



Arnold J. Levine, Ph.D.
SU2C Scientific Advisory Committee



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Arnold J. Levine, Ph.D. is a leader in cancer research. In 1979, Levine was one of the co-discoverers of the p53 protein. The p53 gene and its protein are central players in our present day understanding of cancers. This discovery has generated more than 60,000 publications. In 1989, Levine's group demonstrated that the wild type p53 gene and protein functioned as a tumor suppressor, preventing transformation by oncogenes. This observation changed the direction of the field.

The research paths of the Levine group provide clear evidence that the p53 pathway plays a central role in the prevention of human cancers and that polymorphic variations in components of the pathway can influence individual responses to environmental mutagens, age of cancer onset, sexual dimorphisms in cancers, response to therapy and survival times, all for a gene whose mutations cause the most common genetic alterations in cancers. This research helped to uncover the genetic origins of cancer and focus drug discovery on a rational path to treat cancers.