

- 11.00-13.00 **Registration**
- 13.30-13.50 **Opening & Welcome** (Aula Magna)  
**Eugenio Gaudio** – Rector, Sapienza University of Rome  
**Gennaro Ciliberto** – FISV President
- 13.50-14.00 **Tribute to Luigi Luca Cavalli-Sforza: a Pioneering Geneticist** (Aula Magna)  
**Lucio Luzzatto** (Muhimbili University of Health and Allied Sciences, Tanzania)
- 14.00-15.00 **The EMBO Keynote Lecture** (Aula Magna)  
**FISV Lecture Riccardo Cortese**  
Chair: Valeria Poli (Turin)  
**Wolf Reik** (The Babraham Institute, Cambridge and University of Cambridge, UK)  
Single cell epigenome landscape of development and ageing
- 15.00-17.00 **Plenary Symposium** (Aula Magna)  
**The Circadian Clock. A Living Organism's Best Friend in a Spinning World**  
Chairs: Alex Costa (Milan), Rodolfo Costa (Padua),  
**Amita Sehgal** (Howard Hughes Medical Institute and University of Pennsylvania, USA)  
How do clocks control behavior and physiology: insights from a small animal model  
**Jay C. Dunlap** (Geisel School of Medicine at Dartmouth, Hanover, NH, USA)  
The regulatory network governing global responses to changes in light and time  
**Alex A. R. Webb** (University of Cambridge, UK)  
Dynamic plasticity of circadian oscillators
- 17.00-17.30 **Coffee Break** (Terrace)
- 17.30-19.30 **Round Table** (Aula Magna. This session will be in Italian)  
**Which future for the smart biotechnologies**  
Chair: Anna Meldolesi (Corriere della sera, CRISPeR Mania)  
**Anna Cereseto** (Università di Trento)  
**Andrea Lenzi** (Sapienza Università di Roma e CNBBSV)  
**Massimo Losito** (Ateneo Pontificio Regina Apostolorum, Roma)  
**Michele Morgante** (Università di Udine)  
**Luigi Naldini** (San Raffaele Telethon Institute for Gene Therapy (SR-Tiget), Milano)  
**Sandro Vitale** (Istituto di Biologia e Biotecnologia Agraria, CNR, Milano)
- 19.30-20.30 **Welcome Cocktail** (Terrace)

8.30-11.30 **Short Talks by Participants (Session I)**

**PSI.1** (Aula P1)

8.30-10.00 **Environmental Microbiology and Biotechnology (Topic 1)**

Chairs: Duccio Cavalieri, Teresa Rinaldi

**Annamaria Bevivino** (Rome)

Environmental microbial signatures revealed by metagenomic analysis of the airways of cystic fibrosis patients

**Bruno Casciaro** (Rome)

Frog-skin esculentin-1a derived peptides against *Pseudomonas aeruginosa* keratitis: anti-biofilm activity and immobilization to soft contact lenses

**Simona Crognale** (Rome)

Exploitation of biological As(III)-oxidation in water treatment systems: potentialities and microbiome profiling in bioreactors

**Giovanni Bacci** (Sesto Fiorentino, FI)

Flying to Mars: the human microbiome under isolated conditions

**Francesca D'Angelo** (Rome)

Biotechnological exploitation of bacterial communication processes: from quorum sensing inhibition to the generation of synthetic cells interfacing with natural cells

10.00-11.30 **Genetics of Microorganisms (Topic 7)**

Chair: Francesco Imperi, Renato Fani

**Sarah Hijazi** (Rome)

Hijacking bacterial iron metabolism using the transition metal gallium

**Alice Checcucci** (Sesto Fiorentino, FI)

Playing with the rhizobial Mega-Apps: creation and multi-omics characterization of a genomically hybrid strain in the nitrogen-fixing symbiotic bacterium *Sinorhizobium meliloti*

**Olivier Jousson** (Trento)

The role of Type VI Secretion System on the competitiveness of *P. aeruginosa* clinical isolates

**Paola Sperandeo** (Milan)

Characterization of an *E. coli* suppressor mutant that can survive and assemble a functional LPS transport machinery in the absence of the essential inner membrane-tethered LptC

