

NETTAB 2017

October 16-18, 2017 – Palermo Italy



17°Network Tools and Applications in Biology Workshop

NETTAB 2017

Methods, tools and platforms for the Personalized Medicine in the Big Data Era

Scope and history

- *Network Tools and Applications in Biology*
- *From 2001, annually held in different locations in Italy*
- *Original focus theme each year:*

<i>2001 CORBA and XML</i>	<i>2009 Collaborative / Social Research</i>
<i>2002 Software Agents</i>	<i>2010 Biological Wikis</i>
<i>2003 Microarrays analysis</i>	<i>2011 Clinical Bioinformatics</i>
<i>2004 From Biology to Bioinformatics</i>	<i>2012 Integrated Bio-Search</i>
<i>2005 Bioinformatics Workflows</i>	<i>2013 Semantic, Social, Mobile Tools</i>
<i>2006 GRID Infrastructures</i>	<i>2014 Structural Bioinf. & Integrative Systems Biology</i>
<i>2007 Semantic Web for biomedicine</i>	<i>2015 Bioinformatics for ncRNA</i>
<i>2008 Biomedical Complex Systems</i>	<i>2016 Reproducibility, Standards and SOP</i>

- *International event, supported by scientific societies (incl. ISCB, EMBnet, SIB, NBIC, BITS, ELIXIR, CHARME, GOBLET, ...)*

Methods, tools and platforms for the Personalized Medicine in the Big Data Era

Workshop Chairs

- *Paolo Romano*



IRCCS AOU San Martino IST National Institute for Cancer Research, Genova, Italy

- *Alfonso Maurizio Urso*



CNR-ICAR , Palermo, Italy

- *Alfonso Valencia*

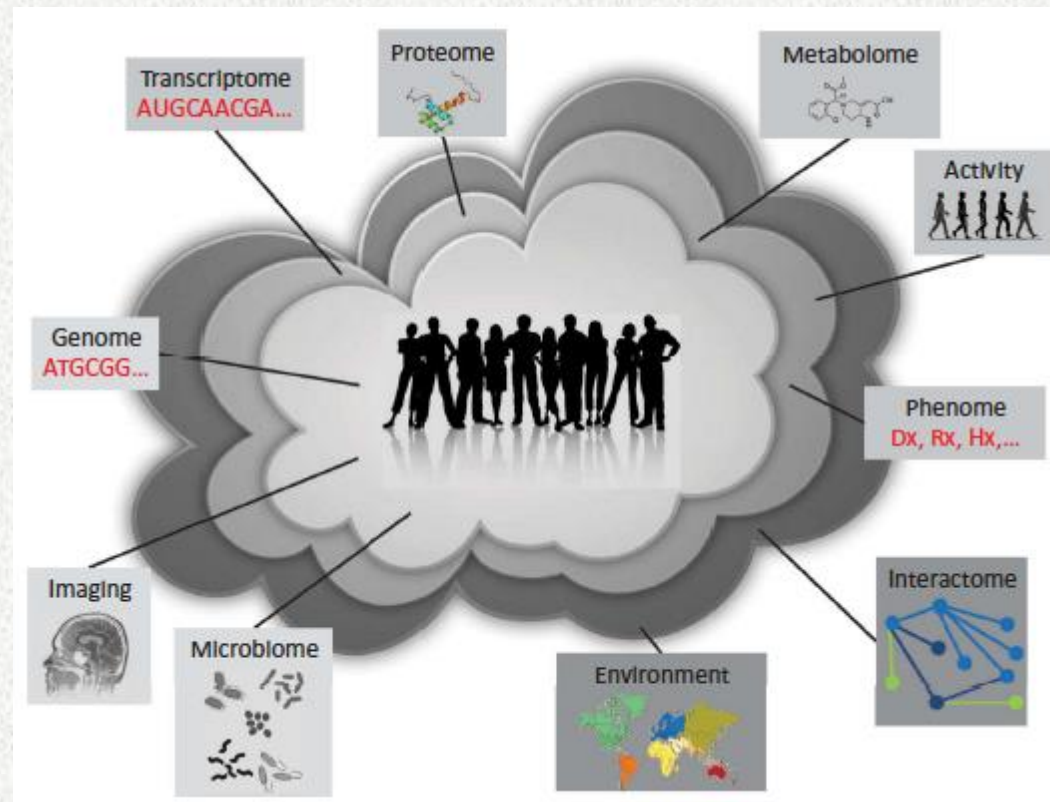


Centro Nacional de Investigaciones Oncologicas, Madrid, Spain

Methods, tools and platforms for the Personalized Medicine in the Big Data Era

Motivations

- Individuals surrounded by a cloud of data
- From bio-specimens, health records, medical imaging ...
- Individualized virtual representation of the patient
- Rational therapy design for each patient



