

My name is **Amel Djoudi** and I am 2<sup>nd</sup> year PhD student in nanomedicines in GLIAD team at CRCINA Angers (France). My academic background is a bachelor degree in biochemistry at University of Rennes 1 then a master degree in biopharmacy and pharmaceutical technology at University Paris Saclay. My thesis is currently funded by la Ligue Contre le Cancer, a non governmental private organization whom specific goal is prevention, promotion of cancer tracing, support sick patients and their families and helping with financial support research in all areas linked with cancerology.

My PhD project consists on developing biodegradable and biocompatible hydrogels imbedding nanoparticles that are loaded with BMP-4, a cytokine involved in various biological processes and mainly in differentiation processes. This latter is formerly nanoprecipitated then encapsulated in PLGA nanoparticles. This innovative scaffold is meant to be injected in a nude rat model brain resection cavity, in order to see if it induces a differentiation process, sequentially studied by immunohistochemistry of obtained brain slices.