

94° CONGRESSO NAZIONALE

6 - 9 Aprile 2022

Palazzo degli Istituti Anatomici
(Corso Massimo D'Azeglio 52, Torino)

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Programma

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UNIVERSITÀ
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DIPARTIMENTO DI
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Programma in sintesi

		6 Aprile	7 Aprile	8 Aprile	9 Aprile
<i>Mattino</i>	9 - 10	Assemblea dei soci (1a convocazione)	<i>Lettura "Francesco Redi"</i> Timothy Ravasi OIST, Giappone	<i>Lettura "Ferdinando Rossi"</i> Michela Matteoli Humanitas Clinical and Research Center, Milano	<i>Simposio satellite</i> "Cibo del futuro: tra sostenibilità, prevenzione e benessere" Università di Scienze Gastronomiche Pollenzo (CN)
	10 - 11		<i>Sessione</i> Biologia degli ambienti acquatici	<i>Sessione</i> Neurodegenerazione e neuroinfiammazione	
	11 - 12		<i>Sessione</i> Oncologia & micro e nanovesicole in biologia sperimentale		
	12 - 13		<i>Sessione</i> COVID-19	<i>Sessione</i> Neurosviluppo & interazioni neuroni-glia	
	13 - 14	Cerimonia di Apertura Saluti istituzionali	Light lunch/Sessione poster	Light lunch/Sessione poster	
<i>Pomeriggio</i>	14 - 15	<i>Lettura "Gaetano Quagliariello"</i> Valerio Orlando KAUST, Arabia Saudita	<i>Sessione</i> Ambiente e salute	<i>Sessione</i> Approcci traslazionali alla biologia sperimentale	
	15 - 16	<i>Sessione</i> Stress cellulare		<i>Lecture sponsorizzate</i> Zeiss, Media System Lab, Miltenyi Biotec	
	16 - 17		Cerimonia di Chiusura Assegnazione dei premi Chiusura dei lavori	XI MEETING QPP GROUP	
	17 - 18	<i>Sessione</i> Antropologia: approcci comparati	Assemblea dei Soci (2a convocazione)		

Per seguire i lavori a distanza, collegarsi a:

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**I VIDEOPOSTER SARANNO VISIBILI PER TUTTA LA DURATA DEL CONGRESSO,
ATTRAVERSO L'AREA RISERVATA DEL SITO.**

I POSTER SARANNO ESPOSTI IN PRESENZA PER TUTTA LA DURATA DEL CONGRESSO.

**I NOMI DEI VINCITORI DEI PREMI PER LE MIGLIORI COMUNICAZIONI
ORALI E I MIGLIORI POSTER/VIDEOPOSTER SARANNO COMUNICATI
NEL POMERIGGIO DI VENERDI' 8 APRILE E INOLTRE RESI PUBBLICI
NEI GIORNI SUCCESSIVI AL CONGRESSO ANCHE ATTRAVERSO LA
PUBBLICAZIONE SUL SITO WEB:**

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LETTURA “GAETANO QUAGLIARIELLO”
6 Aprile 2022, ore 14.00



Prof. Valerio Orlando
KAUST, Arabia Saudita

“Human repeatome: from Junk to RNA therapeutics”

Moderatore: Francesco Cappello

Le ricerche del Prof. Orlando sono focalizzate sullo studio dei meccanismi epigenetici dell'adattamento e di come questi siano importanti per lo sviluppo, l'invecchiamento, l'alimentazione e le malattie dell'uomo. In particolare, nel laboratorio del Prof. Orlando si indagano i meccanismi mediati dalla cromatina e dall'architettura nucleare che controllano e mantengono l'identità e la plasticità cellulare nelle cellule somatiche adulte. Questi includono proteine del gruppo Polycomb, altri regolatori della struttura della cromatina e ncRNA coinvolti nei meccanismi di regolazione epigenetica, nonché come questi meccanismi influenzino lo sviluppo e l'adattamento, in particolare in condizioni di stress, nel ritmo circadiano e nella comunicazione da organo a organo. Inoltre, nell'ambito dell'indagine sulle proprietà plastiche del genoma in risposta a segnali di sviluppo e ambientali, il nuovo focus del laboratorio del Prof. Orlando è quello di esplorare il ruolo degli elementi trasponibili dei mammiferi nella differenziazione cellulare, nell'invecchiamento e nelle malattie.

LETTURA "FRANCESCO REDI"
7 Aprile 2022, ore 9.00



Prof. Timothy Ravasi
Marine Climate Change Unit, Okinawa Institute of
Science and Technology (OIST), Australian Research
Council Center of Excellence for Coral Reef Studies,
James Cook University

"Adaptation and Acclimation of Coral Reef Fish as a
Response to Climate Change"

Moderatore: Corrado Cali

Le attività antropogeniche stanno portando al cambiamento climatico globale a un ritmo senza precedenti. Una pletora di studi ha suggerito che queste anomalie climatiche possono portare a gravi conseguenze per l'ambiente marino, specialmente per le specie poikilotermi che le costituiscono. Inoltre, ci sono prove che un aumento della concentrazione di CO₂ atmosferica porterà a una grave interruzione di processi chiave come la calcificazione, lo sviluppo durante gli stadi larvali, ed il riconoscimento di predatori e prede, tra gli altri. Tuttavia, la maggior parte di questi studi non tiene conto della capacità degli organismi marini di adattarsi e acclimatarsi a cambiamenti così rapidi. Pertanto, studi scientifici hanno identificato popolazioni esposte a condizioni estreme che si sono adattate alle oscillazioni ambientali, rivelando i geni e le vie metaboliche associate alla capacità di far fronte a tali cambiamenti. Un numero crescente di ricerche esemplifica anche come le specie possono acclimatarsi a contesti insoliti se gli individui sono esposti nelle prime fasi della vita e come la tolleranza raggiunta durante la loro vita può essere ereditata dalla sua progenie attraverso meccanismi epigenetici. L'attività di ricerca del Prof. Ravasi mira a comprendere i meccanismi di adattamento delle specie marine, per comprendere il loro destino in un pianeta che cambia, ed il contributo dei meccanismi di rapida evoluzione/plasticità fenotipica alla risposta adattativa dei pesci della barriera corallina agli ambienti mutevoli.

LETTURA “FERDINANDO ROSSI”
8 Aprile 2022, ore 9.00



Prof.ssa Michela Matteoli
Humanitas Clinical and Research Center, Milano

***“Immuno-sinaptopatie: come il sistema immunitario
influenza la sinapsi”***

Moderatore: Marina Boido

Le sinapsi sono strutture cerebrali fondamentali che mediano il trasferimento di informazioni tra le cellule nervose; controllano tutte le funzioni del corpo e tutti gli aspetti cognitivi, inclusi l'attenzione, la percezione, l'apprendimento, il processo decisionale, nonché l'umore e l'affetto. Molti disturbi psichiatrici e neurodegenerativi sono sinaptopatie, cioè condizioni patologiche in cui le vie molecolari e cellulari che operano a livello delle sinapsi sono disregolate. È interessante notare che l'infiammazione ha conseguenze a lungo termine e potrebbe modificare il rischio e/o la gravità di una varietà di malattie del cervello. Non è ancora completamente compreso se le cascate infiammatorie influenzino formazione e funzione delle sinapsi, sebbene sia stato scoperto che un certo numero di molecole coinvolte nei processi infiammatori regolano specifici processi neuronali.

L'attività del laboratorio della Prof.ssa Matteoli mira a comprendere i meccanismi molecolari alla base delle disfunzioni sinaptiche nelle malattie neurodegenerative e psichiatriche e a definire come l'interazione glia-neurone e l'infiammazione influiscano su questi processi, al fine di identificare nuovi target terapeutici.

Le **comunicazioni orali** (della durata di **10 minuti**) potranno essere effettuate in presenza o a distanza. Nel secondo caso, si suggerisce fortemente di preregistrare la presentazione e inviarla, tramite WETRANSFER, a **sibs1925@yahoo.com** almeno una settimana prima dell'inizio del Congresso, in modo che se vi fossero problemi di connessione durante il Congresso la Segreteria Organizzativa potrà avviare quantomeno la registrazione.

I **poster** dovranno essere VERTICALI e non dovranno superare la dimensione di 80 cm in larghezza e 200 cm in altezza (tali dimensioni corrispondono a quelle della griglia porta-poster). I poster potranno rimanere appesi per l'intera durata del congresso: gli autori presentatori dovranno presenziare, per eventuali spiegazioni e chiarimenti, durante le due "sessioni poster" previste nella fascia oraria 13-14 nei giorni 7 e 8 Aprile.

I **videoposter** DOVRANNO essere preregistrati, avere una durata massima di 3 minuti ed essere inviati, tramite WETRANSFER, a **sibs1925@yahoo.com** almeno una settimana prima dell'inizio del Congresso, altrimenti non verrà garantita la loro pubblicazione on-line. Le istruzioni per la registrazione sono state pubblicate sul sito del Congresso nella pagina <https://www.sibsperimentale.it/94congresso-sibs-torino>, nella sezione "Abstract Submission", a cui si rimanda.

Le istruzioni per collegarsi in remoto saranno pubblicate sul sito web del Congresso, pochi giorni prima dello stesso.

La lingua ufficiale del congresso è l'ITALIANO.

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ACCESSO GRATIS AI MUSEI SCIENTIFICI **PER GLI ISCRITTI AL CONGRESSO**

Durante l'intera durata del congresso sarà possibile visitare gratuitamente i seguenti Musei, tutti limitrofi all'area congressuale:

- 1. Museo di Anatomia Umana "Luigi Rolando";**
- 2. Museo di Antropologia criminale "Cesare Lombroso";**
- 3. Museo della Frutta "Francesco Garnier Valletti".**

Basterà mostrare il badge del Congresso SIBS in biglietteria.

Per info:

<https://www.museoanatomia.unito.it>
(Corso Massimo d'Azeglio, 52, 10126 Torino)

<https://www.museolombroso.unito.it>
(Via Pietro Giuria, 15, 10126 Torino)

<http://www.museodellafrutta.it>
(Via Pietro Giuria, 15, 10126 Torino)

Inoltre, sarà possibile effettuare visite gratuite, a piccoli gruppi, ad alcune collezioni del Museo di Antropologia ed Etnografia (attualmente chiuso al pubblico). Gli interessati potranno prenotarsi presso la sede congressuale.

Per info:

<https://www.museoantropologia.unito.it>

Programma delle Letture e delle Comunicazioni Orali

Mercoledì 6 Aprile

Lettura "Gaetano Quagliariello", ore 14.00

Sessione STRESS CELLULARE, ore 15.00 - 17.00

Moderatori: Nicoletta Filigheddu, Antonella Marino Gammazza

MANIPULATION OF HSP70 SIGNAL MODULATES THE PROCESS OF SH-SY5Y DIFFERENTIATION AND SURVIVAL TO OXIDATIVE STRESS-DEPENDENT CELL DAMAGE

Miriana **SCORDINO**, Monica FRINCHI, Giulia URONE, Giuseppa MUDÓ, Valentina DI LIBERTO
Dipartimento di Biomedicina, Neuroscienze e Diagnostica Avanzata, Università di Palermo, Corso Tukory 129, 90134 Palermo, Italy.

MAP KINASES INVOLVEMENT IN STRESS SIGNALING DURING THE COLONIAL BLASTOGENETIC CYCLE OF *Botryllus schlosseri*

Laura **DRAGO**, Gianfranco SANTOVITO, Lorianò BALLARIN
Department of Biology, University of Padova, Padova, Italy.

