

PROGRAM

Monday, 16 October

8:30	REGISTRATION
10:20	OPENING
10:30	PLENARY LECTURE (35+10min Q/A) Ennio Tasciotti - IRCCS San Raffaele & San Raffaele University "Exploring the nano-bio interface of biomimetic materials"
11:20	SESSION 1 – Cancer Research ORAL COMMUNICATIONS (10+2min Q/A). Sofia Parrasia - University of Padova "Peptides as a targeting strategy to eradicate Pancreatic Ductal Adenocarcinoma (PDAC)" Maria Cristina Failla - University of Turin "Development of PET imaging tracers for c-Met aberrant tumors using ⁶⁸ Ga chelators" Valeria Nele - University of Naples Federico II "Self-assembling nanoparticles for miRNA delivery towards precision medicine against metastatic melanoma" Ada Raucci - University of Naples Federico II "Paper-Based Electrochemical Platform to Detect miRNA-652 associated to Triple-Negative Breast Cancer" Michele Mannelli - University of Florence "Metabolic changes induced by Aurothiomalate in A2780 ovarian cancer cells" SLAM (5min). Lara Lamelza - Sapienza University of Rome "Rational design and synthesis of anthraquinone-based SMO inhibitors for the treatment of hedgehog-dependent tumors" Antonella Miglione - University of Naples Federico II "Combining printed electrodes with lateral flow test strip for enhanced applications in cancer detection" Alessia Angelillo - University of Naples Federico II
	"Lipid nanoparticles encapsulating miR182-3p for breast cancer treatment"
12:55	LUNCH & POSTER SESSION 1

14:05	SESSION 2 – Light-related
	ORAL COMMUNICATIONS (10+2min Q/A)
	Francesco Saccoliti - Istituto Italiano di Tecnologia
	<u> </u>
	"Investigation of the mechanism of action of CFTR corrector ARN23765 via Photo-Affinity
	Labeling (PAL) approach"
	Giuseppe Domenico Arrabito - University of Palermo
	"Exploring ROS formation from ZnO/cellulose acetate composites films in Aqueous Solution:
	Light vs. Darkness"
	Light vs. burkitess
	Alexander Zen de Hair and de CRade
	Alessandra Zanut - University of Padova
	"Enhancing Analytical Sensing with DNA-Based Nanoswitches for Dual-Signal
	Electrochemiluminescence at the Nanoscale"
	Giulio Goti - University of Padova
	"A General Organophotoredox Strategy to Difluoroalkyl Bicycloalkane Hybrid Bioisosteres"
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	SLAM (5min)
	Silvia Mizzoni - University of Verona
	"Circularly Polarized activity from two photon excitable Europium and Samarium chiral bioprobes"
	Cristina Volpini - University of Pavia
	"Targeted gold nanoparticles with heating efficiency for Endometriosis Photothermal Therapy"
15:20	SPONSORED TALK
	Alice Pedruzzi- BUCHI
	Why SFC? An in-depth look into the benefits of this separation method"
	The state of the s
15.35	COFFEE BREAK
15:35	COFFEE BREAK
16:05	INVITED LECTURE (20+5 min Q/A)
	Paola Occhetta - Polytechnic of Milan
	"Beating organs-on-chip as innovative technological platforms for drug discovery: advanced in
	vitro models of human physiology and pathology"
16:35	SESSION 3 – Inhibitors & related tools
	ORAL COMMUNICATIONS (10+2min Q/A)
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	Rossella Svigelj - University of Udine
	"Fipronil Detection with a Smartphone-based Aptasensor: Addressing the Small Molecule
	Challenge"
	Giusy Tassone - University of Siena
	"Evidence of amino-thiadiazoles as innovative inhibitors of human glutaminyl cyclase, validated
	target for neurodegenerative disorders"
	tan get vor mean out agente nam e ansor utens
	Latinia Crosatti University of Florence
	Letizia Crocetti - University of Florence
	"Ebselen analogues as Human Neuthophil Elastase (HNE) inhibitors and antioxidant agents"
	SLAM (5min)
	Simona Barone - University of Naples Federico II
	"HDAC6 inhibitors as therapeutic option in cystic fibrosis: the first proof of concept"
	The test initiations as therapeutic option in cystic horosis, the first proof of concept

