

October 8(Wed) ~ 10(Fri), 2008 **Osong Bio-Technopolis, Korea** 



### Organized by

**BIO KOREA** 2008

OSONG CONFERENCE & EXHIBITION

> Chungcheongbuk-do (Chungbuk Province) Korea Health Industry Development Institute (KHIDI) Korea International Trade Association (KITA)

### Supported by

**Bioindustry Association of Korea** Korea Pharmaceutical Manufacturers Association Korea Bio Venture Association Korea Research Institute of Bioscience and Biotechnology Korea Drug Research Association Health Industry Venture Association Korean Research-based Pharmaceutical Industry Association Korea Food Industry Association Korea Health Supplement Association Osong Bio Promotion Foundation Korea Cosmetic Association COEX

### Sponsored by

Ministry of Knowledge Economy (MKE) Ministry for Health, Welfare, and Family Affairs (MIHWAF)

### **Contact Us**

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### www.biokorea.org





Korea International Trade Association



# Join the Asian Bio Hub, **BIO KOREA**

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# O O O O O Welcome to BIO KOREA 2008



We would like to welcome you to BIO KOREA 2008 OSONG, which will be held at Osong Bio-Technopolis, the biggest bio-hub of Korea from October 8th to 10th, 2008, following the previous show.

The annual "BIO KOREA" is proudly stepping into its 3rd consecutive year. BIO KOREA 2007, the second successful show, has attracted more than 17,000 visitors and 250 exhibitors including overseas participants.

Korean bio industry is showing a substantial amount of growth. It has grown by an average of 14 % per year over the last three years. The great strides in the field of Korean bio industry are attributed to the support and effort of government, academics, research institutes and companies from related industry.

BIO KOREA 2008 will offer international exhibitions, a variety of high-level conference and partnership event and provide an opportunity to find information for business and technology partners.

We wish you a successful and enjoyable visit to Korea.

Thank you.

# 0 0 0 BIO Industry in Korea

In Korea, biotechnology and bio industry are expected to become an important driving force in the future economy. There have been enormous expectations concerning the economic potential of biotechnology. The Korean bio industry has been growing rapidly. The major driving force behind the Korean bio industry is the synergy effect between enthusiastic governmental policies and the entrepreneurship of research-oriented companies.

### **General Status of Korean bio industry**

The output of Korean bio industry expanded 14 percent in 2006, marking the third straight year of double-digit growth. The industry's production reached US\$3.35 billion in 2006, compared with \$2.95 billion the previous year, according to the report based on a survey of 794 companies nationwide.

### **Exports**

Exports of bio industry products in 2006 reached US\$1.35 billion, up 9.7 percent from the precious year, while import shot up 18.2 percent to \$935.4 million.

### Workers in Korean bio industry

The total number of workers in Korean bio industry has reached 13,867 in 2006. The percentage of R&D workers rose to 17.2% and the manpower of manufacturing increased to 33.6% from the previous year.

### R&D

Powerful bio fostering of Korean government has been promoting continuously with R&D investment since the establishment of basic plan. Korea's bio industry market has been estimated at approximately US\$2.5 billion with US\$500 million of annual government funding in the R&D.

\* Source : Korean Agency for Technology & Standards, Korea Institute for Industrial Economics & Trade, Bioindustry Association of Korea, 2006



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**BIO KOREA 2008** 

# Ο $\bigcirc$ Ο Overview

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### October 8th(Wed) ~ 10th(Fri), 2008 Osong Bio-Technopolis, Korea

### **Exhibition**

khibition Scale				
	- Expected Visitors : Approx. 25,000 persons (Approx. 1,000 overseas)			
chibit Categories	- Pharmaceuticals & Drug Discovery, Biotechnology, Genomics & Proteomics			
	-Biochips, Bioelectronics and Bioinformatics			
	-CRO, CMO, CSO, Patent and Legal Services, Venture Capitals, Consulting companies			
	-BIO-Clusters, Academic Research Centers, etc.			

### Conference

Date	
Venue	
Program	

### **Business Forum**

Date		
Venue		
Program	- Company Presentation (30 min. including Q& A)	

### **Special Events**

Welcoming Reception			
Other co-events			

# Ο Ο Exhibition

BIO KOREA 2008 Exhibition expects to host 350 companies and 25,000 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 :** October 8(Wed) ~ 10(Fri), 2008

**Venue :** Osong Bio-Technopolis

### **Exhibitor Amenities**

- Two complimentary nights at a hotel for the investors and buyers recommended by the exhibitor
- 2 full pass badges, 3 exhibition access badges and 2 welcoming reception invitations per booth
- Company listing in BIO KOREA 2008 program book
- Subscription to Exhibition Preview and Newsletter
- Company web listing (www.biokorea.org) throughout the year

### Exhibit Fees

	Booth type	Price
	Space only (3m $ imes$ 3m)	US\$ 2,000/9m <sup>2</sup>
Shell Scheme (3m ×3m)		US\$ 2,200/9m <sup>2</sup>

- 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.

### Exhibit Fee Deadline

	Amount
Deposit	50% of Exhibit Fee
Balance	50%

Payment Method for Exhibition : Bank wire transfer to

- Beneficiary : COEX (Convention & Exhibition)

- Account No. : 286-05-035967 (Shinhan Bank, Trade Center Branch, Seoul, Korea) - Swift Code : SHBKKRSE

- Bank Address : 159 Samsung-dong, Gangnam-gu, Seoul, Korea

### More Information on the Exhibition

Name	Korea International Trade Assoc
Tel	82-2-6000-5118
Fax	82-2-6000-5823/4
Email	biokorea@kita.net
Contact person	(Ms.) Joy Jung

## •••••

Due Date
within 5 days from the day of application
July 31, 2008

iation (KITA)

# $\bigcirc$ Participating Companies

As of May 31, 2008

AUSTRADE BECTON DICKINSON KOREA BHK, INC. BINEX CO., LTD. **BIO TAIWAN BIO21 CENTER BIO INDUSTRY ASSOCIATION OF KOREA** BIOLAND BIOMECHATRONIC CO., LTD. **BIOSPECTRUM ASIA BIO TECHNOLOGIE PARK LUCKENWALDE** BIOTRON, INC. CELL THERAPY CENTER CELLGENOMICS, INC. CENTER FOR EMERGENCY MEDICAL INFORMATICS CHABIOMED CO., LTD. CHEJU NATIONAL UNIVERSITY REGIONAL INNOVATION CENTER CHONG KUN DANG PHARMACEUTICAL CORP. CHUNCHEON BIOINDUSTRY FOUNDATION CHUNGBUK TP HEALTH INDUSTRY CENTER CHUNGCHEONGBUK-DO CHUNGDO PHARM. CO., LTD. CHUNGJU NATIONAL UNIVERSITY BIOFOOD SCHOOL-BASED ENTERPRISE COLLEGE OF MEDICINE, POCHON CHA UNIVERSITY RIS CREAGENE INC. DAEGU BIO INDUSTRY CENTER DAEJEON HIGHTECH INDUSTRY PROMOTION FOUNDATION DAIHAN LAB TECH CO., LTD. DIONEX KOREA, LTD. DONGKOOK PHARMACEUTICAL CO., LTD. DR.REDDY'S LABORATORIES LTD. ECONOMIC DEPT., EMBASSY OF ISRAEL, SEOUL EMBASSY OF ISRAEL, KOREA EULJI UNIVERSITY INDUSTRY ACADEMY COOPERATION FOUNDATION GANGNEUNG MARINE BIO FOUNDATION GANGWON REGIONAL INNOVATION AGENCY GANGWON TECHNOPARK GOODGENE INC. GOVERNMENT OF WESTERN AUSTRALIA TRADE INVESTMENT OFFICE KOREA GYEONGBUK INSTITUTE FOR BIO INDUSTRY GYEONGBUK INSTITUTE FOR MARINE BIO-INDUSTRY **GYEONGGI BIO-CENTER** GYEONG-GI PHARMACEUTICAL RESEARCH CENTER HAN ALL PHARMACEUTICAL HAN WHA PHARMA CO., LTD. HANIL SCIENCE INDUSTRIAL HANMI PHARMACEUTICAL CO., LTD. HWASUN COUNTY

INCHEON FREE ECONOMIC ZONE AUTHORITY INNOVATIVE RESEARCH INSTITUTE FOR CELL THERAPY INTERNATIONAL SCIENCE AND TECHNOLOGY CENTER ISU ABXIS CO., LTD. JEJU HI-TECH INDUSTRY DEVELOPMENT INSTITUTE JEOLLANAMDO INNOVATION AGENCY FOR STRATEGIC INDUSTRY JEONBUK BIOINDUSTRY DEVELOPMENT INSTITUTE JEONNAM BIOINDUSTRY FOUNDATION KANGWON BIO-NURI KEYGENE SCIENCE CO., LTD. KOBIOVEN KOREA BIOTECHNOLOGY COMMERCIALIZATION CENTER KOREA CRYOGENIS CO., LTD KOREA INSTITUTE OF INDUSTRIAL TECHNOLOGY [KITECH] KOREA INSTITUTE OF TOXICOLOGY [KIT] KOREA RESEARCH INSTITUTE OF BIOSCIENCE AND BIOTECHNOLOGY [KRIBB] KOREA RESEARCH INSTITUTE OF CHEMICAL TECHNOLOGY KOREA TECHNOLOGY INDUSTRY CO., LTD. KOREAN PHARMACOGEMONICS RESEARCH NETWORK LEO SYSTEM CO., LTD. LG LIFE SCIENCES, LTD. MACROGEN INC. MARINE BIO-INDUSTRY DEVELOPMENT CENTER MARKTECH TRADING CO., LTD. MH2 BIOCHEMICAL CO., LTD. MILLIPORE KOREA CO., LTD. NANOSOUL CO., LTD. ORIENT BIO INC. PALL KOREA LTD. PENNSYLVANIA PROTEOGEN, INC. QUEENSLAND CLINICAL TRIALS NETWORK INC. RNL BIO CO., LTD. SAMYANG CORPORATION SARTORIUS KOREA BIOTECH CO., LTD. SCOTTISH BIOMEDICAL SCOTTISH DEVELOPMENT INTERNATIONAL SEOUL NATIONAL UNIVERSITY BIO-MAX INSTITUTE KOREA BIO-HUB CENTER SERCRIM LABTECH CO., LTD. SHINHAN SCIENCE TECH SK HOLDINGS SMART BIO TECHNOMART INC. TNT EXPRESS WOOSUNG CRYOTECH WORLD COURIER KOREA CO., LTD. YOUNG SCIENCES, INC. YOUNG WHA SCIENTIFIC CO., LTD.

