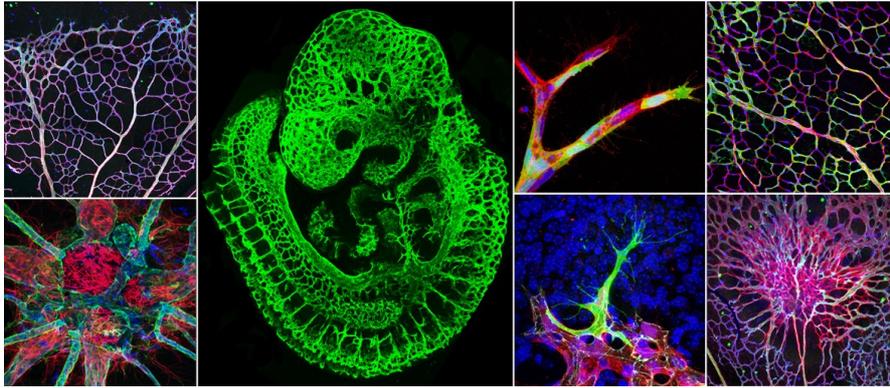


Postdoctoral Position

Vascular Morphogenesis Lab



The [Vascular Morphogenesis Lab](#) is recruiting highly motivated postdoctoral fellows under the project [AXIAL.EC \(id:679368\)](#), funded by the European Research Council (ERC).

Candidates should contact Claudio Franco at cfranco@medicina.ulisboa.pt

Research Focus

The formation of a functional patterned vascular network is essential for development, tissue growth and organ physiology. Several human vascular disorders arise from the mis-patterning of blood vessels, such as arteriovenous malformations, aneurysms and diabetic retinopathy. Although blood flow is recognised as a stimulus for vascular patterning, very little is known about the molecular mechanisms that regulate endothelial cell behaviour in response to flow and promote vascular patterning. Projects are on the following topics:

- Endothelial cell biology in development and disease (cancer; AVMs; ischemic disease);
- Coordination of cell migration and cell polarity;
- Novel regulators of flow-dependent endothelial cell polarisation.

The [Vascular Morphogenesis Lab](#) is located at the **Instituto de Medicina Molecular (iMM)** at the heart of Lisbon. iMM has a young, multidisciplinary and vibrant international research environment. iMM hosts 9 ERC grantees, 2 Howard Hughes Medical Institute Scholars, 3 EMBO Young Investigators and 1 Bill and Melinda Gates Foundation grantee.

Selected Publications

- 1- **Franco CA**, et al. Non-canonical Wnt signaling modulates the endothelial shear stress flow sensor in vascular remodeling. *eLIFE* 2016 Feb 4;5. pii: e07727.
- 2- **Franco CA**, et al. Dynamic endothelial cell rearrangements drive developmental vessel regression. *PLoS Biol.* 2015 May 14;13(5):e1002163
- 3- Bentley K, **Franco CA**, et al. The role of differential VE-cadherin dynamics in cell rearrangement during angiogenesis. *Nat Cell Biol.* 2014 Apr;16(4):309-21.
- 4- **Franco CA**, et al. SRF selectively controls tip cell invasive behavior in angiogenesis. *Development.* 2013 Jun;140(11):2321-33.
- 5- Stenzel D*, **Franco CA***, et al. Endothelial basement membrane limits tip cell formation by inducing Dll4/Notch signalling in vivo. *EMBO rep.* 2011 Oct 28;12(11):1135-43. *co-first.
- 6- Guarani V, **Franco CA***, Deflorian G*, et al. Acetylation-dependent regulation of endothelial Notch signalling by the SIRT1 deacetylase. *Nature.* 2011 May 12;473(7346):234-8. *co-second.
- 7- Jakobsson L, **Franco CA**, et al. Endothelial cells dynamically compete for the tip cell position during angiogenic sprouting. *Nat Cell Biol.* 2010 Oct;12(10):943-53.
- 8- **Franco CA**, et al. Serum response factor is required for sprouting angiogenesis and vascular integrity. *Dev Cell.* 2008. Sep;15(3):448-61.