Course Training in research for Agriculture, Food & Environmental Sciences

Subject Course: Introduction to Plant Biotechnology

Description (200 words aprox)

The aim of this course is to let the student achieve a basic knowledge about general techniques used in plant biotechnology. It includes concepts of molecular biology such as replication, transcription and translation, the principles of genetic engineering, cloning, vectors, polymerase chain reaction, transformation of microbes and plants, heterologous expression of proteins in E. coli and molecular markers, among others.

This course is designed regarding a small number of students (max. 3). These students are integrated in different research groups belonging to the "Laboratory of Ecological Biochemistry". Each student has a supervisor who led the training work. Along the semester students give oral presentations about the main topics of molecular biology and biotechnology. These oral presentations take around two hours per week. The rest of the time, around 10 hours, they work together with students of the research group to put into practice the learned theory. Also, scientific literature is discussed in groups. In some of these meetings students prepare a small talk about a relevant research published in the international literature.

At the end of the semester, the students report their experimental results and their interpretation as final work of this course.

The final qualification is a result of a combination of the performance in the laboratory work, the participation in the discussion meetings and the final report.

Director

Dr. Eduardo A. Pagano

Staff: Carolina Di Santo, PhD
Natalia Ilina, PhD
Patricia Codó, MSc