Latest Automated Cervical Cytology Imaging System

Cervical cancer ranks 5th as the most common cancer in Hong Kong. More than 1/4 of affected patients currently die of the cancer. The mortality and morbidity is thus mainly determined by the extent of the disease at diagnosis. Cervical cytology (Pap smear) is the most effective method to screen for cervical cancer and its precursor.

The Cervical Cytology Screening Laboratory, Department of Pathology, Faculty of Medicine, the University of Hong Kong (HKU), is responsible for reporting cervical cytology samples from The Family Planning Association and the Lady Helen Woo Women's Diagnostic & Treatment Centre, Department of Obstetrics and Gynaecology, HKU, major contributors of cervical cancer screening.

In March 2005, the Laboratory is the 1st in HK and Asia to introduce the latest model of automated cervical cytology screening imager approved by the US Food and Drug Administration.

Traditional Pap smear examination relies on the human eye to look for abnormal cells under a microscope. However, even in a positive smear, there usually only exists a few abnormal cells among the many thousands of normal cells. Automation of slide microscopy and image analysis could allow focusing of cytotechnicians' efforts in interpretation of cytological features and a reduction in the manpower requirement for screening.