2011 한국분자·세포생물학회 정기학술대회

The 23rd Annual Meeting of the Korean Society for Molecular and Cellular Biology

October 6-7, 2011 COEX, Seoul, Korea

Seminar: Conference Center (3F)

Grand Conference Room (4F)

Exhibition & Poster Presentation: Hall C1-C2 (3F)



Sponsored by Korean Federation of Science and Technology Societies

Abstract submission: July 18 - September 15 Early registration: July 18 - September 15

URL: www.ksmcb.or.kr

2011 한국분자·세포생물학회 정기학술대회

The 23rd Annual Meeting of the Korean Society for Molecular and Cellular Biology

October 6-7, 2011 COEX, Seoul, Korea

Seminar: Conference Center (3F)

Grand Conference Room (4F)

Exhibition & Poster Presentation: Hall C1-C2 (3F)



2011년 한국분자 · 세포생물학회 운영위원 및 대의원 명단

KSMCB Organizing Committee

운 영 위 원 「

) 🗅	-			
회 장 (이사) 차기회장 (이사) 부 회 장 (이사) 이 사 감 사	김도한(전용성(김경진((서울대학교) (광주과학기술원) (서울대학교) (서울대학교) (성균관대학교)	정 인 권 (연세대: 박 노 동 (전남대: 정 진 하 (서울대:	학교)	정 헌 택 (울산다	학교) 최 현	일 (전남대 ^章	박교)
학술위원장	이 건 수	(서울대학교) ¦	학회지편집운영위원	권 영 근	(연세대학교)	강원분회장	이 한 수	(강원대학교)
기금위원장	김 영 명	(강원대학교)	학회지편집운영위원	김 재 범	(서울대학교)	대구경북분회장	강남주	(경북대학교)
학회지편집위원장	이 서 구	(이화여자대학교)	학회지편집운영위원	안 지 훈	(고려대학교)	대전충청분회장	조 태 주	(충북대학교)
뉴스지편집위원장	안 주 홍	(한양대학교)	학회지편집운영위원	윤홍덕	(서울대학교)	부산경남분회장	김 상 해	(인제대학교)
출판위원장	염 영 일	(한국생명공학연구원)	학회지편집운영위원	임 대 식	(한국과학기술원)	호남제주분회장	최 현 일	(전남대학교)
국제협력위원장	김 인 산	(경북대학교)	뉴스지편집운영위원	박 찬 배	(아주대학교)	구조생물학분과	이 상 기	(서울대학교)
산학연협력위원장	최 치 용	(주) BMS Korea)	회원운영위원	김 상 수	(숭실대학교)	뇌신경발생학분과장	허성오	(한림대학교)
선거관리위원장	서 연 수	(한국과학기술원)	교육운영위원	임 현 정	(건국대학교)	단백질대사분과장	윤 종 복	(연세대학교)
학술상위원장	서 영 준	(서울대학교)	출판운영위원	박 태 식	(가천의과학대학교)	리보핵산분과장	진 형 종	(수원대학교)
전산위원장	이 상 기	(서울대학교)	국제협력운영위원	남 경 희	(숙명여자대학교)	마우스유전체분과장	이 한 웅	(연세대학교)
윤리위원장	유미애	(부산대학교)	산학연협력운영위원	설 재 홍	(서울대학교)	미토콘드리아분과	윤 계 순	(아주대학교)
일천위원장	서 정 선	(서울대학교)	선거관리운영위원	선 웅	(고려대학교)	분자바이러스학분과장	배 용 수	(성균관대학교)
복지위원장	김 주 곤	(명지대학교)	전산운영위원	송 현 규	(고려대학교)	샤페론분과	진 익 렬	(경북대학교)
융합사이언스위원장	이 동 근	(다카라코리아바이오메디칼(주))	학술상운영위원	여 창 열	(이화여자대학교)	세포주기분과장	임 대 식	(한국과학기술원)

조 은 경

김병철

송 재 환

하남출

안 정 혁

(충남대학교)

(강원대학교)

(연세대학교)

(부산대학교)

(광주과학기술원)

(이화여자대학교)

시스템생물학분과

예쁜꼬마선충분과

제브라피쉬분과

초파리분과장

식물분자생물학분과장 김우택

에피유전체학분과장 조은정

대 의 원

융합교류협력운영위원 임신혁

윤리운영위원

복지운영위원

일천운영위원

동계학술운영위원

동계학술운영위원

■ 농수산학
김동수 (부경대)
김영미 (농촌진흥청)
김영호 (경북대)
김우택 (연세대)
김철중 (충남대)
김 훈 (순천대)
남백희 (명지대)
남홍길 (포항공대)
류기중 (제주대)
박노동 (전남대)
박상규 (대구대)
백명기 (전남대)
송경빈 (충남대)
송민동 (건국대)
신정섭 (고려대)
유상렬 (서울대)
유장렬 (생공연)
윤성중 (전북대)
이상용 (강원대)
이용환 (서울대)
이인구 (경북대)

동계학술위원장

교육위원장

총무운영위원

학술운영위원

기획운영위원

재무(기금)운영위원

이 한 웅

조 진 원

배윤수

김정호

(연세대학교)

(연세대학교)

(서강대학교)

성 제 경 (서울대학교)

김희남 (고려대학교)

(이화여자대학교)

이택견 (한국해양연구원) 조백호 (전남대) 한옥수 (전남대) 한재용 (서울대) 한태룡 (경희대) 황인규 (서울대) ■ 의약학 고규영 (한국과학기술원) 고재영 (울산대) 권오유 (충남대) 김경근 (전남대) 김남득 (부산대) 김명희 (연세대) 김석용 (충북대) 김우현 (전북대) **김응국** (충북대) 김재룡 (영남대) 김 현 (고려대) 문애리 (덕성여대) 배석철 (충북대)

송규영 (울산대)

신재균 (성균관대) 유대열 (생공연) 유지창 (가톨릭대) 유호진 (조선대) 윤주헌 (연세대) 윤화영 (서울대) 이경림 (이화여대) 이공주 (이화여대) 이광호 (경상대) 이복률 (부산대) 이제호 (성균관대) 이현철 (전남대) 임인경 (아주대) 전용성 (서울대) 정진호 (서울대) 조명제 (경상대) 진형종 (수원대) 하권수 (강원대) 한평림 (이화여대) 호원경 (서울대) 황온유 (울산대)

■ 이학 강성만 (고려대) 강창원 (한국과학기술원) 강해묵 (청주대) 권기선 (생공연) 권혁만 (한국외대) 김경태 (포항공대) 김성준 (조선대) 김연수 (인제대) 김윤희 (경희대) 김진미 (충남대) 류성호 (포항공대) 박동은 (서울대) 배용수 (성균관대) 백경희 (고려대) 백형석 (부산대) 서연수 (한국과학기술원) 서판길 (포항공대) 양재명 (서강대) 엄홍덕 (원자력의학원) 오영준 (연세대)

유미애 (부산대)

유영숙 (한국과학기술연구원) 유영준 (광주과기원) 유종신 (한국기초과학지원연구원) 이동희 (이화여대) 이승택 (연세대) 이정섭 (조선대) 이주헌 (연세대) 이찬희 (충북대) 이충은 (성균관대) 임헌만 (충남대) 장광엽 (전북대) 전길자 (이화여대) 전장수 (광주과기원) 조남정 (충북대) 최강열 (연세대) 최의주 (고려대) 최준호 (한국과학기술원) 허태린 (경북대) 황덕수 (서울대)

김도 한

구 현 숙

허 태 린

정 종 경

(광주과학기술원)

(연세대학교)

(연세대학교)

(경북대학교)

(서울대학교)

(성균관대학교)

2011년 한국분자·세포생물학회 정기학술대회

The 23rd Annual Meeting of the Korean Society for Molecular and Cellular Biology

- October 6-7, 2011, COEX, Seoul, Korea
- Seminar: Conference Center (3F), Grand Conference Hall (4F)
- Exhibition & Poster Presentation: Hall C1–C2 (3F)

I. Plenary Lectures

- Plenary Lecture 1. John Blenis, Ph.D.
 - (Harvard Medical School, USA)
- Plenary Lecture 2. Paul B. Fisher, M.Ph.D., Ph.D.
 - (Virginia Commonwealth University, USA)
- Plenary Lecture 3. Wendell A. Lim, Ph.D.
 - (University of California San Francisco, USA)
- Plenary Lecture 4. Eric N. Olson, Ph.D.
 - (University of Texas Southwestern Medical Center at Dallas, USA)
- II. Academic Research Award & Lecture
- III. Macrogen Scientist Award & Lecture
- IV. IIchun Memorial Lecture
- V. Symposia
 - Symposium 1. Cell Cycle & Chromosome Dynamics and Genetic Instability
 - Symposium 2. RNA-Expression and Function
 - Symposium 3. Light Signaling and Flowering
 - Symposium 4. Neurobiological Basis of Behaviors
 - Symposium 5. A Multidisciplinary Approach to the Study of the Functionality and Mechanism of Protein-DNA Interactions
 - Symposium 6. Signal Network in Disease
 - Symposium 7. Redox Modulation of Pro-Inflammatory and Anti-Inflammatory Signaling
 - Symposium 8. Cancer Biology (By the KSBMB)
 - Symposium 9. Bio-Molecular Imaging
 - Symposium 10. O-GlcNAc Biology
 - Symposium 11. Presynaptic Vesicular Traffickings
 - Symposium 12. Chromatin Remodeling and Gene Expression
 - Symposium 13. Mouse Phenogenomics
 - Symposium 14. Molecular and Cellular Mechanisms of Plant Development Plasticity
 - Symposium 15. Bioactive Lipid Signaling in Cancer and Inflammation
 - Symposium 16. Criminal DNA Database and Forensic Genetics
 - Symposium 17. Structural Biology of Post-Translational Modification Proteins
 - Symposium 18. Autophagy
 - Symposium 19. Stem Cells: Biology and Therapeutic Applications
 - Symposium 20. Systems Biology for Plants
 - Symposium 21. The Advancement of Innate Immunity: Pattern-Recognition Receptors and Their Actions
 - Symposium 22. Bone and Cartilage Biology
 - Symposium 23. Convergence Sciences and Mucosal Immune System
- VI. Research Ethics Symposium
- VII. Poster Presentation
- VIII. Exhibition
- Host: Korean Society for Molecular and Cellular Biology
- Sponsor: Korean Federation of Science and Technology Societies

Contents

Invitation	4
General Information	6
Schedule	7
Venue Guide	8
Scientific Lectures	
Plenary Lectures	9
Symposia	13
Awards	37
Abstract Submission	38
Poster Presentation	40
Guideline for Poster Preparation	41
Exhibition	42
Company Workshop	48
Direction	50



초대의 글 I INVITATION LETTER

한국분자 · 세포생물학회 회 장 최 양 도

회원 여러분 안녕하십니까? 우리나라 생명과학계의 가장 큰 행사인 2011년도 한국분자·세포생물학회 정기학 술대회가 오는 10월 6일과 7일 이틀 동안 서울 삼성동 코엑스에서 개최됩니다. 생명과학의 지속적인 발전은 우리에게 끊임 없이 새로운 지식을 받아들이고 서로의 연구 결과를 공유하도록 요구하고 있는 바, 한국분자·세포생물학회의 정기학술대회는 회원 여러분이 최신의 생명과학 지식을 접하고 또한 자신의 연구 결과를 발표하고 토론하며 서로의 정보를 교환하는 자리를 마련하여, 우리나라 생명과학이 세계의 다른 나라와 어깨를 나란히 할 수 있도록 발전 하는데 견인차 역할을 해오고 있습니다.

올해 정기학술대회에서는 Dr. John Blenis (Harvard Medical School, USA), Dr. Paul B. Fisher (Virginia Commonwealth University, USA), Dr. Wendell A. Lim (University of California San Francisco, USA), Dr. Eric N. Olson (University of Texas Southwestern Medical Center at Dallas, USA)를 기조 강연자로 초청하였으며, 생명과학 전 분야에 걸쳐 23개 주제에 따른 심포지엄에 국내외 전문가 170 여 명이 최신 연구 업적을 발표하고, 국내 생명과학 관련 학회에서는 유일하게 연구윤리 심포지엄도 개최합니다.

정기학술대회에서는 우리 학회의 생명과학상 및 M&C우수논문상을 비롯하여 마크로젠 과학자상, 일천기념강좌와 그리고 대학원생을 위한 바이오니아 차세대 연구자상, 우수박사학위논문상, 우수포스터상 등 시상이 예정되어 있습니다. 또한 160여 개의 부스에서 생명과학 관련 업체가 전시에 참여할 예정이어서, 연구자 여러분에게 시약과 기기에 대한 풍부한 정보도 제공할 것입니다.

따라서 올해도 정기학술대회가 최신의 연구정보를 서로 교환하는 풍성한 결실의 장이 될 수 있도록 회원 여러분의 적극적 참여를 부탁 드립니다.

끝으로 성공적인 학술대회 조직을 위해 노력해 주신 학술위원장을 비롯한 학술운영위원, 그리고 심포지엄 오가나이저들께 감사드리며, 본 학술대회를 후원해 주신 한국과학기술단체총연합회 및 전시 참여 업체에도 감사드립니다.

한국분자·세포생물학회 회장 최 양 도

Umgub Chm

Dear Colleagues,

The 2011 Annual Meeting of the Korean Society for Molecular and Celluar Biology (KSMCB), the biggest event in the bioscience community in the Republic of Korea, will be held at the COEX in Seoul, for two days from October 6 through 7, 2011. The development of bioscience requires us to learn new knowledge and share results restlessly. Our annual meeting have played a key role by providing opportunities to present, discuss and exchange the latest results and information and thus contribute to improve the level of Korean bioscience.

At the forthcoming conference, Dr. John Blenis (Harvard Medical School, USA), Dr. Paul B. Fisher (Virginia Commonwealth University, USA), Dr. Wendell A. Lim (University of California San Francisco, USA), Dr. Eric N. Olson (University of Texas Southwestern Medical Center at Dallas, USA) will deliver speeches as key-note speakers and more than 170 of domestic and foreign experts will release their recent results in the symposia on 23 themes throughout bioscience. In particular, a symposium on research ethics will be held, which is a unique case in the academic conferences of bioscience-related societies in the Republic of Korea.

There will be also an awarding ceremony for the Academic Research Award and Molecules and Cells Award of KSMCB, the Macrogen Scientist Award, the Ilchun Memorial Lecture, the Bioneer Next Generation Research Award, the Excellent Doctoral Thesis Award, and the Excellent Poster Award, etc. In addition, companies and industries in the field of bioscience will participate in exhibition, providing you with the recent information on research materials, tools and equipments.

I hope you would attend this conference actively, thus enjoy this opportunity by exchanging the up-todate research information. I hope this conference would be a fruitful and memorable one to you.

I would like to take this oppontunity to express my heartfelt thanks to all the members of Academic Program Committee and Symposium Organizers as well as the Korean Federation of Science and Technology Societies (KOFST) and participating companies for the finalcial support.

Sincerely yours,

Yang Do Choi, Ph.D.

Ungublem

President of the Korean Society for Molecular and Cellular Biology

아 내 General Information

■ 참가 등록비 안내 (Registration Information)

=101	7H	참가 등록비			
외현	구분	사전등 록 비	현장등록비		
 회 원	정회원/일반회원	100,000원	120,000원		
A C	학생회원	40,000원	50,000원		
비회원	교수급/일반	140,000원	200,000원		
비죄면	대학원생	60,000원	70,000원		

- 1) 등록비에는 학술대회 강연 및 기기전시장, 리셉션 참가비와 초록집이 포함되어 있습니다.
- 2) 회원 등록비로 할인을 받기 위해서는 2011년도 연회비를 함께 납부하셔야 합니다.

diffine.