ROLE OF MELATONIN IN MODULATING STRESS-INDUCED PREMATURE SENESCENCE IN HEMATOPOIETIC STEM CELLS

Sara **CRUCIANI**¹, Carlo VENTURA², Claudio FOZZA³, Margherita MAIOLI¹
¹Department of Biomedical Sciences, University of Sassari, 07100 Sassari, Italy; ²National Laboratory of Molecular Biology and Stem Cell Engineering – Eldor Lab, Istituto Nazionale di Biostrutture e Biosistemi (INBB), Innovation Accelerators, CNR, Bologna, 40129, Italy; ³Blood Diseases Department of Clinical and Experimental Medicine University of Sassari, 07100 Sassari, Italy.

LPS AND 17- β -ESTRADIOL AFFECT HUMAN MONOCYTES BEHAVIOUR IN A SEX-SPECIFIC MANNER

Ilaria CAMPESI, Andrea **MONTELLA**
Dipartimento di Scienze Biomediche, Università Degli Studi di Sassari, Sassari, Italy.

ERYTHROCYTE AGING IS ASSOCIATED WITH CHANGES IN BAND 3 PROTEIN FUNCTION DUE TO OXIDATIVE STRESS AND GLYCATION EVENTS

Sara **SPINELLI**¹, Alessia REMIGANTE¹, Silvia DOSSENA², Daniele CARUSO³, 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; ³Clinical Pathology and Virology, A.O. Papardo, Messina, Italy.

A 3D MODEL OF ORGANOTYPIC ORGANOTYPIC CULTURES OF NORMAL HUMAN SKIN HELPS TO GAIN INSIGHTS INTO THE HOMEOSTATIC ROLE OF INTERLEUKIN 22 IN HEALTH AND DISEASE

Elena **DONETTI**¹, Francesca PRIGNANO²
¹Department of Biomedical Sciences for Health, Università degli Studi di Milano; ²Department of Health Sciences, Section of Dermatology, University of Florence.

HUMAN HSP60 MUTATIONS p.GLU129LYS AND p.VAL287ILE ASSOCIATION WITH MITOCHONDRIAL DYSFUNCTION: NEW INSIGHTS FOR UNDERSTANDING SPASTIC PARAPLEGIAS

Alessandra Maria **VITALE**^{1,2}, Rosario **BARONE**¹, Letizia **PALADINO**^{1,2}, Leila **NOORI**¹, Federica **SCALIA**^{1,2}, Everly **CONWAY DE MACARIO**^{2,3}, Alberto **JL MACARIO**^{2,3}, Francesco **CAPPELLO**^{1,2}, Antonella **MARINO GAMMAZZA**¹

¹*Department of Biomedicine, Neuroscience and Advanced Diagnostics (B.i.N.D.), University of Palermo, Palermo, Italy;* ²*Euro-Mediterranean Institute of Science and Technology (IEMEST), Palermo, Italy;* ³*Department of Microbiology and Immunology, School of Medicine, University of Maryland at Baltimore-Institute of Marine and Environmental Technology (IMET), Baltimore, MD, United States.*

THE ROLE OF ACTIVITY-DEPENDENT NEUROPROTECTIVE PROTEIN (ADNP)-DERIVED PEPTIDE (NAP) IN THE CORNEAL EPITHELIUM: FOCUS ON ITS EFFECT AGAINST UV-B RADIATION-INDUCED ROS FORMATION

Grazia **MAUGERI**¹, Agata Grazia **D'AMICO**², Velia **D'AGATA**¹

¹*Section of Anatomy, Histology and Movement Sciences, Department of Biomedical and Biotechnological Sciences, University of Catania, 95100 Catania, Italy;* ² *Department of Drug Sciences, University of Catania, 95125 Catania, Italy.*

PHYSIOLOGICAL RESPONSES INDUCED BY PFAS EXPOSURE IN FRESHWATER FISH OF THE VENETO REGION

Elisabetta **PIVA**¹, Sophia **SCHUMANN**¹, Marco **BONATO**¹, Daniela **BERTOTTO**², Andrea **MARION**³, Paola **IRATO**¹, Gianfranco **SANTOVITO**¹

¹*Department of Biology, University of Padova, Italy;* ²*Department of Comparative Biomedicine and Food Science, University of Padova, Italy;* ³*Department of Industrial Engineering, University of Padova, Italy.*

β-CARYOPHYLLENE REVERTS FREE FATTY ACIDS-INDUCED CELLULAR STRESS IN HEPG2 HEPATOCYTES THROUGH CB2 AND PPAR-α RECEPTORS

Rosaria **SCANDIFFIO**, Erika **COTTONE**, Massimo **MAFFEI**, Patrizia **BOVOLIN**

Dept. Life Sciences and Systems Biology, University of Turin, Italy.

Sessione ANTROPOLOGIA: APPROCCI COMPARATI, ore 17.00 - 18.00

Moderatori: Margherita Micheletti Cremasco, Beatrice Demarchi

YAWN CONTAGION IN BONOBO: OBSERVATIONAL VS EXPERIMENTAL STUDIES

Elisa **DEMURU**^{1,2}, Sara **DE VITTORIS**³, Marta **CASELLI**³, Ivan **NORSCIA**³

¹*Laboratoire Dynamique Du Langage, CNRS-UMR5596, University Lyon 2, Lyon, France;* ²*Equipe de Neuro-Ethologie Sensorielle, ENES/CRNL, CNRS-UMR5292, Inserm UMR-S1028, University of Lyon/Saint-Etienne, Saint-Etienne, France;* ³*Department of Life Sciences and Systems Biology, University of Torino, Torino, Italy.*

DIACHRONIC STUDY OF AN ITALIAN APENNINE VILLAGE THROUGH ANCIENT DNA, ANTHROPOLOGY AND PALEODEMOGRAPHY

Elisabetta **CILLI**¹, Carla **BINI**², Stefania **SARNO**³, Mirko **TRAVERSARI**¹, Francesco **FONTANI**¹, Alessio **BOATTINI**³, Susi **PELOTTI**², Donata **LUISELLI**¹

¹*Laboratory of Ancient DNA (aDNALab), Department of Cultural Heritage, University of Bologna, Ravenna, Italy;* ²*Laboratory of Forensic Genetics, Department of Medical and Surgical Sciences, University of Bologna, Bologna, Italy;* ³*Laboratory of Molecular Anthropology and Centre for Genome Biology, Department of Biological, Geological and Environmental Sciences, University of Bologna, Bologna, Italy.*

ANALYSIS OF THE MANIFESTATION OF THE EAGLE SYNDROME (ES) AND THE CROWNED DENS SYNDROME (CDS) IN HOMO SAPIENS: MORPHOMETRIC APPROACH THROUGH 3D TECHNOLOGY

Francesca **MELI**^{1,2}, Giuseppe **CAROTENUTO**², Salvatore **FICARRA**³, Riccardo **BASILE**², Valeria **CUNZOLO**², Claudia **FIORENTINO**², Luca **SINEO**²

¹ *Dip. Culture e società – Università degli Studi di Palermo;* ² *Laboratorio di Antropologia Dip. Scienze e tecnologie biologiche, chimiche e farmaceutiche (S.Te.Bi.C.e F.) - Dip. di Culture e Società Università degli Studi di Palermo;* ³ *Ricercatore Indipendente.*

3D-3D SUPERIMPOSITION OF PUBIC BONES: AN ADDITION TO THE PERSONAL IDENTIFICATION TOOLKIT

Andrea **PALAMENGI**¹, Daniele **GIBELLI**², Michaela **CELLINA**³, Annalisa **CAPPELLA**^{4,5}, Debora **MAZZARELLI**¹, Danilo **DE ANGELIS**¹, Chiarella **SFORZA**², Cristina **CATTANEO**¹

¹*LABANOF, Laboratorio di Antropologia e Odontologia Forense, Sezione di Medicina Legale, Dipartimento di Scienze Biomediche per la Salute, Università degli Studi di Milano;* ²*LAFAS, Laboratorio di Anatomia Funzionale dell'Apparato Stomatognatico, Dipartimento di Scienze Biomediche per la Salute, Università degli Studi di Milano;* ³*Reparto di Radiologia, Ospedale Fatebenefratelli, ASST Fatebenefratelli Sacco, Milan, Italy;* ⁴*U.O. Laboratorio di Morfologia Umana Applicata, IRCCS Policlinico San Donato, San Donato Milanese, Milan, Italy;* ⁵*Dipartimento di Scienze Biomediche per la Salute, Università degli Studi di Milano, Milan, Italy.*

ANTHROPOMETRY CONTRIBUTION IN CLINICAL RESEARCH: BODY COMPOSITION ASSESSMENT THROUGH BIOELECTRICAL IMPEDANCE VECTOR ANALYSIS (BIVA) DURING PREGNANCY

Alessia **MORONI**¹, Concetta **VARDÈ**², Margherita **MICHELETTI CREMASCO**¹

¹*Department of Life Sciences and Systems Biology, University of Torino, 10123 Torino, Italy;* ²*Edoardo Agnelli Hospital, Gynaecology and Obstetrics Division, Pinerolo (Torino), Italy.*

Giovedì 07 Aprile

Lettura "Francesco Redi", ore 9.00

Sessione BIOLOGIA DEGLI AMBIENTI ACQUATICI, ore 10.00 – 11.00

Moderatori: Francesca Bona, Livio Favaro

AQUEOUS EXTRACTS FROM LEAVES AND RHIZOMES OF THE MARINE SEAGRASS *POSIDONIA OCEANICA* EXHIBIT ANTI-LIVER CANCER ABILITY IN VITRO

Giulia **ABRUSCATO**, Valentina **LAZZARA**, Diletta **PUNGINELLI**, Manuela **MAURO**, Mirella **VAZZANA**, Vincenzo **ARIZZA**, Claudio **LUPARELLO**

Dipartimento di Scienze e Tecnologie Biologiche Chimiche e Farmaceutiche (STEBICEF), Università di Palermo.

EVALUATION OF POTENTIAL SIDE EFFECTS OF TIO₂-rGO NANOCOMPOSITES ON *Paracentrotus lividus* SPERMATOOZOA (LAMARCK, 1816)

Sara **IGNOTO**

Department of Biological, Geological and Environmental Sciences, University of Catania, Via Androne 81, 95124, Catania, Italy.

OTOLITHS ANALYSES HIGHLIGHT DIFFERENCES AMONG THREE SPECIES OF MULLET (*MUGILIDAE*) FROM TRANSITIONAL WATER

Sergio **FAMULARI**¹, Claudio **D'IGLIO**^{1,3}, Marco **ALBANO**¹, Giovanni **LANTERI**¹, Sabrina **NATALE**¹, Claudio **GERVASI**¹, Nunziacarla **SPANÒ**^{3,4}, Serena **SAVOCA**⁴, Gioele **CAPILLO**^{2,3}

¹*Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Viale F. Stagno d'Alcontres 31, 98166, Messina, Italy,* ²*Department of Veterinary Sciences, University of Messina, Viale dell'Annunziata, I-98168, Messina, Italy,* ³*Institute of Biological Resources and Marine Biotechnologies (IRBIM-CNR), Spianata San Raineri, 86 – 98122 Messina (ME), Italy,* ⁴*Department of Biomedical, Dental and Morphological and Functional Imaging, University of Messina, Via Consolare Valeria, Messina, Italy.*

PERCEPTION OF FUNDAMENTAL FREQUENCY AND FORMANTS IN AFRICAN PENGUINS

Luigi **BACIADONNA**¹, Chiara **MACCARONE**¹, Valentina **ISAJA**², Francesca **BANDOLI**³, Marco **GAMBA**¹, Livio **FAVARO**¹

¹Department of Life Sciences and Systems Biology, University of Turin, Turin, Italy, ²Zoom Torino, Piscina, Turin, Italy; ³Giardino Zoologico di Pistoia, Pistoia, Italy.

