



UNIVERSITÀ
DEGLI STUDI
DI PALERMO

DIPARTIMENTO DI SCIENZE E TECNOLOGIE
BIOLOGICHE CHIMICHE E FARMACEUTICHE (STEBICEF)



CdLM BCM e BIRS Seminars
Scientist around the World

martedì 17 maggio, ore 15:00

Presso l'aula 10 del Dip. STEBICEF
Viale delle Scienze, edificio 16

la Dott.ssa Valentina Gambino

Post-doctoral fellow at the Netherlands Cancer Institute (NKI, Amsterdam)

terra un seminario dal titolo:

**A vulnerability of a subset of colon cancers with
a potential clinical utility**

Abstract: BRAF(V600E)colon cancers (CCs) have a characteristic gene expression signature, which is also found in some tumors lacking this mutation. Collectively, they are referred to as “BRAF-like” tumors and represent some 20% of CCs. We used a shRNA-based genetic screen focused on genes upregulated in BRAF(V600E) CCs to identify vulnerabilities of this tumor subtype that might be exploited therapeutically. We identify here RANBP2 (also known as NUP358) as essential for survival of BRAF-like, but not for non-BRAF-like CC cells. Suppression of RANBP2 results in mitotic defects only in BRAF-like CC cells, which lead to cell death. Mechanistically, RANBP2 silencing reduces microtubule outgrowth from the kinetochores, thereby inducing spindle perturbations, providing an explanation for the observed mitotic defects. We find that BRAF-like CC display far greater sensitivity to the microtubule poison vinorelbine both in vitro and in vivo, suggesting that vinorelbine is a potential tailored treatment for BRAF-like CCs.

Tutti gli studenti delle LM sono invitati a partecipare.

Il Coordinatore del CILB
Prof. Salvatore Feo