACTIVITY OF QUERCETIN**

Graziano VINCI (π), Sara SPINELLI, Angela MARINO, Rossana MORABITO, Alessia REMIGANTE

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

15:50 **XII SESSIONE: MISCELLANEA**

Si assegnano n° 3 premi

Moderatori: Francesco Angelucci, Elvira Brunelli, Marina M. Boido,

15:51 – 15:59 **CLINICAL AND MORPHOLOGICAL ASPECTS OF NON-COMPACTION CARDIOMYOPATHY**

Manuel BELLI^{1,2} (π), Emanuela FRUSTACI³, Luigi SANSONE^{1,2}, Andrea RUSSO⁴, Mario CRISTINA³, Matteo A. RUSSO², Andrea FRUSTACI²

¹Department of Human Sciences and Promotion of the Quality of Life, San Raffaele Roma Open University, Rome, Italy; ²IRCCS San Raffaele Rome, Italy; ³Department of Molecular Medicine, Sapienza University of Rome, Italy; ⁴Department of Pathologic Anatomy, IRCCS Regina Elena, Rome, Italy.

16:01 – 16:09 **CONVENTIONAL GLUCOCORTICOID REPLACEMENT THERAPY VS. DUAL-RELEASE HYDROCORTISONE: EFFECTS ON INFLAMMATION AND IMMUNE PROFILE IN PATIENTS WITH PRIMARY ADRENAL INSUFFICIENCY AND IMPLICATIONS OF THERAPY RESPONSE PREDICTORS.**

Mattia BIONDO¹ (π), Laura TOMASELLO², Giuseppe PIZZOLANTI^{2,3,4}, Carla GIORDANO², Giorgio ARNALDI^{2,3}, Valentina GUARNOTTA^{2,3}

¹Università degli Studi di Palermo, Dip. di Scienze e Tecnologie Biologiche Chimiche e Farmaceutiche; ²Università degli Studi di Palermo, Dip. di Promozione della Salute, Materno-Infantile, di Medicina Interna e Specialistica di Eccellenza "G. D'Alessandro"; ³AOU Policlinico "Paolo Giaccone", Palermo; ⁴ATeN Center, Università degli Studi di Palermo.

- 16:11 – 16:19 **A NOVEL PROMISING STRATEGY FOR MANAGING OBESITY AND OBESITY-RELATED DISORDERS: A MOLECULAR DYNAMICS STUDY**
Sara CRUCIANI¹ (π), Gianvito GRASSO², Andrea DANANI², Margherita MAIOLI¹
¹ Department of Biomedical Sciences, University of Sassari, Sassari, Italy; ² Dalle Molle Institute for Artificial Intelligence Studies (IDSIA), University of Applied Sciences and Arts of Southern Switzerland (SUPSI), University of Southern Switzerland (USI), Manno, Switzerland.
- 16:21 – 16:24 **COMPARISON OF HEMOSTATIC TOPICAL FORMULATIONS**
 Giorgia COMINELLI¹ (π), Lorena GIUGNO¹, Alice LEROSE², Gloria PUMILIA², Danilo RIVA², Gaia FAVERO^{1,3}
¹Anatomy and Physiopathology Division, Department of Clinical and Experimental Sciences, University of Brescia, Brescia, Italy; ²Research and development Industria farmaceutica Nova Argentia srl, Gorgonzola, Milan, Italy; ³Interdipartimental University Center of Research “Adaption and Regeneration of Tissues and Organs (ARTO)”, University of Brescia, Brescia, Italy.
- 16:26 – 16:29 **CUTANEOUS LEISHMANIASIS AFTER TREATMENT WITH GOLIMUMAB FOR PSORIATIC ARTHRITIS**
Veronica FORTE¹ (π), Anna Silvia BIAMONTE², Massimo MENICHINI³, Fabrizio LIBERATI⁴, Luca VENTURA¹
¹U.O.C. Anatomia Patologica, Ospedale San Salvatore, L'Aquila; ²Dermatologia, Distretto Sanitario, L'Aquila; ³U.O.C. Medicina Nucleare, Ospedale San Salvatore, L'Aquila; ⁴U.O.C. Anatomia Patologica, Ospedale San Camillo de Lellis, Rieti.
- 16:31 – 16:39 **STRUCTURAL CHARACTERIZATION OF THIOREDOXIN REDUCTASE FROM CRYPTOSPORIDIUM PARVUM AND ITS INTERACTION WITH AURANOFIN**
Federica GABRIELE¹ (π), Jala BOGARD³, Matteo ARDINI¹, Marta PALERMA^{1,2}, Francesca FATA¹, Manuela D'ADDARIO¹, Xian-Ming CHE³, Rodolfo IPPOLITI¹, David WILLIAMS³, Francesco ANGELUCCI¹
¹Dept. of Life, Health and Environmental Sciences, University of L'Aquila, L'Aquila, Italy; ²University School for Advanced Studies of Pavia, Pavia, Italy; ³Dept. of Microbial Pathogens and Immunity, Rush University Medical Center, Chicago, IL, USA.
- 16:41 – 16:44 **STUDY ON ORGAN-ON-CHIP TO DEVELOP AN ALGORITHM THAT ALLOWS THE PERSONALIZATION OF THE OXYGEN-OZONE MIXTURE IN AUTOEMOTHERAPY**
Antonio GALOFORO¹, Paolo BONIVENTO²
¹SIOOT – 24020 GORLE (BG); ²RYSA srl – via Enzo Ferrari 16 – 25030 RONCADELLE (BS)
- 16:46 – 16:49 **SERUM miRNAs PROFILE IN DIABETIC RETINOPATHY AND CORRELATION ANALYSIS WITH IMAGING MARKERS AND CLINICAL OUTCOMES**
Laura LICITRI¹ (π), Francesca POLITO¹, Emanuela ARAGONA², Vincenzo MACAIONE¹, Concetta Ida SAOCA¹, Margherita TORRE¹, M'hammed AGUENNOUZ¹
¹Department of Clinical and Experimental Medicine - Section of VEQ, Immunometry and laboratory diagnosis services - University of Messina, Italy. ² Ophthalmology Department, University Vita-Salute San Raffaele Scientific Institute, Milan, Italy.
- 16:51 – 16:54 **CRYSTAL STRUCTURE OF HUMAN HISTONE DEACETYLASE 8 IN COMPLEX WITH A NOVEL HYDROXAMIC ACID INHIBITOR**
Marta PALERMA^{1,2} (π), Luke N. M. HARDING³, Valentina Z. PETUKHOVA³, Federica GABRIELE¹, Matteo ARDINI¹, Manuela D'ADDARIO¹, Rodolfo IPPOLITI¹, David L. WILLIAMS⁴, Pavel A. PETUKHOV³, Francesco ANGELUCCI¹
¹Department of Life, Health and Environmental Sciences, University of L'Aquila, L'Aquila, Italy; ²University School for Advanced Studies of Pavia, Pavia, Italy; ³Department of Pharmaceutical Sciences, College of Pharmacy, University of Illinois at Chicago, Chicago, IL, USA; ⁴Department of Microbial Pathogens and Immunity, Rush University Medical Center, Chicago, IL, USA.
- 16:56 – 16:59 **MORPHOLOGY OF THE PINE PROCESSIONARY (*Thaumetopoea pytyocampa*)**