CHERAX DESTRUCTOR (Clark, 1836) AND CHERAX QUADRICARINATUS (von Martens, 1868): SAFETY AND NUTRITIONAL QUALITY

Manuela **MAURO**¹, Marco **ARCULEO**¹, Vincenzo **ARIZZA**¹, Pietro **CHIRCO**¹, Giampaolo **BADALAMENTI**¹, Gaetano **CAMMILLERI**², Mirella **VAZZANA**¹

¹Dipartimento di Scienze e Tecnologie Biologiche, Chimiche e Farmaceutiche (STEBICEF), Università di Palermo, Palermo, 90128, Italia; ²Istituto Zooprofilattico Sperimentale della Sicilia A. Mirri, Palermo, 90129, Italia.

Sessione ONCOLOGIA & MICRO E NANOVEVICOLE IN BIOLOGIA SPERIMENTALE, ore 11.00 – 12.00

Moderatori: Stefania Bruno e Rosario Barone

FROM PHYSICAL EXERCISE TO MOLECULAR PATHWAYS: INSIGHT TO TREAT CANCER-RELATED CACHEXIA

Giuseppe Donato **MANGANO**¹, Daniela **D'AMICO**¹, Martina **SAUSA**², Filippo **MACALUSO**², Francesca **RAPPA**¹, Antonella **MARINO GAMMAZZA**¹, Francesco **CAPPELLO**¹, Valentina **DI FELICE**¹, Rosario **BARONE**¹

¹Department of Biomedicine, Neuroscience and Advanced Diagnostics, Institute of Human Anatomy and Histology, University of Palermo, Palermo, Italy; ²SMART Engineering Solutions & Technologies (SMARTEST) Research Center, eCampus University, Palermo, Italy.

HUMAN STROMAL LENTICULE ENGINEERED WITH MICROPARTICLES LOADED WITH RECOMBINANT HUMAN NGF AS A POTENTIAL BIOCOMPATIBLE DRUG DELIVERY SYSTEM FOR OCULAR DISEASE TREATMENT.

Domitilla **MANDATORI**¹, Giuseppina **ACERRA**², Nicola **DETTA**², Letizia **PELUSI**¹, Simone **MATTIOLI**², Manuela **SANTALUCIA**¹, Laura **PIETRANGELO**³, Marcello **ALLEGRETTI**⁴, Jod S **MEHTA**⁵, Mario **NUBILE**⁶, Assunta **PANDOLFI**¹

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THE WORD-OF-MOUTH MESSAGE OF MICROGLIA EXTRACELLULAR VESICLES

Maria Antonietta **PANARO**¹, Maria Ester **LA TORRE**², Melania **RUGGIERO**¹, Antonia **CIANCIULLI**¹, Dario Domenico **LOFRUMENTO**³, Giovanni **MESSINA**², Chiara **PORRO**²

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VITAMIN D BINDING PROTEIN: A NEW PLAYER IN THE ONSET OF CANCER CACHEXIA

Tommaso **RAITERI**¹, Simone **REANO**¹, Andrea **SCIRCOLI**¹, Ivan **ZAGGIA**¹, Flavia **PRODAM**², Nicoletta **FILIGHEDDU**¹

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EXTRACELLULAR VESICLES RELEASED BY PROSTATE CANCER CELLS ENDOW ADIPOCYTES WITH TUMOR-PROMOTING PROPERTIES

Fabrizio **FONTANA**¹, Monica MARZAGALLI¹, Martina ANSELMINI¹, Emanuela CAROLLO², Patrizia SARTORI³, Patrizia PROCACCI³, David CARTER², Patrizia LIMONTA¹

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Sessione COVID-19, ore 12.00 – 13.00

Moderatori: Cristina Casalone, Federico Forneris

SARS-COV-2 IN MARINE MAMMALS: SURVEY RESULTS ON THE POTENTIAL VIRAL SUSCEPTIBILITY IN CETACEANS STRANDED ALONG THE ITALIAN COASTLINE

Tania **AUDINO**¹, Elena BERRONE¹, Carla GRATTAROLA¹, Federica GIORDA¹, Virginia MATTIODA¹, Antonio PINTORE², Giuliana TERRACCIANO³, Cristiano COCUMELLI³, Giuseppe LUCIFORA⁴, Fabio DI NOCERA⁴, Ludovica DI RENZO⁵, Silvia RUBINI⁶, Stefano GAVAUDAN⁷, Anna TOFFAN⁸, Roberto PULEIO⁹, Francesco BRUNELLI¹, Maria GORIA¹, Antonio PETRELLA⁹, Maria CARAMELLI¹, Sandro MAZZARIOL¹⁰, Giovanni DI GUARDO¹¹, Cristina CASALONE¹

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THE SIDE EFFECTS OF SARS-COV2 ON CHEMICAL COMPOSITION OF HUMAN SCALP HAIR

Paolo **BONIVENTO**^{1,2}, Stanislao DI AMATO¹, Cristina GERVASONI¹, Emiliana MINENNA²

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PREDICTED ROLE OF MOLECULAR MIMICRY IN COVID-19 PATHOGENESIS: NEW INSIGHTS FROM BIOINFORMATICS AND IMMUNOMORPHOLOGY

Francesca RAPPA¹, Rosario BARONE¹, Antonella MARINO GAMMAZZA¹, Letizia **PALADINO**¹, Sébastien LEGARE², Alessandro PITRUZZELLA¹, Cristoforo POMARA³, Everly CONWAY de MACARIO⁴, Alberto J.L. MACARIO^{4,5}, Francesco CAPPELLO^{1,5}

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GENDER ANALYSIS ON COVID-19 DATA IN PIEMONTE: THE VIRUS PREFERS MEN

Silvia **DE FRANCIA**¹, Alessandro FERRETTI², Francesco CHIARA¹, Sarah ALLEGRA¹, Daniele MANCARDI¹, Tiziano ALLICE³, Maria Grazia MILIA³, Gabriella GREGORI³, Claudio AVANZINI³, Valeria GHISSETTI³, Alessandra DURIO⁴

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SARS-COV2'S TROPISM IN NEURONS AND GLIA IMPAIRS NEURONAL NETWORKS ACTIVITY: AN *IN VITRO* STUDY ON RAT CORTICAL CELLS

Diletta **POZZI**^{1,*}, Pamela **MARTINEZ-ORELLANA**^{2,*}, Matteo **MANZATI**^{1,*}, Valentina PERRERA¹, Alessandro MARCELLO², Michele GIUGLIANO¹

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Sessione AMBIENTE E SALUTE, ore 14.00 – 17.00

Moderatori: Paolo Bonivento, Caterina Faggio

HYPOTHESIS OF HUMAN PATHOGENIC MICROBIOLOGICAL PRESENCES WITHIN THE CATABOLITES OF XYLOPHAGOUS INSECTS IN URBAN CONTEXT

Rossana **CAPUTO**¹, Emiliana MINENNA¹, Massimiliano MARTELLACCI², Paolo BONIVENTO^{1,3}

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PINCTADA IMBRICATA: AN EFFICIENT “ALIEN” AS A BIOMARKER

Cristiana Roberta **MULTISANTI**, Maria PAGANO, Federica IMPELLITTERI, Salvatore GIACOBBE, Caterina FAGGIO

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

SODIUM LAURYL SULFATE EXPOSURE ON ZEBRAFISH: LOCOMOTOR AND SOCIAL ALTERATIONS

Federica **IMPELLITTERI**¹, Mădălina Andreea ROBEA², Gabriel PLAVAN², Caterina FAGGIO¹

¹Department of Chemical, Biological, Pharmaceutical, and Environmental Sciences, University of Messina, Viale Ferdinando Stagno D'Alcontres 31, 98166 Messina, Italy; ²Department of Biology, Faculty of Biology, “Alexandru Ioan Cuza” University of Iasi, Carol I Avenue, 20A, Iasi, Romania.

THE USE OF NATIVE SPECIES FOR URBAN FORESTRY TO PREVENT ALLERGIES

Fortunato **CIRLINCIONE**¹, Maria Letizia GARGANO², Giuseppe VENTURELLA¹, Raimondo PARDI²

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PHYTOCHEMICAL PROFILE AND ANTIOXIDANT PROPERTIES OF FRUITS OF *EUGENIA INVOLUCRATA* DC

Graziella **SERIO**¹, Giuseppe MANNINO², Alberto ASTEGGIANO³, Noemi GATTI², Cinzia M. BERTEA², Claudio MEDANA³, Carla GENTILE¹

¹Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), University of Palermo, Viale delle Scienze, 90128 Palermo, Italy; ²Department of Life Sciences and Systems Biology, University of Turin, Via Via Gioacchino Quarello 15/A, Turin 10135, Italy; ³Department of Molecular Biotechnology and Health Sciences, University of Torino, Via Pietro Giuria 5, 10125 Torino, Italy.

NEURODEVELOPMENTAL TOXICITY OF SODIUM VALPROATE IN THE ZEBRAFISH MODEL: MORPHOMETRIC PROFILE AND BEHAVIORAL CHARACTERIZATION OF NEUROTOXICITY ENDPOINTS

Annamaria **IANNETTA**¹, Giulia CAIONI², Carmine MEROLA¹, Elisabetta BENEDETTI², Annamaria CIMINI², Cristiano BERTOLUCCI³, Tyrone LUCON-XICCATO³, Basak BESTE³, Michele AMORENA¹, Monia PERUGINI¹

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PESTICIDE EXPOSURE AND PREMATURE IDIOPATHIC THELARCHE IN GIRLS: THE PEACH PROJECT

Monia **PERUGINI**¹, Lucia COPPOLA^{2,3}, Sabrina TAIT³, Enrica FABBRIZI⁴, Lorella CIFERRI⁵, Giovanni ANGELOZZI¹, Cinzia LA ROCCA³

¹Faculty of Bioscience and Technology for Food, Agriculture and Environment, University of Teramo, Teramo, Italy; ²Department of Physiology and Pharmacology V. Erspamer, Sapienza University of Rome, 00185 Rome, Italy; ³Center for Gender-Specific Medicine, Italian National Institute of Health, 00161 Rome, Italy; ⁴Pediatric Departmental Simple Operative Unit, Civitanova Marche Hospital, ASUR Marche Area Vasta n. 3, Macerata, Italy; ⁵ASUR MARCHE Area Vasta 4, 63822 Porto San Giorgio (FM), Italy.

