**Molecular Imaging for drug development**

Hyewon Youn, Ph.D.

Department of Nuclear Medicine, Seoul National University Hospital,

Molecular imaging has been used as a good tool to accelerate drug development. Molecular imaging can be effectively used to verify the efficacy and safety of various new drugs. In this lecture, I would like to introduce the usefulness of molecular imaging in drug development through our recent progress of developing a novel nuclear imaging probe targeting TSPO for diagnosis of neuro-inflammation and the image-based efficacy test for vaccine development.