- 3) 회원에 한하여 우수포스터상 응모가 가능합니다. 비회원에게는 응모 자격이 없습니다. 회원인 경우, 우수포스터상 응모를 원하시면 초록 작성 시 응모 여부에 체크하셔야 합니다.
- 4) 결제 방법
 - 신용카드 결제사전등록 시 온라인 상에서 카드 결제 가능합니다.
 - 무통장 입금

사전등록 시 무통장입금으로 결제하기를 선택하신 후 무통장입금 해주시면 됩니다. 단, 무통장 입금 시는 등록자 성함으로 입금해 주셔야 확인이 가능합니다. 부득이하게 다른 이름으로 입금하신 경우는 학회로 알려주셔야 납부 확인이 가능합니다.

- · 무통장입금 계좌 : 국민은행 454101-01-129531 (사)한국분자 · 세포생물학회
- 영수증 출력

등록비 영수증은 정기학술대회 홈페이지 → "사전등록 확인"에서 등록자가 직접 다운로드 가능하며, 학술대회 당일 행사장에서도 발급 가능합니다.

■ Key Dates

온라인 초록 등록 기간: 7월 18일(월) ~ 9월 15일(목) (선착순 1,200편으로 마감합니다.) 온라인 사전 등록 기간: 7월 18일(월) ~ 9월 15일(목) 학회 각종 시상 후보자 추천 마감일: 6월 7일(화) ~ 8월 19일(금)

■ 등록처 및 문의

온라인 등록 사이트: http://www.ksmcb.or.kr

Tel: 02-568-4490, 4544; E-mail: home@ksmcb.or.kr

Time Table of the 23rd Annual Meeting of the KSMCB

Thursday, October 6, 2011							
Place Room 401 Room 402		Room 307	Room 308	Room 317	Room 318	Hall C1 - C2 (3F) Poster/Exhibition	
08:00 - 09:00							
09:00 - 11:30	SY01 Cell Cycle& RNA-Expi Chromosome Dynamics and Genetic Instability		SY03 Light Signaling and Flowering	SY04 Neurobiological Basis of Behaviors	SY05 A Multidisciplinary Approach to the Study of the Functionality and Mechanism of Protein-DNA Interactions SY06 Signal Network in Disease		
11:30 - 12:20	Council Meet		Research Ethics Sym. *	Workshop 1	Workshop 2	Workshop 3	
12:20 - 13:20			Break & Pos	ster Viewing			Poster Presentation I 09:20 - 18:00
13:20 - 14:00		Acade	emic Research Aw	ards Lecture (Rn	n. 401)		
14:00 - 14:40	Plenary Lec	tures PL 1. J	ohn Blenis (Harva	ard Medical Scho	ol, USA)		
14:40 - 15:20	(Rm. 40	1) PL 2. P	aul B. Fisher (Virg	(Duty: 12:20-13:20)			
15:20 - 15:30	:20 - 15:30 Break						
15:30 - 18:00	SY07 Redox Modulation of Pro- Inflammatory and Anti-inflammatory Signaling		SY08 Cancer Biology	SY09 Bio-Molecular Imaging	SY10 O-GlcNAc Biology	SY11 Presynaptic Vesicular Traffickings	
18:00 - 19:00	Reception (Rm. 402)						

[★] Korean

	Friday, October 7, 2011							
Place Time	Room 401	Room 402	Room 307	Room 308	Room 317	Room 318	Hall C1 - C2 (3F) Poster/Exhibition	
08:00 - 09:00								
09:00 - 11:30	SY12 Chromatin Remodeling and Gene Expression	SY13 Mouse Phenogenomics	SY14 Molecular and Cellular Mechanisms of Plant Development Plasticity	SY15 Bioactive Lipid Signaling in Cancer and Inflammation	SY16 Criminal DNA Database and Forensic Genetics	SY17 Structural Biology of Post-Translational Modification Proteins		
11:30 - 12:00		Macrogen Scientist Award (Rm. 401)						
12:00 - 12:50	KSMCB GA Women's Bioscience Forum *		Workshop 4	Workshop 5	Workshop 6	Workshop 7		
12:50 - 13:30	3:30 Break & Poster Viewing							
13:30 - 14:00		ı	Ichun Memorial	Lecture (Rm. 401)			Presentation	
14:00 - 14:40	Plenary Lec	II 09:20 - 18:00						
14:40 - 15:20	(Rm. 40	(Duty: 12:50-13:30)						
15:20 - 15:30	Break							
15:30 - 18:00	SY18 Autophagy	SY19 Stem Cells: Biology and Therapeutic Applications	SY20 Systems Biology for Plants	SY21 The Advancement of Innate Immunity: Pattern-Recognition Receptors and Their Actions	SY22 Bone and Cartilage Biology	SY23 Convergence Sciences and Mucosal Immune System		
18:00 - 18:30		Excelle	ent Poster Awards &	Closing Remark (Ri	m. 401)	•		

학술대회장 안내

Venue Guide

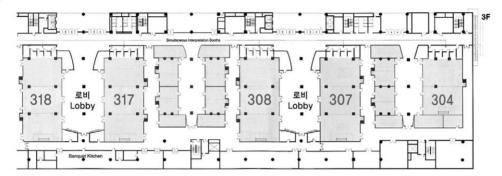
3F 컨:

컨퍼런스센터

Conference Center

- ▶위치 : 전시장 3층
- ▶행사내용: 각종 심포지움, 제품설명회, 기업워크샵

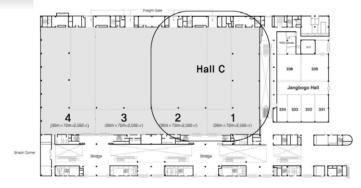
Sent Hills



3F

Hall C1-C2

- ▶위치 : 전시장 3층
- ▶행사내용 : 등록처, 기기전시회, 포스터발표

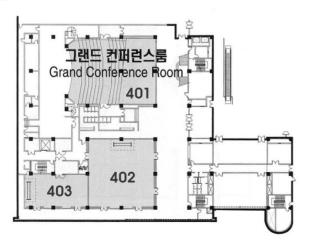


4F

그랜드 컨퍼런스룸

Grand Conference Room

- ▶위치 : 전시장 4층
- ▶행사내용: 기조강연, 시상식 및 기념강연, 각종 심포지움, 정기총회, 리셉션, 폐회식



Plenary Lecture



14:00-14:40, Thursday, October 6, 2011 (Grand Conference Room 401)

Organizer & Chair: Jongkyeong Chung, Ph.D. (School of Biological Sciences, Seoul National University, Korea)

John Blenis, Ph.D.

Department of Cell Biology, Harvard Medical School, USA

"Defining the Signaling Landscape Upstream and Downstream of mTOR

Complex 1"

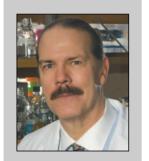
John Blenis, Ph.D., is in the Department of Cell Biology at Harvard Medical School since 1989. He was promoted to Professor in 1996 and became a member of the WCI-KRIBB program in 2010. Prior to joining Harvard Medical School, Dr. Blenis trained in the laboratory of Professor Raymond L. Erikson at Harvard University.

The Blenis laboratory utilizes molecular, cell biological and biochemical approaches to understand how altered cellular signaling and metabolism contributes to the tumor cell phenotype. Current efforts are designed to understand how PI3-kinase, Ras and mTOR signal transduction systems are regulated and affect normal and disease-related modulation of cellular metabolism, protein synthesis, cell survival and cell death, migration and invasion, and cell growth and proliferation. Ultimately, this knowledge will be used to identify pathway specific small molecule inhibitors, develop biomarker assays for disease detection, and produce strategies for personalized therapeutic approaches.

Dr. Blenis is a leader in defining how Ras and PI3-kinase proto-oncoproteins regulate cellular signaling in normal and cancer cells. Dr. Blenis was among the first to demonstrate that Ras mediated signaling from tyrosine kinases to the serine/threonine kinases Raf, ERK and RSK. He showed that activated ERK and RSK rapidly accumulate in the nucleus, revealing how cell surface signals reach the nucleus to alter gene expression. He then demonstrated how several induced gene products act as molecular sensors converting subtle differences in ERK and RSK signals into specific biological responses. In parallel studies, Dr. Blenis discovered that S6 kinase acts downstream of phosphatidylinositols modified by PI3-kinase. He also found that S6 kinase activation is inhibited by the natural product rapamycin, now in clinical trials for various cancers. These data established links between PI3-kinase, mTOR and S6 kinase, and Dr. Blenis is a leader in defining this complex signaling system. Recently, Dr. Blenis illuminated complex mechanisms by which mTOR and S6 kinase regulate protein synthesis and cell growth. Many of these pathway components are now targets for drug development.

Dr. Blenis has published over 140 peer-reviewed articles and is the recipient of several awards including Research Award from the American Cancer Society, Established Investigator Award from the American Heart Association, John A. Boezi Memorial Alumnus Award from Michigan State University, the NIH/NCI MERIT award for his work on cellular transformation by the Ras-ERK/MAP kinase pathway, and the LAM Foundation Established Investigator Award.

Plenary Lecture |



14:40-15:20, Thursday, October 6, 2011 (Grand Conference Room 401)

Organizer & Chair: Dongchul Kang, Ph.D. (Ilsong Institute of Life Science, Hallym University, Korea)

Paul B. Fisher, M.Ph., Ph.D.

- Citylin

Department of Human and Molecular Genetics, Virginia Commonwealth University, School of Medicine, USA

"Cancer-Specific Promoters: Unique Opportunities for Therapeutics, Diagnostics and Drug Discovery"

Paul B. Fisher, M.Ph., Ph.D., is Professor and Chair of the Department of Human & Molecular Genetics, Founding Director, VCU Institute of Molecular Medicine and holder of

the Thelma Newmeyer Corman Chair in Cancer Research in the VCU Massey Cancer Center, Virginia Commonwealth University, School of Medicine, Richmond, Virginia, Prior to this position he was Professor of Clinical Pathology, Director of Neuro-Oncology Research and the Michael and Stella Chernow Urological Cancer Research Scientist in Columbia University, College of Physicians and Surgeons in New York. Dr. Fisher's research focuses on comprehending the molecular and biochemical basis of cancer progression to metastasis and defining improved methods for cancer detection, chemoprevention and therapy. His research also addresses mechanisms of neurodegeneration and infectious diseases. Dr. Fisher pioneered subtraction hybridization in the 1990's to identify and clone novel genes involved in important physiological processes. Using this approach his research group was the first to clone: the cyclin-dependent kinase inhibitor p21 as melanoma differentiation-associated gene-6 (mda-6); the novel IL-10 gene family member mda-7/IL-24 that selectively induces apoptosis or toxic autophagy uniquely in multiple cancers without affecting normal cells; mda-5, a patent receptor for double-stranded RNA that is a key component of the innate immune process; human polynucleotide phosphorylase, a RNA degrading enzyme targeting specific RNAs such as c-myc for destruction and induces cellular senescence; astrocyte elevated gene-1 (AEG-1) a unique gene that is upregulated in multiple cancers (including those of brain, breast, esophagus, prostate and liver) and is a potential therapeutic target; and genes upregulated or downregulated during cancer progression. One initially novel gene of particular importance cloned by this approach, mda-7/IL-24 has been tested in vivo in patients and been found to be safe and display significant clinical activity when administered intratumorally in diverse advanced cancers. His laboratory has isolated several novel gene promoters, including progression elevated gene-3 promoter (PEG-Prom), and demonstrated expression at elevated levels in virtually all cancers of both rodent and human origins. The PEG-Prom was used to create therapeutic viruses that replicate only in cancer cells and produce mda-7/IL-24 (Cancer Terminator Virus) and to image primary tumors and metastases in vivo in animals. The PEG-Prom is also being used as a small molecule-screening platform to identify molecular probes for interrogating known and novel targets mediating cellular transformation, tumorigenesis and metastasis. Dr. Fisher is among the unique top 5% of NIH funded investigators over the past 30 years. He is currently PI on a multi-institutional program project grant, three R01 grants, an IRACDA grant, an R03 grant and private foundation grants from the National Foundation for Cancer Research and the Samuel Waxman Cancer Research Foundation. Dr. Fisher has published over 400 primary papers and reviews including articles in Cell, Science and Nature, served on numerous NIH study sections and government and private grant review panels, and has over 50 issued patents. He is on 18 Editorial Boards including Cancer Research (Breaking Advances Editor), Molecular Therapy, and Cancer Biology & Therapy and is Co-Editor in Chief of Advances in Cancer Research. He was the founder of GenQuest a functional genomics company that merged with Corixa Corporation was traded on NASDAQ and was acquired by Glaxo-SmithKline.

Plenary Lecture |



14:00-14:40, Friday, October 7, 2011 (Grand Conference Room 401)

Organizer & Chair: Sang-Hyun Park, Ph.D. (Department of Biological Sciences, Seoul National University, Korea)

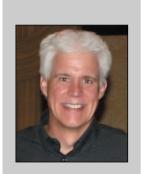
Wendell A. Lim, Ph.D.
University of California, San Francisco, USA
"Understanding the Modular Logic of Cell Signaling Systems"

Dr. Wendell Lim is Professor of Cellular and Molecular Pharmacology at the University of California, San Francisco and an investigator of the Howard Hughes Medical Institute. He received his A.B. in chemistry from Harvard University and his Ph.D. in biochemistry and biophysics from the Massachusetts Institute of Technology.

He a pioneer in the field of Synthetic Biology, where scientists create new or precisely modified systems by rearranging biological components. Dr. Lim believes that cell systems rely on modules, the biological equivalent of electronic components. One way to understand how "natural" systems work is to take these components apart, rearranging, rewiring, and soldering them into °∞nonnatural°± circuits. It's a way of "letting the organism tell you what's important in order to be able to perform a certain function," Dr. Lim says. In numerous landmark papers published in Science, Nature and Cell, he has shown that cell signaling pathways are actually built from modular components which can be artificially rewired to reprogram signaling systems. These biological modules are reused in different cells and organisms to accomplish various tasks. An example of one such module is a scaffold protein that can simultaneously bind to many other proteins. Dr. Lim describes these molecules as the wiring that promotes efficient communication with the right partners and prevents crosstalk with the wrong ones. But little is known about these critical nodes, he notes, so his lab is trying to figure out how they direct the flow of information. One way to tease out the contributions of each of biology's modular components, he says, is to build cell signaling systems from scratch. Dr. Lim believes that by linking these components into functional systems, this noble engineering approach offers a way to understand how the pieces fit and functions together.

Currently, he is Director of the NIH Nanomedicine Development Center and Deputy Director of the National Science Foundation Synthetic Biology Engineering Research Center.

Plenary Lecture IV



14:40-15:20, Firday, October 7, 2011 (Grand Conference Room 401)

Will.

Organizer & Chair: Sung Soo Kim, M.D., Ph.D.