	Emilia Cassese - University of Naples Federico II "Discovery of NDM-1 non-conventional degraders with a novel mechanism of action to fight antibiotic resistance"
	Federica Blua - University of Turin "Design, synthesis and selection of INF200, a new non-sulfonylurea based NLRP3 inhibitor"
	Laura Braconi - University of Florence "New piperazine derivatives as dual P-gp and hCA XII inhibitors to overcome multidrug resistance"
17:45	CLOSING
18:30	CITY WALK

Tuesday, 17 October

9:00	PLENARY LECTURE (35+10min Q/A) Alessio Ciulli - University of Dundee "How PROTAC degraders work: Molecular recognition and design principles"
9:50	SESSION 4 - Viral Research ORAL COMMUNICATIONS (10+2min Q/A) Deborah Grifagni - University of Florence "Targeting 3-chymotrypsin-like protease of SARS-CoV-2 by protein degradation: the first stirrings of PROTAC" Valeria Tudino - University of Siena "Ouisearchia (1211) and based modulators of Resudements serverings wirelesses for toward."
	"Quinazolin-4(3H)-one-based modulators of Pseudomonas aeruginosa virulence factors" Simone Cavalera - University of Turin "Monitoring strategies of the immune response to SARS-CoV-2 after vaccination/recovery by lateral flow immunoassay"
	SLAM (5min) Tessa Bolognesi - University of Florence "Expression of Nucleocapsid protein (N) from SARS-CoV-2 and its characterization through high-field NMR spectroscopy"
	Alessia De Santis - University of Florence "An antiviral agent triggering the proteolysis of the main protease from Coxsackievirus B3"
10:50	COFFEE BREAK
11:20	SESSION 5 - Natural Products & Green Chemistry ORAL COMMUNICATIONS (10+2min Q/A) Chiara De Luca - University of Ferrara "Promising green solvents as alternatives to acetonitrile in RP-LC for biopharmaceuticals applications"
	Davide Moi - University of Cagliari

	"Redesigning and improving the synthesis of coumarin-based TADF dyes for bioimaging applications"
	Lidia Ciccone - University of Pisa "Hybrid compounds natural products based as multifunctional agents against Alzheimer's disease"
	Martina Zangheri - University of Bologna "A double steroid chemiluminescence immunoassay employing reusable microchannel and functionalized superparamagnetic microbeads"
	SLAM (5min) Valeria Consoli - University of Catania "Role of novel synthetized caffeic acid phenethyl ester derivatives as HO-1 inducers and ferroptosis effectors for anticancer therapy"
	Vincenzo Piccolo - University of Naples Federico II "Exploring unripe Datterini tomatoes as a promising nutraceutical for sarcopenia prevention"
	Debora Concetta Santonocito - University of Catania "Extraction of α-tomatine from food waste of tomato processing"
12:40	SESSION 6 – Nucleic Acids ORAL COMMUNICATIONS (10+2min Q/A) Alessio Bonucci - CNRS France "Combining EPR and NMR spectroscopies to investigate the function and dynamics of XRCC4 protein involved in the non-homologous DNA end joining pathway"
	Arianna Rossetti - Polytechnic of Milan "TEMPO-labeled polyethyleneimines for gene-delivery with antioxidant perspectives"
	SLAM (5min) Chiara Nosengo - University of Ferrara "Purification of Oligonucleotides"
	Pasquale Russomanno - University of Florence "Production of recombinant KHSRP and NMR study of its interaction with c-myc oncogene promoter G-quadruplex"
	Patrick Severin Sfragano - University of Florence "DNA Electrochemical Biosensing using a Versatile and Automatable Microfluidic Platform"
13:30	LUNCH & POSTER SESSION 2
	Group Picture- 14:30
14:45	INVITED LECTURE (20+5 min Q/A) Mattia Mori - University of Siena "Non-conventional targeting of non-conventional targets"
15:15	SPONSORED TALK Andrea Pigozzo - Alfatest

