FUNDAMENTALS OF ENZYME KINETICS

CFU: 2 (10 hours of theoretical and practical lectures)

Teachers: Prof. Francesco Malatesta & Dr. Serena Rinaldo

Location: lectures will be held in "Aula A" of the Department of Biochemical Sciences “A. Rossi Fanelli”, Sapienza University of Rome (see map, building n. CU010, ground floor)

Calendar:
Tuesday November 21, 4-6 pm
Thursday November 23, 4-6 pm
Tuesday November 28, 4-6 pm
Thursday November 30, 4-6 pm
Tuesday December 5, 4-6 pm

Application guidelines:
The course is addressed to 1st & 2nd year students of the BeMM PhD School and is open to anybody who is interested. Applications should be sent by e-mail to francesco.malatesta@uniroma1.it, not later than November 19th 2017. Please, indicate “Enzyme Kinetics Course” as the e-mail object, and your Surname and Name, as well as the title of your Ph.D. course, in the text body.

Aim of the Course:
The goal of this short Course is to introduce cell biology, biotechnology, molecular biology and biochemistry Students to the kinetics of enzyme-catalyzed reactions, and to cover in detail the assumptions, derivation, and meaning of the Michaelis–Menten equation within a biological context. Special emphasis will also be given on the practical aspects of enzymology and its biological relevance as detailed by specific examples.

Detailed program:
Basic principles of chemical kinetics  Introduction to enzyme kinetics  Practical aspects of enzyme kinetics  Derivation of steady-state rate equations  Reversible inhibition  Multisubstrate enzymes  Frontiers in steady-state enzyme kinetics  From theory to practice: the cases of phosphodiesterases and cyclases controlling biofilm formation