3.7 기타 학술활동

8th Korea-Japan Biomass Symposium (2014)

- 일시 : 2014년 9월 10일
- 장소 : Sapporo Convention Center, Sapporo, Japan

[강연]

- Yung-Hun Yang^{1*}, Jong-Min Jeon¹, Christopher J Brigham², Anthony J Sinskey³ (¹Dept. Biol. Eng., KonkuK Univ., ²Dept Bioeng., Univ. Massachusetts Dartmouth, ³Dept. Biology, Massachusetts Inst.Technol.) Production of bioplastics from volatile fatty acids
- Seiichi Taguchi^{1,2*}, Ken'ichiro Matsumoto¹ (¹Div. Biotechnol. Macromol. Chem., Grad. Sch. Eng., Hokkaido Univ., ²CREST, JST) Microbial plastic factory driven by renewable carbon sources
- HyoJin Hwang, Yong Hwan Kim* (Dept. Chem. Eng., Kwangwoon Univ. Seoul, Korea) Enzymatic CO₂ conversion to formic acid
- Doman Kim^{1,2*}, Thi Thanh Hanh Nguyen¹, Ye-Sul Seo¹, Sun Lee¹, Jae-Young Cho¹ (¹Inst. Green Bio Sci. & Technol. Seoul Natl. Univ., ²Dept. Agric. Biotechnol., Seoul Natl. Univ.) Production and functional characterization of glycosides and oligosaccharide
- Takeshi Matsumoto*, Yasuhiro Noda (Yanmar CO.,LTD) Present situation of gasification CHP technology from solid biomass

2014년 다산컨퍼런스 심포지엄

- 일시 : 2014년 10월 16일~18일
- 장소 : 경주힐튼호텔 우양미슬관
- 주제 : 재난미생물 및 난치성 감염질환의 위협과 도전 (Natural Disaster-Associated Pathogens and Difficult-to-Treat Infectious Diseases: Risks and Challenges)

Session I (Infection and Propagation of Human Pathogenic Bacteria)

- Yeong-Jae Seok (Seoul National University) Vibrio vulnificus HPr Stimulates Pyruvate Kinase A to Protect Cells Against H202 Stress
- Jung Kug Lee (Sogang University) Physiological Role of O2-independent Coproporphyrinogen III Oxidase HemN of Vibrio vulnificus at Low O2 and Acidic pH
- Lien-I Hor (National Cheng Kung University Medical College, Taiwan) Role of Vibrio vulnificus RTX in Pathogenesis
- Sang Ho Choi (Seoul National University) Quorum Sensing-disrupting Molecules to Control Virulence of Vibrio vulnificus, a Fulminating Foodborne Pathogen
- Steven R. Blanke (University of Illinois, USA) Portals, Pathways, and Peculiarities of Intracellular Pathogen Egress: The Curious Case of *Bacillus anthracis*

Session II (Norovirus: Outbreak Management and Disease Prevention)

Gwang Pyo Ko (Seoul National University) Norovirus: The Main Target for Food Safety and Control

- Xi Jiang (University of Cincinnati College of Medicine, USA) Update of Virus-host Interaction and Strategies against Noroviruses
- Erwin Duizer (National Institute for Public Health and the Environment, Netherlands) Intervention Methods to Control the Transmission of Noroviruses (and Other Enteric and Respiratory Viruses)
- Kazushi Motomura (Osaka University, Japan) Genetic Evolution of Norovirus for Survival in Human Population as a Strategy
- Geun Woo Park (Centers for Disease Control and Prevention, USA) Recent Trends on Norovirus Control Strategies
- **Duwoon Kim (Chonnam National University)** Development of Foodborne Norovirus Concentration and Detection Methods

Session III (Against the Challenges of the Global Antibiotic Resistance)

Heenam Kim (Korea University) The Evolutionary Trajectories of β-lactamases

- Taeksun Song (The International Tuberculosis Research Center) Compensatory Evolution in Rifampicin Resistance in *Mycobacterium tuberculosis*
- Kevin Pethe (Nanyang Technological University, Singapore) The Host as a Growth Medium: Mining Bacterial Central Metabolismfor New Drug Target
- Chang-Jun Cha (Chung-Ang University) Antibiotic Resistome in the Natural Environment: Ecology of AAC(6')-Ib, N-acetyltransferases Conferring Fluoroquinolone Resistance
- Jung-Hye Roe (Seoul National University) Regulation of Intrinsic Resistance to Antibiotics

Session IV (The Control of Pathogenic Influenza Virus)

