



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

DIPARTIMENTO
DI FARMACIA
E BIOTECNOLOGIE

AVVISO DI SEMINARIO

Il giorno **12 settembre 2024**
alle ore **15.00**

Dr. Vanessa Checchetto

Researcher at the Department of Biology, University of Padua.

(ospite di Prof Anna Maria Porcelli)

terrà un seminario in lingua inglese dal titolo:

More Than a Pore: Investigating the Multifaceted Functions of Ion Channels

Area tematica:
Protein-protein interactions

in presenza:

Aula Ghigi, via San Giacomo 9, Bologna BO

e in streaming:

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

Collegli e studenti sono cordialmente invitati

ABSTRACT

Over the past three decades, cation and anion channels have been identified as significant contributors to a multitude of pathological conditions [1, 2]. Some evidence suggests that ion channels, in addition to acting as conductors, function as integral components of signalling platforms that contribute to the activation of pathological signalling cascades. The precise nature of these cascades remains to be determined. BioID proximity labelling has recently been used to study the interactome of the Kv1.3 potassium channel and the VRAC chloride channel [3, 4]. Our research showed that the Kv1.3 channel interacts with the cancer-related pathways of STAT3 and p53 [4]. Furthermore, new interaction partners for VRAC have been identified [3]. The identification of ion channel interaction networks facilitates a deeper understanding of biological processes and provides a basis for the development of therapeutic agents. In the field of contemporary pharmacology, the rational modulation of protein-protein interactions represents a promising avenue for new drug discovery.

BIOGRAPHICAL SKETCH

Vanessa Checchetto is a researcher (RTDa) at the Department of Biology at the University of Padua. Her academic career has been built on solid foundations, beginning with a Bachelor of Science degree in Biotechnology and continuing with a Master of Science degree in Industrial Biotechnology, both obtained from the University of Padua. She subsequently obtained a PhD in Biochemistry and Biotechnology in 2011.

Her academic career has been enhanced by several postdoctoral experiences, which have broadened her skillset and expanded her knowledge base. She has demonstrated notable leadership and project management abilities, having served as Principal Investigator and Co-Principal Investigator in significant national projects. At the present time, Vanessa Checchetto's research objective is to identify potential human pathological targets. Her research focus is on the analysis of the interactome, employing a recently developed technique that allows for the study of protein-protein interactions in intact cells and directly in vivo. The focus of her study is on specific ion channels and transporters located in mitochondria and/or the plasma membrane.

In 2018, Vanessa was awarded the qualification for the position of Associate Professor in two scientific disciplines, including General Biochemistry, thus further confirming her academic and scientific value. Throughout her career, she has been the recipient of numerous international awards, including the "Young Investigator Award" from the International Journal of Molecular Sciences in 2021.

Vanessa Checchetto is the author of 42 documents indexed on Scopus, with an H-index of 21 and over 2000 citations. Her publications in high-impact journals demonstrate the significance and applicability of her research in the field of biochemistry