



SEMINARII ȘTIINȚIFICE

Functional ingredients at intestinal level: from nutriment to bioactive molecules

Prezintă:

Rozenn RAVALLEC, PhD

Professor, Institut Charles Viollette,
Université de Lille, Franța

Vineri, **03.12.2021**, ora **10:30**,
Amfiteatru B2





SEMINARII ȘTIINȚIFICE

Chicory root – a functional food with multiple health benefits evaluated in a mice model

Prezintă:

Anca LUCAU-DANILA, PhD

Associate Professor, Institut Charles Viollette,
Université de Lille, Franța

Vineri, **03.12.2021**, ora **11:00**,
Amfiteatru B2





SEMINARII ȘTIINȚIFICE

Deep Learning and Protein Structure Prediction: the Tale of a “Gigantic Leap”

Prezintă:

Anna MARABOTTI, Professor

Department of Chemistry and Biology "A. Zambelli"
University of Salerno, Italy



**Luni, 29.05.2023, ora 14:00,
Sala B460**

Detalii suplimentare despre autor și conținut pe pagina următoare





Deep Learning and Protein Structure Prediction: the Tale of a “Gigantic Leap”

Abstract: Knowing the three-dimensional structure of a protein is of utmost importance for understanding its function and evolutionary relationships with other members of the same protein family. However, the determination of 3D protein structures by experimental methods is not straightforward. For this reason, several computational methods have been developed in the past decades to predict the structure of proteins from their sequences. This field has experienced tremendous development when deep learning algorithms have made it possible to obtain structural predictions at a level of accuracy approaching that of experimental studies.

In this seminar, the evolution of protein structure prediction methods will be shown, with special reference to the development of artificial intelligence methods, and the implications of these new approaches for knowledge not only at the level of protein structure and function, but also in terms of knowledge of the interactions with other proteins and/or macromolecules inside and outside of cells, and, prospectively, for applying this knowledge in various fields, including rational drug design.

Lecturer: Anna MARABOTTI, Professor

Prof. Anna Marabotti graduated in 1996 in Chemistry and Pharmaceutical Technologies at the University of Parma (final grade 110/110 with honors), and obtained her PhD in Biochemical Sciences in 2001 at the University of Turin. She has worked as a postdoctoral contractor in various Italian universities (Verona, Padua, Second University of Naples) and in public research institutions (CNR), as well as in private research institutes (IRCCS "E. Medea"). In addition, she worked in one of the largest pharmaceutical industries in the world, dealing with regulatory aspects. In October 2012 she became a permanent staff member of the Department of Chemistry and Biology "A. Zambelli" of the University of Salerno in Fisciano, and since January 2020 she is associate professor at the same institution.

Her current main research interests concern studies of structure-dynamics-function relationships of proteins from various species, of prevalent interest in the biomedical field (with particular attention to proteins involved in rare pathologies), and characterization of their interactions with ligands, using a combination of biocomputational techniques, possibly associated with experimental approaches.

Prof. Marabotti has taught in numerous universities and other public institutions, and she has been a member of scientific and/or organizing committees for various conferences, courses, workshops and seminars (including the BBCC meetings: <https://www.bbcc-meetings.it/>). She is a member of several national and international scientific societies, in particular she is a member of the Steering Committee of the Italian Society of Bioinformatics, BITS (<https://bioinformatics.it/>), and she is an ordinary member of the Italian Society of Biochemistry and Molecular Biology, SIB (<http://www.biochimica.it/>). Moreover, prof. Marabotti is involved in the activities of the European infrastructure for the support of life sciences ELIXIR (<https://elixir-europe.org/>), being Local Technical Coordinator for the local node of the University of Salerno (<https://elixir-italy.org/struttura/persona/>), and member of the Italian training team (<https://elixir-iib-training.github.io/website/contacts/>).





SEMINARII ȘTIINȚIFICE

Harmony, Melody, and Beauty in Living Systems

Prezintă:

Hafedh ABDELMELEK, Professor

Laboratory of Integrated Physiology, Faculty of Sciences of Bizerte,
University of Carthage, Tunisia



Vineri, 12.05.2023, ora 10:00,
Sala B339





SEMINARII ȘTIINȚIFICE

Artificial Intelligence (AI) applications on protein structure predictions

Prezintă:

Anna MARABOTTI, Professor

Department of Chemistry and Biology "A. Zambelli"
University of Salerno, Italy



**Joi, 18.04.2024, ora 10:00,
Sala B435**

Detalii suplimentare despre autor și conținut pe pagina următoare





Artificial Intelligence (AI) applications on protein structure predictions

Abstract: Knowing the three-dimensional structure of a protein is of utmost importance for understanding its function and evolutionary relationships with other members of the same protein family. However, the determination of 3D protein structures by experimental methods is not straightforward. For this reason, several computational methods have been developed in the past decades to predict the structure of proteins from their sequences. This field has experienced tremendous development when deep learning algorithms have made it possible to obtain structural predictions at a level of accuracy approaching that of experimental studies.

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SEMINARII ȘTIINȚIFICE

An automated pipeline integrating AlphaFold 2 and MODELLER for protein structure prediction

Prezintă:

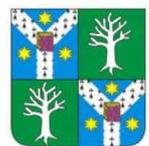
Anna MARABOTTI, Professor

Department of Chemistry and Biology "A. Zambelli"
University of Salerno, Italy



Vineri, **19.04.2024**, ora **10:00**,
Sala B435

Detalii suplimentare despre autor și conținut pe pagina următoare





An automated pipeline integrating AlphaFold 2 and MODELLER for protein structure prediction

Abstract: In this seminar, the evolution of protein structure prediction methods will be shown, with special reference to the development of artificial intelligence methods, and the implications of these new approaches for knowledge not only at the level of protein structure and function, but also in terms of knowledge of the interactions with other proteins and/or macromolecules inside and outside of cells, and, prospectively, for applying this knowledge in various fields, including rational drug design.

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SEMINARII ȘTIINȚIFICE

Vaginoza bacteriană: de la biofilmul asociat la noi opțiuni de tratament



Prezintă:

Aliona ROȘCA, PhD

Cercetător postdoctoral, Universiteit Gent, Belgia

Luni, **07.10.2024**, ora **11:00**,
Amfiteatru B2





SEMINARII ȘTIINȚIFICE

Structura și mecanismul unui sistem specializat de secreție la micobacterii patogene



Prezintă:

Cătălin BUNDUC, PhD

Cercetător postdoctoral, Vrije Universiteit Amsterdam, Olanda

Luni, **07.10.2024**, ora **11:30**,
Amfiteatru B2





SEMINARII ȘTIINȚIFICE

Monitoring protein dynamics in live-cell models of neurodegeneration

Prezintă:

Federico Herrera Ph.D.,
Laboratory Head

Cell Structure and Dynamics Laboratory
Faculty of Sciences, University of Lisbon, Portugal



Miercuri, 09.07.2025, ora 11:00,
Sala B250





SEMINARII ȘTIINȚIFICE

DESCRIBING SOME ORIGINAL ECOTOXICOLOGICAL APPROACHES WITH FURTHER RELEVANCE INTO MEDICAL AND NEUROSCIENCE FIELDS

Prezintă:

PhD Nikola Stanković

Department of Biology and Ecology
Faculty of Sciences and Mathematics
University of Niš, Serbia

**Luni, 22.09.2025, ora 10:00,
Sala B250**

