BIOKOREA 2010
CONFERENCE & EXHIBITION

BIO KOREA 2010

BIO for Humanity

CONFERENCE & EXHIBITION

Sep. 01 (Wed) ~ 03 (Fri), 2010
COEX, Seoul, Korea

National Treasure 5
Beopjusassangsajaseokdeung

ORGANIZED BY

Korea International Trade Association
Chungcheongbuk-do
KHIDI Korea Health Industry Development Institute

PROGRAM

Conference
Exhibition
Business Forum (Partnering + Company Presentation)

www.biokorea.org

5th Korea National Treasure

Beopjusassangsajaseokdeung

Beopjusassangsajaseokdeung (Twin-lion stone lantern of Beopjusa Temple) is the National Treasures 5 which stands for the light of Buddha, and so it is also called a Gwangmyeongdeung (a light lantern). It is usually set up in front of important structures such as a main temple or a pagoda. The stone lantern is from the United Silla Dynasty, and stands between the main temple and the hall of eight phases of the Buddha in Beopjusa Temple. It is the oldest among the relics with carved lion figures and has very unique shape. The figure is that the chests of two lions' face with each other and the lions are standing with their hind legs and supporting the upper stone with their front paws and muzzles. It looks simple and balanced perhaps because of not being decorated.

They guess that the stone lantern was built in the 19th year (720) of Queen Seongdeok. It looks very solemn because the roof stone looking a little large is properly proportional to the flat and wide pedestal stone. Compared with stone lanterns of Silla Era for which octagonal pillars were usually used, the stone lantern has two lions as pillars, which must have been an epoch-making trial at those times.

Korea has a numbered set of National Treasures. To promote the traditional culture of Korea, BIO Korea introduces one National Treasure a year whose number corresponds to the 'nth' year of the meeting.

The Dynamic Asian Bio Hub,
BIO KOREA 2010 CONFERENCE & EXHIBITION

C.O.N.T.E.N.T.S

Welcome to BIO KOREA 2010

Welcome to BIO KOREA 2010 Conference & Exhibition. The 5th BIO KOREA, one of the most comprehensive biotechnology events in the world, will be held from September 1st to 3rd at COEX, Seoul, Korea.

First launched in 2006, BIO KOREA has become one of the most influential and well-known events in Asia. The exceptional success of the previous four events proves its immense potential. It has achieved much beyond all initial expectations and is now a major and effective engine driving the Korean bio-industry's global expansion.

The Korean bio-industry with its huge potential has grown more than 10% annually in the last four years. Due to such growth, interest from the general public as well as the Korean government has been increasing significantly. In order to grow and expand this industry, our government has devoted time and support to foster this event, making it a prominent global bio-industry event and one that offers in depth information about various Korean bio-industries. This event will provide great opportunities for both domestic and foreign investors to meet with fast-growing Korean companies and leading Korean research institutions.

BIO KOREA 2010 will showcase a more solid and broader participation from both local and overseas companies and investors. It will consist of various programs including conference, exhibition, and business forum. It will be a valuable networking venue for potential partnerships with distinguished participants from around the world. In particular, plenary speeches and conference speakers from global leaders in their various research fields will help you obtain and achieve a better insight into practical applications of biotechnology.

We greatly appreciate your time and interest in BIO KOREA 2010, and we hope this event will be enjoyable for you.

Sakong Il
Chairman & CEO
Korea International Trade Association

Lee Si-Jong
Governor
Chungcheongbuk-do

Kim Bup-Wan
President
Korea Health Industry Development Institute

BIO KOREA 2010 Overview

Overview : BIO KOREA 2010 Conference & Exhibition

Period : September 1(Wed) ~ 3(Fri), 2010

Venue : COEX, Seoul, Korea

Organized by : Korea International Trade Association (KITA)
Chungcheongbuk-do (Chungbuk)
Korea Health Industry Development Institute (KHIDI)

Managed by : BIO KOREA Organizing Committee

Supported by : • Government Agencies
Ministry of Health & Welfare (MOHW)
Ministry of Knowledge of Economy (MKE)
Seoul Metropolitan Government
Korea Food & Drug Administration (KFDA)
Korean Intellectual Property Office (KIPO)
Rural Development Administration (RDA)

• Organizations
Korea Research Institute of Bioscience and Biotechnology (KRIBB)
Korea Research Institute of Chemical Technology (KRICT)
Korea Institute of Oriental Medicine (KIOM)
National Cancer Center (NCC)
Korea Institute of Patent Information (KIPI)
Osong Bio Promotion Foundation

• Associations
Korea Pharmaceutical Manufacturers Association (KPMA)
Korea Drug Research Association (KDRA)
Korea Biotechnology Industry Organization
Korean Hospital Association (KHA)
Korea Medical Devices Industrial Cooperative. Association (KMDICA)
Korea Medical Devices Industry Association (KMDIA)
Korea Foods Industry Association (KFIA)
Korea Health Supplement Association (KHSA)
Korea Cosmetic Association (KCA)
Korean Academy of Medical Sciences (KAMS)

Sponsored by :

PROGRAM

CONFERENCE

- Period : September 1(Wed) ~ 3(Fri), 2010 (3 Days)
- Venue : Conference Rm. (South) 3F., COEX, Seoul
- Expected No. of Participants : Approx. 4,500 People from around the World
  * Workers in bio industry, research institutes, academic organizations and Interested individuals in Korea & Overseas
- Program : 147 Speakers, 50 Sessions, 17 Tracks

EXHIBITION

- Period : September 1(Wed) ~3(Fri), 2010 (3 Days)
- Venue : Hall C, 3F, COEX, Seoul
- Expected Participants :
  Expected Exhibitors : Approx. 250 Companies (Approx. 60 from Overseas)
  Expected Visitors : Approx. 12,500 Persons (Approx. 500 from Overseas)
- Key Exhibits :
  - Red Bio - Pharmaceuticals & Drug Discovery, Biotechnology, Genomics & Proteomics - Industrial & Environmental Biotechnology
  - Green Bio - GMO, Agriculture & Functional Food, Eco-friendly Biotechnology
  - White Bio - Bio Mass, Eco-friendly Industrial Process, Bio Environmental Energy
  - BIO-IT - BIO Chip, Bioelectronics, Bioinformatics
  - Equipments - Medical Devices & Lab Equipments
  - Academic Researches - CRO, CMO, CSO, BIO-Clusters, Academic Research Centers, Bio-related Univ. Dept, etc.

BUSINESS FORUM

- Period : Partnering - Sep. 1(Wed) ~ 3(Fri), 2010
  Company Presentation - Sep. 2(Thur) ~ 3(Fri), 2010
- Venue : Partnering - Hall C4, 3F., COEX, Seoul
  Company Presentation - Rm. 327A~C, 3F., COEX, Seoul
- Expected Participants : Bio (Venture) Companies from Korea & Abroad, Bio-clusters, Local Governments, Embassies, Investors, Research Institute, etc.
- Program : Partnering (1:1 Business Meeting)
  Company Presentation (30 min.~60 min. including Q&A)

PLENARY SPEECHES

- Date : September 1(Wed) , 2010
- Venue : Grand Conference Rm. (South), 4F, COEX, Seoul

※ Anyone who registers for the BIO KOREA 2010 is eligible for admission to the plenary session for free without additional registration for the conference. Please be sure to wear your name badge for admission.

SPECIAL EVENTS

▪ Welcome Reception

- Date & Time : September 1 (Wed), 2010 19:00 ~ 21:00
- Place : Orchid Room, 2F., Grand Inter-continental Hotel Seoul

▪ Navigation & Partnering on Han River

- Date & Time : September 2 (Thur), 2010 18:30~21:30
- Place : Han River Cruise, Han River, Seoul

▪ The Entrepreneurship Boot Camp

- Date & Time : August 31 (Tue), 2010 10:00~17:00
- Place : Rm. 327, Conference Rm. (South), 3F., COEX, Seoul

▪ IVI (International Vaccine Institute) Sponsor Night

- Date & Time : August 31 (Tue), 2010 18:00~20:30
- Place : Grand Ballroom, 2F., Grand Inter-continental Hotel Seoul

BIO KOREA 2010 Schedule at a Glance

August 31 (Tue), 2010

Registration	Conference & Business Forum	Lobby of Hall C4, 3F., COEX / 09:00~17:00
Special Event	The Entrepreneurship Boot Camp	Rm. 327, 3F., COEX / 10:00~17:00
	IVI(International vaccine Institute) Sponsor Night	Grand Ballroom, 2F., Grand Inter-Continental Hotal Seoul / 18:00~20:30

September 1 (Wed), 2010

Registration	Conference & Business Forum	Lobby of Hall C4, 3F., COEX / 09:00~17:00
	Exhibition	Lobby of Hall C, 3F., COEX / 09:30~17:30
Conference	Opening Ceremony & Plenary Speeches	Grand Conference Rm. (Rm. 401), 4F., COEX
	Track 1. Vaccine	Rm. 402, 4F., COEX / 14:00~18:30
	Track 2. Technology Transfer & Licensing	Rm. 308, 3F., COEX / 14:00~18:30
	Track 3. Translational Research for Drug Development	Rm. 317, 3F., COEX / 14:00~18:30
	Track 4. Traditional Medicine	Rm. 318, 3F., COEX / 13:30~18:30
	Track 5. Advanced Therapies: Regulation and Development	Rm. 307, 3F., COEX / 13:30~18:30
Exhibition	Exhibition	Hall C, 3F., COEX / 10:00~18:00
Business Forum	Partnering	Hall C4, 3F., COEX / 10:00~18:00
Special Event	Welcome Reception	Orchid Rm., 2F., Grand Inter-continental Hotel Seoul / 19:00~21:00

September 2 (Thur), 2010

Registration	Conference & Business Forum	Lobby of Hall C4, 3F., COEX / 09:00~17:00
	Exhibition	Lobby of Hall C, 3F., COEX / 09:30~17:30
Conference	Track 6. Therapeutic Antibody	Rm. 307, 3F., COEX / 10:00~17:30
	Track 7. Regenerative Medicine	Rm. 308, 3F., COEX / 10:00~17:30
	Track 8. Medical Device & Diagnostics	Rm. 317, 3F., COEX / 10:00~17:30
	Track 9. Bioenergy	Rm. 301, 3F., COEX / 10:00~17:30
	Track 10. Food & Agriculture Ⅰ- GMO	Rm. 402, 4F., COEX / 10:00~17:30
	Track 17. Alzheimer's Disease	Rm. 318, 3F., COEX / 10:00~17:30
Exhibition	Exhibition	Hall C, 3F., COEX / 10:00~18:00
Business Forum	Partnering	Hall C4, 3F., COEX / 10:00~18:00
	Company Presentation	Rm. 327A~C, 3F., COEX / 10:00~17:00
Special Event	Navigation & Partnering on Han River	Han River Cruise, Han River, Seoul / 18:30~21:30

September 3 (Fri), 2010

Registration	Conference & Business Forum	Lobby of Hall C4, 3F., COEX / 09:00~17:00
	Exhibition	Lobby of Hall C, 3F., COEX / 09:30~16:30
Conference	Track 11. Food & Agriculture Ⅱ - Functional Food	Rm. 402, 4F., COEX / 10:00~17:30
	Track 12. Biosimilar	Rm. 307, 3F., COEX / 10:00~17:30
	Track 13. BIO Imaging	Rm. 308, 3F., COEX / 10:00~17:30
	Track 14. u-Health	Rm. 301, 3F., COEX / 10:00~17:30
	Track 15. Korea Medical Cluster	Rm. 318, 3F., COEX / 10:00~17:30
	Track 16. Clinical Drug Development	Rm. 317, 3F., COEX / 10:00~17:30
Exhibition	Exhibition	Hall C, 3F., COEX / 10:00~17:00
Business Forum	Partnering	Hall C4, 3F., COEX / 10:00~18:00
	Company Presentation	Rm. 327A~C, 3F., COEX / 10:00~16:00

Plenary Speeches

The BIO KOREA 2010 Conference consisting of 17 tracks and 50 sessions promise to be another outstanding academic and professional development experience. In particular, plenary session, the highlight of the conference, will provide you with great ideas to discover challenges and upgrade yourself for your future.

The plenary speech at the BIO KOREA 2010 Conference by Prof. Ada E. Yonath, the first female Nobel winner in 2009, Dr. John D. Clemens, Director-General of the International Vaccine Institute, and Dr. Peter St. George-Hyslop FRS, Professor of Cambridge Institute for Medical Research, is already in the spotlight.

We hope you to read the trends in bio-health industry, forecast its future and get a competitive edge with the world-leading experts at the BIO KOREA 2010 Conference where the future of high-tech bio-health industry in the 21st century will begin.

※ Anyone who registers for the BIO KOREA 2010 is eligible for admission to plenary session for free without additional registration for the conference. Please be sure to wear your name badge for admission.

Plenary Speech I

Dr. Ada E. YONATH
Professor of Structural Biology &
Director of Helen & Milton A. Kimmelman Center for Biomolecular Structure and Assembly
Weizmann Institute of Science

Widely considered the pioneer of ribosome crystallography, Prof. Ada Yonath was awarded the Nobel Prize winner in chemistry for her groundbreaking work in understanding how cells build proteins in 2009. Her achievements include a singular pioneering work on the structure of over a dozen antibiotics and their interaction with ribosomes on the molecular level. This has paved the way to the understanding of antibiotic selectivity and the mechanism of drug action, synergy and resistance, thus inspiring the development and design of new antibiotic drugs. Born in Jerusalem, Israel, she graduated with a bachelor's degree in Chemistry and a master's degree in Biochemistry from the Hebrew University of Jerusalem, and earned a Ph.D. in X-Ray Crystallography at the Weizmann Institute of Science. She has also received postdoctoral degrees at Carnegie Mellon University and MIT. She has been active as a member of many international associations and organizations and her awards and honors include the first European Crystallography Prize; the Kilby International Award, USA; the Israel Prize in Chemistry; the Israeli Prime Minister's EMET prize; the Wolf Prize in Chemistry; the UNESCO Award for Women in Science, representing Europe; and etc.

Plenary Speech II

Dr. John D. CLEMENS
Director General of the International Vaccine Institute &
Adjunct Professor at the Seoul National University School of Public Health

Dr. John D. Clemens, Director-General of the International Vaccine Institute (IVI), is an international expert on the evaluation of vaccines in developing countries. From 1983-88, he served at the International Centre for Diarrheal Disease Research, Bangladesh, where he conducted research on an oral cholera vaccine and a measles vaccine. After returning to the U.S., he served as Chief of the Epidemiology Section of the Center for Vaccine Development of the University of Maryland, and then as Chief of the Epidemiology Branch of the National Institute of Child Health and Human Development , U.S. National Institutes of Health (NIH). While at NIH he was the Director of the first WHO Collaborating Centre for Vaccine Evaluation in Developing Countries and was a recipient of the NIH Director's Award for Outstanding Research on Vaccine Evaluation.

