The 38th iCeMS SEMINAR

Fri 4 Dec 2009
17:00-18:00

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

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

Venue: 2nd floor Seminar Room (#A207)
Main Building iCeMS Complex 1, Kyoto University

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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