Philippe Herbomel.
"Developmental hematopoiesis in zebrafish: from stem cells to tissue leukocytes"
IBV Auditorium 3. May 15. 15.00

Unité Macrophages et Développement de l'Immunité
Département de Biologie du Développement
Institut Pasteur
Paris, France.

Philippe Herbomel is a pioneer in the development of imaging methods to analyze the early development of blood cells in the zebrafish model, whose transparency allows live cell imaging in tremendous detail. His group has made many significant discoveries, for example, the identity of an "early" lineage of macrophages, which constitute the embryo's first leucocytes (white blood cells). Analogous early macrophages have been found in all vertebrate model species. In the zebrafish, they have found that they originate from an unexpected small region of the embryo: the cephalic lateral mesoderm, just adjacent to the cardiac territory (whereas all other leucocyte types that arise later originate from hematopoietic stem cells born at the other end of the embryo, from the caudal mesoderm. In a recent paper he showed in a series of videos how macrophages are able to catch *E.coli* from the blood like ‘fly-catchers’ whereas when the bacteria are on the surface of tissues the neutrophils act like ‘vacuum cleaners’. His images and movies are really impressive and colorful and will be appreciated by artists as well as scientists.