

BIostatISTICS - JOINT MODELS FOR TIME-TO-EVENTS AND LONGITUDINAL MARKERS (JOINTMOD)

DATES : FROM JUNE 26 AM TO JUNE 28 PM (18 HOURS)

OBJECTIVES

- Identify situations in which joint models are useful
- Understand the principles of these models and the different approaches (shared random effect joint models, joint latent class models and frailty models)
- Distinguish pros and cons of each approach.
- Know how to estimate these models with R packages (JM, lcmm, FrailtyPack)
- Know how to interpret the results of the different types of joint models

COURSE FEES

Individual : 450 Euros
Institution : 900 Euros

INSTRUCTORS

Hélène JACQMIN-GADDA (**DIRECTOR OF STUDIES**)
Cécile PROUST-LIMA
Virginie RONDEAU

LOCATION

University of Bordeaux

MODULE PROGRAM

- Introduction to joint modeling of a quantitative longitudinal marker and a censored survival time
- Shared random effect models - Practice with the R-package JM
- Joint latent class models - Practice with the R-package LCMM
- Introduction to joint frailty model for repeated events and terminal events
- Joint frailty model - Practice with the R-package Frailtypack

REQUIREMENTS

Knowledge and practice of mixed models and standard time-to-event analyses
Basic knowledge of the R software

SUGGESTED READING LIST

Commenges D, Jacqmin-Gadda H. Modèles biostatistiques pour l'épidémiologie.

Louvain-la-Neuve: DE BOECK UNIVERSITE; 2015. 600 p.