



**Venerdì 20/02/2026 ore 11:30**

Aula Vittorelli (Aula 10) Dip. STEBICEF

Viale delle Scienze ed.16

Si terrà il seminario della

**Prof. Viji Draviam**

Professor of Cell and Molecular biology at  
Queen Mary University of London  
& Head of the Centre for Cell Dynamics



dal titolo:

**“How Microtubule–Chromosome Interactions Safeguard Chromosomal Stability”**

**Abstract:**

During cell division, microtubules capture chromosomes and pull them apart into two equal sets of DNA. Errors in this process can cause chromosomal instability, a hallmark of many diseases, including cancers, infertility and neurodevelopmental disorders. Prof. Draviam will present an overview of her group's efforts to visualise and dissect the mechanisms of human chromosome capture and segregation. Her recent work has focused on determining the impact of naturally occurring genetic variants in chromosome segregation genes, in particular, the constitutive centromere associated network (CCAN) proteins. She will highlight the consequences of harmful loss-of-function variants in the centromeric protein CENPC, which are enriched in cancers across multiple ethnicities. By combining live-cell microscopy, controlled expression of these variants, and optogenetic approaches, her group reveals how CENPC interactions are regulated through interphase and mitotic phases to ensure accurate and timely chromosome segregation. Finally, she will describe their efforts to establish Chromosome Instability Variant (CIVa) database and explore the translation of chromosome segregation research into precision medicine through variant stratification.

**Docenti, studenti e dottorandi sono invitati a partecipare.**

Seminario organizzato dalla Dott.ssa Viviana Barra