Organizer: **uefiscdi**

Iceland
Liechtenstein   Norway
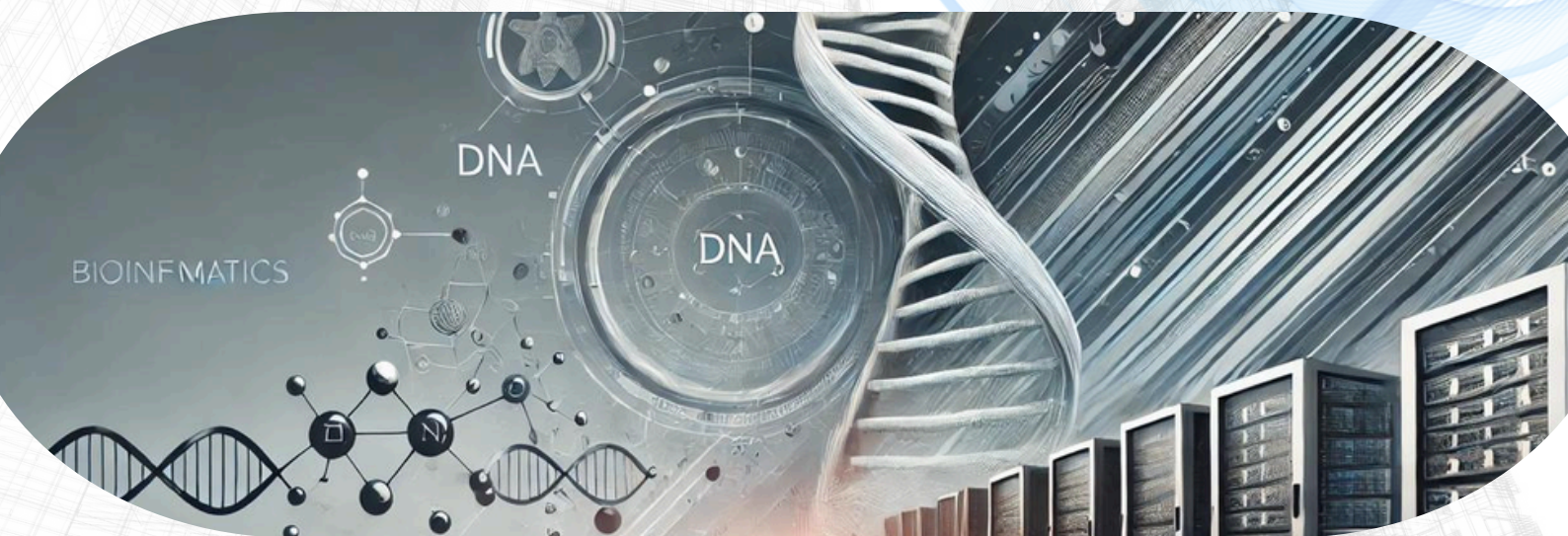Norway grants   grants

Co-organizers: **RSBI**   UNIVERSITATEA DE MEDICINĂ ȘI FARMACIE CAROL DAVILA   UNIVERSITATEA DIN BUCUREȘTI — VIRTUTE ET SAPIENTIA   **TINS**   INCDSB

BIOINFORMATICS
HORIZONS 2025
PRELIMINARY PROGRAM

A must-attend event to connect, learn, and shape the future of bioinformatics.

2-4 APRIL
2025

Bucharest

- **Faculty of Medicine, "Carol Davila" University of Medicine and Pharmacy**
- **Faculty of Biology, Bucharest Botanical Garden**
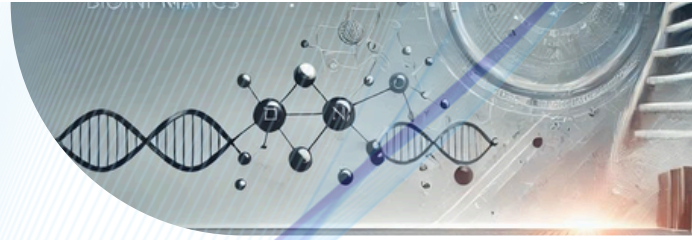
More Information at   **https://rsbi.ro/evenimente/bioinformatics-horizons/**

