

Abstract of talk: "IAP and Bcl-2 family proteins, from bench to bedside"

Evading apoptosis is listed as one of the six "Hallmarks of Cancer", yet only 30 years ago the mechanism for cell death was unknown, and there was no experimental evidence linking abnormalities in cell death to disease. Research on two protein families best known for inhibition of cell death, the Bcl-2 protein family and the Inhibitor of Apoptosis (IAP) protein family, has led to uncovering of complex regulatory and effector mechanisms that determine whether cells survive or kill themselves. Small molecules that antagonise the cell death inhibitors, such as Venetoclax, which inhibits Bcl-2, and Birinapant, which targets IAPs, are currently in human clinical trials for the treatment of malignant disease, and might also be useful in treating certain autoimmune and infectious diseases. This talk will look at some of the key steps on the pathway that has led to the development of novel targeted treatment approaches that are starting to show great promise.