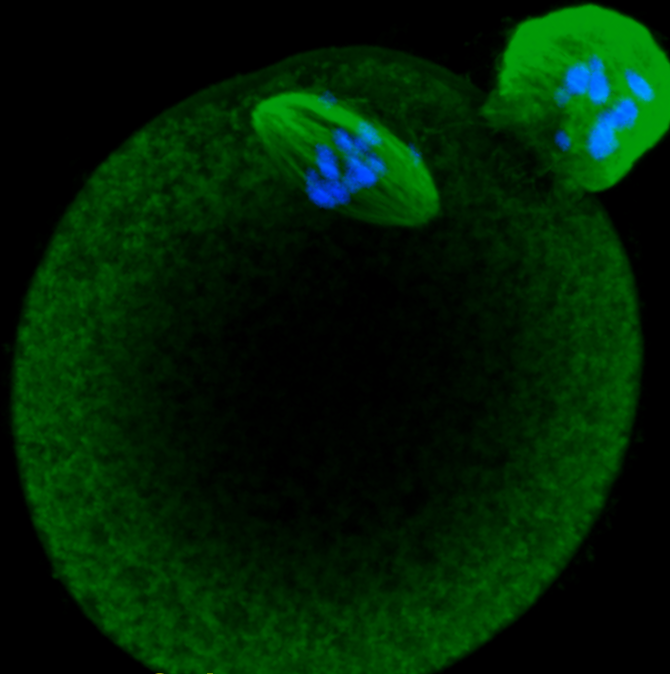


Hurp and
acentriolar spindle assembly in the mouse oocyte



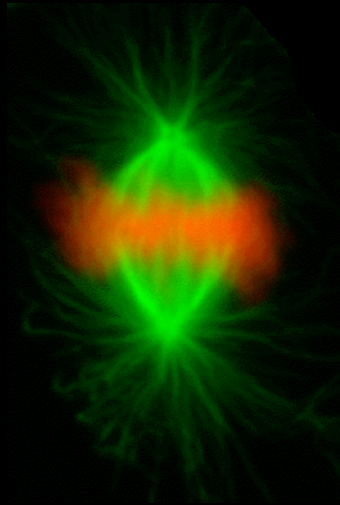
Stéphane Brunet



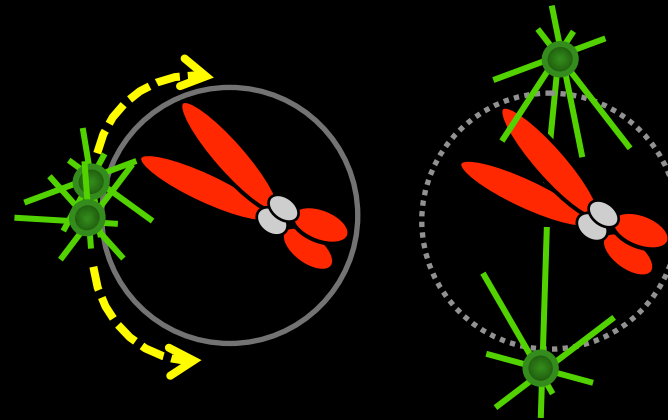