(Kyung Hee University School of Medicine, Korea)

Eric N. Olson, Ph.D.
University of Texas Southwestern Medical Center at Dallas, USA
"Heart Making and Heart Breaking: The Molecular Circuitry of Heart Development,
Disease and Regeneration"

Eric Olson has dedicated his career to deciphering the mechanisms that control muscle gene regulation and development. His most recent work has focused on the genetic pathways responsible for congenital and acquired cardiovascular disease. Dr. Olson

grew up in North Carolina where he attended Wake Forest University and received a B.A. in Chemistry and Biology in 1977, a Ph.D. in Biochemistry in 1981 and an honorary doctorate in 2003. After postdoctoral training with Luis Glaser at Washington University School of Medicine, he joined the Department of Biochemistry and Molecular Biology at The M. D. Anderson Cancer Center in 1984 and became Professor and Chairman in 1991. In 1995, he founded the Department of Molecular Biology at The University of Texas Southwestern Medical Center at Dallas. Dr. Olson's honors include the Basic Research Prize, the Founding Distinguished Scientist Award, and the Research Achievement Award from the American Heart Association, the Pasarow Medical Research Award in Cardiovascular Disease, the Gill Heart Institute Award, the Lucian Award for Research in Cardiovascular Disease, the Outstanding Investigator Award from the International Society for Heart Research, and the Pollin Prize for Lifetime Contributions to Pediatric Research. In 2009, the Institut de France and French Academy of Science awarded Dr. Olson the Fondation Lefoulon-Delalande Grand Prize, considered the largest international award in cardiovascular medicine. He is a member of the American Academy of Arts and Sciences, the National Academy of Sciences, and its Institute of Medicine. In his spare time, Eric Olson plays guitar and harmonica with The Transactivators, a rock band inspired by the Texas icon, Willie Nelson, who created the Professorship that Olson holds.

Symposia

Symposium 1

Cell Cycle & Chromosome Dynamics and Genetic Instability

09:00-11:20, Thursday, October 6, 2011 (Grand Conference Room 401)

Organizer & Chair: Chang-Woo Lee, Ph.D. (Sungkyunkwan University School of Medicine, Korea)

SY01-1

09:00-09:40 (40 min)
The Spindle Checkpoint
Hongtao Yu, Ph.D.

Department of Pharmacology, Howard Hughes Medical Institute, UT Southwestern Medical Center, USA



SY01-2

09:40-10:05 (25 min)

Role of Mis18alpha in Centromere Formation Keun II Kim, Ph.D.

Department of Biological Sciences, Sookmyung Women's University, Korea



SY01-3

10:05-10:30 (25 min)

Phosphorylation-Mediated Stability of Receptor Associated Protein 80 Regulates Mitotic Progression Hongtae Kim, Ph.D.

Department of Biological Science, Sungkyunkwan University, Korea



SY01-4

10:30-10:55 (25 min)

Role of INO80 Chromatin Remodeling Complex in Chromosome Stability Jongbum Kwon, Ph.D.

Department of Life Science, Ewha Womans University, Korea



SY01-5

10:55-11:20 (25 min)

Uncovering DNA Damage Resistance Mechanisms in Developing Mouse Oocytes Eun-Kyung Suh, Ph.D.

Department of Life Sciences, Ewha Womans University, Korea



Session Introduction

Genetic instability is a key process in the development of naturally occurring cancer. The pathogenesis of which is also characterized by specific genetic and epigenetic changes that can result in enhanced proliferation and defective apoptosis. Recently, many studies showed that the genetic faithful segregation of replicated chromosomes during mitosis is central to maintenance of genetic stability. Therefore, this section includes exciting novel roles of various signaling pathways during mitosis in tumor cell biology, viral oncogenesis, mitotic checkpoint signaling and embryonic stem cell biology. We expect this symposium will lead you to the better understanding of molecular signaling pathway on the genetic instability in mitosis and cancer development.

RNA-Expression and Function

William .

09:00-11:30, Thursday, October 6, 2011 (Grand Conference Room 402)

Organizers & Chairs: Sunjoo Jeong, Ph.D. (Department of Molecular Biology, Brain Korea 21 Graduate Program for RNA Biology, Dankook University, Korea)

Haihong Shen, Ph.D. (School of Life Sciences, Gwangju Institute of Science and Technology, Korea)

SY02-1

09:00-09:10 (10 min)

Role of b-Catenin in RNA Metabolism

Sunjoo Jeong, Ph.D.

Department of Molecular Biology, Brain Korea 21 Graduate Program for RNA Biology,

Dankook University, Korea

SY02-2

09:10-09:35 (25 min)

Mechanism of 5'TOP mRNA Translational Co-Regulation Jens Lykke-Andersen, Ph.D.

Division of Biological Sciences, University of Carlifornia, USA

SY02-3

09:35-09:55 (20 min)

Mechanism of Nonself RNA Sensing by RIG-I Helicase Dong-Eun Kim, Ph.D.

Department of Bioscience and Biotechnology, Konkuk University, Korea

SY02-4

09:55-10:10 (15 min)

Ars2 Links RNA Metabolism to Cell Proliferation Jeongsik Yong, Ph.D.

Department of Biochemistry, Molecular Biology and Biophysics at the University of Minnesota College of Biological Sciences, USA

SV02_5

10:10-10:30 (20 min)

Determinants of MicroRNA Targeting

Daehyun Baek, Ph.D.

School of Biological Sciences, Seoul National University, Korea

SY02-6

10:30-10:55 (25 min)

How Does Dicer Measure 22nt?

V. Narry Kim. Ph.D.

School of Biological Sciences, Seoul National University, Korea

SY02-7

10:55-11:20 (25 min)

PTB Plays a Critical Role in Cell Fate Determination by Regulating MicroRNA Targeting in the Human Genome

Xiang-Dong Fu, Ph.D.

Department of Cellular & Molecular Medicine at the University of California San Diego, USA

SY02-8

11:20-11:30 (10 min)

RNA in Pre-mRNA Splicing Haihong Shen, Ph.D.

School of Life Sciences, Gwangju Institute of Science and Technology, Korea

Session Introduction

Since RNA plays a key role in gene expression, post-transcriptional regulations of RNA are essential for cell physiology. Post-transcriptional RNA metabolism includes various steps, such as RNA splicing, stability and translational regulation. Alternative splicing and NMD (Non-sense mediated mRNA decay) are related with almost every biological activities including signal transduction and energy tranport, so their defects causes various human diseases. Recent discovery on regulatory RNAs, such as miRNA and siRNA, propose their roles in fine tuning of gene expression, thus it provides an insight for the functional utilization of RNA. Distinguished RNA biologists are gathered for our session, so as to deliver novel concepts of various RNAs in the cells.

















Light Signaling and Flowering

09:00-11:30, Thursday, October 6, 2011 (Hall 307)

Organizer & Chair: Giltsu Choi, Ph.D. (Department of Biological Sciences, Korea Advanced Institute of Science and Technology, Korea)

SY03-1

09:00-09:30 (30 min)

Light Signaling to Phototactic Movement of the Oxygenic Photosynthetic Bacterium Synechocystis sp. PCC 6803

Youn-II Park, Ph.D.

Department of Biological Science and Graduate School of Analytical Science and Technology, Chungnam National University, Korea

SY03-2

09:30-09:50 (20 min)

Role of PLY2, a Novel Genetic Locus during Photomorphogenesis in *Arabidopsis thaliana*Moon-Soo Soh, Ph.D.

Department of Molecular Biology, College of Life Science, Sejong University, Korea



SY03-3

09:50-10:10 (20 min)

Cytosolic Phytochrome Signaling Giltsu Choi, Ph.D.

Department of Biological Sciences, Korea Advanced Institute of Science and Technology, Korea

10:10-10:20 (10 min) Break



10:20-10:50 (30 min)

Photoperiodic Flowering Controlled by Circadian Clock and Light/Dark Cycles Tsuyoshi Mizoguchi, Ph.D.

Institute of Biological Sciences, University of Tsukuba, Japan



SY03-5

10:50-11:10 (20 min)

Regulation of FT Expression by the miR156-SPL3 Module Ji Hoon Ahn, Ph.D.

Division of Life Sciences, Korea University, Korea



SY03-6

11:10-11:30 (20 min)

Molecular Genetic Mechanism in the Measurement of Daylengths for Photoperiodic Flowering Nam-Chon Paek, Ph.D.

Department of Plant Science, Seoul National University, Korea



Session Introduction

Light is ubiquitous, yet, in different areas, its characteristics vary dramatically in forms of different wavelengths, intensities, directions, and duration. For their very survival, phototrophs including cyanobacteria and plants must be able to recognize these varying features of their local light source and should be able to adapt their physiology and development according to them. A few photoreceptors systems including cyrptochrome—, phytochrome—, and phototropin—based systems have been shown to be responsible for the perception external light conditions in the phototrophs. Once perceived, light information is then converted to biological signals to regulate developmental processes such as flowering in plants. Many pieces of the puzzle that illustrates this complex relationship between light perception and flowering have been found. Yet, missing pieces, either obvious or obscure, are still numerous and make it difficult to grasp the whole picture of the puzzle. At the symposium, a few recently identified missing pieces of this puzzle will be presented.

Neurobiological Basis of Behaviors

09:00-11:30, Thursday, October 6, 2011 (Hall 308)

Organizer & Chair: Ja-Hyun Baik, Ph.D. (Molecular Neurobiology Laboratory, College of Life Sciences and Biotechnology, Korea University, Korea)

SY04-1

09:00-09:30 (30 min) Social Behaviors in Mice Daejong Jeon, Ph.D.

Department of Bio and Brain Engineering, Korea Advanced Institute of Science and Technology, Korea



SY04-2

09:30-10:00 (30 min)

Dopamine D2 Receptor in Stress and Drug-Addiction Ja-Hyun Baik, Ph.D.

Will.

Molecular Neurobiology Laboratory, College of Life Sciences and Biotechnology, Korea University, Korea



SY04-3

10:00-10:30 (30 min)

Association of GIT1 with ADHD Eunjoon Kim, Ph.D.

Department of Biological Sciences, Korea Advanced Institute of Science and Technology, Korea



SY04-4

10:30-11:00 (30 min)

Neurobiological Analysis of Maternally Stressed Mouse Kyungjin Kim, Ph.D.

Department of Biological Sciences, Seoul National University, Korea



SY04-5

11:00-11:30 (30 min)

Optogenetics Reveals Physiological Role of Orexin Neurons in Sleep/Wakefulness Regulation Akihiro Yamanaka, Ph.D.

National Institute of Physiological Sciences, Japan



Session Introduction

Understanding the ways in which nervous systems are adapted to different stimuli and environment that contribute to expression of complex behaviors is one of challenging concerns in Neurobiology. The goal of this symposium is to review progress towards an integrated understanding of molecular, cellular and neuronal basis of behaviors. Speakers in this symposium will present recent findings in studies important for understanding behaviors that include aggression, addiction, stress response, attention, and also sleep/wake cycle related behaviors. Topics covered will provide diverse neurobiological approaches to delineate the expression of behaviors from molecules and cells to circuits, behavior, obtained by anatomical, electrophysiological and biochemical and molecular techniques using genetically engineered model animals including the latest cutting-edge tools in optogenetics.

A Multidisciplinary Approach to the Study of the Functionality and Mechanism of Protein-DNA Interactions

09:00-11:30, Thursday, October 6, 2011 (Hall 317)

Organizer & Chair: Kyeong Kyu Kim, Ph.D. (Department of Molecular Cell Biology, Sungkyunkwan University School of Medicine, Korea)

SY05-1

09:00-09:10 (10 min)

DNA Binding Mode of DAI, a Cytosolic DNA Sensor in Innate Immune System Kyeong Kyu Kim, Ph.D.

Department of Molecular Cell Biology, Sungkyunkwan University School of Medicine, Korea

SY05-2

09:10-09:30 (20 min)

Cooperativity and Specificity of Cys2His2 Zinc Finger Protein-DNA Interactions: A Molecular Dynamics Simulation Study

Chaok Seok, Ph.D.

Department of Chemistry, Seoul National University, Korea

SY05-3

09:30-09:50 (20 min)

Coordination of DNA Bending, Cleavage, and Gate Opening by Human Topoisomerase Ilalpha

Sung Chul Hohng, Ph.D.

Department of Biophysics & Chemical Biology, Department of Physics,

Seoul National University, Korea

SY05-4

09:50-10:10 (20 min)

Modular Structure of DEMETER 5-Methylcytosine Glycosylase Required for Active DNA Demethylation

Jin Hoe Huh, Ph.D.

Department of Plant Science, Seoul National University, Korea

SY05-5

10:10-10:30 (20 min)

Regulation of DNA Replication and Repair Proteins through Interaction with SUMO and Ubiquitin Modification of PCNA

Byong-Seok Choi, Ph.D.

Department of Chemistry, Korea Advanced Institute of Science and Technology, Korea



10:30-11:00 (30 min)

Structural Studies of Protein? DNA Interactions in Solution by

Small-Angle Scattering

Dmitri Svergun, Ph.D.

European Molecular Biology Laboratory, Hamburg Outstation, Germany



11:00-11:30 (30 min)

Direct Observation of Enzymatic Reactions in a DNA Origami Frame Hiroshi Sugiyama, Ph.D.

Department of Chemistry, Graduate School of Science, Principle Investigator, Institute for Integrated Cell-Material Sciences(iCeMS), Kyoto University, Japan



Protein-DNA interaction regulates the most critical cellular processes such as epigenetics, DNA replication and gene transcription, and has been one of classical topics in molecular biology. The recent progress in methods for studying protein-DNA interaction enables us to investigate new aspects of DNA binding proteins. This session will introduce the state-of-the-art biochemical and biophysical methods that can visualize the binding mode of protein-DNA and its dynamic property. Multidisciplinary approaches for studying protein-DNA interaction will open a new possibility for comprehensive understanding of DNA-binding proteins as well as the nucleic acid metabolism.















Signal Network in Disease

Giffin

09:00-11:30, Thursday, October 6, 2011 (Hall 318)

Organizer & Chair: Pann-Ghill Suh, D.V.M., Ph.D. (School of Nano-Bioscience and Chemical Engineering, Ulsan National Institute of Science and Technology, Korea)

SY06-1

09:00-09:30 (30 min)

TonEBP/NFAT5 Transcription Factor in Inflammatory Diseases Hyug Moo Kwon, Ph.D.

School of Nano-Bioscience and Chemical Engineering, Ulsan National Institute of Science and Technology, Korea



SY06-2

09:30-10:00 (30 min)

A New Signal Cascade in Kidney Regulating Blood Pressure and Ion Homeostasis Shinichi Uchida, M.D., Ph.D.

Department of Nephrology, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Japan



SY06-3

10:00-10:30 (30 min)

Identification of Novel Mutations in Non-Small Cell Lung Carcinoma Jaesang Kim, Ph.D.

Department of Life Science, Ewha Womans University, Korea



SY06-4

10:30-11:00 (30 min)

Stress Signaling in Cell Death, Inflammation, and Disease Hidenori Ichijo, D.D.S., Ph.D.

Laboratory of Cell Signaling, Graduate School of Pharmaceutical Sciences, The University of Tokyo, Japan



SY06-5

11:00-11:30 (30 min)

Signaling Pathways in Vascular Development and Disease Young-Guen Kwon, Ph.D.

Department of Systems Biology, Yonsei University, Korea



Session Introduction

The molecular network need to sense multiple signals, robustly process an appropriate cellular response and orchestrate the regulation of a diverse bio-molecules to execute these response. In multi-cellular organisms, a many kinds of signal transduction participate in the communication to coordinate the behavior of individual cells, eventually and to support the function of the organism as a whole. Dysfunctions in this communication system has been directly associated with multiple pathological processes such as diabetes, heart disease, autoimmunity and cancers. As finding a puzzle, elucidation of signal transduction pathways in pathological diseases will be helpful for treatments and drug development. Therefore, with studies based on the understanding of signal transduction system in the cellular level, the life of human will be getting better in the near future. This session will address recent discovery and progress to understanding novel molecular and cellular mechanisms in human diseases.

Redox Modulation of Pro-Inflammatory and Anti-Inflammatory Signaling

15:30-18:00, Thursday, October 6, 2011 (Grand Conference Room 401)

Organizer & Chair: Young-Joon Surh, Ph.D. (College of Pharmacy, Seoul National University, Korea)

SY07-1

15:30-16:00 (30 min) To be announced



SY07-2

16:00-16:30 (30 min)

A20: a Magic Bullet or a Double-Edged Sword for Diseases? Byung-Hyun Park, M.D., Ph.D.

