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# KHUPO 18<sup>TH</sup> ANNUAL INTERNATIONAL PROTEOMICS CONFERENCE

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「Integrative Proteomics for Translational Research」

March 29 (Thu) - 30 (Fri), 2018

\*Skyline Workshop | March 28 (Wed), 2018

Global Education Center for Engineers, Seoul National University, Seoul, Korea

The Korean Human Proteome Organization

## WELCOME

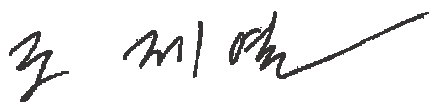
Dear colleagues,

We are delighted to announce that KHUPO's 18th Annual International Proteomics Conference will be held March 29–30, 2018 at Global Education Center for Engineers, Seoul National University in Seoul, Korea. On behalf of the Organizing Committee, I would like to cordially invite you to attend the conference.

The theme of this year's conference is "Integrative Proteomics for Translational Research". Four plenary lectures and 6 symposia are scheduled. The session for young scientists is also planned to encourage the young talent in the field. I expect that this meeting will provide an excellent opportunity for sharing the ideas and build deeper friendship among the participants. As KHUPO is entering its 18th year, I hope the activities of KHUPO will help explore the human proteome and understand human biology and diseases.

Finally, I greet you all and hope our 18th Annual International Conference serve as a crucial forum for proteome scientists and clinicians.

Best wishes,



Je-Yeol Cho, DVM, PhD

President, The Korean Human Proteome Organization  
Professor, Department of Biochemistry, College of Veterinary Medicine  
Seoul National University







## ORGANIZING COMMITTEE

President	<b>Je-Yoel Cho (Seoul National University)</b>
Vice President	Young-Soo Kim (Seoul National University)
	Cheolju Lee (Korea Institute of Science and Technology)
	Jae Jun Lee (Dong-il SHIMADZU Corp.)
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	Marcelino Bae (Waters Korea Limited)
Chair, Committee for Election Affair	Sung Goo Park (Korea Research Institute of Bioscience & Biotechnology)
Chair, Committee for Fund-Raising Affair	Byoung Chul Park (Korea Research Institute of Bioscience & Biotechnology)

## GENERAL INFORMATION

Title	18 <sup>th</sup> Annual International Proteomics Conference
Theme	Integrative Proteomics for Translational Research
Date	- Main Conference: March 29 (Thu) - 30 (Fri), 2018 - Skyline Workshop: March 28 (Wed), 2018
Venue	Global Education Center for Engineers (GECE)(5 <sup>th</sup> Floor), Seoul National University
Program	4 Plenary Lectures, 6 Symposia, Young Scientist Session, Skyline Workshop, Poster, etc.
Industrial Events	Exhibition, Exhibition Tour, Corporate Workshop, etc.
Expected Participants	300 Participants (over 8 countries participants)
Official Language	English
Organized by	The Korean Human Proteome Organization (KHUPO)
Webpage	<a href="http://2018.khupo.org">http://2018.khupo.org</a>

## PLENARY SPEAKERS

			
<b>Christopher M. Overall</b> Univ. of British Columbia, Canada	<b>Bernhard Küster</b> Technical University of Munich, Germany	<b>David R. Goodlett</b> University of Maryland School of Pharmacy, USA	<b>Young-Ki Paik</b> Yonsei University, Korea

## SYMPOSIA

Proteogenomics for comparative Systems Biology
Functional/Chemical/Mechanistic Proteomics
Protein Modifications in Signal Transduction
Protein Biomarkers for Diseases
Bioinformatics & C-HPP
New Technological & Translational Proteomics