Manuel Breuer

Marie-Hélène Verlhac group
Developmental Biology CNRS-U Paris 6, France

Mitotic centriolar spindle assembly



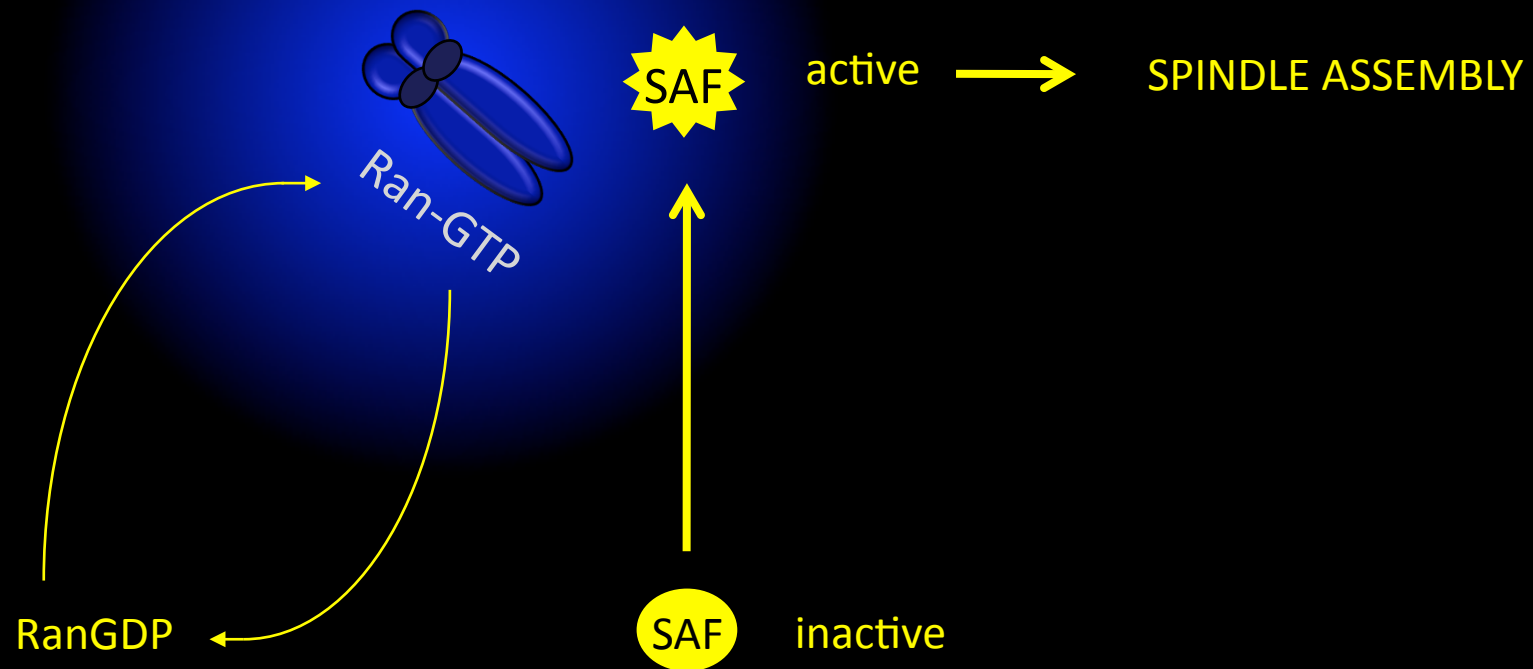
<http://mitchison.med.harvard.edu/>



