Institute of Molecular and Cell Biology
A*STAR

SEMINAR ANNOUNCEMENT

We would like to invite you to attend this seminar hosted by Prof. Vinay Tergaonkar:

Date: 29 August 2018, Wednesday
Time: 11:00AM – 12:00PM
Venue: Level 3, IMCB Seminar Room 3-46, Proteos, Biopolis

Speaker: Prof. Vihandha Wickramasinghe, Peter MacCallum Cancer Centre, Melbourne, Australia
Title: RNA export, alternative splicing and the proteome

Splicing and nuclear export of mRNA are critical steps in the gene expression pathway. While RNA processing factors can perform general, essential functions for intron removal and bulk export of mRNA, emerging evidence highlights that the RNA splicing and export machineries also display regulatory potential. I will discuss recent insights into how this regulatory potential can selectively alter gene expression and regulate important biological processes. I will also discuss our recent efforts to determine the impact of alternative splicing on the human proteome and how selective mRNA processing may contribute to the development of cancer.

Biography:
Doctor Vihandha Wickramasinghe is Head of the RNA Biology and Cancer Laboratory at the Peter MacCallum Cancer Centre, Melbourne, Australia. His research interests lie in understanding the molecular basis of how messenger RNA (mRNA) is selectively processed and exported from the nucleus into the cytoplasm and how deregulation of these processes contributes to human cancer. He was awarded a prestigious Melbourne National Scholarship to undertake his undergraduate and honours degrees in Biomedical Science at the University of Melbourne, Australia. Following this, he was awarded a Medical Research Council pre-doctoral fellowship to undertake his PhD studies at the University of Cambridge in the United Kingdom. During his subsequent post-doctoral studies at the MRC Cancer Unit in Cambridge, he demonstrated for the first time that selective mRNA export from the nucleus can regulate a fundamental biological process, namely DNA repair. The RNA Biology and Cancer Laboratory aims to characterise novel mechanisms of regulating gene expression via selective mRNA processing and to use these insights to identify potential new therapeutic targets for the treatment of cancer.