## PROGRAM AT A GLANCE

Time	March 28 (Wed)	March 29 (Thu)	March 30 (Fri)
08:00		Registration(08:00-18:00)	Young Scientists (08:00-09:00) <i>* Refreshments will be provided</i>
		Morning Coffee (08:30-09:00)	
09:00		Opening Ceremony (09:00-09:10)	Morning Coffee (09:00-09:10)
		PL-1 (09:10-09:50)	PL-3 (09:10-09:50)
		Break (09:50-10:05)	Break (09:50-10:05)
10:00		SYM-1 Proteogenomics for Comparative Systems Biology  (10:05-11:15)	SYM-4 Protein Biomarkers for Diseases  (10:05-11:15)
11:00		Break (11:15-11:30)	Break (11:15-11:30)
		Corporate Workshop-1 (11:30-12:40) Bruker Korea Co., Ltd <i>* Lunch will be provided</i>	한국인체자원은행사업 (11:30-11:50)
12:00	Workshop Registration (11:30-13:00)		국립암센터 단백질 분야 R&D사업 설명회 (11:50-12:10)
			Break (12:10-12:40)
13:00	SKYLINE Workshop (13:00-18:00)	Exhibition Tour & Poster (12:40-14:10)	Poster & Exhibition (12:40-14:40)
14:00		국가 R&D 분야 규제혁파 방안 및 바이오 분야 연구개발사업 설명회 (14:10-14:50)	
		Break (14:50-15:00)	
15:00		SYM-2 Functional/Chemical/Mechanistic Proteomics  (15:00-16:10)	SYM-5 Bioinformatics & C-HPP (14:40-15:50)
16:00		Break (16:10-16:25)	Break (15:50-16:05)
		PL- 2 (16:25-17:05)	PL- 4 (16:05-16:45)
		Break (17:05-17:20)	Break (16:45-17:00)
17:00		SYM-3 Protein Modifications in Signal Transduction  (17:20-18:30)	SYM-6 New technological & Translational Proteomics (17:00-18:10)
18:00			Awards & Closing Remark (18:10-18:30)
		General Assembly (18:30-18:50)	
		Welcome Reception (18:50 at BBQcafe)	

**PLENARY LECTURES****PL-1**

March 29 (Thu)  
09:10-09:50



Chair | Je-Yoel Cho (Seoul National University)

Target Identification by TAILS N-Terminal Positional Proteomics Leads to Development of a Pharmacological Molecular Corrector for Impaired NF- $\kappa$ B Activation

**Christopher M. Overall**

The University of British Columbia, Canada

**PL-2**

March 29 (Thu)  
16:25-17:05



Chair | Ho Jeong Kwon (Yonsei University)

The target landscape of clinical kinase drugs

**Bernhard Küster**

Technical University of Munich, Germany

**PL-3**

March 30 (Fri)  
09:10-09:50



Chair | Jong Shin Yoo (Korea Basic Science Institute)

From a Historical Review of Developments leading to Shotgun Proteomics to Longitudinal Profiling

**David R. Goodlett**

University of Maryland School of Pharmacy, USA

**PL-4**

March 30 (Fri)  
16:05-16:45



Chair | Kyung Soo Hahm (Chosun University)

