DTU Holds a Seminar on Pancreatic Stem Cell Cancer

On June 18th, Dr. Duong Hong Quan, a member of the DTU Center for Research and Development, presented a scientific abstract, entitled “Pancreatic Stem Cell Cancer: Principles and Therapeutics”. Lecturers and students attended from the DTU Faculty of Medicine and Pharmacy.

At the seminar, Dr. Quan introduced the topic of pancreatic cancer and studies that he has conducted on pancreatic stem cells. Pancreatic cancer occurs when cells develop genetic mutations, due to smoking, family history, diet, diabetes and environmental factors. Symptoms may not appear until the cancer is quite advanced and surgical removal is no longer possible.

Pancreatic cancer cells in particular are able to invade and spread rapidly to other organs such as the liver, lungs, stomach, bowels and so on, which limit the effectiveness of surgery, chemotherapy and radiotherapy. Therefore, many studies in new targeted inhibitors and other special treatment for pancreatic cancer stem cells have recently been conducted by scientists worldwide.

Dr. Quan said: “Diagnosing the principles and the spread of the disease and using targeted inhibitors to kill the cancer cells is vital to start controlling a disease which is accelerating fast in Vietnam and all over the world. Presently, our team is focusing on experimenting with a combination of ALDH1A1-siRNA and Gemcitabine on mice with pancreatic tumors. This research could result in a powerful way of overcoming the resistance of pancreatic cancer in the near future.”
Previously, at the 24th Annual Meeting of the KSMCB held in Seoul, Korea, from October 10th to 12th, 2012, Dr. Quan presented three scientific abstracts focusing on pancreatic adenocarcinoma cells, entitled “Aldehyde dehydrogenase 1A1 (ALDH1A1) confers intrinsic and acquired gemcitabine resistance to pancreatic adenocarcinoma cells”, “Inhibition of checkpoint kinase 2 (CHK2) significantly enhances sensitivity of pancreatic adenocarcinoma cells to gemcitabine” and “The anti-tumor effects by BML-275, AMPK inhibitor in pancreatic adenocarcinoma cells”. These three scientific abstracts were well received at the conference.

Pancreatic cancer has been identified as the 4th leading cause of cancer deaths. Dr. Quan’s research is contributing to enhancing the effectiveness of pancreatic cancer treatment. His ongoing studies concern molecular mechanisms and pancreatic cancer stem cell therapy. He will support lecturers and students of the DTU Faculty of Medicine and Pharmacy in conducting cancer and pathological research with the objective of improving the quality of education at DTU.

(Media Center)