Research Program Title	
Tutor	Prof. Giuseppe MARULLI
Scientific Area	06 – Medical Sciences
Gross amount of the fellowship	26.000 Euro
Duration of the fellowship	12 months
Objectives of the research	Lung cancer is the worldwide leading cause of cancer-related death. Non-small-cell lung cancer particularly lung adenocarcinoma (LUAD) is the most common form with targetable genetic alterations. The discovery of cancer cell ability to silence the anti-tumor immune response has opened the door to the development of immune checkpoint inhibitory (ICI) therapies, mainly targeting the programmed cell death PD-1/PD-L1 (PD-ligand) axis. However, the treatment still faces many challenges even in highly selected patients.The research hypothesis is that other tumor microenvironment (TME) components, in addition to PD-L1 axis, may influence and modulate the response to ICI treatment. The primary aim is to carefully investigate immune TME in LUAD tissues of responders and non-responders to ICI treatment. A secondary aim is to evaluate if new genetic alterations are differently present in responders versus non-responders, thus exploring if the PD-L1 neoplastic cell expression is constitutive or an epiphenomenon. An exploratory aim is to develop a more objective computational analysis of TME components. Moreover, to better understand how tumor genetic

background influences circulating and tissue cytokine/chemokine milieu and TME composition and function, we will use innovative preclinical models, such as patient-derived organoids (PDO). This research is a retrospective and prospective longitudinal multicentric study involving surgically resected LUAD patients treated

	project progress, and assessing the experimental results.
Work place	PIEVE EMANUELE - Milan
Mandatory requirements	• Master degree in biomedical disciplines and/or PhD in Biological Sciences or equivalent. Adequate scientific and professional background to carry out the research activity described in this call.

Application for admissions must be submitted at the following link

https://pica.cineca.it/humanitas

No hard copy of the application must be sent by post.

At first access, applicants need to register by clicking on

Selection process

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 (http://www.hunimed.eu/it/lavora-con-noi/) or send an inquiry to ufficiodocenti@hunimed.eu or telephone +39 02.8224.5642/5421.