

FRITZ LIPMANN LECTURE:

Research interests of Gerard Evan

His research is focused on understanding the processes responsible for genesis and maintenance of cancers, in particular cancers of the pancreas, colon, brain, skin and liver. In 1992 he made the unexpected and counter-intuitive discovery that mutations that drive cancer cell proliferation also drive the contradictory pathway of cell suicide and proposed that this coupling of opposing pathways is a central innate tumor suppressive mechanism built into all human cells. Only when this coupling fails can cancers emerge and by inference re-instatement of the defective cell suicide pathway would lead to the rapid and specific demise of cancer cells. Understanding the molecular mechanism that underlies the cell suicide machinery and how it can be manipulated therapeutically are the other arms of his laboratory.