*\** Participating company list will be updated.

# **Exhibit Preview**





**BD KOREA** 

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BD is a provider of products and services for researchers and laboratorians around the world, offering integrated solutions for supporting the life sciences and for accelerating the pace of discovery. BD offers integrated, high-value applications in drug discovery and development, immune function monitoring, and functional genomics. Customers include academic and government institutions doing basic research in life sciences; biotech and pharma companies engaged in drug discovery and development; and hospitals, reference labs and blood banks performing patient testing and monitoring for quality control.

www.bd.com/kr



### **BINEX CO., LTD.**

The vision of Binex for 21st century is the business management focused on research. As the enterprise focused on R&D, it is our goal to establish enterprise with new paradigm by knowledge-based management such as BT · NT · IT, etc., maximizing probability of success in industrialization through establishment of effective human resource management and high-tech research infrastructure. - Development of cancer cell therapy using dendritic cell. - Cell and Tissue Bank ...

www.bi-nex.con



### **BIOTRON INC.**

Biotron, Inc. was founded in 1999 and has been oriented to R&D to supply "state of the art" devices for the biological and medical research. Recently, Biotron, Inc. developed a bioreactor which includes single-use and disposable cartridges customized based on tissue types for stem cell research and therapy in 2007.

www.biotron.kr



www.drreddys.com

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### CHONG KUN DANG PHARMACEUTICAL CORP.

Chong Kun Dang Pharmaceutical Corp. (CKD) is a fully integrated pharmaceutical company manufacturing both active pharmaceutical ingredients and finished products.

The company has experience over half century in manufacturing products by fermentation and synthetic technologies, and continuously strives to develop new drugs.

Furthermore, CKD is trying to investigate new drugs (anti-cancer agent, CKD-602 and CKD-732; insulin sensitizing antidiabetes, CKD-501; antiseptic agent, CKD-712 etc.) through drug discovery and delivery platform technologies in the post-genomic era.

www.ckdpharm.com

### DR.REDDY'S

### **DR. REDDY'S LABORATORIES LIMITED**

Dr. Reddy's Laboratories Ltd. (NYSE:RDY) was founded in 1984. Custom Pharmaceutical Services (CPS) a strategic business unit of Dr.Reddy's, focuses on development and manufacturing of high quality pharmaceutical products cost-effectively and on schedule. CPS's competitive advantage lies in the fact that we provide all the services that an innovator company would need under one roof.



### LG LIFE SCIENCES, LTD.

In August 2002, LG Life Sciences(LGLS) spun off from LG Chem Investment as a full-fledged LG affiliate with a mission to be specialty company and to maximize shareholder value. LGLS' corporate vision is to grow into a world-class life science company with top-tier pharmaceutical products. With this vision in mind, LGLS has been focusing all of its resources on building strategic alliances and capabilities to develop new drugs and to strengthen its marketing competency. LGLS has made a significant investment in life sciences, a field expected to be a major growth engine for LG. As a result of these initiatives, LGLS is already in possession of state-of-the-art technologies to develop new drugs that make our lives more rewarding and enjoyable.

www.lgls.com

# О **Exhibit Preview**



### MACROGEN, INC.

Macrogen has developed fundamental tools and services for the personalized medicine from DNA information analysis to functional genomics. Macrogen is able to provide customized genomic solutions (DNA Sequencing, Customized TG Mouse & KO Mouse, Lentivirus, Customized Bio Chip) and Diagnostic DNA Chip, "MACROGEN BAC Chip H1440" approved by KFDA.

www.macrogen.com

### **ORIENT BIO INC.**

### **ORIENT BIO INC.**

Orient Bio Inc provides research models and laboratory support services, preclinical services and R&D services to the Korea biomedical market with a world leading CRO (Contract Research Organization), Charles River Laboratories. We are focused on enable our clients to bring drugs to market faster and efficiently.

Orient Bio moving towards becoming a total solution provider for all Korea biomedical community.

### www.orient.co.kr

## Proteogen

### PROTEOGEN

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Proteogen, Inc. was established in February 2000 as a start-up company focusing on development of technology platform for microarray protein chips and its application technologies.

The Proteogen platform can be applicable for analysis of multiple protein analytes in proteomics research and for development of biomarker assays, protein expression profile analysis and high throughput drug screening system. Proteogen is interested in further development of application technologies of ProteoChip for multiplex biomarker assays, proteome analysis and high throughput chip-based lead screening system (CBLeSS) for other drug targets

### www.proteogen.co.kr



### SAMYANG CORPORATION

Established in 1924, Samyang is a publicly listed Korean company primarily known for its sugar and engineered plastics. Samyang currently operates 17 subsidiaries and overseas offices in the U.S, Japan and China. Samyang is engaged in diversified manufacturing and global marketing activities through its manufacturing base in Korea, overseas branches and alliances all over the world. Samyang is focusing its efforts on healthcare as its core strategic business for the future.

www.samyang.com

# sartorius stedim

### SARTORIUS KOREA BIOTECH

Sartorius Stedim Biotech is an internationally leading process technology supplier covering the segments of biotechnology.we focuses on filtration and separation applications, fermenters and proteomics. Our key customers are from the pharmaceutical, chemical and food and beverage industries and from numerous research and educational institutes of the public sector.

### www.sartorius.or.kr



### WORLD COURIER KOREA CO., LTD.

- International Biological Sample Delivery Service (Door-to-door)
- Specialized in Temperature Controlled Shipments (Refrigerated/Frozen/Cryogenic)
- Live Lab Animal transportation (SPF T/G, K/I & K/O Mouse)
- Support complex documentation and regulatory requirements
- Individual care & individual monitoring of each single shipment
- Provide UN/IATA approved packaging
- Over 140 offices in 50 countries operating 24 hours a day, 365 davs a vear
- IATA accredited Dangerous Goods training for site personnel

### www.worldcourier.co.kr

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# О Conference Overview

This year, we are holding the 3rd BIO KOREA which commenced with the idea of revitalizing the bio industry of Korea having a vision of becoming the world's 7th bio country by 2016. The BIO KOREA 2008 Conference is especially meaningful because it will be held at the Osong Bio-Health Science Technopolis in Chungbuk Province which has been developed to intensively foster health and bio industries as Korea's strategic industries and establish itself as 'the hub of Northeast Asia & world's leading high-tech biohealth complex' by 2025.

The BIO KOREA 2008 Conference will be an opportunity to discuss various subjects such as vaccine, medical device, regenerative medicine, new medicine developed from natural substances, antibodies, technology commercialization, investment attraction and industry policies & system with world-class scholars and experts in life science & bio industry and CEOs of global bio companies and share related knowledge and information.

Please read the trends in bio-health industry, forecast its future and get a competitive edge with the world-leading experts at the Osong Bio-Health Science Technopolis which will be a hub of high-tech bio-health industry in the 21st century.



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### - Period : Oct. 8 (Wed) ~ 10 (Fri), 2008 (3 Days)

- Venue : Bio-Technopolis, Cheongju City, Chungbuk Province, Korea

### - Official Language : English

\*Simultaneous interpretation service will be

- Expected No. of Participant : Approximately 4,000 people from all over the world (\*People working in bio industry, research institutes, academic organizations and interested individuals in Korea &

# Conference Program at a Glance

	Opening Ceremony & Plenary Session Dr. William J. Rutter, Chairman & CEO, Synergenics, LLC Prof. Sir Ian Wilmut, Director & Professor, Centre for Regenerative Medicine, University of Edinburgh Dr. O Young Lee, Advisor, JoongAng Ilbo								
	Micro/Nano-biotechno	ogy	Technology Li	censing	١	Vaccine	U	Ubiquitous Healthcare	
Oct. 8 (Wed)	13:30-15:30 Micro/Nano-fluidics Technology of UK/KOREA		13:30-15:00 Preparation of Successful Licensing		13:30-14:30 Special Speech Hepatitis C Virus: Challenge and Advancement of Viral Vaccine Development 14:30-16:00		13:30-15:00 u-Health as Emerging Heathcare Service		
	15:50-17:50 Micro/Nano-biotechnology of UK/KOREA I		15:20-16:50 Case Studies - Strategies for Successful Technology Transfer		Core Elements and Current Status of Cancer Vaccine 16:20-17:50 New Trend of Vaccine Development		Techr	15:20-16:50 Technologies and Applications for u-Healthcare	
	Biorefinery	Micro	/Nano-biotechnology	Medical	Devices	Smart Drug Delivery St	rategy	Business Development	
Oct. 9 (Thur)	10:00-11:30 Processing of Lignocellulosic Biomass for Biorefinery	10:00-12:00 Micro/Nano-biotechnology of UK/KOREA II		10:00-11:30 Biocompatable Materials for Medical Implants (Including Injectable Material and		10:00-11:30 Optimization of Drug Delivery Efficiency		10:00-11:00 <b>Special Speech</b> Merck's Partnering Strategy in the Asia-Pacific Region	
	13:30-15:00 Microbial Catalysis and Engineering			13:30-15:00 Cardiovascular Device		13:30-15:00 Disease-Oriented Drug Delivery		11:00-12:30 Benchmarking Globally Commercialized Innovative Therapeutics & Technologies 13:30-15:00 Solutions to Complicated Dilemmas of Funding-investment Opportunities & Business Development	
	15:20-16:50 Enzyme Catalysis and Engineering			15:20-16:50 Musculorskeletal Implants		15:20-16:50 Advances in Drug Delivery Technology		15:20-16:50 Technological Innovation Strategy for Biotechnology	
	Recent Advances of Regenerative Medicine	Reg	ulatory and GMP Compliance	Therapeutic Antibody		Botanical New Drug Development		Clinical Drug Development	
	10:00-11:30 Regenerative Medicine for Hard Tissue	Re	10:00-11:30 gulatory Update	10:00-11:30 Recent Advances in Therapeutic Antibody R&D		10:00-11:30 Research and Developr Botanical Drug	nent of	10:00-11:30 Enhancing Competitiveness in Multinational Clinical Trials	
0ct. 10 (Fri)	13:30-15:00 Regenerative Medicine for Soft Tissue	GN	13:30-15:00 MP Compliance	13:30-15:00 Process Development of Therapeutic Antibodies		13:30-15:00 Global Herbal Market		13:30-15:00 Clinical Trial Expert Education and Training	
	15:20–16:50 Commercialization Trends of Regenerative Medicine for Global Market	15:20-16:50 Quality Control and Quality Assurance		15:20- Forecasts by Indus Antibody De	tries in Therapeutic evelopment	15:20-16:50 Regulations and Pros on Natural Produ	spects cts	15:20-16:50 Clinical Trial Expert Education and Training	

# Ο Ο Conference Highlight

We are proud to offer you 13 Specialized Learning Tracks and 39 Educational Sessions covering all levels and numerous topics of biotechnology. Also, the conference includes plenary session and special sessions with distinguished speakers. You will leave the conference energized with great ideas you can use and connections that will provide you support throughout the year.

### Plenary Speech



Dr. William J. Rutter Chairman & CEO Synergenics, LLC

Dr. Rutter is Chairman and CEO of Synergenics, LLC, Chairmen Emeritus of Chiron

Corporation and Horzstein Professor of Biochemistry Emeritus at the University of California, San Francisco (UCSF). Dr. Rutter served as chairman of the Department of Biochemistry and Biophysics at the UCSF where he played a key role in developing recombinant DNA technology. He has published 381 scientific articles and holds 26 patents. His lab made several early contributions in biotechnology, including the first cloning of the insulin gene and sequencing of the Hepatitis B virus, and the formation of Hepatitis B pseudoparticles in yeast. This led to the formation of the Hepatitis B vaccine, the first vaccine ever based on recombinant DNA methodology.

### **Prof. Sir lan Wilmut**

**Director & Professor** Centre for Regenerative Medicine, University of Edinburgh

Prof. Sir Ian Wilmut is an English embryologist and is currently one of the leaders of the Queen's Medical Research Institute at the University of Edinburgh. He is best known as the man who played a supervisory role in the team that in 1996 first cloned a mammal, a Finn Dorset lamb named Dolly in 1996. He was granted an Order of the British Empire in 1999 for services to embryo development. In December 2007 it was

announced that he would be knighted in the 2008 New Year Honours.



Dr. O Young Lee Advisor JoongAng Ilbo

Dr. Lee, O Young is widely known in Korea for his articles, essays and critical writings, covering a vast range of topics such as arts, literature, social, philosophical, cultural, and political issues. In 1960, Dr. Lee began to serve as an editorialist with a number of major daily newspapers and later contributed countless of outstanding columns to their pages. Dr. Lee is a polymath of international stature, perhaps best known abroad for his role in planning the opening and closing ceremonies of the 1988 Seoul Olympic Games. In 1990, he was appointed to be the Republic of Korea's first Minister of Culture, a position he held until 1991. He is now a distinguished honorary professor at Ewha Academy for advanced studies, and advisor of the JoongAng Ilbo.

**KOREA 2008** BI

## 0 0 0 0 Conference Highlight

### Special Speech

### Track 5. Vaccine / Session I



**Dr. Jang H. Han** Director Novartis

### Hepatitis C Virus : Challenge and Advancement of Viral Vaccine Development

He is the director of HCV Vaccines Research of Novartis. He was responsible for HCV vaccine research and HDV siRNA inhibitor research as a director, Molecular biology and biochemistry research as research director at Chiron Corporation.

He taught Life Science at Pohang University of Science and Technology. He worked for hormone Research Institute at the University of California, San Francisco, USA.

### Track 8. Business Development / Session I



**KOREA 2008** 

BIO

### Dr. Gregory J. Wiederrecht

Vice President & Head, External Scientific Affairs Worldwide Licensing & External Research, Merck & Co., Inc.

**Dr. Greg Wiederrecht** is the Vice President and Head of the External Scientific Affairs department of the Merck Research Laboratories division of Merck & Co., Inc. External Scientific Affairs is responsible for the scientific assessment of all licensing and partnering opportunities for Merck. Merck is a leading research-

driven pharmaceutical products and services company. Merck discovers, develops, manufactures and markets a broad range of innovative products to improve human and animal health, directly and through its joint ventures. Dr. Wiederrecht's responsibilities include the management of a group of 73 scientists and administrators, divided by various therapeutic and platform areas, who identify and assess opportunities outside of Merck's walls.

## 0 0 0 Conference Sessions k

Track	1	Recent Advances of Regenerative Medicine
		Session 1. Regenerative Medicine for Hard Tissue
		Session 2. Regenerative Medicine for Soft Tissue
		Session 3. Commercialization Trends of Regenerative M
Track	2	Biorefinery
		Session 1. Processing of Lignocellulosic Biomass for Bi
		Session 2. Microbial Catalysis and Engineering
		Session 3. Enzyme Catalysis and Engineering
Track	3	Micro/Nano-biotechnology
		Session 1. Micro/Nano-fluidics Technology of UK/KORE
		Session 2. Micro/Nano-biotechnology of UK/KOREA I
		Session 3. Micro/Nano-biotechnology of UK/KOREA II
Track	4	Medical Devices
		Session 1. Biocompatable Materials for Medical Implant
		Session 2. Cardiovascular Device
		Session 3. Musculorskeletal Implants
Track	5	Vaccine
		Session 1. Special Speech : Hepatitis C Virus: Challenge
		Session 2. Core Elements and Current Status of Cancer
		Session 3. New Trend of Vaccine Development
Track	6	Smart Drug Delivery Strategy
		Session 1. Optimization of Drug Delivery Efficiency
		Session 2. Disease-Oriented Drug Delivery
		Session 3. Advances in Drug Delivery Technology
Track	7	Regulatory and GMP Compliance
		Session 1. Regulatory Update
		Session 2. GMP Compliance
		Session 3. Quality Control and Quality Assurance

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ledicine for Global Market	
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ts (Including Injectable Material and Nanof	iber coating)
and Advancement of Viral Vaccine Develo Vaccine	pment

**BIO KOREA 200** 

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# Conference Sessions by Track

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### Track 8 Business Development

Session 1. Special Speech : Merck's Partnering Strategy in the Asia-Pacific Region

Session 2. Benchmarking Globally Commercialized Innovative Therapeutics & Technologies

Session 3. Solutions to Complicated Dilemmas of Funding-investment Opportunities & Business Development

Session 4. Technological Innovation Strategy for Biotechnology

### Track 9 Technology Licensing

Session 1. Preparation of Successful Licensing

Session 2. Case Studies - Strategies for Successful Technology Transfer

### Track 10 Therapeutic Antibody

Session 1. Recent Advances in Therapeutic Antibody R&D

Session 2. Process Development of Therapeutic Antibodies

Session 3. Forecasts by Industries in Therapeutic Antibody Development

### Track 11 Botanical New Drug Development

Session 1. Research and Development of Botanical Drug

Session 2. Global Herbal Market

Session 3. Regulations and Prospects on Natural Products

### Track 12 Clinical Drug Development

Session 1. Enhancing Competitiveness in Multinational Clinical Trials

- Session 2. Clinical Trial Expert Education and Training I
- Session 3. Clinical Trial Expert Education and Training II

### Track 13 Ubiguitous Healthcare

Session 1. u-Health as Emerging Healthcare Service

Session 2. Technologies and Applications for u-Healthcare

# Conference Program

### Track 1. Recent Advances of Regenerative Medicine

### Session 1. Regenerative Medicine for Hard Tissue

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 for hard tissues.

### Chair:

Moon Suk KIM, Research Scientist, Korea Research Institute of Chemical Tech. Speakers:

**Regenerative Medicine for Dental Application** : Soon-Jung HWANG, Professor, Seoul Nat' I Univ.

- **Novel Biomaterials for Bone Regeneration**
- : Mark Van DYKE, Assistant Professor, Wake Forest Univ.
- **Biomechanical Effect for Tissue Regenerations**
- : Soo-Hyun KIM, Senior Researcher, Korea Institute of Science and Tech.

### Session 2. Regenerative Medicine for Soft Tissue

Among the three factors for the regenerative medicine as cell, scaffold and bioactive molecules, cell might be the most important factor. It can be large divided three types according to cell source as (1) embryonic stem cell, (2) adult stem cell and (3) primary cell. Embryonic/adult stem cell might be differentiate/dedifferentiate to desired primary cell by the controlling the culture condition. In this session, we will introduce the types of cell for the soft tissue applications as spinal cord regeneration, bio-artificial liver and Parkinson's diseases.

### Chair:

Dong Keun HAN, Research Scientist, Korea Institute of Science and Tech.

### Speakers:

**Bioartificial Liver System** 

: Jung-Keug PARK, Professor, Dongguk Univ. Spinal Cord Regeneration by Regenerative Medicine

- : Moon-Suk KIM, Principal Research Scientist, Korea Research Institute of Chemical Tech.
- **Embryonic Stem Cell for Regenerative Medicine**
- : Dong-Wook KIM, Professor, College of Medicine, Yonsei Univ.

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### Oct. 10, 10:00~11:30

### Oct. 10, 13:30~15:00

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### $\Rightarrow$ Session 3. Commercialization Trends of Regenerative Medicine for Global Market

Oct. 10, 15:20~16:50

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 eight 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, Professor, Chonbuk Nat'l Univ.

### Speakers:

From Bench Side to Clinical Application and Industrialization for Regenerative Medicine; Our experience in Japan : Ken-ichiro HATA, Director, Research and Development, Japan Tissue Engineering Co., Ltd.

**Recent Advances of Regenomics in Korea** 

: Seung-Jin LEE, Professor, Ehwa Woman's Univ.

**Recent Activities of Commercialization of Japan** 

: Mime EGAMI, Professor, Tokyo Womans Medical Univ.

### Track 2. Biorefinery

### Session 1. Processing of Lignocellulosic Biomass for Biorefinery

Oct. 9, 10:00~11:30

With increasing concerns over shortage of oil supply, serious works are under progress to develop alternative routes to produce fuels and chemicals from renewable biomass. Lignocellulosic materials are regarded as a promising or an ultimate feedstock because of the cheap cost, abundance and renewable property. However, to utilize the lignocellulosic biomass as raw material, efficient and cost-effective saccharification technology should be developed which is dependent upon the proper pretreatment of biomass. In this session, recent progress in the pretreatment of lignocellulosic biomass is introduced. Major effort in three countries, Korea, USA and Japan, will be overviewed.

### Chair:

Jin-Seok LEE, Senior Researcher, Korea Institute of Energy Research

- Speakers:
- Research Activities of National Institute of Advanced Industrial Science and Technology
- ; Pretreatment Technology of Woody Biomass for Bioethanol Production

: Seung-Hwan LEE, Biomass Tech. Research Center, Nat'l Institute of Advanced Industrial Science and Tech.

**Biomass to Hydrocarbons** 

: Mark HOLTZAPPLE, Professor, Texas A & M Univ.

**Biorefinery of Cellulosic Biomass; Concept and Practice in Korea** 

: Jin-Suk LEE, Principal Researcher, Korea Institute of Energy Research

# Conference Program

### Session 2. Microbial Catalysis and Engineering

Industrial Biotechnology is an emerging technology for the production of chemicals and biofuels by using biomass as raw material. The products include primary or secondary metabolites of microorganisms and various biopolymers such as bioethanol, biohydrogen, glycerol, lactic acid, amino acids, PHA, PLA, etc. The technology is based on biocatalysis; both enzymatic and microbial. This session focuses on the development of microbial biocatalysis. Recent progress in microbialpathway engineering and its application to development of microbial biocatalysts will be covered by three well-known scientists from Korea, USA, and Japan.

### Chair:

Sung Hoon PARK, Professor, Pusan Nat'l Univ.

- Speakers:
- Harnessing the Microbial Fermentation of Glycerol : A New Path to Biofuels and Biochemicals : Ramon GONZALEZ, Assistant Professor, Chemical and Biomolecular Engineering, Rice Univ. Systems Metabolic Engineering for the Production of Chemicals : Sang-Yup LEE, Professor, Korea Advanced Institute of Science and Tech. Production of Biofuels from C6 & C5 Sugars by the RITE Bioprocess : Hediaki YUKAWA, Director & Chief Researcher, Research Institute of Innovative Technology for the Earth

### Session 3. Enzyme Catalysis and Engineering

Enzymes play a key role as a workhorse in the field of biorefinery. As an example, cellulases, used for the degradation of cellulose to glucose, have been considered one of the most important components for the success of biorefinery. The activity and economical production of cellulases have been an issue and improved significantly during last decades. However, further improvements are still needed to materialize biorefinery processes. Strategies can be found in a variety of approaches in the enzyme technology, such as enzyme discovery, production, engineering, and modification. This session will be dedicated to general discussion on recent progress in the field of enzyme catalysis and engineering, which can be employed in the development of biorefinery processes.

### Chair:

Jungbae KIM, Professor, Korea Univ.

- Speakers:
- Engineering of Industrial Enzymes Using High Throughput Cell-free Protein Synthesis System : Dong-Myoung KIM, Associate Professor, Dept. of Chemical Engineering, Choongnam Nat'l Univ. Nanobiocatalysis and Its Potential Applications
- : Jung-Bae KIM, Professor, Korea Univ.
- Enzymatic Processes which Replaced Some of Already Established Chemical Processes : Yasuhida ASANO, Professor, Biotechnology Research Center, Toyama Prefectural Univ.

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### Oct. 9, 13:30~15:00

### Oct. 9, 15:20~16:50

# $\bigcirc$ Conference Program



### Track 3. Micro/Nano-biotechnology

### Session 1. Micro/Nano-fluidics Technology of UK/KOREA

Oct. 8, 13:30~15:30

Recent years have seen considerable progress in the development of microfabricated systems for use in the chemical and biological sciences. Much development has been driven by a need to perform rapid measurements on small sample volumes in areas such as chemical synthesis, DNA/Protein analysis, drug discovery, pharmaceutical screening, proteomics and medical diagnostics. However, at a more primary level, interest in miniaturized analytical systems has been stimulated by the fact that physical processes can be more easily controlled and harnessed when instrumental dimensions are reduced to the micrometre scale. For example, it is well recognized that when compared to macroscale instruments, micro/nano-fluidic systems engender a number of distinct advantages with respect to speed, analytical throughput, reagent usage, process control, automation and operational and configurational flexibility. In general terms, such systems define new operational paradigms and provide predictions about how molecular synthesis and analysis might be revolutionized in the coming years. This session will introduce some of the key features and benefits of micro/nano-fluidic systems and describe the use of such devices for performing ultra-fast biological and chemical analysis. Specifically, the following areas will be highlighted with respect to relevant chemical and biological applications. In this session several approaches will be described regarding the development and application of nanofluidic devices for single molecule binding studies in UK and KOREA.

### Speakers:

### **Diagnostic Microfluidic Chip Technology**

: Andrew J. DeMELLO, Head & Professor, Chemical Nanosciences/Nanostructured Materials & Devices, Imperial College London

- Nano-bio and Systems-Bio Platform Technologies for Diagnosis and Therapy
- : Sang-Yup LEE, Professor, Korea Advanced Institute of Science and Tech. Exploring Mechanism in Chemical Biology by High-Throughput Approaches
- : Florian HOLLFELDER, Univ. Lecturer, Dept. of Biochemistry, Cambridge Univ.
- Highly Sensitive Biological Analysis Using Optical Microfluidic Sensor
- : Jaebum CHOO, Professor, Department of Applied Chemistry, Hanyang Univ.

### Session 2. Micro/Nano-biotechnology of UK/KOREA I

Oct. 8, 15:50~17:50

Micro/nanobiotechnology is a rapidly advancing area of scientific and technological opportunity that applies the tools and processes of micro/nanofabrication to build devices for studying biosystems. Researchers learn from biology to create new micro-nanoscale devices to better understand life processes at the nanoscale. Micro/nanotechnology on a chip is a new paradigm for total biological analysis systems. The ability to make chemical or biological information easier and less costly to obtain will impact molecular binding analysis, diagnostics and high through screening for drugs. Some examples of devices are micro/nanofluidic chips and protein nanobiochips. These devices can be adapted for point-of-care use. One of the more promising uses of nanofluidic devices is isolation and analysis of individual biomolecules, such as protein or DNA. This capability could lead to new detection schemes for disease as a cancer. Protein microarrays for the study of protein function are not widely used, in part because of the challenges in producing proteins to spot on the arrays. In these sessions some of the key features and benefits of micro/nano-biotechnology systems and its fabrication & application for biological research will be presented.

### Speakers:

- A New Chemical Surface Technology for Protein Micro- and Nanoarray Chips: ProLinker
- : Soo-Ik CHANG, Professor, Chungbuk Nat'l Univ.
- **New Techniques in Electrochemistry**
- : Danny O' Hare, Professor, Imperial College London
- SPR Imaging Protein Microarrays for High Throughput Screening of Protein Protein Interaction Inhibitors
- : Bong-Hyun CHUNG, Head, Korea Research Institute of Bioscience and Biotech.

### **Bionanosensors & Microfluidics**

: Jon COOPER, Chair & Professor, Glasgow Univ.

# Conference Program

### Session 3. Micro/Nano-biotechnology of UK/KOREA II

Micro/nanobiotechnology is a rapidly advancing area of scientific and technological opportunity that applies the tools and processes of micro/nanofabrication to build devices for studying biosystems. Researchers learn from biology to create new micro-nanoscale devices to better understand life processes at the nanoscale. Micro/nanotechnology on a chip is a new paradigm for total biological analysis systems. The ability to make chemical or biological information easier and less costly to obtain will impact molecular binding analysis, diagnostics and high through screening for drugs. Some examples of devices are micro/nanofluidic chips and protein nanobiochips. These devices can be adapted for point-of-care use. One of the more promising uses of nanofluidic devices is isolation and analysis of individual biomolecules, such as protein or DNA. This capability could lead to new detection schemes for disease as a cancer. Protein microarrays for the study of protein function are not widely used, in part because of the challenges in producing proteins to spot on the arrays. In these sessions some of the key features and benefits of micro/nano-biotechnology systems and its fabrication & application for biological research will be presented.

### Speakers:

- Recent Advance in ProteoChip Technology : Chip-based Profile Study of Differential Protein Expension in Cells : In-Cheol KANG, Professor & Director, Hoseo Univ.
- **Biomolecules and Nanomaterials: Engineering the Hard/Soft Interface**
- : Tony CASS, Deputy Director & Professor, Institute of Biomedical Engineering, Imperial College London Bioconjugation and Biofunctionality of Surface Immobilized Proteins for Biochip Applications : Eun-Kyu LEE, Professor, Bioprocessing Research Laboratory, Department of Chemical Engineering, Hanyang Univ.
- **Rational Design of Enzyme Inhibitors**
- : Robin J. LEATHERBARROW, Head & Professor, Biological and Biophysical Chemistry, Imperial College London

### Track 4. Medical Devices

### Session 1. Biocompatable Materials for Medical Implants (Including Injectable Material and Nanofiber Coating)

With the growing needs for superior implants, prosthetics, and scaffolds, biomaterials have become a highly explored field. These artificial materials are an integral part of this research effort, allowing for the study of cell attachment, growth, differentiation, functioning, viability, and matrix degradation. Biomaterials must fulfill 3 criteria; they must be biofunctional (suitable physical and chemical properties for replacing the tissue), biocompatible (no negative interaction between materials and biological environment), and inert to the biological environment or degradable by the system.

### Chair:

Jong-Chul PARK, Associate Professor, Yonsei Univ.

### Speakers:

- **Functional Medical Adhesives**
- : Suong-Hyu HYON, Associate Professor, Frontier Medical Science, Kyoto Univ.
- **Current Status of Biocompatible Polymeric Materials**
- : Ki-Dong PARK, Professor, Ajou Univ.
- The Review and Approval of Medical Device in Korea : Gyu-Ha RYU, Director, Medical Device Safety Bureau, Korea Food & Drug Administration

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### Oct. 9, 10:00~12:00

### Oct. 9, 10:00~11:30

# $\bigcirc$ Conference Program

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### Session 2. Cardiovascular Device

Oct. 9, 13:30~15:00

Cardiovascular disease is an important cause of morbidity and mortality world wide. Biocompatibility problems are encountered with the use of implanted cardiovascular devices such as artificial hearts, ventricular assist devices, heart valves, small diameter vascular grafts, and stents. Novel cardiovascular prosthetic devices or implants having many useful cardiovascular applications comprise a porous surface and a network of interconnected interstitial pores below the surface in fluid flow communication with the surface pores. Tissue forms a smooth thin adherent coating or self-determining thickness on the porous surface making it resistant to the formation of the blood clots normally associated with the presence of foreign bodies in the blood stream.

### Chair:

Dong-Joon CHUNG, Professor, SungKyunKwan Univ.

### Speakers:

**Robotics-based Vascular Engineered Tissue Fabrication** 

: Matsuda TAKEHISA, Professor, Genome Biomed. Lab, Kanazawa Institute of Tech.

**Closure Device** 

: Yang-Soo JANG, Professor, Yonsei Univ.

Spray Coating Techniques for Medical Implants

: Ii-Keun KWON, Assistant Professor, Kyung Hee Univ.

### Session 3. Musculorskeletal Implants

### Oct. 9, 15:20~16:50

Current tissue engineering strategies focus on the replacement of pathologically altered tissues by the transplantation of cells in combination with supportive biocompatible scaffolds. Scaffolds for tissue engineering strategies in musculoskeletal research require an appropriate mechanical stability. Dental surgical implant treatment modalities continue to be relatively successful within musculoskeletal restorative systems. Because available systems include a wide range of metallic and ceramic biomaterials plus multiple designs for the implant body, transgingival abutment, and intraoral crown constructs, failure analyses of explanted devices must include comprehensive information. In orthopedics, the regeneration and repair of cartilage or bone defects after trauma, cancer, or metabolic disorders is still a major clinical challenge.

### Chair:

Seung-Jin LEE, Professor, Ewha Womans Univ.

### Speakers:

**Current Trends on Endosseous Implant Bulk and Surface Design** 

: Paulo G. COELHO, Adjutant Professor, School of Arts and Science, New York Univ.

Biomimetic Surface Modifications of Medical and Dental Implants : Evolution of Implant Surface modification : Seong-Joo HEO, Professor, Seoul Nat'l Univ.

### **Artificial Cargilage**

: Myung-Chul LEE, Professor, Seoul Nat'l Univ.

# **Conference Program**

### Track 5. Vaccine

### Session 1. Special Speech

### Speakers:

Hepatitis C Virus: Challenge and Advancement of Viral Vaccine Development : Jang H. HAN, Director, HCV Vaccine Research, Novartis

### Session 2. Core Elements and Current Status for Cancer Immunotherapy

Cancer vaccine is no longer a dream but a reality. This advance has been in debt to the revolutionary discovery of core technologies in tumor immunology. In that context, fashioning cancer vaccine is more simplified. However, cancer vaccine has been diversified and tailorized in real application. This session will cover core elements and current status of cancer vaccine. Specifically, immunologic adjuvant and antigen discovery is essential requirement for powerful cancer vaccine. In parallel, we'll touch the cutting-edge application of cancer vaccine in clinic.

### Chair:

Soo-Ki KIM, Professor & Director, Institute of Basic Medical Science, Yonsei Univ.

- Speakers:
  - Discovery of Tumor Antigen for Cancer Immunotherapy

: Sang-Yull LEE, Associate Professor, College of Medicine, Pusan Univ.

- : Chi-Duk KANG, Professor, College of Medicine, Pusan Univ.
- Immunologic Adjuvant for Cancer Vaccine & Ganglioside Antigen Cancer Vaccine
- : Soo-Ki KIM, Professor, College of Medicine, Yonsei Univ.

### Session 3. New Trend of Vaccine Development

As the main entry of most environment pathogens, mucosal surfaces such as respiratory, gastro-intestinal, and genital tracts as the first line of defense against pathogenic antigens such as AIDS, influenza virus, salmonella, shigella, TB, cholera, and HPV. Therefore, vaccination targeting mucosal tissues capable of effectively inducing both mucosal (secretory IgA Ab) and systemic immune responses (IgG Ab), thereby resulting in two layers of host protection. We would like to introduce new concept of mucosal delivery routes and current status of development of mucosal adjuvants in this session.

### Chair:

Mi-Na KWEON, Chief, International Vaccine Institute

### Speakers:

**Commercialization Based on Scientific Excellence: HPV Vaccine & Others** : Walter STRAUS, Executive Director, Scientific Affairs, Merck & Co., Inc. Mucosal Adjuvant Activity of Flagellin, the TLR5 Agonist : Flagellin, a New Mucosal Vaccine Adjuvant : Joon-Heang RHEE, Professor, Chonnam Nat'l Univ.

The Sublingual Mucosa: An Efficient Delivery Route for Inducing Protective Immune Responses : Mi-Na KWEON, Chief, Mucosal Immunology Section, International Vaccine Institute

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### Oct. 8, 13:30~14:30

### Oct. 8, 14:30~16:00

Cell-based Radioimmunotherapy and Chemoimmunotherapy for Treatment of Human Cancer

### Oct. 8, 16:20~17:50



### Track 6. Smart Drug Delivery Strategy

### Session 1. Optimization of Drug Delivery Efficiency

Oct. 9, 10:00~11:30

A major challenge to pharmaceutical scientists in new drug development is in the optimization of drug delivery properties to improve the therapeutic effectiveness of drugs. Many studies have supported that poor pharmacokinetic properties heavily contribute to compound failure or at a minimum, difficulty of the compound to progress through drug development. Therefore, in this session, several case studies are illustrated to enlighten the current approaches for improving oral drug delivery efficiency and ultimately for maximizing the therapeutic benefits of drugs.

### Chair:

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In-Koo CHUN, Professor, Dongduk Women's Univ.

### ■ Speakers:

Delivery of Drugs to Target Tissues: Project Supports and BBB Initiative in Drug Discovery

: Doo-Man OH, Associate Director, College of Pharmacy, Clinical Pharmacology, PPD Inc.

Microenvironmental pH and Crystal Behavior of Ionizable Drug by Alkalizers in Solid Dispersions : Beom-Jin LEE, Professor, College of Pharmacy, Kangwon Nat'l Univ.

Preparation of Cyclosporine A Lipid Emulsion Using Membrane Emulsification Method

: Eun-Seok PARK, Professor, College of Pharmacy, SungKyunkwan Univ.

### Session 2. Disease-Oriented Drug Delivery

### Oct. 9, 13:30~15:00

Efficient drug delivery to target tissue is prerequisite for disease control by chemotherapy. Target tissue characteristics should be taken into consideration in strategy development for effective drug delivery and maximum drug efficacy. Solid tumors represent a particular interest in term of unique histophysiology and intrinsic chemo-resistance, which makes it important to develop selective drug delivery systems and to study pharmacokinetics in avascular region of solid tumors. This session will focus on recent research trends regarding vascular and avascular delivery of anticancer drugs using novel drug delivery systems or 3-dimensional cell culture models.

### Chair:

Hyo-Kyung HAN, Professor, Chosun Univ.

### Speakers:

Tumor Priming to Promote Nano- and Micro-particle Delivery to Solid Tumors : Jessie AU, Distinguished University Professor, College of Pharmacy, The Ohio State Univ. Drug Delivery and Activity in Solid Tumors ; A Pharmacokinetic Perspective

: Hyo-Jeng KUH, Associate Professor, College of Medicine, Catholic Univ.

### Targeted Drug Delivery via Surface-modified Nanoparticles

: Chang-Koo SHIM, Professor, College of Pharmacy, Seoul Nat'l Univ.

# **Conference Program**

### Session 3. Advances in Drug Delivery Technology

Development of novel technology of drug delivery system might be more efficient compared with conventional novel synthetic drug in terms of the invest money and duration, especially Korea which is coupled with Korea-USA FTA and inferior basement of discovery of new drug. Also, developed novel DDS technology can be applied to several drugs and various symptoms that is platform technology. In this session, we will discuss profoundly for the nanobiomaterials for tissue engineering and drug delivery, nucleic acid delivery using nanotechnology and micro needle system for macromolecular drug.

### Chair:

Beon-Jin LEE, Professor, Kangwon Nat'l Univ.

Speakers:

Peptide Based Nanobiomaterials for Drug Delivery and Tissue Engineering Purpose : Yoon-Jeong PARK, Assistant Professor, School of Dentistry, Seoul Nat'l Univ. Delivery of Nucleic Acid-based Medicines Using Nanotechnology : Yu-Kyoung OH, Associate Professor, School of Life Science, Korea Univ. Recent Advances on Microneedle System for Drug Delivery : Gilson KHANG, Professor, Dept of PolymerNano Sci. & Tech., Chonbuk Nat'l Univ.

### Track 7. Regulatory and GMP Compliance

### Session 1. Regulatory Update

Korea Food and Drug Administration (KFDA) continuously improves its regulations and guideline to secure the efficacy and safety of drug products. Recent enforcement of the validation requirement is evaluated as a essential step to prepare Korea-US FTA and to export the drug products to advanced countries. Therefore, it is very important to update recent development in the KFDA regulations. In this session a plan of KFDA for CTD (Common Technical Document) which ICH had implemented in its State Parties, Global GMP training, and regulations of cell bank control and validation for biologics manufacturing.

### Chair:

Chan-Wha KIM, Professor, Korea Univ.

### Speakers:

Implementation of the Common Technical Document (CTD) in Korea : Biotechnological/Biological Products : Soo-Kyung SUH, Senior Scientific Officer, Korea Food & Drug Administration Efficient and Practical Training Program for Vaccine Manufacturer and National Regulatory Authority Personnel : Chung-Keel LEE, Special Advisor, Korea Food & Drug Administration Validation of Cell Bank for Production of High Quality Biotech Products : Current Trends in Cell Banking Technologies : Sue Nie PARK, Director, National Institute of Toxicological Research, Korea Food & Drug Administration

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### Oct. 9, 15:20~16:50

### Oct. 10, 10:00~11:30

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### Session 2. GMP Compliance

Oct. 10, 13:30~15:00

GMP compliance is one of the most important tasks in the drug manufacturing. Therefore, drug manufacturing companies allocate significant portions of their resources to improve levels of GMP. In this session industrial experts will present PAT in manufacturing processes and quality control in biopharmaceutical manufacturing. In addition, GMP compliance in research institute will be presented.

### Chair:

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Doo-Hong PARK, Director, Mogan Biotechnology Research Institute

### Speakers:

**PAT Based Optimization and Control of Pharmaceutical Processes** 

: Mojgan MOSHGBAR, Senior Manager, Innovative Processes ? PASG, Pfizer, Inc.

- **Quality Control of Biopharmaceutical Products**
- : Guy BERG, Senior Vice President, Newlab

GMP Application in Research & Development Institute : Quality Management in Research & Development Phase : Do-Yeon LEE, Leader of QA Team, Pharmaceutical Bureau R&D QA, CJ CheilJedang Corp.

### Session 3. Quality Control and Quality Assurance

Oct. 9, 15:20~16:50

With rapid growth of the monoclonal antibody therapeutic market, technological demand of quality control and quality assurance of therapeutic monoclonal antibody manufacturing increases. In this session, validation of analytical method and quality assurance for monoclonal antibodies will be presented by industrial experts. In addition, quality assurance in vaccine manufacturing will be presented.

### Chair:

Gyunmin LEE, Professor, Korea Advanced Institute of Science and Tech.

### Speakers:

Validation of Analytical Method for Monoclonal Antibody Products

: KC CHENG, Associate Director, Analytical and Formulation Development, Medarex Inc.

**Quality Assurance of Monoclonal Antibody Manufacturing Processes** 

: Brian KIM, Vice President, QA and Regulatory Compliance, Celltrion

### **Continuous Improvement and Modern Quality System**

: Sang-Jeom AHN, CEO & President, Berna Biotech Korea Corp.

# **Conference Program**

### **Track 8. Business Development**

### Session 1. Special Speech

This is to show the strategy of an exemplary research-based global leading pharmaceutical company in successful business development by collaboration and partnerships with smaller companies with innovative technologies.

### Speakers:

### Merck's Partnering Strategy in the Asia-Pacific Region

: Greg WIEDERRECHT, VP & Head of External Scientic Affairs, Worldwide Licensing & External Research, Merck & Co., Inc.

Session 2. Benchmarking Globally Commercialized Innovative Therapeutics & Technologies Oct. 9, 11:00~12:30

For successful global commercialization, primary and most important element should be technological excellence and innovation, which could be secured only from years of focused refinement and innovative challenges.

### Speakers:

Success Elements in R&D Strategy for Competitive Therapeutics : Hybrid R&D

: Sung-Chun KIM, CTO, LG Life Sciences Ltd.

**Focusing on Specialty Competitiveness** 

: Joong-Myung JO, CEO, Crystal Genomics, Inc.

Session 3. Solutions to Complicated Dilemmas of Funding-investment Opportunities & Business Development Oct. 9, 13:30~15:00

Realization of technologies in commercial use needs financial instruments. Experienced capitalists explain how and why venture capitals decide where to invest the funds in this high risk, high return industry.

### Speakers:

VCs' perspective of What Emerging Companies Should Be Doing : Hui-Hsing MA, TVM Capital

Novartis Strategy of Global Venture Funding in Drug Discovery : Reinhard J. AMBROS, Executive Director & Head, Novartis Venture Funds, Novartis International

Session 4. Technological Innovation Strategy for Biotechnology

Market readiness and commercial acumen should be well wrapped up in addition to technological excellence, for successful licensing deals.

### Speakers:

Integration of Expertise, Research and Partnering: Winning Strategy : Sung-Eun YOO, Director, Korea Research Institute of Chemical Tech. Strategy for Innovative Competitiveness and Compressed Growth : Kyu-Chan KIM, Science Ambassador, Merck Research Laboratories/MSD Korea, Merck & Co., Inc. Harnessing Korean Biotech for the Markets: The Importance of IP Protection & Technology Transfer : Lawrence KOGAN, President & CEO, Institute for Trade, Standards and Sustainable Development

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### Oct. 9, 10:00~11:00

Oct. 9, 15:20~16:50

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### Track 9. Technology Licensing

### Session 1. Preparation of Successful Licensing

Oct. 9, 13:30~15:00

This session is to re-visit on the expeditions of innovative technology development consistent of multidisciplinary interactions and collaborations, in the highly competitive environment.

### Speakers:

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Preparation of Successful Licensing- Korean Pharma and Biotech's Prospoetus : Jai-Jun CHOUNG, Managing Director, EU Biotech Development Ltd. To Be Announced

: Joo-Mee KIM, Rothwell, Figg, Ernst & Manbeck

- **Beyond Licensing : Becoming Global Player**
- : Hideki MITANI, Roberts Mitani, LLC.

### Session 2. Case Studies - Strategies for Successful Technology Transfer

Oct. 9, 15:20~16:50

Learn from experienced leaders the critical issues on how to make proprietary technologies be successfully licensed to global market.

### Speakers:

Critical Issues to LO/partnership with Small Co. with Innovative Tech

: Mark PEREZ, Senior Director, Human Health Business Development, Merck & Co., Inc.

- Critical Issues to LO/partnership with Global Pharma
- : Jae-Man RYU, Head, Dong Wha Pharmaceutical Ind. Co. Ltd.

### To Be Announced

: Soo-Hee YOON, LG Life Sciences Ltd.