“.... delivering the right treatments, at the right time, every time to the right person”

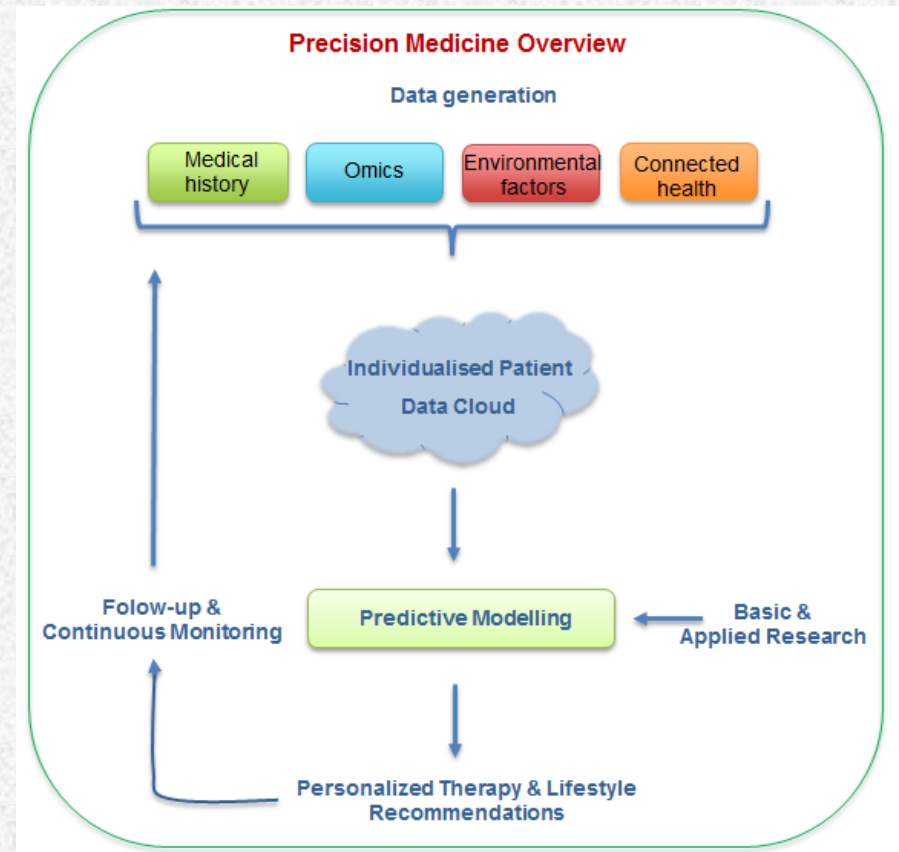
D.D. Duffy, “Problems, challenges and promises: perspectives on precision medicine, *Briefings in Bioinformatics*, 17(3), 2016, 494–504

Bevan E Huang, Widya Mulyasasmita & Gunaretnam Rajagopal (2016) The path from big data to precision medicine, *Expert Review of Precision Medicine and Drug Development*, 1:2, 129-143, DOI: 10.1080/23808993.2016.1157686

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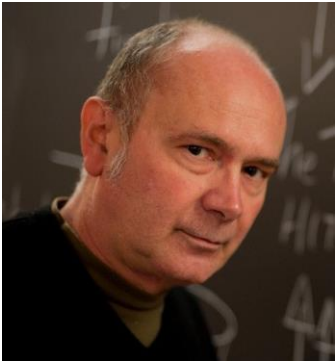
Methods, tools and platforms for the Personalized Medicine in the Big Data Era

Topics

- *Data management*
 - *Biomedical Big Data Management, Standards for Clinical and Genetic Data, Data Privacy and Security, Omics Data Integration, Biobanks*
- *Data analysis*
 - *Omics Data analysis, Genetic Mutation Analysis, Biomarkers Discovery, NGS Data Analysis, Patient Information Analytics*
- *Tools and Services*
 - *Clinical Genomics Services, Models for Clinic and Genetic Data, Mobile tools and applications, Interoperability of Clinical and omic tools, Communication Technologies for Health-Care.*
- *Platforms*
 - *Integrated Data Warehouses, Integration of Applications and Data Services, Clinical Decision Support Systems, Healthcare Systems*

Methods, tools and platforms for the Personalized Medicine in the Big Data Era

Invited speakers (provisional list)



Winston Hide

Professor of Computational Biology, University of Sheffield, UK.

Main activities in personalized medicine:

- *build a functional modelling system that interprets functional pathways for Alzheimer's disease and Amyotrophic lateral sclerosis;*
- *determine how functional pathways can alter their activity within disease progression;*
- *predict both which subjects will respond to a drug treatment and the drugs they will respond to.*



Anita Grigoriadis

Lecturer in Cancer Bioinformatics, King's College, London, UK.

