



# 3S Biology Summer School

## September 8<sup>th</sup>-11<sup>th</sup>, 2014

### Povo (Trento), Italy

## Preliminary Program

University of Trento

Room B101 'Povo 2' building, via Sommarive 9, 38123 Povo (TN)  
 Cibio's terrace 'Povo 2' building, via Sommarive 9, 38123 Povo (TN)  
 Room A201 'Polo F. Ferrari', via Sommarive 5, 38123 Povo (TN)  
 Canteen 'Polo F. Ferrari', via Sommarive 5, 38123 Povo (TN)

### Monday, September 8

10:30 – 12:00	Povo 2	<i>Registration</i>
12:00 – 13:15	CIBIO's terrace	<i>Welcome light lunch</i>
13:15 – 13:30	Room B101	<i>Welcome and initial remarks</i>  Alessandro Quattrone, CIBIO Director – University of Trento Paola Lecca, CIBIO – University of Trento
<b>Session: Systems Biology I (Room B101 – Povo 2)</b> <b>Chair: Francesca Demichelis</b>		
13:30 – 14:30	Room B101	<b>Systems biology approaches for personalizing targeted anticancer therapy</b> , Olivier Elemento, Weill Cornell Medical College, New York, US
14:30 – 15:20	Room B101	<b>Poster talks</b> supervised by O. Elemento
		F. Aggazio (BIGEA, Bologna), "A genomic scale investigation on enhancer-promoter interactions mediated by transcription factors"  E. Lusito (IEO, Milano), "A Network based approach to cancer system medicine"
15:20 – 16:00	CIBIO's terrace	<i>Coffee break</i>
16:00 – 18:00	Room A201	<b>Systems Biology Tutorial:</b> Network analysis using Gaussian Graphical Models, O. Elemento
18:30 – 19:30	CIBIO's terrace	<i>Aperitif</i>



## Tuesday, September 9

8:30 – 9:00	Povo 2	<i>Registration</i>
<b>Session: Systems Biology II</b> <b>Chair: Nicola Segata</b>		
9:00 – 10:00	Room B101	<b>Studying the human microbiome using metagenomics</b> , Jeroen Raes, VIB, Belgium
10:00 -11:00	Room B101	<b>Poster talks</b> , supervised by J. Raes
		M. Scholz (CIBIO, Trento) “Pangenome-based strain level metagenomic profiling” A. Zandonà (FBK, Trento) “A metagenomic pipeline integrating predictive profiling methods and complex networks for the analysis of NGS microbiome data”
		Questions and discussion
11:00 – 11:30	CIBIO’s terrace	<i>Coffee break &amp; Poster session</i>
11:30 – 13:30	Room A 201	<b>Systems biology tutorial: Inference and analysis of microbial association networks</b> , Karoline Faust, VIB, Belgium
13:30 – 14:30	Canteen	<i>Lunch</i>
<b>Session: Synthetic and Semantic Biology I</b> <b>Chair: Paola Lecca</b>		
14:30 – 15:30	Room B101	<b>Between hype and reality: an overview of Semantic Web technologies in Biomedical Research</b> , Andrea Splendiani, Novartis, UK
15:30 – 16:10	Room B101	<b>Poster talks</b> supervised by P. Lecca
		A. Argentini (VIB, Ghent), “MOPP: A Simple and Robust approach to detect MS1 intensities”  L. Martini (CIBIO, Trento), “In vitro evolution of new RNA sensors”
16:10 – 16:40	CIBIO’s terrace	<i>Coffee break</i>
16:40 – 18:30	Room A201	<b>Semantic biology tutorial: The Semantic Web is easy</b> (a hands-on tutorial), Andrea Splendiani, Novartis, UK

## Wednesday, September 10

8:30 – 9:00	Povo 2	<i>Registration</i>
<b>Session: Semantic Biology II</b> <b>Chair: Angela Re</b>		
9:00 – 10:00	Room B101	<b>Building reasonable biomedical ontologies for a Life Sciences Semantic Web</b> , Mikel Egaña Aranguren, UPV-EHU, Euskal Herriko Unibertsitatea, Spain
10:00 – 10:40	Room B101	<b>Poster talks</b> , supervised by M. Egaña Aranguren
		Z. Dúl (King's College, London), "Search for novel cell size regulators in five eukaryotic species"
		G. Corrado (DISI, Trento), "PTRcombiner: mining combinatorial regulation of gene expression from posttranscriptional interaction maps"
10:40 – 11:10	CIBIO's terrace	<i>Coffee break</i>
11:10 – 11:30		Poster session
11:30 – 13:30	Room B101	<b>Semantic biology tutorial</b> : Use of semantic web resources for knowledge discovery, Mikel Egaña Aranguren, Genomic Resources, UPV-EHU Euskal Herriko Unibertsitatea
13:30 – 14:30	Canteen	<i>Lunch</i>
<b>Session: Synthetic Biology I</b> <b>Chair: Sheref Mansy</b>		
14:30 – 15:30	Room B101	<b>Computer-aided design for metabolic engineer</b> , Jean-Loup Faulon, Institute of Systems and Synthetic Biology (ISSB), University of Evry, France
15:30 – 16:00	CIBIO's terrace	<i>Coffee break</i>
16:00 – 18:00	Room A201	<b>Synthetic biology tutorial</b> : retrosynthetic circuit design, Pablo Carbonell, ISSB, Genopole, France
19:00	Trento downtown	<i>Social dinner</i>

**Thursday September 11**

8:30 – 9:00	Povo 2	<i>Registration</i>
<b>Session: Synthetic Biology II</b> <b>Chair: Sheref Mansy</b>		
9:00 – 10:00	Room B101 – Povo 2	<b>Introduction to Big data</b> , Marco Combetto, Innovation Manager of Informatica Trentina, Trento, Italy
10:00 – 11:40	Room B101 – Povo 2	<b>Poster talks</b> supervised by S. Mansy
		A. Argentini (VIB, Ghent), “MOPP: A Simple and Robust approach to detect MS1 intensities”  Y. Ciani (LNCIB, Trieste), “Regulatory modules discovery and cell line characterization in the human FANTOM5 promoterome dataset”  F. Lauria (CNR, Trento), “RiboAbacus: an imaging-derived model to predict ribosome density and translational efficiency in human transcriptomes”
11:40 – 12:00		<b><i>Conclusions and final farewell</i></b>
12:00 – 14:00	Canteen	<i>Lunch</i>