**Alessandra Fortuna** (Rome)

DksA-dependent regulation of quorum sensing in *Pseudomonas aeruginosa*

**PSI.2** (Aula C – Biochimica, 2° Floor)

8.30-10.00 **Genomics, Proteomics and Systems Biology (Topic 2)**

Chairs: Andrea Bellelli, Graziano Pesole

**Federico Martinelli** (Palermo)

Meta-analysis of RNA-seq data to gain insight into crop responses to environmental stresses

**Marco Russo** (Bologna)

Analyses of genomic R-loop maps induced by G-quadruplex ligands in human cancer cells

**Federica Zinghirino** (Catania)

VDAC (voltage dependent anion selective channel) promoters elements and their involvement in metabolic stress

**Elisa Margherita Maffioli** (Milan)

Nanostructured surfaces promote differentiation and maturation events in different cell types

**Marcello Manfredi** (Alessandria)

Integrating serum proteomics, metabolomics and lipidomics to study the effect of sport activity

**PSI.3** (Aula Montalenti – Genetica)

8.30-10.00

**Chromosome Biology, Cell Division and Cell Cycle (Topic 3)**

Chair: Giulia Guarguaglini

**Valeria Palumbo** (Rome)

Morgana/CHP-1 is required for oogenesis and early embryonic divisions in *Drosophila*

**Patrizia Lavia** (Rome)

RANBP2: a nucleoporin with key roles in protein SUMOylation

**Ferdinando Di Cunto** (Orbassano, TO)

Citron kinase inactivation inhibits medulloblastoma progression by inducing apoptosis and cell senescence

**Patrizia Sarogni** (Pisa)

Cohesin over-expression promotes colorectal cancer development

**Veronica Ferrucci** (Naples)

A genotype/ phenotype correlation study to dissect the clinical features of the PRUNE-1 syndrome (#617481)

10.00-11.30

**DNA Replication, Repair and Recombination (Topic 8)**

Chairs: Antonio Musio, Ennio Proserpi

**Serena Montalbano** (Parma)

Identification of the biological target of new platinum, copper and nickel complexes

**Anita Palma** (Rome)

MUS81 endonuclease activity is regulated by CHK2 for replication forks rescue upon replication stress and BRCA2 depletion

**Antonella Porrazzo** (Rome)

Low doses of gamma irradiation render *Drosophila melanogaster* resistant to the DNA damage

**Elisa Palumbo** (Padua)

Identification of molecular biomarkers useful for predicting the likelihood of radiation-induced side effects in oncological patients undergoing radiotherapy

**Giulio Ticli** (Pavia)

Live cell imaging analysis of the influence of p21CDKN1A on PCNA-partners turnover at UV-induced DNA damage sites

**PSI.4** (Aula Magna)

8.30-10.00

**Oncogenes and Tumor Suppressors (Topic 5)**

Chairs: Sara Cabodi, Miriam Martini

**Giulia Bon** (Rome)

HMGA1/E2F1 axis and NFkB pathways regulate LPS progression and trabectedin resistance

**Amani Bouzidi** (Rome)

Impact of the inhibition of the mitochondrial Serine hydroxymethyltransferase enzyme in mitochondrial respiration and cancer cell growth

**Viola Calabrò** (Naples)

Secreted YB-1 regulates NFkB signaling pathway in receiving cells

**Lidia Chellini** (Rome)

Regulation of ovarian cancer progression by IQGAP1 through endothelin-1 receptor signalling

**Silvia Soddu** (Rome)

The p53 mitotic centrosomal localization contributes to mitotic surveillance pathway

10.00-11.30

**Cellular Stress, Apoptosis and Autophagy (Topic 11)**

Chairs: Daniela Barilà, Lucia Morbidelli

**Romina Burla** (Rome)

A new telomeric and ESCRT complex associated factor

**Andrea Guarino** (Naples)

YB-1 recruitment to stress granules in Zebrafish reveals a differential adaptive response

**Alberto Inga** (Trento)

An RBP complex containing DHX30 and PCBP2 operates translation control acting as gatekeeper for p53-dependent apoptosis