He has conducted clinical studies of vaccines against cholera, enterotoxigenic Escherichia coli, typhoid fever, pneumococcus, tuberculosis, Haemophilus influenzae type b, measles, and Japanese encephalitis, and published more than 300 original peer-reviewed papers. He is an elected member of the American Epidemiology Society and a Fellow of the American College of Epidemiology and of the Infectious Disease Society of America. He has served on several WHO Steering Committees, including committees for enteric vaccines, vaccine epidemiology, and vaccine safety, and he currently serves as a member of the Advisory Committee to the Director of the Initiative for Vaccine Research. He was the winner of the 2010 Albert B. Sabin Gold Medal, one of the highest honors in vaccine research, which is bestowed by the Sabin Vaccine Institute.

Plenary Speech III

Dr. Peter St GEORGE-HYSLOP, FRS
Professor of Cambridge Institute for Medical Research, University of Cambridge

Dr. St George-Hyslop is a leading neurologist and molecular geneticist who is known for his research into neurodegenerative diseases. He has identified a number of key genes that are responsible for nerve cell degeneration and early-onset forms of Alzheimer's disease. He has been honoured with the Alois Alzheimer Award, The Michael Smith Award for Excellence. He is a professor of Experimental Neuroscience at the Cambridge Institute for Medical Research, and Director of the Centre for Research in Neurodegenerative Diseases. Dr. St George-Hyslop was an instructor in Neurology and Genetics at Harvard Medical School and Massachusetts General Hospital. He also undertook post-doctoral training in molecular genetics at Harvard Medical School. He is a Howard Hughes Foundation Medical Institute International Scholar, Canadian Institutes of Health Distinguished Scientist, a Fellow of the Royal Society of Canada, Fellow of the Royal Society (London), and a Foreign Member of the Institute of Medicine of the US National Academies of Science.

Conference Overview

Bio industry, the key strategic industry of Korea in the 21st Century!

Covering a diverse range of applications and areas such as medical care, food, agriculture, energy, chemical, and the environment, The Bio industry has become the future growth industry. Fueled by the growth of Information Technology(IT) and Nano Technology(NT), Bio industry is expanding its stance further by creating added value and new businesses.

Kicking off with the plenary speech by a Nobel Prize Winner, BIO KOREA 2010 Conference will be a place to discuss and acquire the latest knowledge on various topics including vaccines, clinical trials, regenerative medicine, bio energy, GMO, functional food, technology transfer and licensing, attracting investments, industrial policies and systems. It will help you to secure the competitiveness in global market.

Come to BIO KOREA and get a chance to explore in bio industry with new technologies.

- Period : Sep. 1(Wed) ~ Sep. 3(Fri), 2010
- Venue : COEX, Seoul, Korea
- Expected No. of Participant : Approximately 4,500 people from all over the world
  * Workers in bio industry, research institutes, academic organizations and interested individuals in Korea & overseas.
- Official Language : English
  * Simultaneous interpretation service (Korean <-> English) will be provided during the conference.

Conference Sessions by Tracks

Track 1 Vaccine

Special Speech in Track
Session 1. Seasonal Influenza & Pandemic Influenza
Session 2. Influenza Vaccine Development

Track 2 Technology Transfer & Licensing

: Translating Early Innovations in Biopharmaceutical Industry: Challenges and Opportunities

Session 1. Strategies for Bridging the Gap between Early-stage Innovations and Successful Product Development
Session 2. New Trends of Investment in Early-stage Technologies

Track 3 Translational Research for Drug Development

(Sponsored by GyeongGi Bio-center and Institut Pasteur Korea)

Session 1. Introduction of Translation Research System in North America and Europe
Session 2. Introduction of Translational Research in Korea

Track 4 Traditional Medicine

: Issues and Trends on Medical Devices Development based on Traditional Medicine

(Sponsored by Korea Institute of Oriental Medicine)

Session 1. Issues and Trends on Development of Pulse Diagnosis Systems
Session 2. Issues and Trends on Development of Tongue Diagnosis Systems and Medical Devices in Traditional Medicine

Track 5 Advanced Therapies: Regulation and Development

* Detailed Program will be announced at our official website (www.biokorea.org) soon.

Track 6 Therapeutic Antibody

: IBC - BIO KOREA 2010

Session 1. Development of Biopharmaceuticals in China
Session 2. Development of Biopharmaceuticals Ⅰ
Session 3. Development of Biopharmaceuticals Ⅰ

Track 7

Regenerative Medicine

: Harmony between Patients and Research for Regenerative Medicine

Session 1. Stem Cell: Benchside to Clinical Study
Session 2. Regulation & Commercialization Trend for TEMPs
Session 3. Translational Research for Regenerative Medicine

Track 8

Medical Device & Diagnostics

: Standardization Issues in Biomedical in Vitro Diagnostic Devices

Session 1. Current Status of the Biomedical IVDD Development
Session 2. Regulation Issues in Biomedical IVDD
Session 3. Standardization Issues in Biomedical IVDD

Track 9

Bioenergy

: Bioenergy for Sustainable Society

Session 1. Biofuel from Lignocellulose Biomass
Session 2. Biogas as Clean Energy
Session 3. Marine Bioenergy

Track 10

Food & Agriculture I - GMO

: Current Status of Commercialized Biotech/GMO Crops and Future Prospects
(Sponsored by Monsanto Korea)

Special Speech in Track
Session 1. Regulation and Public Awareness of GMO
Session 2. Current Status of Biotech/GM Crops
Session 3. Future Prospects of Biotech/GM Crops

Track 11

Food & Agriculture II - Functional Food

: Updated Research and Commercialization of Functional Food

Session 1. Research Trends Using Funcional Food Materials
Session 2. Health Functional Evaluation of Functional Food Materials

Track 12 Biosimilar

: Development of Therapeutic Proteins in Korea

Session 1. Therapeutic Proteins Ⅰ
Session 2. Therapeutic Proteins Ⅱ
Session 3. Therapeutic Proteins Ⅲ

Track 13 BIO Imaging

: Fluorescence Molecular Imaging for Biotechnology

Session 1. Fluorescence Imaging Probe
Session 2. Instruments for Fluorescence Molecular Imaging
Session 3. Applications of Fluorescence Molecules

Track 14 u-Health

: u-Health Industry Development Strategy

Session 1. u-Health Law/Policy
Session 2. u-Health Technology Standardization
Session 3. u-Health Hospital Service

Track 15 Korea Medical Cluster

: High-tech Medical Cluster Project as a Strategy for Global R&D Hub

Session 1. Key Success Factor of Medical Cluster and Its Implication
Session 2. Role of High-tech Medical Cluster in Medical Industry Development
Session 3. Opportunity to Invest in High-tech Medical Cluster

Track 16 Clinical Drug Development

: Practical Aspects of Clinical Drug Development: Issues, Strategy & Solution

Session 1. Early Clinical Development in Korea: Opportunities & Challenges
Session 2. Patient Recruitment Issues in Clinical Trials
Session 3. Clinical Supply Management

Track 17 Alzheimer's Disease

* Detailed Program will be announced at our official website (www.biokorea.org) soon.

Conference Program at a Glance

The Entrepreneurship Boot Camp / Aug. 31 (Thur) 10:00~17:00

Date \ Room	Conference Rm. (South), 3F., COEX		
	Rm. 301	Rm. 307	Rm. 308
Sep. 01 (Wed)	BIO KOREA 2010	**Advanced Therapies : Regulation and Development** **Track 5** Advanced Therapies I : Regulation of Advanced BioTherapy Products in EU and Korea 14:00~16:00 Session 1 Advanced Therapies II : Development of Advanced BioTherapy Products in Korea 16:30~18:30 Session 2	**Technology Transfer & Licensing** **Track 2** Strategies for Bridging the Gap between Early-stage Innovations and Successful Product Development 14:00~16:00 Session 1 New Trends of Investment in Early-stage Technologies 16:30~18:30 Session 2
Sep. 02 (Thur)	**Bioenergy** **Track 9** Biofuel from Lignocellulose Biomass 10:00~12:00 Session 1 Biogas as Clean Energy 13:00~15:00 Session 2 Marine Bioenergy 15:30~17:30 Session 3	**Therapeutic Antibody** **Track 6** Development of Biopharmaceuticals in China 10:00~12:00 Session 1 Development of Biopharmaceuticals I 13:00~15:00 Session 2 Development of Biopharmaceuticals II 15:30~17:30 Session 3	**Regenerative Medicine** **Track 7** Stem Cell: Benchside to Clinical Study 10:00~12:00 Session 1 Regulation & Commercialization Trend for TEMPs 13:00~15:00 Session 2 Translational Research for Regenerative Medicine 15:30~17:30 Session 3
Sep. 03 (Fri)	**U-Health** **Track 14** u-Health Law/Policy 10:00~12:00 Session 1 u-Health Technology Standardization 13:00~15:00 Session 2 u-Health Hospital Service 15:30~17:30 Session 3	**Biosimilar** **Track 12** Therapeutic Proteins I 10:00~12:00 Session 1 Therapeutic Proteins II 13:00~15:00 Session 2 Therapeutic Proteins III 15:30~17:30 Session 3	**Bio Imaging** **Track 13** Fluorescence Imaging Probe 10:00~12:00 Session 1 Instruments for Fluorescence Molecular Imaging 13:00~15:00 Session 2 Applications of Fluorescence Molecules 15:30~17:30 Session 3

Opening Ceremony & Plenary Session

Prof. Ada E. Yonath	Dr. John D. Clemens	Prof. Peter St. George-Hyslop FRS
Weizmann Institute of Science	Director-General of the International Vaccine Institute	University of Cambridge

Conference Rm. (South), 3F., COEX		Conference Rm. (South), 4F., COEX
Rm. 317	Rm. 318	Rm. 402
Translational Research for Drug Development Track 3	**Traditional Medicine** Track 4	**Vaccine** Track 1
Introduction of Translation Research System in North America and Europe 14:00~16:00 Session 1	Issues and Trends on Development of Pulse Diagnosis Systems 13:30~16:00 Session 1	Special Speech in Track 14:00~14:30
		Seasonal Influenza & Pandemic Influenza 14:30~16:00 Session 1
Introduction of Translational Research in Korea 16:30~18:30 Session 2	Issues and Trends on Development of Tongue Diagnosis Systems and Medical Devices in Traditional Medicine 16:30~18:30 Session 2	Influenza Vaccine Development 16:30~18:30 Session 2
Medical Device & Diagnostics Track 8	**Alzheimer's Disease** Track 17	**Food & Agriculture I - GMO** Track 10
Current Status of the Biomedical IVDD Development 10:00~12:00 Session 1	To be updated soon at www.biokorea.org	Special Speech in Track 10:00~11:00
		Regulation and Public Awareness of GMO 11:00~12:00 Session 1
Regulation Issues in Biomedical IVDD 13:00~15:00 Session 2		Current Status of Biotech/GM Crops 13:00~15:00 Session 2
Standardization Issues in Biomedical IVDD 15:30~17:30 Session 3		Future Prospects of Biotech/GM Grops 15:30~17:30 Session 3
Clinical Drug Development Track 16	**Korea Medical Cluster** Track 15	**Food & Agriculture II - Functional Food** Track 11
Early Clinical Development in Korea : Opportunities & Challenges 10:00~12:00 Session 1	Key Success Factor of Medical Cluster and Its Implication 10:00~12:00 Session 1	Research Trends Using Functional Food Materials 10:00~12:00 Session 1
Patient Recruitment Issues in Clinical Trials 13:00~15:00 Session 2	Role of High-tech Medical Cluster in Medical Industry Development 13:00~15:00 Session 2	Health Functional Evaluation of Functional Food Materials 13:00~15:00 Session 2
Clinical Supply Management 15:30~17:30 Session 3	Opportunity to Invest in High-tech Medical Cluster 15:30~17:30 Session 3	Commercialization of Functional Food Materials 15:30~17:30 Session 3

Conference Program

Track 1. Vaccine

Overall goal of this conference is to provide attendees with updates on the current landscape of seasonal and pandemic influenza vaccines. Seasonal influenza virus is responsible for several thousand deaths and millions of hospitalizations worldwide each year. Trends over the past two years suggest that pandemic influenza virus has also had a substantial impact on populations throughout the world. Development, scale-up and deployment of new influenza vaccines for seasonal and pandemic influenza has become a major global, regional and national public health priority. To provide greater access to influenza vaccines worldwide, a number of manufacturers have undertaken extensive research and development programs as well as partnerships with public and international organizations to accelerate deployment of new influenza vaccines. Presentations in this track will provide up-to-date information on influenza vaccines against seasonal and pandemic influenza vaccines. Attendees will come away with a deepened understanding of influenza and vaccines for influenza prevention in Korea and beyond.

Special Speech in Track / Welcome Address

Sep. 1 (Wed), 14:00~14:30

Session 1. Seasonal Influenza & Pandemic Influenza

Sep. 1 (Wed), 14:30~16:00

Seasonal and pandemic influenza have gained international notoriety as a major cause of disease burden among both children and adults. In this session, we will learn about the impact of seasonal and pandemic influenza around the world and gain insight into the history of H1N1 influenza vaccine development as well as understand recent experience with H1N1 influenza vaccines in Korea. Lessons learned in recent years with respect to influenza surveillance and H1N1 vaccine development are likely to be critical in charting the way forward for improved influenza control in both developed and developing countries.

- **Chair** : *Paul E. KILGORE, Senior Scientist, Int'l Vaccine Institute*
- **Speakers**

Public Health Impact of Seasonal and Pandemic Influenza
TBA

Experience with Introduction of H1N1 Influenza Vacccine, Korea, 2009-2010
Byunggun RHEE, President, Green Cross Corp.

Session 2. Influenza Vaccine Development : Past, Present, & Future

Sep. 1 (Wed), 16:30~18:30

H5N1 (Swine) influenza came to global attention as outbreaks spread to nearly every continent and decimated wildlife and domestic animal populations. Illness among humans prompted global concern and ignited H5N1 vaccine development activities by both public and private organizations. Recently, new cases of H5N1 have emerged and renewed concern that H5N1 is not fully controlled despite large-scale vaccination of domestic poultry populations in some countries. In this session, we will learn about research activities for development of H5N1 vaccines that involve innovative research into new technologies for improving immune responses as well as delivery of vaccines to large populations.

- **Chair** : *Michael O. FAVOROAV, Deputy Director General, Int'l Vaccine Institute, Translational Research Div.*
- **Speakers**

Clinical Development and Evaluation of H5N1 Influenza Vaccines
Walter STRAUS, Global Director - Vaccines, Global Center for Scientific Affairs, Merck & Co., Inc.

