

## Microscopy image analysis

I am currently working at IDSIA on the acquisition and analysis of microscopy images in the context of In Vitro Fertilization, in collaboration with biologists and clinicians at IIRM.

We aim at improving success rates of IVF procedures by means of new quantitative indicators of zygote and embryo viability, obtained through image segmentation, 3D reconstruction from image stacks, and data mining.

Previously, in Spring 2008 I worked as a research intern at the Institute for Health and Consumer Protection (IHCP) at the Joint Research Center of the European Commission, in Ispra.

I was with the Nanotechnology and Molecular Imaging unit, where I experimented with image acquisition using an automated microscope, and developed and tested several algorithms for processing such images and performing quantitative measurements in the context of toxicity assays.