

**CA COST Action:
COST MEETING GREEKC CA15205**

MALTA: 3 – 4 April 2017

Venue:

Faculty of Information & Communication Technology
University of Malta Main Campus, Msida

Workshop Theme:

‘Setting the stage for the Gene Regulation Knowledge Commons’

The Workshop is designed to provide us with an overview of the current state of the art, the main hurdles that currently block further progress in delivering a Gene Regulation Knowledge Commons, possible solutions to solve these issues, and an overview of existing and potential new project applications that could be used to deliver these solutions.

Each presenter should therefore elaborate on:

- blue sky scenario: what should ideally be in place;
- the largest gaps that stand in the way of achieving the dream.

Presentations should be 20 minutes, leaving time for 10 mins. discussion on gaps and blue sky slides.

Preliminary workshop schedule:

Monday 3 April 2017

Morning Session: Intended to provide an overview of the current availability of ‘knowledge’ relevant for the domain of Gene Regulation models:

08:30 – 8:40 Introduction

08:40 – 10:40 **Survey of what is available**

Draft content:

08:40 *Sandra Orchard:*
Overview of the Gene Regulation Knowledge Commons

09:10 *Julio Collado Vides:*
Overview of RegulonDB

5 lightning talks: 10 minute presentations of current resources for Gene Regulation Knowledge + 2 minute questions

09:40 *Livia Perfetto: SIGNOR*

09:52 *Marcio Acencio: DbTF curation NTNU*

10:04 *Miguel Teixeira: Yeabstract*

10:16 *Benoît Ballester: ReMap*

10:28 *Luana Licata: MINT*

10:40 – 11:00 **Coffee Break**

11:00 – 12:30 **User Stories**

11:00 *Dénes Túrei: Omnipath and modelling*

11:30 *Stein Aerts: iRegulon, i-cisTarget and modeling*

12:00 *Julien Dorier: SwissProt and Logical modelling*

12:30 – 14:00 **Lunch**

Afternoon Session: Formal representations of knowledge:

14:00 – 15:30 **Systems level representations**

14:00 *Stefan Schulz: GRO, pros and cons*

14:30 *Paul Thomas: GO LEGO and NOCTUA*

15:00 *Michel Dumontier: OWL*

15:30 – 16:00 **Coffee Break**

16:00 – 17:30 **Network component level representations**

16:00 *Ruth Lovering: protein centric - GO/GPAD, annotation extensions*

16:30 *Sandra Orchard: Interaction centric: PSI-MI/MITAB, CausalTab*

17:00 *Marcus Chibucos: The development of the Evidence and Conclusion Ontology*

Tuesday 4 April 2017

Morning Session: Nucleotide level annotations and storage; text mining:

8:30 – 10:30 **Nucleotide level annotations**

08:30 *Rachael Huntley: non-coding RNA (miRNA, NCRO)*

09:00 *Colin Logie: DNA centric annotation – what is the ideal world*

09:30 *Suzanne Lewis: Apollo: Current status of genome annotation*

10:00 *Daniel Zerbino: ENSEMBL*

10:30 – 10:50 **Coffee Break**

10:50 – 12:15

10:50 *Cecilia Arighi: Overview of text mining: what works and what doesn't*

11:20 *Fabio Rinaldi: Text mining-facilitated curation pipelines, ontology terms from text?*

11:50 *Martin Krallinger: BeCalm, PITL and OpenMinted initiatives on integration, annotation and gold standards for text mining*

12:05 *Martin Kuiper: Introduction to breakout sessions: discussion topics and targets*

12:15 – 13:45 **Lunch**

13:45 – 15:45 *Breakout Sessions: Integrated Gap and Solution analysis:*

For this we need to prepare some 'productive discussion scenarios', these should be developed further. Some preliminary ideas:

- Challenges and opportunities at the nucleic acid level: annotating (nc)RNAs;
- Challenges and opportunities for DNA centric annotation;
- Knowledge representation: what could we agree on;
- Grading knowledge by evidence type;
- Other?

15:45 – 16:15 **Coffee Break**

16:15 – 17:30 Breakout reports, conclusions and synthesis of the workshop – how will we proceed? What new initiatives can/need to be launched by a concerted effort, and which ongoing efforts can be re-steered in light of the workshop results.

24 February 2017