Yi Guan (The University of Hong Kong, China) Re-emergence and Development of H7N9 Influenza Virus in China Young-Ki Choi (Chungbuk National University) Pathobiologic Features of Novel Highly Pathogenic Avian Influenza A(H5N8) Virus

- Baik-Lin Seong (Yonsei University) Options and Obstacles for Designing a Universal Influenza Vaccine
- Ji-Young Min (Institut Pasteur Korea) Strategies to Tackle Influenza: A Nexus Between Basic Sciences and Clinical Applications
- Seon-Ju Yeo (Wonkang University) Rapid and Quantitative Detection of Zoonotic Influenza A Virus Infection Utilizing Coumarin-derived Dendrimer-based Fluorescent Immunochromatographic Test

9th Korea-Japan Biomass Symposium (2015)

일시 : 2015년 6월 24일~26일 중 장소 : HICO, Gyeongju, Korea

[강연]

Symposium I

Sung Gyun Kang (KIOST) One-carbon Based Biohydrogen Production Using a Hyperthermophilic

Archaeon, Thermococcus Onnurinues NA1

Akihiko Kondo (Kobe University, Japan) Development of Microbial cell Factories for Biorefinery

- Sunghoon Park (Pusan National University) Co-production of Hydrogen and Ethanol from Glucose by Modification of Glycolytic Pathways in *Escherichia coli*
- Michihiko Kataoka (Osaka Prefecture University, Japan) Fermentative Production of 1-Propanol Using Metabolically Engineered *Escherichia coli*
- Yong Hwan Kim (Kwangwoon University) Production of Formate from CO2 and Feasibility Study of Formate Based Biorefinery

Symposium II

- Eun Yeol Lee (Kyung Hee University) Methanotrophs: Bacteria for Pollutant Degradation and Methane Conversion
- Tomohisa Hasunuma (Kobe University, Japan) Biofuel Production from Microalgae and Cyanobacteria Based on Metabolic Profiling
- Byung-Kwan Cho (KAIST) Understanding of Chemolithoautotrophic Acetogenic Bacterial Genomes
- Taizo Hanai (Kyushu University, Japan) Synthetic Genetic Circuit for Improvement of Iso-propanol Production
- Kyoung Heon Kim (Korea University) Discovery of the Novel Metabolic Pathway of 3,6-Anhydro-L-galactose for Utilization of Red Macroalgal Biomass

10th Korea-Japan Biomass Symposium (2016)

일시 : 2016년 9월 29일 장소 : ANA Crowne Plaza Toyama, Toyama, Japan

[강연]

- Hah Young Yoo, Dong Sup Kim, Ju Hun Lee, Soo Kweon Lee, Seung Wook Kim^{*} (Dept. Chem. Biological Eng., Korea Univ) Bioenergy and chemicals from sustainable biomass resources
- Tetsushi Mori^{1*}, Mami Takahashi¹, Yumiko Yamada¹, Toshiyuki Shibata², Toshiyuki Takagi³, Reiji Tanaka², Hideo Miyake², Kouichi Kuroda³, Mitsuyoshi Ueda³, Haruko Takeyama¹ (¹Fac. Sci. and Eng., Waseda Univ., ²Grad. Sch. Bioresour., Mie Univ., ³Grad. Sch. Agric., Kyoto Univ.) Isolation of biorefinery enzymes for brown macroalgae degradation from bacterial metagenome
- Akihiko Kosugi^{1,2*} (¹JIRCAS, ²Grad. Sch. Life Environ. Sci., Univ. Tsukuba) Biological saccharification by anaerobic thermophilic bacteria
- Jeong Eun Hyeon, Sung Ok Han^{*} (Dept. Biotechnol., Korea Univ.) Designer microbes equipped with nanoscale protein complexes

SIMB-KMB 2nd International Conference on Natural Product Discovery and Development in the Genomic Era

일시 : 2018년 1월 21일~24일 장소 : Hilton Clearwater Beach Resort & Spa, Clearwater Beach, FL, USA

Session 1: Natural products in microbiomes/environment

Eung-Soo Kim (Inha University) Isolation, characterization, and redesign of disaccharidecontaining antifungal polyene NPP in *Pseudonocardia autotrophica*

Session 2: Chemical biology of natural products

Ho Jeong Kwon (Yonsei University) Exploring new protein targets of natural products with labelfree based target identification and validation

Session 6: Natural product discovery and regulation

Byung-Kwan Cho (KAIST) Translational regulation in Streptomyces tsukubaensis

The 9th Japan-Korea Chemical Biology Symposium (2018)