AFLATOXIN B1 TOXICITY IN ZEBRAFISH LARVA (*DANIO RERIO*): PROTECTIVE ROLE OF *HERICIUM ERINACEUS*

Davide **DI PAOLA**^{1,†}, Carmelo IARIA^{1,†}, Fabiano CAPPARUCCI¹, Marika CORDARO², Rosalia CRUPI³, Rosalba SIRACUSA¹, Ramona D'AMICO¹, Roberta FUSCO¹, Daniela IMPELLIZZERI¹, Salvatore CUZZOCREA^{1,4,*}, Nunziacarla SPANÒ^{2,*}, Enrico GUGLIANDOLO^{3,‡}, Alessio Filippo PERITORE^{1,‡}

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MICROGRAVITY EFFECT ON CYANOBACTERIA UNDER EXTRA-TERRESTRIAL GROWING CONDITIONS TO SUPPORT MANNED SPACE MISSIONS

Alessia **MANCA**¹, Giacomo FAIS², Alessandro CONCAS^{2,3}, Giacomo CAO^{2,3,4}, Antonella PANTALEO¹

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NEW STANDARDISED PROCEDURE TO EXTRACT GLYPHOSATE AND AMINOMETHYLPHOSPHONIC ACID (AMPA) FROM ORGANIC AND INORGANIC MATRICES: TOWARD A PRACTICAL KIT FOR HPLC-UV DETECTION

Sarah **ALLEGRA**, Francesco CHIARA, Elisa ARRIGO, Silvia DE FRANCIA, Daniele MANCARDI
Department of Clinical and Biological Sciences, University of Torino, Italy.

THE ANTIMICROBIAL POTENTIAL OF AN HEXANE OIL FRACTION AND POLYPHENOLS-RICH EXTRACTS FROM *PISTACIA VERA* L

Teresa **GERVASI**^{1,*}, Manuela D'ARRIGO², Davide BARRECA², Giuseppina MANDALARI²

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METABOLIC EFFECTS OF POLYSTYRENE MICROPLASTICS IN MARINE MUSSELS AFTER SHORT-TERM EXPOSURE

Giuseppe DE MARCO, Mariachiara GALATI, Gea OLIVERI CONTI, Maria MAISANO, Tiziana **CAPPELLO**
Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Italy.

CNIDARIAN JELLYFISH AS A NEW FOOD SOURCE. A TOOL TO CHANGE A PROBLEM TOWARDS A RESOURCE?

Marco GIAMMANCO¹, Manfredi Marco GIAMMANCO², Gabriele MARIOTTINI³, Gian Luigi **MARIOTTINI**⁴

¹Department of Surgical, Oncological and Oral Sciences, University of Palermo, Italy; ²Medical School, University of Palermo, Italy; ³Doctor specializing in Emergency Medicine at the University of Verona, Italy; ⁴retired from University of Genova, Italy (research fellow at Department of Earth, Environment and Life Sciences – DISTAV).

ZEBRAFISH: OBESITY AND NATURAL COMPOUNDS

Marilena **BRIGLIA**¹, Giuseppe MONTALBANO¹, Maria LEVANTI¹, Kamel MHALHEL¹, Caterina PORCINO¹, Marzio COMETA¹, Caterina FAGGIO², Rosaria LAURÁ¹

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MULTI-STRAIN PROBIOTIC FORMULATION IMPROVE INTESTINAL BARRIER FUNCTION BY MODULATION OF TIGHT JUNCTION PROTEINS

Raffaella **DI VITO**, Carmela CONTE, Giovanna TRAINA

Dipartimento di Scienze Farmaceutiche, Università degli Studi di Perugia, Via Romana, 06126, Perugia (PG), Italy.

Venerdì 08 Aprile

Lettura "Ferdinando Rossi", ore 9.00

**Sessione NEURODEGENERAZIONE E NEUROINFIAMMAZIONE,
ore 10.00 – 12.00**

Moderatori: Giovanni Ferrara, Mariagrazia Grilli

A CONVENIENT METHOD FOR EXTRACTION AND ANALYSIS WITH HIGH-PRESSURE LIQUID CHROMATOGRAPHY OF CATECHOLAMINE NEUROTRANSMITTERS IN PLASMA AND BRAIN SAMPLES OF MICE

FRANCESCO CHIARA¹, SARAH ALLEGRA¹, FRANCESCA MONTAROLO², SILVIA DE FRANCIA¹

¹ Clinical and Biological Sciences Department, University of Turin; ² Neuroscience Institute Cavalieri Ottolenghi (NICO), Orbassano (Turin).

EFFECTS OF PERINATAL EXPOSURE TO BISPHENOL A OR S IN EAE MODEL OF MULTIPLE SCLEROSIS

Brigitta BONALDO^{1,2}, Antonino CASILE^{1,3}, Francesca MONTAROLO^{1,4,5}, Martina BETTARELLI¹, Marilena MARRAUDINO^{1,2}, GianCarlo PANZICA^{1,2}

¹Neuroscience Institute Cavalieri Ottolenghi (NICO), Regione Gonzole, 10-10043 Orbassano, Turin, Italy; ²Department of Neuroscience "Rita Levi-Montalcini", University of Turin, Via Cherasco 15, 10126, Turin, Italy; ³Department of Chemical and Pharmaceutical Sciences and Biotechnology, University of Camerino, Cavour 19/f 62032 square Camerino (MC), Italy; ⁴Neurobiology Unit, Neurology, CReSM (Regional Referring Center of Multiple Sclerosis), San Luigi Gonzaga University Hospital, Orbassano, Italy; ⁵Department of Molecular Biotechnology and Health Sciences, University of Turin, Turin, Italy.

THE ROLE OF LOCUS COERULEUS DEGENERATION IN ALZHEIMER'S DISEASE AND ITS ASSOCIATION WITH NEUROINFLAMMATION

Alessandro GALGANI^{1,2}, Franco LOMBARDO³, Nicola MARTINI³, Filippo S. GIORGI¹, Francesco FORNAI^{1,4}

¹Department of Translational Research and of New Surgical and Medical Technologies, University of Pisa, Pisa, Italy; ²Department of Clinical and Experimental Medicine, University of Pisa, Pisa, Italy; ³Monasterio Foundation/National Research Council- Tuscany Region, Pisa, Italy; ⁴IRCSS Neuromed, Pozzilli, Italy.

THE AMYLOID AGGREGATION STUDY ON BOARD THE INTERNATIONAL SPACE STATION

Elena BERRONE¹, Franco CARDONE², Cristiano CORONA¹, Marco SBRICCOLI², Valerio BENEDETTI¹, Alessandra FAVOLE¹, Claudia PALMITESSA¹, Flavia PORRECA², Antonio CORNACCHIA², Serena CAMERINI², Marialuisa CASELLA², Marco CRESCENZI², Stefano SIRIGU³, Alessandro CRISAFI³, Chiara PIACENZA⁴, Gianni TRUSCELLI⁴, Dario CASTAGNOLO⁵, Claudia PACELLI⁶, Marino CRISCONIO⁶, Giovanni VALENTINI⁶, Gabriele MASCETTI⁶, Sara PICCIRILLO⁶, Simona SENNATO⁷, Francesca A. SCARAMUZZO⁸, Giovanni MELI⁹, Elena FIORI⁹, Annalisa MANCA⁹, Cristina CASALONE¹

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MOXIFLOXACIN RESCUES SPINAL MUSCULAR ATROPHY PHENOTYPES IN BOTH ANIMAL MODEL AND PATIENT-DERIVED CELLS

Giovanna MENDUTI¹, Piotr KONIECZNY^{2,3,4}, Camille JANUEL^{5,6}, Cecile MARTINAT^{5,6}, Ruben ARTERO^{2,3,4}, Marina BOIDO¹

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RHEUMATOID ARTHRITIS INDUCED BY INTRA-ARTICULAR INJECTION OF COMPLETE FREUND'S ADJUVANT ENHANCES THE EXPRESSION OF VARIOUS HSPS IN SENSORY NEURONS AND GLIAL CELLS IN THE DORSAL HORN OF THE SPINAL CORD

Malak **FOUANI**¹, Giuseppe Donato **MANGANO**¹, Wassim ABOU-KHEIR², Nada LAWAND^{2,3}, Angelo LEONE¹, Rosario BARONE¹

¹*Department of Biomedicine, Neuroscience and Advanced Diagnostics, Institute of Human Anatomy and Histology, University of Palermo, Italy;* ²*Department of Anatomy, Cell Biology and Physiological Sciences, Faculty of Medicine, American University of Beirut, Beirut, Lebanon;* ³*Department of Neurology, Faculty of Medicine, American University of Beirut, Beirut, Lebanon.*

GLIOBLASTOMA MULTIFORME: IDENTIFICATION OF A NEW PHARMACOLOGICAL TARGET INTERFERING WITH UNCONTROLLED NEOANGIOGENESIS

Agata Grazia **D'AMICO**¹, Grazia MAUGERI², Velia D'AGATA²

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AMPLIFICATION OF THROMBIN SIGNALLING IN CEREBRAL CAVERNOUS MALFORMATIONS

Concetta **SCIMONE**^{1,2}, Luigi DONATO^{1,2}, Simona ALIBRANDI^{1,2,3}, Rosalia D'ANGELO^{1,2}, Antonina SIDOTI^{1,2}

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NEUROTROPHIN SPECIFIC TRK RECEPTORS IN THE INNER EAR AND LATERAL SYSTEM OF NOTHOBRANCHIUS GUENTHERI

Caterina **PORCINO**¹, Marilena BRIGLIA¹, Caterina FAGGIO², Antonino GERMANÀ¹

¹*Zebrafish Neuromorphology Lab, Department of Veterinary Sciences, University of Messina, 98168 Messina, Italy;* ²*Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, 98166 Messina, Italy.*

DIFFERENTIATION POTENTIAL OF HUMAN ADIPOSE-DERIVED MESENCHYMAL STEM CELLS

Giuliana **MANNINO**¹, Graziella Croazzo², Rosario GIUFFRIDA², Rossana MORABITO¹, Angela MARINO¹, Debora LO FURNO²

¹*Department of Chemical, Biological, Pharmaceutical, and Environmental Sciences, University of Messina, Italy;* ²*Department of Biomedical and Biotechnological Sciences, University of Catania, Italy.*

Sessione NEUROSVILUPPO & INTERAZIONI NEURONI-GLIA, ore 12.00 – 13.00

Moderatori: Carmen Falcone, Michele Papa

UNDERSTANDING THE FUNCTION OF AHDC1 USING IN IN VITRO MODELS

Silvana **BOCHICCHIO**¹, Sara FINAURINI¹, Gloria ROS², Nicolò GUALANDI¹, Federico ANSALONI^{1,3}, Diego VOZZI³, Stefano GUSTINCICH^{1,3}, Remo SANGES^{1,3}

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CCT CHAPERONIN MUTANTS ASSOCIATED TO SENSORY AND MOTOR NEUROPATHIES: ABNORMAL MOLECULAR SHAPE RESULTS IN DYSFUNCTION

Federica **SCALIA**^{1,2}, Fabrizio LO CELSO^{3,4}, Alessandra Maria VITALE^{1,2}, Letizia PALADINO^{1,2}, Giosuè LO BOSCO^{2,6}, Giampaolo BARONE⁷, Everly CONWAY DE MACARIO⁵, Alberto J. L. MACARIO^{2,5}, Francesco CAPPELLO^{1,2}

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GFAP DELETION INDUCES MOLECULAR CHANGES IN THE SPINAL CORD NOT PARALLELED BY BEHAVIORAL ALTERATIONS

Ciro **DE LUCA**¹, Assunta VIRTUOSO¹, Ivana ALLOCCA¹, Raffaella CIRILLO¹, Giovanni CIRILLO¹, Michele PAPA^{1,2}

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MIGRATING SCHWANN CELLS USE BLOOD VESSELS LIKE A PATHWAY TO COLONIZE NERVE CONDUITS

Federica **ZEN**^{1,2}, Benedetta Elena FORNASARI^{1,2}, Giulia NATO^{2,3}, Marco FOGLI^{2,3}, Federico LUZZATI^{2,3}, Giulia RONCHI^{1,2}, Stefania RAIMONDO^{1,2}, Giovanna GAMBAROTTA^{1,2}

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EARLY POSTNATAL TREATMENT WITH ESTROGEN RECEPTOR ANTAGONISTS: SEXUALLY DIMORPHIC ORGANIZATIONAL EFFECTS

Marilena **MARRAUDINO**^{1,2}, Brigitta BONALDO^{1,2}, Margherita PAIANO¹, Gabriele TANESE¹, GianCarlo PANZICA^{1,2}, Paloma COLLADO³, Helena PINOS³, Stefano GOTTI^{1,2}

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Sessione APPROCCI TRASLAZIONALI ALLA BIOLOGIA SPERIMENTALE, ore 14.00 – 15.00

Moderatori: Marco Agus, Michele Giugliano

CHARACTERIZATION OF A NOVEL *IN VITRO* MODEL OF SARCOPENIA

Andrea **SCIRCOLI**, Tommaso RAITERI, Ivan ZAGGIA, Simone REANO, Nicoletta FILIGHEDDU
Department of Translational Medicine, University of Piemonte Orientale, Novara (Italy).