	"Zetasizer Advance with Adpative Correlation and MADLS: the most advanced light scattering system"
15:30	SESSION 7 – Tools ORAL COMMUNICATIONS (10+2min Q/A) Angela Bonaccorso - University of Catania "Quality by Design tools in early-stage nanopharmaceuticals development"
	Mario Prejanò - University of Calabria "Molecular modelling for (bio)technologies"
	Annalisa Scroccarello - University of Teramo "Paper substrates integrating laser-induced platinum nanostructures with nanozyme activity for smartphone-based ascorbic acid determination"
	SLAM (5 min) Luca Capelli - University of Parma "Protease detection using activity-based CRISPR-Cas amplification"
	Diego Garcia Jimenez - University of Turin "Ad hoc tools to monitor bRo5 chameleonicity"
	Giovanni Protopapa - Polytechnic of Milan "A new microfluidic cartridge to prepare non-viral gene delivery complexes"
	Filippo Silveri - University of Teramo "Lab-made nanostructured third-generation biosensors for fructose determination in food and biological samples"
16:45	SESSION 8 - Binding ORAL COMMUNICATIONS (10+2min Q/A) Alessandro Giraudo - University of Milan "From MG624 to selective antagonists of α9α10 nicotinic acetylcholine receptor"
	Pierre Picchetti - Karlsruhe Institute of Technology "Beyond Fluorescent Signal Readouts: New Design Principles for Cucurbit[n]uril-Based Chemosensors"
	Matteo Rossi Sebastiano - University of Turin "A drug repurposing strategy to treat an ultra-rare IAHSP form"
	Domiziana Masci - Catholic University of Sacred Heart "Structure-Activity Relationship Investigation into the Antitubercular Potential of N-aryl-2,5-dimethylpyrroles"
	SLAM (5 min) Lorenzo Baldini - University of Florence "Click Chemistry for advancing the development of dual RGD integrin/MMP ligands"
	Andrea Di Santo - University of Florence "Surface Plasmon Resonance biosensor to detect and quantify drug and anti-drug antibodies in patients treated with the therapeutic monoclonal antibody Adalimumab"

18:00	SESSION 9 - Materials ORAL COMMUNICATIONS (10+2min Q/A) Angelo Tricase - University of Bari Aldo Moro "Usign coloration Melocular Impriinted Bolumous for law types food contention to detection"
	"High-selective Molecular Imprinted Polymers for low-trace food contaminants detection" Marina Massaro - University of Palermo "Chemical modification of clay minerals for application in life science"
	SLAM (5 min) Elena Allegritti - University of L'Aquila "Lipid mesophases-based beads as new platform for sustained release of TOFA"
18:35	CLOSING
20:00	SOCIAL DINNER

Wednesday, 18 October

9:00	PLENARY LECTURE (35+10min)
	Luisa De Cola - Mario Negri Institute
	"Porous materials for biomolecules delivery"
9:50	SESSION 10 - Metal-related
	ORAL COMMUNICATIONS (10+2min Q/A)
	Fabio Di Nardo - University of Turin
	"Development and application of a colorimetric device for urinary zinc detection to
	improve prostate cancer diagnosis"
	SLAM (5 min)
	Laura Marretta - University of Palermo
	"Ruthenium (II) metal complexes: synthesis and binding with mitochondrial G-quadruplex DNA"
	Lorenzo Chiaverini - University of Pisa
	"Novel dimolybdenum paddlewheel complexes bearing NSAID ligands. Synthesis,
	characterization and possible biological applications"
	Walter Vieri - University of Florence
	"Exploring the impact on metabolism of ovarian cancer treatment with gold-based drugs using a
	context-specific genome-scale metabolic model"
	Andrea Geri - University of Florence
	"Reactions of Auranofin and Medicinal Gold(I) Compounds with Human Thioredoxin Reductase
	through ESI-Q-TOF MS"
	Leonardo Querci - University of Florence
	"NMR of Paramagnetic Proteins: New Routes for ¹³ C Direct Detection in Challenging Iron-
	Sulphur Proteins"
	Rosa Maria Dell'Acqua - University of Milan
	"Bioorganometallic platinum(II)-peptide nucleic acid conjugates"

