INSTITUT PASTEUR

香港大學－巴斯德研究中心
HKU-Pasteur Research Centre

THE UNIVERSITY OF HONG KONG
LI KA SHING FACULTY OF MEDICINE
香 港 大 學 李 嘉 誠 醫 學 院

1st Pasteur-Asia Immunology Course

A seminar entitled

'Structural Mechanism of RNA Recognition by the RIG-I-like receptors'

will be given by

Dr Takashi Fujita
Laboratory of Molecular Genetics, Institute for Virus Research
Laboratory of Molecular Cell Biology, Graduate School of Biostudies
Kyoto University, Japan

Date:	Friday, 24 October 2008
Time:	14:00 pm to 15:00 pm
Venue:	Mrs Chen Yang Foo Oi Telemedicine Centre 2/F, William MW Mong Block, Faculty of Medicine Building 23 Sassoon Road, Pokfulam, Hong Kong
Contact:	hku-pasteur@hku.hk or Anne Li at +852 2816 8403

Abstract:

Cytoplasmic non-self RNA such as those generated by invading viruses are recognized by a family of sensor molecules termed RIG-I-like Receptor (RLR). Here I discuss the mechanism of sensing non-self RNA by the RLRs. Biochemical and structural studies have shown that one of the RLR, RIG-I, specifically recognizes distinct features of non-self RNA: 5'ppp-RNA and short double stranded-RNA. In addition, a domain at the C-terminus with basic concave surface is involved in recognition of these substrate RNA. Specific RLR, RIG-I and MDA5 show distinct specificity such as preference of 5'-phosphate group or length of RNA. These findings define three functional domains of RLR and provide insights on how it functions as a molecular switch through interaction with virus-specific RNA ligands.

Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE
CONSULAT GÉNÉRAL DE FRANCE
À HONG KONG

裘槎基金會
THE CROUCHER FOUNDATION

AIR FRANCE
法 國 航 空 公 司