Quest for Dark Proteins in Biomedical Sciences

**Young-Ki Paik**

Yonsei University, Korea

## SYMPOSIA | March 29 (Thu)

SYM1		Proteogenomics for Comparative Systems Biology		Mar 29 (Thu) 10:05-11:15	
		Chairs: Bonghee Lee (Graduate School of Medicine, Gachon University)			
SYM1-1	10:05-10:30	In Depth Locus Specific Protein Interaction Characterized by Ultrasensitive Genome Scale Proteome Quantification (GSPQ) Platform			
		Feng Zhou	Fudan University, China		
SYM1-2	10:30-10:50	A study of transposable element-associated structural variations (TASVs) using a de novo assembled Korean genome			
		Seyoung Mun	Dankook University, Korea		
SYM1-3	10:50-11:10	Comparative analysis of proteins profiles of canine plasma			
		Dong Wook Kim	College of Veterinary Medicine Seoul National University, Korea		
SYM2		Functional/Chemical/Mechanistic Proteomics		Mar 29 (Thu) 15:00-16:10	
		Chairs: Chan-Wha Kim (Korea University)			
SYM2-1	15:00-15:23	Apolipoprotein B binds to enolase-1 and aggravates inflammation in rheumatoid arthritis			
		Yeong Wook Song	Seoul National University, Korea		
SYM2-2	15:23-15:46	Post-Translational Modification of PPAR-gamma in metabolic diseases			
		Kyung-Hee Chun	Yonsei University College of Medicine, Korea		
SYM2-3	15:46-16:09	The Chemoproteomic Toolbox for Redox Biology			
		Jing Yang	Beijing Proteome Research Center, China		
SYM3		Protein Modifications in Signal Transduction		Mar 29 (Thu) 17:20-18:30	
		Chairs: TBA			
SYM3-1	17:20-17:37	High-throughput phosphoproteomics: technologies and applications in systems biology			
		Sean Humphrey	University of Sydney, Australia		
SYM3-2	17:37-17:54	Why is the yeast checkpoint kinase Rad53 so highly phosphorylated?			
		Ming-Daw Tsai	Institute of Biological Chemistry, Academia Sinica, Taipei, Taiwan		
SYM3-3	17:54-18:11	Nrich and iNrich: N-terminomics tools for discovering various protein forms			
		Cheolju Lee	Korea Istitude of Science and Technology, Korea		
SYM3-4	18:11-18:28	Fomryl-Methionine-Targeting Proteolytic System: the fMet/N-End Rule Pathway in the Yeast Saccharomyces cerevisiae			
		Cheol-Sang Hwang	POSTECH, Korea		

## SYMPOSIA | March 30 (Fri)

SYM4		Protein Biomarkers for Diseases	Mar 30 (Fri) 10:05-11:15
		Chairs: Je Kyung Seong (Seoul National University)	
SYM4-1	10:05-10:22	Quantitative Chemoproteomic Analysis of Protein O-GlcNAcylation <b>Xing Chen</b> <i>Peking University, China</i>	
SYM4-2	10:22-10:39	Supramolecular polymorphism in Pathogenic Amyloid Proteins by Cu(II) Coordination <b>Hugh I. Kim</b> <i>Korea University, Korea</i>	
SYM4-3	10:39-10:56	Peptide and Glycan Mass Spectrometry Imaging as Diagnostic Tool in Cancer Research <b>Peter Hoffmann</b> <i>University of South Australia</i>	
SYM4-4	10:56-11:13	Top down proteomics and its application for clinical biomarker <b>Kyunggon Kim</b> <i>University of Ulsan / Asan Medical Center, Korea</i>	
SYM5		Bioinformatics & C-HPP	Mar 30 (Fri) 14:40-15:50
		Chairs: Byoung Chul Park (Korea Research Institute of Bioscience & Biotechnology)	
SYM5-1	14:40-15:03	Network-augmented analysis of disease genomics data <b>In Suk Lee</b> <i>Yonsei University, Korea</i>	
SYM5-2	15:03-15:26	Splicing bridging transcriptomics and proteomics in breast cancer <b>Younghee Lee</b> <i>The University of Utah, School of Medicine, USA</i>	
SYM5-3	15:26-15:49	SAAVpedia : Identification, functional annotation, retrieval and prioritization of single amino-acid variants from proteomic and genomic data <b>Soo Youn Lee</b> <i>Korea Basic Science Institute, Korea</i>	
SYM6		New Technological & Translational Proteomics	Mar 30 (Fri) 17:00-18:10
		Chairs: Sung Goo Park (Korea Research Institute of Bioscience & Biotechnology)	
SYM6-1	17:00-17:20	A mathematical Deep-sequenced mRNA transcripts can be combined to predict mass spectrometry derived protein levels in human Th1-activation <b>Mika Gustafsson</b> <i>Bioinformatics, IFM, Linköping University, Sweden</i>	
SYM6-2	17:20-17:45	Time-resolved genome-wide gene expression analysis of the plant pathogen <i>Xanthomonas oryzae</i> pv. <i>Oryzae</i> <b>Lin-Woo Kang</b> <i>Konkuk University, Korea</i>	
SYM6-3	17:45-18:10	Peptide Chromatographic Approaches for Illuminating Human Proteome <b>Yasushi Ishihama</b> <i>Graduate School of Pharmaceutical Sciences, Kyoto University, Japan</i>	



## CORPORATE WORKSHOP

\* Lunch will be provided.