**Marialuisa Piccolo** (Naples)

Nucleolipidic-based Ru(III) nanosystems induce multiple cell death pathways activation in preclinical models of human breast cancer

**Gaetana Paoella** (Fisciano, SA)

Involvement of mitochondria and endoplasmic reticulum in stress response to the environmental pollutant 4-Nonylphenol in a human liver cell line

**PSI.5** (Aula Giacomini – Botanica)

8.30-10.00 **Transcriptional Mechanisms and Epigenetic Modifications (Topic 4)**

Chairs: Giacomo Donati, Aymone Gurtner

**Michele Menotta** (Urbino)

ATM unconventional splicing modulation by glucocorticoids

**Veronica Ruta** (Rome)

Strategies to inhibit PRC2 methyltransferase activity in *Arabidopsis* seedlings

**Annalisa Roberti** (Pavia)

Epigenetic marks at satellite-free and satellite-based centromeres

**Elisa Coluzzi** (Rome)

How oxidative stress affects telomere structure and telomeric epigenetic modifications?

10.00-11.30 **Non-coding RNA (Topic 9)**

Chairs: Alessandro Fatica, Francesca Orso

**Silvia Biscarini** (Rome)

LncRNAs in motor neuron differentiation and physiopathology

**Neri Mercatelli** (Rome)

HULC/miR-186/Twist: a novel molecular axis in the resistance of Ewing Sarcoma to YK-4-279

**Simone Detassis** (Trento)

An innovative technology for the direct detection of microRNAs in biofluids

**Giorgio Dieci** (Parma)

SINE-encoded ncRNA profiling unveils a new layer of epigenetic dysregulation in cancer

**Lidia Villanova** (Rome)

MiR-663 sustains NSCLC by inhibiting mitochondrial outer membrane permeabilization (MOMP) through PUMA/BBC3 and BTG2

**PSI.6** (Aula A – Fisiologia Generale)

8.30-10.00 **Plant Nutrition and Biofortification (Topic 10)**

Chairs: Laura De Gara, Anita Zamboni

**Francesca Cardinale** (Grugliasco, TO)

Strigolactones effects on root acidification ability

**Sara Cimini** (Rome)

Lead exposure differentially affect growth, antioxidative network and nutrient uptake in metalicolous and non-metallicolous *Zygophyllum fabago* populations

**Flaviana Marzano** (Bari)

Scouting cross-kingdom transfer: effect of plant microRNA on the expression of human genes involved in cell proliferation

**Pasqualina Woodrow** (Caserta)

Tvv1 retrotransposon family is activated by seaweed extracts in Micro-Tom genome

**Sezen Yilmaz-Sarialtin** (Ankara, Turkey)

*In vitro* antioxidant and anti-inflammatory activities of some *viola L.* species in Turkey

