

Michael Welsh – The Shb gene in tumor biology

Shb is an SH2-domain adapter protein operating downstream of tyrosine kinase receptors such as the VEGFR-2, FGFR-1, PDGF-receptors and the T cell receptor. The effects of Shb are pleiotropic and context dependent. The overall aims of the studies carried out by Michael Welsh's group is to increase our understanding of solid tumor metastasis and leukemia progression by usage of the Shb-gene knockout model. These tumor processes will in particular be related to immune cell responses. The project involves both in vivo and in vitro experimentation and in an extension it is hoped that small molecular weight inhibitors of Shb function can be found that have an application in medicine.