Department of Biochemistry and Diabetes Research Center, Chonbuk National University Medical School, Korea



SY07-3

16:30-17:00 (30 min)

Cellular Signaling Mediated by Nitrated Cyclic Nucleotides and Its Regulation by Hydrogen Sulfide Takaaki Akaike, Ph.D.

Department of Microbiology, Graduate School of Medical Sciences, Kumamoto University, Japan



SY07-4

17:00-17:30 (30 min)

Novel Lipid Mediators with Anti-Inflammatory and Pro-Resolving Activities Young-Joon Surh, Ph.D.

College of Pharmacy, Seoul National University, Korea



SYU7-5

17:30-18:00 (30 min)

Roles of ROS in Proinflammatory Responses in Adipose Tissue Jae Bum Kim, Ph.D.

School of Biological Sciences, Institute of Molecular Biology and Genetics, Seoul National University, Korea



Session Introduction

The implication of inflammatory cell/tissue damage in pathophysiology of human metabolic disorders is under intense investigation both at the research level and in clinical practice. Numerous studies have been reported with the global biochemical profiling technologies, such as DNA microarray, proteomics, metabolomics, lipidomics, transcriptomics, etc., to identify and characterize a series of critical molecules/changes in the inflammatory signaling. It is by gaining this type of mechanistic understanding of a disease that researchers will unlock the keys to discovering new diagnostics and therapeutic strategies for the management of inflammation-associated metabolic disorders. One of the key molecules involved in mediating pro-inflammatory signaling is NF-xB. Accumulating data support the cross-talk between NF-xB and other redox-sensitive transcription factors, such as nuclear factor E2-related factor-2 (Nrf2) that activates antioxidant and anti-inflammatory signaling. This symposium will highlight the recent advances in redox biochemistry in the context of cellular adaptive response to inflammatory stress.

By the Korean Society for Biochemistry and Molecular Biology

Symposium 8

Cancer Biology

655

15:30-18:00, Thursday, October 6, 2011 (Hall 307)

Organizers & Chairs: Han-Woong Lee, Ph.D. (College of Life Science and Biotechnology, Yonsei University, Korea) Kyung-Hee Chun, Ph.D. (National Cancer Center, Korea)

SY08-1

15:30-16:00 (30 min)

FoxOs in Cancer and Stem Cells Jihye Paik, Ph.D.

Department of Pathology and Laboratory Medicine, Weill Cornell Medical College, USA



SY08-2 (Short Talk) 16:00-16:15 (15 min)

To be selected from poster abstracts



SY08-3

16:15-16:40 (25 min)

Insulin-like Growth Factor Binding Protein-3, Regulation of Angiogenesis Ho-Young Lee, Ph.D.

College of Pharmacy, Seoul National University, Korea



SY08-4

16:40-16:55 (15 min)

Mutations of the *SLX4* Gene in Fanconi Anemia Yonghwan Kim, Ph.D. NYKB Travel Awardee

Laboratory of Genome Maintenance, The Rockefeller University, USA



SYU8-5

16:55-17:20 (25 min)

How Loss of Beta2-Spectrin Leads the Formation of Hepatocellular Cancer? Sang Soo Kim, Ph.D.

National Cancer Center, Korea



SY08-6 (Short Talk) 17:20-17:35 (15 min)

To be selected from poster abstracts



SY08-7

17:35-18:00 (25 mn)

Deciphering Cancer Progression Mi Young Kim. Ph.D.

Department of Biological Sciences, Korea Advanced Institute of Science and Technology, Korea



Session Introduction

The purpose of this session "cancer biology" in this year is to expose young biologists who are already proven themselves as competitive cancer researchers. Here we are introducing the prominent scientists who are shedding lights on cancer biology field that are directly related to their molecular mechanisms. Dr. Jihye Paik has contributed on elucidating lineage—restricted redundant tumor suppressor function of FoxOs, and she will present further updated discovery. Dr. Ho—young Lee who has already established the mechanistic study of IGFBP3 signaling will introduce us "Bench to bedside" translational cancer research. Dr. Sang—Soo Kim has examined the functional role of Brca1 and b2—spectrin known as tumor suppressors, and will show his recent work on b2—spectrin. Dr. MiYoung Kim has studied cancer metastasis, self—seeding, and their relationship, and will provide a new paradigm for the process of cancer progression. Also, young scientists will give us novel threatening inspirations.

Bio-Molecular Imaging

15:30-18:00, Thursday, October 6, 2011 (Hall 308)

Organizer & Chair: Jung Joon Min, M.D., Ph.D. (Nuclear Medicine, Chonnam National University Medical School, Korea)

SY09-1

15:30-16:15 (45 min)

Imaging and Control of Biological Functions Using Split-Reporter Reconstitution Analyses

Takeaki Ozawa, Ph.D.

Department of Chemistry, School of Science, The University of Tokyo, Japan



SY09-2

16:15-16:50 (40 min)

PET & SPECT-Based Molecular Imaging of Cancer Biology and Treatment Response

Kyung-Han Lee, M.D., Ph.D.

Department of Nuclear Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea



SY09-3

16:50-17:25 (35 min)

Nanotechnology in Molecular Imaging Kwangmeyung Kim, Ph.D.

Center for Theragnosis, Korea Institute of Science and Technology, Korea



SY09-4

17:25-18:00 (35 min)

In Vivo Molecular Imaging for Atherothrombosis Research in Mice Dong-Eog Kim, M.D., Ph.D.

MINER (Molecular Imaging & Neurovascular Research) Laboratory, Dongguk University, Korea



Session Introduction

Recent unprecedented progress in the development of noninvasive imaging technologies and molecular/cell biology techniques should allow molecular imaging to play a major role in the field of biomedical research. This session is now organized to discuss several important goals in biomedical research, namely: (1) To develop non-invasive in vivo imaging methods that reflect specific cellular and molecular processes, e.g. gene expression or protein-protein interactions; (2) To monitor multiple molecular events near-simultaneously; (3) To follow trafficking and targeting of cells or organisms; (4) To optimize drug and gene therapy; (5) To assess disease progression at a molecular pathological level; and (6) To create the possibility of achieving all of the above goals of imaging in a rapid, reproducible, and quantitative manner, so as to be able to monitor time-dependent experimental, developmental, environmental, and therapeutic influences on gene products in the same animal or patient.

O-GlcNAc Biology

Will.

15:30-18:00, Thursday, October 6, 2011 (Hall 317)

Organizer & Chair: Jin Won Cho, Ph.D. (College of Life Science and Biotechnology, Yonsei University, Korea)

SY10-1

15:30-16:20 (50 min)

Is the Ghost in Your Genes a Sugar: O-GlcNAc and Epigenetics John Allan Hanover, Ph.D.

Laboratory Cell Biochemistry and Biology, NIDDK, National Institutes of Health, USA



SY10-2

16:20-16:45 (25 min)

Functional Roles of O-GlcNAc Modification in Epithelial-Mesenchymal Transition Jin Won Cho, Ph.D.

Integrated OMICS for Biomedical Science, Yonsei University, Korea



SY10-3

16:45-17:10 (25 min)

Does O-GlcNAc Play a Role in Alzheimer's Disease? Inhee Mook-Jung, Ph.D.

Department of Biochemistry and Biomedical Sciences, College of Medicine, Seoul National University, Korea



SY10-4

17:10-17:35 (25 min)

The Anti-Inflammatory Effect of Glucosamine: A Role for O-GlcNAc Modification of NF- κ B Inn-Oc Han, Ph.D.

Department of Physiology, College of Medicine, Inha University, Korea



SY10-5

17:35-18:00 (25 min)

Competition of O-GlcNAcylation and Phosphorylation in Paxillin during Cell Adhesion

Jung Weon Lee, Ph.D.

Department of Pharmacy, College of Pharmacy, Seoul National University, Korea



Session Introduction

The covalent attachment of O-linked β -N-acetylglucosamine (O-GlcNAc) to hydroxyl group of serine and threonine residues is an unconventional glycosylation because this modification occurs on proteins in cytoplasm and nucleus, not in endomembrane organelles, and only one sugar is added to the proteins. O-GlcNAc modification may affect phosphorylation which can be added during many signal transduction pathways because these two modifications can compete with each other on serines and threonines in many proteins. In this symposium, diverse cellular functions of nutrient-driven O-GlcNAc modification which regulates signaling, transcription, and morphogenesis will be discussed.

Presynaptic Vesicular Traffickings

15:30-18:00, Thursday, October 6, 2011 (Hall 318)

Organizer & Chair: Sunghoe Chang, Ph.D. (Seoul National University College of Medicine, Korea)

SY11-1

15:30-16:15 (45 min)

Ca²⁺ Signalling and Transmitter Release at the Presynaptic Active Zone Ralf Schneggenburger, Ph.D.

Brain-Mind Institute, EPFL (École Polytechnique Fédérale de Lausanne - Swiss Federal Institute of Technology), Switzerland



SY11-2

16:15-17:00 (45 min)

Coupling of Exo- and Endcytosis in a CNS Synapse Jürgen Klingauf, Ph.D.

Institute for Medicinal Physics and Biophysics, University of Münster, Germany



SY11-3

17:00-17:30 (30 min)

Multimeric Interaction of SNAREs Observed at the Single Molecule Level Tae-Young Yoon, Ph.D.

Department of Physics at KAIST, National Creative Research Initiative, Korea



SY11-4

17:30-18:00 (30 min)

Linking the Degree of SNARE Zippering to the Stages of Presynaptic Membrane Fusion

Dae-Hyuk Kwon, Ph.D.

School of Life Science and Biotechnology, Sungkyunkwan University, Korea



Session Introduction

The life cycle of a synaptic vesicle relies on a series of membrane-trafficking events centered around the exocytotic release of neurotransmitter. Since the rate and the pathway of vesicle trafficking determine synaptic efficacy during activity, much effort is focused on understanding molecular basis of synaptic vesicle trafficking reactions. Synaptic vesicles in a CNS terminal show functional heterogeneity. The vesicles in the readily releasable pool (RRP) which are docked at release sites regulates the probability of release while the reserve pool (RP), spatially distant from the release sites, replaces the vesicles in the RRP that have been exocytosed. Therefore, the regulation and the change in mobilization rates from different pools are a crucial determinant of presynaptic efficacy and of several forms of short— and long—term synaptic plasticity. At the symposium recent findings regarding to the various types of presynaptic membrane trafficking events and their implication to synaptic plasticity will be reviewed and discussed.

Chromatin Remodeling and Gene Expression

09:00-11:30, Friday, October 7, 2011 (Grand Conference Room 401)

Organizers: Eun-Jung Cho, Ph.D. (School of Pharmacy, Sungkyunkwan University, Korea)

Daeyoup Lee, Ph.D. (Department of Biological Sciences, Korea Advanced Institute of Science and

Technology, Korea)

65555

Chairs: Hyockman Kwon, Ph.D. (Department of Bioscience and Biotechnology, Hankuk University of Foreign

Studies, Korea)

Hansol Lee, Ph.D. (Department of Biological Science, Inha University, Korea)

SY12-1

09:00-09:25 (25 min)

Structural Mapping of the Regulatory Function of Histone H3 and H4 Residues Jung Kyoon Choi, Ph.D.

Department of Bio and Brain Engineering, Korea Advanced Institute of Science and Technology, Korea/Genome Institute of Singapore, Singapore



SY12-2

09:25-09:50 (25 min)

Mechanism of H2B Ubiquitylation and H3K4 Methylation Crosstalk Jaehoon Kim, Ph.D.

Department of Biological Sciences, Korea Advanced Institute of Science and Technology, Korea



SY12-3

09:50-10:15 (25 min)

Cancer Cell Proliferation Regulated by DOT1L Histone Methyltransferase Ja-Eun Kim. Ph.D.

Department of Pharmacology, School of Medicine, Kyung Hee University, Korea



SY12-4

10:15-10:50 (35 min)

The Molecular Basis for Pluripotency Huck-Hui Ng, Ph.D.

Genome Institute of Singapore, Singapore



SY12-5

10:50-11:15 (25 min)

ES Cell Fate Decision by the CBP(CP2c, CP2b, and PIAS1) Complex Chul Geun Kim, Ph.D.

Department of Life Science, Hanyang University, Korea



SY12-6

11:15-11:30 (15 min)

H2B Mono-Ubiquitylation Is a 5'-Enriched Active Transcription Mark and Determines Exon-Intron Architecture in Humans

Inkyung Jung, Ph.D.
Department of Bio and Brain Engineering, Korea Advanced Institute of Science and

Technology, Korea

Session Introduction

In the nuclei of all eukaryotic cells, there exists genomic DNA which is highly folded, constrained, and compacted by histone and nonhistone proteins in a dynamic polymer called chromatin. As a physiological template of genetic information, chromatin is subject to a diverse array of posttranslational modifications. The modifications largely take place on histone amino termini, regulating the access to the underlying DNA. In this session, experts in chromatin biology will discuss the recent advances in "Chromatin Remodeling and Gene Expression" including epigenomics using whole genome sequencing technology, chromatin based transcription elongation mechanism, higher—order chromatin structure as well as chromatin dynamics.

Mouse Phenogenomics

09:00-11:25, Friday, October 7, 2011 (Grand Conference Room 402)

Organizer & Chair: Je Kyung Seong, D.V.M., Ph.D. (College of Veterinary Medicine, Seoul National University, Korea)

SY13-1

09:00-09:40 (40 min)

Global Efforts in Mouse Systematic Phenotyping
Thomas A. Weaver, Ph.D.

Mary Lyon Centre, MRC Harwell, UK



SY13-2

09:40-10:15 (35 min)

Regulation of Beta Cell Mass by Serotonin
Hail Kim, M.D., Ph.D.
Graduate School of Medical Science and Technology,
Korea Advanced Institute of Science and Technology, Korea



SY13-3

10:15-10:50 (35 min)

Critical Role of Lysophospholipid Signalings in Neural Cell Migration in the Developing Cerebral Cortex Sung-Oh Huh, Ph.D.

Hallym University College of Medicine, Korea



SY13-4

10:50-11:25 (35 min)

Translational Research of Cancer Using *In Vivo* Small Animal Imaging Keon Wook Kang, M.D., Ph.D.

Department of Nuclear Medicine, Seoul National University College of Medicine, Korea



Session Introduction

Mouse genetics is one of the powerful tools for understanding the function of human genes through the production of mutant mice and their characterization. Mouse models are crucial for the functional annotation of human geneme. Gene modification techniques including gene targeting and gene trap in mouse have provided powerful tools in the form of genetically engineered mice (GEM) for understanding the molecular pathogenesis of human diseases. Several international consortium and programs are under way to deliver mutations in every gene in mouse genome. The information from studying these GEM can be shared through international collaboration. However, there are many limitations in utility because not all human genes are knocked out in mouse and they are not yet phenotypically characterized by standardized ways which is required for sharing and evaluating data from GEM. The recent improvement in mouse genetics has now moved the bottleneck in mouse functional genomics from the production of GEM to the systematic mouse phenotype analysis of GEM. Enhanced, reproducible and comprehensive mouse phenotype analysis has thus emerged as a prerequisite for effectively engaging the phenotyping bottleneck. In this session, recent achievements on systematic mouse phenotype from international collaborations and an issue-oriented topics including molecular imaging and metabolic syndrome will be provided by Tom Weaver in MRC, UK.