10:45	COFFEE BREAK
11:15	SESSION 11 - Nanosystems ORAL COMMUNICATIONS (10+2min Q/A)
	Sima Singh - University of Naples Federico II
	"On-site electrochemical detection of Zinc (II) in biological samples by Bismuth-MXene nanocomposites"
	Nora Bloise - University of Pavia "In vitro investigation of the impost of pretain seven on the highering offsets of gold
	"In vitro investigation of the impact of protein corona on the biological effects of gold nanoparticles against human breast cancer cells"
	Fabio Pizzetti - Polytechnic of Milan "Decorated nanogels as promising tools for selective drug delivery in spinal cord injury"
	SLAM (5 min)
	Philippa Jacob - University of Nottingham "Poly(diglycerol adipate) Variants as Enhanced Nanocarrier Replacements in Drug Delivery Systems"
	Susy Brusco - University of Naples Federico II
	"Engineered poly(lactide-co-glycolide) nanoparticles for co-delivery of antigens and immune adjuvants to the respiratory mucosa"
	Francesca Ferrara - University of Ferrara
	"Vesicular nanosystems for the transdermal delivery of mangiferin to counteract the O ₃ -induced cutaneous damage"
	Sabrina Romanò - University of Naples Federico II "Preliminary approaches to detect targets enclosed by the lipid bilayer via electrochemical reading"
12:30	INVITED LECTURE (20+5 min Q/A)
	Chiara Borsari - University of Milan "Selective Targeting of the PI3K-mTOR Pathway for Cancer Treatment"
13:00	LUNCH & POSTER SESSION 3
14:15	SESSION 12 - Deep Investigation
	ORAL COMMUNICATIONS (10+2min Q/A)
	Maria Gessica Ciulla - University of Milan "Design, synthesis and assessment of a new series of ppGpp synthetase inhibitors against
	bacterial persistence"
	Alessia Vignoli - University of Florence
	"Metabolomics in Human Ageing: studying Alzheimer's disease evolution via a personalized serum NMR-based approach"
	Panagis Polykretis - CNR Florence
	"Atomic Force Microscopy applied to the study of the CSF of Alzheimer's disease patients"
	Giovanni Bellomo - University of Perugia "Plasma protein profiling reveals novel specific biomarkers reflecting the multifactorial nature of Alzheimer's disease continuum"

15:45	SLAM (5 min) Angela Tino - University of Florence "NMR-based investigation of intrinsically disordered regions of modular proteins for tailored design of interacting peptides" Gabriele Cianfoni - Sapienza University of Rome "Towards the total synthesis of pentacaronic acid" Beatrice Bargagna - University of Florence "Molecular basis of the Multiple Mitochondrial Dysfunctions Syndrome 2: the pathogenic His96Arg BOLA3 mutation" SESSION 13 - Materials
(17.47	ORAL COMMUNICATIONS (10+2min Q/A)
	Morena Miciaccia - University of Bari Aldo Moro "Harmaline-based scaffold as Human Caseinolytic Protease P (hClpP) inducers for Diffuse Intrinsic Pontine Glioma (DIPG) treatment"
	Francesca Ghirga - Sapienza University of Rome "Rational design and synthesis of a water-soluble resorcarene-based linker for immunosensors development"
	SLAM (5 min) Camillo Morano - University of Milan
	"Tip-tip filtration as a non-conventional tool for the improvement of single-phase lipids extraction"
16:20	AWARDS
16:30	CLOSING CEREMONY

POSTER SESSION 1

P1: Federica Agosta - University of Ferrara

"In silico analysis of Fibroblast Activation Protein ligand selectivity"

