



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE \_5978\_

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at Dipartimento di \_biotecnologie mediche e medicina traslazionale\_

Scientist- in - charge: \_Elena Borroni\_

[Name and surname]

## CURRICULUM VITAE

### PERSONAL INFORMATION

Surname	Lin
Name	Jiazhi

### PRESENT OCCUPATION

Appointment	Structure
Ongoing	Research assistant

### EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	Pharmacy	Jiangxi university of Chinese medicine	2019
Specialization			
PhD			
Master	Pharmaceutical biotechnology	The university of Milan	2022
Degree of medical specialization			
Degree of European specialization			
Other			

### REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date	of	Association	City
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registration		

FOREIGN LANGUAGES

Languages	level of knowledge
English	B2

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award

TRAINING OR RESEARCH ACTIVITY

<p>description of activity</p> <p>1.Master thesis internship: The study focus on the role of lipid in cancer associated macrophages. Macrophages have an important role in the innate immunity to maintain the body homeostasis. The disfunction of macrophages could related to some diseases like cancer. The polarization of the macrophages is quite complicated, and it’s controlled by many factors like cytokines and transcription factors respectively. Many researchers found that lipid metabolism is highly associated to this process. To illustrate the relationship between lipid and macrophages. We develop the lipid laden macrophages model in vitro to figure out the effect of lipid in macrophage polarization. We focused on the phenotype and immune regulation alteration of lipid laden macrophages. As result, I found that oxLDL-treated macrophages are more immunosuppressive compared to the M1 phenotype. Then, I noticed that loss of intensity of HLA-DR marker in oxLDL condition that I have seen from the heat map showing the mean fluorescence intensity, indicate that lipid-engulfed macrophages could reflect an immunosuppressive polarization. Moreover, macrophages with lipid dysmetabolism decrease T-cell activation, and proliferation is shown when we do the co-culture of lipid-laden macrophages with the T cells at different ratios. therefore, we conclude that exogenous lipid is sufficient to induce macrophages with immune suppressive function. Secondly, lipid accumulation could present in the tumour associated macrophages that contributes to tumour growth, the precise role of fatty acid triggering TAM required further investigation.</p> <p>2. ANSO project-Assessing cell-mediated immunity against viral infections and predicting susceptibility to future infections: The program is aiming to identify the immune related biomarkers to predict the cell mediated response to viral infections. We take SARS-CoV-2 as prototypical system now and we want to evaluate cell-mediated immunity to predict the protection and risk for future infections. Now the method for assess the vaccine induced protection is the production of specific antibodies. How to assess the</p>
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immunological status of population becomes a problem. We hope to develop analytical approaches to predict the immune protection against viruses (taking SARS-CoV-2 as prototypical system), by examining innate and adaptive immune responses against the virus and their anatomical location, specificity, breadth of recognition and neutralization capacity. Then we could define the different anatomical locations of immunity from nose and blood, and the development of innate memory, which is different and complementary to adaptive memory. My work in the project is mainly focus on the identifying differences between nasal local system and systemic system. I am doing the whole blood assay with LPS and R848 stimulus that induce the non-specific response for viral and bacterial agents. The reactivity will be tested by the IFN-alpha and IL-6. At the same time, I collect the cells from nose by using nasal swabs. Flow cytometry will be applied to quantify the number of cells collected and the cell population as well. Same stimulus and reactivity test will be used in nasal sample and compared to the whole blood assay in the end. The difference in reactivity between vaccinated and infected subjects and between systemic and mucosal cells will suggest different mechanisms between natural infection and vaccination. The lack of difference in reactivity between systemic and mucosal cells in naturally infected subjects will suggest a wider protection induced by the natural infections compared to systemic vaccines.

**3. Short term exchange programme in Duke-Nus Medical school:** Through the ANSO project I worked, I got an opportunity to go to Duke-Nus medical school in Singapore to work with the team of professor Antonio Bertoletti. Here, I learned how to evaluate SARS-CoV-2-specific T cell immunity and get the knowledge on several methods detecting T cell response to SARS-CoV-2 peptide.

PROJECT ACTIVITY

Year	Project
2023	ANSO project in SHENZHEN INSTITUTE OF ADVANCED TECHNOLOGY CHINESE ACADEMY OF SCIENCES
2021-2022	Master thesis internship at ISTITUTO NAZIONALE DEI TUMORI   FONDAZIONE IRCCS

PATENTS

Patent



CONGRESSES AND SEMINARS

Date	Title	Place
27-10-2023	Kick-Off meeting of the Alliance of international Science Organizations	SIAT, Shenzhen
30/08/2023	International symposium on nanobiology	SIAT, Shenzhen
2023	The role microglia in health and diseases	SIAT, Shenzhen

PUBLICATIONS

Books

Articles in reviews

Congress proceedings

OTHER INFORMATION


Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Please DO NOT SIGN this form.

Place and date: \_\_19/11/2023\_\_\_\_\_, \_\_jiazhi lin\_\_\_\_\_