Seasonal Influenza Vaccines: Current Status & Future Directions
James T. MATTEWS, VP, Immunization Policy and Government Affairs, Heath and Science Policy, Sanofi Pasteur

Cooperation between Biomedical Organizations for Global Vaccine Development: Case Studies, the NIH
Uri Reichman, Senior Advisor, Office of Tech Transfer, NIH

Track 2. Technology Transfer & Licensing
: Translating Early Innovations in Biophamacentical Industry
: Challenges and Opportunities

Session 1. Strategies for Bridging the Gap between Early-stage Innovations and Successful Product Development

Sep. 1 (Wed), 14:00~16:00

■ **Chair** : *Ku-Chan KIM, Science Ambassador, MSD*

■ **Speakers**

Trends in Technology Licensing and Collaboration in Academia
Ofra WEINBERGER, Director, Health Sciences, Columbia Technology Ventures

Case Study: Technology Transfer and Alliance between Korean Biotech and Multi-national Biopharmaceutical Companies
Ji-Woo LEE, CEO, Digital Biotech

Challenges Involving Financial Supports for Bridging Innovations to Early Development
Tae-Wan KIM, Prof., Columbia Univ.

Session 2. New Trends of Investment in Early-stage Technologies

Sep. 1 (Wed), 16:30~18:30

■ **Chair** : *Tae-Wan KIM, Prof., Columbia Univ.*

■ **Speakers**

Valuation of Biotech Companies and Technology
Patrik FREI, CEO, Venture Valuation

Investment and Alliance Model of Corporate Venture Capital in Emerging Market
Paul KIM, Head, Novartis Korea Venture Fund

Future of Biotechnology Investment - Roles of the Government and the Private Sector
TBA

Track 3. Translational Research for Drug Development
(Sponsored GyeongGi Bio-center and Institut Pasteur Korea)

Pharma companies in the US have spent $65.2 billion on R&D investment in new medicines, which has led to only 18 new chemical entity (NCE) approvals in 2008. At the same time, around 70-80% of the current 100 top drug sellers will have gone generic by 2010. As such, innovative and effective approaches for translational research are urgently needed. To promote basic research into application and utilize superb results studied by researchers in university and public institute, collaborating research between university and industry is necessary. This has become a trend and, has been expanded from government and public institute in the world. Therefore, I have a plan to introduce good examples of collaborating research in America, Canada and Korea (GyeongGi Bio-Center, IPK-Korea and Asan hospital) to emphasize need of this collaboration for efficient study and encourage this research.

Session 1. Introduction of Translation Research System in North America and Europe

Sep. 1 (Wed), 14:00~16:00

This session would explain definition of translational research and instance of collaborating system to help audience to understand collaboration and efficacy for drug discovery, and introduce global pharmaceutical company and the program of public government for vitalizing translation research to apply know-how of lab, which had an experience of new drug discovery.

- **Chair** : *Myung-Hwan PARK, Executive Director, GyeongGi Bio-Center*
- **Speakers**

Overview of Translational Research for Drug Development
Ulf NEHRBASS, CEO, Institut Pasteur Korea

Establishing Drug Discovery in Academia at IRCI: The Pharmacological Chaperone Discovery Program as an Example
Michel BOUVIER, Prof., Dept. of Biochemistry Principal Investigator & Deputy General Director, Institute for Research in Immunology & Cancer, Université de Montréal

Exploring Open Innovation Collaborative Approaches for Diseases of the Developing World Drug Discovery at GSK's Tres Cantos Medicines Development Campus
Lluis BALLELL, Principal Scientist, Diseases of the Developing World, GlaxoSmithKline

Session 2. Introduction of Translational Research in Korea

Sep. 1 (Wed), 16:30~18:30

This session would account for examples of translation research of GyeongGi Bio-Center, Institut Pasteur Korea (IP-Korea) and inform opportunity for translational research for domestic companies to develop new drug. In addition, introduce New drug-development center in Asan hospital where research not only HIT-finding but also clinical experiment for developing new drug.

Chair : *Ulf NEHRBASS, CEO, Institut Pasteur Korea*

Speakers

From Bench to Application: A Success Story of Drug Discovery based on HCS at IP-K
Zaesung NO, Senior Director, Center for Drug Discovery, Institut Pasteur Korea

Why Do Need Translation Research?
Myung Hwan PARK, Executive Director, GyeongGi Bio-Center

Translational Approaches for the Development of Anti-Cancer Theraputis
Eun Kyung CHOI, Prof., Dept. of Radiation Oncology, Asan Medical Center, College of Medicine, Univ. of Ulsan

Track 4. Traditional Medicine
: Issues and Trends on Medical Devices Development based on Traditional Medicine

Holistic and tailored approaches draw intense attention as a possibility to overcome the limitation of the modern medical science. As a holistic and tailored medicine, Traditional Korean Medicine (TKM) has a great chance to gain such a success. TKM developed many non-invasive methods to diagnose patients' health conditions, which is beneficial for the u-healthcare applications. However, its drawback is the lack of the standardization and modernization in its diagnostic methods. The increasing number of patents in the field of the traditional medical instruments forecast its industrial bloom. The increase of the patent applicants is relatively small compared to the increase of the patent applications, which implies that the field is still in the early stage of development and the profit ratio for the investment can be high. The rapid growth of the patent applications in Korea reflects her growing competency in this field. We are going to overview the recent trend of development of the two actively growing subfields - the pulse diagnosis system and the tongue diagnosis system.

Session 1. Issues and Trends on Development of Pulse Diagnosis Systems

Sep. 1 (Wed), 13:30~16:00

Pulse diagnosis is a diagnostic method to find patient's pathology by analyzing the patterns of the pulse wave at the radial artery, which is originated by the periodic beating of the heart. Despite its importance in traditional medicine, the pulse diagnosis confronts some criticisms due to its subjectivity in diagnosis and difficulty in clinical application. To overcome such criticisms, the pulse diagnosis needs to be objectified and standardized. For developing a reliable pulse diagnosis system, it needs to develop both (1) the measuring instrument (including recording sensor) with verified repeatability and reproducibility and (2) the classification algorithm of the pulse images in terms of the objective and quantitative physical quantities, replacing the subjective sensing and image classification of the traditional medical doctors. In this session, we address the importance of the development of modernized pulse diagnosis systems for the objectivity and reliability of the pulse diagnosis, and overview the current state of the development and commercialization by three leading research groups in Korea and China.

■ **Chair** : *Jong-Yeol KIM, Principal Researcher & Director, Div. of Constitutional Medicine, Korea Inst. of Oriental Medicine*

■ **Speakers**

Blood Flow Volume as an Indicator of Effectiveness of Traditional Medicine
Takashi SEKI, Prof., Center for Asian Traditional Medicine, Tohoku Univ. Graduate School of Medicine

Present Situation and Forecast of Research on Traditional Chinese Pulse Quantitative Detection
Wei-chang TANG, Researcher, Experiment Centre for Science & Tech, Shanghai Univ. of Traditional Chinese Medicine

Contemporary Research Trends of Pulse Diagnosis System
HeeJung KANG, CEO, Daeyomedi Co., Ltd.

Current Status of the Development of the Pulse Classification Algorithm
Jaeuk KIM, Senior Researcher, Constitutional Biology and Medical Engineering Research Center, Korea Institute of Oriental Medicine

Session 2. Issues and Trends on Development of Tongue Diagnosis Systems and Medical Devices in Traditional Medicine

Sep. 1 (Wed), 16:30~18:30

In traditional Korean medicine, the status of tongue, as well as the physiological and the clinicopathological changes of internal organs in the body, is considered as an important indicator for human's health condition. The tongue diagnosis is not only easy to practice but also non-invasive, and therefore widely used in TKM. However, the tongue diagnosis depends sensitively to the diagnostic circumstances such as light source, patient's posture, and doctor's condition. To develop an automated tongue diagnosis system for an objective and standardized diagnosis, it is inevitable to segment tongue region from a captured facial image, and to classify tongue coating, however, it is very difficult to perform since the color of tongue, lips, and skin around the mouth are all alike. To overcome these difficulties, the standardized hardware of the tongue diagnosis system acquires a tongue image by using a light source and digital camera, makes a darkroom with an apparatus contacting a face ergonomically, minimizes the reflection on the tongue surface with several LED lights with a polarizing filter and a diffusion plate, and corrects the color difference according to the effect of a light by using a mini color chart. Also, the system analyzes the acquired tongue image and evaluates health index of a patient from correlation between tongue areas and internal organs. The system can be used for an objective and standardized diagnosis and for the u-Healthcare system. In this session, by exploring the research status in tongue diagnosis system of Korea and China, the developing features of the modern medical devices reflecting characteristics of traditional medicine in each country would be discussed and shared.

■ **Chair** : *Jin-Seong KIM, Prof., College of Oriental Medicine, Kyung Hee Univ.*

■ **Speakers**

Computerized Tongue Image Analysis
Dapeng David ZHANG, Chair Prof., & Head, Dept. of Computing, The Hong Kong Polytechnic Univ.

The Trends in Technical Development of Tongue Diagnosis System
Keun Ho KIM, Senior Researcher, Constitutional Medicine Research Div.

Issues and Trends on Development of Tongue Diagnosis Systems and Medical Devices in Traditional Medicine
Kiwang KIM, Assistant Prof., Dept. of Applied Medicine, School of Korean Medicine, Pusan Nat'l Univ.

Track 5. Advanced Therapies: Regulation and Development

Session 1. Advanced Therapies 1 : Regulation of Advanced BioTherapy Products in EU and Korea

Session 2. Advanced Therapies 2 : Development of Advanced BioTherapy Products in Korea3

* Detailed Program will be announced soon at our official website (www.biokorea.org).

Track 6. Therapeutic Antibody
: IBC-BIO KOREA 2010

Therapeutic antibodies, which is the new paradigm of drug development, currently occupies 37% of total biological drugs that are being developed and 20% of drugs in FDA approval process. The growth rate of therapeutic antibody market is up to 20% each year and it is estimated by Global Industry Analysts that market will reach 80 billion dollars by 2010. Since it is apparent to many that this therapeutic antibody drug market will grow constantly, Korean companies are putting lot of effort in developing therapeutic antibodies that works more effienciently and with less side effects. We will start this track with friendship session of IBC 7th BioProcess International™, Conference and Exhibition (http://www.ibclifesciences.com/bpi/overview.xml)-Biokorea, enabling us to hear presentation from the top tier scientists in antibody production and development area. Also, Korean companies focusing on therapeutic antibodies, Celltrion, and Hanwha group will present up-to-date antibody engineering developments.

Session 1. Development of Biopharmaceuticals in China

Sep. 2 (Thur), 10:00~12:00

This track is co-organized by IBC (www.IBCLifeSciences.com) and BIO Korea to showcase the rapid development of biotherapeutics in China. IBC is organizing their 2nd Annual BioProcess International™, China event on August 30-September 2, 2010 in Beijing, China (www.IBCLifeSciences.com/BPIChina) and 3 of the prominent speakers representing China's biopharmaceuticals industry will be here to discuss the challenges and state of the bioprocess industry in China.

- **Chair** : **Chairperson's Opening Remarks** *Jun-Ho Chung, Prof., Seoul Nat'l Univ.*
- **Speakers**

Challenges of Developing Biosimliars in China
Chris CHEN, COO, Shanghai Celgen Biopharmaceuticals

Case Study - Human Antibodomics' Approach to Development of Bio-Better and Novel Antibody Products
Jian NI, CEO, Human Antibodomics (SIP) Inc.

Overcoming Current Challenges of High Titer Cell Culture for Future mAb Manufacturing Production
Joe ZHOU, CEO, Genor Biopharma, Wilson Group

Session 2. Development of Biopharmaceuticals Ⅰ

Sep. 2 (Thur), 13:00~15:00

Speakers

Characterization of Biopharmaceutical Monoclonal Antibodies for BLA/MAA Filings
Jin-San U, CEO, PharmAbcine

Anti-VCAM1 Antibody
Jung-Tae LEE, Principal Investigator, Hanwha

Anti-flu Antibody
Kunihiro OHTA, Prof., Univ. of Tokyo

Session 3. Development of Biopharmaceuticals Ⅱ

Sep. 2 (Thur), 15:30~17:30

Chair : *Roger R. BEERLI, Senior Scientist, Cytos*

Speakers

Isolation of Human Monoclonal Antibodies by Mammalian Cell Display
Roger R. BEERLI, Director, Cytos Biotechnology

Anti-integrin Alpha Ⅱ b B3 Antibody as Anti-platelet Agent
Jung-Eun KIM, Principal Investigator, Abxign

FlexFacory: A Paradigm Shift in Biologics Manufacturing
Parrish M. GALLITHER, Founder and Chief Technology Officer, Xcellerex

Track 7. Regenerative Medicine
: Harmony between Patients and Research for Regenerative Medicine

Research and development area for tissue regeneration including regenerative medicine and tissue engineering have extensively carried out in terms of academic and industrial area in the world. The changes of innovation technologies for the manufacturing of cell line might be the faster than other research areas. The induced pluripotent cell is good example. In this track, we will introduce recent advances of (1) Stem Cell: Benchside to clinical study will be suggested for the globalization, (2) Regulation & Commercialization Trend for TEMPs has been introduced, and (3) Translational Research for Regenerative Medicine will be discussed.

Session 1. Stem Cell: Benchside to Clinical Study

Sep. 2 (Thur), 10:00~12:00

The one of the most important key factors for the tissue regeneration is cell sources. Cells for the tissue regeneration are largely divided into (1) embryonic stem cell and (b) adult stem cell which have the advantage and disadvantages simultaneously. Very recently, the induce pluripoten cell (iPS) has been widely tested and investigated for the cell sources for the next generations. In this session, three prominent scientists have a lecture for the recent advances of stem cell such as embryonic stem cell, induced pluripotent stem cell and adult stem cell.

- **Chair** : *Dongwon LEE, Prof., Dept. of PolymerNano Sci. & Tech., Chonbuk Nat'l; Univ.*
- **Speakers**

Induction of Pluripotency in Mouse Fibroblasts by Oct 4
Seungkwon YOU, Prof., Biotechnology, Korea Univ.

Thermo-sensitive Hydrogel as Cell Carrier for Tissue Engineering of Nucleus Pulposus
Feng-Huei LIN, Prof., Div. of Medical Engineering, Nat'l Health Research Institutes

Improvement of Neuronal Maturation by Retrovirus Gene Inducible System
Chang-Hwan PARK, Prof., Lab. of Neural Stem Cell Biology, College of Medicine, Hanyang Univ.