- 10.00-11.30 **Photosynthesis, Metabolism and Environmental Stress (Topic 6)**  
Chairs: Cinzia Berteà, Nicola Tomasi
- Giulia Russo** (Grugliasco, TO)  
Strigolactones and abiotic stress in plants: modulation of abscisic acid transport
- Cecilia Brunetti** (Sesto Fiorentino, FI)  
Abscisic acid dynamics in leaves, shoot and roots of *Populus nigra* exposed to drought: relationships with water relations and carbohydrate status
- Libero Gurrieri** (Bologna)  
Rearrangements in carbon metabolism under osmotic stress: from central metabolism to stress response
- Davide Marzi** (Rome)  
COP1 mediates light-controlled stamen growth in *Arabidopsis thaliana*
- Alberta Pinnola** (Verona)  
Archeology of stress-resistance genes: a novel strategy to improve photosynthesis and productivity in crops
- 11.30-12.00 **Coffee Break** (Terrace)
- 12.00-13.00 **Plenary Lecture** (Aula Magna)  
Chair: Omar Rota-Stabelli (Trento)
- Alexei Maklakov** (University of East Anglia, Norwich, UK)  
Why do we age: disposable soma of functional trade-offs?
- 13.00-13.15 **SARTORIUS Short Talk** (Aula Magna)  
**T. Claudio Bencivenga** (Milan)  
IncuCyte® S3: live-cell analysis system
- 13.15-14.30 **Lunch time and Posters Viewing (PSI: Topics 1, 2, 3, 4, 6, 7, 8, 9, 10, 11)**
- 14.30-16.30 **Plenary Symposium** (Aula Magna)  
**Oxidative Stress, Protein Damage and Repair: Implications in Health and Disease**  
Chairs: Alessandra Polissi (Milan), Roberto Sitia (Milan)
- Frédéric Barras** (Institut Pasteur, Paris, France)  
Protein homeostasis control: fighting ROS damages by repairing oxidized proteins
- Roberto Sitia** (Università Vita-Salute San Raffaele, Milan)  
Tuning redox signaling in and between cells
- Alessandro Giuffrè** (CNR-IBPM, Rome)  
Energy, redox status and gasotransmitters: poisons at work!
- Giovanna De Chiara** (IFT, CNR, Rome)  
Recurrent Herpes Simplex Virus -1 (HSV-1) infection causes neurodegenerative signs and cognitive deficits in mice. Role of protein oxidation
- 16.30-17.00 **Coffee Break** (Terrace)
- 17.00-19.00 **Parallel Symposia**
- 1. Emergence and Spread of Archaic and Modern Humans: News from Bones and Genomes** (Aula P1)  
Chairs: Antonio Torroni (Pavia), Luca Sineo (Palermo)
- Giorgio Manzi** (Sapienza University of Rome)  
The evolution of the genus *Homo* has been driven by a series of geographical dispersals
- Robert Foley** (University of Cambridge, UK)  
Evolution of *Homo sapiens* in Africa: integrating genes, fossils and behaviour
- Carles Lalueza-Fox** (CSIC-University Pompeu Fabra, Barcelona, Spain)  
Genomics of the bell beaker phenomenon and the transformation of Western Europe
- Cristian Capelli** (University of Oxford, UK)  
Recent, ancient and archaic genomic signatures in the Italian population

## 2. Genetic and Epigenetic Mechanisms Regulating Transgenerational Inheritance

(Aula Magna)

Chairs: Michele Morgante (Udine), Antonella Russo (Padua)

**Marco Barchi** (University of Rome Tor Vergata)

Molecular mechanisms underlying X-Y chromosomes segregation errors during meiosis

### EMBO Young Investigator Lecture

**Nicola Iovino** (Max Planck Institute of Immunobiology and Epigenetics, Freiburg, Germany)

Epigenetic inheritance through the germline in *Drosophila*

**James Hackett** (EMBL, Monterotondo, Rome)

Genetic and epigenetic regulation of the mammalian germline

### EMBO Young Investigator Lecture

**Isabel Bäurle** (University of Potsdam, Germany)

Chromatin regulation of heat stress memory in plants

## 3. Proteins as Drug Target and Drugs, and Protein Degradation as a Therapeutic Strategy

(Aula Giacomini – Botanica)

Chairs: Alberto Boffi (Rome), Andrea Mozzarelli (Parma)

**Giuseppe Zanotti** (University of Padua)

Structural determination of proteins of *Helicobacter pylori* relevant for bacterial survival and pathogenicity

**Antonella Isacchi** (Nerviano Medical Sciences, Milan)

Kinases as drug targets: state of the art and future perspectives

**Cecilia Weigelt** (Chiesi Group, Lidingo, Sweden)

The CMC and biological development path of an enzyme replacement therapeutic drug - from idea to EMA approval

**Alessio Ciulli** (University of Dundee, Scotland, UK)

Drug design for targeted protein degradation

## 4. Crossing Biological Barriers, in Health and Disease (Aula Montalenti – Genetica)

Chairs: Massimo Masserini (Milan), Vito De Pinto (Catania)

