



# Short Course in Bioinformatics

17<sup>th</sup> – 19<sup>th</sup> March 2025

## AGENDA

### March 17<sup>th</sup> 2025

Time	Duration	Topic	Speaker
10h00	15'	Welcoming session	Pedro Leão
10h15	45'	Introduction bioinformatics for bioprospection	Adriana Rego
11h00	30'	FALpred (tba)	Leandro Pereira
11h30	30'	<b>Coffee-break</b>	
12h00	30'	Introduction to antiSMASH and BiG-SCAPE workflows	Catarina Loureiro
12h30		<b>Lunch break</b>	
14h00	60'+30'	Classes: <ul style="list-style-type: none"><li>• Hands- on session antiSMASH and BiG-SCAPE</li></ul>	Catarina Loureiro
15h30	30'	<b>Coffee-break</b>	
16h00	30' + 60'	Classes: Introduction to GNPs and MicrobeMASST <ul style="list-style-type: none"><li>• Hands-on session - MicrobeMASST</li></ul>	Mauricio Caraballo

## March 18<sup>th</sup> 2025

Time	Duration	Topic	Speaker
9h00	60'+30'	Phylogenetic approaches to natural product discovery  (short) Hands-on session NaPDos2	Hans Singh
10h30	30'	<b>Coffee-break</b>	
11h00	30'	Genomic context of target biosynthetic genes	Adriana Rego
11h30	45'	Bioinformatics tools to optimize BGC analysis: troubleshooting	Adriana Rego and Catarina Loureiro
12h15		<b>Lunch break</b>	
13h45	45+60'	Classes: <ul style="list-style-type: none"> <li>• Introduction to computational protein structure prediction</li> <li>• Hands-on session to computational protein structure prediction, molecular docking</li> </ul>	Arménio Barbosa
15h30		<b>Coffee-break</b>	
15h45	30'	EFI and DNA-based function prediction	Raquel Castelo Branco



## March 19<sup>th</sup> 2025

Time	Duration	Topic	Speaker
10h	15'	Welcoming session	
		Presentation of the speakers for the day	
10h15	30'	<i>Living organisms produce millions of specialized molecules that play key roles in host-microbiome interactions and are rich sources of pharmaceuticals and crop protection agents</i>	Catarina Loureiro
10h45	15'	Q&A	
11h00	30'	Coffee-break	
11h30	45'	Scientific Lecture (tba)	Arménio Barbosa
12h15	15'	Q&A	
12h30		<b>Lunch break</b>	
14h30	45'	Scientific Lecture (tba)	Marc G. Chevrette
15H15	15'	Q&A	
15h30	30'	Coffee-break	
16h00	45'	<i>A journey for the discovery of microbial molecules, the need of reference datasets, and using small molecules to understand symbiotic relationships in ants' ecosystems</i>	Mauricio Caraballo
16H45	15'	Q&A	
17h00	10'	Final remarks	

tba - to be announced