Session 2. Regulation & Commercialization Trend for TEMPs

Sep. 2 (Thur), 13:00~15:00

Final goal of engineering with medicinal science might be the human application, that is, commercialization. For the success of commercialization, medical products must be approved by government at each country system. Notably, Korean Food and Drug Administration already approved ten products as cell therapy, whereas Japan has only one product. In this session, we will discuss the strategy of global marketing for the tissue engineered and regenerative medicine products.

- **Chair** : *Gilson KHANG, Prof., Dept of BIN Fusion Tech., Chonbuk Nat'l Univ.*
- **Speakers**

Regulatory Considerations for Cell and Tissue Engineering Products in Korea
Chiyoung AHN, Director, Biologics Research Div., Nat'l Institute of Food and Drug Safety Evaluation, KFDA

Current Regulatory Status of Cell/Tissue-based Products in Japan
Kenichi YANAGI, Deputy Review Director, Office of Biologics II, Pharmaceuticals and Medical Devices Agency

Commercialization Status of Tissue Engineered Medicinal Product
: Current Status and Trend in Korea
Jae-Deog JANG, Associate Prof., Catholic Institute of Cell Therapy & Catholic Institute of Cell and Tissue Engineering, School of Medicine, The Catholic Univ. of Korea

Session 3. Translational Research for Regenerative Medicine

Sep. 2 (Thur), 15:30~17:30

Regenerative medicine seeks to devise new therapies for patients with severe injuries or chronic diseases in which the body's own responses do not suffice to restore functional tissue. Prerequisite factors to accomplish new organ/tissue are (1) cells, (2) scaffolds, and (3) bioactive molecules. In this session, we will present the recent advances of the application of regenerative medicine using tissue engineering techniques. Recent advances of tissue engineered products for articular cartilage, connective tissue and teeth engineering will be introduced for the goal of clinical trials.

- **Chair** : *Moon Suk KIM, Prof., Dept. of Molecular Sci. & Tech., Ajou Uinv.*
- **Speakers**

The Cellular Physiological Behavior on Defined Patterns of Extracellular Matrix
Chun-Ho KIM, Chief, Lab. of Tissue Engineering, Korea Institute of Radiological and Medical Sciences

Engineering Complex Tissues for Translation
James J YOO, Prof., Institute for Regenerative Medicine, Wake Forest Univ. School of Medicine

Xenoislet Transplantation with Alginate Microcapsule
KunHo YOON, Prof., Dept. of Endocrinology & Metabolism, Seoul St. Mary's Hosp., The Catholic Univ. of Korea

Track 8. Medical Device & Diagnostics
: Standardization Issues in Biomedical in Vitro Diagnostic Devices

Recent advance in Biotechnology, Nanotechnology and Information technology leads development of new biomedical devices in the field of In vitro diagnostics. These technologies are merged into a new and complex fusion technology beyond a simple biochip or biosensor technology. One of the biomedical IVDDs based on the fusion technology is the LOC based IVDD. Another trend of the new biomedical IVDD is the usage of multiple biomarkers for one disease. Recently, several multivariate immunoassay IVDDs are approved from US FDA which use multiple biomarkers for one disease. In this track, we will discuss the state of the arts in development of the new biomedical IVDDs. We will also discuss the recently approved IVDDs based on the fusion technologies and finally we will discuss the current trend in the standardization issues in the IVDDs, especially developed by the CLSI and ISO.

Session 1. Current Status of the Biomedical IVDD Development

Sep. 2 (Thur), 10:00~12:00

BT-IT-NT are merged into a new fusion technology in order to overcome the current IVDD. In this session, we will discuss the current status of the development of the new biomedical IVDD. Rapid kits for immunoassay of the chronic diseases which is developing currently and LOC based molecular genetic diagnostic device will be discussed. Current status of the development of the biochip and biosensor will be also discussed.

■ **Chair** : *Junkeun CHANG, CEO, NanoEnTek*

■ **Speakers**

Rapid Immnoassay IVDD
EuiYul CHOI, CEO, Bioditech Med

The Electrical Sensor based LABODxTM System: The LOC (lab-on-a chip) LABODxTM based on the Electrical Solid-phase-polymerase Chain Reaction (SP-PCR) Sensor for a Molecular-genetic Clinical Diagnosis.
Sung Han KIM, Director, Research Institute, Digital Genomics Inc.

Label Free Detection of Bio Molecule Using Microcantilever Sensor
Tae Song KIM, Director, Intelligent Microsystem Center, Korea Institute. of Sci. and Tech.

Session 2. Regulation Issues in Biomedical IVDD

Sep. 2 (Thur), 13:00~15:00

Updated issues in regulation of the KFDA and USFDA for the IVDD will be reviewed. The difference between conventional and new IVDD from the point of view of regulation will be discussed. A new biomedical IVDD which is recently USFDA approved will be introduced.

- **Chair** : *Gyu Ha RYU, Director, Korea Food & Drug Administration*
- **Speakers**

Current Status of Review and Authorization of Drugs for in Vitro Diagnosis
Seog Youn KANG, Director, Biopharmaceuticals & Herbal Medicine Evaluation Dep., Biologics Div., Korea Food & Drug Administration

US FDA Clearance/Approval Process for in Vitro Diagnostic Molecular Devices
Lakshman Ramamurthy, Reviewer, U.S. Food and Drug Administration

USFDA Approval for Ovacheck
Brian MANSFIELD, Vice President, Correlogic System Inc.

Session 3. Standardization Issues in Biomedical IVDD

Sep. 2 (Thur), 15:30~17:30

Current issues in standardization for IVDD which is discussed in the CLSI and ISO TC212 will be reviewed. The current trend of the new biomedical medical devices which are developing based upon the fusion technology will be discussed.

- **Chair** : *Joo Young SONG, Researcher, Korean Agency for Tech. and Standards*
- **Speakers**

CLSI Standards
TBA

Status of ISO Standards for in Vitro Diagnostic Molecular Devices
Hye-Jeong SOHN, Manager, CDC-Medical, TÜV SÜD Korea Ltd.

The Necessity of the Standardization for Safety and Efficacy Evaluation of Collagen-based Medical Devices
Soung Gi LEE, Executive Vice President, Regenerative Medicine Research Center, Darim Tissen Inc.

Track 9. Bioenergy: Bioenergy for Sustainable Society

The public attention for bioenergy has gradually increased due to the high price of energy as well as the global warming problem. Bioenergy can be defined as energy producible from biomass through the biological and chemical process. The net discharge of carbon dioxide, one of the major global warming gases, can be significantly reduced because bioenergy can be repeatedly produced through the short carbon cycle, which implies that bioenergy is carbon-neutral. Many countries including industrially advanced countries have tried to develop the technology to produce bioenergy and bioethanol and biodiesel have already been commercialized. However, rapid growth of bioenergy industry based on bioethanol and biodiesel induced severe criticisms promptly because these bioenergy are being produced by consuming edible resources such as corn starch, sugar cane, plant seeds oil and etc. Nowadays more advanced bioenergy based on inedible resources such as woody biomass and waste biomass is suggested to cope with these criticisms and to make this industry more sustainable. In this track (Bioenergy for sustainable society) more sustainable bioenergy from lignocelluloses, marine biomass and wastes will be discussed. As the first, liquid biofuel such as bioethanol and biobutanol from woody biomass will be introduced at Session I and another fascinating bioenergy from marine biomass will be discussed at Session II and finally different phases of bioenergy (biogas) will be suggested at Session III. These all sessions will give remarkable opportunity to make joints between biotechnology and energy technology, which is crucial for sustainable developments.

Session 1. Biofuel from Lignocellulose Biomass

Sep. 2 (Thur), 10:00~12:00

Huge amount of biofuel such as bioethanol and biodiesel are being produced from edible sources such as corn starch, sugar cane and plant seed oils. These biofuels have already taken up over 5 % of total liquid fuel used in transportation field especially in several countries such as USA, Germany and Brazil, however, which provoked severe resistance and critics due to the inflation in food price. Now it is critically needed to develop the sustainable technology capable of producing biofuel from nonedible sources such as lignocelluloses and wastes. In this session recent progresses and research trends including new biofuel compound such as biobutanol will be presented by outstanding researchers in petroleum Refinery Company and government funded research institute.

- **Chair** : *Choul-Gyun LEE, Prof., Inha Univ.*
- **Speakers**

Microbial Butanol Production: Strain and Process Development
Hyohak SONG, Principal Researcher, Biochemical Team, R&D Center, GS Caltex Corp.

Bioethanol Production from Waste Biomass
John E. CUZENS, CTO, Bluefire Ethanol

Next Generation Biofuels Produced from Lignocellulosic Biomass: Next Generation Biofuels Production
Byoung-In SANG, Principal Research Scientist, Clean Energy Center, Korea Institute of Science and Tech.

Session 2. Biogas as Clean Energy

Sep. 2 (Thur), 13:00~15:00

Biogas production technology will be the right solution for the difficult problem of energy shortage and waste treatment. Since biogas production technology is at the edge of commercialization compared to other technologies, recently this technology is taking attention of governments. However, this technology was not fully augmented because of the lack of supporting laws in Korea. The international ban for the discharge of food wastes into ocean will be executed from 2013, which will ignite the commercialization of biogas production technology. In this session new clean gas (biohydrogen) production technology will also be introduced with the methane gas production technology.

- **Chair** : *Byoung-In SANG, Principal Research Scientist, Korea Institute of Science and Tech.*
- **Speakers**

The Installation and Operation of an Integrated Two-phase Anaerobic Digestion System in South Korea
: The Installation and Operation of Korean Style Biogas Plants
Hyunsu PARK, Senior Research Engineer, Environmental Engineering Research Team, Daewoo E&C Co., Ltd.

Strategies of Bio-hydrogen Production from Organic Wastes and Biomass
: Towards the Hydrogen Economy and Green Society
Mi-Sun KIM, Researcher Scientist, New and Renewable Energy Dept. & BioEnergy Research Center, Korea Institute of Energy Research

Scale-up of Biogas Plant
Li Yu You. Prof., Tohoku Univ.

Session 3. Marine Bioenergy

Sep. 2 (Thur), 15:30~17:30

Recent progress in the R&D capable to produce bioenergy from marine biomass began to attract public attention. The sufficient marine biomass can be grown up in even Korea since Korean peninsula is surrounded by vast ocean. Recent research proves that biofuel such as bioethanol and biodiesel can be efficiently produced from marine biomass. In this session the opportunities and challenges to overcome in marine bioenergy field will be suggested. In addition the experiences of leading company will be shared.

- **Chair** : *Mi-Sun KIM, Principal* Researcher*, Korea Institute of Energy Research*
- **Speakers**

Opportunities and Challenges of Marine Bioenergy: Biodisel Production Technology from Marine Microalgae
Choul-Gyun LEE, Prof., Dept. of Biological Engineering, Inha Univ.

High Value Products and Biofuel Production Using Marine Microalgae: Algae & Biofule
Ami BEN-AMTOZ, Emeritus Prof., Marine Phycology, Seambiotic

Marine Bioenergy: Present, and Future: Production of Bioethanol from Red Sea Algae
Myung-kyo SHIN, CEO & Vice President, BioIsystems Co., Ltd

Track 10. Food & Agriculture I - GMO
: Current Status of Commercialized Biotech/GMO Crops and Future Prospects

The International Service for the Acquisition of Agri-biotech Applications (ISAAA) reported that global hectarage of biotech crops continued to grow in 2009 and reached 134 million hectares. Twenty-five countries approved biotech crops for planting and 57 countries approved biotech crops or products meaning that GM crops are now commonly accepted in these countries. In addition, biotech Bt rice and biotech phytase maize were approved by China on 27 November 2009. These approvals are momentous and have enormous implications for biotech crop adoption not only for China and Asia, but for the whole world. Although GMO should be one of the essential solutions for the challenge of the global food security which will be caused by population growth and climate change in future, it is real that there are still some debates to accept GM crops in many countries specially in EU and Korea. In this tract, we will provide various information and suggestions about GMO regulation and public awareness, current status of biotech/GM crops, and future prospects of biotech/GM crops.

Special Speech in Track

Sep. 2 (Thur), 10:00~11:00

Global Adoption, Impact and Future Prospects of Biotech/GM Crops
Clive JAMES, Chair, Int'l Service for the Acquisition of Agri-biotech Applications

Session 1. Regulation and Public Awareness of GMO

Sep. 2 (Thur), 11:00~12:00

In this session, first invited speaker will show not only the regulations of GM crops derived from the Cartagena Protocol on Bio safety but also the public Awareness of GM crops. Through his presentation, it can be shown that what is the real worldwide perception of GM crops or their products. In addition, through second speaker's presentation, we can see the recent information of approved GM crops or their products and how they were approved in Korea.

- **Chair** : *Hwan Mook KIM, Director, Bio-Evaluation Center, Korea Research Institute of Bioscience & Biotech.*
- **Speakers**

GMO Regulation and Public Awareness in the World
Ho-Min JANG, Director, Korea Biosafety Clearing House, Korea Research Institute of Bioscience & Biotech.

Current Status of Regulations and Risk Review System on LMOs
Sang Jae LEE, Director, Research Project Planning Div., Rural Development Administration

Session 2. Current Status of Biotech/GM Crops

Sep. 2 (Thur), 13:00~15:00

In this session, there will be interesting presentations about the current status of developing and commercialized GM crops. Twenty-five countries approved biotech crops for planting and 57 countries approved biotech crops or products. In addition to Bt rice approval by China, the European commission has approved a GM corn product meaning that GM crops for food will be adopted for many countries within 3~5 years. For knowing global status of GM crop development, three speakers were invited. Dr. Gerard Barry will show current status and future plan of Golden Rice Program. Two other speakers from government and private sector will inform about GM crop development in Korea.

- **Chair** : *Yong-Hwan KIM, Dept. of Agricultural Biotech., Rural Development Administration*
- **Speakers**

Golden Rice Program : Status of the Development of Golden Rice
Gerard F. BARRY Program Leader, Golden Rice Network Coordinator, Int'l Rice Research Institute.

Current Status of GM Crop Development and Perspectives in Korea : Research Activities toward GM Development in RDA
Dongherm KIM, Senior Researcher, Biocrops Development Div., Nat'l Academy of Agricultural Science, Rural Development Administration

GM Crops, Plant Bioreactor for New Materials
Cheol Ho HWANG, Prof., Dept. of Crop Science and Biotech., Dankook Univ.

