



POSTDOCTORAL RESEARCHER AT INEM/RARECELLS DIAGNOSTICS

The Institut Necker-Enfants Malades (**INEM**), created in January 2014, is an international biomedical research center located on the Necker Hospital campus, and supported by the French National Institute of Health and Medical Research (INSERM), the French National Center for Scientific Research (CNRS) and the University of Paris. The INEM is the hub for cellular and molecular biology at University of Paris, one of the World's leading universities. The Institute draws together over 100 talented scientists who are working together to translate research discoveries into applied more effective diagnostics and therapies.

The Circulating Rare Cells Research team is working in a public/private partnership with the Company **Rarecells Diagnostics**. Rarecells Diagnostics (www.rarecells.com, www.isetbyrarecells.com), is an innovative and dynamic company based in France and in the US, spin-off of Paris Descartes University, INSERM and APHP. Through its proprietary technology, the Isolation by Size or Tumor Cells (ISET®) for isolation and characterization of Circulating Tumor cells (CTC), internationally recognized by 85 independent scientific publications, Rarecells has provided a novel paradigm to the field of circulating tumor cells (CTC) as well as fetal cells and has implemented the ISET® technology in international Cancer Centers of excellence. Rarecells products have the IVD-CE mark.

See Arte channel: <u>https://www.youtube.com/watch?v=qbiH7axplb1</u>

Job characteristics:

The post-holder will be based at INEM in the Circulating Rare Cells Research team within the "PRL/GH Pathophysiology: translational approaches" laboratory (Director: Dr Vincent Goffin) and will report directly to Professor Patrizia Paterlini-Bréchot, MD, PhD, inventor of the ISET® Technology.

Location: Paris **Duration:** Initially for 1 year with possibility to extend **Salary:** According to experience

Infrastructure:

The research lab is fully equipped to perform technology developments, cell culture, cellular and molecular studies, immunolabelling and single cell genetic analysis. This includes a laser microdissection system, equipment for single cell micromanipulation as well as a three step forward PCR lab space and equipment. The team has also access to the fully equipped Institut Imagine CGH and Next generation sequencing platform (Life technology and Illumina instruments).

Project outline:

The collaborative project, funded within Transcan-JTC 2016 and entitled CLEARLY: Validation of multiparametric models and circulating and imaging biomarkers to improve lung cancer early detection aims to investigate mutations and transcript profiles of individual tumor cells circulating in blood of patients with lung cancer using advanced single cell-based molecular systems and advanced microscopy. The Researcher will also be involved in the development of single cell transcriptome analysis for the phenotypical study of circulating tumor cells contributing to unravel the mechanisms involved in tumor invasion.





Required Qualifications:

Degree: PhD or MD/PhD Experience in Molecular Biology, Cellular biology or Genetics and Single cell molecular analyses Experience in Management of R&D projects **Compulsory** full English language proficiency.

Competences:

Ability to work independently Very good communication skills Highly motivated Interest in technology development with clinical impact

Applications:

To apply, please send a CV and a cover letter to: researchparisdescartes@gmail.com