

Join our Cutting-Edge MEP Research Project in Chemical Engineering!

Investigate the Role of T Cells in the Tumor Microenvironment (TME) and Enhance Immunotherapies

Are you an MSc student interested in making a difference in cancer research? We are working on a research project that will help us understand the behavior of T cells (a type of white blood cell) in cancer. We believe that T cells play an essential role in helping patients fight cancer, and we want to understand more about how they work.

Project Overview:

We know that the presence of T cells in the Tumor Microenvironment (TME) is important in determining how well patients respond to cancer treatments. T cells move through the body looking for cancer cells, and they need specific molecules to help them get where they need to go. We want to learn more about how these molecules work so we can develop better treatments for cancer patients.

Research Objectives:

We are looking for a highly driven MSc student to work with us developing an in-vitro model that will allow us to study T cells and cancer cells in a controlled environment. We will use a microfluidic device to create different chemical environments that will help us understand how T cells move through the body and interact with cancer cells. This project will give you a chance to work with experts in biology, engineering, and medicine.

Benefits for the MSc Student:

- Contribute to advancing our understanding of T cell biology and its impact on cancer therapy response.
- Work under the mentorship of leading researchers in microfluidic technology, fluid mechanics, cell biology, and clinical research.
- Gain exposure to state-of-the-art experimental techniques and research facilities at TU Delft.
- Collaborate with professionals at Erasmus MC and learn the intricacies of handling patient-derived melanoma samples and primary T cells.
- Enhance your scientific skills through interdisciplinary collaboration, data analysis, and project management.
- Boost your academic profile with a highly relevant Master Thesis in an emerging field of research.
- Present results in seminar/conferences.

Future Impact:

If we are successful, our research could help doctors develop more effective treatments for cancer patients. We hope that by understanding more about how T cells work, we can find new ways to help patients fight cancer. Join us in unraveling the mysteries of T cell biology and its impact on cancer treatment!

Apply today and be part of our ambitious research team! The project can start as early as possible but not later than 01/09/2023.

To apply or for more information, please contact Dr. Ankur Bordoloi: a.d.bordoloi@tudelft.nl.