

Group name: Mechanism of growth control and cancer

IP name: Maria Dominguez

Group web: <https://in.umh-csic.es/en/grupos/mechanisms-of-growth-control-and-cancer/>

Title of the MRP/TFM: Uncovering the mechanism behind the brain and tumour communication

Summary of the Project:

The influence of a patient's emotional state on the outcome and survival of a disease is difficult to quantify but evident in the response to a placebo. In our laboratory, we are currently investigating the potential influence that the mental state of the host may have on tumour growth. Using *Drosophila melanogaster* cancer paradigms, we have made an intriguing discovery revealing that manipulating the activity of a specific neural circuit in the brain remotely affects tumour growth. Our goal is to unravel the mechanisms bridging the brain and its effect on remote tumour growth, which will shed light on the intriguing phenomenon of mental state and disease.

Methods and technology involved in the MRP/TFM Project:

In this project, we will use Fly genetics, immunohistochemistry, confocal microscopy, molecular biology and behavioural assays (longevity, fertility and viability among others).

Member/s of the lab who will act as tutor/co-tutor of the project (if different from the group IP): Mario Aguilar-Aragon

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