



DIPARTIMENTO DI FARMACIA E BIOTECNOLOGIE

## AVVISO DI SEMINARIO

Il giorno giovedì **30 marzo 2023**  
alle ore **12**

*in presenza:*

**Aula 1** – FaBiT, via Belmeloro 6, Bologna BO

oppure *in streaming:*

<https://teams.microsoft.com/l/meetup-join/19%3aN09c0NlyEssBnF7ObCyDOQwkgDWm1qdd9f7F2nJV9fw1%40thread.tacv2/1631519544944?context=%7b%22Tid%22%3a%22e99647dc-1b08-454a-bf8c-699181b389ab%22%2c%22Oid%22%3a%225a941351-ef41-4aa4-8771-fa50a6d62ca1%22%7d>

**Prof. Krzysztof Józwiak**

*Department of Biopharmacy, Medical University of Lublin, Lublin,  
Poland*

(ospite Prof.ssa Manuela Bartolini)

terrà un seminario dal titolo:

**STRUCTURAL BIOLOGY OF GPCRs REVEALS  
NOVEL OPPORTUNITIES IN PRECISE DESIGN OF  
SIGNAL BIASED AGONISTS**

Collegli e studenti sono cordialmente invitati

*Commissione Ricerca e Attività Correlate - FaBiT*

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## BIOGRAPHICAL SKETCH



Prof. Józwiak is an expert in the molecular pharmacology and medicinal chemistry of membrane receptors with particular emphasis on G protein-coupled receptors. He uses a combination of molecular modeling, experimental affinity and functional efficacy studies to develop substances with a selective action on a specific receptor subtype and/or on a specific intracellular signaling event. The main achievements are the development of a series of novel subtype- and signal-selective agonists of the  $\beta_2$ -adrenergic receptor, one of them endowed with a very effective dual action ( $\beta_2$ -AR agonist and GPR55 antagonist), currently in preclinical development as drug candidate for pancreatic cancer treatment; In another area professor Jozwiak developed a series of  $\alpha_7$  or  $\alpha_3\beta_4$  selective allosteric modulators of nicotinic acetylcholine receptors. These discoveries are covered by two patents. Recently, he also contributed to the development of selective peptide analogs that regulate GPR116 adhesion receptor and of a TRL4 modulating ligand showing cardioprotective activities in vivo. Prof. Józwiak research activities also include modeling and testing multi-target pharmacophores to treat multifactorial diseases.

In 2012, Professor Jozwiak was granted by the European Federation for Medicinal Chemistry by the UCB-Ehrlich Award for Excellence in Medicinal Chemistry