일시 : 2018년 5월 24일~26일

장소 : 센트럴파크 호텔(인천)

- Organizing Co–Chairs: Eung–Soo Kim (Inha Univ., Korea) Kazuro Shiomi (Kitasato Univ., Japan)
- Organizing Members: Jong Seog Ahn (KRIBB, Korea) Hiroyuki Osada (RIKEN, Japan)
- Organizing Co-Secretariats: Jae-Hyuk Jang (KRIBB, Korea)
 Yukihiro Asami (Kitasato Univ., Japan)
 Hye Jin Jung (Sun Moon Univ., Korea)
 Pil Kim (Catholic Univ., Korea)
 Si-Sun Choi (Inha Univ., Korea)

[강연]

Hyukjae Choi (Yeungnam Univ.) Discovery of Marine-derived Microbial Natural Products with Molecular Networking

Toshifumi Takeuchi (Bikaken) Screening of Cancer Metabolism Inhibitor

- Sang Hee Shim (Duksung Women's Univ.) Endophytic Fungi: a Potential Source of Novel Bioactive Metabolites
- Hideaki Kakeya (Kyoto Univ.) Microbial Metabolites Targeting Microenvironment: a Cell Membrane Signaling Modulator and a Hypoxia-Response Modulator

- Hahk-Soo Kang (Konkuk Univ.) Genome Mining Platform to Uncover New Natural Products from Cryptic Biosynthetic Gene Clusters in Microbial Genomes
- Kenji Watanabe (Univ. Shizuoka) Crystallographic Characterization of a [4+2]-Cyclase Binding Site and Mutational Alteration of Stereoselectivity

Je Won Park (Korea Univ.) Exploiting the Biosynthetic Pathways of Aminoglycosides and Their Engineering Shunji Takahashi (RIKEN) Regulation of Secondary Metabolite Gene Cluster by Small Molecule

Hyunjoo Cha-Molstad (KRIBB) Autophagy Induced by p62 Activating Ligands

Etsu Tashiro (Keio Univ.) Chemical Biology Investigation of ER Stress

Jae Wook Lee (KIST) Synthesis and Biological Evaluation of Quinazoline Derivatives as Cytoprotective Agents

Akihiro Ito (TUPLS) Regulation of a Dual Specificity Deacylase Activity of SIRT2

Joo-Won Nam (Yeungnam Univ.) Oligomeric Proanthocyanidins with Potent Dentin Biomodification Activity Satoshi Ohte (Kitasato Univ.) Scopranones, Novel Polyketides with Two Linked Scoop-like Moieties Produced by *Streptomyces* sp. BYK11038, Isolated as an Inhibitor of BMP-induced Osteoblastic Differentiation in C2C12 Cells

- Jun-Pil Jang (KRIBB) Novel Bioactive Molecules from a *Streptomyces* sp. RK88-1441 Using One Strain-Many Compounds (OSMAC) Approach
- Junnosuke Otaka (RIKEN) Small Molecules Produced by Coprinopsis cinerea

2019 Workshop on Host and Microbe Interactions

일시 : 2019년 8월 30일

장소 : 연세대학교 과학관

반용선 (연세대학교) Systematic Functional Analysis of Fungal Pathogenicity-Related Signaling Networks

- 정도원 (동덕여자대학교) Horizontal Transfer of Plasmid Encoding Lincomycin Resistance Gene During Soybean Fermentation and the Passage of Intestine in Mice
- 이동우 (연세대학교) Proteomic Analysis of Relationships between Atopic Dermatitis and the Enteric Microbiome in Pediatric Patients
- 장수진 (파스퇴르연구소) Interaction of Microbes between Human and Environments: Influence on Antibiotic Resistance
- 김명희 (KRIBB) Mechanisms on Bacterial Pathogenesis
- 신재호 (경북대학교) Multiple Copies of 16S rRNA Gene in Bacterium Could Affect Species Identification
- 조병관 (KAIST) Analysis of the Mouse Gut Microbiome Using Full-Length 16S rRNA Amplicon Sequencing