### Track 10. Therapeutic Antibody

### Session 1. Recent Advances in Therapeutic Antibody R&D

As a major part of recombinant protein therapeutics, antibody therapeutics have made a remarkable progress of industry while the whole pharmaceutical market has been in stagnant growth rate. First session will provide latest updates in global R&D in antibody therapeutics regarding engineering antibodies for improved efficacy, and the therapeutic significance of human antibodies. Monoclonal antibodies and novel targets discovery will be discussed and the development of monoclonal antibody for the treatment of B-cell Malignancy will be presented as an example. The last topic in the first session is R&D of therapeutic antibodies which include past experience, current trend and future direction of this field.

### Chair:

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Se-Ho KIM, Research Director, Green Cross Corp., Korea

### Speakers:

Monoclonal Antibodies and Their Target Discovery

: Young-Woo PARK, Korea Research Institute of Bioscience & Biotech. **Development of Monoclonal Antibody for the Treatment of B-Cell Malignancies** : Sang-Hoon LEE, Senior Scientist II, Exelixis

Generation of Therapeutic Antibodies: Past Experience, Current Trend and Future Direction : Naoya TSURUSHITA, Co-Founder, JN Biosciences LLC

### Session 2. Process Development of Therapeutic Antibodies

Although Therapeutic antibody field has shown rapid growth, limitation of validated target raised the interest in efficacy enhancement through the antibody engineering. This second session will discuss in depth about current status of local and global antibody manufacturing capacities, problem and checkpoint in the process development for eventual antibody development. The first time will be addressed assessment of cell engineering strategies for improved therapeutic antibody production in CHO cells. What will follow is ADCC and CDC enhancement technology for next generation therapeutic antibodies. The final topic is the role of the analytical tools in the development of therapeutic antibodies.

### Chair:

Hosung MIN, Samsung Advanced Institute of Technology

- Speakers:
- Assessment of Cell Engineering Strategies for Improved Therapeutic Antibody Production in CHO Cells : Gyunmin LEE, Professor, Korea Advanced Institute of Science and Tech. ADCC and CDC Enhancement Technology for Next-Generation Therapeutic Antibodies
- : Kenya SHITARA, Director, Kyowa Hakko Kogyo Co., Ltd.
- The Analytical Role in the Development of Therapeutic Antibodies : Zheru ZHANG, Director, Celltrion

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### Oct. 10, 10:00~11:30

### Oct. 10, 13:30~15:00



### $\Rightarrow$ Session 3. Forecasts by Industries in Therapeutic Antibody Development

Oct. 10, 15:20~16:50

Due to advantage of the cost-effective and shorter development time, many Korean pharmaceutical companies are trying to develop the therapeutic antibody. This session will discuss on the global forecast of antibody therapeutics market in the short and long term from the viewpoint of therapeutics industries in Korea. The developmental programs of therapeutic antibodies will be presented by Hanwha Chemical Corp., Korea Greencross Corp., and Samsung Advanced Institute of Technology.

### Chair:

Young-Woo PARK, Senior Researcher, Korea Research Institute of Bioscience and Biotechnology

### Speakers:

Market-Derived Antibody Program in Hanwha Chemical Corp.

: Soon-Jae PARK, Hanwha Corp.

HBV Neutralizing Human Monoclonal Antibody: From Bench to Clinic ; HBV Neutralizing Human Antibody : Se-Ho Kim, Research Director, Green Cross Corp., Korea.

**Beyond Antibodies: Possibilities and Limitations** 

: Ho-Sung MIN, Samsung Advanced Institute of Tech.

### Track 11. Botanical New Drug Development

### Session 1. Research and Development of Botanical Drug

Oct. 10, 10:00~11:30

Extensive experience and abundant clinical data have been accumulated in traditional Korean medicine for thousands of years. Basic and clinical research in traditional Korean medicine (TKM) constitutes a potentially rich source for drug discovery and development. How can we use the information of TKM for the development of new drug? The strategy of botanical new drug development from TKM will be presented by Dr. Kim. Strategy of new phytomedicine development have been derived based upon various experinces of preclinical and clinical developments in industry, Dong-A Pharm, and will be presented by Dr. Son. Research studies in all fields of medicine are known as clinical trials. These studies are conducted with an eye to the future, in hopes of finding safer or more effective methods to screen for, prevent, diagnose, or treat a variety of diseases. However, botanical new drug approval process is little bit simpler for the approval by the national regulatory authority. Therefore strategic approach for clinical trials for natural Products reduces time and cost of Clinical trials for botanical new drug and dietary supplement which will be presented by Dr. Chae.

### Chair:

Eung Bang Lee, Professor, Seoul National Univ.

### Speakers:

Strategy of Botanical New Drug Development from Traditional Korean Medicine : Hocheol KIM, Professor & CEO, Kyung Hee Univ. & NeuMed Inc.

- Strategy of New Phytomedicine Development: Dong-A's Key Area in Research
- : Mi-Won SON, Senior Research Manager, Dong-A Pharmaceutical Co., Ltd.
- **Clinical Trial Strategy of Botanical New Drug and Dietary Supplement**
- : Soowan CHAE, Professor & Director, Clinical Trial Center, Chonbuk National Univ.

# **Conference Program**

### Session 2. Global Herbal Market

Functional Botanical Food New opportunities emerge for traditional Chinese medicine (TCM) based botanical drug as pharmaceutical industries are faced with challenges of increasing costs, time and risk in new drug development. The market trend and sourcing strategy of functional botanical food will be presented by Dr. Kim. In Dr. Guo's presentation, the overall strategies and regulatory considerations for the development of a modernized TCM product will be discussed, using Cardiotonic pills from Tasly as an example. Germany harbors a large number of phytomedicine companies of which Dr. Willmar Schwabe is the largest one, nationally and world-wide. An example for a successful herbal medicinal product (HMP) developed by Schwabe is the Ginkgo biloba extract EGb 761<sup>®</sup> for the treatment of dementia, peripheral arterial occlusive disease, tinnitus and vertigo. Extensive research is done to identify the active components of medicinal plants and to find the most suitable way to extract them. To establish safety and efficacy, pharmacological, toxicological and clinical studies (phases I-IV) have to be conducted. Standards of evidence-based medicine and controlled clinical trials which fulfill the criteria of GCP have also become the gold standard for evaluating the efficacy of HMP. Finally, phytomedicines are manufactured according to GMP requirements. As a result, doctors and patients in Germany have much more trust in HMP than they have in other countries, where these products are regulated as dietary supplements. In particularly, phytomedicines are seen as safer alternatives to synthetic drugs in many indications.

### Chair:

Hocheol KIM, Professor & CEO, Kyung Hee Univ. & NeuMed Inc.

### Speakers:

Market Trend and Sourcing Strategy of Functional Botanical Ingredient : Sangbae KIM, Director, Korea Ginseng Corp.

Placing TCM Based Botanical Drugs on the Global Market

: Ruoling GUO, Senior Research Scientist, Research Institute, Tasly Pharmaceuticals : Isabelle BUSCHULTE, Head, Dr. Willmar Schwabe GmbH & Co. ; Pharmacovigilance and Med. Documentation

**Development of High Quality Herbal Medicine and Global Herbal Market** 

### Session 3. Regulations and Prospects on Natural Products

This session review the efficacy and safety of natural new drugs, herbal medicinal products according to Regulation of the Efficacy and Safety Evaluation of Drugs, etc at KFDA. Herbal medicinal products are distinctly different from conventional medicines in origin of herbal plants, structure, components of herbal medicinal products, physicochemical and phytochemical properties, standardization and specification of drugs. Chemistry, manufacturing and quality control of drugs should be considered first and important in new drug development. There are several regulatory affairs as KFDA notifications to provide information to help product license applicants determine the evidence required to support the quality. This presentation will also analyze changing environment from industry, regulatory, and scientific perspectives. The number of new functional ingredients for dietary supplements has been increased since the enactment of Health/Functional Food Act in 2004. Among them, botanical supplements have limited history of safe use as foods and need special consideration in the respect of safety evaluation. The regulatory perspectives on the evaluation of botanical supplements will be presented by Dr. Kwon at KFDA.

### Speakers:

- **Development of Botanical New Drugs: Regulatory Perspectives** To Be Announced
- Herbal Medicinal Products Regulations in Korea
- : Changhee CHO, Reviewer & Scientific Officer, Korea Food & Drug Administration
- **Regulatory Perspectives on Botanical Supplements**
- : Oran KWON, Director, Korea Food & Drug Administration

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### Oct. 10, 13:30~15:00

### Oct. 10, 15:20~16:50

# $\bigcirc$ Conference Program



### **Track 12. Clinical Drug Development**

### Session 1. Enhancing Competitiveness in Multinational Clinical Trials

Oct. 10, 10:00~11:30

As the pharmaceutical market becomes globalized, more countries from around the world are participating in clinical trials. While previous trials were confined to Europe and North America, Asia has become an important player in international trials. Not only does Asia have good science and relative low costs, but also the potential to grow into one of the largest pharmaceutical markets. Although India and China are strong competitors, Korea is fast growing to become a clinical trial hub. In this session, a overview of the drug development process will be provided with considerations on how Korea should enhance its competitiveness.

### Speakers:

Modern Drug Discovery ; Dengue : Paul HERRLING, Professor & Head, Novartis **Industry Perspective** 

: So La LEE, Pfizer Korea

Shortening the Gap on Attaining the Computerized Clinical System Validation Environment

: Kyungsub CHOI, Assistant Professor, Computer Information Systems Dept., Manhattan College

### Session 2. Clinical Trial Expert Education and Training 1

### Oct. 10, 13:30~15:00

Clinical trials require the professionality from multi-disciplinaries; investigators, statisticians and industries always endeavour in developing protocols, coordinating trials and managing data. In this session, various aspects of clinical trials will be provided by professionals with different parts in this area. Each speaker will talk about the roles and responsibilities of their profession; and also discuss about the shortage of professionals and the methods in educating them.

