







Workshop "Basic Notions in Biostatistics"

Imparted by Dr. Miguel Peláez (Data Scientist at Tecnatom)

Wednesday, 14th March 2018 Main Lecture Hall (CIB)

9:30-10:30h: Introduction

What is biostatistics?

Why and when to use statistics in biology or chemistry or science in general? Statistics descriptors

We will define Biostatistics in the context of Statistics and bring fundamental logic about the role of statistics in the scientific knowledge. We will get used to the mathematical notation that will be useful when talking about the statistics descriptors (functions that help us statistically describe a population).

10:30-11:30h: Distributions

Uniform distribution Gaussian distribution Bimodal distribution

We will study function distribution, which represents one of the main building blocks in probabilistic modeling of a population. We will discuss in more detail some of the most common distributions.

11:30-12:00h: Break

12:00-13:00h: Statistical Test to Confirm Hypothesis

Chi square test Fisher test T-student Test

Statistical testing interpretation represents one of the most challenging parts of statistics, where many people struggles with the interpretation of results as well as justifying the use of a test in the right conditions.

13:00-14:00h: Experimental Design

Sampling Techniques

Further considerations and workshop wrap-up

We will be focusing on how to design an experiment from a statistical standpoint, paying attention to other strategies to incorporate in the scientific reasoning before running an experiment or after obtaining results.

Free admission until complete seats. Registration required by email to mcfa@cib.csic.es

Centro de Investigaciones Biológicas Ramiro de Maeztu, 9, 28040 Madrid Metro: Metropolitano, line 6 Autobus: 132, F

Nuria Campillo (nuria.campillo at csic.es) Mª Cristina Vega (cvega at cib.csic.es) María del Carmen Fernández Alonso (mcfa at cib.csic.es)

Contact: