E02 - Functional genomic data analysis: transcriptomics 2023 session

Required background

Computer knowledge: bases in computer programming, practice of Linux command lines and knowledge of R language.

Biology knowledge: you need to know how DNA microarrays and hight throughput sequencing work.

Program

	Morning	Afternoon
Monday	9h30 – 10h Introduction	14h – 17h Discussions
9/4	10h – 13h Reading of the lectures	
Tuesday	9h30 – 12h30 Practical: microarray and	13h30 – 16h30 Practical: microarray and
9/5	RNA-seq pre-processing	RNA-seq pre-processing
Wednesday	9h30 – 12h30 Practical: differential and	13h30 – 16h30 Practical: differential and
9/6	functional analysis	functional analysis
Thursday	Personal work (321 & 306)	Personal work (321 & 306)
9/7		
Friday	9h30 – 12h30 Student presentations	13h30 – 15h30 Open analysis
9/8		16h – 17h30 Exam
	Classroom (316)	Computer room (313 & 321)

Teaching team

Stéphane Le Crom (Sorbonne Université, Paris) Lucie Gaspard-Boulinc (École normale supérieure, Paris)

Organization

Credits: 3 ECTS

All classes are held at the 3rd floor of the Department of Biology of ENS, 46 rue d'Ulm, 75005 Paris.

Students will be evaluated based on a written exam at the end of the week.