**Francesca Re** (University of Milano-Bicocca)

Modeling the blood-brain barrier (BBB) in healthy and diseased states

**Sara Nicoli** (University of Parma)

Innovative strategies to overcome ocular barriers

**Valeria Dall'Asta** (University of Parma)

Cationic amino acid transport: physiology and pathology

**Krisztina Herédi-Szabó** (SOLVO Biotechnology, Budaörs, Hungary)

Challenges and opportunities to develop drugs traversing biological barriers

## 19.00-21.00 Societies' Time

**AGI** (Aula Magna)

19:00 Premio AGI "Ferruccio Ritossa" 2018 e presentazione del lavoro premiato

19:20 Premio Dottorato AGI/Zanichelli 2018 e presentazione del lavoro premiato

19:40 Assemblea dei Soci AGI

**SIBV** (Aula Montalenti – Genetica)

Premi 2018:

- SIBV Seed Grants

- Giovani Biologi Vegetali

Assemblea Sociale

**SIMAG** (Aula Giacomini – Botanica)

Assemblea dei Soci

8.30-11.30 **Short Talks by Participants (Session II)**

**PSII.1** (Aula Sergi – Antropologia, 1° Floor)

8.30-10.00 **Development, Differentiation and Ageing (Topic 12)**

Chairs: Daniele Condorelli, Fulvio Della Ragione

**Adriana Borriello** (Naples)

Studies on cancer-associated *CDKN1B* mutations: unravelling a novel mechanism for tumor suppressor loss of function

**Marina Bruno** (Florence)

Role of sphingosine 1-phosphate signaling axis in the differentiation of epithelial cochlear progenitors

**Roberta Cascella** (Florence)

The mechanism of neuronal toxicity by oligomers and fibrils of  $\alpha$ -synuclein

**Stefania Martucciello** (Fisciano, SA)

Tbx1 interacts genetically with Vegfr3 to regulate lymphangiogenesis in mice

**Rebecca Piccarducci** (Pisa)

Influence of APO $\epsilon$  polymorphism and physical activity on the well-being of erythrocytes: antioxidant capability and cellular membrane assessment

10.00-11.30 **Stem Cells, iPS, Cancer Stem Cells (Topic 18)**

Chairs: Gianni Cuda, Gabriele Stocco

**Maria Giovanna Garone** (Rome)

Development of new cranial motor neuron differentiation protocol from human iPS cells carrying ALS mutations

**Chiara Giacomelli** (Pisa)

New insights on the human bone-marrow and gingival mesenchymal stem cell responses to senescence induction

**Giusj Pugliese** (Rome)

Generation of an iPSC model to investigate replicative stress as the possible molecular mechanism underlying Schimke immune-osseous dysplasia

**Alessandro Rosa** (Rome)

Dysregulation of RNA metabolism in iPSC-derived FUS mutant human motor neurons, an *in vitro* model system for Amyotrophic Lateral Sclerosis

**Federico Salaris** (Rome)

Transcriptome and proteome analysis of FXS patient-derived iPSC lines to investigate FMRP role and its interactors during neural development

**PSII.2** (Aula C – Biochimica, 2° Floor)

8.30-10.00 **Metabolism and its Regulation in Health and Diseases (Topic 13)**

Chairs: Mauro Magnani, Luigi Palmieri

**Giulia Guiducci** (Rome)

Beyond intermediary metabolism: characterization of the moonlighting function of human serine hydroxymethyltransferase

**Alessio Menga** (Bari)

Blockade of glutamine synthetase enhances inflammatory response in microglial cells

**Vito Porcelli** (Bari)

Molecular identification and functional characterization of a novel glutamate transporter in yeast and plant mitochondria

**Karim Zuhra** (Rome)

Synthesis and breakdown of H<sub>2</sub>S, the third gasotransmitter

**Gianluca Mattei** (Florence)

Metabolism in breast cancer: a systems biology approach



**PSII.3** (Aula Montalenti – Genetica)

8.30-10.00 **Human Genetics and Genomic Diversity (Topic 14)**

Chairs: Alessandro Achilli, Luca Pagani

**Michela Leonardi** (Cambridge, UK)

Human genetic diversity and the effects of subsistence strategies

**Angelica Macauda** (Pisa)

Inherited variation in the xenobiotic transporter pathway and survival of multiple myeloma (MM) patients: an IMMEnSE study

