Jens Lüders: Microtubule organization

Highlights

- SPICE, a novel centrosome protein, is a dual-function regulator that participates in centriole duplication and chromosome congression during mitosis
- The gamma-tubulin ring complex, the main nucleator of microtubule polymerization, contains several previously unidentified core subunits. It is regulated by a network of constitutive as well as mitosis-specific interactors.
- GCP8 is a novel core subunit of the human gamma-tubulin ring complex. GCP8 has no obvious role in mitotic spindle assembly, but participates in microtubule organization at centrosomes specifically in interphase.

Publications


Collaborations

- Composition and regulation of the human γTuRC. Carme Caelles, IRB Barcelona (Barcelona, Spain); Steven P, Gygi, Harvard Medical School (Boston, United States); Joan Roig, IRB Barcelona (Barcelona, Spain); Judit Villen, University of Washington (Seattle, United States)
- Functional analysis of the centrosomal protein SPICE. Laurence Pelletier, Samuel Lunenfeld Research Institute (Toronto, Canada)
- Regulation of microtubule nucleation through phosphorylation. Joan Roig, IRB Barcelona (Barcelona, Spain); Carme Caelles, IRB Barcelona (Barcelona, Spain)
Research projects

