

Universidad Euskal Herriko del País Vasco Unibertsitatea



15-12-2010



ADM.FR.01.PR.13.01

## Ref. 13.202 SGIker TRAINING COURSES OFFERED

SERVICE: Genomics Service: DNA Bank.

COURSE TITLE: DNA Sequencing.

**PARTICIPANT PROFILE:** Researchers and professionals in the areas of Biosciences, Pharmacy, Medicine, Nutrition and similar.

**DATES:** December 9<sup>th</sup> to 13<sup>th</sup>, 2013

DURATION (in hours): 20

**COURSE VENUE:** The "Lucio Lascaray" Centre of Research and Advanced Studies, UPV/EHU, Alava Campus, Vitoria.

**SPEAKERS, TRAINERS AND PROFILE:** Dr. Marian Martínez de Pancorbo (Scientific Consultant of the Service), Dr. Maite Álvarez (Service Technician).

MINIMUM No. of PARTICIPANTS: 10

MAXIMUM No. of PARTICIPANTS: 20

COURSE FEE: UPV/EHU members: €150; PRBs: €250; non-members: €400

## **PERSON TO CONTACT:**

Dr. Maite Álvarez, General Genomics Research Service: DNA Bank, The "Lucio Lascaray" Centre of Research and Advanced Studies, UPV/EHU. Avda. Miguel de Unamuno 3, 01006 Vitoria-Gasteiz Tel. 945014492, 945014527 Fax. 945014458 Email: <u>bancoadn@ehu.es</u>; maite.alvarez@ehu.es

**LEGAL REFERENCE:** The course is not subject to legal regulation.

## A certificate of attendance will be provided for courses of 20 hours' duration or over. Those attending courses will receive this certificate provided that they have completed at least 80% of the total duration of the course.

OBJECTIVES TO BE FULFILLED DURING THE COURSE	
1.	To establish the basic principles of automated DNA sequencing and interpretation of sequences.
2.	To develop methodology for automated DNA sequencing, including purification, pre- sequencing DNA, BDT sequencing reaction, post-sequencing reaction purification and analysis in automated ABI3130 DNA sequencer.
3.	To introduce participants to bioinformatic analysis of the results obtained by DNA sequencing.



Vicerrectorado de Investigación

Ikerketa Errektoreordetza



Universidad Euskal Herriko del País Vasco Unibertsitatea

Unidad de Calidad e Innovación-Berrikuntza eta Kalitate Unitatea

CONTENT THAT IS GOING TO BE WORKED ON DURING THE COURSE:

The main aspects to be developed throughout the course are listed below:

- Principles of DNA sequencing.
- PCR purification of the amplified product.
- Checking the purification process in agarose gel.
- Preparation of BDT sequencing PCR.
- Description of a basic kit for automated sequencing: ABI3130 Genetic Analyzer.
- Cleaning the BDT sequencing reaction.
- Process of loading samples into the sequencer.
- Retrieval of .abi files from the sequencer.
- Interpretation of electropherograms: causes of error in a sequence.
- Basic concepts of the bioinformatic analysis of DNA sequences.
- Bioinformatic analysis of DNA sequences.

## **OTHER ADDITIONAL INFORMATION:**

Participants must don a lab coat throughout the course.

Theoretical and practical course.

Compulsory course attendance for all those enrolled.