



Five-day Hands-on Training School on Microbiome Sequencing & Data Analysis Final Programme

Day 1 Friday 8 October, 2021

16.00 -16.30	Welcome	M. Grigoriou
16.30 -17.15	Lecture: A little history of the sequencing world	G. Skavdis
17.15 -18.00	Lecture: Introduction to microbiome sequencing	M. Grigoriou
18.00 -18.45	Protocol: 16S/ITS microbiome sequencing introduction to the protocol - library preparation	E. Stylianopoulou & T. Tsirka

Day 2 Saturday 9 October, 2021

09.30 - 11.30	Hands-on: Genomic library preparation & quantification	T. Tsirka, E. Stylianopoulou K. Tegopoulos, I. Farmakioti
11.30-12.00	Coffee break	
12.30-13.30	Hands-on: Genomic library preparation & quantification	T. Tsirka, E. Stylianopoulou K. Tegopoulos, I. Farmakioti
13.30 -14.30	Lunch break	
14.30 -15.15	Protocol: 16S/ITS microbiome sequencing introduction to the protocol- library amplification, enrichment & template preparation	E. Stylianopoulou & T. Tsirka
15.15- 15.45	Lecture: Primer selection and quality assessment for amplicon sequencing	K. Tegopoulos
15.45 - 16.30	Lecture: Shotgun metagenomics	M. Grigoriou
16.30- 17.00	Coffee break	
17.00 -17.45	Case study 1	M. Tokamani
17.45- 18.15	Q & A	T. Tsirka, E. Stylianopoulou
18.15-19.00	Hands-on: Genomic library amplification	T. Tsirka, E. Stylianopoulou

Day 3 Sunday 10 October, 2021

09.30 - 10.00	Protocol: Loading for sequencing	T. Tsirka, E. Stylianopoulou K. Tegopoulos, I. Farmakioti
10.00-11.30	Hands-on: Enrichment of positive ISPs	T. Tsirka, E. Stylianopoulou K. Tegopoulos, I. Farmakioti
11.30 - 12.00	Coffee break	

12.30-13.30	Hands-on: Template preparation - sequencing	T. Tsirka, E. Stylianopoulou K. Tegopoulos, I. Farmakioti
13.30 - 14.30	Lunch break	
14.30 -15.15	Lecture: DNA and RNA preparation for metagenomics/metatranscriptomics	E. Stylianopoulou
15.15 - 16.00	Lecture: Metatranscriptomics	P. Kolovos
15.45 - 16.30	Case study 2	A.Palaiologou
16.30-17.00	Coffee break	
17.00 -17.45	Case study 3	I.Kourkoutas
17.45- 18.15	Case study 4	I. Farmakioti
18.15- 18.45	Q & A	T. Tsirka, E. Stylianopoulou

Day 4 Monday 11 October, 2021

09.30 – 10.00	Hands-on: Assessment of the NGS experiment	T. Tsirka, E. Stylianopoulou K. Tegopoulos, I. Farmakioti
10.00 -10.45	Protocol: Introduction to data analysis	T. Tsirka
10.45 -11.30	Lecture: Module A - run plan and output for 16S	Alessandro Albiero
11.30-12.00	Coffee break	
12.00-13.00	Lecture: Module B - IonReporter workflows	Alessandro Albiero
13.30 -14.30	Lunch break	
14.30 -16.00	Hands-on: Data analysis with QIIME2	M. Tokamani
16.00- 16.30	Coffee break	
16.30 -18.00	Hands-on: Data analysis with UseGalaxy.EU	T. Tsirka
18.00 -19.00	Participants' presentations	Participants

Day 5 Tuesday 12 October, 2021

09.30 - 11.30	Hands-on: Participants' Data analysis	Participants
11.30-12.00	Coffee break	
12.00- 12.45	Lecture: Statistical analysis and interpretation of NGS microbiome data	T. Tsirka
12.45 -13.45	Q & A	P. Kolovos
13.45 -14.00	Closing remarks	