Institute of Molecular and Cell Biology
A*STAR

SEMINAR ANNOUNCEMENT

We would like to invite you to attend this seminar hosted by Dr. John Connolly:

Date: 16 October 2018, Tuesday
Time: 11:00AM – 12:00PM
Venue: Level 3, IMCB Seminar Room 3-46, Proteos, Biopolis

Speaker: Dr. Evan Lind, Departments of Molecular Microbiology and Immunology & Cell, Developmental and Cancer Biology, Oregon Health & Science University, Portland
Title: Targeting the immune microenvironment in Acute Myeloid Leukemia (AML)

Our research program focuses on tumor cell-immune interactions in hematological malignancies specifically myeloid leukemia (AML). AML is disease striking older patients predominantly, with a mean onset in mid 60's. Despite decades of research into cytotoxic chemotherapies the prognosis for this type of cancer is poor, with a mean survival of less than 30% at 5 years. We are performing an in-depth analysis of the immune microenvironment in the bone marrow (tumor niche) of patients with AML. This involves both functional testing of T cells and high parameter mass-cytometry (CyTOF). CyTOF allows us to simultaneously measure 35 proteins associated with single cells in complex samples. We are working with bioinformatics researchers do develop methods to interpret the large amounts of data generated from this type of measurement technology. We are also developing a mouse model of leukemia that recapitulates the mutational profile that is seen in about 10% of AML patients. This mouse has been genetically modified to contain both a proliferative mutation (FLT3-ITD) and a mutation resulting in epigenetic dysregulation (TET2) at the level of DNA methylation. This combination allows us to test, combination therapies based on small molecule TKIs, epigenetic modifiers and immune therapies *in vivo*. The ultimate goal of the Lind lab is to understand how hematological malignancies avoid immune detection and to target those pathways for clinical application in diseases such as AML.

Biography:
Evan Lind is currently an Assistant Professor in the departments of Molecular Microbiology and Immunology (MMI) and Cell, developmental and Cancer Biology (CDCB) at Oregon Health and Science University (OHSU) in Portland Oregon USA. He is also a Member of the Knight Cancer Institute at OHSU. He earned his Bachelor of Arts in Biology at New York University in 1996 and his PhD in Immunology in 2007 at Dartmouth Medical School, New Hampshire USA. Dr. Lind's thesis work was performed under the mentorship of Dr. Randolph Noelle and focused on biochemical pathways controlling dendritic cells ability to cross-present antigens. After completing is PhD, Dr. Lind did a post-doctoral fellowship in the laboratory of Dr. Pamela Ohashi at the Princess Margaret Hospital in Toronto, Canada. The main focus of his research in Toronto was to understand the impact of micro-RNAs on immune function. In his later years in Toronto

Dr. Lind collaborated with Dr. Tak Mak to develop and study novel mouse models of leukemia. In 2014 Dr. Lind was recruited to OHSU and opened his lab with a major focus on studying the immune microenvironment in leukemia in both mouse models and man.