BIOACTIVE TRITERPENES OF PROTIUM HEPTAPHYLLUM GUM RESIN EXTRACT DISPLAY CHOLESTEROL-LOWERING POTENTIAL

Giuseppe **MANNINO**¹, Piera IOVINO², Antonino LAURIA¹, Tullio GENOVA³, Alberto ASTEGGIANO^{2,4}, Monica NOTARBATOLO¹, Alessandra PORCU⁵, Graziella SERIO¹, Giorgia CHINIGO³, Andrea OCCHIPINTI⁵, Andrea CAPUZZO⁵, Claudio MEDANA⁴, Luca MUNARON³, Carla GENTILE¹

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GENETIC DETERMINANTS OF SENSORY IMPAIRMENT IN ITALIAN SEMI-SUPERCENTENARIANS

Katarzyna M. **KWIATKOWSKA**^{#,1}, Vincenzo **IANNUZZI**^{#,2}, Chiara **PIRAZZINI**³, Daniela **MONTI**⁴, Claudio **FRANCESCHI**^{1,5}, Giuseppe **PASSARINO**⁶, Giorgia **GIROTTO**^{7,8}, Maria Pina **CONCAS**⁷, Paolo **GASPARINI**^{7,8}, Paolo **GARAGNANI**^{1,9,10}, Cristina **GIULIANI**^{2,10}

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DIGITAL TWIN RESEARCH IN BIOHEALTH SECTOR: TOWARDS THE CONCEPT OF DISTRIBUTED AND SHARED FACILITY

Emiliana **MINENNA**¹, Stanislao **DI AMATO**¹, Antonio Carlo **GALOFORO**¹, Paolo **BONIVENTO**^{1,2}

¹Reborn srl – Latina, Trieste; ²IEMEST – Istituto Euro Mediterraneo di Scienza e Tecnologia - Palermo.

OVERCOMING SIZE IN MICROSCOPIC ANIMALS: NEW APPROACH TO STUDY TARDIGRADES WITH CONFOCAL LASER MICROSCOPY

Edoardo **MASSA**, Lorena **REBECCHI**, Roberto **GUIDETTI**

Department of Life Sciences, University of Modena and Reggio Emilia.

LETTURE SPONSORIZZATE, ore 15.00 – 15.30

ADVANCES IN ELECTRON MICROSCOPY: IMAGING OF ULTRASTRUCTURES WITH NEW SPEED AND QUALITY

Francesco **BIANCARDI**, Marketing & Business Development Manager Carl Zeiss Spa

VIDEO KILLED THE IMAGING STAR

Francesco **GIRARDI**, Media System Lab Srl

FROM ISOLATION TO CHARACTERISATION OF EXTRACELLULAR VESICLES BY FLOW-CYTOMETRY

Chiara **ZARA**, Application Specialist Miltenyi Biotec

Programma dei Poster (in presenza)

Sessione AMBIENTE E SALUTE

VIABILITY CELLS OF *MYTILUS GALLOPROVINCIALIS* EXPOSED TO ACETYLSALICYLIC ACID (ASA)

Federica **ARRIGO**, Annalisa COTUGNO, Danilo CARLETTO, Giuseppe SCADUTO, Jessica LOMBARDO, Maria PAGANO, Caterina FAGGIO

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

SPONDYLUS GAEDEROPUS CELL LINES AS AN INNOVATIVE TOOL FOR ENVIRONMENTAL TOXICITY ASSAYS

Federica IMPELLITTERI, Maria PAGANO, Salvatore GIACOBBE, Caterina **FAGGIO**

Department of Chemical, Biological, Pharmaceutical, and Environmental Sciences, University of Messina, Via Ferdinando Stagno D'Alcontres, 31, 98166, S. Agata-Messina, Italy.

SPARC PROTEIN: INDUCER OF REMODELING ALSO IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)?

Giorgia **INTILI**¹, Alessandro PITRUZZELLA^{1,2,4}, Alberto FUCARINO¹, Stefano BURGIO¹, Olga Maria MANNA¹, Francesca RAPPA¹, Domiziana PICONE¹, Dario SAGUTO¹, Antonino DI STEFANO³, Isabella GNEMMI³, Alice PLICATO¹, Fabio BUCCHIERI¹

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OXYSTEROLS PROFILE IN ZEBRAFISH EMBRYOS EXPOSED TO TRICLOCARBAN AND PROPYLPARABEN—A PRELIMINARY STUDY

Carmine **MEROLA**¹, Anton VREMERE^{1,2}, Federico FANTI¹, Annamaria IANNETTA¹, Giulia CAIONI³, Manuel SERGI¹, Dario COMPAGNONE¹, Stefano LORENZETTI², Monia PERUGINI¹, Michele AMORENA¹

¹Faculty of Bioscience and Technology for Food, Agriculture and Environment, University of Teramo, 64100 Teramo, Italy; ²Department of Food Safety, Nutrition and Veterinary Public Health, Istituto Superiore di Sanità—ISS, 00161 Rome, Italy; ³Department of Life, Health and Environmental Sciences, University of L'Aquila, 67100 L'Aquila, Italy.

ENVIRONMENTAL CONTAMINANTS IN ALGERIAN AROMATIC HERBS

Giuseppa DI BELLA¹, Miriam **PORRETTI**², Alessandra SCINELLI¹, Caterina FAGGIO²

¹Dipartimento di Scienze Biomediche, Odontoiatriche e delle Immagini Morfologiche e Funzionali of the University of Messina, Messina, Italy; ²Dipartimento di Scienze Chimiche, Biologiche, Farmaceutiche ed Ambientali of the University of Messina, Messina, Italy.

MICROPLASTICS AS A SOURCE OF ENDOCRINE DISRUPTING CHEMICALS: EVALUATION OF THE POSSIBLE EFFECTS ON *IN VITRO* AND *IN VIVO* MODELS

Astrid **SARACENI**^{1,3}, Martina Capriotti², Erika COTTONE¹, Sara PALERMO³, Paolo COCCI², Gilberto MOSCONI², Francesco Alessandro PALERMO², Giorgio Roberto MERLO³, Patrizia BOVOLINI¹

¹Department of Life Sciences and Systems Biology, University of Turin, Turin, Italy; ²School of Biosciences and Veterinary Medicine, University of Camerino, Camerino, Italy; ³Department of Molecular Biotechnology and Health Sciences, University of Turin, Turin, Italy.

VALORIZATION OF WASTE RASPBERRY SEED POWDER: PHYTOCHEMICAL PROFILE, ANTIOXIDANT PROPERTIES AND NUTRACEUTICAL APPLICATIONS

Graziella SERIO¹, Giuseppe MANNINO², Raimondo GAGLIO³, Luca SETTANNI³, Carla **GENTILE**¹

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FEEDING HABITS OF THE BLACKMOUTH CATSHARK (*GALEUS MELASTOMUS*) FROM CENTRAL MEDITERRANEAN SEA, WITH EMPHASIS ON PLASTIC INGESTION

Giorgia ZICARELLI^{1,2}, Chiara ROMANO¹, Samira GALLO¹, Sharon CHIRIACO¹, Concetta MILAZZO¹, Caterina FAGGIO², Cecilia MANCUSI³, Emilio SPERONE¹

¹Department of Biology, Ecology and Earth Sciences, University of Calabria, 87036 Rende (CS), Italy;

²Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, 98166 Messina, Italy; ³ARPAT Tuscany, Livorno, Italy.

Sessione NEURODEGENERAZIONE E NEUROINFIAMMAZIONE

TARGETING OF ALTERED MITOCHONDRIAL GENES AS A THERAPEUTIC STRATEGY FOR SPINAL MUSCULAR ATROPHY

Anna CARETTO^{1,2}, Ferdinando DI CUNTO^{1,2}, Marina BOIDO^{1,2}, Alessandro VERCELLI^{1,2}

¹Department of Neuroscience Rita Levi Montalcini, University of Turin, 10126 Turin, Italy; ²Neuroscience Institute Cavalieri Ottolenghi, University of Turin, 10043 Orbassano (TO), Italy.

A BIODEGRADABLE PBS-BASED SCAFFOLD IN PROMOTING REGENERATION OF THE PERIPHERAL NERVOUS SYSTEM IN A RAT SCIATIC NERVE TRANSECTION MODEL

Roberta CIRINCIONE¹, Luca CICERO¹, Roberto PULEIO¹, Mariano LICCIARDI², Giuseppe GIGLIA³, Pierangelo SARDO³, Giulio VIGNI EDOARDO⁴, Carmelo RUSSO¹, Valeria VITALE BADACO¹, Salvatore SEMINARA¹, Giovanni CASSATA¹

¹Istituto Zooprofilattico Sperimentale della Sicilia "A. Mirri", Palermo; ²Dipartimento di Scienze e Tecnologie Biologiche Chimiche e Farmaceutiche, Università degli Studi di Palermo, Palermo; ³Dipartimento di Biomedicina, Neuroscienze e Diagnostica Avanzata, Università degli Studi di Palermo, Palermo; ⁴Dipartimento di Discipline Chirurgiche, Oncologiche e Stomatologiche, Università degli Studi di Palermo, Palermo.

ANTI-INFLAMMATORY POTENCY OF EXTRACELLULAR VESICLES DERIVED FROM HUMAN WHARTON'S JELLY STEM CELLS IN NEUROINFLAMMATION OF SCI

Leila NOORI¹, Somayeh ARABZADEH², Yousef Mohamadi³, Sina MOJAVERROSTAMI¹, Mohammad AKBARI¹, Gholamreza HASSANZADEH¹

¹Department of Anatomy, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran;

²Department of Biology, School of Basic Sciences, Ale Taha Institute of Higher Education, Tehran, Iran;

³Department of Anatomy, School of Medicine, Ilam University of Medical Sciences, Ilam, Iran.

