Job offers – 3 Years Research Fellowship

Biological Sciences:
Epi_MCL - Dismantling epigenetic resistance in aggressive Mantle cell lymphoma

As part of the **Epi_MCL** project, supported by the PLBIO-2025 call from the French National Cancer Institute (INCa), the reMoVE-B team at CRCI²NA (Nantes) is seeking a Postdoctoral associate for a fixed-term position of **36 months**.

The **Epi-MCL** project brings together basic (A. Papin and D. Chiron, Nantes) and translational (M. Cheminant and A. Touzart, Necker) researchers focused on resistance in hematological malignancies. The partner teams share a strong interest in advancing fundamental knowledge on the role of epigenetic dysregulation for future clinical applications, particularly on their common Mantle cell lymphoma (MCL) model, through their French networks (LYSA, Carnot Institute CALYM) and European collaborations (European MCL Network).

The reMoVE-B team gathers around twenty members (faculty, researchers, engineers/technicians, and students) dedicated to studying resistance mechanisms in mature B-cell malignancies, such as Multiple Myeloma and Mantle cell lymphoma. To uncover vulnerabilities within the tumor ecosystem, we combine fundamental and translational approaches, working closely with the University Hospital of Nantes. Our research spans intrinsic and epigenetic resistance, intercellular communication, and key signaling pathways in the immune microenvironment. More details can be found on our website → Team 11 CRCI2NA.

Mission and Project:
Despite advances in tumor molecular profiling and the characterization of their malignant ecosystem, therapeutic resistance remains a major challenge in aggressive lymphomas. Epigenetic deregulations, such as DNA or histone methylations, have emerged as key drivers of resistance in many cancers, yet their functional consequences remain poorly understood. In the Epi-MCL project, we will use mantle cell lymphoma (MCL), an aggressive and incurable B-cell lymphoma, as a model to explore how epigenetic modifications contribute to tumor resistance. Our main objectives are:

1) to characterize the molecular impact of DNA methylation and histone methylation (via NSD2, frequently deregulated in MCL) on tumor resistance,

2) to determine how these epigenetic alterations contribute to the overactivation of resistance pathways (e.g., NFkB pathways), and

3) to define novel signatures integrating epigenetic regulations to improve risk stratification in MCL patients.

This project relies on high-throughput technologies (EPIC array, Cut&Run, transcriptomic signatures), functional models (cell lines, primary sample cultures, PDX), genetic editing tools (CRISPR/Cas9), and access to translational research biological material (clinical trial samples). We hope to gain new insights into the molecular and functional impacts of epigenetic alterations (DNA methylation, NSD2 gain-of-function) on chromatin remodeling, transcriptional regulation and resistance pathways. Our project aims to deepen our understanding of resistance and identifying new biomarkers and therapeutic targets to improve treatment strategies for cancer patients.

This position offers an excellent opportunity to contribute to high-impact research within a dynamic and dedicated team. The candidate will join Team 11 CRCI²NA and benefit from established expertise in cell death, epigenetics, omics, and technical support of the team.

Team publications related to the project:

- Sarkozy et al. Blood. 2025 Mar 29:blood.2023022351
- Durand et al. Haematologica. 2024 Aug 1;109(8):2574-2584
- Decombis et al. Blood. 2023 Nov 2;142(18):1543-1555
- Decombis et al. Haematologica. 2022 Dec 1;107(12):2905-2917
- Le Gouill et al. Blood. 2021 Feb 18;137(7):877-887

Candidate Profile

The candidate should have a solid background in cancer biology as well as epigenetics. Prior experience in cell culture is essential. Additional experience in hematology and high-throughput data analysis would be an asset.

The candidate is expected to work effectively as part of a team, demonstrating strong interpersonal and communication skills, adaptability, organizational rigor, scientific integrity, and the ability to work independently. Motivation and a proactive attitude are essential.

The applicant will be expected to be both eligible and competitive for external funding and to apply for grant/fellowship support during the 3-year term, with the intention that this will lead to a tenured position.

Required Education Level or Diploma

PhD, Biology

Contract

The selected candidate will be hired by INSERM to work at CRCI^{2}NA under the direct supervision of Dr. David Chiron and Dr. Antonin Papin, in close collaboration with the team's students and research engineer. The position (36-month fixed-term contract) is expected to start in **January 2026**.

Please send your application, including a CV and a cover letter highlighting your relevant skills for the position to:

Antonin Papin, Assistant Professor (MCU), Nantes Université.
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and

David Chiron, Research Director, CNRS
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