Session 3. Future Prospects of Biotech/GM Grops

Sep. 2 (Thur), 15:30~17:30

The next generation of biotech crops will include a broad range of products that confer benefits on both farmers and consumers. Some of those will be aimed still to improve agricultural traits such as yield, nitrogen use efficiency, and a biotic stress tolerance. On the other hand, some products will be developed to provide benefits directly to the consumer by using plants as bio-factories to produce high value bio-products such as medicine and industry materials. These kinds of next generation GM crops can compromise not only to handle global agricultural challenges and but also to change agriculture as a high-tech industry. Scientists from university and biotechnology companies will show what they are thinking and how they prepare for leading next generation biotechnology.

- **Chair** : *Yang-Do CHOI, Prof., College of Agriculture and Life Sciences, Seoul Nat'l Univ.*
- **Speakers**

Research Direction and Strategy for Development of GM Crops in Korea
Chee Hark HARN, Director, Biotech. Institute, Nongwoo Bio Co.

A Strategy to Commercialize GM Crop form Scientist Perspective: Making Drough-Tolerant GM Rice
Ju-Kon KIM, Prof., Bioscience & Bioinformatics, Myongji Univ.

Next Generation of GM Crops
Susan J. MARTINO-CATT, Scientist, Monsanto Co.

Track 11. Food & Agriculture Ⅱ - Functional Food
: Updated Resarch and Commerciatiation of Functional Food

Recently numerous bioactive botanicals and functional food materials have been identified, which stimulates the expansion of botanical drug and functional food markets. The objective of this track is to introduce trends in updated research and development as well as commercialization of bioactive botanicals and functional foods.

Session 1. Research Trends Using Functional Food Materials

Sep. 3 (Fri), 10:00~12:00

This session introduces the current trends in research on bioactive botanicals and functional foods through presentations and discussion by experts.

■ **Chair** : *Young-Joon SURH, Prof., College of Pharmacy, Seoul Nat'l Univ.*

■ **Speakers**

Epigenetic Regulation by Green Tea Polyphenols
Sanjay GUPTA, Carter Kissell Associate Prof. & Research Director, Dept. of Urology, Case Western Reserve Univ.

Polyphenols as Functional Food Components beyond Antioxidants
Hyong Joo LEE, Prof., Agricultural Biotech., Seoul Nat'l Univ.

Identification of Anti-hepatitis Peptide in Wheat Gluten Hydrolysates Isoalted by *In Vivo* Activity-guided Fractionation : Wheat Gluten Peptide with Therapeutic Potential for Hepatitis.
Kenji SATO, Prof., Kyoto Prefectural Univ.

Session 2. Health Functional Evaluation of Functional Food Materials

Sep. 3 (Fri), 13:00~15:00

In this session, the health beneficial effects of bioactive botanicals and functional foods and their underlying mechanisms will be presented.

■ **Chair** : *Sung Hoon KIM, Prof., Kyunghee Univ.*

■ **Speakers**

Japanese Sake-derived peptide has anti-inflammatory effect on Dss-induced acute colitis.
Sayori WADA, Prof., Kyoto Prefectural Univ.

Regulation of Antioxidant and Cytoprotective Gene Expression by Selected Dietary Phytochemicals : Molecular Mechanisms Underlying Cytoprotective Effects of Edible Phytochemicals
Young-Joon SURH, Prof., College of Pharmacy, Seoul Nat'l Univ.

Phenolic Phytochemicals and Neuroprotective Effect
Dae-Ok KIM, Assistant Prof., Dept. of Food Science & Tech., Kyung Hee Univ.

Session 3. Commercialization of Functional Food Materials

Sep. 3 (Fri), 15:30~17:30

This session proposes the prospective research and strategies for commercialization of the bioactive botanicals and functional foods.

■ **Chair** : *OkJin PARK, Prof., Hannam Univ.*

■ **Speakers**

Korean Fermented Functional Foods (Chemopreventive and Antiobesity Effects of Kimchi and Doenjang)
KunYoung PARK, Prof., Food Science and Nutrition, Pusan Nat'l Univ.

Industrial Trends and Perspectives of Nutricosmetics in Functional Foods
Jae-Kwan HWANG, Prof.,Dept. of Biotech., Yonsei Univ.

Commercialization Strategy of Health Functional Food in Korea
: Product Development Cases of the Utilization of Aloe Ingredients and Ginsenosides
Seon-Gil DO, Chief Scientific Officer, R&D Institute, Univera Inc.

Track 12. Biosimilar
: Development of Therapeutic Proteins in Korea

Biosimilars as therapeutic proteins will be presented in three sessions: In the first session, differences in regulatory controls of the biosimilars in various parts of the world will be reviewed for oversea market exploration and development. Biosimilar manufacturing and control process as well as methods for their physicochemical purity and characterization will be also included in the first session as an introduction. In session II, biosimilar assay methods will be presented along with their validation for clinical pharmacokinetic data. Neutralizing antibody and biosimilar immunogenicity studies for their safety and potency will be also discussed in this session. Session III deals with pre/clinical safety and innovative development of therapeutic antibodies. In addition, an overview of MAb biosimilar development cases in Celltrion, Inc. will be presented as a final summary of the three sessions for business applications.

Session 1. Therapeutic Proteins I

Sep. 2 (Thur), 10:00~12:00

The criteria for the development, review and regulatory approvals of Biosimilars(Follow-on biologics) have not reached any international harmonization. US FDA approved numerous follow-on-biologics, based on Food Drug Cosmetic Act 505(b) (1) or (2). EMEA has CHMP guideline, while they will handle biosimilars case-by-case. Thus, in this first session, regulatory guides in typical agency will be focused with relevant quality and manufacturing control issues of biosimilars.

- **Chair** : *Herman RHEE, Principal Investigator, Int'l Scientific Standard Inc.*
- **Speakers**

Regulatory and Scientific Considerations on Quality Comparability of Biosimilars / Follow-on Biologics
Duu-Gong WU, Executive Director, Consulting Div., Pharmanet Development Group Int'l

Biosimilar: Physocochemical Characterization
Chan-Wha KIM, Prof., Biotech., Korea Univ.

Development and Validation of Immunoassays Supporting Clinical Pharmacokinetics Studies
Victor S. MOORE, President & CEO, Int'l Scientific Standard Inc.

Session 2. Therapeutic Proteins II

Sep. 3 (Fri), 13:00~15:00

Established methods of therapeutic antibody production and development such as hybridoma cell, recombinant and cell culture, etc will be discussed in terms of their biological purity and therapeutic efficacy. Neutralizing antibodies, immunogenicity, and their immunochemical purity and potency will be discussed in depth in this session II.

Chair : *Jonathan CHANG, Vice President, Green Cross*

Speakers

Immunogenicity, Purity, Safety and Potency
Matthew BAKER, CEO, Antitope Ltd.

Monoclonal Ab: Pharmacodynamic Effect
Paul SONG, Vice President, Samsung Advanced Institute of Tech.

Development of Universal Neutralizing Monoclonal Antibodies against Hetero-subtypic Influenza Virus
ShinJae CHANG, Vice President & Head, Biotech. Institute, Celltrion Inc.

Session 3. Therapeutic Proteins III

Sep. 3 (Fri), 15:30~17:30

We are going to focus on therapeutics of the biosimilar products in this final session including potential changes in their products due to post-translational changes. That is, biosimilars are not identical, by definition, and their slight differences in immunogenic purity and quality might be critical in human therapy and safety. Thus, in this session, safety of preclinical and clinical findings will be discussed extensively. To apply the state-of-the art knowledge and techniques on biosimilars, an industry presentation is also scheduled for the symposium highlight as a final conclusion of our symposium.

Speakers

Post-translational Modification of Therapeutic Proteins
: Post-translational Modification Mechanism of Therapeutic Proteins for their Optinal Activity and Stability
Seong Eon RYU, Prof., Bio-engineering, HanYang Univ.

Therapeutic Antibodies: Now and Future
Byeong Doo SONG, President, Scripps Korea Antibody Institute

Regulatory Control for Biosimilars in EU, Korea, and USA
: Regulatory Guides for Biosimilars
Hee Min RHEE, Principal Investigator, Int'l Scientific Standard Inc.

Track 13. BIO Imaging
: Fluorescence Molecular Imaging for Biotechnology

Molecular imaging (MI) is a fast growing and leading technology in life science R&D. MI can visualize and quantify biological phenomena in cellular or sub-cellular levels via various tools such as radioisotopes, magnetic particles and NIR probes. In particular, monitoring pathological routes enables high throughput screening and drug discovery. Among them, optical imaging based on fluorescence molecules is one of the most famous and widely used methods. In this track, domestic and international specialists in the field, which can be divided into fluorescent probes, instruments and applications, will introduce their recent outstanding research and commercialization strategy.

Session 1. Fluorescence Imaging Probe

Sep. 3 (Fri), 10:00~12:00

In this session, information on R&D of fluorescent probes will be provided and discussed. Professor Young-Tae Chang from National University of Singapore and Singapore Bioimaging Consortium will talk about his recent research on development of novel fluorescent dye library and validation of their target molecules. President Jong Joo Na of DKC Corp., a chromophore specialized company, will introduce development of Flamma fluorescent probes and global marketing strategy. Dr. Kwangmeyung Kim of Korea Institute of Science & Technology will introduce "Theragnosis", a unique method to couple therapy and diagnosis though molecular imaging.

- **Chair** : *In-San KIM, Prof., School of Medicine, Kyungpook Nat'l Univ.*
- **Speakers**

Lumino Genomics Using Diversity Oriented Fluorescence Library Approach
Young-Tae CHANG, Prof., Dept. of Chemistry, Nat'l Univ. of Singapore

Fluorescence Molecular Imaging for Biotechnology
Jong Joo NA, President, DKC Corp.

Fluorogenic Nanoprobes for in Vivo Enzyme Activity: Nanoprobes for Molecular Imaging
Kwangmeyung KIM, Senior Research Scientist, Biomedical Research Center, Korea Institute of Science and Tech.

Session 2. Instruments for Fluorescence Molecular Imaging

Sep. 3 (Fri), 13:00~15:00

In this session, experts from U.S.A. and Korea will discuss optical imaging instruments and their applications. Professor Paul Robinson, a director of Cytometry Laboratory of Purdue University and Cytomics and Imaging of Bindly Biosciences Center, and Dr. Sehoon Kim from Biomedical Center of Korea Institute of Science & Technology will discuss about novel research using fluorescence imaging instruments. Dr. JaeBeom Kim from Caliper Life Sciences will introduce one of their main optical imaging products, IVIS.

- **Chair** : *Dong Jin KIM, Principal Research Scientist, Neruo-Medicin Center, Korea Institute of Science and Tech.*
- **Speakers**

Spectral Fluorescence Imaging: Advantages and Disadvantages
Joseph Paul ROBINSON, Prof., Bindley Bioscience Center, Purdue Univ.

Nanointegrated Molecular Fluorescence for Advanced Bioimaging
Sehoon KIM, Senior Research Scientist, Biomedical Science Center, Korea Institute of Science and Tech.

IVIS™: A User Friendly Non-invasive Fluorescence Imaging Platform
Jae-Beom KIM, Senior Scientist, Oncology, Caliper Life Sciences

Session 3. Applications of Fluorescence Molecules

Sep. 3 (Fri), 15:30~17:30

During our last session, various applications utilizing fluorescence probes and imaging instruments will be introduced. Professor Takeharu Nagai from Hokkaido University will explain his current research on FRET based fluorescent probe applications. Professor Byung-Heon Lee of Kyung pook National University will discuss fluorescent homing peptide development using phage display. At last, Professor Dongmin Kang from Ewha Womans University will talk about a live imaging method to monitor cell signaling using fluorescent probes.

- **Chair** : *Ick Chan KWON, Center Head & Principal Research Scientist, Biomedical Center, Korea Institute of Science and Tech.*
- **Speakers**

A Novel Way to Expand the Dynamic Range of Genetically-encoded FRET-based Indicators
: Engineering the Dimerization Interface of Fluorescent Proteins
Takeharu NAGAI, Prof., Research Institute for Electronic Science, Hokkaido Univ.

In Vivo Imaging of Apoptosis Using Peptide Probes
Byung-Heon LEE, Associate Prof., Biochemistry & Cell Biology, School of Medicine, Kyungpook Nat'l Univ.

Monitoring the Change of Cell Signaling by Extracellular Stimuli through Live Cell Fluorescence Imaging
Dongmin KANG, Prof., Life Sciences, Ewha Womans Univ.

Track 14. u-Health
: u-Health Industry Development Strategy

The market value and the level of technology of healthcare have been rapidly expanding. In the 21st century, focus in medicine and healthcare is now more important than ever for it not only improves health for the general public but also enhances the quality of life. This trend is allowing new changes and new concepts of medicine to come into the market. The improving technology has increased people's expectations on healthcare services that they receive. In consideration with the current increasing worldwide longevity, this track consists of 3 parts covering law/policy, technology standardization and latest information on u-healthcare.

Session 1. u-Health Law/Policy

Sep. 3 (Fri), 10:00~12:00

Advancement in technology has enabled people to live longer but it has also brought about a rise in aging populations and expenses on healthcare. Building u-healthcare infrastructure is crucial for it is a way to solve this problem. It would reduce general cost and still make it possible for those in need from the general public to get treatments on illnesses and general check-ups in a more convenient and cost-effective way. In this session, discussions on current and future status of u-health law/policy both domestic and overseas will be made by groups of law/policy professionals. International u-healthcare system as a part of Korean wave will be also dealt with in a way to attract global attention.

- **Chair** : *Ji-Hong JOO, Prof., School of Law, Pusan Nat'l Univ.*
- **Speakers**

Healthcare Laws and Policies of the United States of America: u-Health Prespective
Seong K. MUN, Prof., Arlington Innovation Center, Virginia Tech Univ.

The Law, the Regulations, and the Healthcare System for Health Promotion Services : Business Strategy for Emerging Market
Hongjin KIM, Director, u-Health Div., Insung Information Co., Ltd.

u-Health Trend in Global Healthcare
Young-wook YOON, General Manager, Healthcare-IT, GE Healthcare Korea

Session 2. u-Health Technology Standardization

Sep. 3 (Fri), 13:00~15:00

The combined development of Biotechnology (BT) and nanotechnology (NT) together with IT, the core technology of 21st century, has brought about a new form of healthcare system of technologies and services. This has improved accessibility to information of health services. This session will cover technological standardization that is important for all relevant technologies to come to a consensus in the products and services given to patients and buyers. It is expected to reduce the medical cost and improve user-friendliness. This session will also look at the future of the industry and introduce integrated programs and networks that will control the services provided in hospitals so as to effectively give patients the best possible medical. It will also cover international laws and strategies in providing a standard healthcare service.

- **Chair** : *Kyo-il CHUNG, Creative & Challenging Research Div., Electronics and Telecommunications Research Institute*
- **Speakers**

u-Health Technology Global Standards for Interoperability
Yun Sik KWAK, Visiting Prof., Intelligent Health Info. Sharing System Development Center, Kyungpook Nat'l Univ.

Standardization Trend of Personal Health Device
Seunghwan KIM, Managing Director, BTConvergence Tech. Research Dept. & IT Convergence Tech. Research Lab., Electronics and Telecommunications Research Institute

Standardization Roadmap for Health Informatics
Yong-hee LEE, Prof., Dept. of Computer Engineering, Halla Univ.

Session 3. u-Health Hospital Service

Sep. 3 (Fri), 15:30~17:30

Nowadays in our modern society, with the number of people with geriatric diseases such as diabetes increasing, where the number is expected to reach up to 7,760,000 by 2012, there is a need for an improved healthcare and treatments. In this session, u-healthcare services provided by hospitals for those with chronic diseases will be introduced. First, Gachon University Gil Hospital will introduce their GTS service, a total solution system to help patients with heart diseases. Their range of services provided covers posting and filing the results of medical check-ups to consultation with doctors via video conference calls. Second, Seoul St. Mary's Hospital, the Catholic University of Korea will introduce their homecare services for pregnant diabetic women to help them exercise and control their diet and weight based on their blood sugar levels and the recommendations they received from the doctors. Lastly, Yonsei University Severance Hospital will introduce their u-healthcare service system.

■ **Chair** : *Suk Wha KIM, Dept. of Reconstructive Plastic Surgery, Seoul Nat'l Univ.*

■ **Speakers**

State of u-Healthcare Service in Gachon Univ. Gil Hospital
Dong Kyun PARK, Prof. & Director, u-Healthcare Center, Gachon Univ. Gil Hospital

u-Health Service Experience in Seoul St. Mary's Hospital
Jae Hyoung CHO, Assistant Prof., Dept. of Endocrinology, Seoul St. Mary's Hospital, College of Medicine, The Catholic Univ. of Korea

u-Healthcare Service Status in Yonsei University Health System
Namhyun KIM, Prof. & CIO, Dept. of Medical Engineering, Yonsei University Health System

Track 15. Korea Medical Cluster
: High-tech Medical Cluster Project as a Strategy for Global R&D Hub

Korean medical industry has a high growth potential in spite of disadvantage such as short experience in industry development and the gap with advanced countries. High-tech healthcare industry is emerging as a promising industry for the next generation although it is still in its early stage for commercialization. Korea has established the foundation for developing its medical industry as a growth engine industry through competitiveness in IT industry and outstanding individual in medical field. High-tech Medical Complex project was proposed in order to promote condensed growth of medical industry. High-tech Medical Complex is a cluster specialized in commercializing basic biomedical research into new drugs and medical devices development. Two regions - Daegu and Chungbuk Osong were designated as this project and will be established by 2012. This track aims to discuss about strategies and policies for innovating Korean medical industry through the High-tech medical complex project.

Session 1. Key Success Factor of Medical Cluster and Its Implication

Sep. 3 (Fri), 10:00~12:00

Key success factor of medical clusters in advanced countries and its implication to high-tech medical complex project will be discussed in this session. First, success factor of medical clusters in Northern Europe such as Sweden and Denmark will be presented and its policy implication will be discussed. Second, Success story of Texas Medical Center where the local economy growth is attained by its medical industry will be introduced. Finally Singapore Biopolis story as a success case in Asia region will be presented.

- **Chair** : *Kyung SUN, Prof., Korea Univ.*
- **Speakers**

Key Success Factor of Medical Clusters in Northern Europe and Its Implication
Sang-Chul PARK, Prof., Korea Polytechnic Univ.

Key Success Factor of Texas Medical Center and Its Implication
TBA

Key Success Factor of Singapore Biopolis and Its Implication
Philip LIM, CEO, Agency for Science, Technology and Research Singapor Exploit Technologies Pte Ltd.

Session 2. Role of High-tech Medical Cluster in Medical Industry Development

Sep. 3 (Fri), 13:00~15:00

The function of high-tech medical complex and centers in this complex and the role of them in medical industry development will be discussed in this session. First, the role of High-tech Medical Complex in the growth of Korean medical industry will be discussed. In the second and the third topic we will discuss the role of Drug Development Service Center and Medical Device Development Service Center which will be established in the cluster.

■ **Chair** : *Wang-Jae LEE, Prof., College of Medcine, Seoul Nat'l Univ.*

■ **Speakers**

Role of High-tech Medical Cluster in Medical Industry Development
Sang-Won LEE, Principal Researcher, Korea Health Industry Development Institute.

Role of Drug Drug Innovation Center in High-Tech Medical Complex and Its Direction to the Future
Seung Jun YOO, Associate Research Fellow, R&D Program Evaluation Div., Korea Institute of Sci. & Tech. Evaluation & Planning

The Role of Medical Device Development Support Center in Medical Device Industry
: Global Establishment & Operation of the Medical Device Development Support Center
Dae Young KIM, Director, Digital Industry Div. & Medical Group, Korea Testing Lab.

Session 3. Opportunity to Invest in High-tech Medical Cluster

Sep. 3 (Fri), 15:30~17:30

This session will present opportunities to invest high tech medical complex established in Daegu and Osong. The benefit and advantages of locating in Korea will be discussed. First, the outlook of Korean medical industry and investment opportunity in terms of foreign direct investment. Finally, we will discuss the opportunities to invest in High-tech Medical Complex established in Daegu and Chungbuk Osong.

■ **Chair** : *Shin-Ho LEE, Director, Korea Health Industry Development Institute*

■ **Speakers**

Outlook of Korean Medical Industry and Investment Opportunity
TBA

The Potentials and Plan of Daegu-Gyeongbuk High-tech Medical Complex
Taewoon KIM, Director, High-tech Medical Complex Planning Div., Daegu Metropolitan City

Opportunity to Invest in Osong High-tech Medical Complex
Jin Tae HONG, Prof., College of Pharmacy, Chungbuk Nat'l Univ.

Track 16. Clinical Drug Development
: Practical Aspects of Clinical Drug Development: Issues, Strategy & Solution

Clinical drug development is a sum of professional activities encompassing academic, managerial, technical, ethical and regulatory aspects. In the past recent years clinical drug development in Korea achieved a remarkable advance. Nowadays Korea is regarded as one of the leaders in the emerging markets for its excellence in clinical development performance. There have been joint efforts among the stakeholders in investment and education and training. However, clinical development field has entered into fierce global competition, and we are at the stage where we have to reset our future direction and to gear up our competency. Recent reports analyzing international trends and domestic clinical trials environment point out that our competitiveness in the global clinical trials arena lies not in the quantitative growth in number of trials, but in quality improvement and sophistication in trials. In the near future, late phase trials in many cases will seek their places in China or India. However, we will have more opportunity for early phase trials, which in most cases have been conducted in advanced countries only. For this cause, government, academia, and industry jointly invested to build necessary infrastructure and training. Now we need to cumulate specialized knowledge and skills, and finetune our expertise in this area. This track highlights early phase clinical development as an opportunity and a challenge, addresses various aspects of subject recruitment including ways for acceleration, and revisits clinical supply management issues. It will provide opportunities to the participants to grasp important concepts regarding clinical drug development.

Session 1. Early Clinical Development in Korea: Opportunities & Challenges

Sep. 3 (Fri), 10:00~12:00

This session highlights the early phase clinical development, which is rather under activated in Korea compared with later phases or other established countries in global clinical development. Future prospects as well as challenges for investigative sites in Korea will be addressed and discussed. It will help many clinical trials centers prepare themselves to meet the expectations and demands of multinational Pharma°Øs and to become preferred sites. New strategies for early global development of multinational Pharma's will be introduced. Strengths and weaknesses of Korea as an investigative site for early phase development will be discussed in the perspective of sponsors. Hurdles to overcome to excel in early phase development will be addressed in the perspective of investigators. This session will help participants understand international trends in early phase development and the current status and prospects of Korea. It will contribute to activation of early phase development and eventually local drug development industry in Korea.

- **Chair** : *Yil-Seob LEE, Vice General Manager, GlaxoSmithKline*
- **Speakers**

Early Phase Development in Asia: Global Pharma's Perspective
Aakash GANJU, Head of Global Clinical Operation (GCO) Asia-Pacific Region, Johnson & Johnson

Strengths and Weaknesses of Korea in Early Phase Clinical Development
Karen GRIFFIN, Head Regional Operations, CPSSO/CCSE GlaxoSmithKline

Early Clinical Development in Korea
Kyung-Sang YU, Associate Prof., Clinical Pharmacology and Therapeutics, Seoul Nat'l Univ. Hospital

Session 2. Patient Recruitment Issues in Clinical Trials

Sep. 3 (Fri), 13:00~15:00

Underneath the globalization of clinical development lies the issue of access to larger patient pools and expanding the Pharma markets in addition to purely financial reasons. Globally clinical drug development faces an ever-increasing failure rate as well as a rapid increase in investment. This led all the stakeholders of clinical development including pharmaceutical companies to turn their eye to the importance of efficiency and acceleration of patient recruitment. This session deals with principles and practical issues involved in subject recruitment in global clinical trials including strategies for accelerating subject recruitment. Different aspects of subject recruitment for healthy volunteer studies as well as patient-based non-therapeutic studies will be addressed with suggestions for improvement. An ethical issue, which is inevitably related with subject recruitment, will also be considered. Through the session, the participants will be able to step up a notch in planning and executing improved subject recruitment in terms of practical aspects and in principle.

■ **Chair** : *Min-Soo PARK, Director, Severance Hospital, Yonsei Univ. College of Medicine*

■ **Speakers**

Recruitment and Management of Non-patient Study Participants
In-Jin JANG, Prof., Clinical Pharmacology, Seoul Nat'l Univ. Hospital

Patient Recruitment Strategies in Non-therapeutic Trials
Min Soo PARK, Director, Clinical Trials Center, Severance Hospital, Yonsei Univ. College of Medicine

Accelerating Subject Recruitment and Successful Retention in Global Clinical Trials
Susanne OELLRICH, Corp. Vice President, Regional Head Research Operations Asia Pacific, Parexel Int'l

Session 3. Clinical Supply Management

Sep. 3 (Fri), 15:30~17:30

This session is devoted to a less highlighted but very important aspect, namely, Clinical Supply Management. It is often underestimated but it would affect the whole process unless properly planned and managed in advance. The large multinational companies have their own know-how and design appropriate solution for each study as it indirectly influence study's speed, quality and cost. Nevertheless, a rapid increase in the volume as well as the complexity of clinical trials in Korea is met by a similar increase in the volume and complexity of clinical supply management. Current status, regulatory and practical issues regarding clinical supply as well as sample management will be addressed. The session will provide various solutions which can be used as a guideline for clinical supply management designing. This whole session is focused on providing practical information that will directly help the Korean biotech/ pharmaceutical companies to apply for their upcoming multi-national clinical trials.

- **Chair** : *Won-Sik LEE, Executive Director, Pfizer Korea*
- **Speakers**

Planning and Designing of Clinical Supply Management in Global Clinical Trials
JiHyun LEE, Director, Johnson & Johnson

Regulatory Issues in Clinical Supply Management and Handling of Hazardous Materials
: Setting up a GxP Compliant Supply Chain - Challenges and Opportunities
Ruediger B. LOMB, Global Director, Quality and Technical Compliance, World Courier Management Inc.

Successful Study Drug and Study Human Sample Importation/Exportation in China
Ning XU, Senior Director & Head, Clinical Development Services, Covance China

Track 17. Alzheimer Disease

Sep. 2 (Thur), 10:00~17:30

* Detailed Program will be announced at our official website(www.biokorea.org) soon.

Exhibition

BIO KOREA 2010 Exhibition expects to host 250 companies and 12,500 visitors from all over the world. This event will be an outstanding exhibition of an international level embracing every field of the bio industry.

- Period : Sep. 1(Wed) ~ 3(Fri), 2010
- Venue : Hall C, COEX, Seoul, Korea

Exhibitor Benefits

- Two Complimentary Nights at a hotel for the investors and buyers, recommended by the exhibitor
- Two 3-Day Conference Access Tickets
- Three Exhibition Access Badges per Booth
- Two Invitations to Welcome Reception per Booth
- Company Listing in BIO KOREA 2010 Program Book
- Company Web Listing (www.biokorea.org) throughout the Year

Key Exhibits

- Red Bio - Pharmaceuticals & Drug Discovery, Biotechnology, Genomics & Proteomics
  - Industrial & Environmental Biotechnology
- Green Bio - GMO, Agriculture & Functional Food, Eco-friendly Biotechnology
- White Bio - Bio Mass, Eco-friendly Industrial Process, Bio Environmental Energy
- BIO-IT - BIO Chip, Bioelectronics, Bioinformatics
- Equipments - Medical Devices & Lab Equipments
- Academic Researches - CRO, CMO, CSO, BIO-Clusters, Academic Research Centers, Bio-related Univ. Dept, etc.

Application

• Go to "BIO KOREA 2010 Exhibitor Application Form" attached

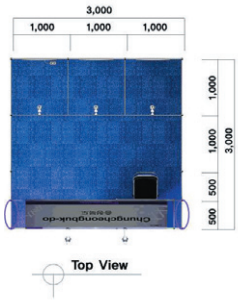
Payment Method for Exhibition

• Due Date : Aug. 13(Fri), 2010
• Bank Wire Transfer to
- Beneficiary : Seoul Messe Inc
- Account No. : 1005-880-801621
- Swift Code : HVBKKRSE
- Bank : Woori Bank Jamsilnam Branch

Exhibit Fees

Booth Type	Booth Fee
Space only (3m X 3m)	US$ 2,000/m²
Shell Scheme (3m X 3m)	US$ 2,300/m²

* Shell Scheme includes back & side walls, carpet, company name board, information desk & 1 round chair, 3 spot light (100W), 1 outlet (1kw).
* VAT is not included. All Korean company is required to pay the VAT on the participation fee.



Top View

Perspective View

Contact Information on the Exhibition

Ms. Young
Korea International Trade Association (KITA)
Tel : 82-2-6000-5058
Fax : 82-2-6000-5823
Email : biokorea@kita.net

Business Forum

Business Forum Overview

For the past 20 years, the global bio industry has achieved significant growth. The number of bio related businesses has increased by about 7 times, and the market value by approximately 30 times.

As the bio industry is anticipated to lead the growth of health, prosperity, and welfare of mankind in the 21st century, the social demands and interest on Bio industry has grown explosively; and furthermore, the environment surrounding the Bio industry has rapidly changed.

The most noticeable phenomenon in the bio industry is globalization. In an ever growing global market, where it is important to secure the leading position and competitiveness in the market, we hope that the BIO KOREA Business Forum provides you a place to discover the present and future trends of bio technology.

