

**Post-doctoral position at the interface between  
Immunology / Cancerology / Vascular biology  
Team of Dr Jean-Philippe GIRARD (IPBS)  
CNRS and University of Toulouse, France**

(<http://www.ipbs.fr/?-Vascular-Biology-Endothelial-cells-&lang=en>)

**A post-doc position funded for 2 years by the IDEX University of Toulouse** is available in the team of Dr Jean-Philippe GIRARD (*Director of IPBS*) to work on "High endothelial venules (HEVs) blood vessels against cancer: regulation, function in lymphocyte recruitment and therapeutic impact" (*Key words: blood vessel – endothelial cell - lymphocyte – solid tumor*).

**Project:** We recently found that some blood vessels present within the tumor microenvironment can be associated with favorable prognosis by contributing to tumor suppression rather than tumor growth (*Martinet, ... and Girard, Cancer Res 2011*). These specialized blood vessels, designated high endothelial venules (HEVs), are normally found in lymph nodes where they mediate lymphocyte entry from the blood (*Girard et al., Nat Rev Immunol 2012*). A high density of tumor-associated HEVs in human breast carcinomas was associated with high levels of cytotoxic lymphocyte infiltration, indicating that HEVs may participate in the eradication of tumors by facilitating access of 'killer' lymphocytes into tumor tissues. It is thus important to better define the mechanisms regulating HEV phenotype and function. These mechanisms are still poorly understood, despite our recent data indicating a critical role for dendritic cells in the process (*Moussion and Girard, Nature 2011*).

The major objective of the present project is to explore the role of HEV blood vessels in cancer by characterizing their regulation, function in tumor suppression and therapeutic impact (including influence on the response to cancer therapeutics) using mouse tumor models and tools available in the team (HEV-reporter lines, gene-targeted mice, function-blocking antibodies, intravital microscopy, multiphoton in vivo imaging, HEV-inducing compounds). These studies will open up new horizons for cancer research and treatment. Novel therapeutic strategies based on the modulation of tumor-associated HEVs could have a major impact on clinical outcome of cancer patients.

**Requirement:** PhD in Immunology, Vascular Biology or Cancerology with strong background in animal experimentation (*in vivo* analysis of mouse models). Previous experience in flow cytometry and/or intravital microscopy will be appreciated.

**Contract:** 2 years full time post-doc position funded by IDEX-ANR (starting date: between 01/10/15 and 01/12/15). The salary is in accordance with the CNRS researcher salary scale.

**How to apply:** Please, send your application (in French or English, including a motivation letter, curriculum vitae, technical expertise and list of publications) to [Jean-Philippe.Girard@ipbs.fr](mailto:Jean-Philippe.Girard@ipbs.fr) (Offer published on August 24<sup>th</sup> 2015; Deadline: the position will remain open until filled; only successful applicant will be contacted)



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