DOCTORAL TRAINING ACTIVITY, UPV/EHU

Molecular approaches for biodiversity detection

14-15 December 2017
Faculty of Science and Technology

Leaf mycoflora

Soil microbiota

Stream ichtyofauna

Animal diet

ORGANISED BY:
Doctoral Programme in Biodiversity and Ecosystem Functioning and Management

Intensive workshop (13h)

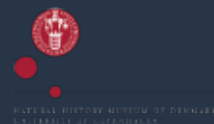Thursday 14th 9:00-18:00, Friday 15th 9:00-17:00

CONTENTS

· **Introduction to biodiversity detection in environmental DNA (eDNA)**

· **Methodological approaches and experimental designs**
Field sampling, sample storage, DNA extraction, library build, High Throughput Sequencing and bioinformatic pre-processing

· **DNA metabarcoding**
Primer choice, PCR replicates, sequencing depth, copy number thresholds, OTU clustering

· **Shotgun metagenomics**
Read assembly, gene prediction, functional annotation

· **Taxonomy and function assignment**
Reference databases, mapping and aligning methods

· **Visualisation and statistical analyses**
Result visualisation, diversity quantification and comparison

*Lectures will be in English

LECTURERS

Ostaizka Aizpurua
Antton Alberdi
Centre for GeoGenetics
Natural History Museum of Denmark
University of Copenhagen

- Registration open until **November 3rd**
- Students enrolled in the Doctoral Programme in Biodiversity will have priority. Depending on availability, other Doctoral Students might be accepted.

Registration:
goo.gl/xcYqB5

Further information:
inazio.garin@ehu.eus

Universidad del País Vasco
Euskal Herriko Unibertsitatea

MDe
Master eta Doktorego Eskola
Escuela de Máster y Doctorado
Master and Doctoral School