Molecular and Cellular Mechanisms of Plant Development Plasticity

09:00-11:20, Friday, October 7, 2011 (Hall 307)

Organizer: Woo Taek Kim, Ph.D. (College of Life Science and Biotechnology, Yonsei University, Korea)

Chairs: Byeong-ha Lee, Ph.D. (Department of Life Sciences, Sogang University, Korea)

Jeong Hoe Kim, Ph.D. (College of Natural Sciences, Kyungpook National University, Korea)

SY14-1

09:00-09:20 (20 min)

Differential Pairings of VAMP721/722 with Plasma Membrane-Resident Syntaxins Depending on Pathogen Classes

Chian Kwon, Ph.D.

Department of Molecular Biology, Dankook University, Korea

William .



SY14-2

09:20-09:40 (20 min)

Understanding Transcriptional Regulation of Secondary Wall Biosynthesis in Plants Jae-Heung Ko, Ph.D.

Department of Plant & Environmental New Resources, College of Life Sciences, Kyung Hee University, Korea



SY14-3

09:40-10:00 (20 min)

Regulation of Autophagy in Plant Cells

Taijoon Chung, Ph.D.

Department of Biological Sciences, Pusan National University, Korea



SY14-4

10:20-10:40 (20 min)

Sugar Signaling Network for Developmental Plasticity in *Arabidopsis* Sang-Dong Yoo, Ph.D.

School of Natural Sciences, Sungkyunkwan University, Korea



SY14-5

10:40-11:00 (20 min)

Coordinated Regulation of Abiotic Stress Response Pathways by Plant Immune Signaling

Tae-Houn Kim, Ph.D.

Health Functional Biomaterials/PrePharmMed, College of Natural Sciences, Duksung Womens University, Korea



SY14-6

11:00-11:20 (20 min)

A Rice Blast Fungus Secreted Protein, MSP1 (Magnaporthe Oryzae Snodprot1 Homolog), Induces Programmed Cell Death in Rice

Sun Tae Kim, Ph.D.

Department of Plant Bioscience, Pusan National University, Korea



Session Introduction

Probably the biggest difference between animal and plant developments is the continuous development in plants. As plants are sessile, this continuous development has to be achieved at one location in response to external stimuli as well as internal signals. Plants do this by displaying tremendous developmental plasticity. Thus, developmental plasticity in plants is critical for their survival, competition, and successful reproduction. At the symposium, recent understandings of plant developmental plasticity at the molecular and cell biology levels will be reviewed and discussed.

Bioactive Lipid Signaling in Cancer and Inflammation

09:00-11:30, Friday, October 7, 2011 (Hall 308)

Organizer: Jae-Hong Kim, Ph.D. (Division of Life Sciences, Korea University, Korea) Chairs: Jae-Hong Kim, Ph.D. (Division of Life Sciences, Korea University, Korea)

Hae Young Chung, Ph.D. (College of Phamacy, Pusan National University, Korea)

SY15-1

09:00-09:25 (25 min)

LTB4 Receptor in Inflammation and Cancer Jae-Hong Kim, Ph.D.

Division of Life Sciences, Korea University, Korea



SY15-2

09:25-09:50 (25 min)

sPLA2 in Cancer and Inflammation Suk Hwan Baek. Ph.D.

Department of Biochemistry & Molecular Biology, Yeungnam University, Korea



SY15-3

09:50-10:15 (25 min)

Therapeutic Effects of Chemoattractant Receptor Agonists against Sepsis Yoe-Sik Bae, Ph.D.

Department of Biological Sciences, Sungkyunkwan University, Korea



SY15-4

10:15-10:40 (25 min)

A Novel Anti-Inflammatory Mechanisms of 15d-PGJ2 through MKP-1 Induction II-ro Jou, M.D., Ph.D.

Department of Pharmacology, CIDRC, Ajou University Medical School, Korea



SY15-5

10:40-11:05 (25 min)

Lysophosphatidylcholine Signaling in Age-Related Inflammation Hae Young Chung. Ph.D.

College of Phamacy, Pusan National University, Korea



SY15-6

11:05-11:30 (25 min)

Elucidating the Role of SDF-1 in Chronic Lymphocytic Leukemia Cell Survival Morgan O' Hayre, Ph.D.

University of California, San Diego, USA



Session Introduction

The role of bioactive lipid mediators in human diseases is expanding. Various inflammatory responses and cancer progression involve lipid signaling/network. In this symposium, we invite distinguished scientists working in inflammation signaling to share their progress in this expanding area and to present a comprehensive view on what inflammation does in our body. Especially, inflammatory lipid mediators [including classic mediators such as prostaglandins and leukotrienes] are now recognized to influence a broad swath of biology from inflammation to allergy, cancer, aging and stress response. We hope this symposium would help scientists interested in the translation of such basic science from model systems to an understanding of the role of lipids/inflammation in human physiology, disease and drug action. Expansion of our understanding of the role of inflammatory responses affords the opportunity for novel therapeutic opportunities.

Criminal DNA Database and Forensic Genetics

09:00-11:30, Friday, October 7, 2011 (Hall 317)

Organizer & Chair: Seung Hwan Lee, Ph.D. (DNA Analysis Laboratory, Division of Forensic Science, Supreme Prosecution Service, Korea)

SY16-1

09:00-09:50 (50 min)

Forensic DNA-Profiles Crossing Borders in Europe (Implementation of the Treaty of Prüm) Ir. C.P. van der Beek MBA, Ph.D.

William .

Netherlands Forensic Institute (NFI), The Netherlands



SY16-2

09:50-10:15 (25 min)

The Current Status and Future Challenges of Korean Criminal DNA Database Sabina Sung-yun Park, Ph.D.

DNA Analysis Laboratory, Division of Forensic Science, Supreme Prosecution Service, Korea



SY16-3

10:15-10:40 (25 min)

Molecular Tools for Forensic Body Fluid Identification Hwan Young Lee, Ph.D.

Department of Forensic Medicine, Yonsei University College of Medicine, Korea



SY16-4

10:40-11:05 (25 min)

Forensic DNA Typing and National DNA Database in Korea Dong-Ho Choi, Ph.D.

Manager of Forensic DNA Center National Forensic Service, Korea



SY16-5

11:05-11:30 (25 min)

Strategy to Increase Success Rates of Short Tandem Repeat Typing from Challenged Samples
Seung Bum Seo, Ph.D.

Department of Forensic Medicine, College of Medicine, Seoul National University, Korea



Session Introduction

The impact of DNA as a scientific evidence has profoundly touched the need of forensic genetics. There has been a remarkable growth in forensic genetics in spite of the short history of the past 20 years. Progressed by the lead of United States and Europe, technologies for forensic DNA analysis are now globally standardized. Especially, criminal DNA database which has been established since mid-1990s greatly enlarged the infrastructure and contributed to the progress in technologies involved. In 2010, Korea also launched criminal DNA database, which marked a turning point in our scientific investigation. Though Korea has attained world level advances in forensic DNA analysis, we are still challenged by human and material resources or development of original technologies. Thus far, accurate and reliable human identification based on STR analysis was mainly focused. But now, global efforts are concentrated on providing investigators with more scientific information by adopting a variety of concepts of molecular biology such as SNP (Single Nucleotide Polymorphism) and tissue-specific RNA molecules. Thus, it is encouraged for researchers in the field of molecular biology to have interest and participate in forensic genetics. The goals of this symposium are (i) to review the current forensic DNA analysis technologies including criminal DNA database, and (ii) to discuss the recent developments in forensic genetics and their prospects. We hope this will synergize ideas and method breakthroughs and also gather many molecular biologists who will take Korean forensic genetics to a higher level.

Structural Biology of Post-Translational Modification Proteins

09:00-11:25, Friday, October 7, 2011 (Hall 318)

Organizers & Chairs: Weontae Lee, Ph.D. (College of Life Science and Biotechnology, Yonsei University, Korea)
Soo Hyun Eom, Ph.D. (School of Life Sciences, Gwangju Institute of Science and Technology, Korea)

SY17-1

09:00-09:25 (25 min)

Structure of Non-Canonical E1-Activating Enzyme Atg7 Hyun Kyu Song, Ph.D.

Division of Life Sciences, Korea University, Korea



SY17-2

09:25-09:50 (25 min)

Oligomeric Status Directs Overall Activity of Syndecan Family of Cell Surface Proteoglycans Eok-Soo Oh, Ph.D.

Department of Life Sciences, Division of Life and Pharmaceutical Sciences, Ewha Womans University, Korea



SY17-3

09:50-10:25 (35 min)

A Systematic Approach for Structural Glycoproteomics Koichi Kato, Ph.D.

Okazaki Institute for Integrative Bioscience National Institutes of Natural Sciences, Japan



SY17-4

10:25-10:50 (25 min)

A Noble Pathway Connecting Extrinsic and Intrinsic Apoptosis Jaewhan Song, Ph.D.

College of Life Science and Biotechnology, Yonsei University, Korea



SY17-5

10:50-11:15 (25 min)

Mechanism of p53 Rescue from mdm2 by SUMO Protease Kyou-Hoon Han, Ph.D.

Division of Biosystems Research, Korea Research Institute of Bioscience and Biotechnology, Korea



SY17-6 (Short Talk) 11:15-11:25 (10 min)

To be selected from poster abstracts



Session Introduction

Post-translational modifications (PTM) such as phosphorylation, glycosylation, sumoylation, and ubiquitinylation are tightly controlled by a number of cellular signaling mechanisms to increase the diversity of functional groups in the side chains of 20 amino acids incorporated into nascent proteins. The diversification would be enabled by protein modification process and it increases the molecular variants of proteins in cells by an estimated one to two orders of magnitude over the number encoded in the genome. This process makes possible for controlling the lifetime and/or molecular recognition of proteins in a cell. Structural biology has proven that PTM process and function of modified proteins are closely related with their three–dimensional structures. In this symposium, the recent progress related to the protein modifications and their implication to human diseases will be presented and discussed.

Autophagy

diffin

15:30-18:00, Friday, October 7, 2011 (Grand Conference Room 401)

Organizer & Chair: Myung-Shik Lee, M.D., Ph.D. (Sungkyunkwan University School of Medicine, Korea)

SY18-1

15:30-16:15 (45 min)

Pathophysiological Roles of Autophagy in Mice Masaaki Komatsu, Ph.D.

Department of Advanced Science for Biomolecules, Tokyo Metropolitan Institute of Medical Science, Japan



SY18-2

16:15-16:45 (30 min)

Autophagy Modulators and Modulation of Aggregation Disease Yong-Keun Jung, Ph.D.

Department of Biological Science, Seoul National University, Korea



SY18-3

16:45-17:15 (30 min)

Enhancing Antiviral Immunity by Dendritic Cells via Autophagy Heung-Kyu Lee, Ph.D.

Graduate School of Medical Science and Engineering, Korea Advanced Institute of Science and Technology, Korea



SY18-4

17:15-17:45 (30 min)

Autophagy-Deficiency in Pancreatic Beta-Cells Leads to Compromised Unfolded Protein Response and Progression from Obesity to Diabetes Myung-Shik Lee, M.D., Ph.D.

Sungkyunkwan University School of Medicine, Korea



SY18-5

17:45-18:00 (15 min)

Peptidyl-Prolyl Cis-Trans Isomerase Pin1 in Cancer Tae Ho Lee, Ph.D. NEBS Travel Awardee

Beth Israel Deaconess Medical Center, Harvard Medical School, USA



Session Introduction

This session covers autophagy, one of the "hottest" fields in the current molecular/cellular biology. Recent studies have shown the role of autophagy in diverse aspects of patho-physiological processes such as cancer, metabolism, cell death, neurodegeneration, amyloid deposition and inflammatory responses. Dr. Massaki Komatsu, a world-renown pioneer of molecular autophagy, have shown in vivo role of autophagy by producing Atg7 knockout mice. He is also one of the first scientists who demonstrated the phenomenon of selective autophagy. He discovered autophagy adaptors such as p62 that play a crucial role in selective autophagy. His findings revolutionized autophagy field, and now the autophagy adaptors are considered as the lynchpin of the autophagic clearance of proteins and organelles. In this session, audience will have a chance to see the recent advances in the understanding of the mechanism of autophagy and its role in aging, metabolism, immunity and diverse diseases.

Stem Cells: Biology and Therapeutic Applications

15:30-18:00, Friday, October 7, 2011 (Grand Conference Room 402)

Organizer: Jae Hong Seol, Ph.D. (School of Biological Sciences, Seoul National University, Korea) Chairs: Jae Hong Seol, Ph.D. (School of Biological Sciences, Seoul National University, Korea)

Yong-Mahn Han, Ph.D. (Department of Biological Sciences, Korea Advanced Institute of Science and Technology, Korea)

SY19-1

15:30-15:55 (25 min)

Generation of A9-Type Midbrain Dopamine Neurons with Pre-Synaptic and Cell Therapeutic Functions in Parkinson's Disease Animal Model Sang-Hun Lee, M.D., Ph.D.

Department of Biochemistry and Molecular Biology, College of Medicine, Hanyang University, Korea

SY19-2

15:55-16:20 (25 min)

MicroRNAs and Stem Cell Biology Kyung-Sun Kang, D.V.M., Ph.D. Adult Stem Cell Research Center.

College of Veterinary Medicine, Seoul National University, Korea



SY19-3

16:20-16:45 (25 min)

Therapeutic Potential of Human Umbilical Cord Blood Mesenchymal Stem Cell for Alzheimer's Disease Jong Wook Chang, Ph.D.

Biomedical Research Institute, MEDIPOST Co., Ltd., Korea

16:45-17:10 Break



17:10-17:35 (25 min)

Revolutionizing Drug Discovery with Stem Cell Technology Kwang Rok Kim, Ph.D.

Pharmacology Research Center, Bio-Organic Science Division, Korea Research Institute of Chemical Technology, Korea



SY19-5

17:35-18:00 (25 min)

Differentiation of Human Pluripotent Stem Cells into Functional Lineage-Specific Cells by Combined Modulation of Signalling Pathways Yong-Mahn Han, Ph.D.

Department of Biological Sciences and Center for Stem Cell Differentiation, Korea Advanced Institute of Science and Technology, Korea



Session Introduction

Stem cell research has garnered great public attention in recent years, offering the promise for novel therapeutic interventions that could revolutionize the treatment of numerous genetic and degenerative disorders in humans, such as Parkinson's and Alzheimer's diseases, spinal injury, cardiac failure, arthritis, and diabetes as well as aggressive and recurrent cancers. Although there are objections to the use of human embryonic stem cells for research on religious, moral, and ethical grounds, scientists have steadily learned to exploit the potential of stem cells for unraveling the molecular mechanisms of cell differentiation and development. Stem cells have the dual ability to undergo self-renewal and to generate lineages of more differentiated or mature cells. Thus, they represent fundamental building blocks of living organisms, playing pivotal roles in the production of new and replacement cells for tissues during development and post-injury repair. A broad range of stem cells- embryonic, fetal, amniotic, umbilical cord blood, and adult stem cells including cancer stem cells- have been described according to their origins and long-term ability to maintain stem cell-like properties in vitro and in vivo

Therefore, the symposium will deal with the recent progress in stem cell biology including the basic concepts of stemness and cellular reprogramming to provide ways to translate the basic knowledge into clinical therapeutic implications in humans. Experimental optimization for isolation, expansion, and differentiation of human stem/progenitor cells into specific differentiated cells in vitro, ex vivo, and in vivo and the identification of specific biomarkers to each type of adult stem/progenitor cells relative to their more committed and mature progeny will also be reviewed and discussed.

Systems Biology for Plants

diffiniti

15:30-18:10, Friday, October 7, 2011 (Hall 307)

Organizer & Chair: Ildoo Hwang, Ph.D. (Department of Life Sciences, POSTECH Biotech Center, Pohang University of Science and Technology, Korea)

SY20-1

15:30-16:00 (30 min) Systems Biotechnology Sang Yup Lee, Ph.D.

