Phd or Postdoctoral positions in Quantitative Biology of Cell Division

Open position (either Phd or post-doc) to work on evolution, development of resistance and cancer in the Quantitative Biology group lead by Andrea Ciliberto at IFOM (Milan). The project will explore mechanisms that cells adopt to overcome the effect of drugs inhibiting cell division, following our established research line (see: Bonaiuti et al, Curr Biol, 2018; Gross et al, PLoS Comp Biol, 2018; Corno et al, Life Sci All, 2019).

Successful applicants will use laboratory evolution experiments to uncover mechanisms underlying the development of resistance in cells mimicking treatment with DNA-damaging drugs. The project stems from a collaboration with the lab of David Szuts at the Institute of Enzymology of Budapest (Poti et al, Genome Biol, 2019; Nemeth et al, Int J Cancer, 2019; Nemeth et al, DNA Repair, 2020). In the framework of the collaboration, the project can accommodate for extended periods spent in the two labs (primarily: yeast and models in Milan, mammals and genome analysis in Budapest).

The project will require experimental work on model systems (yeast and mammalian cells) and/or quantitative approaches (statistics, programming). Experience in either experimental biology or genomic analysis and mathematical models is required. If you possess both, that is fantastic, but either one of them will suffice to take over the project. The Phd lasts four years, and comes with a fellowship (some options can be found [here](https://www.ifom.eu/en/training/)).