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M2 Internship offer in the OrgaScreeen Project Team
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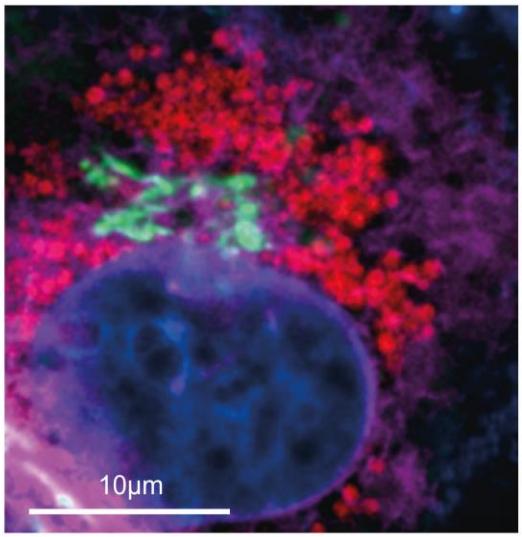
Microfluidic generation and sorting of biological samples

One of the critical questions of cell biology is how cells respond to dynamic collections of external stimuli. Such a question is challenging because of the cell complexity due to multiple pathways involving many of its subunits. Therefore, many evolving techniques are devoted to studying intracellular architectures better, focusing on organelles' behavior, positioning, communication, etc. How about disassembling such an organization for better studying and understanding the function of each piece of the cell ?



Our lab recently embarks in an entrepreneurship adventure through developing a new technology for the high-throughput recovery and sorting of biological samples, following the lysis of the cell membrane. This procedure leads to a mixture comprising many cellular objects, which we aim to recover, sort and further analyze.

The main objective of the internship is to:

- Design microfluidic chips to enable the controlled rupture of cell membrane on chip
- Set optimal conditions for on chip-harvesting of cellular objects
- Develop on-chip sorting system

To reach these aims, we are looking for a student trained in microfluidics and interested in working in an entrepreneurial environment, interacting with multidisciplinary scientists. Indeed, the intern would work in close collaboration with two postdocs developing the technology. She/he will also benefit from the biophysics and cell biology expertise present in the team, and have the chance to follow and get involved in a translational research project.

If you are interested by this offer, please contact vincent.faugeras@phys.ens.fr, and send your CV and master marks.