P2: Sara Alfano - Sapienza University of Rome

"Sustainable polyhydroxyalkanoates aminolysis by using choline-taurinate ionic liquid for nanoparticles preparation"

P3: Ester Butera - University of Catania

"Delivery of AuNCs into extracellular vesicles using fusogenic liposomes cargos"

P4: Sara Calenda - University of Florence

"Design and synthesis of edaravone-based thiazolo[5,4-d]pyrimidine derivatives. New antioxidant A2A and A2B adenosine receptor antagonists as multitarget agents against demyelinating diseases"

P5: Noemi Dessi - University of Udine

"Determination of Fipronil in Honey Samples by an electrochemical Competitive replacement Assay"

P6: Silvia De Caro - University of Pavia

"Nitrative stress in synthetic models of neuromelanins"

P7: Nicole Innocenti - University of Trento

"Targeting the undruggable: Developing pharmacological degraders for the Cellular Prion Protein"

P8: Elisabetta Lacolla - Sapienza University of Rome

"Development of polysaccharide-based nano-systems containing Lactoferrin for treatment of respiratory infections"

Pg: Laura Landolfi - University of Naples Federico II

"Drug-repurposing campaign targeting the fatty acids pocket of SARS-CoV-2 Spike protein"

P10: Giuliano Napolitano - University of Naples Federico II

"Synthesis and pharmacological evaluation of hybrid molecules containing fibrates and the semi-synthetic bile acid derivative BAR502"

P11: Roberta Panebianco - University of Catania

"Design of novel antiproliferative nanosystems based on hyaluronan-terpyridine conjugates"

P12: Maddalena Paolillo - University of Naples Federico II

"Binding to lysozyme of VIVO-pyranonato and VIVO-pyridinone"

P13: Benedetta Brugnoli - Sapienza University of Rome

"Chitosan-sodium usnate nano-assemblies activity against osteosarcoma 143B cells"

P14: Seyedeh Rojin Shariati Pour - University of Bologna

"Development of a Chemiluminescent Method for the Analysis of Antioxidant Activity in Cosmetic Products"

P15: Andrea Criscuolo - University of Naples Federico II

"Towards improved anti-HMGB1 G-quadruplex-forming aptamers: studies on dimerization"

P16: Nastassja Burrini - University of Orléans

"Neolectins, towards new tools for selective sugar targeting"

P17: Alessandro D'Urso - University of Catania

"Exploiting induced Circular Dichroism to probe biomolecule's conformations"

P18: Silvia Rinaldi - CNR-ICCOM

"Computational and spectroscopic study of phosphorene interactions with protein models to foster biomedical applications"

POSTER SESSION 2

P1: Vincenza Armenise - University of Bari Aldo Moro

"Alginate hydrogels to deliver plasma generated RONS for biomedical purposes"

P2: Eleni Axioti - University of Nottingham

"Effect of hydrophobicity alterations and purification nature on poly(glycerol adipate) self-assembling behaviors"

P3: Clarissa Ciarlantini - Sapienza University of Rome

"Development of magnetic molecular imprinted polymer systems for biomedical applications"

P4: Wanda Cimmino - University of Naples Federico II

"Nucleic acid-based portable device for liquid biopsy application"

P5: Giuseppe Cinà - University of Palermo

"Functional biofilms based on alginate polymer filled with modified halloysite for active food packaging"

P6: Flavio Della Pelle - University of Teramo

"Low-cost benchtop approaches for the manufacturing of nanostructured platforms for bioanalytical applications"

P7: Eleonora Diamanti - University of Bologna

"Toolbox to hijack the E3 ligase in viral infections"

P8: Simone Fabbian - University of Padova

"If you get the switch you get the control: OSCP subunit as an emerging therapeutic target for the PTP modulation"

P9: **Verdiana** Marchianò - University of Bari Aldo Moro

"Analytical Characterization of (h-PG) D-(-)-Fructose Amperometric Biosensor based on Self-Templated Highly Porous Gold"