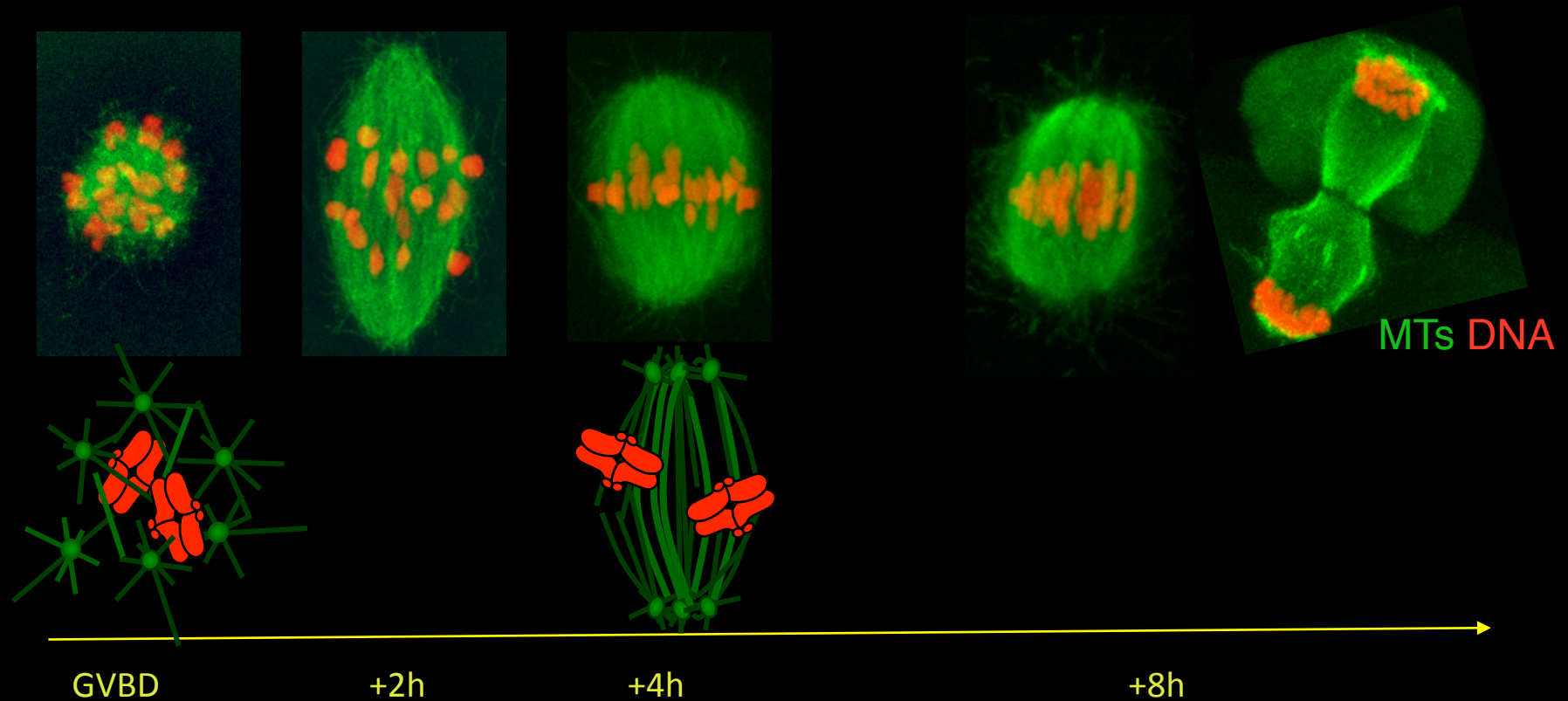
NEBD

MTs DNA

Chromosomes, Ran-GTP and Spindle Assembly Factors activation

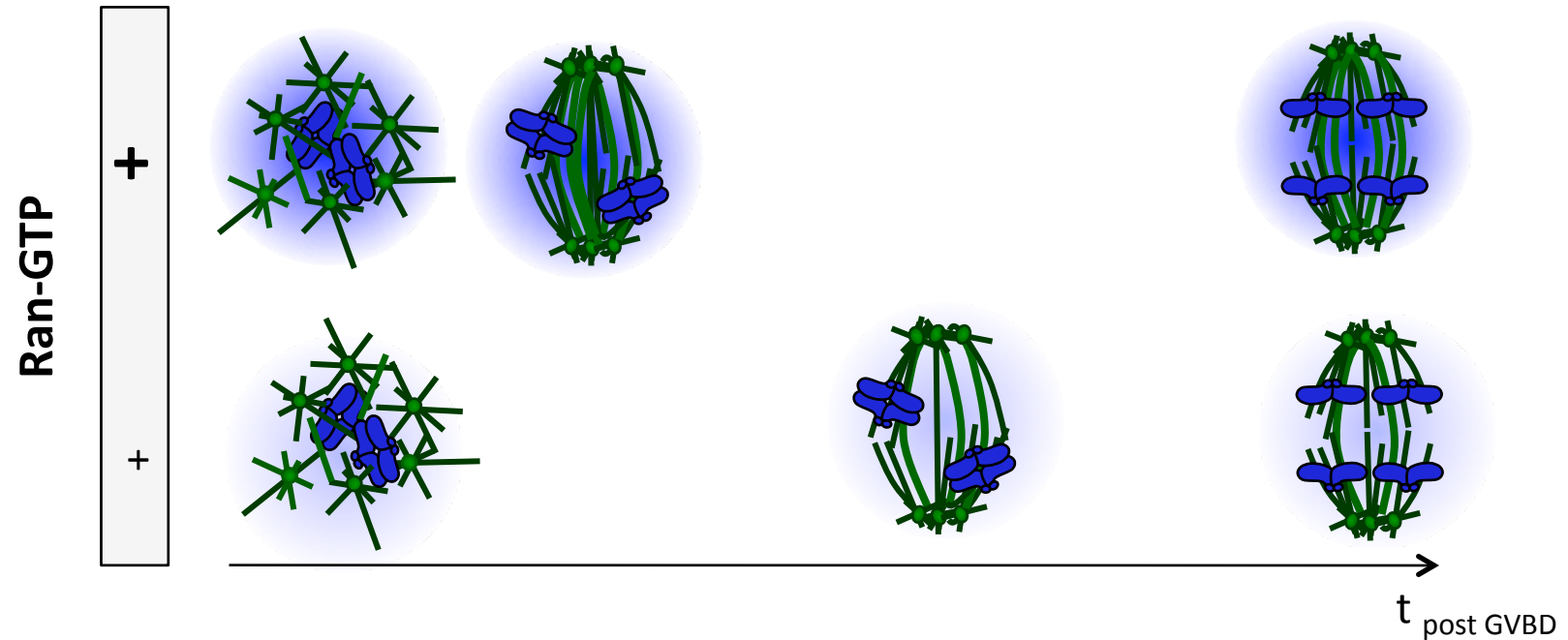


Meiosis I acentriolar spindle assembly