THE STUDY OF MITOCHONDRIAL MORPHO-FUNCTIONAL DYSFUNCTIONS IN THE PATHOGENESIS OF SPINAL MUSCULAR ATROPHY REVEALS MITOCHONDRIAL ACNITASE AS A POSSIBLE BIOMARKER OF THE DISEASE

Gianna PAVARINO^{1,*}, Francesco Paolo ZUMMO^{1,2,*}, Serena STANGA¹, Alessandro VERCELLI¹, Marina BOIDO¹

¹Neuroscience Institute Cavalieri Ottolenghi, University of Turin, 10043 Orbassano (TO), Italy; Department of Neuroscience Rita Levi Montalcini, University of Turin, 10126 Turin, Italy; ²Department of Biomedicine, Neurosciences and Advanced Diagnostics (BiND), Institute of Human Anatomy and Histology, University of Palermo, 90127 Palermo, Italy. *These authors share first authorship.

2D AND 3D IN VITRO EXPERIMENTAL MODELS TO STUDY SPINAL MUSCULAR ATROPHY AND PRELIMINARY PERFORM DRUG SCREENING

Daniela Maria RASÀ, Serena STANGA, Marina BOIDO, Alessandro VERCELLI

Department of Neuroscience Rita Levi Montalcini, Neuroscience Institute Cavalieri Ottolenghi, University of Turin, Italy.

LONG-TERM TRANSPLANTATION OF STRIATAL PROGENITORS AND ENRICHED ENVIRONMENT PROMOTE CIRCUITS RECONSTRUCTION AND MOTOR RECOVERY IN A RAT MODEL OF HUNTINGTON'S DISEASE

Roberta SCHELLINO^{1,2}, Roberta PAROLISI^{1,2}, Dario BESUSSO³, Gabriela GÒMEZ-GÒNZALEZ^{1,2}, Sveva DALLERE^{1,2}, Linda SCARAMUZZA³, Marta RIBODINO^{1,2}, Ilaria CAMPUS³, Paola CONFORTI³, Marina BOIDO^{1,2}, Elena CATTANEO³, Annalisa BUFFO^{1,2}

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ACTIVATION OF THE HEPICIDIN-FERROPORTIN1 PATHWAY IN THE BRAIN AND ASTROCYTIC-NEURONAL CROSSTALK TO COUNTERACT IRON DYSHOMEOSTASIS DURING AGING

Mariarosa MEZZANOTTE¹, Giorgia AMMIRATA², Marina BOIDO³, Antonella ROETTO¹, Serena STANGA³
¹Department of Clinical and Biological Sciences, University of Turin, 10126 Italy; ²Molecular Biotechnology Center, University of Turin, Turin, Italy; ³Department of Neuroscience Rita Levi Montalcini, Neuroscience Institute Cavalieri Ottolenghi, University of Turin, 10126 Turin, Italy.

ANTIOXIDANT AND ANTI-INFLAMMATORY ROLE OF GRAPEFRUIT INTEGROPECTIN

Chiara VALENZA¹, Miriana SCORDINO¹, Antonino SCURRIA², Mario PAGLIARO², Rosaria CIRIMINNA², Francesco MENEGUZZO³, Giuseppa MUDÒ¹, Angela BONURA⁴, Valentina DI LIBERTO¹
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Sessione NEUROSVILUPPO & INTERAZIONI NEURONI-GLIA

SPATIO-TEMPORAL DYNAMICS OF GLIAL CELLS, MACROPHAGES, AND EXTRACELLULAR MATRIX FOR GLIOBLASTOMA CHALLENGE

Ivana ALLOCCA¹, Assunta VIRTUOSO^{1,2}, Raffaella CIRILLO¹, Giovanni CIRILLO¹, Immacolata VISCOVO¹,
Ciro DE LUCA e Michele PAPA^{1,3}

¹Laboratory of Morphology of Neuronal Network, Department of Public Medicine, University of Campania "Luigi Vanvitelli", 80138 Napoli, Italy; ²School of Medicine and Surgery, University of Bicocca, Milan, Italy; ³SYSBIO Centre of Systems Biology ISBE, ITALY, University of Milano-Bicocca, 20126 Milano, Italy.

A NEW ANIMAL MODEL OF INTERNET GAMING DISORDER (IGD): SEXUAL DIFFERENCES IN BEHAVIOR AND BRAIN ACTIVITY

Antonino CASILE^{1,2}, Brigitta BONALDO^{2,3}, Sofia NASINI⁴, Stefano GOTTI^{2,3}, Carlo CIFANI¹, Giancarlo PANZICA^{2,3}, Marilena MARRAUDINO^{2,3}

¹University of Camerino, School of Pharmacy, Pharmacology Unit, Via Madonna delle Carceri, 9, 62032 Camerino (MC), Italy; ²Neuroscience Institute Cavalieri Ottolenghi (NICO), Regione Gonzole, 10, Orbassano (TO), University of Turin, 10043 Turin, Italy; ³Department of Neuroscience "Rita Levi-Montalcini", Via Cherasco 15, 10126 Turin (TO), Italy; ⁴Laboratory of Molecular and Cellular Pharmacology, Department of Pharmacology, University of Padua, Largo Egidio Meneghetti, 2, 35131 Padua, Italy.

TRANSCRIPTIONAL AND EPIGENOMIC PROFILING OF THE VISUAL CORTEX REVEALS MYELIN DISORGANIZATION IN CDKL5-DEFICIENCY DISORDER PATIENTS

Debora COMAI¹, Riccardo PIZZO¹, Sunaina DEVI¹, Andrea LAURIA^{2,3}, Francesca ANSELMINI^{2,3}, Antonia GURGONE¹, Salvatore OLIVIERO^{2,3}, Maurizio GIUSTETTO¹

¹University of Turin, Dept. of Neuroscience-Italy; ²University of Turin, Dept. of Life Sciences and Systems Biology and MBC; ³IIGM - Italian Institute for Genomic Medicine, Candiolo, Italy.

MORPHOLOGICAL CHARACTERIZATION OF ADULT-BORN HIPPOCAMPAL NEURONS IN A MOUSE MODEL OF THE NEURODEVELOPMENTAL DISORDER BBSOAS

Eleonora DALLORTO^{1,2}, Sara BONZANO^{1,2}, Alessia PATTARO^{1,2}, Michèle STUDER³, Silvia DE MARCHIS^{1,2}
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DEVELOPMENT OF A CHITOSA-BASED MEDICAL DEVICE FOR IMPROVING FUNCTIONAL RECOVERY AFTER RADICAL PROSTATECTOMY.

Luisa MURATORI^{1,2}, Federica FREGNAN^{1,2}, Giulia RONCHI^{1,2}, Alessandro CROSIO³, Cristian FIORI⁴, Matteo MANFREDI⁴, Juliette MEZIERE⁴, Francesco PORPIGLIA⁴, STEFANIA RAIMONDO^{1,2}, STEFANO GEUNA^{1,2}.

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MOLECULAR AND HISTOPATHOLOGICAL FEATURES OF A GENETIC NEUROCHAPERONOPATHY ASSOCIATED WITH A MUTATION IN THE CHAPERONIN SUBUNIT CCT5

Lella **NOORI**¹, Alessandra Maria **VITALE**^{1,2}, Giuseppe Donato **MANGANO**¹, Antonella Marino **GAMMAZZA**¹, Rosario **BARONE**¹, Francesca **RAPPA**¹, Giusy **SENTIERO**^{1,2}, Everly **CONWAY DE MACARIO**³, Alberto J. L. **MACARIO**^{2,3}, Francesco **CAPPELLO**^{1,2}, Federica **SCALIA**^{1,2}

¹*Department of Biomedicine, Neuroscience and Advanced Diagnostics (BIND), University of Palermo, 90127 Palermo, Italy;* ²*Euro-Mediterranean Institute of Science and Technology (IEMEST), 90139 Palermo, Italy;* ³*Department of Microbiology and Immunology, School of Medicine, University of Maryland at Baltimore-Institute of Marine and Environmental Technology (IMET), Baltimore, MD21202, USA.*

HUMAN IPSCS-DERIVED OLIGODENDROCYTES AND ASTROCYTES: A MODEL FOR AUTOSOMAL DOMINANT LEUKODYSTROPHY

Elena **SIGNORINO**^{1,2}, Martina **LORENZATI**^{1,2}, Marta **RIBODINO**^{1,2}, Ersilia **NICORVO**^{1,2}, Piercesare **GRIMALDI**³, Luciano **CONTI**⁴, Pietro **CORTELLI**^{5,6}, Paola **BERCHIALLA**⁷, Elisa **GIORGIO**^{8,9}, Annalisa **BUFFO**^{1,2}

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Sessione STRESS CELLULARE

POTENTIALITY OF OXYGEN-OZONE THERAPY IN SKIN REGENERATION FOR TROPICAL DISEASES: PROTOCOL FOR THE TREATMENT OF BURULI ULCER

Antonio Carlo **GALOFORO**¹, Paolo **BONIVENTO**², Catia **SCASSELLATI**¹

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PROBIOTIC-MEDIATED NF- κ B REGULATION AND INDUCTION OF MOLECULAR CHAPERONES IN THE SMALL INTESTINE OF A MOUSE MODEL OF ETHANOL-INDUCED INFLAMMATORY DAMAGE

Letizia **PALADINO**^{1,2}, Rosario **BARONE**¹, Francesca **RAPPA**¹, Filippo **MACALUSO**³, Everly **CONWAY de MACARIO**⁴, Alberto J. L. **MACARIO**^{2,4}, Valentina **DI FELICE**¹, Francesco **CAPPELLO**^{1,2}, Antonella **MARINO GAMMAZZA**¹

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Programma dei Videoposter (solo Online sul sito del Congresso)

Sessione AMBIENTE E SALUTE

TIME-DEPENDENT BIOLOGICAL IMPACT OF ENVIRONMENTALLY REALISTIC DOSES OF CAFFEINE VS CAFFEINE-SALICYLIC ACID MIXTURES ON *MYTILUS GALLOPROVINCIALIS*

Giuseppe **DE MARCO**¹, Sabrina AFSA², Mariachiara GALATI¹, Tiziana CAPPELLO¹

¹Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, 98166 Messina, Italy; ²Research Unit of Analysis and Process Applied to The Environment – APAE (UR17ES32) Higher Institute of Applied Sciences and Technology of Mahdia, University of Monastir, 5000 Monastir, Tunisia.

BIOACCUMULATION AND IDENTIFICATION OF BIOMARKERS ON BULL EXPOSED TO ENDOCRINE DISRUPTORS

Greta **FERRUGGIA**¹, Roberta PECORARO¹, Elena Maria SCALISI¹, Pietro ZUCCARELLO², Maria Violetta Brundo¹, Antonio SALVAGGIO³

¹Department of Biological, Geological and Environmental Science, University of Catania, Via Androne 81, 95124, Catania, Italy; ²Department of Anatomy, Biology and Genetics, Legal medicine, Neuroscience, Diagnostic Pathology, Hygiene and Public Health “G.F. Ingrassia”, University of Catania, 95123 Catania, Italy; ³Experimental Zooprophyllactic Institute of Sicily “A. Mirri”, Via Gino Marinuzzi, 3, Palermo 90129, Italy.

ANALYSIS OF SPATIAL AND TEMPORAL VARIATIONS OF ALL-CAUSE MORTALITY BY TOWN URBAN UNIT: UPDATE ON A MORE DETAILED SPATIAL DEFINITION OF THE EXPERIENCE IN GENOA

Valerio **GENNARO**¹, Paolo CONTIERO², Giovanna TAGLIABUE³, Andrea TITTARELLI³, Martina BERTOLDI², Claudio TRESOLDI³, Giulio BARIGELLETTI³, Viviana PEROTTI³, Vittoria BALBO⁴, Stefania RIZZIERI⁴, Marco D'ORAZI⁴

¹International Society of Doctors for the Environment (ISDE); ²Environmental Epidemiology Unit, Fondazione IRCCS Istituto Nazionale dei Tumori; ³Cancer Registry Unit, Fondazione IRCCS Istituto Nazionale dei Tumori; ⁴Information Office of the Municipality of Genoa.

