



## 2017 IGBMC Summer Internship

### Neuroimmunity

Laboratory of Dr Angela Giangrande

The immune system allows us to respond to external challenges and regulate many physiological processes, including metabolism that affect neurodegeneration, ageing and reproduction. *Drosophila* hemocytes behave as professional scavenger cells and originate through two hematopoietic waves. The primitive wave occurs in the embryonic procephalic mesoderm, the definitive wave in the larval lymph gland. The relative contribution and role of the two waves is not known.

The student will analyze the role the first wave by specifically killing the hemocytes arising from the primitive wave. We have the genetic tools and strains allowing for such experiment. The student will confirm that the genetic ablation has been successful by immunohistochemistry and will analyze the viability, ageing and reproduction of the animals devoid of primitive hemocytes.