

MSc Opportunity in Cancer Immunology/ Cancer Neuroscience:

Topic: Dissecting Neuro-Immune Interactions in cancer

Project outline

Accumulating evidence indicates that cancer and the nervous system bear a much closer, entangled relationship than had been previously appreciated. The innervation landscape of the tumour microenvironment appears to impact tumour progression, but the mechanisms underlying this observation remains completely unresolved and understudied. The aim of our research is to use powerful complementary technologies to address a key interdisciplinary question in cancer – The role of neuro-immune interactions in tumour progression and anti-tumour immunity.

Your profile

We offer a MSc studentship to work closely with a Ph.D. student and Early Independent PI (Karen Dixon, Ph.D.) within an interdisciplinary team (Cancer Neuro-Immunology). We are looking for a highly curious and motivated student with good communication skills and a strong interest and background in immuno-oncology and/or neuroscience, who is willing to independently work on and develop a research project.

Our contribution

Trainee wellbeing, including fostering a diverse, inclusive, and welcoming culture, are the foremost priorities of the lab. We offer you an environment where you can network, be inspired and develop your own ideas. You will be able to interact and train with highly skilled experts in oncology, immunology, and cell biology and work with patient material as well as with animal models. In addition, you will have the opportunity to learn to perform cell culture, flow cytometry, histology, multiplexed imaging and more.

Application

Please send your full application consisting of a motivation letter and CV to: karen.dixon@unibas.ch. Please specify in your email why you would like to work with us, what lab experience you already have, and which skills you would like to acquire.

References

Dixon K.O et al, Expression of Tim-3 on dendritic cells restrains anti-tumour immunity by regulating Inflammation activation. *Nature*. 2021 Jul;595(7865):101-106. doi: 10.1038/s41586-021-03626-9.

Zhu C*, Dixon KO* et al, Tim-3 adapter protein Bat3 is a molecular checkpoint of T cell terminal differentiation and exhaustion. *Science Advances*, 2021 Apr 30;7(18): eabd2710. Doi: 10.1126/sciadv.abd2710. PMID: 33931442.

Dixon KO et al, Functional Anti-TIGIT Antibodies Regulate Development of Autoimmunity and Antitumor Immunity. *J Immunol*. 2018 Apr 15.