Main activities in personalized medicine:

- *exploring statistical means of capturing the transcriptional profiles of breast and prostate cancer;*
- *application of computational methods to genomic instability of tumour cells and tumour immune environment;*
- *identify biomarkers and drug targets integrating different modalities of omics data.*

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Programme Outline (Provisional Scheduling)

- ***Tutorial***
 - *Monday October 16, 2017*
- ***Opening***
 - *Monday October 16, 2017, 2.30 PM*
- ***Closure***
 - *Wednesday October 18, 2017, 1.00 PM*
- ***Social activities***
 - *Guided Tour, Tuesday October 17, 2017, 5.00 – 8.00 PM*
 - *Social Dinner, Tuesday October 17, 2017, 8.00 – 10.00 PM*

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Key dates (Provisional Scheduling)

- ***November 2016: Invited Speakers***
- ***December 2016: Tutorials and Sponsors***
- ***January 2017: Program Committee***

- ***February 2017: First Announcement***
- ***March 2017: Call for papers***
- ***May 2017: Oral communication submission***
- ***September 2017: Poster submission***

- ***October 16-18 2017: Workshop and Tutorials***

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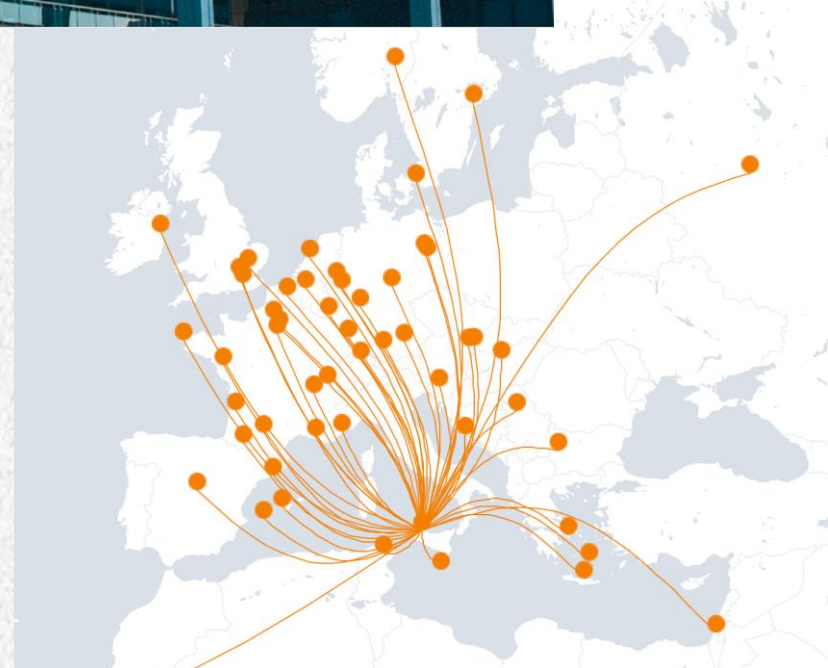
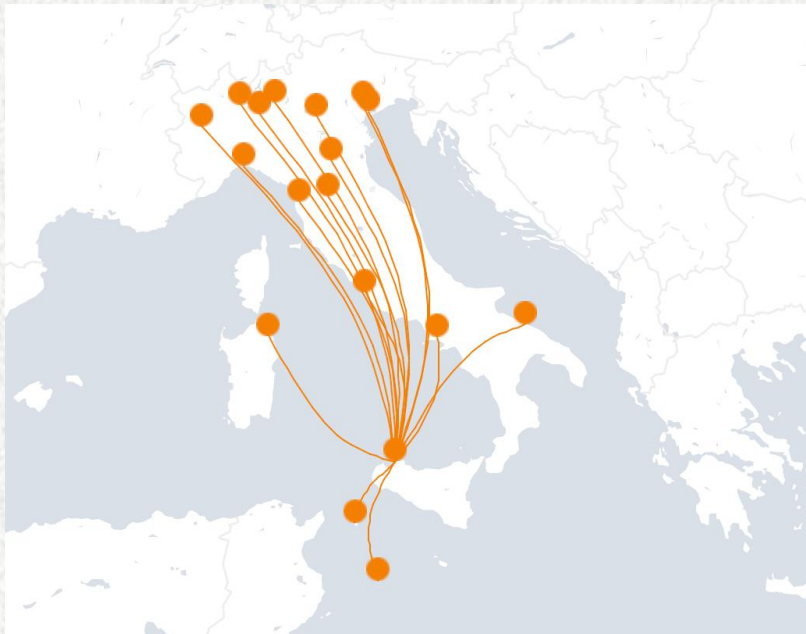
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National Research Council of Italy (CNR)