**Manuel Gentiluomo** (Pisa)

A Mendelian randomization approach to predict the risk to develop pancreatic ductal adenocarcinoma

**Marco Capodiferro** (Pavia)

Exploring the genetic history of Panamanians through ancient genomes

**Linda Ongaro** (Tartu, Estonia)

The European heritage of American populations

10.00-11.30 **Evolutionary Biology (Topic 20)**

Chairs: Giorgio Manzi, Marco Oliverio

**Valeria Russini** (Rome)

A biogeographic analysis of loss of planktotrophy in caenogastropod molluscs (Gastropoda, Nassariidae)

**Omar Rota Stabelli** (San Michele all'Adige, TN)

The genome of *Drosophila subpulchrella* helps polarising the evolution of pest traits in its sister species *Drosophila suzukii*

**Roberto Feuda** (Bristol, UK)

A common regulatory neurogenic toolkit in Bilateria

**Costantino Buzi** (Rome)

On the shoulder of the past. The scapula of the Neanderthal from Altamura, Italy

**PSII.4** (Aula A – Fisiologia Generale)

8.30-10.00 **Neurobiology and Neuropharmacology (Topic 15)**

Chairs: Giulia Piaggio, Giorgio Racagni

**Carlo Brighi** (Rome)

Modeling Fragile X syndrome with iPSC-derived neurons as a purpose of deciphering the molecular mechanisms and the neurobiological phenotypes associated with the pathology

**Anna Maria Lucianò** (Rome)

M2 muscarinic receptors show inhibitory effects on drug resistance in human neuroblastoma cells

**Claudia Colussi** (Rome)

Nitro-oxidative stress dependent Nup153 alteration affects neural stem cell function in a mouse model of Alzheimer's disease

**Serena Faggiano** (Parma)

Human serine racemase, a drug target for neuropathologies

**Ciro Iaccarino** (Sassari)

Role of LRRK2 in the regulation of dopamine receptor trafficking

10.00-11.30 **Nutrition Biochemistry (Topic 19)**

Chairs: Francesco Bonomi, Silvana Hrelia

**Paola Antonia Corsetto** (Milan)

Nutrient deprivation alters lipid phenotype in triple-negative breast cancer

**Simone Luti** (Florence)

Investigating the nutraceutical properties of peptides extracted from Tuscany sourdoughs

**Laura Giusti** (Pisa)

A proteomic approach to study the neuroprotective effect of oleocanthal in SH-SY5Y cells



**Stefania Iametti** (Milan)  
Structure-dependent biological activities of food-related stilbene derivatives isomers

**Pasquale Marrazzo** (Rimini)  
Enhancing stem cell functionality through antioxidant supplementation

**PSII.5** (Aula Magna)

8.30-10.00 **Immunology and Host-Pathogen Interaction Topic 16)**

Chairs: Fiorentina Ascenzioni, Paolo Visca

**Duccio Cavalieri** (Sesto Fiorentino, FI)  
Strain level analysis of intestinal fungi and immune mediated host-yeast interaction

**Marta Kinga Lemieszek** (Lublin, Poland)  
Beneficial effect of cathelicidin on treatment of hypersensitivity pneumonitis induced by *Pantoea agglomerans* – *in vivo* studies

**Maria Luisa Mangoni** (Rome)  
How to control *Pseudomonas aeruginosa*-induced pneumonia? A lesson from derivatives of the amphibian skin peptide esculentin-1a

**Luca Cavinato** (Rome)  
Escaping the oxidative burst: dual role of the *P. aeruginosa* superoxide dismutases

**Federica Runci** (Rome)  
The contribution of iron uptake to *Acinetobacter baumannii* pathogenicity

10.00-11.30 **Plant Development and Disease (Topic 22)**

Chairs: Franco Faoro, Michela Zottini

**Alex Costa** (Milan)  
Looking for aminoacid-gated calcium channels in plants: functional, biochemical and structural characterization of one GLR isoform

**Cristina Ruberti** (Muenster, Germany)  
Fine-tuning the unfolded protein response in plants

**Anna Fiorillo** (Rome)  
Biochemical characterization of Salt tolerance-related protein (STRP): a new protein involved in cold stress in *A. thaliana*

