

Modern Methods in Plant Systematics-practical activity C2

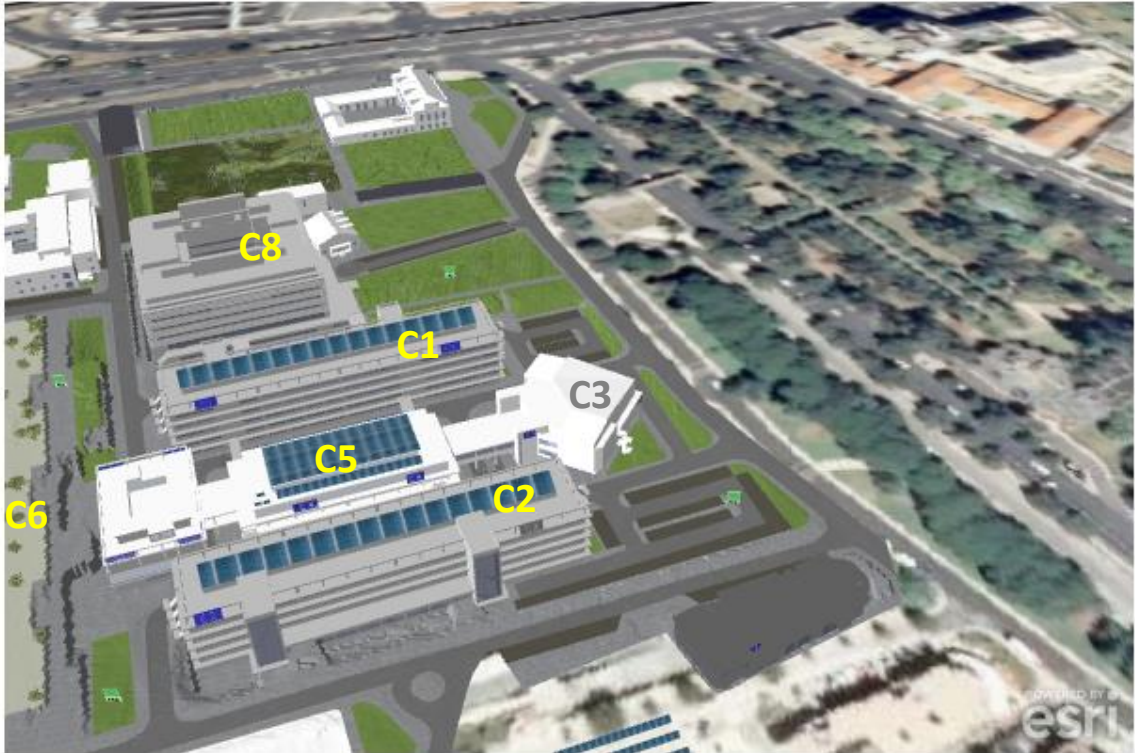
Lisbon, October 30th-November 3rd 2017

Lecturer(s) or Responsible(s): Helena Cotrim and Filipa Monteiro

Location: building C2, Faculdade de Ciências da Universidade de Lisboa, Campo Grande 1749-016 Lisboa

SCHEDULE		ACTIVITY	ROOM *
Monday 30 Oct	9.-10.00	Reception of participants	2.2.22
	10.00-12.30	A1 -Plant DNA extraction and quantification. #Groups activity digest: dry out the required volume of DNA solution in the vacuum oven at 60 °C for all afternoon.	lab 2.4.37
	14.00-17.00	B1 - Amplification of target sequences (Polymerase Chain Reaction) for Sanger sequencing. #Groups activity digest : check if samples are dried if precipitated let them dissolve ON).	lab 2.4.37
Tuesday 31 Oct	9.00-12.30	C1 -Amplified Fragment Length Polymorphisms (AFLPs): preparation and setup of Restriction -Ligation reactions B2 -Validate PCR results from B1; clean and quantify PCR products to sequence.	lab 2.4.37
	14.00-17.00	C2 - Amplified Fragment Length Polymorphisms (AFLPs): verify Restriction-Ligation reaction and STOP the restriction reaction. C3 - AFLPs, set up Pre-Selective Amplification. Groups activity digest	lab 2.4.37
Wednesday 1 Nov	9.00-12.30	C4 - AFLPs, set up Selective Amplification.	lab 2.4.37
	14.00-17.00	D2 - AFLP and microsatellite analysis workflow. Groups activity digest D1 - Primer design for phylogeny and diversity studies. B3 -Sequence databases and sequence analysis workflow; sequence analysis	2.4.16 PC room 2.3.16
Thursday 2 Nov	9.30-12.30	E1 -DNA barcode: databases and applications, BOLD.	2.4.16
	14.00-17.00	F1 -Next Generation Sequencing (NGS), overview of techniques and applications: analysis of case studies	PC room 2.3.16 /2.4.16
Friday 3 Nov	9.00-12.30	F2 -Next Generation Sequencing (NGS) techniques: group presentations and discussion	
	14.00-16.00-17.00	F2 -Next Generation Sequencing (NGS) techniques: group presentations and discussion. CONCLUSIONS	2.4.16

