# **Postdoctoral Training Fellow - Liquid Biopsy**

The group of Dr Maria Vinci, at the the Bambino Gesù Children's Hospital in Rome, Italy, is seeking candidates for an open Postdoctoral Training Fellow position. We are looking for a highly motivated and talented fellow to join our dynamic research team focused on pediatric High-Grade Gliomas. This exciting opportunity will allow the successful candidate to contribute to our ongoing research in the field of liquid biopsy for advanced cancer diagnostics and personalized medicine, specifically focusing on circulating biomarkers including ctDNA, exosomes, and proteins (*Buzova D, et al., Molecular Diagnosis and Therapy (2024); Pericoli, et al., Cell & Bioscience (2023); Izquierdo E, et al., Neuro-Oncology Advances (2021)*).

## About the Role:

This Postdoctoral Training Fellow position will be integral to our ongoing research program through national and international collaborations, investigating the translational and clinical applications of liquid biopsies. The successful candidate will be responsible for designing, conducting, and analyzing experiments related to ctDNA and EV. This will involve working with various patient tissue sample types, utilizing advanced molecular biology techniques, and contributing to the development of novel diagnostic assays.

## Key Responsibilities:

Handle human specimens, process, and bank samples

Develop and optimize methods for isolating and characterizing ctDNA and EVs from various biological fluids (e.g., blood, cerebral spinal fluid, conditioned medium from primary cells).

Utilize and develop advanced molecular biology techniques, including PCR, qPCR, NGS, and other relevant methodologies.

Perform data entry and management of sample databases

Analyze and interpret complex datasets, including genomic and proteomic data.

Contribute to the preparation of manuscripts for publication in high-impact journals.

Present research findings at conferences and meetings.

Collaborate effectively with other researchers within the team and across institutions.

Contribute to grant applications and other funding opportunities.

Maintain accurate and detailed records of experiments and results.

## Required Qualifications:

PhD in Molecular Biology, Biochemistry, Cancer Biology, or a related field.

Demonstrated expertise in liquid biopsy technologies, specifically with ctDNA and/or EVs.

Strong background in molecular biology techniques (e.g., PCR, qPCR, NGS, WB, ELISA).

Proficiency in data analysis and interpretation.

Excellent written and oral communication skills.

Ability to work independently and as part of a team.

Strong organizational and time-management skills.

Experience with cell culture (desirable but not essential).

## Type of Contract:

1-year fixed term, with the possibility of renovation. Salary will be in the range of  $\notin 20,400 \cdot \notin 25,000$ /year (net salary) based on the candidate's qualifications, experience, skills, and education.

To Apply:

Please submit your CV, cover letter outlining your research experience and interests, and contact information for at least 2 references to maria.vinci@opbg.net

Please include "Postdoctoral Training Fellow - Liquid Biopsy" in the subject line.