Special Departmental Seminar

Prevention of colonic inflammation and colon cancer: novel risk factors and novel therapeutic targets

By

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Date: 30 May 2018 (Wednesday)
Time: 11:00 am
Venue: CSE Conference Room B6605 (near Lift 3)
Level 6, Blue Zone
Yeung Kin Man Academic Building
City University of Hong Kong
Tat Chee Avenue, Kowloon Tong

For abstract, please refer to the attached sheet.

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~ All are Welcome ~
Prevention of colonic inflammation and colon cancer: novel risk factors and novel therapeutic targets

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The incidence and prevalence of inflammatory bowel disease (IBD), which is characterized by chronic inflammation in small intestine and colon tissues, are dramatically increasing in the US and other countries. IBD severely impacts life quality of the patients. Symptoms include abdominal pain, vomiting, diarrhea, and rectal bleeding; to date, there is no cure of IBD. In addition, IBD patients have increased risks of developing colon cancer. It is estimated that more than 20% of IBD patients would develop colon cancer, and more than 50% of these patients would die from colon cancer.

Our research focuses on prevention of IBD and IBD-associated colon cancer. To achieve this, we address two major issues: (1) identification and characterization of novel environmental risk factors of IBD and colon cancer. We study how environmental and dietary compounds alter gut microbiome and deregulate mucosal immune system to exaggerate colonic inflammation and colon tumorigenesis; and (2) discovery of novel therapeutic targets and biomarkers of IBD and colon cancer. We use LC-MS/MS-based lipidomics and transgenic animal models to study the roles of eicosanoid signaling in colonic inflammation and colon cancer, in order to identify novel therapeutic targets and biomarkers of these diseases.

References:


