

SPECIAL SESSION

Korea-Singapore International Global Industry Forum 2017 (Bio Industry)

Chair/Co-Chair: Prof. Ho Sup Yoon / Dr. Shin Cheul Kim

17 Nov, 2017 / 13:30 - 17:50

Ballroom 3913, MBS, Level 3

According to the report by EvaluatePharma, the market for prescription drugs is expected to grow by 5.1% per year (CAGR) to reach \$ 1.2 trillion by 2020. The aging population afflicted with chronic diseases requiring long-term care will be a critical burden for government and healthcare providers in both the developed and pharmerging markets. This special forum is devoted to review various drug development platforms with innovative approaches and novel ideas that have the potential to transform disease treatment in the future healthcare. We wish that this session will be a vibrant forum for participants to initiate fruitful discussions between Korea and Singapore. Hopefully, these discussions may broaden our horizon and capabilities and will lead to future collaborations in biomedical R&D sector and healthcare industry.

Timetable

13:30 - 13:50	Prof. Wu Bin: Engineering a Catalytically Efficient Recombinant Protein Ligase
13:50 - 14:10	Prof. Andrew Tan: Plugging the Leaks in Cancer Metastasis and Respiratory Infection
14:10 - 14:30	Dr. Byung Soo Yoon: Eupatilin, a chromone scaffold compound, has a potential to overcome idiopathic pulmonary fibrosis, IPF
14:30 - 14:50	Dr. Rishikesan Sankaranarayanan: Discovery of disease-modifying therapeutics for Parkinson's Disease
14:50 - 15:10	Dr. Sang-Hyun Min: DGMIF-Preclinical Drug Development Platform
15:10 - 15:30	Mr. Soowoong (Philip) Kim: The Global platform strategy of C&R through Korea-Singapore cooperation in Bio-healthcare industry
15:30 - 16:00	Coffee/Tea Break
16:00 - 16:20	Prof. Jaeseung Yoon: Development of Biosimilars at PanGen Biotech
16:20 - 16:40	Dr. Jong-seong Ahn: Adoptive immune cell therapy for the liver cancer using the autologous CIK cells
16:40 - 17:40	Open Forum: Biopharmaceuticals - Quest for Billion Dollar Molecules? Panel: Ho Sup Yoon, Sinchul Kim, Jaeseung Yoon
17:40 - 17:50	Closing

Prof. Ho Sup Yoon

*Professor of Structural Biology & Biochemistry
Director, Bioscience Research Center
School of Biological Sciences
Nanyang Technological University
Singapore*



Ho Sup Yoon is currently Professor in the School of Biological Sciences and Director of Bioscience Research Center at Nanyang Technological University, Singapore. After obtaining his PhD degree from University of Chicago in Biochemistry, he worked at Abbott Laboratories and contributed to several drug discovery projects. He left Abbott in early 2002 and joined School of Biological Sciences, Nanyang Technological University as a founding faculty member and appointed as Head of Division of Chemical Biology & BioTechnology from 2010 to 2011 followed by Head of Division of Structural Biology & Biochemistry from 2011 to 2015. Prof Yoon has done seminal research on Pleckstrin homology (PH) domain recognizing phosphoinositides and molecular mechanism of pro-survival Bcl-2 family proteins. He has published on the order of 100 papers in highly regarded journals and holds 10 patents in cancer, dengue and Parkinson's disease areas. Prof Yoon was the recipient of Abbott Drug Discovery Impact Award 2000. In 2016 Prof Yoon has been elected as a Fellow of The Royal Society of Chemistry (FRSC) United Kingdom.

SPECIAL SESSION

Dr. Shin Cheul Kim

Director, Technology Transfer Office. The University of Hong Kong, Managing Director, Versitech Limited



Dr. Shin Cheul KIM is a director of Technology Transfer Office at University of Hong Kong(HKU), managing director of Versitech Ltd, associate director of Knowledge Exchange Office and a member of University Research Committee at HKU (2017). He is in charge of HKU's IP management, innovation and technology commercialization. He served as a senior vice president in Exploit Technologies Pte Ltd (ETPL) (2007~2016), a commercialization arm of Agency for Science, Technology and Research (A*STAR) Singapore. He was a founding member of NESS Display Co Ltd (2000) in Korea which commercialized OLED display in 2002 with the strength of 370 IP portfolios. He has the strong track records on technology commercialization, innovation and investment. Over all, he involved in establishing 12 start-ups mainly in materials, electronics and biomedical applications with the total investment of more than US\$150m.

Dr. Wu Bin

*Nanyang Assistant Professor
School of Biological Sciences
Nanyang Technological University, Singapore*



Dr Wu Bin obtained his PhD in 2010 from Nanyang Technological University and joined Sun Hur's lab at Harvard Medical School for two stints of postdoc research in the field of molecular immunology. In his Boston years, he solved a couple of complex structures, using X-ray crystallography and cryo-EM, capturing the signaling intermediates of RIG-I/MDA5/MAVS pathway, and published research articles in various journals including Nature, Cell, Mol Cell, PNAS, etc. When he came back to Singapore in 2015, he established his own research group aiming at conquering immunology related diseases with novel approaches. At AKC 2017, he will present the discovery of an engineered protein ligase that is thousands times faster than sortase A, and capable of modifying proteins under routine experimental conditions. This presents us an unrepresented opportunity in various of applications.

Dr. Andrew Tan

*Associate Professor and Associate Chair
School of Biological Sciences
Nanyang Technological University, Singapore*



Dr. Andrew Tan is a tenured Associate Professor of Nanyang Technological University. He is currently the Associate Chair (Students) of School of Biological Sciences and holds a joint position with the Lee Kong Chian, School of Medicine. Dr Tan is also a Joint Scientist of the KK Women's and Children's Hospital (SingHealth) and an Adjunct PI of Institute of Molecular and Cell Biology (A*STAR). He was awarded the Nanyang Education Award (2013, 2007) for his innovative teaching and the Nanyang Award for Research Excellence (2013) for his contribution on anoikis resistance during cancer metastasis. In 2014, Dr Tan was awarded The Commendation Medal from the Prime Minister's Office, Singapore. Dr Andrew Tan is an alumnus of National University of Singapore. He graduated with a PhD in Cell and Molecular Biology in 1997. His first postdoc was in the lab of Prof Jeak Ling in NUS and worked on the endotoxin detecting enzyme, Factor C, from the horseshoe crab. Later, he joined Prof Walter Wahli's lab in Center of Integrative Genomics (Lausanne, Switzerland), where he elucidated the roles of peroxisome-proliferator-activated receptor in wound healing, various facets of metabolic syndrome and the discovery angiopoietin-like 4.

SPECIAL SESSION

Dr. Byung Soo Youn

*Founder and CTO
OsteoNeurogen, Korea*



Dr. Youn was trained in a molecular immunology and hematology area at the department and Immunology in school of medicine & Indiana university. He originally discovered CCR9 that plays a pivotal role in homing gut-associated T cells. Since he returned to Korea he established a diagnostic company named AdipoGen in 2005 now being AdipoGen Lifesciences. He contributed to immunometabolism by developing several key adipokine assay systems. After leaving AdipoGen he was involved in osteoporosis, leading to a missing signaling axis called the progranulin-PIRO axis that had been embedded in the RANKL-RANK osteoclastogenesis master axis. This study made him conceptualize a connection of epithelial-mesenchymal transition (EMT) to fibrosis. He established a biotech company called OsteoNeuroGen that has been singly focusing on development of a powerful anti-fibrosis platform technology.

Dr. Rishikesan Sankaranarayanan

*Business Development Director
Lifex Biolabs, San Jose CA, USA*



Dr. Rishikesan is currently Business Development Director of Lifex BioLabs, San Jose, CA, USA. He has 15 yrs of experience in biological research and has worked on protein biochemistry & drug development for the last 10 years. He was working on the tribological properties of Gastric Mucus based drug delivery system during 2014-16 at DTU-Denmark. Prior to that, he was studying interaction patterns of Gelsolin-Actin-Ca at NUS-Singapore. During his PhD, he studied the structural properties of V-ATPase, and also postulated the interaction pattern of Mycobacterium Tuberculosis drug candidate TMC-207 with F-ATP Synthase. He holds a Ph.D. in Protein Biochemistry from NTU-Singapore.

Dr. Sang-Hyun Min

*Principal Researcher
New Drug Development Center, Daegu Gyeongbuk
Medical Innovation Foundation (DGMIF), Korea
Adjunct professor, Kyungpook National University,
Daegu, Korea*



Dr Sang-Hyun Min obtained his PhD from Korea Advanced Institute of Science and Technology (KAIST) in 2009 and joined Prof Kun Ping Lu at Harvard Medical School as a Research Fellow working on regulatory roles of Peptidyl prolyl isomerase PIN1. He returned to Korea in 2012 and joined New Drug Development Center, DGMIF, Korea as a Principal Researcher. Currently, he also holds an adjunct Professor position, Kyungpook National University. His research focuses on the target-oriented drug discovery for several diseases including cancers, osteoporosis, obesity and diabetes. His group is also interested in phenotype-based drug screening using patient-originated iPS (induced pluripotent stem cells) as a trial of drug reposition.

SPECIAL SESSION

Mr. Soowoong (Phillip) Kim

*Director
C&R Research (PM, C&R Healthcare Global)*



Soowoong (Phillip) Kim is a Director of C&R Research and in charge of C&R HealthcareGlobal project. Based in Singapore, C&R Healthcare Global is capable of pursuing an ecosystem which allows Bio-health companies to expand globally. He had been working as the Director of Global Healthcare Business Center in KHIDI. In his career, he has participated in 42 International Free Trade Agreement (FTA) Negotiations. Since 2009, he has taken the overall responsibility of promoting 'Medical Korea' which is the national medical brand of Korea. Throughout his project, he has contributed to Korean Global Healthcare Project.

Previously, as the director of KHIDI-UK London Office, he managed the Global Healthcare Business for supporting Korean HT industry to extend their business in EU during 2012-2015.

Prof. Jaeseung Yoon

*Professor, Kyung Hee University
President & CEO, PanGen Biotech Inc.*



Dr. Jaeseung Yoon is Professor of the department of Genetic Engineering at Kyung Hee University, Korea and President & CEO of PanGen Biotech Inc. He received a B.S. degree in microbiology from Seoul National University, Korea and a Ph.D. degree in biological sciences from Purdue University, USA. After postdoctoral research at Purdue he joined the Kyung Hee University faculty in 1992. Dr. Yoon and his colleagues developed a novel mammalian cell expression vector, based on insulator and transcription terminator elements, that can efficiently produce protein from Chinese hamster ovary (CHO) cells in late 1990s, and then Dr. Yoon founded PanGen Biotech Inc. in 1999 with this innovative technology. Since its establishment, PanGen has been supporting many pharmaceutical companies and science community by meeting their needs in entire biopharmaceutical development value chain (from stable cell line development to GMP manufacturing of therapeutic proteins including monoclonal antibodies). Recently, PanGen started development of biosimilar protein therapeutics and some of them are already in clinical trials. PanGen Biotech Inc. he founded was listed in KOSDAQ (**Korean Securities Dealers Automated Quotations**) on March 11, 2016 (Stock code number 222110) as a New Growth Engine Company.

Dr. Jong-Seong Ahn

*Head
Green Cross Cell Manufacturing Unit, Korea*



Dr Jong-Seong Ahn graduated from Department of Zoology, Seoul National University, Korea. He subsequently obtained his PhD degree in Biotechnology from Hankuk University of Foreign Studies, Korea. Dr Ahn was a former Director of the production sector of Green Cross LabCell. He also worked as Research Scientist at Mogam Institute for Biomedical Research, Korea. Currently, he is Head of Green Cross Cell Manufacturing Unit.