

## **Marine Bioinformatics Hackathon: Biodiversity, Genomics, and Nextflow Pipelines.**

**Venue: Nile University 29-31 October 2026**

<b>Day 1 (29- 10 -2025)</b>	
<b>Timeline</b>	<b>Lectures and practical sessions</b>
<b>9:30 – 10:00</b>	Registration
<b>10:00 - 10:15</b>	Welcome Note (Dr. Asmaa Abushady) - Room 357, UB1
<b>10:15 - 11:15</b>	Lec1. Biodiversity Genomics in the '-Omics' Era (Dr.Abdollah Sharaf) - Room 357, UB1
<b>11:15 – 12:15</b>	Lec2. Biodiversity Loss in Marine Biology (Dr. Mohamed E. Hassan) - Room 357, UB1
<b>12:30 – 13:30</b>	Lec3. Comparison between Long-read and short-read sequencing technology (Dr. Mohamed E.Hassan)- Room 357, UB1
<b>13:30 – 14:00</b>	Coffee break - Appetizers
<b>14:00- 15:00</b>	Lec4. Describing the difference between 16S/shotgun in microbial analysis (Shaimaa and Assem) - Room 53, UB1
<b>15:00- 16:30</b>	Practical Session 1: Quick tutorial on galaxy platform and illustration for the selected pipeline (Shaimaa and Assem) - Room 53, UB1

Day 2 (30 - 10 -2025)	
Timeline	Lectures and practical sessions
9:30 – 10:30	Lec1.Integrated metagenome-metabolome analysis reveals coral responses to ocean warming (Dr. Amin Roshdy) - Room 357, UB1
10:30 – 11:30	Lec2. (Dr. Marwa Amer) - Room 357, UB1
11:30 – 12:30	Practical Session1. Getting data and QC (Shaimaa and Assem) - Room 357, UB1
12:30 - 13:30	Practical Session2. Sequence alignment (Shaimaa and Assem) - Room 53, UB1
13:30 – 14:30	Coffee break - Appetizers
13:00- 15:00	Practical Session3: Extraction of Taxonomic Information (Shaimaa and Assem) - Room 53, UB1
15:00- 15:30	Practical Session3. Visualization (Shaimaa and Assem) - Room 53, UB1
15:30 – 16:30	Exploring Assignment and Project Ideas - Room 53, UB1
16:30 – 17:00	Coffee break
17:00 – 18:00	Assignment and Project Discussion Wrap Session - Room 53, UB1

<b>Day 3 (31- 10-2025)</b>	
<b>Timeline</b>	Lectures and practical sessions
<b>9:30 – 11:00</b>	Workflow management with Nextflow
<b>11:00 – 11:30</b>	Coffee break - Appetizers
<b>12:00 – 13:00</b>	Introduction to nf-core
<b>13:00 - 13:30</b>	Prima Project activities (Dr.Aasmaa Abushady) - Room 367, UB1
<b>13:30 – 14:00</b>	Closing Ceremony

Visit the links below to access workshop practical materials

<https://github.com/assemkadry/AfricaBP-Biodiversity-Workshop.git>

Please Note:

- Lectures' materials will be uploaded by the end of the workshop