MONASH University

2023 MIPS Seminar Program

28 Sep 2023 | 3:00 to 4:00 pm | LT2

DECODING AND TARGETING LKB1/STK11 PATHWAY IN LUNG CANCER

Dr. Reuben Shaw

Reuben Shaw is the Director of the NCI-Designated Cancer Center and the William Brody Chair at the Salk Institute in La Jolla, California. Prof Shaw received his PhD at MIT in Tyler Jacks lab followed by a postdoc in Lew Cantley's lab at Harvard Medical School before starting as an Assistant Professor at the Salk in early 2006. He worked his way up the ranks, and in 2016 he took over as Director of Salk's Cancer Center from Tony Hunter.

He received multiple young investigator awards early in his career. More recently, he received an NCI Outstanding Investigator Award and he has made the Clarivate Most Highly Cited Researchers list the last 4 years running.

Twenty years ago, Prof Shaw made the unexpected finding that the LKB1 tumor suppressor - which is commonly mutated in lung cancer - was the long-sought-after kinase that activates AMPK following energy stress, including after the diabetes drug metformin. This connection between metabolic sensing and cancer was very unexpected at the time but today is appreciated to be just one of many ways that connect cancer pathways to direct metabolic regulation. Prof Shaw's lab continues to focus on the AMPK signalling pathway and other metabolic stress pathways, which has led to multiple therapeutic avenues in cancer and other diseases.