Teaching for international courses
Visiting Professors
Academic year 2018/2019

1st term

COURSE TITLE
Complex Systems

Scientific area
Biology

Department of Life Sciences and Systems Biology

Language used to teach
English

Teaching Commitment: 16 hours

Course summary
Systems Biology is one of the most important emerging issues in modern Molecular Biology. The main goal of this course will be to summarize the most recent results in this context. In particular the course will deal with two main advanced topics:
- A Network theory approach to gene regulation
- A brief description of the most popular inference tools in this context
These issues will be discussed during the course with a set of topical examples

Learning objectives
- Provide an overview of the most recent results in the context of Systems Biology
- Discuss the role of Network theory in describing the gene regulatory network
- Introduce a few of the most recent computational tools for data analysis and inference

Tutorship activities
During the period of the course, the Visiting Professor shall be available to meet students, doctoral candidates, and young researchers pursuing study or research in Systems Biology and data analysis, to provide advice and mentoring.

Other activities besides the course: i.e. seminars and conferences addressed to PhD students and research fellows, dissemination conferences
Research seminars for PhD students of the PhD Program “Complex Systems for Life Sciences” of the University of Torino.

Visiting Professor Profile
We are looking for senior scientists with significant postdoctoral experience, a strong interdisciplinary background, and experience in
- Biology
- Physics
- Computer Science
Contact person at the Department
Prof. Michele Caselle
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