



# BEYOND OMICS REVOLUTIONS: INTEGRATIVE KNOWLEDGE MANAGEMENT FOR EMPOWERED HEALTHCARE AND RESEARCH

## **Debates\***

July,  $3^{rd}$  and  $4^{th}$ , 2012

CAIXAFORUM BARCELONA

#### **PRESENTATION**

The *omics* research (genomics, proteomics, systems biology, etc.) is generating a huge amount of data that incorporates key information on the biological basis of life and diseases. The management and analysis of this information requires powerful computational tools, which are often labeled as Bioinformatics. As *omics* research, also health care and clinical research generate vast amounts of electronically manageable information; the name normally given to the corresponding scientific discipline being Medical Informatics. Unfortunately, the *omics* information and the Bioinformatics tools are not generated in the health-related applications at the pace that was initially expected, nor the information generated in the health-related settings is used for enriching the basic biomedical research in the way that one may envisage. The reasons for the underdevelopment of synergic translational approaches between Bioinformatics and Medical Informatics are probably diverse. One of the possible reasons for this is the lack of deep debate on the problem by opinion leaders from the diverse related disciplines.

With the aim of fostering such dialogue, B·Debate, an initiative of Biocat and "la Caixa" Foundation, and the Pompeu Fabra University in the framework of the European INBIOMEDvision project, organize a series of debates on the matter on July 3<sup>rd</sup> and 4<sup>th</sup> with the participation of a wide scope of internationally recognized experts. After the debate (July 5<sup>th</sup>) an open symposium with the participation of some of the invited experts will be held in order to present key current initiatives in the field, as well as conclusions arising from the previous debates..

#### Scientific Committee:

Ferran Sanz – Universitat Pompeu Fabra & IMIM, Barcelona, Spain (Chair) Anthony Brookes – University of Leicester, UK (Vice-Chair) Søren Brunak – Technical University of Denmark and University of Copenhagen, Denmark Peter Coveney – University College London, UK Johan van der Lei – Erasmus University Medical Center, The Netherlands

#### More information:

http://www.bdebate.org/debat/beyond-omics-revolutions-integrative-knowledge-healthcare-and-research

\*(attendance by invitation)

 $\mathsf{B}\text{-}\mathsf{DEBATE}\;\mathsf{IS}\;\mathsf{AN}\;\mathsf{INITIATIVE}\;\mathsf{OF};$ 

















# BEYOND OMICS REVOLUTIONS: INTEGRATIVE KNOWLEDGE MANAGEMENT FOR EMPOWERED HEALTHCARE AND RESEARCH

## **Debates\***

Tuesday, July, 3rd 2012

CAIXAFORUM BARCELONA

13:30 Registration

14:30 Welcome and introduction
Ferran Sanz, IMIM – UPF, Spain

SESSION 1: Dealing with biomedical knowledge explosion for better healthcare: Identifying actionable knowledge items at the point of care

14:45 Introductory talk by Anthony Brookes
University of Leicester, UK

**15:05 Statement by Russ B. Altman** Stanford University, USA

15:15 Statement by Joan Albanell
Hospital del Mar – IMIM, Spain

15:25 Statement by Teri Klein Stanford University, USA

15:35 Statement by Angela Brand Institute for Public Health Genomics, Maastrich University, The Netherlands

15:45 Statement by Edward H. Shortliffe Columbia & Arizona State Universities, USA

**15:55** Open Debate (35min)

16:30 Coffee break

\*(attendance by invitation)

 $\mathsf{B} \cdot \mathsf{DEBATE} \; \mathsf{IS} \; \mathsf{AN} \; \mathsf{INITIATIVE} \; \mathsf{OF} ;$ 



INBIOMEDVISION IS LED BY:



SESSION 2: Exploiting patient information to enrich basic biomedical research

17:00 Introductory talk by Johan van der Lei Erasmus University Medical Center, The Netherlands

17:20 Statement by Riccardo Bellazzi
University of Pavia, Italy

17:30 Statement by Alfonso Valencia
National Cancer Research Center, Spain

17:40 Statement by Norbert Graf Saarland University, Germany

17:50 Statement by José Luís Oliveira
University of Aveiro, Portugal

18:00 Statement by Edward H. Shortliffe Columbia & Arizona State Universities, USA

**18:10** Open Debate (35min)

19:30 Transport from the hotel to UPF Rectorate

20:00 Dinner at UPF Rectorate Building

22:00 Transport to the hotel

WITH THE COLLABORATION OF:







### Wednesday, July, 4th, 2012

### CAIXAFORUM BARCELONA

<b>SESSION 3</b>	Standards for clinical-omics	
	integration: the semantic challenge	4

- 9:00 Introductory talk by Barend Mons Leiden University Medical Centre, The Netherlands
- 9:20 Statement by Alfonso Valencia

  National Cancer Research Centre, Spain
- 9:30 Statement by Patrick Ruch
  University of Applied Sciences, Switzerland
- 9:40 Statement by Victor Maojo
  Universidad Politécnica de Madrid, Spain
- 9:50 Statement by Amnon Shabo
  IBM Research, Israel
- 10:00 Statement by Mark Musen Stanford University, USA
- **10:10** Open Debate (35min)
- 10:45 Coffee break

# SESSION 4: New IT paradigms supporting massive biomedical data management

- 11:15 Introductory talk by Amnon Shabo
  IBM Research, Israel
- 11:35 Statement by Núria López-Bigas
  Universitat Pompeu Fabra, Spain
- 11:45 Statement by Riccardo Bellazzi
  University of Pavia, Italy
- **11:55 Statement by Roderic Guigó**Center for Genomic Regulation, Spain
- **12:05 Statement by Anthony Brookes**University of Leicester, UK
- **12:15** Open Debate (45min)
- 13:00 Lunch

# SESSION 5: Systems medicine: Making systems biology translational

- **14:00** Introductory talk by Søren Brunak
  Technical University of Denmark, University of
  Copenhagen, Denmark
- 14:20 Statement by Peter Ghazal
  University of Edinburgh Medical School, UK
- 14:30 Statement by Martin Hofmann-Apitius SCAI Fraunhofer Institute, Germany
- 14:40 Statement by Joaquin Gea Hospital del Mar-IMIM, Spain
- 14:50 Statement by Scott Boyer
  AstraZeneca, Sweden
- **15:00** Open Debate (45min)
- 15:45 Coffee break

# SESSION 6: Integrative knowledge management for improving drug R&D

- 16:15 Introductory talk by Russ Altman Stanford University, USA
- **16:35 Statement by Tim W. Clark**Harvard Medical School, USA
- 16:45 Statement by Anthony Rowe

  Janssen Research & Development, UK
- **16:55 Statement by Martin Hofmann-Apitius** SCAI Fraunhofer Institute, Germany
- 17:05 Statement by Scott Boyer AstraZeneca, Sweden
- 17:15 Open Debate (45min)
- 18:00 Free time or visit to CaixaForum
- 20:00 Dinner (optional)

B-DEBATE IS AN INITIATIVE OF:





INBIOMEDVISION IS LED BY:

WITH THE COLLABORATION OF:

