

Organizer:



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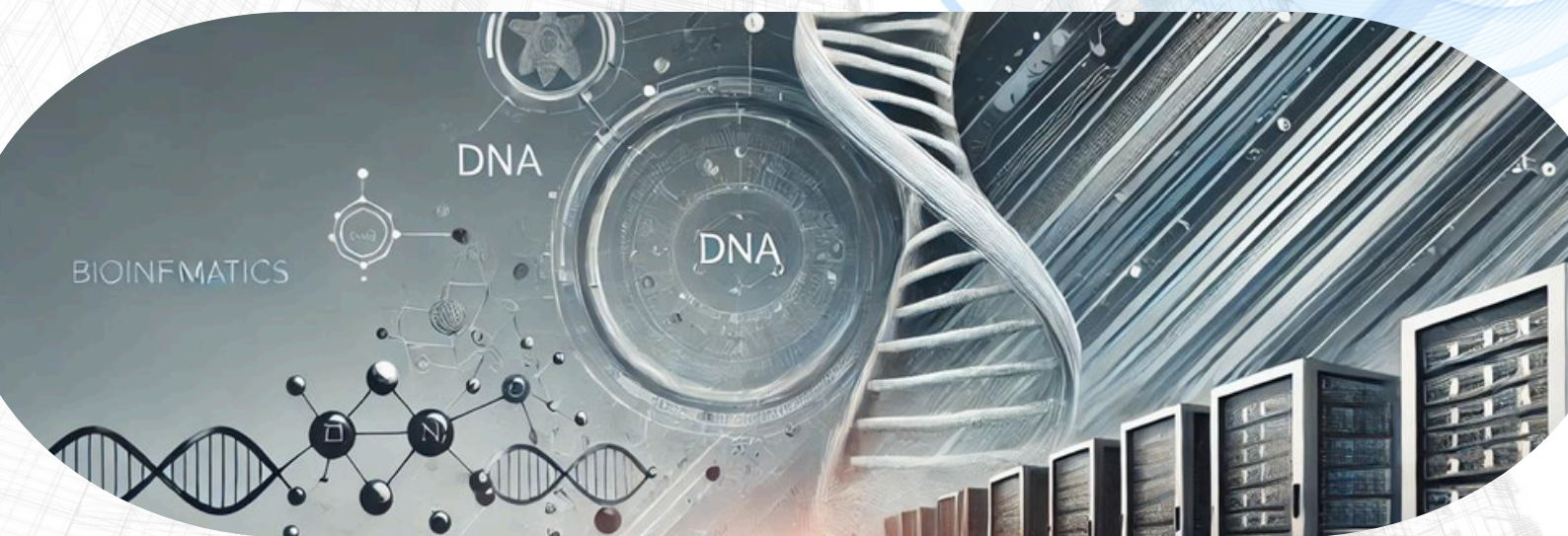


Co-Organizers:



BIOINFORMATICS HORIZONS 2025

AGENDA



***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, University of Bucharest Botanical Garden

More Information at



<https://rsbi.ro/evenimente/bioinformatics-horizons/>

BIOINFORMATICS HORIZONS 2025

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Preconference Workshop April 2



**Administrative Building, 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
Viorel Munteanu, “Stefan cel Mare” University of Suceava*

15:45

Coffee Break

16:15

**Session 2 – RNA seq data analysis
part 2**

*Serghei Mangul, University of Southern California, USA
Viorel Munteanu, “Stefan cel Mare” University of Suceava*

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Day 1 - April 3



Faculty of Medicine, "Carol Davila" University of Medicine
(Eroii Sanitari 8, Bucharest)

08:30

Registration

09:30

Bioinformatics Horizons' 25 Conference Opening

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*

Mircea Iliescu: *The evolution of human diversity in admixed populations*

11:30

Coffee Break and Networking

11:50

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: *Accelerating scientific progress through the reusability of genomics data*

13:20

Lunch Break

14:20

Session 3

Applied Bioinformatics in Medicine and Health

Andrei Lobiuc: *PHGL-COVID – An overview of the integrated health application*

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 – Roundtable discussion

19:00

Dinner

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Day 2 - April 4



Faculty of Biology, University of Bucharest
"Dimitrie Brandza" Amphitheater, 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

Maria Mernea: THz spectroscopy and molecular modeling to investigate protein-ligand interactions

Andrei Paun: Unconventional computing using artificial neural networks

12:25

Lunch Break + Botanical Garden View

14:20

Session 3 – Bioinformatics Education

Inimary Toby-Ogundeji: Bioinformatics Education: Essential Competencies and Framework

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