Department of Chemical and Biomolecular Engineering, Korea Advanced Institute of Science and Technology, Korea



SY20-2

16:00-16:30 (30 min)

LEAFY Target Genes Reveal Floral Regulatory Logic, cis Motifs, and a Link to Biotic Stimulus Response Doris Wagner, Ph.D.

Department of Biology, University of Pennsylvania, USA



SY20-3

16:30-16:55 (25 min)

Decoding of DNA Methylome in Plants Daehee Hwang, Ph.D.

School of Interdisciplinary Bioscience and Bioengineering, Pohang University of Science and Technology, Korea



SY20-4

16:55-17:20 (25 min)

Interplay of Light and Brassinosteroids in *Arabidopsis* Development Sunghwa Choe, Ph.D.

Department of Biological Sciences, College of Natural Sciences, Seoul National University, Korea



SY20-5

17:20-17:45 (25 min)

DNA Methylation and Disease Resistance in Plant Tae-Young Roh, Ph.D.

Division of Integrative Biosciences and Biotechnology and Department of Life Science, Pohang University of Science and Technology, Korea



SY20-6

17:45-18:10 (25 min)

Deciphering the Regulatory Codes in Microbial Genomes Byung-Kwan Cho, Ph.D.

Department of Biological Sciences, Korea Advanced Institute of Science and Technology, Korea



Session Introduction

Living organisms execute their diverse functions by virtue of the operation of biological networks and their nodal components within or among cells. Systems biology is the study of an organism, viewed as an integrated and interacting network of genes, proteins, epigenomic modulations, and biochemical reactions. Many biological events including disease arise by genetic or environmental perturbations of one or more of these networks. A systems view of such events attempts to understand their initiation and progression in terms of their initial perturbations and their dynamic transitions as they progress. Systems approaches to decode such events have the following cardinal features: 1) global analyses to generate comprehensive data sets (e.g. how do all genes, DNA structural variations, DNA methylation, mRNAs, histone modifications, proteins or phenotypes change upon perturbation or during transition), 2) the integration of different levels of biological information (e.g. DNA, mRNA, protein, interactions, networks, tissues or organs, individuals, etc) to generate coherent hypotheses about the events, and 3) engineering of networks to control properties of the events based on the hypotheses. Systems biology seeks to understand these complex interactions which are viewed as the keys to understanding life. In this session, the speakers will present several systems approaches that would be adopted to elucidate key biological events in plants.

The Advancement of Innate Immunity: Pattern-Recognition Receptors and Their Actions

15:30-18:10, Friday, October 7, 2011 (Hall 308)

Organizers & Chairs: Bok Luel Lee, Ph.D. (College of Phamacy, Pusan National University, Korea))

Joo Young Lee, Ph.D. (School of Life Sciences, Gwangju Institute of Science and Technology, Korea)

SY21-1

15:30-16:10 (40 min)

Inflammasomes: Mechanisms of Activation

Veit Hornung, M.D., Ph.D.

Institute for Clinical Chemistry and Clinical Pharmacology,

University Hospital, University of Bonn, Germany



SY21-2

16:10-16:40 (30 min)

Novel Bacterial Lipoproteins Functioning as Toll-Like Receptor 2 Ligand Molecules Bok Luel Lee, Ph.D.

College of Phamacy, Pusan National University, Korea



SY21-3

16:40-17:10 (30 min)

Structural Biology of LPS Pattern Recognition Jie-Oh Lee, Ph.D.

Department of Biological Sciences, Korea Advanced Institute of Science and Technology, Korea



SY21-4

17:10-17:40 (30 min)

Toll-Like Receptor-Triggered Inflammatory Signaling Is Regulated by Orphan Nuclear Receptor Small Heterodimer Partner Eun-Kyeong Jo, M.D., Ph.D.

Department of Microbiology, Infection Signaling Network Research Center, Chungnam National University School, Korea



SY21-5

17:40-18:10 (30 min)

A Novel Interaction of TBK1 and Akt in Toll-Like Receptor-Mediated Anti-Viral Immunity

Joo Young Lee, Ph.D.

School of Life Sciences, Gwangju Institute of Science and Technology, Korea



Session Introduction

Innate immunity is one of the critical host defense processes required to eliminate pathogens when host is infected, and to repair tissue damage. Pattern recognition receptors (PRRs) which are germ-line encoded receptors play a pivotal role in initiating and regulating innate and adaptive immune responses by recognizing pathogen-associated molecular patterns (PAMPs) or danger-associated molecular patterns (DAMPs). PRRs include Toll-like receptors, RIG-l-like receptors and NOD-like receptors, which have their own features in ligand recognition and cellular location. Recent findings present more PRRs such as AlM2, IF116, and LRRFIP1 to detect bacterial and viral DNA in the cytoplasm. In addition, the inflammasome system plays a critical role in sensing danger signals derived from tissue, environment, and chemicals. The topics in this symposium will review and discuss recent advancement in innate immunity and PRRs. The understanding of PRRs and their actions will help to provide beneficial therapeutic strategies for the relevant inflammatory diseases and immune disorders.

Bone and Cartilage Biology

15:30-18:00, Friday, October 7, 2011 (Hall 319)

Organizer & Chair: Eun-Jung Jin, Ph.D. (College of Natural Sciences, Department of Biological Sciences, Wonkwang University, Korea)

SY22-1

15:30-15:55 (25 min)

Regulation of NFATc1 during Osteoclast Differentiation Nacksung Kim, Ph.D.

65555

National Research Laboratory for Regulation of Bone Metabolism and Disease, Chonnam National University, Korea



SY22-2

15:55-16:20 (25 min)

Nkx3.2-Barx1 Crosstalk in Chondrocytes and Its Implication in Osteoarthritis Dae-Won Kim, Ph.D.

Department of Systems Biology, Yonsei University, Korea



SY22-3

16:20-16:45 (25 min)

Novel Regulators of Bone Metabolism: from Proteomic Discovery to Molecular Validation
Hong-Hee Kim, Ph.D.

Department of Cell and Developmental Biology, Seoul National University School of Dentistry, Korea



SY22-4

16:45-17:10 (25 min)

Novel Catabolic Factors Regulating Osteoarthritis Jang-Soo Chun, Ph.D.

School of Life Science, Gwangju Institute of Science and Technology, Korea



SY22-5

17:10-17:35 (25 min)

MicroRNAs Regulate Chondrogenesis of Limb Mesenchymal Cells Eun-Jung Jin, Ph.D.

College of Natural Sciences, Department of Biological Sciences, Wonkwang University, Korea



SY22-6

17:35-18:00 (25 min)

Role of Runx2 Transcription Factor Complex for Bone Formation Je-Yong Choi, D.D.S., Ph.D.

Department of Biochemistry and Cell Biology, School of Medicine, Kyungpook National University, Korea



Session Introduction

Bone and cartilage comprise the skeleton – a finely patterned structure that provides mobility, protection of vital organs, and housing of the bone marrow. They are maintained by various cell types: osteoblasts that synthesize bone, osteocytes which act as mechanosensors, osteoclasts which resorb bone, cartilage cells lining the bones in joints. Bone and cartilage-related diseases such as osteoarthritis and osteoporosis remain costly and challenging clinical problems. Understanding the biology of the developing cartilage and bone could provide valuable strategies for improving understanding of the etiology of both osteoarthritis and osteoporosis and potential treatment. This symposium will discuss how bones and cartilage develop, the influence of genetics over human skeletal biology, the signaling pathways and transcription factors that control bone mass, and the pathogenic mechanisms of arthritis.

Symposium 23

Convergence Sciences and Mucosal Immune System

15:30-18:00, Friday, October 7, 2011 (Hall 318)

Organizer & Chair: Sin-Hyeog Im, Ph.D. (School of Life Sciences, Gwangju Institute of Science and Technology, Korea)

SY23-1

15:30–16:05 (35 min) **Human–Microbe Interactions and Health Heenam Stanley Kim, Ph.D.**Department of Medicine, College of Medicine, Korea University, Korea



SY23-2

16:05-16:40 (35 min)

Suppression of TCRgd T-Cells by T-Regulatory Cells Helps Maintain Intestinal Homeostasis
Sung-Gyoo Park, Ph.D.

School of Life Sciences and Immune Synapse Research Center, Gwangju Institute of Science and Technology, Korea



SY23-3

16:40-17:20 (40 min)

Tolerogenic Dendritic Cells Björn E. Clausen, Ph.D.

Department Immunology, Erasmus MC, University Medical Center, The Netherlands



SY23-4

17:20-18:00 (40 min)

A Crosstalk between Probiotics and Host Immune System Sin-Hyeog Im, Ph.D.

School of Life Sciences, Gwangju Institute of Science and Technology, Korea



Session Introduction

The purpose of controlled posttranslational modifications is to increase the diversity of functional groups beyond those in the side chains of 20 amino acids incorporated into nascent proteins. The diversification enabled by posttranslational modification increases the molecular variants of proteins in cells by an estimated one to two orders of magnitude over the number encoded in the genome. This diversity enables new biochemical properties, new recognition patterns for partner molecules, turns "on" and "off" enzymatic activity, and controls the lifetime and location of such proteins in cells, which consequently lead to the various changes of cellular metabolism, physiology, and fate. These protein isoforms may differ, for example, in phosphorylation, glycosylation, sumoylation, and/or ubiquitinylation content and location at one or more amino acid residues within any given protein. At the symposium recent findings regarding to the various types of protein modification and their implication to disease will be reviewed and discussed.

연구윤리 심포지엄

(Korean)

Research Ethics Symposium

Research Ethics Symposium

생명과학 연구윤리와 다양한 주변 이슈들

11:30-12:30, Thursday, October 6, 2011 (Hall 307)

Organizer & Chair: 유미애 윤리위원회 위원장 (부산대학교 자연과학대학 분자생물학과)

William.

ES-1

11:30-12:00 (30 min) 검체 대상 연구의 연구윤리 김호중 (삼성서울병원 미래의학연구센터 임상시험센터장)



ES-2

12:00-12:30 (30 min) 연구윤리와 주변 이슈들 김미경 (서울대학교 의과대학)



Session Introduction

과학기술의 발전과 더불어 지식강국으로 다가갈수록 글로벌 스탠다드에 적합한 책임 있는 연구 수행의 윤리는 더욱 중요하다. 현재 생명과학 분야에도 인간 검체를 이용하는 연구가 점차 확대되고 있으며 사전 심의에 대한 법률 및 제도에 대한 논의와 이해가 필요한 시점이다. "검체 대상 연구의 연구윤리"에서는 인간 검체 대상 연구 윤리에 대한 과학적, 윤리적 고찰을 통해 연구에 참여하는 피험자의 권리와 복지, 보호에 대한 토론이 이루어질 것이다. "연구윤리와 주변 이슈들"에서는 다양한 이해상충문제를 비롯한 통상적인 연구윤리 및 이를 강화하기 위한 구체적 정책과 관리 시스템에 대하여 고찰할 것이다. 본 연구윤리 심포지엄을 통해 인간과 동물을 대상으로 하는 실험들에 대한 기관 승인, 잠재적인 이해관계의 상충 등 연구 초기 단계에서 실험을 수행하기 전, 우선 해결되어야 할 윤리적인 이슈들을 심도 있게 논의할 수 있을 것이다.

시 상 Awards

	상 명	대 상	추천인	시상 내용	비고
학 술	생명과학상	본 학회 회원으로서, 분자생물학 및 세포생물학 분야에서 최근 5년 동안 한 가지 주제와 관련해서 창의성을 발휘하여 탁월한 연구업적을 이룩한 자	학술상	20,000,000원+상패	
상	M&C 우수논문상	본 학회 회원으로서, 최근 3년 동안 "Molecules and Cells"에 가장 우수한 논문을 게재한 자	추천인단	3,000,000원+상패	
마크로젠 과학자상		탁월한 연구업적을 올린 분자생물학 및 세포생물학 분 야의 재외 한국 동포를 포함한 신진 및 중견 연구책임 자급 회원		10,000,000원+상패	(주)마크로젠 후원
 일천기념강좌		우수한 한인 과학자		메달(1냥)+항공료/체재비	
바이오니아 차세대연구자상		전년도 7월 이후에 발표된 국내에서 수행한 분자세포생물학 관련 연구 성과를 토대로 발표한 논문의 제 1 저자인 정규/임시직 박사급 이하 연구원, 박사후연구원, 석박사 과정 대학원생으로 한다. 단, 해당 연구를 수행한 연구실/연구기관의 책임자는 제외한다.	정회원	대상: 5,000,000원+상패 금상: 3,000,000원+상패 은상: 2,000,000원+상패	(주)바이오니아 후원
우수박사학위 논문상		대한민국에서 분자·세포생물학을 연구하는 박사과정의 학생으로 전년도 정기 총회 이후부터 시상년도 정기총회 1개월 전까지 박사학위를 수여 받은 자		1,000,000원+상패	수상자는 5인 씨그마알드리치코리아(유) 후원

⁻ 시상 후보자 추천 마감일 : 8월 19일(금) (학술상은 별도로 진행함.)

⁻ 시상 별 추천 양식은 학회 홈페이지(www.ksmcb.or.kr)를 통해 다운로드가 가능합니다.

초록 등록

Abstract Submission

한국분자·세포생물학회 정기학술대회 초록접수는 학회 홈페이지를 통해 접수 받고 있습니다. 초록은 반드시 영문으로 작성하셔야 하며 특히 회원에 한하여 우수포스터상 응모가 가능하오니, 회원으로 등록하시어 회원 혜택을 모두 받으시기 바랍니다.

포스터 발표 초록 제출

- O 제출일: 2011년 7월 18일(월) ~ 9월 15일(목)
- O 온라인 초록 제출 : 정기학술대회 홈페이지 → 초록 제출
- O 초록 본문은 반드시 영자 1,200자(여백 포함) 이내로 작성하여 주십시오.

Constitute.

O 초록 제출은 회원과 비회원으로 구분하여 등록하게 되어 있으며 Poster (일반연구자 포스터발표) 중 우수포스터를 선정하여 시상하는 우수포스터상은 회원(특히, 교신저자)의 경우만 응모가 가능합니다.

■ 포스터 주제 분야

No.	Category	No.	Category
Α	RNA Biology	- 1	Stem Cell Biology
В	Cancer Biology	J	Chromatin and Gene Regulation
С	Cellular Signal Transduction	K	Omics Biology, Systems Biology, and Evolution
D	Immunology	L	Cell Death
Е	Plant Biology	М	Bioimaging, Biotools and Biotechnology
F	Neurobiology	N	Microbiology and Infectious Diseases
G	DNA Replication, DNA Damage, and Cell Cycle	0	Others
Н	Developmental Biology and Cell Differentiation	Р	High School or University Undergraduate Student's Abstract

두 기 기 구두 발표 연사(시상기념강연, 심포지엄) 초록 제출

- O 제출일: 2011년 7월 18일(월) ~ 9월 15일(목)
- 온라인 초록 제출 : 정기학술대회 홈페이지 → 초록 제출
- O 정기학술대회의 구두발표 연자는 초록 제출 시, 해당 abstract type을 선택하시고 해당분야의 category를 선택하시 어 입력하시기 바랍니다.
- O 심포지엄의 연자는 이력서를 별도 파일로 첨부하게 되어 있으니 사전에 이력서를 준비하시기 바랍니다.
- O 초록 본문은 반드시 영자 1,500자 (여백 포함) 이내로 작성하여 주십시오.
- O 강연 동영상 촬영 허가 여부를 선택하여 주십시오.
- O 기타 다른 사항은 포스터 발표 초록 제출 요령과 동일합니다.

