PhD Student through a CIFRE Contract

Predicting Multiple Myeloma Patients' Response to Treatment for Developing Precision Medicine Strategies

Multiple myeloma (MM) is a mostly incurable malignant disease of clonal plasma cells that accumulate in the bone marrow. Our vision is that treatment improvements will come from detailed molecular analyses to develop individualized therapies taking into account the molecular heterogeneity and subclonality evolution. Genome and epigenome sequencing has been performed to define the tumor and intra-tumor heterogeneity, understand the molecular events involved in myelomagenesis and clonal evolution, identify new prognostic factors and develop personalized treatments.

Diag2Tec mission is to develop precision medicine approaches in hematological cancers, particularly in MM.

Diag2Tec is seeking a PhD Student through a CIFRE contract in Montpellier. CIFRE positions (Industrial Agreements for Training through Research) are 3-year fixed term for PhD students in France who will work in collaboration with a public research lab. To implement this current PhD project, Diag2tec collaborates with the research group "Maintenance of genome integrity during DNA replication" at the Institute of Human Genetic (Montpellier, UMR CNRS-UM 9002), which disposes an optimal asset to tackle this project, both from the molecular and the clinical sides.

In our project, we plan to:

- 1. Identify new predictive biomarkers of MM tumor cells response to different types of treatment.
- 2. Develop a bioinformatics tool to integrate our set of biomarker signatures for predicting MM patients' response to treatment
- 3. Develop and validate a therapeutic guidance tool, "Chemogram", taking into account the in vitro response of tumor cells to drugs used in the therapeutic management of patients.

Candidates must be highly motivated and hardworking with experience in molecular and cell biology, and in bioinformatics. We offer the opportunity to conduct high quality research in a supportive environment. The appointment will begin in early January 2019.

Please email your CV, a statement of research interests, a copy of your transcript of records (Master 1 and 2) and the names of two references to: contact@diagt2tec.com