

Hematopoietic cells marked by CD41 expression interact with migrating venous sprouts as the parachordal vessel and lymphatic primordium is formed.

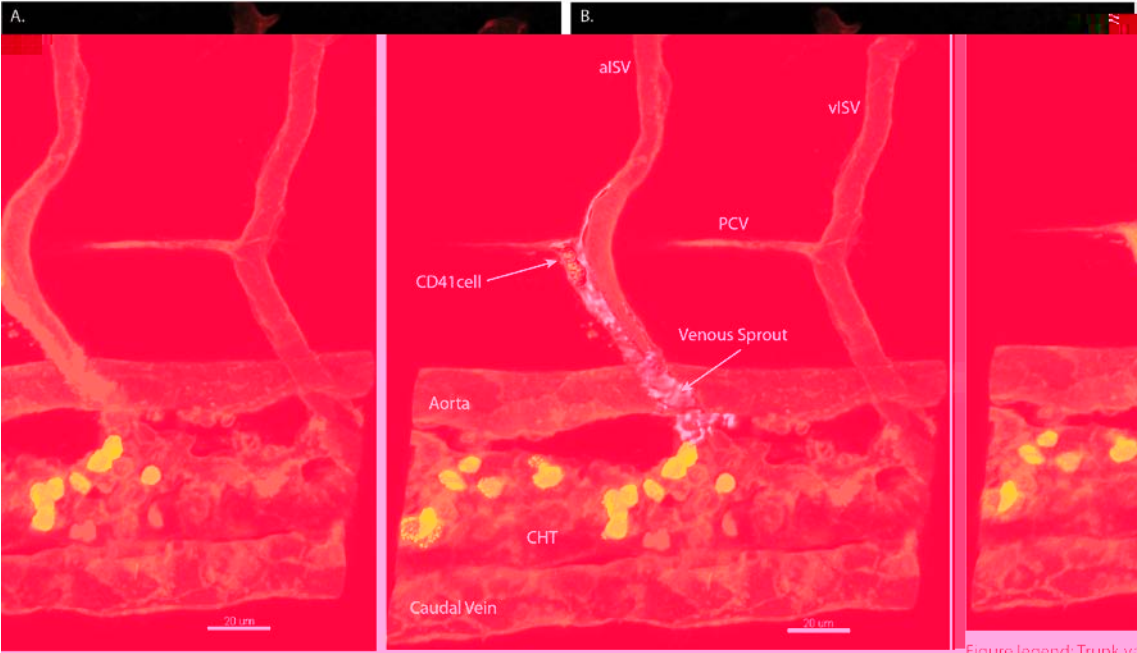


Figure 1. The cellular architecture of a transgenic 3 day old zebrafish embryo. Two intersomitic vessels run vertically, the aorta and caudal vein run horizontally with the CHT (caudal hematopoietic tissue) developing between the aorta and caudal vein. A) A double transgenic *itga2b:eGFP*; *cd41:EGFP* zebrafish embryo highlights the hematopoietic cell population of interest in green (CD41 positive cells, that develop in the CHT) and the vascular tree in red. A confocal microscope. A maximum intensity projection of a z-stack that contains the left side of the embryo is shown, from the exterior of the embryo to the lumen of the aorta. B) A imaging software reconstructed view illustrating a venous sprout, in shades of grey (arrow), that migrates from the caudal vein to the lumen of the aorta. This venous sprout, that will contribute to the parachordal vessel (PCV), which in turn is the source of lymphatic endothelial cells. These venous sprouts are fated to become lymphatic vessels 2 days later. aISV, arterial InterSomitic Vessel and vISV, venous InterSomitic Vessel.

Figure legend: Trunk vessels run horizontally with the CHT. The vascular tree is in red and the CD41 cells are in green. The venous sprout is in shades of grey and a CD41 cell within the CHT is in green.