- How is bipolarity set-up in the absence of centrioles ?
- How do Chromosomes participate in this process?

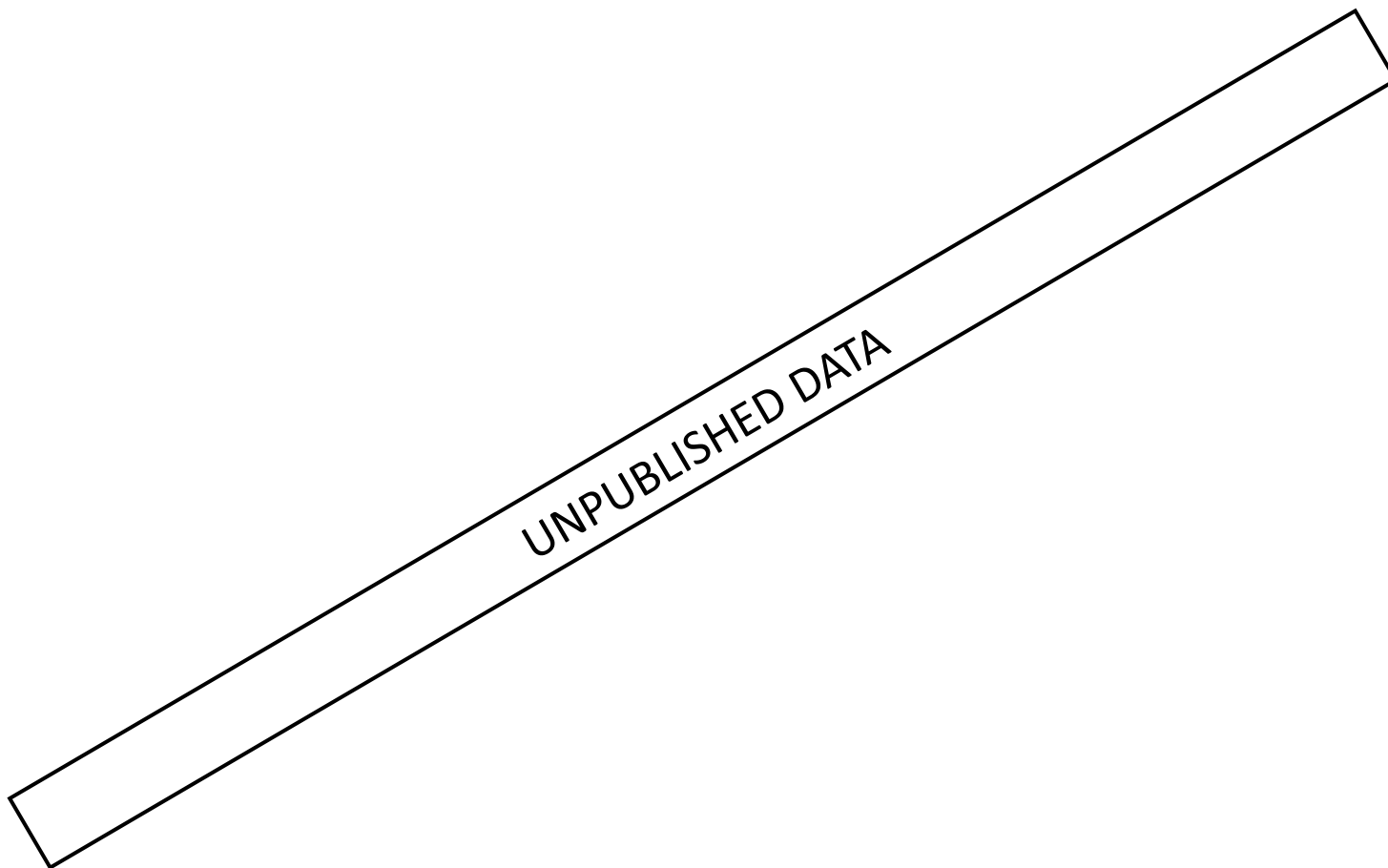
Ran-GTP and acentriolar spindle assembly in mouse oocyte



