

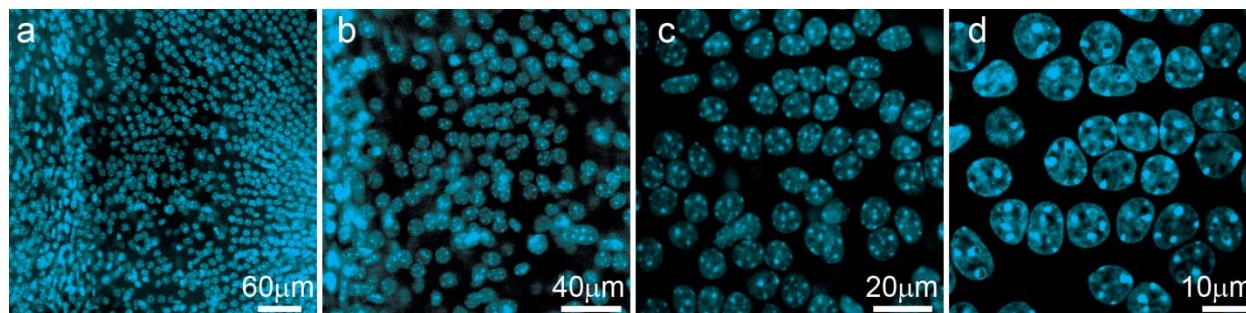
## Electronic Supplementary Information

### Chamber and Microfluidic Probe for Microperfusion of Organotypic Brain Slices

Arthur Queval, Nageswara R. Ghattamaneni, Cécile M. Perrault, Raminder Gill, M. Mirzaei, R. Anne McKinney and David Juncker

Technical drawings and design file:

Supplementary technical drawings show the perfusion chamber. The *design.zip* file contains the Autodesk design files including the main chamber (base.ipt), The metal plate with the perfusion cut-out, (metal\_sheet.ipt) the PTFE sheet, The inner and outer gasket and the 2 thin laser cut metal sheets. The "2" at the end of the filename corresponds to the 22x22 mm<sup>2</sup> coverslip version ( If there is no the number "2" at the end means that it corresponds to the 12x24 mm<sup>2</sup> version).



**Fig. S1.** Organotypic brain slice with stained cell nuclei mounted inside the perfusion chamber and imaged using an inverted confocal microscope. A representative cross-section for different magnifications are shown using a (a) 10×, (b) 20×, (c) 40×, and (d) 60× objective.

**Video S1.** Confocal stack showing the microfluidic stream (red) and the organotypic slice. The stack comprises 84 cross-sections above the coverslip with a spacing of 0.9 μm and which are played at a rate of five frames per second