LU TALKS

Language Understanding Laboratory

Pancreatic Cancer Research using Molecular Imaging and Animal Models

Our Guest Speaker

Dr. Winn Aung
Senior Researcher
Department of Molecular Imaging and Theranostics
Institute for Quantum Medical Sciences
National Institutes for Quantum Science and Technology
4-9-1 Anagawa, Inage-ku, Chiba 263-8555, Japan
winn.aung@qst.go.jp

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9:00 am (Myanmar Time)
11:30 am (Japan Time)

Chairperson

Dr. Ye Kyaw Thu
(Lab. Leader)
yktnlp@gmail.com

Biography

- 1982-1987: M.B.,B.S. (Bachelor of Medicine and Bachelor of Surgery) Institute of Medicine (1), Yangon, Myanmar
- 1992-1994: Completed the two years regular course for Japanese Language Meros Language School, Tokyo, Japan
- 1994-1997: Completed the two years basic curriculum for Information Technology Yoyogi Information Technology and Accounting School, Tokyo, Japan
- 1998-2002: Ph.D. in Medical Science (Radiology) Tokyo Medical and Dental University, Tokyo, Japan

Pancreatic cancer has the worst prognosis among malignant solid tumors. In 2018, in USA, it is the fourth and ninth leading cancer type for estimated cancer death and new cancer case, respectively. Five-year survival rate is still as low as 9% according to the American Cancer Society 2018 statistics. The major reasons of poor prognosis are late diagnosis and lack of effective therapy. An ideal imaging modality and reagent for diagnosis of pancreatic tumors remains elusive. In recent years, positron emission tomography (PET) using 18F-fluoro-2-deoxy-Dglucose (18F-FDG) has been most commonly used for the evaluation of pancreatic cancer, as in the other clinical settings of various cancers. However, certain pitfalls, including false positive findings due to pancreatitis or false-negative diagnosis in hyperglycemic patients, limit the accuracy of detection. Moreover, the treatment options for the pancreatic cancer are still limited including surgery, adjuvant chemotherapy, and radiation therapy and have not given encouraging outcomes so far. Therefore, to achieve the early diagnosis and new treatment options, researchers from around the world are trying to find out the new strategies for diagnosis and treatment of pancreatic cancer in preclinical and clinical studies. We are also challenging the preclinical tasks by adopting state-of-the-art molecular imaging techniques and small animal models. Molecular imaging can be applied to various aspects of cancer imaging: early detection, diagnosis and treatment-response monitoring. However, the current status of clinical molecular imaging is limited with a few specific molecular targets. The availability of a more cancer-specific imaging agent targeting tumor markers of pancreatic carcinoma is desirable. Meanwhile, the suitable animal models that mimic the clinical situation as closely as possible are essential for developing and comparing new diagnostic and therapeutic strategies.

In this presentation, he will discuss their data that encourage the potential of novel molecular-targeted approaches using new targets / probes for diagnosis and therapy of pancreatic cancer.

Online Seminar Via Microsoft Team