

**12<sup>th</sup>  
January  
2024**



**UNIVERSITÀ  
DI TRENTO**

Dipartimento di  
Biologia Cellulare,  
Computazionale e Integrata - CIBIO

# PhD Colloquia 2023

## Intrinsic and extrinsic drivers of cancer evolution



A204



11:00



**Prof. Francesca Ciccarelli**

**Bart's Cancer Institute &  
The Francis Crick Institute**

Cancer is an evolving system that can respond and adapt very dynamically to the changing circumstances in time and space. But how does this happen? In my talk, I will discuss our contribution towards a better understanding of what intrinsic and extrinsic factors drive cancer evolution and why this is key to advance cancer early detection and treatment.

**Short biography:** Francesca Ciccarelli is lead of the Centre for Cancer Genomics and Computational at the Bart's Cancer Institute and Principal Group Leader at the Francis Crick Institute. Francesca graduated in Pharmaceutical Chemistry at the University of Bologna and did her PhD at the EMBL in Heidelberg, where she studied the evolution of genomes using comparative genomics and phylogenetics. In 2005, Francesca started her independent research group at the European Institute of Oncology in Milan pioneering the use of genomics and systems biology to study cancer evolution. In 2014, she moved with her group to King's College London and since 2017 they are seconded to the Francis Crick Institute. Francesca's multidisciplinary team of biologists, mathematicians, oncologists, engineers, and computer scientists applies genetics, imaging and theoretical modelling to study cancer evolution in time and space. Francesca co-leads the Cancer Evolution Theme of the CRUK City of London Cancer Centre and her work is supported by Cancer Research UK, the MRC and the European Union.