



UNIVERSITÀ
DI TRENTO

Dipartimento di
Biologia Cellulare,
Computazionale e Integrata - CIBIO



**MONDAY,
5 OCTOBER
2026**

FROM **10:30 AM**
ROOM **A205**
POVO 1

Petr Cejka

FULL PROFESSOR, FACULTY OF BIOMEDICAL SCIENCES,
UNIVERSITÀ DELLA SVIZZERA ITALIANA, SWITZERLAND

UNDERSTANDING MECHANISMS OF TRINUCLEOTIDE REPEAT INSTABILITY THROUGH BIOCHEMICAL RECONSTITUTION

Trinucleotide repeat expansion underlies numerous human disorders. Genome-wide association studies using patient data, as well as animal and cellular models, have identified modifiers of repeat instability; however, the mechanisms underlying this process have remained unclear. The Cejka laboratory (IRB Bellinzona, Switzerland) has established biochemical systems that reconstitute key elements of both repeat expansion and repeat contraction. These reactions, performed with purified recombinant proteins, provide mechanistic insight into the molecular processes driving repeat instability. They can also serve as the basis for screening compounds that target the enzymes involved. During the seminar, Dr. Cejka will present recent advances in our understanding of trinucleotide repeat instability driven by MutSbeta, MutLbeta and MutLgamma.



COMUNICAZIONE.CIBIO@UNITN.IT