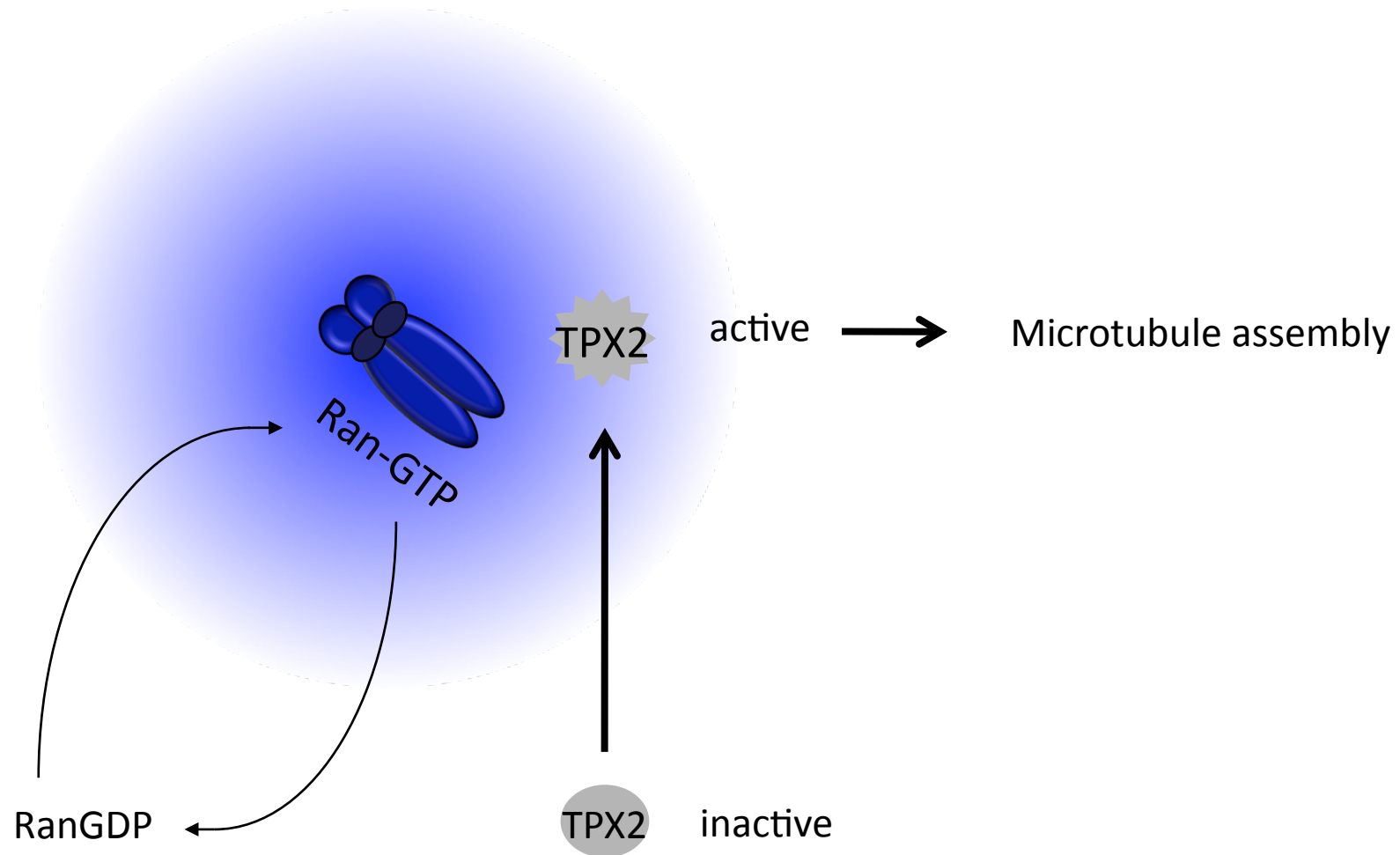
Dumont et al, JCB 2007

Ran-GTP target(s) involved in spindle bipolarization?

... HURP (Hepatoma Up-Regulated Protein)
a mitotic Ran-GTP target required for chromosomes congression