2019 Workshop on Smart Cell Factory Design

일시 : 2019년 11월 1일 장소 : 서강대학교 가브리엘관

이대희 (KRIBB) Synthetic Biology Tools for Microbiome Engineering 서상우 (서울대학교) Microbial Synthetic Biology 송미령 (한국외국어대학교) Delivery Bacteria: Repurposed Bacterial Secretion System 최종현 (KRIBB) Cell Factory for Protein Production and Expression 이승구 (KRIBB) Enzyme Factory Facilitated by Synthetic Biology 김 필 (㈜헤모랩) Development of Heme-Producing Non-GM Bacteria as Agricultural Products 김응수 (인하대학교) Actinobacteria Cell Factory Design: from Potential to Reality 이정국 (서강대학교) Biotechnological Utilization of the Chromatophore Membrane Vesicle of the Photosynthetic Bacteria

2019년 One World One Health (포스트게놈 시대의 재난미생물 연구동향) 워크샵

일시 : 2019년 12월 20일 장소 : 서강대학교 김대건관

명진종 (전북대학교) Introduction to "One Health" Concept 박종현 (농림축산검역본부) Ideal Vaccine for FMD Eradication 김용주 (농림축산검역본부) Current Situation of African Swine Fever in Korea and Asia 최윤이 (고려대학교) Multiple Strategies to Combat against Harmful Algal Blooms 최경화 (한국생명공학연구원 국가연구안전관리본부) 미생물재난 대응을 위한 생물연구안전관리

SIMB-KMB 3rd International Conference on Natural Product Discovery and Development in the Genomic Era

일시 : 2020년 1월 12일~16일 장소 : Wyndham San Diego Bayside Hotel, San Diego, CA, USA

Session 1: Natural products of bacterial origin

Eung-Soo Kim (Inha University) A3 foresight network on natural products: awakening and refactoring of actinomycetes biosynthetic gene clusters

Session 5: Enabling technologies for natural products

Yeo Joon Yoon (Ewha Woman's University) Advances in the biosynthesis of minor components of aminoglycosides

Session 6: Natural products for new targets and biology

Byung-Kwan Cho (KAIST) Elucidating transcriptional and translational regulatory elements encoded in the Streptomyces genomes

2021년 특별 워크샵

일시 : 2021년 11월 25일 장소 : 서울 코엑스 주제 : The Rise of the Human Microbiome Therapeutics Industry in Korea

Session I (Microbiome Therapeutics- The Overview)

김희남 (고려대학교) Current Status of the Microbiome Therapeutics Development in the World

- 이동호 (분당서울대학교병원) Big Bang of Medicine: Clinical Usefulness of Gut Microbiome and NGP (Next Generation Probiotics)
- 오민규 (과기부 한국연구재단 차세대바이오단) Microbiome R&D Program in National Research Foundation of Korea (NRF)

Session II (Microbiome Therapeutics - The Industry I) -

- 임신혁 (이뮤노바이움(주)) Defining and Application of Active Pharmaceutical Ingredients from Microbiota for Cancer and Inflammatory Disorders
- 성문희 (국민바이오(주)) R&BD of Postbiotics Using Microbial Metabolites Produced by GRAS Fermented Food Microorganisms
- 이동은 ((주)hy(한국야쿠르트)) Effect of Probiotics HY7714 on UVB-induced Photoaging and Intestinal Health

Session II (Microbiome Therapeutics - The Industry II)

김태윤 (일동제액주)) Specific Properties of Multiple Strains Probiotics (ID-JPL934): Relevance and Benefits for the Human

- 이백석 (CJ 제일제당(주)) Microbiome: a New Way of Health
- 윤상선 ((주)바이오미) Novel Approaches to Microbiome Therapeutics Set Forth by BioMe Inc., a New Academia-based Start-up

Session IV (Microbiome Therapeutics - The Industry III)

- 박경미 ((주)지놈앤컴퍼니) Development of Live Biotechnological Product as an Immuno-oncological Drug 정유숙 ((주)쎌바이오텍) A Synthetic Probiotic for CRC Therapy and Gut Microbiota Modulation
- 박성준 ((주)고바이오랩) The Development Process for Human Microbiome-based Live Biotherapeutic Products

SIMB-KMB 4th International Conference on Natural Product Discovery and Development in the Genomic Era

일시 : 2023년 1월 8일~12일 장소: Manchester Grand Hyatt San Diego, CA, USA

Session 3 -

Dong-Chan Oh (Inha University) A3 foresight network on natural products: awakening and refactoring of actinomycetes biosynthetic gene clusters

Session 4:

Byung-Kwan Cho (KAIST) Elucidation of Multi-Level Regulation of Gene Expression in Streptomyces Genomes

Session 6:

Hahk-Soo Kang (Konkuk University) Gram-Scale Production of Daptomycin Through Multiplexed Promoter Engineering of Biosynthetic Gene Cluster