# **CODEJAM**

## 1st Workshop on Computational Biology

Sorbonne University, Faculty of Sciences and Engineering Master of Integrative Biology and Physiology

National and Kapodistrian University of Athens, School of Science Departments of Biology, Mathematics & Computer Science MSc of "Bioinformatics-Computational Biology"



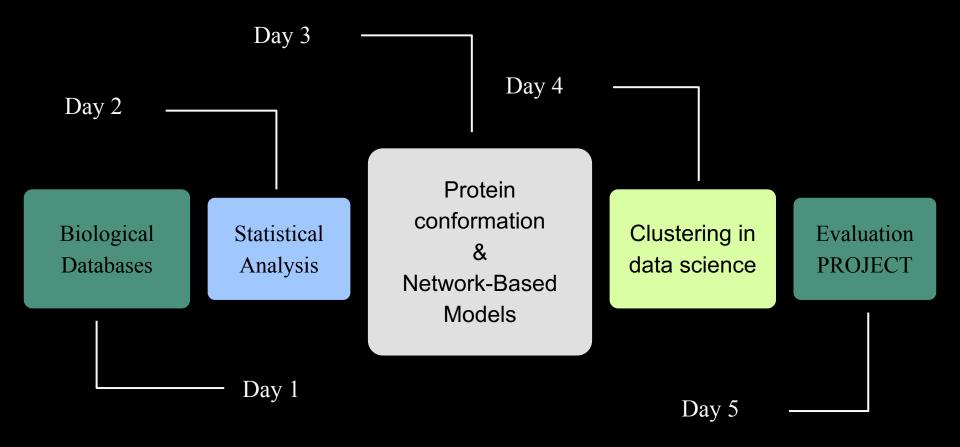
**Paris France** 



**Athens Greece** 

With the Participation of Harvard





### Program

#### Keynote speaker

Dr Kalotina MACHINI Harvard Medical School/Mass General Brigham **Personalized Medicine** 

#### Day 1 Biological databases

Dr. Nikolaos PAPANDREOU, Dr. Zoi LITOU, Dr. Ourania KONSTANTI & Assoc. Prof. Vassiliki ICONOMIDOU (Dept. of Biology, NKUA, GR)

9-12am Introduction to Biological databases and ontologies
2-5 pm Lab applications of biological databases and ontologies

#### Day 2 Statistical analyses

Assist. Prof. Fotios SIANNIS, PhD Cand. Stylianos TZORTZAKIS (Dept. of Mathematics, NKUA, GR)

9-12am Main approaches on linear model 2-5 pm Lab applications

## Day 3 Protein Conformation Clustering & Network-Based Models

**Dr. Ioannis CHAMODRAKAS & Prof. Ioannis EMIRIS** (Dept. of Computer science, NKUA, GR)

9-11am Protein conformation clustering

**Dr. John VAXEVANAKIS & Prof. Vassilis ZISSIMOPOULOS** (Dept. of Computer science, NKUA, GR)

11-1am Biological Network-Based Models for Disease Pathway Detection

3-4 pm Lab Network x Python Library

#### Day 4 Clustering

Pr. Hedi SOULA (Sorbonne University FR)

9-12 am Clustering in biological data2-5 pm Lab Clustering

#### Day 5 Evaluation

9am - 5pm Project sessions and grading