Program

Tuesday, 14th November 2017

09:00-12:30  **Tutorials (Aula Nievo, Palazzo Bo)**

- 09:00-9:30  **Experimental Design in Metabolomics**  
  *(Federico Marini)*

- 09:30-10:15  **NMR based Metabolomics: Experiments and Data Processing**  
  *(Stefano Mammi)*

- 10:15-11:15  **MS based Metabolomics: Experiments and Data Processing**  
  *(Giuseppe Giordano, Pietro Franceschi)*

- 11:15-12:15  **Data Analysis; Principles and Tools**  
  *(Marina Cocchi, Matteo Stocchero)*

12:00-15:00  **Registration (Palazzo Bo)**

  Chairman: Giuseppe Giordano, Stefano Mammi

14:00-15:00  **Welcome and Introduction to the Congress (Aula Magna, Palazzo Bo)**

15.00-15.30  **IMaSS, GIDRM and ASIC Presentation**

15:30-16:20  **Elaine Holmes**  
  *(Tu1)*  What can Metabolic Profiling and the exposome tell us about chemical risk?

**Metabolomics Society Grants:**

16:20-16:40  **Monica Scognamiglio**  
  *(Tu2)*  Metabolomics as a tool to study allelopathic interactions between Mediterranean plants.

16:40-17:00  **Veronica Ghini**  
  *(Tu3)*  Cell metabolomics- an innovative tool to investigate cellular processes.

17:00-17:20  **Alessia Trimigno**  
  *(Tu4)*  A multi-platform metabolomic approach for the identification of urine and serum dairy intake biomarkers.

17:20-18:10  **Ana Gil**  
  *(Tu5)*  Cell Metabolomics: stories and challenges.

18:10-21:30  **Appetizer (Cavour Cafe)**
Wednesday, 15th November 2017
(Orto Botanico)

Impact of Metabolomics in Clinical Medicine
Chairs: Pietro Franceschi, Luigi Atzori

09:10-10:00 Theodore Alexandrov
(W1) Spatial Metabolomics in tissues and single cells.

10:00-10:30 Silvia Carraro
(W2) Metabolomic approach in asthma: a clinician’s perspective.

10:30-10:50 Andrea Armirotti
(W3) Single neuron lipidomics made real.

10:50-11:10 Pierluigi Caboni
(W4) A lipidomics approach for the diagnosis of inflammatory bowel disease using QTOF-LC/MS and Ion Mobility-QTOF-LC/MS.

11:10-11:30 Nicola Cavallini
(W5) Discrimination of glioma brain tumor grades through Multivariate Data Analysis on 1H-HR-MAS NMR ex-vivo spectra.

11:30-11:50 Coffee Break

Metabolic Phenotyping
Chairs: Paola Turano, Andrea Armirotti

11:50-12:20 Manfred Spraul
(W6) NMR Based Tools in Clinical/Translational Metabolomics.

12:20-12:50 David Heywood
(W7) Platforms for the Precision Measurement of the Metabolome Powering biological insights: precisely profiling complex samples from large experimental cohorts.

12:50-13:10 Rosaria Cozzolino
(W8) Urinary volatile organic compounds (VOCs): application in clinics.

13:10-13:30 Giuseppe Corona
(W9) Pharmacometabolomics approach to identify new biomarkers of response to HER-2 targeted anticancer therapy.

13:30-14:30 Lunch and Poster Session
Food / Nutrition
Chairs: Matteo Stocchero, Luisa Mannina

14:30-15:20 Serge Rezzi
(W10) Perspectives for Metabolomics in Human Nutrition.

15:20-15:50 Claudio Luchinat
(W11) Profiling visible and invisible metabolites in urine by NMR.

15:50-16:10 Flaminia Cesare Marincola
(W12) Impact of early postnatal nutrition on the NMR urinary metabolic profile of infant.

16:10-16:30 Stefano Dall'Acqua
(W13) The use of metabolomics in the study of nutraceuticals: cranberry and green coffee.

16:30-16:50 Coffee Break

Food / Nutrition
Chairs: Marco Roverso, Graziano Guella

16:50-17:20 Luisa Mannina
(W14) NMR based Metabolomics in food Science: outcomes and critical points.

17:20-17:40 Francesco Fanizzi
(W15) Harvest year effect on Apulian EVOOs assessed by 1H NMR based Metabolomics: a deeper study on altitude-based classification.

17:40-18:00 Federica Angilè
(W16) Metabolic profile comparison of different compartments of scyphomedusa Rhizostoma pulmo: preliminary results.

18:00-18:20 Roberto Consonni
(W17) Multi-spectroscopic investigations of Crocus sativus L. tissues.

18:20-19:10 Bénédicte Elena-Hermann
(W18) NMR Metabolomics in action: from real-time analyses to longitudinal snapshots in biological systems.
Thursday, 16th November 2017
(Orto Botanico)

Computational and Statistical Tools
Chairs: Federico Marini, Marina Cocchi

09:10-10.00  **Johan Westerhuis**
(Th1) Searching for metabolic changes in human nutritional intervention studies.

10:00-10:30  **Francesco Savorani**
(Th2) Untargeted NMR metabolomics: from raw data to valuable knowledge through chemometrics.

10:30-10:50  **Eleonora Amante**
(Th3) Optimization of a GC-MS method for endogenous anabolic androgenic steroids (EAAS) detection and application for new screening strategies of prostatic diseases.

10:50-11:10  **Vito Gallo**
(Th4) New metrics for performance assessment in NMR fingerprinting and simultaneous multicomponent qNMR analysis.

11:10-11:30  **Emanuela Locci**
(Th5) Metabolomics signature reveals distinctive patterns in an animal model of mechanical asphyxia and dysrhythmic cardiac arrest.

11:30-11:50  **Coffee Break**

Metabolomics Applications
Chairs: Giuseppe Pieraccini, Claudio Luchinat

11:50-12:10  **Luigi Atzori**
(Th6) Pitfalls and Caveats in Clinical Metabolomics.

12:10-12:30  **Anatoly Sobolev**
(Th7) NMR and MS metabolomics of baobab (*Adansonia digitata* L.) products.

12:30-12:50  **Giuseppe Paglia**
(Th8) Pre-analytic evaluation of volumetric absorptive microsampling and integration in a mass spectrometry based metabolomics workflow.

12:50-13:10  **Matteo Stocchero**
(Th9) The untargeted mass spectrometry analysis for the study of the "pediatric community acquired pneumonia".

13:10-13:30  **Zeeshan Shah**
(Th10) A detailed lipidomics and proteomics exploration of the FAAH knockout mice brain.
13:30-14:30  Lunch and Poster Session

14:30-15:30  Discussion Group  
            Chairs: Federico Marini, Pietro Franceschi, Marco Geppi

15:30-15:45  Best Poster Award

15:45-16:00  Closing Remarks