CW-1	Bruker Korea Co., Ltd	Mar 29 (Thu) 11:30-12:40
CW 1-1	<p>The timsTOF Pro with PASEF: Digging deeper into the proteome with record-breaking speed, sensitivity and robustness</p> <p><b>ShinKwon Kang</b>      <i>Application Manager, Bruker Daltonics Korea</i></p>	
CW 1-2	<p>Improvements in Mass Spectrometry Imaging for the Molecular Analysis of FFPE Tissue Sections</p> <p><b>JinNyoung Choi</b>      <i>Application Chemist, Bruker Daltonics Korea</i></p>	

## Young Scientist Symposium

March 30 (Fri) 08:00-09:00

Chair: Hyun-Woo Rhee (Seoul National University), Jun-Seok Lee (Korea Institute of Science and Technology)

YS-1 08:00-08:06	A vinyl Sulfone-Based Fluorogenic Probe Capable of Selective Labeling of PHGDH in Live Mammalian Cells <b>Se-Young Jang</b> <i>Korea Institute of Science and Technology</i>
YS-2 08:06-08:12	Identification and characterization of eEF1B $\delta$ L as a substrate of RNF20/40 <b>Suna In</b> <i>Korea Advanced Institute of Science and Technology</i>
YS-3 08:12-08:18	Quantitation of Serum N-Glycan Isomers for Bechet Disease Monitoring <b>Nari Seo</b> <i>Chungnam National University</i>
YS-4 08:18-08:24	PRM and SRM methods to identify prognostic biomarkers of Tocilizumab <b>Jinwoo Jung</b> <i>Seoul National University</i>
YS-5 08:24-08:30	Establishment of 3-D Cell Culture Model for Liver Cancer <b>Ramin Seo</b> <i>Korea Advanced Institute of Science and Technology</i>
YS-6 08:30-08:36	Development of Fucosylated Glycopeptides in Alpha-fetoprotein Immunoprecipitated from Serum as a Biomarker Candidate for Hepatocellular Carcinoma by Parallel Reaction Monitoring <b>Kwang Hoe Kim</b> <i>Korea Basic Science Institute</i>
YS-7 08:36-08:42	SEPROGADIC – serum protein-based gastric cancer prediction models for prognosis and selection of proper adjuvant therapy <b>Hee-Sung Ahn</b> <i>UST</i>
YS-8 08:42-08:48	Aberrant glycosylation is associated with gastric cancer and precancerous diseases <b>Seunghyup Jeong</b> <i>GRAST, Chungnam National University</i>
YS-9 08:48-08:54	Application of LC-MS/MS to identify biomarkers for autism spectrum disorder using Cntnap2 KO mouse <b>Wooyoung Eric Jang</b> <i>Kyung Hee University</i>
YS-10 08:54-09:00	Multidimensional proteomic analysis for understanding Alzheimer's disease <b>Jong Hyuk Yoon</b> <i>Korea Brain Research Institute</i>

## POSTER SESSION

All poster presentations must be in English. Presenters are responsible for setting up their displays, being present during the entire scheduled poster session, and removing their displays at the conclusion of the poster session. On your assigned day, please plan to spend the entire session at your poster for questions and discussion. Each poster should be allocated on a poster board corresponding to its abstract number.

