

Post-doctoral position in Translation regulation and hematopoiesis

Postdoctoral position in Stephane Belin's team (Grenoble Institute of Neuroscience GIN INSERM U1216, University Grenoble-Alpes) and Marjorie Poggi's team (Centre de Recherche en CardioVasculaire et Nutrition, C2VN INSERM U1263, INRAE 1260; Marseille). Stephane Belin's team is specialized in protein synthesis and how the translational complex directly controls mRNA translation during physio-pathological conditions. The group of Marjorie Poggi focuses on platelet disorders, with particular expertise in hematopoietic transcription factor mutations, such as FLI1, GATA1, and ETV6, which are key contributors to inherited platelet defects.

This is a 2 years position funded by an ANR project.

Background: Over the past decade, genetic lesions that cause ribosome dysfunctions have been identified in both congenital and acquired human disorders. These ribosome modifications can directly impact translation levels and quality in cells. Very recent data underline that ribosome biogenesis is involved in mediating the transition between proliferation and differentiation of erythroid progenitors. The functional consequences of translation and protein synthesis regulation on megakaryopoiesis remains largely unexplored. Our preliminary data suggest that translation regulation and modification of the ribosomal protein RPS6 might have a critical role in the megakaryopoiesis and platelet formation.

The goal of the postdoctoral project is to determine the role of the translation regulation during megakaryopoiesis and to explore the potential roles of the ribosomal protein RPS6 in this process.

Qualification: We seek an enthusiastic, highly motivated post-doctoral fellow to work on translation regulation and mechanisms during megakaryopoiesis. The candidate needs to hold a PhD with good record of publications, preferentially with no more than 2 years after getting PhD. Candidate needs to have a strong background in molecular biology and biochemistry with knowledge in cell culture, western blot, immune-fluorescence and RNAseq. Additional knowledge in mouse handling and microscopy is a plus. We offer a close supervision in both motivated teams and a stimulating scientific environment for a transdisciplinary project. The postdoc will have access to state-of-the-art equipment related to the project. She/he will interact with interdisciplinary groups and will receive mentoring for career development.

Location: The project will take place mainly at the GIN (research center devoted to understanding brain functions in health and diseases located in Grenoble) and C2VN (Institute devoted to the understanding of cardiovascular diseases, located in Marseille).

How to apply:

Candidates should email a cover letter, a CV and at least two reference letters to:

Stephane Belin (stephane.belin@inserm.fr) and Marjorie Poggi (Marjorie.POGGI@univ-amu.fr)

References to the project:

1- *The RSK2-RPS6 axis promotes axonal regeneration in the peripheral and central nervous systems.* Decourt C, Schaeffer J, Blot B, Paccard A, Excoffier B, Pende M, Nawabi H, Belin S. *PLoS Biol.* 2023 Apr 17;21(4):e3002044. doi: 10.1371/journal.pbio.3002044

2- *Single-cell analysis of megakaryopoiesis in peripheral CD34⁺ cells: insights into ETV6-related thrombocytopeni.* Bigot T, Gabinaud E, Hannouche L, Sbarra V, Andersen E, Bastelica D, Falaise C, Bernot D, Ibrahim-Kosta M, Morange PE, Loosveld M, Saultier P, Payet-Bornet D, Alessi MC, Potier D, Poggi M. *J Thromb Haemost.* 2023 Sep;21(9):2528-2544. doi: 10.1016/j.jtha.2023.04.007.

Links:

<https://neurosciences.univ-grenoble-alpes.fr/en/research/research-teams/team-translation-regulation-normal-and-pathological-conditions>

<https://c2vn.univ-amu.fr/equipes/equipe-2-thrombose-plaquettes-et-desordres-vasculaires/>