## Course offered for the STAT PhD program

TITLE	Mitochondria: more than just a powerhouse. Tools to study mitochondrial morphology and function
Lecturer	Francesca Baldini, Laura Vergani
Duration and Credits	2 CFU (8 hrs)
Course description	Mitochondria are commonly known as the powerhouses of the cell and they play an important role in cell physiology by hosting one of the most important processes: the cellular respiration. Recent emerging evidence suggest a wider spectrum of mitochondrial functions, beyond the primary role of ATP generators. During the course, I will discuss the different techniques and approaches to study mitochondrial morphology and function: from fluorescent labeling (Mitotracker, TMRE), electron microscopy and real-time PCR to high-resolution respirometer (Oroboros O2K-FluoRespirometer, Seahorse XF Analyzer).
Course organization	Frontal lessons
Teaching period	To be decided