**※ Posters are displayed for entire day, although presenters are only required to be present at their board from 12:40 to 14:40 on March 30 (Fri).**

Category	Poster Set up	Poster Sessions	Removal
Proteogenomics for comparative Systems Biology	09:00-18:00 March 29 (Thu) – 30 (Fri)	<b>12:40-14:40</b> <b>March 30 (Fri)</b>	17:00-18:30 March 30 (Fri)
Functional/Chemical/Mechanistic Proteomics			
Protein Modifications in Signal Transduction			
Protein Biomarkers for Diseases			
Bioinformatics & C-HPP			
New Technological & Translational Proteomics			

## POSTER SIZE

90 cm wide × 120 cm high (Board size: 95 cm wide × 165 cm high )

## AWARDS



Qualification: Poster presenters

The number of people: 2 people

Award details: Cash prize and Certificate of award, book about MALDI-TOF

Winner announcement: March 30 (Fri) 18:10 in Awards & Closing Remarks

Sponsored by Bruker Korea Co., Ltd & SINCO Co., Ltd



Qualification: Poster presenters

The number of people: 15 people

Award details: Cash prize and Certificate of award

Winner announcement: March 30 (Fri) 18:10 in Awards & Closing Remarks

Sponsored by Sartorius Korea Biotech Co., Ltd.

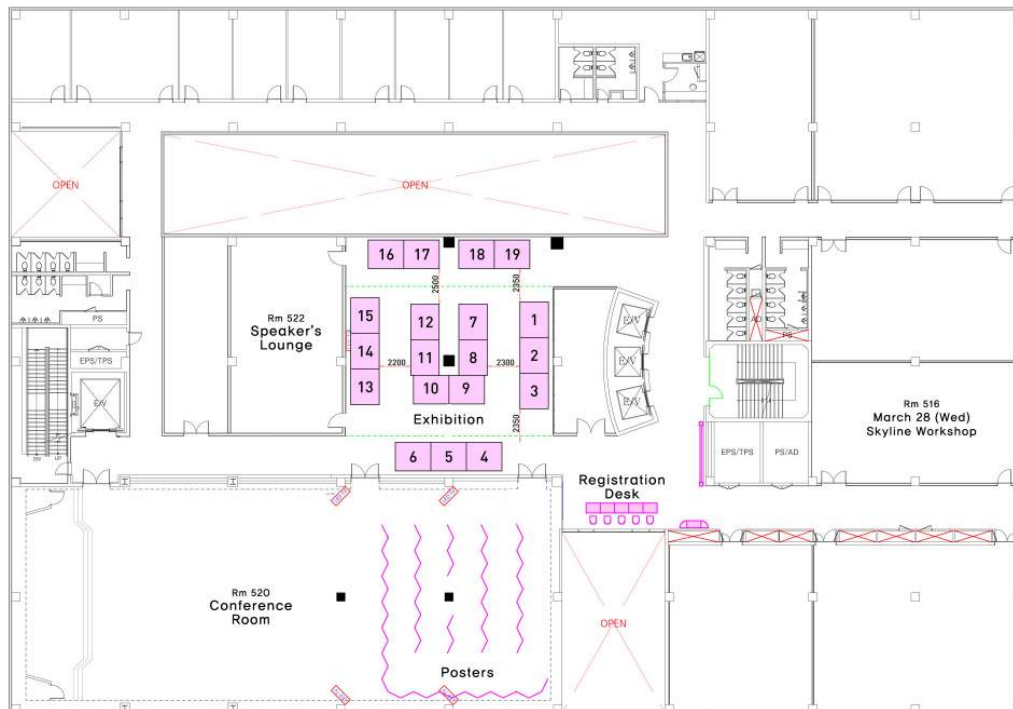
## EXHIBITION INFORMATION

- Date: March 29 (Thu) – 30 (Fri), 2018
- Time: 09:00-17:00
- Place: Lobby (5F), Global Education Center for Engineers, Seoul National University

