Focusing and de-focusing transition depending on the ratio $Q_{\text {out }} / Q_{\text {in }}$ where $Q_{\text {out }}=0.1 \mathrm{ml} / \mathrm{min}$ and $0.250<Q_{\text {in }}<3 \mu \mathrm{l} / \mathrm{min}$



2D axisymmetric COMSOL Multiphysics ${ }^{\circledR}$ simulations of the velocity streamline in the millichannel, where $Q_{\text {out }}=400 \mu \mathrm{l} / \mathrm{min}$ and a) $Q_{\text {in }}=10 \mu \mathrm{l} / \mathrm{min} ; \quad$ b) $Q_{\text {in }}=100 \mu \mathrm{l} / \mathrm{min}$

