

Co-located Session

02

Novel Therapeutics from Discovery to Licensing I, II

April 9(Thur), 13:00 ~ 17:30 / Rm. 301

We are members of KSBMB Drug Development Consortium, who are developing novel therapeutics since 2010. We will introduce several successful stories of novel drug candidates based on innovative discoveries.

SESSION 1. TARGETED CHEMICAL DRUG DESIGN TOWARDS PERSONALIZED LUNG CANCER THERAPY 13:00 ~ 15:00

In the post human genome project era, the paradigms for new drug discovery have focused on personalized therapy. This session will cover the subjects on the targeted chemical drug design for the treatment of lung cancer. The topics will include the chemical screening system exploiting the metabolism of lung cancer and novel pharmacophore design strategies for the drug resistant lung cancer.

SESSION CHAIR **Minsoo Noh**, Assistant Professor, College of Pharmacy, Seoul National University

13:00 ~ 13:40 **Structure-Activity Relationship Study of New Anticancer Natural Lignans with Low Toxicities**
Dongyun Shin, Assistant Professor, College of Pharmacy, Gachon University, Korea

13:40 ~ 14:20 **Integrative Approaches to Develop Novel Therapeutic Strategies by Exploring the LKB1-AMPK Paradox in Lung Cancer**
Sang-Min Jeon, Assistant Professor, Department of Pharmacy, Ajou University, Korea

14:20 ~ 15:00 **Discovery of Reversible EGFR T790M Inhibitors for the Treatment of Gefitinib Resistant Non-small Cell Lung Cancer**
Kyung Hoon Min, Associate Professor, College of Pharmacy, Chung-Ang University, Korea

15:00 ~ 15:30 Session Break

SESSION 2. NOVEL APPROACH FOR CANCER THERAPY: TARGETING CANCER METABOLISM 15:30 ~ 17:30

Drug development groups are on the verge of discovering another pot of gold - a therapeutic target - similar to the successful Gleevec case in cancer biology. Modern molecular biology improves cancer therapy through finding more pharmaceutically viable targets, and yet there still remain major problems and risks in late phase cancer therapy. Presently, a growing number of reports have begun talking about the benefits of regulating metabolism in cancers. It looks strange to us in Korea, but is already popular in clinical trial for cancer in western world. There are so many reports that regulating metabolic targets in cancer result in a wonderful response. In this session, we introduce the novel concept of anti-cancer therapeutics development targeting cancer metabolism, as well as successful story of anti-cancer metabolism strategy.

SESSION CHAIR **Kyeong Man Hong**, Chief, Omics Core Lab. National Cancer Center

15:30 ~ 16:10 **Two Novel Approaches for NSCLC Therapeutics by Regulation of Cancer Metabolism**
Soo-Youl Kim, Head, Cancer Biology Division, National Cancer Center, Korea

16:10 ~ 16:50 **A Highly Specific Assay for Cancer-Causing Isocitrate Dehydrogenase Mutant and its Application to Natural Product Screening**
Sunghyook Park, Associate Professor, Head, Department of Manufacturing Pharmacy, College of Pharmacy, Seoul National University, Korea

16:50 ~ 17:30 **Targeting Mitochondrial OXPHOS in Cancer Metabolism**
Yoo Sanghee, Research Director, New Drug R&D Center/HanAll Biopharma, Korea