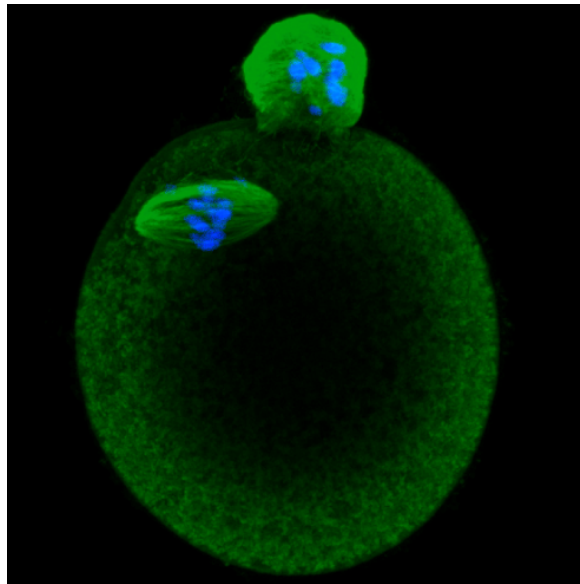


TPX2 is a Ran GTP dependant microtubule nucleator

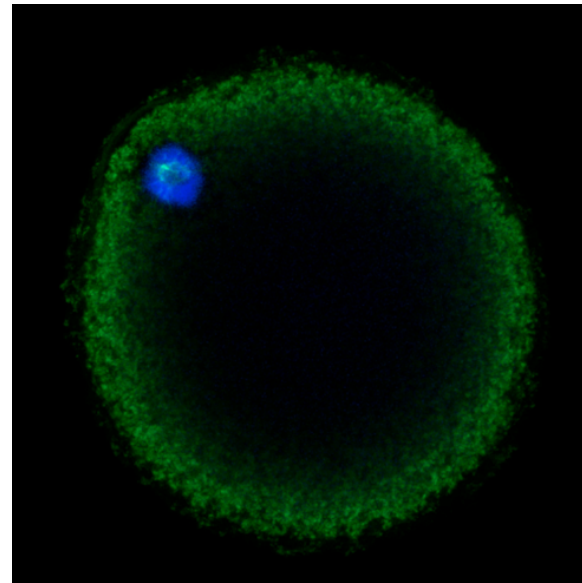


**TPX2 depletion induces
a dramatic reduction in microtubule density and spindle collapse**

control si

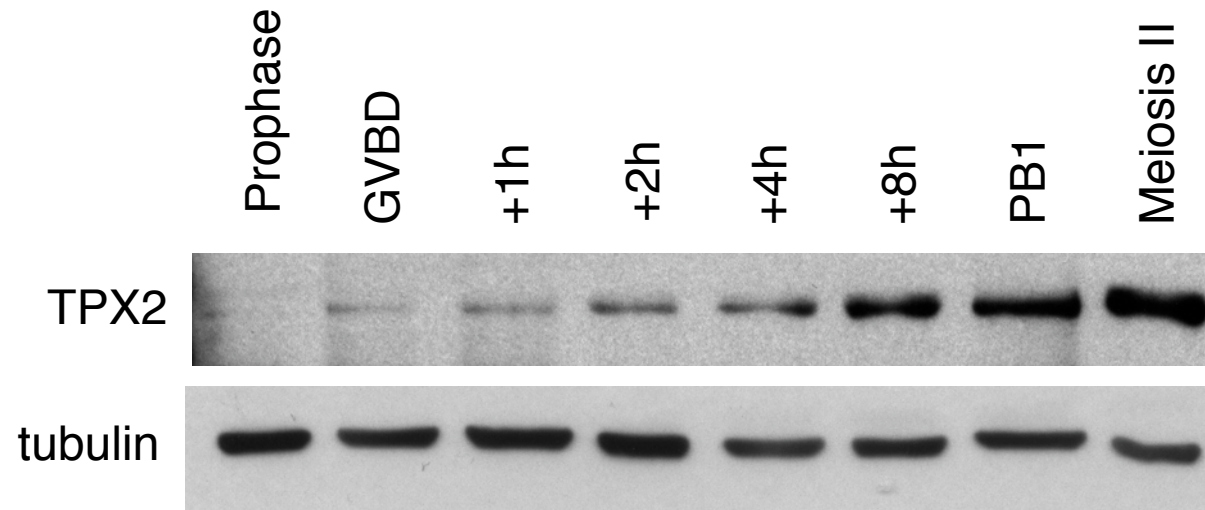


si TPX2



Brunet et al, PLoS One 2008

