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# The 38th iCeMS SEMINAR

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2009 12. 04 (金)  
17:00-18:00

講演者： **Dr. Victor Ling**  
President and Scientific Director  
Terry Fox Research Institute

演題： **The Use of Knockout Mice  
to Investigate the Role of  
ABC Transporters in Bile Flow**

場 所： 京都大学 アイセムス本館 2階 (東一条北西角)  
セミナー室 (A207)

Bile flow is critical for human health. A critical step involves the energy-dependent transport of bile salt across the canalicular membrane in the liver, via the ABCB 11 bile salt export pump (BSEP). Mutations in BSEP result in insufficient bile flow and progressive cholestatic disease. Investigation of knockout mice, in which the bile salt export pump is inactivated, revealed the ability of these mice to compensate for this defect. This includes the greatly increased synthesis of tetrahydroxylated bile acids (THBA) and the up-regulation and use of an alternative ABC transporter (ABCB1, MDR1) to maintain bile flow sufficiency. These findings may have therapeutic implications for the use of THBA in a variety of liver diseases.

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