BIOINFORMATICS HORIZONS 2025

Preconference Workshop
April 2

📍 "Dimitrie Brândză" Botanical Garden
(Soseaua Cotroceni 32, Bucharest)

08:30 — **Registration**

09:00 — **Session 1 - Ensembl Genome Browser Workshop part 1**
- **Batista da Rocha Jorge, European Bioinformatics Institute (EMBL-EBI), UK**

10:45 — **Coffee Break**

11:15 — **Session 1 - Ensembl Genome Browser Workshop part 2**
- **Batista da Rocha Jorge, European Bioinformatics Institute (EMBL-EBI), UK**

13:00 — **Lunch Break**

14:00 — **Session 2 - RNA seq data analysis part 1**
- **Serghei Mangul, University of Southern California, USA**

15:45 — **Coffee Break**

16:15 — **Session 2 - RNA seq data analysis part 2**
- **Serghei Mangul, University of Southern California, USA**

BIOINFORMATICS HORIZONS 2025

Day 1 - April 3

📍 **Faculty of Medicine, "Carol Davila" University of Medicine and Pharmacy** (*Eroii Sanitari 8, Bucharest*)

08:30 **Registration**

09:30 **Opening Ceremony**

10:00 **Session 1 – Genomics part 1**
- **Paula Istvan –** Populational Studies of the Microbiome: Revealing Viral Diversity and its Impact on Health and Disease
- **Natacha Couto –** The bioinformatics conundrum of microbial typing

11:00 **Coffee Break and Networking**

11:20 **Session 2 – Genomics part 2**
- **Elias Rodriguez-Fos –** Extrachromosomal circular DNA in cancer cells
- **Dustin Sokolowski –** An updated naked mole-rat assembly and annotation unveils genomic underpinnings of their unique physiology
- **Serghei Mangul**- TBA

12:50 **Lunch Break**

14:20 **Session 3**
Applied Bioinformatics in Medicine and Health
- **Michael Flower** - Unraveling Genetic Modifiers and DNA Repair Mechanisms in Huntington's Disease: Bioinformatics-Driven Insights into Therapy Development
- **Jose Espejo Valle** - Mechanisms underpinning cancer genome complexity and clonal evolution
- **Andra Maria Ionescu** - The use of viral genomics to monitor infectious diseases in the UK
- **Konika Chawla** - From Data to Discovery: Bioinformatics Core Facility's Case Study on Psoriasis transcriptomics

16:20 **Coffee Break and Networking**

16:40 **Bioinformatics Horizons**

19:00 **Dinner**

BIOINFORMATICS HORIZONS 2025

Day 2 - April 4

📍 **Faculty of Biology, Bucharest Botanical Garden**
(Intrarea Portocalelor 1-3, Bucharest)

09:15 **Day 2 Opening**

09:30 **Session 1 - Artificial Intelligence and Machine Learning**

- **Alfredo Iacoangeli** - Dissecting disease heterogeneity using large-scale genomics and machine learning in Amyotrophic Lateral Sclerosis
- **Mihai Udrescu** - Combining Fractional Dynamics with Deep Learning - A New Method for Analyzing Physiological Signals
- **Ana Bondar** - Graph-based algorithms to decipher how membrane receptors function in the cell

11:00 **Coffee Break and Networking**

11:20 **Session 2 - Functional Bioinformatics**

- **Joel Rozowsky -** Using the The EN-TEx personal epigenome resource to construct variant-impact models
- **Mircea Iliescu-** TBA
- **Iulian Gabur -** TBA

12:50 **Lunch Break**

14:20 **Session 3 - Bioinformatics Education**

- **Dr. Inimary Toby-Ogundeji -** Bioinformatics Education: Essential Competencies and Framework
- **Dr. Marius Mihășan -** Bridging Abstract Concepts and Tangible Learning: 3D-Printed Models in Biomolecular Science Education

15:20 **Coffee Break and Poster Viewing**

16:45 **Conference Closing**