**Federica Locci** (Rome)  
Oxidation of Damage-Associated Molecular Patterns as a homeostatic mechanism in plant immunity and development

**Vincenzo Lionetti** (Rome)  
Pectin methylesterases in plant immunity: activators or susceptibility factors?

**PSII.6** (Aula Giacomini – Botanica)

8.30-10.00 **Biotransformations (Topic 17)**

Chairs: Loredano Pollegioni, Raffaele Porta

**Paola Branduardi** (Milan)  
Optimizing the biotransformation of residual biomasses by ameliorating the effectiveness of cell factories

**Mohammed Sabbah** (Naples)  
Innovative chitosan-based biodegradable plastics as food coating and wrapping

**Valeria Vecchi** (Verona)  
Identification of two novel hemicellulosolytic enzymes from the hyperthermophilic bacterium *Thermotoga neapolitana* and their exploitation for lignocellulose degradation

**Andrea Franzetti** (Milan)  
Removal and biodegradation of air pollutants by plant-bacteria interactions in urban areas

**Sara Ragucci** (Caserta)  
Purification and characterization of a novel peroxidase from seeds of *Araujia sericifera* Brot

- 10.00-11.30 **Glycoconjugates (Topic 21)**  
 Chairs: Alberto Passi, Eugenia Schininà
- Livia Cabitta** (Milan)  
 Identification of the antigen recognized by rHIgM22, a remyelination-promoting human monoclonal antibody and his effect on glial cells
- Ilaria Caon** (Varese)  
 The long non coding RNA HAS2-AS1 regulates breast cancer cells aggressiveness acting as a competing endogenous RNA
- Elena Caravà** (Varese)  
 Role of TNF $\alpha$  on endothelial glycocalyx
- Michela Pucci** (Bologna)  
 Glycosylation in colorectal cancer: role of B4GALNTII and Sialyl Lewis x antigen
- 11.30-12.00 **Coffee Break** (Terrace)
- 12.00-13.00 **Plenary Lecture** (Aula Magna)  
 Chair: Mario Pezzotti (Verona)
- Luis Herrera Estrella** (LANGEBIO, Mexico)  
 Genetically modified plants: past, present and future
- 13.00-13.15 **SENECO Short Talk** (Aula Magna. This talk will be in Italian)  
**Ettore Senes** (Milan)  
 Ultrasound-assisted emerging technologies for applied and basic research
- 13.15-14.30 **Lunch time and Posters Viewing (SPII: Topics 5, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22)**
- 14.30-16.30 **Plenary Symposium** (Aula Magna)  
**Life is Also a Matter of Taste and Smell**  
 Chairs: Roberto Barale (Pisa), Guglielmina Nadia Ranzani (Pavia)
- Wolfgang Meyerhof** (Saarland University, Homburg, Germany)  
 Different tongues for different people? - Genetics of bitter taste receptors and perceptual differences in individuals and the population
- Catia Sternini** (UCLA, Los Angeles, CA, USA)  
 Gut bitter taste receptors as sensors of luminal content
- Paolo Gasparini** (University of Trieste)  
 Genes and food preferences and their role in personal choices, lifestyle and health
- Darren Logan** (Wellcome Trust Sanger Institute, Cambridge, UK)  
 Do you smell what I smell? The genetics of olfaction
- 16.30-17.00 **Coffee Break** (Terrace)
- 17.00-19.00 **Parallel Symposia**
- 1. RNA Biology** (Aula A – Fisiologia Generale)  
 Chairs: Irene Bozzoni (Rome), Salvatore Oliviero (Turin)
- Danny Incarnato** (IIGM, Turin)  
 Dissecting the RNA structurome to decipher *in vivo* RNA folding dynamics
- Gian Gaetano Tartaglia** (Centre for Genomic Regulation and ICREA, Barcelona, Spain)  
 Aggregation, neurodegeneration and RNA networks
- Julie Martone** (Sapienza University of Rome)  
 Lnc-049, a cytoplasmic long non-coding RNA involved in skeletal muscle differentiation

