

Figure 1: Block of medial tissue extracted from the rat aortic wall. Colours represent: cells (blue); surrounding matrix of structural molecules (green and yellow); and elastic lamellae (red).

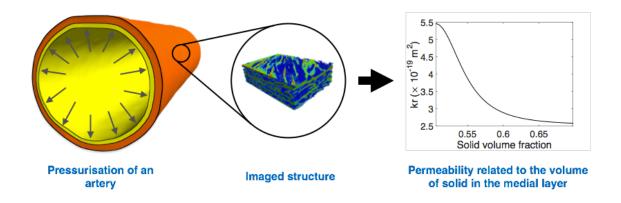


Figure 2: From left to right: 1) Pressurisation of rat aortic artery (Four pressures 40, 80, 100 and 120mmHg) 2) Structure extracted for each pressure and permeability determined. 3) Permeability related to the solid volume fraction (cells and structural proteins) in the arterial wall.

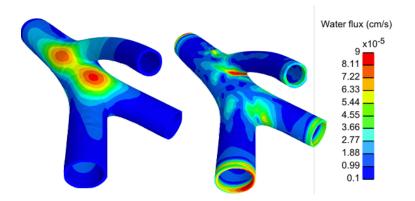


Figure 3: On the left: Deformation of a rat aortic bifurcation due to internal pressurisation, blue: small deformation and red large deformation. On the right: the resulting water flux in the medial layer of the arterial wall.