Providing the opportunity for business cooperation and joint research between Korean/overseas bio companies and researchers, BIO KOREA 2010 Business Forum offers its participants Partnering, where companies with the same interests meet and form partnerships through pre-organized one-on-one online meetings and Company Presentation, where advanced technologies and business strategies are introduced.

BIO KOREA 2010 Business Forum will provide you with the opportunity to enter into business or technology partnership with leading bio companies in Korea and other parts of the world and will be a venue for communication and prosperity in your business. Even more customized and differentiated services provided this year will be the path of successful technology transfer, joint research and investment attraction

- Period : Partnering - Sep. 1 (Wed) ~ 3 (Fri), 2010
  Company Presentation - Sep. 2 (Thur) ~ 3 (Fri), 2010
- Venue : Partnering - Hall C4, 3F., COEX, Seoul, Korea
  Company Presentation - Rm. 327A~C, 3F., COEX, Seoul, Korea
- Expected Participant : Bio (Venture) Companies from Korea & Abroad, Bio-clusters, Local Governments, Embassies, Investors, Research Institute, etc.
- Program : Partnering (1:1 Business Meeting) + Company Presentation

Partnering (1:1 Business Meeting)

Partnering provides the opportunity to meet with potential business and technology partners to discuss mutual interest through pre-scheduled one-on-one meetings. This one-on-one meeting arrangement with particular companies can be made via the online partnering system after online registration at www.biokorea.org.

- Date & Time : Sep. 1 (Wed), 2010 - 13:00~18:00
  Sep. 2 (Thur), 2010 - 10:00~18:00
  Sep. 3 (Fri), 2010 - 10:00~17:00
- Meeting Time : 30 Mins. per Meeting
- Deadline for Online Pre-registration : Aug. 13 (Fri), 2010
- Registration Instruction : 1. Go to the Online Registration at www.biokorea.org
  2. Log-in for Partnering at www. biokorea.org

Company Presentation

Company Presentation helps companies, expand their business by exposing their advanced technology and business strategies to potential partners, investors and media. Requesting time for Company Presentation will be screened by the organizing committee of BIO KOREA 2010 and presentation schedule will be notified via e-mail address submitted through online registration and announced on our official website at www.biokorea.org.

- Presentation Time : 30 Mins. Including Q&A
- Important Deadlines : Online Registration - By July 16 (Fri), 2010
  Screening - July 23 (Fri), 2010
  Notification - July 26 (Mon), 2010
- Registration Instruction : Online Registration at www.biokorea.org

Registration

How to Pre-register

Pre-registration should be done through online registration system at www.biokorea.org.

Deadlines for Online Pre-registration

- Conference : August 13 (Fri), 2010
- Business Forum - Company Presentation : July 16 (Fri), 2010
- Business Forum - Partnering : August 13 (Fri), 2010

Registration Fee for Conference & Business Forum

Category	Pre-registration		General Registration	
	Individual	Student	Individual	Student
Full Convention Access	$660	$462	$770	$539
▪ Access to Plenary Session ▪ Access to Exhibition (3 Days) ▪ Access to Business Forum - Company Presentation ▪ ~~Invitation to Navigation & Partnering on Han River~~ Early Closed for Limited Seats ▪ Business Forum Kit (Name Badge, Final Program, Business Forum Directory, Pocket Guide) ** Only Extra $100 for the Participation of Business Forum - Company Presentation*	▪ Access to all Conference Sessions (3 Days) ▪ Access to Business Forum - Partnering ▪ Invitation to Welcome Reception			
3-Day Conference Access	$176	$121	$242	$165
▪ Access to Plenary Session ▪ Access to Exhibition (3 Days) ▪ Conference Kit (Name Badge, Final Program, Pocket Guide)	▪ Access to All Conference Sessions ▪ Access to Business Forum - Company Presentation			
1-Day Conference Access	$88	$66	$132	$99
▪ Access to Plenary Session ▪ Access to Exhibition (1- Day Registered) ▪ Conference Kit (Name Badge, Final Program, Pocket Guide)	▪ Access to Conference Sessions (1- Day Registered) ▪ Access to Business Forum - Company Presentation			
Business Forum-Company Presentation	$330	-	-	-
▪ Access to Plenary Session ▪ Participation of Business Forum - Company Presentation ▪ Conference Kit (Name Badge, Final Program, Pocket Guide)	▪ Access to Exhibition (3 Days) ▪ Welcome Reception			
Business Forum-Partnering	$550	-	$660	-
▪ Access to Business Forum - Partnering ▪ Access to Exhibition (3 Days) ▪ Invitation to Welcome Reception ▪ ~~Invitation to Navigation & Partnering on Han River~~ Early Closed for Limited Seats ▪ Business Forum Kit (Name Badge, Final Program, Business Forum Book, Pocket Guide)	▪ Access to Plenary Session ▪ Access to Business Forum - Company Presentation			

※ 1-Day Conference Access is available only for the day the attendee is registered.

Pre-paid Ticket for Conference & Business Forum

It is more efficient to purchase Pre-paid Tickets if your party consists of 5 or more people
The discount rate applies to pre-registration fee.

* Pre-paid Ticket Category : Full Convention Access, 3-Day Conference Access, 1-Day Conference Access
* Discount Rate (Based on the Total No. of Pre-Paid Ticket)

No. of Tickets	5~9 Tickets	10~14 Tickets	15~19 Tickets	More than 20 Tickets
Discount Rate	10%	15%	20%	30%

* How to Purchase the Pre-paid Ticket
  - Online purchasing through the official wedsite at www.biokorea.org
  - Fill out the Pre-paid Ticket purchasing Form and ruturn it to the BIO KOREA 2010 Conference & Business Forum secretariat office by fax or e-mail.

Method of Payment for Conference & Business Forum

Registration without appropriate payment will not be processed until full payment is received.

Credit Card	Visa, Master, American Express, JCB, Diners Club are accepted.
Bank Transfer	- Bank Name: Kookmin Bank - Account No.: 389801-01-113867 - Swift Code: CZNBKRSE - Beneficiary: IBI Meeting Professionals Inc. - Bank Address: 159-9 Samsung-dong, Gangnam-gu, Seoul 135-973, Korea

※ Please send a copy of the remittance Statement fax or e-mail.
※ All bank charges for bank transfer must be paid by registrants.

Cancellation & Refund Policy

Please refer to the following cut-off dates for cancellation.

- Before and Including Aug. 13. 2010 : 80% of Total Amount refund available
- From Aug. 14. 2010 : Refund unavailable

※ Cancellation should be notified to the secretariat in writing by e-mail or fax.
※ All refund will be made after the conference for administrative reasons.
※ Bank charges will be deducted from the refunded amount.

Contacts For More Information

Secretariat for Conference & Business Forum	Secretariat for Exhibition
· Tel. +82-2-508-4217	· Tel. +82-2-6000-5058
· Fax. +82-2-508-4218	· Fax. +82-2-6000-5823
· E-mail. registration@biokorea.org	· E-mail. biokorea@kita.net

Accommodation

Hotel Reservation Deadline for Conference & Business Forum Participants : By July 31 (Sat), 2010

COEX Intercontinental Seoul

- Address : 159 Samseong-dong, Gangnam-gu, Seoul, Korea
- Tel No : +82-2-3452-2500
- Fax No : +82-2-3430-8000
- E-mail : coexseoul@interconti.com
- Website : www.seoul.intercontinental.com
- Distance from the Venue: 5 Minutes Walk

Grand Intercontinental Seoul

- Address : 521 Teheranno, Gangnam-gu, Seoul, Korea (135-732)
- Tel No : +82-2-555-5656
- Fax No : +82-2-559-7990
- E-mail : seoul@interconti.com
- Website : www.seoul.intercontinental.com/eng/main_grand.htm
- Distance from the Venue: 5 Minutes Walk

Riviera Seoul

- Address : 53-7 Cheongdam-dong, Gangnam-gu, Seoul, Korea
- Tel No : +82-2-541-3111
- Fax No : +82-2-546-6111
- E-mail : webmaster@hotelriviera.co.kr
- Website : www.hotelriviera.co.kr
- Distance from the Venue: 5 to 10 Minutes by Car

IBIS Hotel

- Address : 893-1 Deachi-dong, Gangnam-gu, Seoul, Korea
- Tel No : +82-2-3454-1101
- Fax No : +82-2-3454-1946
- E-mail : ibis-seoul@ambatel.com
- Website : www. ibis.ambatel.com
- Distance from the Venue: 10~15 Minutes Walk

Hotel Map


Horse Affairs Association
Ellui Hotel
Yeongdong Bridge
Cheongdam Catholic Church
HOTEL RIVIERA
Cheongdam Bridge
Cheongdam Station
Kyunggi High School
IPARK Apartment
Bongeun Temple
COEX Intercontinental Hotel
ASEM Tower
Gangnam Hospital
CASINO
COEX Convention Center
Oakwood Premier
Trade Tower
Korea City Air Terminal
COEX Artium
Samseong Station (Gate 5)
Hyundae Department Store
Grand Intercontinental Hotel
Samseong Station (Gate 6)
Jamsil Station
Ibis Seoul Hotel
Gangnam Station
Yangjae Daero

Venue

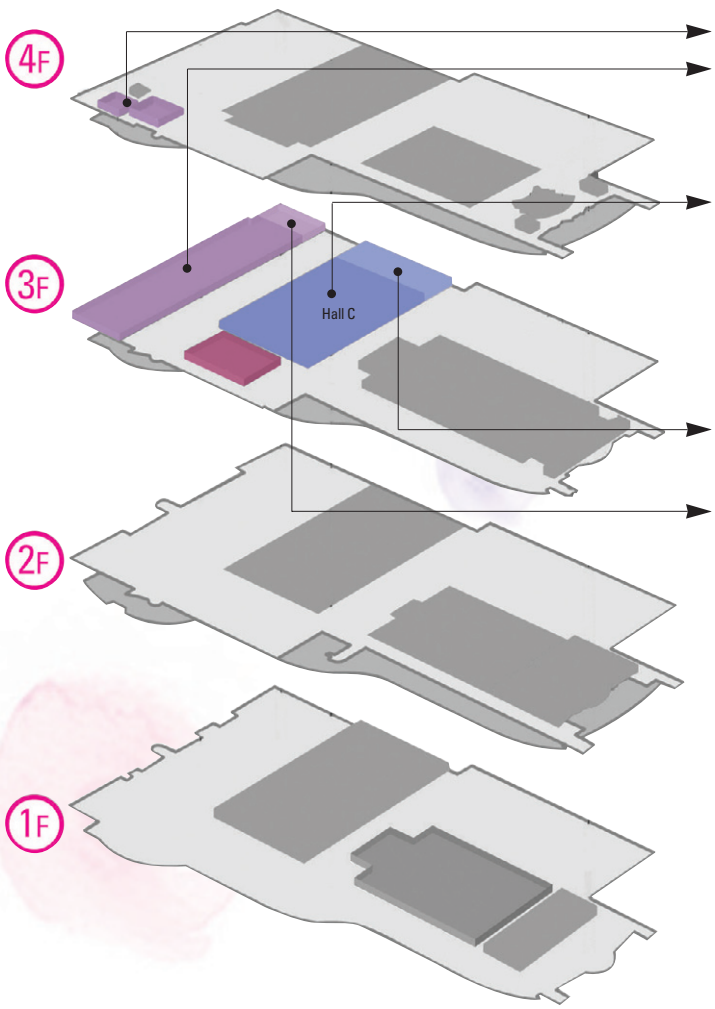
COEX Convention & Exhibition Center, Seoul, Korea

Located in the World Trade Center Seoul Complex, COEX is a world class convention center offering a perfect infrastructure including deluxe hotels, shopping mall, recreation areas, and cultural facilities, and transportation conveniences.

Highlighting one of the convention halls, the ASEM hall was a historical venue for the 3rd ASEM Summit Meeting held in the year of 2000 with presidents and prime ministers from 26 Asian and European countries in attendance.

Floor Plan

COEX, Seoul, Korea



BIO KOREA 2010 Conference

Period : Sep. 1 (Wed) ~ 3 (Fri), 2010
Venue : Conference Rm. (South), 3F. & 4F., COEX

BIO KOREA 2010 Exhibition

Period : Sep. 1 (Wed) ~ 3 (Fri), 2010
Venue : Hall C, 3F., COEX

BIO KOREA 2010 Forum

Period : Partnering - Sep. 1 (Wed) ~ 3 (Fri), 2010
Company Presentation - Sep. 2 (Thur) ~ 3 (Fri), 2010
Venue : Partnering - Hall C4, 3F., COEX
Company Presentation - Rm. 327A~C, 3F., COEX

Transportation

From Incheon International Airport to the Hotels

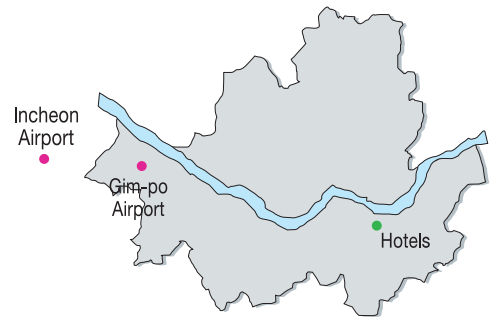
1) By Limousine Bus

(KRW 1,150 ≒ USD1.00)

Category	From Incheon International Airport	From Gim-po Domestic Airport
Destination	Grand Inter continental Hotel	Grand Intertinental Hotel
Route (Bus Stop No.)	Hotels-Gangnam (4B, 11A)	KCAT (No. 3)
First Bus Time	05:10	07:35
Last Bus Time	22:30	22:20
Interval	20~30 mins.	5~15 mins.
Travel Time	80 mins.	45 mins.
Fare (KRW)	KRW 14,000	KRW 6,500
Remarks	Non-stop Service to the Hotels	Non-stop Service to the KCAT
Bus Service Co.	KAL (+82-2-2667-0386)	KCAT (+82-2-551-0790)

* Note

- We kindly recommend you to use the Limousine Bus.
- You can obtain information on limousine buses and purchase bus tickets at the Transportation Information Counter (near the Exit No. 2, 4, 9, 17) on the arrival floor (1F) of the passenger terminal of Incheon International Airport.



2) By Taxi

Category		From Incheon International Airport	From Gim-po Domestic Airport
Destination		Grand Intercontinental. Hotel / COEX Intercontinental. Hotel / Ibis Seoul	
Fare (KRW)	Deluxe Taxi	Approx. KRW 70,000	Approx. KRW 45,000
	Regular Taxi	Approx. KRW 50,000	Approx. KRW 35,000
Travel Time (Min.)		60 Min.	45 Min.

- Toll gate fee will be added from Incheon International Airport to the hotels.
- From midnight to 4 am, a 20% extra charge will be added to the fare.
- A receipt is issued upon your request.
- Taxis are always available. When traffic is heavy, it may cost more.

