

Research Theme: Cell Adhesion & Cancer
Research Project Title: Investigating integrin-linked cell adhesion-mediated drug resistance in leukemic cells
Principal Investigator/Supervisor: A/P Tan Suet Mien
Co-supervisor/ Collaborator(s) (if any): Not at present
Project Description
<p>a) Background: Despite the general success in treating chronic myelogenous leukemia with available drugs, failure to eradicate minimal residual disease in the bone marrow can limit the success of treatments. The bone marrow environment provides hematopoietic cancer cells cell-extracellular matrix (ECM) interactions (“leukemic niche”) that can confer survival signals, leading to the development of resistance to chemotherapy. Integrins are cell adhesion molecules that are involved in various physiological and pathological processes. There is gaining evidence supporting a role of integrins in the development of drug resistant myelogenous leukemia. In this project, the signalling conduit emanating from integrins will be examined to define the mechanism(s) by which subversion of drug-induced apoptosis in leukemic cells is achieved.</p> <p>b) Proposed work: The project will involve the following: molecular and cell biology experiments, biochemical assays, and studies using <i>in vivo</i> mouse models. The candidate should have a good background in molecular and cell biology techniques, and is comfortable with performing animal studies.</p>
Supervisor contact:
If you have questions regarding this project, please email the Principal Investigator: smtan@ntu.edu.sg
SBS contact and how to apply:
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