

**POST-DOC POSITION IN CELL AND DEVELOPMENTAL BIOLOGY.**  
**INSTITUTE OF BIOLOGY-VALROSE, NICE, FRANCE**

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Position available (starting oct./dec. 2018) in Pascal Théron laboratory to functionally characterize Hedgehog secretion and spreading in *Drosophila*. Hedgehog proteins are key signaling mediators that govern a wide range of processes during embryonic development and adult tissue homeostasis from *Drosophila* to human. Hedgehogs are the only metazoan proteins known to possess a covalently-linked cholesterol moiety. Our laboratory is interested in how Hedgehog proteins traffic in the producing tissue and exert their function in the receiving tissue.

We have shown that the Endosomal Sorting Complex Required for Transport (ESCRT) promotes Hedgehog proteins loading on exo-vesicles to exert their effect at long distances. The post-doctoral project aims to gain further insight into the trafficking, vesicular secretion and the extracellular spread of Hedgehog proteins through tissues using cell biology and genetic technics. Moreover, *in vivo* imaging and single molecule tracking (in collaboration with computational science lab) has been developed on our tissue models and will be further used to investigate the dynamics of Hedgehog release and spreading.

Interested candidates should have strong knowledge of, and experience in fly genetics, cell biology and optic microscopy (confocal/spinning disc). The position is funded for 3 years in duration. Candidates must have a Ph.D. degree, and can be nationals of any country.

**Selected references:** Ayers et al., *Dev. Cell* 2010 vol18, 605–620; Briscoe and Théron, *Nat Rev Mol Cell Biol.* Vol. 14, 2013; Matusek et al., *Nature* 2014 Dec 4;516(7529): 99-103; D'Angelo et al., *Dev. Cell* 2015 Feb. 9 ; 32, 290-303.

Candidates should send a Curriculum Vitae and a list of three referees to:

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