### Speakers:

- **Training Program for Investigator**
- : Young-Kyun KIM, Professor, Catholic Uinv.
- **Education & Training Program for Experts in Pharmaceutical**
- : Hye-Young KANG, Associate Professor, Yonsei Univ.
- **Statistics in Clinical Trials**

: Seokyung HAHN, Assistant Professor, Seoul Nat'l Univ..

# $\bigcirc$ **Conference Program**

### Session 3. Clinical Trial Expert Education and Training I

Recently, Korea has witnessed a remarkable increase in clinical trials; but also a demanding need for more professionals. As many education programs have emerged during the past few years, there is a growing need for certifying each program. Clinical trial professionals, including clinical pharmacologists, pharmacists and clinical research associates (CRAs) will talk about systems required to educate qualified experts.

### Speakers:

- **Training Clinical Pharmacologists**
- : Kyung-Sang YU, Assistant Professor, Seoul Nat'l Univ.
- **CRA Education and Training**
- : Jae-Yong SHIM, Professor, College of Medicine, Yonsei Univ.
- **Training Program for Clinical Research Pharmacist**
- : Ok-Yun HAN, Team Leader, College of Medicine, Catholic Univ.

### Track 13. Ubiguitous Health Care

### Session 1. u-Healthcare as Emerging Healthcare Service

Information technologies are applied to well-being as well as to the entertainment and to the life convenience. In this session we review u-healthcare as one of the killer application of information technologies. We study the current status of u-healthcare standardization used for its industrialization and suggest u-healthcare business models to investigate its industrialization direction.

### Speakers:

- u-Healthcare and Future Medicine
- : Seokhwa KIM, Professor, Seoul Nat'l Univ.
- u-Healthcare Standardization
- : Sung Kee LEE, Professor, Kyungbuk Univ.
- u-Healthcare Business Models
- : Hongjin KIM, CTO, Insunginfo

### Session 2. Technologies and Applications for u-Healthcare

In this session, we investigate the current status and outlook of u-healthcare technologies. Examples of devices and systems needed for the u-healthcare services will be given. Also a model service in Korea will be shown to predict future uhealthcare services direction.

### Speakers:

- Healthmonitoring Devices and Systems
- : Soojun PARK, Electronics and Telecommunications Research Institute
- **Post Operative Telemonitering Service**
- : Dongkyun PARK, Gachon Univ. of Medicine and Science
- **Ubigutous Emergency Service : u-119**
- : Daehoon KANG, National Emergency Management Agency

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### Oct. 10, 15:20~16:50

### Oct. 8, 13:30~15:00

### Oct. 8, 15:20~16:50

# **Business Forum Overview**



Providing opportunity for business cooperation and joint research with Korean/overseas bio companies and researchers, Business Forum consists of Company Presentation where companies present their advanced technologies and business strategies and Partnering which arranges one-to-one meeting between interested companies.

The BIO KOREA 2008 Business Forum held at Osong Bio-Health Science Technopolis, a comprehensive complex integrating industry, academy, research and government circles and aiming to be the mecca of bio industry in the 21st century, will provide you with the opportunity to enter into business or technology partnership with leading bio companies in Korea and overseas 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 researches and investment attraction.

### **Company Presentation**



- Date : Oct. 9(Thu) ~ 10(Fri), 2008
- Venue : Osong Bio-Technopolis, Chungbuk Province, Korea
- Presentation Time : 30 min. (Including Q&A)
- Expected Participant : Bio companies from Korea & abroad, Bio-clusters, local governments, embassies, etc.
- \* Application for presentation should be made through the online registration system and presenting companies will be announced in August.

### Partnering



### Date : Oct. 9(Thu) ~ 10(Fri), 2008

- Venue : Osong Bio-Technopolis, Chungbuk Province, Korea
- \* One-to-one meeting between mutually interested companies to discuss how to cooperate in business & researches.
- \* Partnering will screen & select mutually interested companies using the online system in advance and be operated in accordance with the pre-set meeting schedule.

# $\bigcirc$ Registration

### **Method of Pre-registration**

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

### **Registration Fee**

Exhibition Access Only (Registration fee is free of charge if registered before Oct. 2)

Attendee Fee	Before Oct. 2	On-site registration (Oct. 8 ~ Oct. 10)		
Exhibit Hall Access Only	Free	USD10		

### Conference

Category	Pre-registration (by Sep. 12)	On-site registration (Sep. 13 ~ Oct. 10)
3-Day Pass	USD90	USD110
1-Day Pass	USD45	USD55

### Business Forum

Cotogory	Company Presentation and Partnering		Company Presentation or Partnering	
Category	Until Aug. 31	From Sep.1 to Sep. 30	Until Aug. 31	From Sep.1 to Sep. 30
Exhibitor	USD450	USD550	USD350	USD450
Non-Exhibitor	USD550	USD650	USD450	USD550

\* Registration fee: up to two persons from one company / Extra charge: USD110 for each additional person

### Method of Payment for Conference & Business Forum

Credit Card	Visa, Master, American Express, JCB, Dine
	- Bank Name : Kookmin Bank (Samsunggo
	- Bank Address : 159-9 Samsung-dong, Ga
Wire Transfer	- Account No. : 389801-01-113854
	- Swift Code : CZBNKRSE
	- Beneficiary : IBI Meeting Professionals In

### For More Information

If you have any questions, please do not hesitate to contact the secretariat.

### + Secretariat for Exhibition

Tel: +82-2-6000-5118 Fax: +82-2-6000-5823/4 E-mail: biokorea@kita.net + Secretariat for Conference & Business Forum Tel: +82-2-508-4217 Fax: +82-2-508-4218 E-mail: bioconf@ibimp.com, biobiz@ibimp.com

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ers Club are accepted. onghang Tower Branch, Seoul, Korea) Ingnam-gu, Seoul 135-973, Korea

*<sup>\*</sup> All bank charges are to be paid by registrants* x A copy of the remittance receipt should be faxed to the secretariat. (+82-2-508-4218)

## Ο $\bigcirc$ Ο $\bigcirc$ Accommodation in Cheongju

RAMADA.



### **G** HOTEL SPAPIA

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• Room Type : Deluxe

**RAMADA PLAZA CHEONGJU** 

• **Distance from the Venue :** 20 minutes by bus

### Contact Info

- Tel. +82-43-290-1000
- Fax. +82-43-290-1010 Email. webmaster@ramadakorea.co.kr
- http://www.ramadakorea.co.kr



### **HOTEL SPAPIA**

- Room Type : Deluxe
- **Distance from the Venue :** 40-50 minutes by bus
- Contact Info Tel. +82-42-600-6006 Fax. +82-42-600-6008 http://www.hotelspapia.com



[RAMADA PLAZA CHEONGJU]



[HOTEL SPAPIA]

## Ο ()Ο $\bigcirc$ Accommodation in Seoul





### **COEX INTER-CONTINENTAL SEOUL**

• Room Type : Super Deluxe			
• Distance from the Venue : 3 hours by bus			
Contact Info			
Tel. +82-2-3452-2500			
Fax. +82-2-3430-8000			
Email. coexseoul@interconti.com			
http://www.seoul.intercontinental.com			





Dakewood PREMIER COEX CENTER Seoul





• Room Type : Deluxe • Distance from the Venue : 3 hours by bus Contact Info Tel. +82-2-3466-7000 Fax. +82-2-3466-7700 Email. seoul@oakwoodpremier.co.kr http://www.oakwoodpremier.co.kr

# Ο $\square$ $\bigcirc$ Access to Venue





### ► Free Shuttle bus service

- Incheon Int'l Airport ↔ hotel
- Incheon Int'l Airport -- Osong Bio-Technopolis
- COEX, Seoul ++ Osong Bio-Technopolis
- Cheongju express bus terminal -- Osong Bio-Technopolis

### ► Car

- Gyeongbu (Seoul-Busan) Expressway
- : Cheongju I.C Osong Bio-Technopolis (Approx. 15min)
- Jungbu (Central) Highway
- : Ochang I.C -- Ochang Science Industrial Complex -- Osong Bio-Technopolis (Approx. 10min)

# Ο Ο Transportation

### Incheon International Airport↔OSONG Bio-Technopolis

For the convenience of participants, free airport shuttle for the BIO KOREA 2008 OSONG will be arranged from the Incheon International Airport to the OSONG Bio-Technopolis from 7th to 10th of October, 2008. Upon arriving at the airport, please find the bus stand number of #12C on the 1<sup>st</sup> floor outside of passenger terminal. On your return way please check the time table again with hotel or "Housing & Tour Desk" at venue.



### East Gate of COEX ↔ OSONG Bio-Technopolis

For the convenience of participants, free shuttle for the BIO KOREA 2008 OSONG will be arranged from the COEX in Seoul to the OSONG Bio-Technopolis from 7th to 10th of October, 2008. Please find the bus stand in front of the Asem Tower. On your return way please check the time table again with hotel or "Housing & Tour Desk" at venue.



	Information Desk	To be announced
	Operation Date & Time	7 <sup>th</sup> -10 <sup>th</sup> October (07:30~21:30), 5 time
	Bus Stand	Bus Stand in front of the Asem Tow
*All the information here of		

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