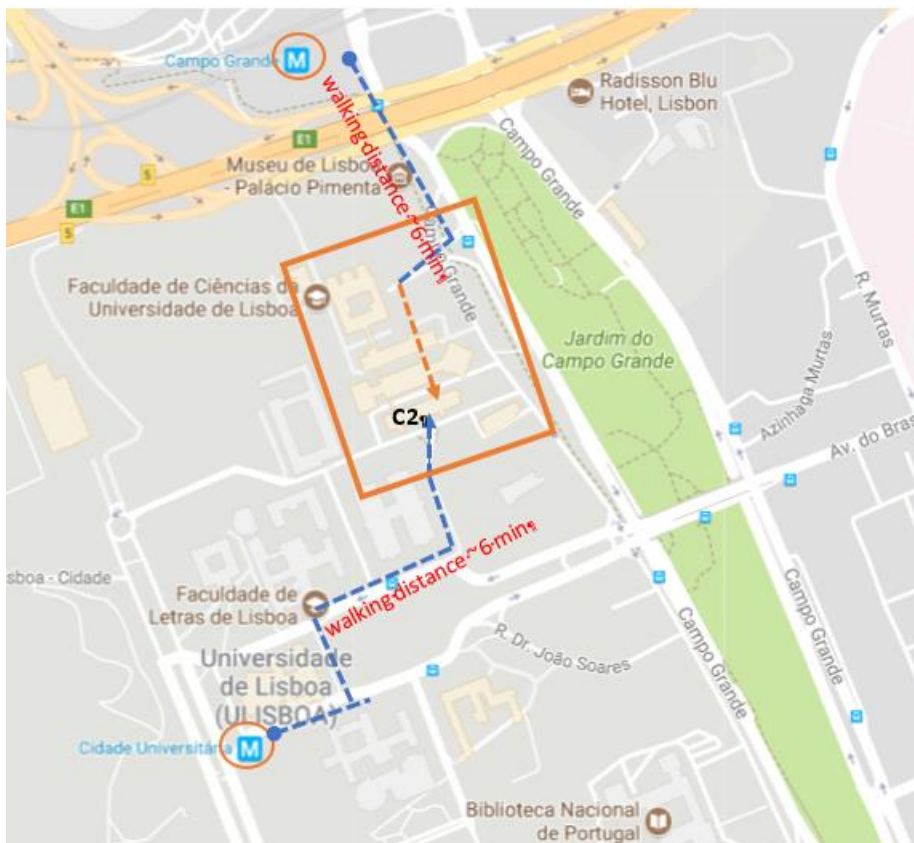
The participants will receive a username and password to have individual access to internet. The sessions will be mainly in the laboratory (2.4.37) but also in a computer room (2.3.16) and different classrooms. Students are advised to wear lab coat and have a notebook, computers or other electronic devices (iPad/tablet) are not mandatory but are allowed.



FCUL campus with building names

See FCUL web page “HOW TO GET HERE” section and the virtual campus at:

<https://ciencias.ulisboa.pt/en/campus>



FCUL can be reached by Underground (M) or Bus. Underground stations are marked with M on this map (Campo Grande and Cidade Universitária) Both metro stations are at a walking distance of ~6 minutes to FCUL. C2 main entrance is southside (Cidade Universitária).

(*) At C2 building the room numbers include the number of the building, the floor number and room number. **Room 2.2.22 stands for building C2, second floor, room number 22.**