초록 제출 안내

- 1. 제목: 단어의 머리글자는 대문자로, 나머지는 소문자로 입력하시고, 전치사나 관사 등은 소문자로 합니다. 단, 이텔릭체는 무시하십시오.
- 2. 저자 및 소속 기관: 저자 인원과 소속기관 개수를 선택한 뒤에 입력을 시작합니다.
 - 1) 저자 인원을 선택한 뒤, 저자 정보를 입력합니다. 저자이름은 First name(이름), Last name(성) 순으로 fulll name을 표기하셔야 합니다.
 - 2) 저자 순서: 화면에 보이는 대로 저자 순서가 반영되며, 처음 입력하는 저자가 First Author입니다. 교신저자(Corresponding author)는 Corresponding author 표시 박스에 체크해주시기 바랍니다. 공동 교신

저자의 경우에도 저자의 Corresponding author 표시 박스에 체크해주시면 됩니다.

3) 소속 기관은 소속 기관 개수를 선택한 뒤에 영문으로 학과, 소속기관, 도시명, 우편번호, 국가 순으로 입력하시기 바랍니다. 한 저자의 소속기관이 2개 이상일 경우. 각 각의 소속의 번호를 저자명 옆에 표시해주시면 됩니다.

3. 초록 전문

- 1) 입력 도중 시스템이 다운될 경우를 대비하여 워드 프로그램에서 별도로 작업하신 후 복사하여 붙여넣기 하십시오.
- 2) 포스터 발표 초록 본문은 반드시 영자 1,200자 (여백 포함) 이내로 작성하여 주십시오. (구두 발표 연사는 1,500자이내)
- 3) 이탤릭체는 무시하십시오.
- 4) 약어 사용 시는 IUBMB에 의한 표준약어나 국제적으로 널리 통용되는 것만을 사용하시고, 부득이한 경우에는 첫 번째 나오는 약어 옆에 full spell을 괄호 안에 넣어 주시기 바랍니다.
- 5) 초록 마지막 부분에는 연구를 지원해 준 지원처를 꼭 표기하시기 바랍니다.

ㅇ 초록예문

Mind Bomb-Binding Protein, Mibb-1 Is Expressed in Hematopoietic Progenitor Cells KIM Hee Jung, LEE Dong Gook and KIM Joo Sik*
School of Biosciences and Biotechnology, Hangook University, Seoul 130-123, Korea

*Corresponding author: home@ksmcb.or.kr

Cell-cell interaction through the Delta-Notch signaling is a principal mechanism underlying cell fate specification in a variety of developmental processes.... [중략]... This work was supported by grant from Brain Neurobiology Research Program of the MOST.

〉〉〉초록제출을 완료하신 회원(또는 비회원)님은 학술대회 페이지에서 반드시 참가신청을 (사전등록) 해주시기 바랍니다.〈〈〈

우수포스터상 응모 안내 (Excellent Poster Awards)

우수포스터상은 정기학술대회에서 발표하는 일반연구자 포스터 중 우수한 내용의 포스터를 30여 편 선정하여 시상하는 행사입니다. 우수포스터에 선정되면 상장 및 상금이 수여되며, 편당 20만원의 상금을 수여합니다. 회원에 한해서만 우수포스터상에 응모할 수 있는 자격을 부여하고 있으며, 비회원은 수상 대상에서 제외됩니다. 우수포스터상에 응모하고자 하는 참가자는 반드시 회원으로 등록하시어 모든 혜택을 받으실 수 있도록 준비하시기 바랍니다. *회원은 우수포스터상 응모를 원할 경우 온라인 초록 제출 시, 응모 여부를 표시하셔야 합니다(고등학생 및 학부생 우수포스터상은 별도로 심사하여 약간명을 시상하며 상금은 100,000원 입니다.).

포스터의 평가 기준은 포스터 내용의 과학성과 발표자의 발표 및 방어, 포스터 제작 수준 등이며, 시외 지역에서 참가한 발표 자는 가산점을 부여합니다. 수상자 선정은 우수포스터상 평가위원이 행사장에서 직접 평가하여 결정되며, 시상식은 정기학술대회 폐막식에서 개최됩니다.

- 대상 : 정기학술대회 포스터 발표자 중 회원에 한해 응모한 자

- 시상: 2011년 10월 7일 18:00, 서울 코엑스 그랜드컨퍼런스룸 401호

- 상금: 편 당 200,000원

포스터 발표

Poster Presentation

▮ 포스터 발표일시 및 장소

Poster Session	발표 시간	장소
Poster Presentation I	10월 6일(목) 09:20-18:00 (의무발표시간: 12:20-13:20)*	COEX Hall C1-C2 (3F)
Poster Presentation II	10월 7일(금) 09:20-18:00 (의무발표시간: 12:50-13:30)*	COEX Hall CI-CZ (3F)

^{*} 의무발표시간에는 자리를 비우지 마시고 포스터 앞에서 발표 대기를 하기기 바랍니다.

diffill

▮ 포스터 발표 안내

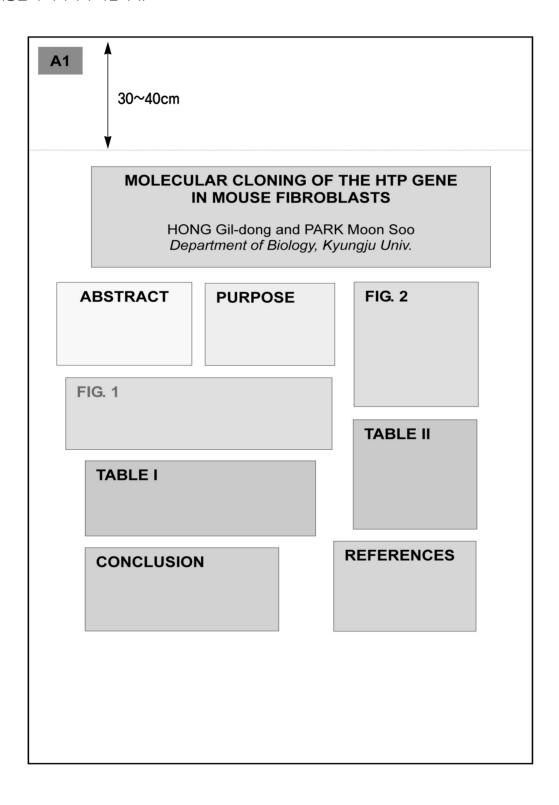
- 1) 모든 Poster는 부착시간 이내에 지정된 Board에 부착하여야 하며, 발표자는 발표시작 시간부터 Poster Session 이 끝날 때까지 의무적으로 Poster 앞에 위치하여야 합니다.
- 2) Poster Board의 크기는 1 m (가로) × 2.5 m (세로)이며 특히, 제목이 가로 넓이를 초과하지 않도록 준비하여야 합니다. 부착시 상단여백을 30 cm 두고 발표물을 부착하시기 바랍니다.
- 3) Poster의 내용은 Abstract, Purpose of Experiment, Results (즉 Figures, Tables), Conclusion, References (대표적인 것 5개 정도)의 순으로 합니다.
- 4) Poster는 굵고 명확히 표기하여, 전방 2 m 위치에서 쉽게 읽을 수 있어야 합니다.
- 5) Poster 부착시 압정은 사용할 수 없으니 반드시 스카치테이프를 지참하시기 바랍니다.
- 6) 모든 Poster는 발표 종료 시간에 발표자가 철거해야 합니다.
- 7) 보드 부착방법은 다음 페이지의 안내와 같습니다.

[※] 초록을 제출하였더라도 포스터를 부착하지 않은 경우는 학술대회 발표 실적으로 활용할 수 없음을 알려드립니다.

포스터 제작 안내

Guidline for Poster Preparation

제공되는 Poster Board 규격은 1 m \times 2.5 m (가로 \times 세로) 입니다. 부착시 보드 상단에서 30 \sim 40cm 여백을 두고 발표내용을 부착하시기 바랍니다.



기기전시회

Exhibition

- ㅇ 160개 부스 전시 예정
- O 현재 신청업체 (7월 20일, 가나다 순) : 총 49개 업체 92부스

언새	신정업제 (/월 20일, 가나나 순	·)· 송 49개 	입제 92부스 		
순	업체명 홈페이지	대표자	주소	전화 팩스	부스
1	고마바이오텍(주) www.komabiotech.co.kr	문상훈	서울 강서구 가양3동 1487번지 가양테크노타운 301호	02-579-8787 02-578-7042	2
2	(주)그린진바이오텍 www.ggbio.com	남백희, 황기욱	경기 용인시 처인구 남동 명지대학교 용인캠퍼스 생명과학 내	031–330–6193 031–321–6355	1
3	(주)기산바이오텍 www.kisanbiotech.com	선지운	서울 서초구 양재동 86-2 기산빌딩 2층	02–529–2282 02–529–2284	1
4	(주)노바프로 www.novapro.co.kr	박인성	서울 마포구 서교동 478-12 홍익제일빌딩 5층	02-338-0059 02-338-0079	1
5	니콘 인스트루먼트 코리아 www.nikon-inst.co.kr	김경섭, 마사이토시유키	서울 강남구 대치2동 육인빌딩 1층	02-2186-8417 02-555-4415	2
6	다카라코리아바이오메디칼(주) www.takara.co.kr	나카오고이찌, 이동근, 윤경묵	서울 금천구 가산동 뉴티캐슬 601호	02-2081-2510 02-2081-2500	2
7	(주)대명사이언스 www.dm4you.com	곽상명	서울 송파구 가락동 128-9 디엠빌딩 401호	02-458-5835 02-452-1221	1
8	(주)대일테크 www.daeiltech.co.kr	이동건	서울 강남구 역삼동 727-5,6	02–508–1408 02–508–2091	2
9	(주)라이카 코리아 www.leica-microsystems.co.kr	고승희	서울 강남구 청담1동 53-8 은성빌딩 6층	02-3416-4541 02-514-6548	2
10	마크로텍 www.macrotech.co.kr	이주형	경기 고양시 일산동구 장항동 846 센트럴프라자 802호	031-903-3093 031-903-3096	1
11	머크 주식회사 www.merck-chemicals.co.kr www.merck.co.kr	유르겐 쾨닉	서울 강남구 대치3동 해성2빌딩 15층	02-2185-3800 02-2185-3830	2
12	(주)바이오니아 www.bioneer.co.kr	박한오	대전 대덕구 문평동 49-3 (주) 바이오니아	1588–9788 042–930–8600	2
13	바이오알앤디(주) www.doctorprotein.com	이성학	대전 유성구 전민동 461-8 대전바이오벤처타운 508호	070-7706-5630 042-863-5631	2
14	(주)바이오프린스 www.bioprince.co.kr	박종우	서울 성동구 성수2가3동 299-157 4층	02-498-7686 02-498-7687	2
15	바이오텍인스트루먼츠코리아 www.biotek,com	경연기	서울 강남구 역삼동 830-48 경남빌딩 3층	02-562-4740 02-562-4750	2
16	(주) 비바젠 www.vivagen.co.kr	박준상	경기 성남시 중원구 상대원동 311-3 성남우림라이온스밸리1차 618호	031–737–2080 031–737–2083	1
17	(주)비엠에스 www.bmskorea.co.kr	김선기	서울 강남구 역삼1동 829 BMS빌딩	02-3471-6500 02-3472-1211	8
18	비투바이오(주) www.b2bio.co.kr	문경배, 최윤식	서울 노원구 하계동 250-3 하계테크노타운 A-701	02-6409-9338 02-995-9008	2
19	(주)서린바이오사이언스 www.seoulin.co.kr	황을문	서울 강동구 성내동 452-2 서린빌딩	02-478-5911 02-478-5912	2
20	(주)석림랩텍 www.sercrim.com	정태완	서울 성북구 정릉2동 109-24호	02-9114-114 02-9114-111	1
21	(주)셀타젠 www.celltagen.com	강동율	서울 광진구 구의1동 221-81 2층	02-434-7093 02-434-7094	1
22	씨그마알드리치코리아 www.sigmaaldrich.com	주현채	경기 용인시 처인구 원삼면 맹리 698-84	031–329–9000 031–329–9090	1
23	앱클론 주식회사 www.abclon.com	이종서	서울 구로구 구로동 212-1 에이스트윈타워 1차 1403호	02-2109-1294 02-2109-1296	2
24	(주)영화과학 www.labplus.co.kr	안여환	서울 금천구 가산동 60-73 벽산디지털밸리 5차 11층	02-2140-5400 02-2140-5405	4
25	(주)에스피엘 www.spllifesciences.com	허상오	경기 포천시 내촌면 음현리 570번지	031–533–4800 031–533–1430	2
26	(주)엔지노믹스 www.enzynomics.com	이승호	대전 유성구 관평동 1359 한신에스메카216호	042-330-6300 042-330-0630	1
27	엠 바이오텍 www.mbiotech.co.kr	이정교	경기 구리시 토평동 378-1	031–556–3905 031–556–3907	1
28	우성크라이어텍 www.woo-sung.com	석민철	경기 성남시 중원구 상대원동 442-5 쌍용IT트윈타워 B동 409호	031-732-2555 031-732-2544	1
			4.0		

2 1 1 1 1 1
1 1
1
1
4
1
2
3
1
3
2
2
1
1
2
2
4
2
2
2

기기전시회 참가 안내

2011년도 한국분자 · 세포생물학회 정기학술대회가 오는 10월 6일(목)-7일(금), 서울 삼성동 코엑스에서 개최됩니다.

본 행사는 국내 생명과학 분야 최대 학술대회로 매년 3,500명 이상이 참가하고 있으며 일반연구자 발표 초록 편수도 1,000편 이상이 되고 있습니다. 이에 올해에도 본 학회 학술대회 기기전시 업체로 참가하시어 생명과학 관련 연구자에게 귀 사의 제품 및 기술을 효과적으로 홍보하는 자리를 마련하시기 바랍니다.

1. 기기전시회 개최 일시 및 장소

O 일 시: 2011년 10월 6일(목) 09:00-7일(금) 18:00

전시 준비: 2011년 10월 5일(수) 09:00-(단. 기본부스 신청 업체는 16:00 이후에 준비 가능)

철거 시작: 2011년 10월 7일(금) 18:00-22:00

min

O 장 소: 코엑스 3층 Hall C1-C2

O 규 모: 선착순 160부스 마감

O 대 상: 이화학기기, 벤처업체, 시약, 소모성재료, 서적, 컴퓨터

2. 기기전시 참가비 안내

가. 독립부스(Only Space)인 경우

부스 수	1 부스	2 부스	3 부스	4 부스	5 부스	6 부스
참가비 (*부가세 별도)	210만원	400만원	580만원	740만원	870만원	980만원

1) 독립부스(Only Space)는 할당 면적의 Space만 제공되는 부스입니다.

2) Space (부스면적): 3m × 2m (가로 × 세로)

*높이는 천정에 따라 다르나 최대 4M 이하로 제한함.

3) 테이블 제공: 크기 1,500mm × 700mm 테이블 1부스 당 1개 제공

4) 의자 제공: 1부스 당 기본 2개 제공

5) 전기 제공: 1부스 당 1.5Kw, 콘센트 220V 2구짜리 1개 제공

6) 바닥: 파이텍스 *부스설치 시 - 주어진 면적을 벗어나 통로쪽으로 시공하지 못함.