## **2. Inflammation and Disease** (Aula Magna)

Chairs: Carlo Riccardi (Perugia), Paolo Pinton (Ferrara)

**Cecilia Garlanda** (Humanitas University, Milan)

IL-1R8, a negative regulator of inflammation and checkpoint molecule

**Francesco Di Virgilio** (University of Ferrara)

ATP: the quintessential DAMP

**Maria Lina Bernardini** (Sapienza University of Rome)

PAMPs: linking bacterial recognition and inflammatory response

**Stefano Bruscoli** (University of Perugia)

Glucocorticoid and B cell functions: role of Glucocorticoid-Induced Leucine Zipper (GILZ)

## **3. Carbon Cycle and Climate Change: the Future** (Aula Montalenti – Genetica)

Chairs: Luca Espen (Milano), Sergio Esposito (Napoli)

**Maria De Nobili** (University of Udine)

Soil, the second active planet scale interface: effects and perspectives of climate change

**Nick Ostle** (Lancaster University, UK)

Climate change and soil biotic carbon cycling

**Mauro Centritto** (IVALSA, CNR, Florence)

Evolution of stomatal and mesophyll conductance: implications for carbon and water exchange in drylands

**Rémi Lemoine** (CNRS and University of Poitiers, France)

Flux of carbon from leaves to roots in plants under environmental stress

21.00

## **Social Dinner**

Ristorante La Limonaia

Villa Torlonia

Via Lazzaro Spallanzani, 1/A

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## Friday, September 21

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- 8.30-10.30 **Plenary Symposium** (Aula Magna)  
**Farming for Pharming: Plants as Biofactories (in the Production of Vaccines, Antibiotics, Anticancer)**  
Chairs: Marcello Donini (Rome), Franco Faoro (Milan)  
**Emanuela Noris** (CNR, Torino)  
Transient expression of anticancer and antiviral antigens in plants  
**Julian K-C. Ma** (St. George's, University of London, UK)  
Molecular pharming in tobacco to provide antibody based solutions for global health  
**Selene Baschieri** (ENEA Centro Ricerca Casaccia, Rome)  
Plant-derived vaccines and smart drugs  
**Linda Avesani** (University of Verona)  
Plant-made nanomaterials for diagnosis and therapy
- 10.30-11.30 **Plenary Lecture** (Aula Magna)  
Chair: Bianca Colonna (Rome)  
**Josep Casadesús** (University of Seville, Spain)  
Waddington's landscapes in the microbial world
- 11.30-11.45 **SEQUENTIA BIOTECH Short Talk** (Aula Magna)  
**Walter Sanseverino** (Barcelona, Spain)  
When computer science meets life science: novel bioinformatics approaches to improve NGS data interpretation
- 11.45-12.00 **Coffee Break** (Terrace)
- 12.00-14.00 **Plenary Symposium** (Aula Magna)  
**Regulatory Network Dynamics: from Interaction to Function**  
Chairs: Matteo Barberis (Amsterdam, The Netherlands), Pier Luigi Martelli (Bologna)  
**FEBS National Lecturer**  
**Luis Serrano Pubul** (Centre for Genomic Regulation, Barcelona, Spain)  
Comprehensive systems analysis of the transcriptome and its regulation of a genome reduced bacterium  
**Matteo Barberis** (University of Amsterdam, The Netherlands)  
Deciphering yeast physiology by a multi-scale framework integrating cell cycle and metabolism  
**Davide Cacchiarelli** (TIGEM, Napoli)  
Understanding transcription factors biology through genomics  
**Adil Mardinoglu** (KTH Royal Institute of Technology, Stockholm, Sweden)  
The employment of systems biology in treatment of liver diseases
- 14.00-14.30 **Poster Prizes and Closing Remarks** (Aula Magna)
- 15.00-17.00 **Societies' Time**  
**SIBV** (Aula Giacomini – Botanica)  
Elevator Pitch Session  
Premio Assunta Baccarini Melandri  
**SIMGBM** (Aula Magna)  
Consegna Premi Franco Tatò e Mario Campa 2018  
Assemblea Generale dei Soci