



EMBnet Conference 2020

Bioinformatics Approaches to Precision Research

23-24 September 2020

Zoom Platform - Time 3 pm to 8 pm (CEST)

Registration: <https://us02web.zoom.us/meeting/register/tZEvd-mupjwiE911qtAnYln4TrNwQlxDMYm4>

Programme

1st Day: 23 September 9, 2020

15:00-15:10

Welcome & Programme Presentation

Domenica D'Elia & Erik Bongcam-Rudloff

15:10-15:30

Exosomes in breast milk; a beneficial genetic trojan horse from mother to child

Dimitrios Vlachakis, Aspasia Efthimiadou, Flora Bacopoulou, Elias Eliopoulos, George P. Chrousos

15:30-15:50

Precision dairy farming – A Phenomenal opportunity

Tomas Klingström

15:50-16:10

Genome regulation by long non-coding RNAs

Katerina Pierouli, George N. Goulielmos, Elias Eliopoulos, Dimitrios Vlachakis

- 16:10-16:30 Precision Epidemiology of Multi-drug resistance bacteria: bioinformatics tools
J. Donato, L. Lugo, H. Perez, H. Ballen, D. Talero, S. Prada, F. Brion, V. Rincon, L. Falquet, M.T. Reguero, E. Barreto-Hernandez
- 16:30-16:50 Mechanisms of epigenetic inheritance in children following exposure to abuse
E. Damaskopoulou, G.P. Chrousos, E. Eliopoulos, D. Vlachakis
- 16:50-17:00 Break
- 17:00-17:20 Genome-wide association studies (GWAS) in an effort to provide insights into the complex interplay of nuclear receptor transcriptional networks and their contribution to the maintenance of homeostasis
Thanassis Mitsis, G.P. Chrousos, E. Eliopoulos, D. Vlachakis
- 17:20-17:40 Computer aided drug design and pharmacophore modelling towards the discovery of novel anti-ebola agents
Kalliopi Io Diakou, G.P. Chrousos, E. Eliopoulos, D. Vlachakis
- 17:40-18:00 3'-Tag RNA-sequencing
Andreas Gisel
- 18:00-18:20 Expression profiling of non-coding RNA in coronaviruses provides clues for virus RNA interference with immune system response
Arianna Consiglio, V.F. Licciulli, D. Catalano, G. Grillo, D. D'Elia
- 18:20-18:40 Single-cell mapping of microRNA expression during cardiac development
Stefanos Leptidis, E. Papakonstantinou, K. Pierouli, A. Mitsis, S. Chlamydas, A.
- 18:40-19:00 A computational drug design strategy against the Yellow Fever Virus helicase
E. Papakonstantinou, K. Pierouli, G.N. Goulielmos, E. Eliopoulos

19:00-19:10	Break
19:10-19:30	Big Data analytics for knowledge transfer among organisms while reconstructing Gene Regulatory Networks <u>Paolo Mignone</u> , G. Pio, D. D'Elia, M. Ceci
19:30-19:50	LP-HCLUS: a novel tool for the prediction of relationships between ncRNAs and human diseases <u>Emanuele Pio Barracchia</u> , G.Pio, D. D'Elia, M. Ceci
19:50-20:00	Concluding Remarks

2nd Day: 24 September 2020

15:00-15:10	Welcome & Programme Presentation
15:10-15:30	Plant micro RNAs can control cancer genes expression through a sequence-specific targeting mechanism: the case of MALAT1 and NEAT1 <u>Flaviana Marzano</u> , M.F. Caratozzolo, A. Consiglio, F. Licciulli, S. Liuni, E. Sbisà, D. D'Elia, A. Tullo, D. Catalano
15:30-15:50	Benefits of a grape-rich diet on human health: a nutrigenomics study underlining the potential role of non-coding RNAs <u>Rosa Anna Milella</u> , M. Gasparro, F. Alagna, M.F.Cardone, S. Rotunno, C.T. Ammollo, F. Semeraro, A. Tullo, F. Marzano, D. Catalano, M.Colucci, D. D'Elia
15:50-16:10	In silico characterization of the gene repertoires of immunoglobulins and T cell receptors of the various inbred laboratory strains of <i>Mus musculus</i> <u>Anna Tran</u> , Géraldine Folch, Véronique Giudicelli and Sofia Kossida

- 16:10-16:30 Predicting L-PART1 exon using deep learning
Merouane Elazami Elhassani
- 16:30-16:45 ML4microbiome: Statistical and machine learning techniques in human microbiome studies (CA 18131)
Tatjana Loncar-Turukalo, D. D'Elia
<https://www.ml4microbiome.eu/>
- 16:45-17:00 Advancement of Bioinformatics and Computational Biology in Latin America: SolBio and other scientific networks
Javier De Las Rivas, President of SolBio (<http://www.soibio.org/>)
- 17:00-17:20 An ERASMUS student exchange involving nodes from Belgium, Sweden, Colombia, Slovakia and Greece was organized during 2020
Two Student projects will be presented
- 17:20- 20:00 **EMBnet Annual Business Meeting**
Only EMBnet members

Programme Committee

Domenica D'Elia	Italy
Erik Bongcam-Rudloff	Sweden
Dimitrios Vlachakis	Greece
Lubos Klucar	Slovakia
Emiliano H. Barreto	Colombia
Aspasia Efthimiadou	Greece