P10: Chiara Papi - University of Turin

"Effect of Gd-based contrast agents on endogenous Chemical Exchange Saturation Transfer (CEST) signals: a new tool for investigating water dynamics across cell membrane in tumor by MRI"

P11: Eleonora Parolin - University of Trento

"Development of PROTACs for Cancer Treatment"

P12: Giulio Pavan - University of Padova

"Highly efficient electrochemiluminescence from imidazole based thermally activated delayed fluorescence emitters"

P13: Roberta Sole - University of Calabria

"Transdermal Delivery of Phloretin by Gallic Acid Microparticles"

P14: Matteo Spedicato - University of Ferrara

"Exploring green alternatives to acetonitrile in reversed-phase liquid chromatography: from small molecules to biomolecules"

P15: Gabriella Tito - University of Naples Federico II

"Structural studies of two anticancer metallodrugs with B-DNA double helical dodecamer"

P16: Morgan Reynolds-Green - University of Nottingham

"Synthesis of polymers with core-shell morphology in supercritical carbon dioxide"

P17: Rossella Santonocito - University of Catania

"Monitoring stress conditions with optical sensor array"

P18: Francesca Romano - University of Naples Federico II

"Comparison of the biological effects of Gadodiamide (Omniscan) and Gadoteridol (ProHance) by means of multi-organ and plasma metabolomics"

P19: Federica Curcio - University of Calabria

"Solid Lipid Nanoparticles Hydroquinone-Based for the Treatment of Melanoma: Efficacy and Safety Studies"

POSTER SESSION 3

P1: Federica Leone - University of Palermo

"Synthesis of fluorescent nanomaterials based on halloysite for potential fluorescence imaging"

P2: Noemi Bognanni - University of Catania

"Linear polymers of Hyaluronan-Cyclodextrin as carriers for Sorafenib"

P3: Martina Rosati - University of Florence

"Towards cost-effective side-chain isotope labelling of proteins expressed in human cells"

P4: Francesco Mattii – University of Florence

"Design of plasmonic nanoparticles as functional fillers for 3D printable biocompatible photopolymers"

P5: Ilaria Cursaro - University of Siena

"Development of potential HDAC6-targeting PROTACs for the treatment of idiopathic pulmonary fibrosis"

P6: Angela Fabiano - University of Pisa

"Skin anti-aging carrageenan gel containing SNEDDS loaded with Sichuan pepper extract"

P7: Alvaro Gacho Temprano - University of Siena

"Molecular dynamics simulations of the interaction between antibacterial small molecules and the staphylococcus aureus lipid bilayer"

P8: Valentina Giraldi - University of Bologna

"Functionalization of electrospun poly(L-lactic acid) scaffold with a selective β -lactam integrin agonist for tissue regeneration"

P9: Giuliano Migliorini - CNRS France

"Macromolecular crowding effects on enzymatic kinetics and diffusion in the extracellular matrix"

P10: Luca Morgan - University of Padova

"Red emitting thermally activated delayed fluorescence emitters for electrochemiluminescence applications"

P11: Lorenzo Quadrini - University of Florence

"Enzyme-Based Catalytic Methods for Real-Time Monitoring of Urea"

P12: Valentina Monaci - University of Florence

"Optimizing vaccine design for prevention of neonatal sepsis"

P13: Anastasiia Tulupova - University of Prague

"Plasmon-assisted organic electrochemistry – towards selective hydrogenation"

P14: Erica Vigiani - University of Florence

"Targeting the adenosinergic axis in cancer immunotherapy: design and synthesis of small molecules as CD73 inhibitors"

P15: Jacopo Vigna - University of Trento

"Synthesis of covalent inhibitors targeting m6a reader proteins"

P16: Fabrizio Villapiano - University of Naples Federico II

"Physicochemical and technological studies of nanoparticles loaded with rutin/2-hydroxypropyl- β -cyclodextrin inclusion complex"

P17: Ersilia Villano - University of Naples Federico II

"Exploiting the potential of hybrid nanoparticles as nucleic acid carrier in pulmonary diseases"