TPX2 accumulates progressively during meiotic maturation



TPX2 partially compensates Hurp deficiency during Meiosis I delay

Jessica Azouri

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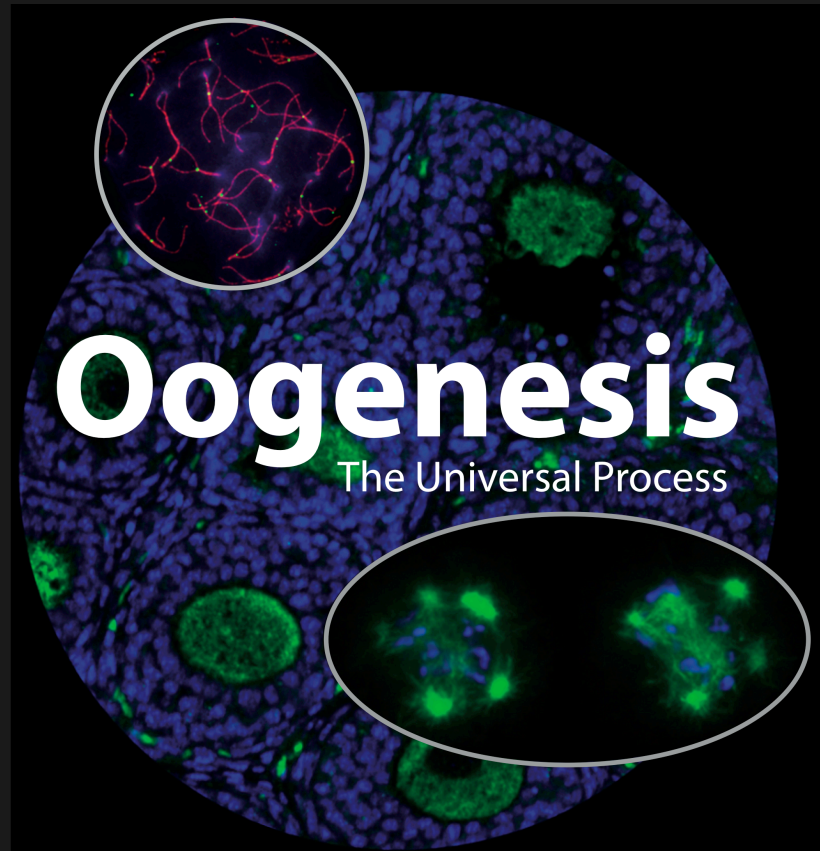
Ting-Fen Tsai, Taiwan



... soon

Editors

Marie-Hélène VERLHAC / Anne VILLENEUVE



 WILEY-BLACKWELL