Dr Gonsup Kim is currently a Professor of Veterinary Medicine, guiding PhD researchers since 1998 in his Laboratory.

Since conventional anti-cancer drugs can be highly toxic, plant-derived bioactive compounds are being investigated more intensively as alternate or adjunct therapies for various forms of cancer. Natural herb products have played a crucial role in drug discovery. The use of natural herb medicines as an alternative therapy has become increasingly popular in Eastern Asia and globally. In particular, the use of anti-cancer agents derived from natural products provides efficiency without some of the harmful side effects of conventional chemotherapies for cancers. One of the most effective cancer therapy methods is induction of apoptosis using various cytotoxic agents. The research team of Dr Kim is currently examining the effects of polyphenolic extract from plants on carcinoma cells. Flavonoids are a large group of heterogeneous polyphenols carrying potential anti-carcinogenic and antitumor activities. Citrus fruits are the rich source of these bioactive compounds. Monomer compounds of flavonoids have been shown to possess the most effective anti-cancer potential. At present the focusing points deal with the evaluation of cell signaling pathways involved in cancer cell death, and the molecular mechanisms of the regulatory genes. This field is gaining increasing attention, and the research of Dr Kim and his colleagues on the anticancer and anti-inflammatory effects of natural compounds has been published widely.