THE CONTRIBUTION OF MOLECULAR TRACEABILITY TO UNCOVERING COMMERCIAL FRAUDS AND PROTECTING THE HEALTH OF CONSUMERS

Anna Maria PAPPALARDO¹, Marco **NANIA**¹, Marta GIUGA^{1,2}, Alessandra RAFFA¹, Luana ROSSITTO¹, Venera FERRITO¹

¹Department of Biological, Geological and Environmental Sciences, Section of Animal Biology “M. La Greca”, University of Catania, Via Androne 81, 95124 Catania, Italy; ² Institute for the study of antropic impact and sustainability in the marine environment, IAS-CNR, Capo Granitola, Trapani, Italy.

ACETYLSALIC ACID (ASA): PHYSIOLOGICAL CHANGES IN NON-TARGET ORGANISM *MYTILUS GALLOPROVINCIALIS*

Maria **PAGANO**¹, Serena SAVOCA², Federica IMPELLITTERI¹, Marco ALBANO¹, Gioele CAPILLO³, Caterina FAGGIO¹

¹Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Italy ² Department of Biomedical, Dental and Morphological and Functional Imaging, University of Messina, Italy ³ University of Messina, Department of Veterinary Sciences, Polo Universitario Dell'Annunziata, 98168, Messina, Italy

ANTIMICROBIAL AND ANTIBIOFILM ACTIVITY OF A PEPTIDE IDENTIFIED IN THE SEAGRASS *POSIDONIA OCEANICA*

Diletta **PUNGINELLI**¹, Mirella VAZZANA¹, Manuela MAURO¹, Valentina CATANIA², Vincenzo ARIZZA¹, Domenico SCHILLACI¹

¹Department of Biological, Chemical and Pharmaceuticals Sciences and Technologies (STEBICEF), University of Palermo, via Archirafi 18-32, 90123, Palermo, Italy; ²Department of Earth and Marine Sciences (DiSteM), University of Palermo, viale delle Scienze Edificio 16, 90128, Palermo, Italy.

Sessione ANTROPOLOGIA: APPROCCI COMPARATI

ANCIENT BODIES, BIOLOGY AND CULTURE: CASE STUDIES FROM THE COLLECTION OF THE MUSEUM OF ANTHROPOLOGY AND ETHNOGRAPHY (UNIVERSITY OF TURIN)

Rosa **BOANO**¹, Gianluigi MANGIAPANE², Beatrice DEMARCHI¹, Ezio FULCHERI³

¹Department of Life Sciences and Systems Biology, University of Turin; ²Department of Philosophy and Educational Science, University of Turin; ³Department of Surgical Science and Integrated Diagnostics, University of Genoa.

THE CALVARIUM OF THE BLESSED MARIA LORENZA LONGO († 1539) FOUNDER OF THE “OSPEDALE DEGLI INCURABILI” IN NAPLES: PALEORADIOLOGICAL AND PALEOPATHOLOGICAL EVALUATION.

Claudio BELLEVICINE¹, Arturo BRUNETTI², Luca VENTURA^{3,4}, Elisabetta CILLI⁵, Mirko **TRAVERSARI**⁵

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THE AGAR PRE-EMBEDDING TECHNIQUE IN HISTOPALEOPATHOLOGY

Luca **VENTURA**^{1,2,3}, Cinzia MERCURIO¹, Martina DI FRANCO¹, Noemi SABATINI³, Chiara CIACE³, Davide CLEMENTONI³, Mirko **TRAVERSARI**⁴

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Sessione BIOLOGIA DEGLI AMBIENTI ACQUATICI

MICROPLASTICS IN THREE COMMERCIALY IMPORTANT DECAPOD CRUSTACEANS FROM SOUTHERN TYRRHENIAN SEA

Tosin **AFENIFORO**^{1,2}, Sergio FAMULARI², Dario DI FRESCO², Giuseppe PANARELLO², Mariachiara COSTANZO², Claudio D'IGLIO^{2,3}, Davide DI PAOLA², Nunziacarla SPANÒ^{3,4}, Serena SAVOCA⁴

¹Sustainable Development and Climate Change Programme, IUSS Scuola Universitaria Superiore, Piazza della Vittoria 15, 27100, Pavia, Italy ²Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Viale F. Stagno d'Alcontres 31, 98166, Messina, Italy ³Institute of Biological Resources and Marine Biotechnologies (IRBIM-CNR), Spianata San Raineri, 86 – 98122 Messina (ME), Italy ⁴Department of Biomedical, Dental and Morphological and Functional Imaging, University of Messina, Via Consolare Valeria, Messina, Italy.

OCCURENCE OF *ZU CRISTATUS* (BONELLI, 1819) IN THE IONIAN SEA AT AN UNUSUAL DEPTH

Marco **ALBANO**¹, Serena SAVOCA², Orazio ROMEO¹, Domenico GIOSA¹, Nunziacarla SPANO², Gioele CAPILLO³

¹Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy; ²Department of Biomedical, Dental and Morphological and Functional Imaging University of Messina, Messina, Italy; ³Department of Veterinary Sciences, University of Messina, Italy.

VALORIZATION OF FISHERY AND AQUACULTURE SIDE STREAMS FOR THE EXTRACTION AND VALORIZATION OF BIOACTIVE COMPOUNDS IN DIVERSE BIOREFINERIES

Rosaria **ARENA**¹, Eleonora CURCURACI¹, Laura LA BARBERA², Giuseppe RENDA¹, Andrea SANTULLI^{1,2}, Concetta Maria MESSINA¹

¹Dipartimento di Scienze della Terra e del Mare DiSTeM, Laboratorio di Biochimica Marina ed Ecotossicologia, Università degli Studi di Palermo, Via G. Barlotta 4, 91100 Trapani, Italy; ²Istituto di Biologia Marina, Consorzio Universitario della Provincia di Trapani, Via G. Barlotta 4, 91100 Trapani, Italy.

A NEW FEMALE VIOLET BLANKET OCTOPUS (*TREMOCTOPUS VIOLACEUS*, DELLE CHIAJE, 1830) RECORD IN THE STRAIT OF MESSINA, SOUTHERN ITALY

Alex CARNEVALE¹, Giuseppe PANARELLO¹, Carmelo IARIA¹, Sergio FAMULARI¹, Gioele CAPILLO², Serena SAVOCA³

¹Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina; ²Department of Veterinary Sciences; ³Department of Biomedical, Dental and Morphological and Functional Imaging, University of Messina.

EFFECT EVALUATION OF AMINE-MODIFIED POLYSTYRENE MICROPLASTICS ON SPERM QUALITY OF *MITYLUS GALLOPROVINCIALIS*

Martina CONTINO

Department of Biological, Geological and Environmental Sciences, University of Catania, Via Androne 81, 95124, Catania, Italy.

EFFECTS OF ACUSTIC STRESS ON BIOCHEMICAL AND MOBILITY PARAMETERS AND BEHAVIOUR IN THE CRAYFISH, *CHERAX DESTRUCTOR*

Clarissa DE VITA^{1,2}, Giuseppa BUSCAINO², Manuela MAURO¹, Mirella VAZZANA¹

¹Department of Biological, Chemical and Pharmaceutical Sciences and Technologies, University of Palermo, 18 Archirafi Street, Palermo 90123, Italy; ²Institute of Anthropic Impact and Sustainability in Marine Environment-National Research Council, Capo Granitola, Via del Mare 3, 91021 Torretta Granitola (TP), Italy.

PLASTISPHERE: THE IMPACT OF PLASTICS FROM NEW PERSPECTIVE

Dario DI FRESCO¹, Marco ALBANO¹, Claudio D'IGLIO^{1,4}, Nunziacarla SPANÒ², Gioele CAPILLO³, Serena SAVOCA²

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ZFET AS A VIABLE TOOL FOR EXPERIMENTAL BIOLOGY

Claudio GERVASI¹, Sabrina NATALE¹, Davide DI PAOLA¹, Alessio Filippo PERITORE¹, Vincenzo ZAMMUTO¹, Giovanni DE BENEDETTO², Giuseppe DE MARCO¹, Carmelo IARIA¹, Fabiano CAPPARUCCI¹

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UTILIZATION OF HALOFILIC STRAINS AS PROBIOTIC IN AQUACULTURE AND EFFECTS ON FISH HEALTH: PRELIMINARY RESULTS

Simona MANUGUERRA¹, Manfredi MADIA¹, Eleonora CURCURACI¹, Cristobal ESPINOSA RUIZ², María Angeles ESTEBAN², Concetta Maria MESSINA¹ Andrea SANTULLI^{1,3}

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THE IMPACT OF WASTE WATER TREATMENT PLANTS ON ALPINE RIVERS AFFECTED BY WATER SCARCITY: STATE OF THE ART AND PRELIMINARY RESULTS

Anna MARINO, Silvia BERTOLOTTI, Elisa FALASCO, Stefano FENOGLIO, Zoè SCHUSTER, Marta ZOPPI, Francesca BONA

Università di Torino.

Sessione COVID-19

WHY IS ABSOLUTE EXCESS MORTALITY IN ITALY IN 2021 SIMILAR TO 2020?

Simone LOMBARDINI¹, Daniela MARENCO², Anna FAVRE³, Valerio GENNARO⁴

¹Department of Economics, University of Genoa; ²Associazione Eredità e Memoria 1948, ³BSc, PhD in Pathology; ⁴Department of Epidemiology, IRCCS Policlinico San Martino, Genoa.

Sessione NEURODEGENERAZIONE E NEUROINFIAMMAZIONE

ENDOCANNABINOIDS AND TRPV1 CHANNELS: BIOELECTRIC INTERPLAY IN HIPPOCAMPAL NEURONS

Daniele GALLO, Mauro RAIA, Pavel BURKO, Giuseppe GIGLIA, Giuseppe FERRARO, Pierangelo SARDO, Giuditta GAMBINO

Department of Biomedicine, Neuroscience and Advanced Diagnostics (BIND), University of Palermo.

MODULATING PERIPERSONAL SPACE IN A VIRTUAL REALITY ENVIRONMENT

Valentina PORTERA¹, Antonio SBRIGATA¹, Talya SALEEM¹, Umberto. QUARTETTI¹, Giulio MUSOTTO², Giuditta GAMBINO¹, Pierangelo SARDO¹, Giuseppe FERRARO¹, Giuseppe GIGLIA¹

¹BIND, University of Palermo; ²Fondazione Ri.Med. Palermo.

DEVELOPMENT OF A HOME-BASED TRAINING PROGRAM FOR PATIENTS WITH PARKINSON DISEASE: NEUROBIOLOGICAL AND MOTOR SKILLS EFFECT

Sara BALDASSANO¹, Alessandra AMATO², Giuseppe SCHIRO³, Marco D'AMELIO³, Gabriella SCHIERA¹, Carlo Maria DI LIEGRO¹, Italia DI LIEGRO³, Anna ALIOTO², Patrizia PROIA²

¹Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), University of Palermo ²Department of Psychological, Pedagogical and Educational Sciences, Sport and Exercise Sciences Research Unit, University of Palermo, ³Department of Biomedicine, Neurosciences and Advanced Diagnostics (Bi.N.D.), University of Palermo, Italy.