## Booth No.

No.	Exhibitor	No.	Exhibitor
1	Korea Basic Science Institute	11	SeouLin Bioscience
2,3	Bruker Korea co., Ltd	12	YOUNG IN FRONTIER
4	GLYCAN	13	ANYGEN CO., LTD
5	Sartorius Korea Biotech	14	JM ENB
6	MDxK, Inc.	15	LK BioScience Inc.
7	Waters Korea	16	Korea Biobank Project
8	Thermo Fisher Scientific Korea	17	EBIOGEN
9	Promega Korea	18	SMAAnalytical
10	Dong-il SHIMADZU corp.	19	Taeshinbio science

## Floor Plan



## Exhibition Tour

Time	Exhibitor	Time	Exhibitor
ET-1 (12:40-12:45)	Korea Basic Science Institute	ET-8 (13:15-13:20)	EBIOGEN
ET-2 (12:45-12:50)	Bruker Korea co., Ltd	ET-9 (13:20-13:25)	SMAlytical
ET-3 (12:50-12:55)	GLYCAN	ET-10 (13:25-13:30)	Waters Korea
ET-4 (12:55-13:00)	Sartorius Korea Biotech	ET-11 (13:30-13:35)	Promega Korea
ET-5 (13:00-13:05)	MDxK, Inc.	ET-12 (13:35-13:40)	Dong-il SHIMADZU corp.
ET-6 (13:05-13:10)	JM ENB	ET-13 (13:40-13:45)	YOUNG IN FRONTIER
ET-7 (13:10-13:15)	LK BioScience Inc.	ET-14 (13:45-13:50)	Taeshinbio science

**VENUE**

Global Education Center for Engineers (GECE), Seoul National University

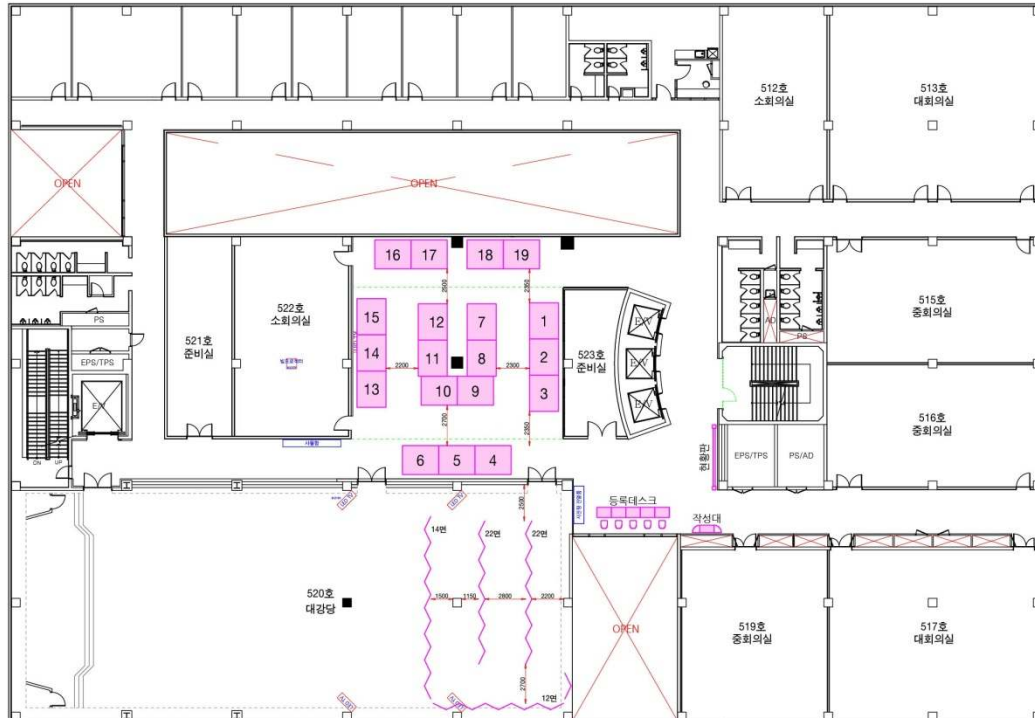
Address: 1 Gwanak-ro, Gwanak-gu, Seoul 08826, Korea

