Genomic Analysis of Cancers

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Effectives: 20
Language: English
Prerequisites: none

Where?
Paris Rive-Gauche site

When?
October 3-7

Evalutation:
Three short questionnaires
One short note about the
experimental practice part

Questions:
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Number ECTS: 3

**Total numbers of
hours: 35h**

Teaching format:
Flipped-classroom,
experimental practice on
computers

Teaching objectives
Several consortia recently described thousands of tumours at a genomic level, opening the way to the development of precision medicine. The data they provided allow biologists to answer questions on cancers through bioinformatics analyses. The aim of this course is to provide students fundamental concepts and tools to tackle the analysis of genomic data.

Teaching outline
Basic concepts on cancers are taught through a flipped-classroom approach. During four days students learn Bash and PERL programming to manage genomic data (no prerequisite in programming before this course!). The last day is focused on the statistical analysis of tumours (survival analyses, dimensionality reduction)