

Course overview

The objective of the course is to cover a range of basic methods commonly used in Molecular Biology and its application to the detection and control of pathogenic bacteria, including those resistant to antibiotics. The course is suitable for pre and post-graduate students in Life Sciences, Biomedical Sciences and other allied subjects.

The course, which is part of the PhD academic program of the Department of Immunology, Microbiology and Parasitology of the University of the Basque Country, has been designed with visual material that will help the students with the development of the techniques in the laboratory. In order to cover a broad spectrum of potential students we have included general information in two levels of knowledge, basic and advanced, and scientific papers where some of our investigations have been published.

The selection of methods included reflects the techniques which members of our research group considered essential for the basic practice of molecular biology, along with a variety of important information which we have found useful. We have tried to include practical tips that can be found by carefully reading of the protocols and comments of each section.

The course aims to:

- Provide a course of study in the theoretical and practical aspects of the Molecular Biology and its application to the analysis of pathogenic bacteria.
- Familiarise the students with a research environment, thereby developing the skills necessary to undertake research.
- Train to carry out critical evaluation of published scientific papers so that the students can develop the ability to report and interpret results.