CAN HUMAN SPATIAL ORIENTATION BE MODULATED BY MEANS OF GENERAL PURPOSE NON-INVASIVE BRAIN STIMULATION?

Antonio SBRIGATA, Mauro RAIA, Daniele GALLO, Giuditta GAMBINO, Pierangelo SARDO, Giuseppe FERRARO, Filippo BRIGHINA, Giuseppe GIGLIA

Department of Biomedicine, Neuroscience and Advanced Diagnostics (BIND), Section of Human Physiology, University of Palermo.

Sessione ONCOLOGIA & MICRO E NANOVESICOLE IN BIOLOGIA SPERIMENTALE

QUANTITATIVE PATTERNS OF THE CHAPERONES HSP10 AND HSP90 IN TUMORS OF THE HUMAN MAJOR SALIVARY GLANDS: DIFFERENCES WITH NORMAL TISSUE AND PATHOGENIC IMPLICATIONS

Charbel A. BASSET^{1*}, Francesca RAPPA^{1*}, Rosario BARONE¹, Alessandro PITRUZZELLA^{1,2,3}, Francesco CAPPELLO^{1,2,4}, Everly CONWAY DE MACARIO^{2,5}, Alberto J.L. MACARIO^{2,5}, Angelo LEONE¹

¹Department of Biomedicine, Neuroscience and Advanced Diagnostics, Institute of Human Anatomy and Histology, University of Palermo, Italy ²Euro-Mediterranean Institute of Science and Technology (IEMEST), Palermo, Italy ³Consorzio Universitario di Caltanissetta, University of Palermo, Caltanissetta, Italy ⁴Department of Biology, College of Science and Technology, Temple University, Philadelphia, USA ⁵Department of Microbiology and Immunology, School of Medicine, University of Maryland at Baltimore-Institute of Marine and Environmental Technology (IMET), Baltimore, USA *These authors contributed equally.

MALIGNANT PLEURAL MESOTHELIOMA (MPM) – DISCOVERY OF NEW POTENTIAL THERAPEUTIC TARGETS AND PERSONALIZED THERAPY BASED ON SELECTIVE DELIVERY OF DRUG-LOADED EXTRACELLULAR VESICLES

Stefano BURGIO¹, Celeste CARUSO BAVISOTTO¹, Olga Maria MANNA¹, Giorgia INTILI¹, Domiziana PICONE¹, Antonio PALUMBO PICCIONELLO², Fabio BUCCHIERI¹, Francesco CAPPELLO¹

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EXTRACELLULAR MOLECULAR CHAPERONES IN CANCER THERANOSTICS: FROM BENCH TO BEDSIDE

Celeste **CARUSO BAVISOTTO**^{1,2}, Radha SANTONOCITO¹, Giuseppa D'AMICO¹, Francesca RAPPA¹, Antonella MARINO GAMMAZZA¹, Everly CONWAY de MACARIO³, Alberto J.L. MACARIO³, Fabio BUCCHIERI¹, Claudia CAMPANELLA¹, Francesco CAPPELLO^{1,2}

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INTERPLAY BETWEEN ONCOGENIC BRAF AND P53 IN MELANOMA CELLS AND MOLECULAR TARGETING BY HISTONE DEACETYLASE INHIBITORS

Adriana **CELESIA**¹, Antonietta NOTARO², Giovanni PRATELLI¹, Marianna LAURICELLA¹, Daniela CARLISI¹, Antonella D'ANNEO², Michela GIULIANO², Sonia EMANUELE¹

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THE RNA PROFILE OF LEMON-DERIVED EXTRACELLULAR VESICLES: THE SECRET OF THE CROSS-KINGDOM COMMUNICATION?

Stefania **RAIMONDO**¹, Ornella URZI¹, Roberta GASPARRO¹, Alice CONIGLIARO¹, Guglielmo PUCCIO², Francesco MERCATI², Riccardo ALESSANDRO¹

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Sessione STRESS CELLULARE

CHAPERONE SYSTEM IN DIAGNOSIS AND TREATMENT OF THE GLIOBLASTOMA MULTIFORME: IMMUNOHISTOCHEMICAL AND IMMUNOFLUORESCENCE ANALYSIS

Giusi **ALBERTI**¹, Claudia CAMPANELLA¹, Letizia PALADINO^{1,2}, Celeste CARUSO BAVISOTTO¹, Alessandro PITRUZZELLA¹, Giuseppe VERGILIO¹, Ada Maria FLORENA³, Antonina ARGO⁴, Everly CONWAY de MACARIO⁵, Alberto J. L. MACARIO^{2,5}, Fabio BUCCHIERI¹, Francesco CAPPELLO^{1,2}, Rosario BARONE¹, Francesca RAPPA¹

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ER STRESS OF HEPATOCYTES AS POSSIBLE CONSEQUENCE OF FMO3 MISFOLDING

Simona **ALIBRANDI**^{1,2,3}, Fabiana NICITA^{1,2}, Luigi DONATO^{1,2}, Concetta SCIMONE^{1,2}, Carmela RINALDI¹, Rosalia D'ANGELO^{1,2}, Antonina SIDOTI^{1,2}

¹ *Department of Biomedical and Dental Sciences and Morphofunctional Imaging, University of Messina, Messina, Italy;* ² *Department of Biomolecular strategies, genetics and avant-garde therapies, Euro-Mediterranean Institute of Science and Technology (I.E.M.E.S.T.), Palermo, Italy;* ³ *Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy.*

IMPACT OF CIGARETTE SMOKE ON INFLAMMASOME-DEPENDENT RESPONSES IN HUMAN LUNG FIBROBLASTS

Agnese **LA MENSA**^{1,2}, Marco BUSCETTA², Marta CRISTALDI², Maura CIMINO², Paola DINO^{1,2}, Maria Rita GIUFFRÈ², Fabio BUCCHIERI¹, Chiara CIPOLLINA^{2,3}

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PLACENTA-BRAIN AXIS: FOCUS ON ASTROCYTES

Serena **NENCINI**¹, Sofia PASSAPONTI¹, Filiberto Maria SEVERI², Leonardo ERMINI¹, Roberta ROMAGNOLI¹, Laura CRESTI¹, Francesca IETTA¹

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SIRT5 AS CELLULAR MODULATOR IN NON-ALCOHOLIC FATTY LIVER DISEASE

Rosaria Maria **PIPITONE**¹, Claudia LA MANTIA¹, Giulia LUPO¹, Rossella ZITO¹, Salvatore PETTA¹, Federico SALOMONE², Stefania GRIMAUDDO¹

¹Department of Health Promotion, Mother and Child Care, Internal Medicine and Medical Specialties, "G. D'Alessandro"- University of Palermo, Palermo, Italy. ²Division of Gastroenterology, Ospedale di Acireale, Azienda Sanitaria Provinciale di Catania, 95024 Catania, Italy.

PEEL AND SEED EXTRACTS OF MANGIFERA INDICA REDUCE ADIPOGENESIS AND EXERT ANTIOXIDANT EFFECTS ON 3T3-L1 CELLS

Giovanni **PRATELLI**¹, Daniela CARLISI¹, Antonella D'ANNEO², Sonia EMANUELE¹, Adriana CELESIA¹, Antonietta NOTARO², Marianna LAURICELLA¹

¹Department of Biomedicine, Neurosciences and Advanced Diagnostics (BIND), Institute of Biochemistry, University of Palermo; ²Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), Laboratory of Biochemistry, University of Palermo.

OXIDATIVE STRESS IMPAIRS THE ACTIVITY OF KIR2.1 CHANNELS IN A MODEL OF AGING NEUROGLIA

Alessia **REMIGANTE**¹, Sara SPINELLI¹, Rossana MORABITO¹, Angela MARINO¹, Antonio SARIKAS³, Michael PUSCH² and Silvia DOSSENA³

¹Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Italy. ²Biophysics Institute, National Research Council, Genoa, Italy; ³Institute of Pharmacology and Toxicology, Paracelsus Medical University, Salzburg, Austria.

INSIGHTS ON RECENT ADVANCEMENT IN CARTILAGE TISSUE ENGINEERING AND 3D JOINT BIOMIMETIC SYSTEM

Marta A. **SZYCHLINSKA**¹, Giovanna CALABRESE², Ugo D'AMORA³, Maria G. RIZZO², Alberto FUCARINO¹, Alessandro PITRUZZELLA¹, Fabio BUCCHIERI¹

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Simposio Satellite presso l'Università di Scienze Gastronomiche (Pollenzo, CN)

Sabato 9 Aprile

(fruibile solo per coloro i quali si sono prenotati all'atto dell'iscrizione al Congresso)



- Ore 08.30 (in punto): Partenza dal Palazzo degli Istituti Anatomici, Torino (trasporto in pullman)
- Ore 09.30: Simposio **“Cibo del futuro: tra sostenibilità, prevenzione e benessere”**
Aula Magna (presso Cascina Albertina, via Amedeo di Savoia 8, Pollenzo)

Saluti del Magnifico Rettore dell'Università di Scienze Gastronomiche, Prof. Biolatti.

Relatori (relazioni da 15 minuti):

- Michele Filippo Fontefrancesco, Ricercatore in Discipline Demoeetnoantropologiche, Università di Scienze Gastronomiche di Pollenzo
 - Cristina Giacoma, Prof.ssa Ordinaria di Zoologia, Università di Torino (con il contributo di Gabriele Beccaro, Prof. Associato di Arboricoltura generale, Università di Torino)
 - Gabriella Morini, Ricercatrice in Chimica Organica, Università di Scienze Gastronomiche di Pollenzo
 - Marcello Romeo, MD PhD, Bromatech s.r.l.
 - Luisa Torri, Prof.ssa Associata di Scienze e Tecnologie Alimentari, Università di Scienze Gastronomiche di Pollenzo
 - Alessandro Vercelli, Prof. Ordinario di Anatomia Umana, Presidente della Società di Neuroscienze, Università di Torino
- Ore 12.00 – Visita guidata alla Banca del Vino e degustazione di un calice di metodo classico/metodo charmat italiano (<https://www.bancadelvino.it>)
 - Ore 13.00 – Colazione di lavoro presso Albergo dell'Agenzia (<https://www.albergoagenzia.it>), comprensiva di antipasto, primo, dolce, acqua, vino e caffè
 - Ore 15.00 (circa) – Ripartenza per Torino (per Palazzo degli Istituti Anatomici)

Sabato 9 Aprile, Ore 16:00

11TH QPP MEETING
EVENTO TRASMESSO SOLO ON-LINE

"From Neuronal Membranes to Holography"

Introduction: Jack Tuszynski
jack.tuszynski@gmail.com

Greetings from Nancy Mullis & Massimo Cocchi

Opening Lecture
Michael Levin, *Kary Mullis Prize 2022*
Michael.Levin@tufts.edu

Speakers
Gustav Bernroider
gustav.bernroider@gmail.com

Andrew Adamatzky
adamatzky@gmail.com

Aristide Dogariu
adogariu@creol.ucf.edu

Gene Dolgoff
Chief Executive Officer @ Holobeam Technologies

Conclusions: Marco Cavaglià

Scientific Secretariat: Marco Cavaglià, Marco Deriu
marco.cavaglia@polito.it, marco.deriu@polito.it

The Meeting, organized in partnership with the Italian Society of Experimental Biology 1925, will be held electronically only.

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sibs1925@yahoo.com

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GRAZIE E BUON CONGRESSO A TUTTI!