Homepage: <http://en.snu.ac.kr>



## FLOOR PLAN

Multipurpose Hall #B101, Global Education Center for Engineers (5<sup>th</sup> Floor), Seoul National University

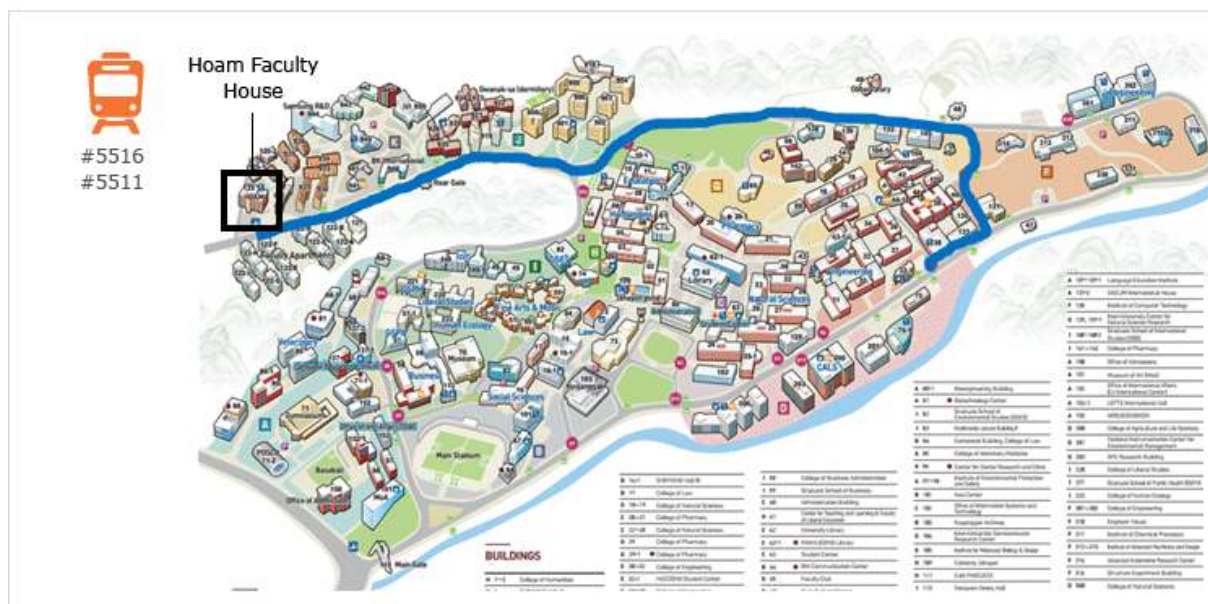
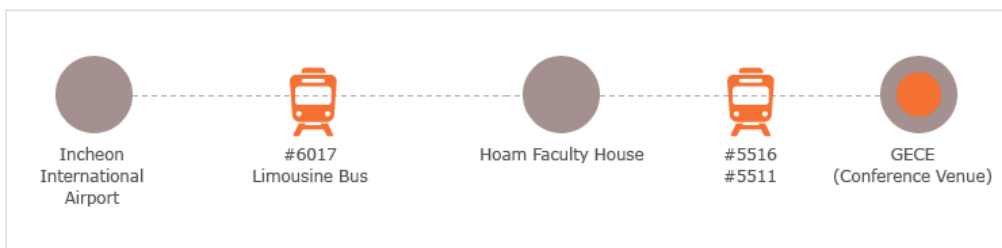


## TRANSPORTATION

*From Incheon Airport to GECE*



### Way 1: #6017 Airport Limousine Bus (For Participants staying at Hoam Faculty House)



### From Gimpo Airport to GECE

Flight to Gimpo Airport (Int'l) is available from countries' main cities of Japan and China



