

# GABIOMATIC Bioinformatics Workshop at CERMEL, Lambaréné, Gabon

## Workshop programme

### Mon April 15, 2024

11-12.00h	Arrival and registration of participants (All organizers and workshop participants)
12-17.00h	Day 1 afternoon session
	Welcome address by the organizers (All organizers)
	Mentimeter questions session to get to know the workshop participants (Sophia Derdak)
	Short presentations of the participants (Workshop participants, Chair: Sophia Derdak, Saidou Mahmoudou)
	Coffee break (All organizers and workshop participants)
	Summary: Central applications, research interests, technologies and needs identified from the presentations of the participants (Sophia Derdak)
17.00h	End of Day 1
wil 16 2024	

### Tue April 16, 2024

9-12.00h	Day 2 morning session
	Data acquisition and management – with special focus on participants' data (Sophia Derdak)
	Coffee break (All organizers and workshop participants)
	Tabular data and data types with examples from participants' data (Alexander Tolios (online))
12-13.00h	Lunch (All organizers and workshop participants)





### 13-17.00h Day 2 afternoon session

Introduction to data visualization (Fabian Amman)

Coffee break (All organizers and workshop participants)

How to start with bioinformatics from Windows? (Saidou Mahmoudou)

How to start with bioinformatics from Windows on the participants' computers? (Saidou Mahmoudou, with the help of all organizers)

17.00h End of Day 2

### Wed April 17, 2024

9-12.00h	Day 3 morning session
	R with RStudio practical session, part1 (Alexander Tolios (online))
	Coffee break (All organizers and workshop participants)
	R with RStudio practical session, part2 (Alexander Tolios (online))
12-13.00h	Lunch (All organizers and workshop participants)
13-17.00h	Day 3 afternoon session
	10 simple rules for getting started with command-line bioinformatics (Sophia Derdak)
	Coffee break (All organizers and workshop participants)
	Introduction to Oxford Nanopore sequencing technology and genome alignments (Sophia Derdak)
	Linux command-line practical session (example from genomics) (Sophia Derdak and Saidou Mahmoudou)
17.00h	End of Day 3



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### Thu April 18, 2024

#### 9-12.00h Day 4 morning session

Feedback from the hands-on sessions, Q&A (All organizers and workshop participants)

Coffee break (All organizers and workshop participants)

Basics on statistical evaluation of data, with some examples (Saidou Mahmoudou)

### 12.00-13.00h Lunch (All organizers and workshop participants)

### 13.00-17.00h Day 4 afternoon session

Interactive session to form alliances between IT/computational participants and biological/biomedical participants (All organizers and workshop participants)

Coffee break (All organizers and workshop participants)

IT infrastructure, servers, networks (Alexander Tolios (online) and CERMEL IT department)

#### 17.00h End of Day 4

### Fri April 17, 2024

#### 9-13.00h Day 5 morning session

Galaxy platform (https://usegalaxy.org) (Fabian Amman)

Coffee break (All organizers and workshop participants)

A "bioinformatics" core unit for CERMEL? (All organizers and workshop participants)

Mentimeter questions session to get feedback from the participants (All organizers and workshop participants)

Farewell and handing out participation certificates to participants (All organizers and workshop participants)

#### 13.00h End of Day 5 and the workshop



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### Workshop Teachers:

### **Alexander Tolios**

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### Sophia Derdak

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### **Fabian Amman**

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### Saidou Mahmoudou

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