Tuesday, September 18

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 esculetin-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

8.30-11.30  **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*

10.00-11.30  **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 Prosperi

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 Paolella (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 metallocolous and non-metallocolous 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 Bertea, 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 Bencivena** (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
Assembly Sociale

SIMAG (Aula Giacomini – Botanica)
Assembly dei Soci
7.30-11.30 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

Adriano 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 a-synuclein

Stefania Martucciello (Fisciano, SA)
Tbx1 interacts genetically with Vegfr3 to regulate lymphangiogenesis in mice

Rebecca Piccarducci (Pisa)
Influence of APOE 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

Giusy 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 H2S, 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 rHlgM22, 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 TNFα 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)

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
Friday, September 21

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