SMART-BioSyM Partners with NUS and A*STAR to Develop a Microfluidic Platform for Studying Tumor-Associated Macrophages (TAMs) *in vitro*

6th August 2015: A recent study by a team of researchers consisting of the BioSystems and Micromechanics Interdisciplinary Research Group of the Singapore-MIT Alliance for Research and Technology (SMART-BioSyM), MIT in Boston, National University in Singapore and the A*STAR Research Institutes (Singapore Immunology Network and the Institute of Molecular and Cell Biology) have developed a novel microfluidic-based platform for studying the tumour microenvironment *in vitro*. This work was published in the Open-Access journal *Oncotarget*, and the SMART-BioSyM researchers involved in this project includes Postdoctoral Associates Dr Jing Bai and Dr Giulia Adriani, PhD alumnus Dr Ting-Yuan Tu, and Research Investigators Dr Siew-Cheng Wong (A*STAR/SIgN/SMART), Prof Roger Kamm (MIT/SMART) and Prof Jean-Paul Thiery (NUS/IMCB/SMART).

Tumour-associated macrophages (TAMs) were examined in this study, as they make up a substantial part of the tumour mass and can influence the aggressiveness of the cancer. With this microfluidics platform, the researchers were able to assess the role of TAMs in causing the cancer to spread from one site to another. These findings on the tumor-suppressive properties of TAMs could aid in the development of immunotherapies for certain cancer types.

Click here to access the published manuscript on *Oncotarget*. To know more about the technological capabilities of SMART, please visit the CREATE website for more information.

The SMART-BioSyM research programme is funded by the National Research Foundation Singapore under its Campus for Research Excellence and Technological Enterprise (CREATE) programme.

To keep up with the latest in interdisciplinary research at CREATE, like us on Facebook or follow us on twitter!