

# The Bioinformatics Workshop

**Venue:** computer study hall (03 on 4NP) National Technical Library

(<http://www.techlib.cz/cs/>)

**Date:** 2-4 June 2014

## **Organisers:**

Laura Emery

### **The EMBL-European Bioinformatics Institute**

Wellcome Trust Genome Campus

Hinxton, Cambridge

CB10 1SD, United Kingdom

Jiri Vondrasek

### **Institute of Organic Chemistry and Biochemistry, AS CR**

Flemingovo nam. 2, Prague 6, CZ

Admin support: Frank O'Donnell

Registration opens: 7.5.2014

Registration deadline: 20.5.2014

Acceptance notification date:

## Course overview

**This course will provide an introductory overview of some of the most commonly used publicly accessible, tools and resources for genome browsing, functional genomics and phylogenetics. A separate registration will be available for those delegates interested in using proteomics in their research. Delegates will gain hands-on practice of using these data resources, interspersed with some lectures.**

## Audience

The course is aimed at bench-based researchers in the fields of medicinal chemistry, biochemistry, structural biology and chemical synthesis. The practical exercises use web-browser-based tools and assume little prior experience in bioinformatics.

## Modules and Resources

During this course you will learn about:

- Genome browsing: Ensembl
- Functional genomics: Array Express, Gene Expression Atlas
- Phylogenetics: EBI phylogeny tools
- Proteomics services: UniProt, IntAct, Reactome

## Learning Objectives

After this course you should be able to:

- Access, browse and retrieve a range of data types from leading public repositories for genomic, transcriptomic and proteomic data
- Query leading bioinformatics databases efficiently
- Use some freely available software to analyse nucleotide sequence data and interpret phylogenetic analyses

Time	Subject	Trainer
<b>Day 1</b>		
<b>09:00</b>	An introduction to the EBI	Ensembl team
<b>09:30</b>	Exploring genomes with Ensembl	Ensembl team
<b>11:00</b>	Break	
<b>11:30</b>	Exploring genomes with Ensembl	Ensembl team
<b>13:00</b>	Lunch	
<b>14:00</b>	Exploring functional genomics data with Array Express	Karyn Megy
<b>15:30</b>	Break	
<b>16:00</b>	Exploring functional genomics data with the Gene Expression Atlas	Karyn Megy
<b>17:30</b>	Close	
<b>Day 2</b>		
<b>09:00</b>	An introduction to phylogenetics	Laura Emery
<b>10:30</b>	Break	
<b>11:00</b>	Interpreting phylogenies	Laura Emery
<b>12:30</b>	Lunch	
<b>13:30</b>	Phylogenetic methods	Laura Emery
<b>15:00</b>	Break	
<b>15:30</b>	Phylogenetic methods	Laura Emery

<b>17:00</b>	Close	
<b>Day 3</b>		
<b>09:00</b>	An introduction to proteomic services	Sandra Orchard
<b>10:30</b>	Break	
<b>11:00</b>	UniProt	Sandra Orchard
<b>12:30</b>	Lunch	
<b>13:30</b>	IntAct	Sandra Orchard
<b>15:00</b>	Break	
<b>15:30</b>	Reactome	Sandra Orchard
<b>17:00</b>	Close	

## Registration and payment

**Please note that there is no registration fee**

To register for this event please use the following link.

<http://www.ebi.ac.uk/training/Prague2014>

Items marked \* are mandatory. Incomplete registrations will not be processed.