

## HKU DEVELOPS NOVEL GENE THERAPY FOR COLON CANCER

The Faculty of Medicine, The University of Hong Kong has discovered a novel method of gene therapy for colon cancer. The report has been published in the February 2005 issue of *Gastroenterology*.

Colon cancer is one of the commonest cancers in the world. In Hong Kong, it is the second most common cancer after lung cancer. The incidence of colon cancer increases from 2,900 in year 1997 to over 3,300 new cases per year in year 2001, representing an increase of around 13%. Treatment for advanced stage patients are usually not satisfactory. Therefore, new treatment is needed.

The invention work led by Dr. Benjamin Wong, HKU showed that suppression of the function of a cancer gene *survivin* could inhibit cell growth and cause cell death (apoptosis) in colon cancer. Therefore *survivin* is a new target in the treatment of colon cancer. Moreover, Dr. Wong has invented a new gene therapy method, by packaging the survivin mutant into an adeno-associated virus (AAV). The combination therapy worked very well in animal cancer model. This method was shown to be safe, more efficient, consistent and sustainable. After the animal tests, the team is going to refine this system and hope to apply on human in the near future.