



## BIostatistics - INTRODUCTION TO BAYESIAN ANALYSIS (INBAY)

DATES : FROM MAY 22 AM TO MAY 23 PM (12 HOURS)

### OBJECTIVES

- Understand the fundamentals of Bayesian methods
- Learn about the practical tools to perform Bayesian analysis

### COURSE FEES

Individual : 300 Euros  
Institution : 600 Euros

### INSTRUCTORS

Boris HEJBLUM (DIRECTOR OF STUDIES)  
Mélanie PRAGUE

### LOCATION

University of Bordeaux

### MODULE PROGRAM

- The course will cover the basic ideas underlying the Bayesian framework and provide practical tools to perform Bayesian analysis, an alternative to traditional statistical frequentist methods. The course will cover Bayesian modeling including prior specification, as well as posterior estimation and decision theory. We will also cover modern numerical solutions implemented to perform Bayesian analysis using the BUGS language and JAGS software. This course will particularly focus in the specific contexts of epidemiology, clinical trial analysis and pharmacology.
- The course will use a combination of lectures, discussions, software demonstrations and practice. Slides will be used to present material in lecture form and printed notes will be available for the students. A variety of examples from epidemiology, pharmacology and clinical sciences will be covered to illustrate the techniques and approaches.

### REQUIREMENTS

Anyone who wants to learn about Bayesian analysis and is familiar with statistical inference