Federica TALARICO¹, Rachele MACIRELLA¹, Stefano SCALERCIO², Elvira BRUNELLI¹

¹Department of Biology, Ecology and Earth Science (DiBEST) - University of Calabria, Via P. Bucci 4/B, 87036, Rende, Cosenza, Italy; ²CREA- Research Centre for Forestry and Wood, 87036, Rende, Cosenza, Italy.

17:01 – 17:09 **ARTEMISIA ABSINTHIUM EXTRACT: A PROMISING CANDIDATE FOR ANTIBACTERIAL MOUTHWASH AGAINST ORAL PATHOGENS"**

Ioannis TSAMESIDIS¹ (π), Athanasios CHRISTODOULOU^{1,2}, Dionisia AMANATIDOU², Faidra ELEFTHETIOU², Georgia MICHAILIDOU³, Dimitrios BIKIARIS¹, Sotirios KALFAS¹ and Eleana KONTONASAKI¹

¹Department of Prosthodontics, Faculty of Health Sciences, School of Dentistry, Aristotle University of Thessaloniki, Thessaloniki, Greece. ²Department of Biomedical Sciences, International Hellenic University, Thessaloniki, Greece. ³Department of Chemistry, Aristotle University of Thessaloniki.

17:11 – 17:29

LETTURA "MASSIMO COCCHI"

Dott.ssa Anna DI COSMO, Napoli

Invertebrate Welfare

Moderatori: Paolo Bonivento; Maria Grazia Palmerini

17:30 – 18:30

ASSEMBLEA DEI SOCI

Presidente: Francesco Cappello; Segretario: Marina M. Boido

18:30 – 18:45

COMUNICAZIONE DEI VINCITORI DEI PREMI

Francesco Cappello, Maria Grazia Palmerini

18:50 – 19:00

Conclusioni della seconda giornata e informazioni di servizio sulla terza

Francesco Cappello, Maria Grazia Palmerini

28 aprile 2024

PRESSO IL FORTE SPAGNOLO DELL'AQUILA

9:00 – 11:50

Open Round Table

"La SIBS verso il Centenario"

11:50 – 12:00

Conclusioni del Congresso

Francesco Cappello, Maria Grazia Palmerini

