

**The 591th Medical Research Institute Seminar**  
**The 164th Joint Usage/Research Program of Medical Research Institute Seminar**

Date: March 27, 2019      13 : 00-14 : 30

Venue: Seminar Room 3, M&D Tower 23F

Lecturer: Prof. Benjamin K. Tsang

(Director, Reproductive Biology Unit, Department of Obstetrics and Gynaecology,  
University of Ottawa, Canada )

Title: In Search of Early Diagnosis and New Therapy Strategy for Chemoresistant Ovarian Cancer in the Era of Precision Cancer Medicine

Summary:

Ovarian cancer (OVCA) is the most lethal gynecological cancer, due mainly to late diagnosis, recurrence and chemoresistance. Although combined cytoreductive surgery and chemotherapy is initially a successful treatment, chemoresistance remains a major hurdle for long term therapeutic success. OVCA is considered a cold tumor and has poor immune cell infiltration, rendering immunotherapy ineffective to date. In this lecture, Professor Ben Tsang will elaborate on the role of plasma gelsolin (pGSN), a calcium-dependent actin-binding protein, in the molecular and cellular basis of chemoresistance in OVCA. Specifically, pGSN secretion is involved in exosome-mediated signaling in the ovarian tumor microenvironment, resulting in subtype-specific T cell anergy, apoptosis and chemoresistance. The clinical significance of his studies is pGSN could serve as a new biomarker for diagnosis of stage 1 disease, in the prognostication in residual disease and a possible target for immunomodulation in chemoresistant OVCA patients.

Organizers: Department of Molecular Cytogenetics,  
Prof. Johji Inazawa (ext. 5820)

Co-organizer: Department of Stem Cell Regulation, Prof. Tetsuya Taga