

Series of Workshops on Laboratory Techniques: Enzyme-Linked Immunosorbent Assay, Polymerase Chain Reaction and Flow Cytometry

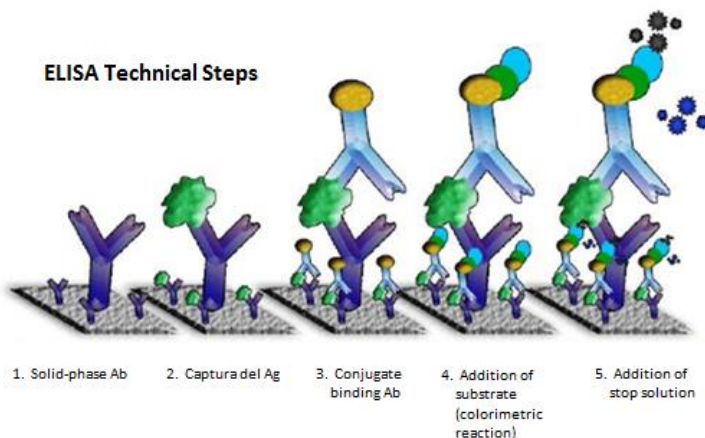
Introduction

The Rheumatology Department of the *Hospital General Universitario Gregorio Marañón* is well-recognised in the research and treatment of autoimmune and auto-inflammatory diseases. The team behind this workshop has extensive experience in basic and clinical research as well as in personalized medicine using advanced cellular, humoral and molecular techniques.

Understanding therapeutic mechanisms and identifying biomarkers is a vast field subject to constant change. Knowing how these techniques work and developing proficiency in their application will be invaluable to the physician in terms of understanding disease progression and treatment efficacy.

The aim of the workshop is to develop a thorough understanding of what the technologies are, how they work and how they are applied in clinical practice. These techniques represent an important step forwards to individualised biological therapies and translational medicine approaches.

- Enzyme-Linked Immunosorbent Assay (ELISA) is a laboratory technique which can be used to quantify immunoglobulins, determine antibodies and autoantibodies or measure drug content.



- Genomics has been used in sequencing the human genome, in cloning, identifying both genes and polymorphisms associated with pathologic processes. The polymerase chain reaction (PCR) is a molecular biology technique that uses a small DNA sample and imitates natural replication allowing specific genetic sequences to be detected. Genomics is widely used in diagnostics and prognostics.
- Flow cytometry is a biophysical technology which enables superficial and intracellular markers, signaling, proliferation and apoptosis to be observed.

Content

There are three workshops in the series: ELISA, PCR and flow cytometry. Each one will cover:

- The theory and applications
- Critical analysis of a scientific article
- Hands-on lab practice
- Analysis of results and discussion

The innovative workshop series includes both theory and practical exercises so as to equip you with the knowledge and skills needed to use the technologies.

State of Development

The training is fully prepared and packaged and can be done at the *Hospital General Universitario Gregorio Marañón*, Madrid, or at a venue of your choosing. All didactic materials are available to be licensed on demand.

Advantages

The workshops place great emphasis on practical application of the tools enabling you to lock in knowledge acquired during the theoretical sessions.

Application

The workshop is targeted at medical professionals.

IPR Position

Copyright application number M-005461/2014.

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Opportunity

The workshop can be carried out in the *Hospital General Universitario Gregorio Marañón*, Madrid, or at an alternative location of your choice. All didactic materials are available to be licensed on demand.