

Editorial

Dissemination reports are concise informative reports of health-related research supported by funds administered by the Food and Health Bureau, for example the *Research Fund for the Control of Infectious Diseases* (which was consolidated into the Health and Medical Research Fund in December 2011). In this edition, 12 dissemination reports of projects related to influenza, viral hepatitis, and human papillomavirus are presented. In particular, three projects are highlighted due to their potentially significant findings, impact on healthcare delivery and practice, and/or contribution to health policy formulation in Hong Kong.

Innate and adaptive immune systems play critical roles in protecting against infection. Tu et al¹ aimed to develop alternative strategies to activate early innate responses—the host's first line of defence—against influenza A virus infection. Using a mouse model with a human immune system, they demonstrated that phosphoantigen could protect against influenza A H1N1 virus infection. For avian influenza A H5N1 virus infections, this protection was strain-dependent. This study suggested a potentially novel therapeutic approach for influenza using phosphoantigens to inhibit influenza infection.

Chronic hepatitis B (CHB) is the most common cause of liver cirrhosis and hepatocellular carcinoma in most Asian countries. Chan et al² validated the performance of an ALT-based transient elastography algorithm and various serum test formulae in a cohort of 82 newly-recruited ethnic Chinese CHB patients. They developed an algorithm to predict advanced liver fibrosis in CHB. This algorithm improved the accuracy of prediction compared

with transient elastography alone, and liver biopsy could be correctly avoided in approximately 50% of patients.

Human papillomavirus (HPV) is a common sexually transmitted pathogen that plays an important role in the pathogenesis of pre-cancerous cervical lesion and cervical cancer. Integration of HPV genetic material into the host genome correlates with poor response to treatment and poor disease-free survival in cervical cancer. Liu et al³ studied the spectrum and prevalence of HPV in healthy women in Guangzhou and Hong Kong and determined the extent and clinical significance of integration of HPV16 and HPV58 genomes in the host in relation to precancerous lesion and cervical cancer. They found that women in Guangzhou had significantly higher HPV prevalence than those in Hong Kong. Younger women had significantly higher risk of HPV infection.

A research impact evaluation was conducted 2 years after the project end date for all studies reported in this supplement. Many of the studies reported impact through knowledge generation, capacity building, and influence on health policy and health care practices.

We hope you will enjoy this selection of research dissemination reports. Electronic copies of these dissemination reports and the corresponding full reports can be downloaded individually from the Research Fund Secretariat website (<http://www.fhb.gov.hk/grants>). Researchers interested in the funds administered by the Food and Health Bureau also may visit the website for detailed information about application procedures.

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References

1. Tu WW, Lau YL, Peiris JS. Use of humanised mice to study antiviral activity of human $\gamma\delta$ -T cells against influenza A viruses. *Hong Kong Med J* 2014;20(Suppl 5):4-6.
2. Chan HL, Wong VW, Wong GL, Choi PC. Non-invasive algorithm for detecting advanced liver fibrosis in chronic hepatitis B patients. *Hong Kong Med J* 2014;20(Suppl 5):31.
3. Liu SS, Chan KK, Leung RC, et al. Human papillomavirus status in southern Chinese women. *Hong Kong Med J* 2014;20(Suppl 5):35-8.