



Courtesy translation of D.R. n. 017/2023

For more details on the selection process, please refer to the Italian version of

D.R. n. 017/2023 available at <http://www.hunimed.eu/it/lavora-con-noi/>

SELECTION PROCEDURE FOR A RESEARCH FELLOWSHIP IN COMPLIANCE WITH ART. 22 OF LAW 240/2010

Research Program Title	Rewiring granulopoiesis to promote differentiation of antitumoral neutrophils in high-grade gliomas
Tutor	Prof.ssa Raffaella BONECCHI
Scientific Area	06 – Medical Sciences
Gross amount of the fellowship	23.000 Euro
Duration of the fellowship	12 months
Objectives of the research	<p>'High-grade gliomas (HGGs) are aggressive brain tumors with a limited response to treatments. Recent data indicate that glioma patients can benefit from preoperative immune-checkpoint inhibition and for this reason, is important to identify immunosuppressive mechanisms. Neutrophils are considered major players in the immunosuppression of tumor patients. However, granulocyte progenitors can be reprogrammed by metabolic and epigenetic mechanisms to give rise to antitumoral neutrophils. The atypical chemokine receptor ACKR2 is a negative regulator of neutrophil differentiation.</p> <p>We hypothesize that ACKR2 genetic deletion induces metabolic changes that can promote epigenetic rewiring of antitumoral granulopoiesis.</p> <p>The general aim of this project is to understand whether modulation of granulopoiesis can enhance antitumor immunity in HGGs.</p> <p>In particular we will study which is the mechanism of regulation of granulopoiesis exerted by the atypical chemokine receptor ACKR2 and whether promotion of</p>

	antitumoral granulopoiesis could be protective in preclinical models of glioma.
Activities to be carried out	<p>The mechanism of regulation of antitumoral granulopoiesis will be studied by transcriptomic and epigenetic analysis of WT and ACKR2 KO hematopoietic progenitors. The effects on granulopoiesis will be studied by multiparametric FACS analysis.</p> <p>The effect on glioma growth will be studied in WT, ACKR2 KO and csfr3 KO mice with an orthotopically injected syngeneic model of glioma.</p>
Work place	PIEVE EMANUELE - Milan
Mandatory requirements	In order to be considered for the post candidates must hold Master's Degree in Biotechnology or Biology or Medicine and Surgery
Selection process	<p>Application for admissions must be submitted at the following link:</p> <p>https://pica.cineca.it/humanitas</p> <p>No hard copy of the application must be sent by post.</p> <p>At first access, applicants need to register by clicking on "Register" and completing the requested data.</p> <p>If applicants already have LOGINMIUR credentials, they do not need to register again. They must access with their LOGINMIUR username and password in the relevant field LOGINMIUR.</p> <p>Applicants must enter all data necessary to produce the application and attach the required documents in PDF format.</p>
Selection criteria	<p>Selection criteria are predetermined by the Selection Committee. As part of the selection process, the Committee will evaluate the curriculum, titles and publications presented by the candidate and will consider, in particular:</p> <ul style="list-style-type: none"> - Theoretical knowledge and technical skills acquired - Further requirements will also be considered, such as: - Excellent knowledge of English, spoken and written



FURTHER INFORMATION:

In the event of any conflict between Job Opening text and Italian D.R. text, the Italian version will prevail.

For more details on the selection process please refer to the **D.R. n. 017/2023** (<http://www.hunimed.eu/it/lavora-con-noi/>) or send an inquiry to ufficiodocenti@hunimed.eu or telephone +39 02.8224.5642/5421.