* For more information on the transportation, please visit our website at www.biokorea.org.

General Information

Welcome to Seoul, Korea

Korea, traditionally known as the "Land of the Morning Calm," is today a modern and bustling business hub of Northeast Asia. As one of the oldest countries in the world, Korea has its own distinctive language, culture, and history spanning well over 5,000 years. Korea will provide you with the opportunity to experience a unique oriental and traditional lifestyle. Seoul, the capital of South Korea, is also one of the world's most fascinating cities. Seoul is not only the center of culture, education, politics, and economics of Korea but also possess numerous relics and ancient sites, where you can experience Korea's unique 5,000-year history and modern facilities all at the same time. For more information on Korea, please visit the Korea National Tourism Organization's website. (www.knto.or.kr)

Invitation Letter

An invitation letter will be issued to any BIO KOREA 2010 registrant upon request. We are unable to send you an invitation letter for VISA application prior to the receipt of your registration form and full payment of fee. The invitation letter does not confirm any financial support from the BIO KOREA 2010 organizing committee.

Passport and VISA

Foreigners who wish to visit the Republic of Korea should possess valid passports. Visitors from certain countries with confirmed round-trip-tickets can stay in the country for 30 days without VISAs. However, visitors from other countries should obtain entry visas before coming to Korea. Please contact your local Korea embassy and apply for any required VISAs well in advance. For more information, please visit the Ministry of Foreign Affairs and Trade at www. mofat.co.kr.

Currency Exchange

The Korean currency unit is the WON (indicated ₩). Bank notes are ₩10,000, ₩5,000, ₩1,000 bills and coin denominations are ₩500, ₩100, ₩50, ₩10. One US dollar is about ₩1,150.00 as of June, 2010. Money can be exchanged at Incheon International Airport, banks, and hotels. Visa, Master, American Express, and Diners Club credit cards are also accepted.

Climate

Korea has four distinct seasons; spring, summer, fall, and winter. September, the month of Bio Korea 2010, is the best time to visit Korea. You will enjoy the beautiful Korean fall weather with clear blue skies and mild temperatures.

1330 Korea Travel Phone

For English assistance or travel information, just dial 1330 and a bilingual operator will offer you detailed tourist information.

Electrical System

Electrical Outlets in Republic of Korea are of 220 to 240 and primary outlet types are Europlug and Schuko types. Always check the power supply before using your equipments. You may also need plug-adapters and/or voltage converters.

Tax & Tipping

Value-added tax is levied on most goods and services at standard rate of 10% and is included in the retail price. Tipping is not customary in Korea. Sometimes, expensive restaurants and luxury hotels may add a service charge of 10%. Thus, you do not necessarily have to prepare for extra charges since it will be included in the bill.

Credit Card

Most restaurants, hotels and shops accept credit cards. You may not be able use credit cards at small businesses and in rural areas. You may also want to check whether your credit card is accepted by looking at signs posted on doors. Visa and Master cards are the most common types of payment that can be found.

Insurance

The organizaing committee will accept no liability for personal injuries sustained or losses and/or damages to properties belonging to conference participants, during the conference period and at all tours. Therefore, we recommend that all participants arrange for their own personal travel health, accident and insurance before arrival.

BIO KOREA 2010 Exhibitor Application Form

* Please complete the form and return it to the secretariat via e-mail (biokorea@kita.net) or fax (+82-2-6000-5823).
* For more information, please visit our website at **www.biokorea.org**

■ Company Information

Company Name			
CEO / President		Country	
Address	(–)		
Contact		Position / Department	
Tel		Fax	
Mobile		E-mail	
Website(1)		Website(2)	

■ Exhibit Information

Exhibit Items	☐ Pharmaceutical ☐ CMO ☐ CRO ☐ Government ☐ Organization ☐ Logistic ☐ Food ☐ Packaging ☐ IT ☐ Equipment ☐ Cosmetic ☐ Ingredients ☐ Clinical Trials ☐ Software ☐ Etc ( )
Exhibit Information	

■ Booth Application

Type	Price	Quantity	Total Amount	Remark
Raw Space	US$ 2,000 / booth(9sqm)	booth	US$	Space only
Shell Schem	US$ 2,300 / booth(9sqm)	booth	US$	
Discount	2 consecutive year participant 5%		US$	Discount is based on raw space rate
Total Amount			US$	

* Shell Scheme includes Back & Side Walls, Carpet, Company Signage, 1 Information desk & 1 chair, 3 Spot lights, 1 Electric outlet(1kw)
* Please make full down payment(wire transfer) along with the submission of the application form

■ Account Information

Beneficiary	Account No#	Swift Cod	Bank
SeoulMesse InC	1005-880-801621	HVBKKRSE	Woori Bank Jamsilnam Branch

* All payment must be wire-transferred to the above account.
* All banking charges, if any are to be borne by the exhibitor.

This document, when signed by the above named Exhibitor and subjected a written acceptance by BIO KOREA 2010,

Date _____

Name _____ Signature _____

Secretariat for BIO KOREA 2010 Exhibition
Tel : +82-2-6000-5058, Fax : +82-2-6000-5823, E-mail : biokorea@kita.net

BIO KOREA 2010 Terms & Conditions

1. Defined Terms

In these terms and conditions, "Organizer" means "BIO KOREA 2010 Organizer" including "Korea International Trade Association", "Chungcheongbuk-do" and "Korea Health Industry Development Institute". "Exhibitor" means all employees, partnership, firms, and individuals to whom the space has been allocated for the purpose of exhibiting. "Exhibition" means "BIO KOREA 2010."

2. Contract Acceptance

When signing the prescribed application form, the Exhibitor agrees to follow all the existing terms and conditions, and further regulations that might be made to modify them. Once signed and submitted by the applicant and confirmed by the Organizer, the contract will be established and come into effect.

3. Application and Payment

The Exhibitor must send the application form to the Organizer along with a transfer slip (check or copy of a bank) paying for initial 50% of the total participation fee. The balance must be paid by no later than August 13, 2010, and the refund will not be made except for the cases specified in the Terms and Conditions. If the Exhibitor fails to perform the full payment by the due date, the Organizer may terminate the contract with no refund to the Exhibitor. If the Exhibitor has any balance of the participation fee unpaid by the time of the Exhibition, the Organizer has right to seize the exhibits. Payment for participation fee should be made through wire transfer as specified in the application.

4. Assignment of Space

The Organizer shall determine the location of booths for each Exhibition in the manner that the Organizer deems appropriate considering the order of application, the size of the space applied for, and the nature of the exhibits. The Organizer reserves the right to make changes to the space allocated to the Exhibitor at any time prior to the commencement of the build-up of the exhibition when the circumstances demand. Such changes shall be at the discretion of the Organizer, and the Exhibitor may not claim for compensation as a consequence.

5. Cancellation and Changes by the Exhibitor

In the case of changing exhibits or canceling participation in the Exhibition, Exhibitors must inform the Organizer in writing and pay the applied cancellation fee to the Organizer within 15 days after cancellation. Cancellation fees are the 50% of the participation fee when cancelled on or before August 13, 2010 and 100% of the participation fee when cancelled after August 14, 2010. In the event that the Exhibitor refuses to use all or part of the space allocated or the Exhibitor defaults on the payment, the Organizer shall reserve the right to terminate the contract forthwith, and the submitted payment will not be refunded.

6. Cancellation and Changes by the Organizer

The Organizer may exclude the Exhibitor who violates any of the terms and conditions or further regulations from the Exhibition, and no refund will be made to the Exhibitor. In the event that the Exhibition is changed or cancelled due to the Organizer' s exceptional circumstances, the Organizer shall notify the Exhibitor of the change or cancellation in advance, and the Exhibitor has right to choose whether to participate in the changed Exhibition or to claim refund for the total amount of the submitted payment.

7. Cancellation and Changes due to Force Majeure

The Organizer may cancel the Exhibition when the circumstances are beyond the reasonable control of the Organizer (such as fire, strike, earthquake, war, terrorism, construction, renovation projects, government regulation, public catastrophe, interruption of transportation or communications, acts of god, unavailability of the exhibit facility, and any other force majeure) and, in its sole discretion, shall determine whether to refund to the Exhibitor no more than its proportionate share of the balance of the aggregate display fees received, which remains after deducting expenses incurred by the Organizer and reasonable compensations to the Organizer.

8. Exhibit Space Occupancy

The Exhibitor shall provide adequate staffs for maintenance and operation of the exhibit during all exhibit hours. All booths must be fully displayed and open for business throughout the Exhibition.

9. Installation and Dismantling

In the event that the Exhibitor fails to install products in the assigned space by the opening of the Exhibition, the Organizer reserves the right to assign the said space to another Exhibitor, or use the said space in any other manner deemed suitable. The Exhibitor may not dismantle the display until the Exhibition closes according to the time and date specified by the Organizer. When vacated, all exhibit space must be left in good order. The Exhibitor must remove all exhibits from the exhibition hall within the move-out period stipulated by the Organizer and will be charged for any loss or damage to exhibition hall due to the delay, if any.

10. Exhibit Space Usage

Care of Facility : The Exhibitor may not destroy and/or paint any part of exhibit space and must maintain the original condition of the exhibit space upon vacation. The Exhibitor will be charged of the damages that are made by the Exhibitor, if any. Display : Display of products or services and any other activities by the Exhibitor are restricted within the specified and approved space. Products and services displayed must be those normally manufactured by or provided by the Exhibitor. Sub-letting : Exhibitor may not assign its rights to any portion of the exhibition space to a third party (for example, "booth sharing" and "Sub-letting") without the prior written consent of the Organizer, which the Organizer may withhold at its discretion. The Exhibitor may not share its exhibit space with any other person or entity.

11. Coordination of Exhibit with the Organizer

The Exhibitor shall provide the descriptions of all the exhibits and restrictions on booth design and activities before the construction of the Exhibition begins. The Exhibitor shall also provide the Organizer with the necessary information to facilitate the overall promotion of the Exhibition.

12. Safety and Insurance

The Exhibitor must subscribe to all the risks in the insurance policy on all equipment and products during all the exhibit hours as well as set-up and dismantling period. The Organizer will not be responsible for any loss, theft, or damages to any article belonging to the Exhibitor. Materials used in stand and display construction must properly be fireproof in accordance with the local fire and safety regulations. The Organizer reserves the right to restrict any construction or demonstration that poses a potential safety hazard.

13. Additional Terms and Conditions

When necessary, the Organizer may issue supplementary regulations in addition to those in the Terms and Conditions for exhibiting, and those regulations shall be binding on the Exhibitor.

14. Arbitration of Disputes

Any dispute, differences or questions arising hereafter between the Organizer and the Exhibitor concerning the true construction of the Terms and Conditions for exhibiting or the rights and liabilities of the parties thereto shall be settled in accordance with the Commercial Arbitration Board. The verdict of the above arbitration shall be final and binding upon both parties.

BIO KOREA 2010 Conference & Business Forum
Pre-paid Ticket Purchasing Form (For Individual)

* To purchase the Pre-paid Ticket, please complete the purchasing form below and return it to the BIO KOREA 2010 Conference and Business Forum Secretariat by fax (+82-2-508-4218) or e-mail (registration@biokorea.org)
* Participant who has Pre-paid ticket must register with the ticket serial number on the front of the Pre-paid Ticket through on line registration at our official website (www.biokorea.org) no later than Aug 20 (Fri), 2010

I. Pre-paid Ticket Info

Category	Ticket Fee	No. of Tickets	Amount
Full Convention Access	USD 660		
3-Day Conference Access	USD 176		
1-Day Conference Access	USD 88		
Total No. of Tickets & Amount			

* 5~9 Tickets: 10% Discount / 10~14 Tickets: 15% Discount / 15~19 Tickets: 20% Discount / 20 Tickets or more: 30% Discount
* The discount rate applies on pre-registration fee.

II. Purchaser's Info

Name	
Organization	
Dept./Div.	
Position	
Tel.	
Fax.	
Mobile	
E-mail	* Pre-paid ticket will be sent to your e-mail address.

Date _____ Signature _____

Bank Transfer Info	Sender's Name : _____ Bank Transfer Date : _____ Bank Name : Kookmin Bank Account No. : 389801- 01-113867 Swift Code : CZBNKRSE Beneficiary : IBI Meeting Professionals Inc. Bank Address : 159-9 Samsung-dong, Gangnam-gu, Seoul 135-973, Korea * Note : 1. Please attach a copy of the remittance statement by fax or e-mail 2. All bank charges for remittance must be paid by the registrants

Detach

Secretariat for BIO KOREA 2010 Conference & Business Forum
Tel : +82-2-508-4217, Fax : +82-2-508-4218, E-mail : registration@biokorea.org

BIO KOREA 2010 Conference & Business Forum
Pre-paid Ticket Purchasing Form (For Student)

* To Purchase the Pre-paid Ticket, please complete the purchasing form below and return it to the BIO KOREA 2010 Conference and Business Forum Secretariat by fax (+82-2-508-4218) or e-mail (registration@biokorea.org)
* Participant who has Pre-paid Ticket must register with the ticket serial number on the front of the Pre-paid Ticket through online registration at our official website (www.biokorea.org) no later than Aug 20 (Fri), 2010

I. Pre-paid Ticket Info

Category	Ticket Fee	No. of Tickets	Amount
Full Convention Access	USD 462		
3-Day Conference Access	USD 121		
1-Day Conference Access	USD 66		
Total No. of Tickets & Amount			

* 5~9 Tickets: 10% Discount / 10~14 Tickets: 15% Discount / 15~19 Tickets: 20% Discount / 20 Tickets or more: 30% Discount
* The discount rate applies on pre-registration fee.

II. Purchaser's Info

Name	
University	
Dept.	
Category	☐ Undergraduate ☐ Graduate Student
Tel.	
Fax.	
Mobile	
E-mail	*Pre-paid ticket will be sent to your e-mail address.*

Date _____ Signature _____

Bank Transfer Info	Sender's Name : _____ Bank Transfer Date : _____ Bank Name : Kookmin Bank Account No. : 389801- 01-113867 Swift Code : CZNBKRSE Beneficiary : IBI Meeting Professionals Inc. Bank Address : 159-9 Samsung-dong, Gangnam-gu, Seoul 135-973, Korea *Note : 1. Please attach a copy of the remittance statement by fax or e-mail 2. All bank charges for remittance must be paid by the registrants

Secretariat for BIO KOREA 2010 Conference & Business Forum
Tel : +82-2-508-4217, Fax : +82-2-508-4218, E-mail : registration@biokorea.org

Detach

Preliminary Program

September 01(Wed) ~ 03(Fri), 2010
COEX, Seoul, Korea

www.biokorea.org