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

Venue: Nile University 29-31 October 2026

| **Day 1 (29- 10 -2025)** | |
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| **Timeline** | Lectures and practical sessions |
| **9:30 – 10:00** | Registration |
| **10:00 - 10:15** | Welcome Note (Dr. Asmaa Abushady) - Room 357, UB1 |
| **10:15 - 11:15** | Lec1. Biodiversity Genomics in the '-Omics' Era (Dr.Abdollah Sharaf) - Room 357, UB1 |
| **11:15 – 12:15** | Lec2. Biodiversity Loss in Marine Biology (Dr. Mohamed E. Hassan) - Room 357, UB1 ????? |
| **12:30 – 13:30** | Lec3. Comparison between Long-read and short-read sequencing technology (Dr. Mohamed E.Hassan) ????- Room 357, UB1 |
| **13:30 – 14:00** | Coffee break - Appetizers |
| **14:00- 15:00** | Lec4. Describing the difference between 16S/shotgun in microbial analysis (Shaimaa and Assem) - Room 53, UB1 |
| **15:00- 16:30** | 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)** | |
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| **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 OR Dr.Yasser) - 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 |

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

# Visit the links below to access workshop practical materials

<https://drive.google.com/drive/folders/1fCm6gp2tY-7LLAp-Pl-n5aMfiCd85pJY?usp=share_link>

# Please Note:

* Lectures’ materials will be uploaded by the end of the workshop