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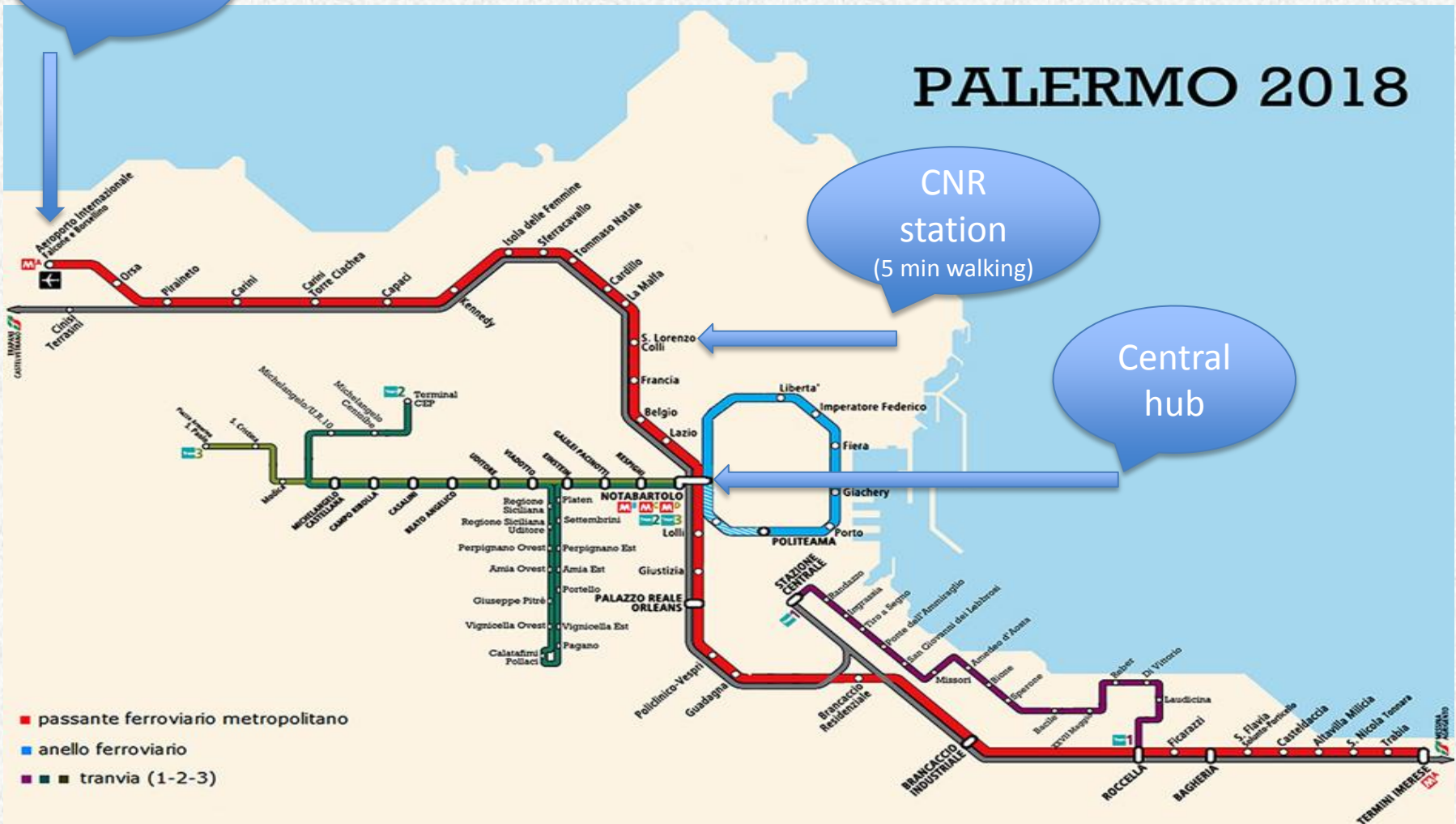
How to reach the workshop venue

Airport

PALERMO 2018

CNR
station
(5 min walking)

Central
hub



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October 16-18: in Palermo is still summer (....not too hot).....

.....best to visit the Arab-Norman itinerary



Some masterpieces of Arab-Norman style in the historic centre of Palermo.

from <http://palermoarabonormanna.com/en>

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October 16-18: in Palermo is still summer (....not too hot).....

.....best to swim in Mondello beach



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We are looking forward to meeting you at

NETTAB 2017

in Palermo

<http://www.nettab.org/2017/>

nettab.workshops@gmail.com

