



COURS INTERNATIONAL

1ST COURSE ON COMPUTATIONAL SYSTEMS BIOLOGY OF CANCER - 2018

Theme of course:

The objective of the course is to promote integration of computational approaches into biological and clinical labs. We aim to help participants to improve interpretation and use of omics and imaging data that nowadays are accumulated in any biological or medical lab.

The course will contain the following sessions:

- Session 1: Pathway databases and networks resources in cancer
- Session 2: Visualisation and interpretation of cancer data
- Session 3: Cancer genomics
- Session 4: Multi-level omics data analysis and tumour heterogeneity
- Session 5: Mathematical modelling of signalling networks in cancer
- Session 6: integration of multi-level data into models of cancer signalling
- Session 7: Treatment response prediction and patient stratification
- Session 8: Single cell data analysis in cancer
- Session 9: Bioimage informatics for cancer research
- Session 10: Cancer evolution studies

Description of course:



Systems biology approaches help to analyse molecular mechanisms in silico. Despite availability of cancer high-throughput (omics) and imaging data, they are not fully exploited to provide the clue on deregulated mechanisms that would guide to better patient's stratification and to specific treatment in cancer and beyond.

We invited leading international speakers from different fields in cancer systems biology that will expose an umbrella of systems biology methods from data analysis to modelling and integration of rationalized treatment schemes into the clinical trials.

>>Click [here](#) to register for this course.<<

 [sysbiocancer2018_program.pdf](#)

Audience:

The course can accommodate 60-80 Master 2, PhD students and post-docs from:

- French universities/teams
- European universities/teams
- International universities/teams

The course will be validated by 3 ECTS for Master 2 and PhD students by UPMC (10-15 places) and IBENS-ENS (10 places) and Rouen Normandie University (10-12 places).

Evaluation of students (by scientific committee)

- Master 2 students will be evaluated according to their presentation on the Journal club + general activity during scientific discussions
- PhD students will be evaluated according to the flash presentations + posters + general activity during scientific discussions

Post-doc applicants are requested to present a flash presentation and a poster on their scientific research. Most significant abstract will be chosen for 15 minutes talks.

All participants of the course will take part in the Career development workshop during the Saturday morning session.

In addition, we expect free attendees among researchers and physicians interested to learn about systems biology impact into cancer research and treatment.

No previous experience in programming and modelling methods or deep knowledge in systems biology is required. The talks will be constructed in a didactic manner, introducing the audience to the basics on systems biology approaches and applications for cancer research.

Conditions of selection:

Selections for participation in the course are based on applications.

Application for the course

- CV (max. 1 page)
- Description of scientific topic in a form of abstract (max. 1 page)
- Motivation letter explaining objectives to attend the course (max. 1 page)
- Recommendation letter from 1-2 reference persons

Note: if the reference persons wish to communicate directly to the scientific committee of the course, they can send their recommendation letters to c.sysbiocancer2018@curie.fr before the registration deadline

Application deadline:

25 July 2018

Location:

Institut Curie, BDD building, Amphitheatre BDD
11 Rue Pierre et Marie Curie, 75248 Paris cedex 05
Paris - France

Results of selection:

August 5, 2018

Registration fees:

No registration fees are requested

Lunches, coffee breaks, reception and farewell buffet will be provided for free during the course.
Accommodation and travel expenses are not provided by the course.

Organizers:

Organizers

Emmanuel BARILLOT Institut Curie - INSERM U900, Paris, France

Gregory BATT Inria - Saclay - Institut Pasteur, Paris, France

Inna KUPERSTEIN Institut Curie - INSERM U900, Paris, France

Vassili SOUMELIS Institut Curie - INSERM U932, Paris, France

Denis THIEFFRY Institut de Biologie de l'École Normale Supérieure, Paris, France

Jean-Philippe VERT Centre of Computational Biology, MINES - ParisTech, Paris, France

Thomas? WALTER Centre of Computational Biology, MINES - ParisTech, Paris, France

Scientific committee

Laurence CALZONE Institut Curie – INSERM U900, Paris, France

Tatiana POPOVA Institut Curie – INSERM U830, Paris, France

Andrei ZINOVYEV Institut Curie – INSERM U900, Paris, France

Contact:

c.sysbiocancer2018@curie.fr

Workshops:

Career development workshop (half a day on Saturday)

Introduction to career development opportunities in computational systems biology of cancer. Presentation of career paths and assistance of students by (round tables):

-Invited speakers

-Pharma representatives

-Scientific editing bodies

Partners:

UPMC, Institut Pasteur, IBENS-ENS, MINES-ParisTech

Sponsors:

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