

## Master Project Proposal

**Title: Deciphering the molecular paths towards cancer development and cell differentiation**

**Synopsis:**

Research in the SAlmeida lab @iMM focuses on the molecular mechanisms that drive cancer development and embryonic stem cell differentiation. We are particularly interested in understanding how do cells cope with DNA damage and how do they set the gene expression programs that drive specific functions. To this end, we employ a multidisciplinary research strategy that combines experimental tools and approaches from areas like molecular biology, advanced single-molecule & live-cell microscopy, next-generation sequencing and computational biology, CRISPR/Cas9 genome editing, culture of embryonic stem & cancer cells, etc.

Our lab offers one position that will be filled by a highly motivated master student. The selected student will have the opportunity to choose from our current projects the one that better fits her/his preferences. Students seeking 100% computational biology or wet-lab (i.e. experimental bench-work) projects and students looking for hybrid projects that merge computational biology and wet lab practice are equally welcome to apply.

**Supervisor:** *Sérgio de Almeida, SAlmeida lab @iMM, [sergioalmeida@medicina.ulisboa.pt](mailto:sergioalmeida@medicina.ulisboa.pt)*  
*Webpage of the group: <https://imm.medicina.ulisboa.pt/en/investigacao/labs/almeida-sergio-lab/>*

**Remunerated or volunteer training:** volunteer