Bioinformatic analysis of NGS data for plant virus detection

Hands-on Training School

6-7 June 2018

Provisional program

Location: Computer Room, Dep. of Biology building, Heraklion, Crete

Max number of participants: 30

Chairs:*KritonKalantidis, Assoc.Prof. Dep.of Biology, UoC / IMBB-FORTH Pantelis Topalis, Bioinformatics Group IMBB-FORTH*

Brief Schedule

Day 1

09:00 – 09:15	**Welcome** KritonKalantidis
09:15 – 11:30	**Introduction to linux** Emmanuel Dialynas
11:30 – 12:00	**Coffee break**
12:00 – 13:00	**Introduction to sequencing technologies** Pantelis Topalis
13:00 – 14:00	**Lunch break**
14:00 – 15:30	**Quality control of sequencing reads - Read trimming+ hands-on** George Papagiannakis
15:30 – 17:00	**RNASeq data analysis (Differentially expression pipeline) + hands-**

	on
	Pantelis Topalis
17:00 – 17:30	**Coffee break**
17:30 – 19:00	**RNASeq data analysis (*de novo* transcriptome assembly) + hands-on**
	Pantelis Topalis

Day 2

09:00 - 11:30	**Next generation sequencing for plant viruses detection + hands-on**
	Pantelis Topalis
11:30 – 12:00	**Coffee break**
12:00 – 13:00	**Next generation sequencing for plant viruses detection hands-on (continued)**
	Pantelis Topalis
13:00 – 14:00	**Lunch break**
14:00 – 17:00	**A hands-on introduction and tutorial to Genome Wide Association Studies (GWAS)**
	Pantelis Topalis
17:00 – 17:30	**Coffee break**
17:30 – 18:45	**Multiple sequence alignment with (MUSCLE)**
	Pantelis Topalis
18:45 – 19:00	**Course feedback / Closing remarks**
	Pantelis Topalis, KritonKalantidis

Important Notes:

- We require participants to self-study the online course http://linuxsurvival.com before start.
- The organizers will provide computers with all the required bioinformatics tools and demo data.

For further information please contact Kriton Kalantidis (kriton@imbb.forth.gr)