



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

DIPARTIMENTO
DI FARMACIA
E BIOTECNOLOGIE

AVVISO DI SEMINARIO

Il giorno **8 Ottobre 2024**
alle ore **15:00**

Prof. Xavier De La Cruz

Group Leader - Vall Hebron Institut de Recerca

(ospite di Prof. Emidio Capriotti)

terrà un seminario in lingua inglese dal titolo:

Key Considerations for Deploying AI-Based Tools in Clinical Settings: The Case of Pathogenicity Predictors

Area tematica:
Bioinformatics

in presenza:

Aula Farbiomot - Via Selmi 3, Bologna BO

Collegli e studenti sono cordialmente invitati

ABSTRACT

Artificial Intelligence (AI) has rapidly expanded across various fields, including personalized medicine, where tools like pathogenicity predictors are becoming essential. However, two critical and interrelated challenges—imperfect accuracy and lack of interpretability—are limiting their widespread adoption in clinical settings. These challenges often become evident when AI tools move from controlled environments to real-world applications, where issues like counterintuitive outputs and biased predictions can arise. In my talk, I will explore these challenges specifically in the context of pathogenicity prediction and propose solutions, such as post-prediction visual analysis, to help healthcare professionals quickly and effectively assess AI-driven predictions.

BIOGRAPHICAL SKETCHES

His career revolves around the application of in silico tools to address biomedical questions. His Ph.D. focused on studying the principles of protein structure underlying function, a work he pursued during his stay at the NIH (1993-1997) and UCL (1997-2000). After joining ICREA (Barcelona, Spain), this topic dominated his activities (PCB, 2001-2009; IBMB-CSIC, 2009-2012). In 2012, he joined the Vall d'Hebron Institute of Research (VHIR) to enhance the applicability of his work on the pathogenicity of genetic variants, bringing it closer to healthcare stakeholders. These efforts have recently gained international recognition after his team's participation in the prestigious CAGI contest, where they ranked second in the ENIGMA (2018-2019) and ARSA (2023-2024) challenges.