나. 기본부스(Shell Scheme) Package인 경우

부스 수	1 부스	2 부스	3 부스	4 부스	5 부스	6 부스
참가비 (*부가세 별도)	240만원	460만원	660만원	840만원	990만원	1,120만원

- 1) 기본부스(Shell Scheme) Package는 독립부스에 부스외곽(Shell) 설치가 제공됩니다. 독립부스 참가비 외에 부스외곽 설치 비용이 추가된 것입니다.
- 2) 부스외곽 크기 : 3m × 2m × 2.5m (가로 X 세로 X 높이)

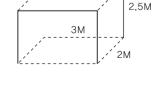
3) Information 데스크 1개 제공

4) 테이블 제공 : 크기 1.500mm × 700mm 테이블 1부스 당 1개 제공

5) 의자 제공: 1부스 당 기본 2개 제공

6) 전기 제공: 1부스 당 1.5Kw, 콘센트 220V 2구짜리 1개 제공 7) 조명 제공: 1부스 당 형광등 40W 1개, Spot-light 100W 3개



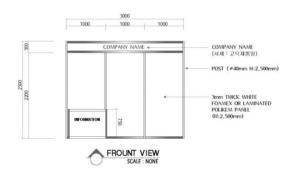


8) 상호 제작 : 회사명을 부스 간판에 제작함. 흰색 바탕에 청색 고딕 서체로 기본 회사명 제작

9) 바닥: 파이텍스

10) Shell Scheme 도면도







3. 안내사항

가. 자체 준비 사항

- 1) 110V 이용시는 Transformer와 멀티코드를 자체 준비하시기 바랍니다.
- 2) 테이블보는 분실이 많은 관계로 제공되지 않으니, 필요한 경우 직접 준비해 오시기 바랍니다.

나. 추가 선택사항

- 1) 추가로 선택하실 사항은 신청서에 체크하시기 바랍니다.
- 2) 모든 부스 종류에 해당되는 추가 선택사항입니다.

항 목	설 명	금 액
Bar-code Reader 임대	업체별 방문고객관리 전산입력 시스템	70,000원
LAN선 1회선 사용료	인터넷 사용을 위한 랜선 제공	40,000원
전기 용량 추가	기본제공 전기용량 이외에 부득이하게 전기용량을 추가할 경우 (*설비제한으로 전기용량 사용을 제한하고 있음)	15,000원/kw

3) 기본부스(Shell Scheme) 신청 시만 해당되는 추가 선택사항입니다.

항 목	설 명	금 액
상호 로고 이미지 제작	Shell (부스외곽) 간판에 기본 상호 외의 회사 로고 이미지나 Cl 제작을 원할 경우	40,000원

다. 기타사항

1) Booth 배치 : ① Sponsorship package 및 큰 부스 신청 순

Constitute.

② 2012년도 전시 사전 신청 순

③ 접수 순

2) 연합 Booth : 원칙적으로 금함.

- 3) 전시물 설치 가능 시간 : 행사전일 10월 5일(수) 09:00- (단, 기본부스 신청 업체는 16:00 이후에 준비 가능) *전시물 해체 시간 : 10월 7일(금) 오후 6시 이후-10시 전까지 완료요망.
- 4) 2011, 2012년 연간 부스 계약시 자리배정 우선순위 및 2012년도 전시비 5% 할인을 적용해 드릴 예정입니다.
- 5) 신청서 제출시 **사업자등록증**을 반드시 학회 팩스로(Fax. 02-558-0131) 보내주시기 바랍니다.

4. 기기전시 신청 마감일: 2011년 8월 31일(수)까지

■ Fax. 02-558-0131, E-mail, home@ksmcb.or.kr

■ 온라인 등록: http://www.ksmcb.or.kr

5. 기기전시 참가비 납부 방법

1) 첨부 신청서에 해당사항을 작성하여 보내주시면 학회에서 별도로 청구서를 보내드립니다. 청구서 접수 후, 해당금액을 아래 계좌에 입금하여 주시기 바랍니다.

2) 납부구좌: 국민은행, 454101-01-129531 (사)한국분자·세포생물학회

3) 법인카드 결제는 BC, 국민, 신한 카드에 한해 가능합니다.

6. 정기학술대회 초록집 광고 신청

규 격	A4 Size
광 고 비	면당 80만원 (* 단, 뒤표지 게재 시에는 100,000원 추가)
접수 방법	모든 광고는 PDF로 접수
광고 신청 마감일	2011년 8월 31일(수)

2011년도 한국분자 · 세포생물학회 정기학술대회 기기전시 참가 및 초록집 광고게재 신청서

업체명	(국 문)						
	(영 문)						
rkrk+lmi	담당자명	이메일					
담당자명	전화번호	팩스번호					
Sponsorship Package 신청	□ A □ B	□C □ D □ E					
Special Sponsorship 신청							
	독립부스 (Only Space)	□ 1개 : 210만원 □ 2개 : 400만원 □ 3개 : 580만원 □ 4개 : 740만원 □ 5개 : 870만원 □ 6개 : 980만원					
전시참가 (해당사항에 ☑ 표기)	기본부스	□ 1개 : 240만원 □ 2개 : 460만원 □ 3개 : 660만원 □ 4개 : 840만원 □ 5개 : 990만원 □ 6개 : 1,120만원					
	(Shell Scheme)	간판상호 제작 선택 ㅁ 국문상호(무료) ㅁ 영문상호(무료) ㅁ 로고제작[4만원]					
	바코드리더기	()개 [개당 7만원]					
추가선택	랜선 ()개 [개당 4만원]						
	전기 1부스당 기본제공 1,5Kw 외 ()Kw 추가 [15,000원/kw]						
학술대회 전시품목 (초록집에 게재함)		□ 이미징 장비 분야 □ 세포연구장비 분야 □ 일반분석장비 분야 □ 일반시약 분야 □ 소모품 분야 □ 서적 분야					
초록집 광고게재	면당 80만원	(신청 : 면)					
※ 위 금액은 부가세(VA ⁻	「) 별도입니다.						
	대표자명	URL					
	전화번호	팩스번호					
관련업체 명부	이메일	우편번호					
*초록집게재	주소						
	취급분야						
	주요취급품목						
	기술제휴 회사명						
2012년도 전시 계약	신청부스수	기본: ロ 1개 ロ 2개 ロ 3개 ロ 4개 ロ 5개 독립: ロ 1개 ロ 2개 ロ 3개 ロ 4개 ロ 5개 *2012년도에 계약을 취소할 경우 자리배정 등 불이익이 따를 수 있사오니, 계약시 반드시 시행하시기 바랍니다.					
	혜택사항	1) 2011년도 기기전시 부스 자리배정시에 우선순위 부여					
	에팩시청	2) 2012년도 부스비의 5% 할인 적용					
	담당자	(서명)					

본사에서는 "2011년 한국분자·세포생물학회 정기학술대회"에서의 전시 및 광고 참가를 위와 같이 신청하는 바입니다.

	2011.	
대표자명 :		 (인)

사단법인 한국분자 · 세포생물학회장 귀중(Fax. 02-558-0131)

제품설명회

Company Workshop

- 1. 일시 및 발표시간
- 2011년 10월 6일(목)-7일(금)
 - □ Session 1-3: 10월 6일(목) 11:30-12:20
 - □ Session 4-8: 10월 7일(금) 12:00-12:50
- 2. 장소: 서울 코엑스 컨퍼런스센터 홀 심포지엄 전용 홀
- 3. 발표 내용: 제품 / 신기술 홍보, 인력채용 안내 등 업체 자율
- 4. 비용: 한 Session 당 4,000,000원 (부가세 별도임)
 - 학회 제공 사항: 발표기자재(빔프로젝터 및 마이크)
 - ※ 참가자에게 중식 제공 시 업체 자체적으로 부담하여 제공하여야 함.

min

- 5. 신청 마감일: 2011년 8월 31일(수)
- 6. 비용 청구 및 납부: 신청서 접수 후 학회에서 청구서를 발송해 드리며 해당 계좌로 납부하시면 됩니다.
- 7. 신청방법: 희망하시는 업체는 아래 신청서에 날인하시어 학회로 송부하시기 바랍니다.
 - ※ 발표 가능한 Session 수가 제한되어 있어 <u>선착순으로</u> 신청을 받을 예정이니 발표를 원하시면 빠른 시일 내 신청하시기 바랍니다.

제품설명회 참가 신청서

업체명	국문		
	영문		
연락처	전화번호	팩스번호	
	담당자	E-mail	
희망일자	□ Session 1 - 3:10월 6일 점심시간 50분		
	□ Session 4 - 8:10월 7일 점심시간 50분		
경비	4,000,000원 (VAT 별도)		

본 사는 제품 설명회를 위와 같이 신청합니다.

	2011.		
대표자:			(인)

사단법인 한국분자·세포생물학회 귀중 (Fax. 02-558-0131)

출장협조 의뢰서

2011년 한국분자·세포생물학회 정기학술대회가 아래와 같이 개최되오니 소속 회원들이 참가할 수 있도록 출장을 허락하여 주시기 바랍니다.

□ 일 시 : 2011년 10월 6일(목) - 7일(금)

□ 장 소 : 서울 코엑스

사단법인 한국분자 · 세포생물학회

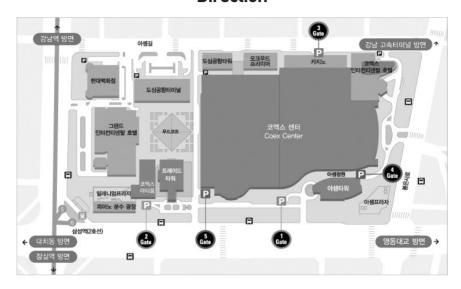
회 장 최 양



교통편 안내

William.

Direction



- 지하철

* 2호선 삼성역 방면

삼성역 하차, 5,6번 출구와 연결된 통로로 진입, 밀레니엄 광장을 통해 진입.

* 7호선 청담역 방면

청담역 2번출구(진행방향 앞쪽)로 나온 후 도보로 약 20-30 분 거리 직진, 아셈광장을 통해 진입.

- 승용차

서 울

● 강남역 방면

테헤란로 삼성동 방면으로 직진, 삼성역사거리에서 유턴하여 현대백화점을 끼고 우회전, 전방 200m 우측에 있는 Gate3 (서문)을 통하여 옥상 및 지하 주차장(오크우드호텔 지하쪽)으로 진입

● 잠실 방면

삼성역 사거리에서 직진하여 현대백화점을 끼고 우회전, 전방 200m 우측에 있는 Gate3 (서문)을 통하여 옥상 및 지하 주차 장(오크우드호텔 지하쪽)으로 진입

● 강남고속터미널 방면

제일생명 사거리에서 직진하여 라마다 호텔을 지나 직진, 봉은 사 아셈 사거리에서 우회전 후 100m 직진하여 Gate3(서문)을 통해 진입

● 영동대로 방면

영동대교를 건너서 경기고 및 청담역 사거리 직진, 코엑스 사거 리에서 우회전하여 전방 100m 좌측에 있는 Gate4(북문)를 통하여 지하주차장으로 진입.

수도권

● 인천방향에서 오시는 길

서울 외곽 고속도로 판교방향으로 진입하여 의왕, 과천 고속도로에서 과천방향으로 진입하여 경마장 옆으로 진행, 양재대로로 합류하여 가락동 농수산물 시장방향으로 진행하시다가 삼성병원 못가서 영동대교 방향으로 좌회전, 삼성역 사거리에서 직진, 코엑스 사거리에서 유턴하여 전방 100m 우측에 있는 Gate2 (남문) 또는 Gate5 (동문2)를 통하여 지하 주차장으로 진입

● 강화. 김포방향에서 오시는 길

88올림픽도로로 진입하여 잠실방향으로 주행하시다가 영동대교를 지나면 3차선으로 차선을 바꾸어 주행하여 잠실운동장 조금 못가서 LG 주유소를 끼고 우회전, 무역센터 방향으로 우회전, 코엑스 사거리에서 좌회전하면 전방 100m 우측에 있는 Gate2 (남문) 또는 Gate5 (동문2)를 통하여 지하 주차장으로 진입

지방

● 경부고속도로로 오시는 길

서울 방향으로 진행하시다가 양재 인터체인지에서 가락동 농수 산물 시장방향으로 직진하여 삼성병원 못가서 영동대교 방향 좌 회전, 삼성역 사거리 지나서 코엑스 사거리에서 유턴하여 직진 방향 100m 우측에 있는 Gate2 (남문) 또는 Gate5 (동문2)를 통하여 지하 주차장으로 진입

● 중부고속도로, 구리방향에서 오시는 길

중부고속도로방향(구리 방향은 강동대교를 건너서)에서는 88을 림픽도로 김포방향으로 진입하여 잠실 운동장 방향으로 진행하 시다가 무역센터 방향으로 직진, 코엑스 사거리에서 좌회전 100m 직진하여 우측에 있는 통하여 지하 주차장으로 진입

- 시내버스

● 그랜드 인터컨티넨탈 호텔(삼성역 5번 출구) 앞: 정류장 번호 23201

일반버스: 146, 341, 360, 730 (파랑버스), 3411, 4434

(초록버스), 41 (노란버스), 강남 07 (마을버스)

공항버스: 6000

● 코엑스 아티움(무역센터) 앞: 정류장 번호 23199

일반버스: 143 (파랑버스), 2413, 4318, 4419 (초록버스),

강남 01 (마을버스)

공항버스: 도심터미널

● 코엑스 동문 앞: 정류장 번호 23198

일반버스: 146, 301, 342, 362, 401 (파랑버스), 2415, 3217, 3411, 3412, 3414, 3418 (초록버스),

강남 01 (마을버스)

공항버스: 6006

● 봉은사 건너편: 정류장 번호 23191

일반버스: 342, 640 (파랑버스), 3411, 3412 (초록버스)

공항버스: 강남심야노선

● 한국전력(삼성역 7번 출구) 앞: 정류장 번호 23197

일반버스: 143, 146, 301, 342, 362, 401, 640 (파랑버스), 2413, 2415, 3217, 3412, 3414, 3417, 3418, 4318, 4419 (초록버스), 강남01, 강남06 (마을버스)

공항버스: 도심터미널, 도심터미널2

주차안내



- COEX 주차장 (지하 2~4층)

● 주차요금

- 승용차: 15분당 1,000원 (최초 30분 2,000원)※1일 주차할 경우 승용차에는 최고 4만원의 주차요금이 적용
- 2.5톤 이상 화물차: 승용차 주차요금의 2배
- 대형버스: 코엑스 주차장 이용 불가 (탄천 주차장 이용)
- ※ 주차요금이 부담스러우신 이용객께서는 대중교통을 이용 하시길 바라며, 부득이하게 승용차를 이용하고자 하시면 탄천주차장을 이용하시기 바랍니다.

- 탄천주차장

• 탄천 주차장은 탄천을 사이로 송파구와 강남구로 구분되어 있습니다. 송파구 탄천 주차장의 위치는 종합운동장 쪽이며, 강남구 탄천 주차장의 위치는 강남병원 옆쪽에 있습니다.

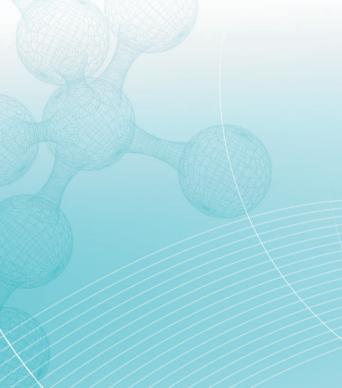
구분	(강남)탄천주차장	(송파)탄천주차장
주차장관리	강남구 도시관리공단	송파구 시설관리공단
주차요금	매분 10분당 200원	7시간 2,500원 / 초과 시 시간당 1,200원씩 (소형기준)
주차대수	996대	900~1,000대
전화번호	02) 2176-0900	02) 417–0739
홈페이지	http://www.kncity.or.kr/adbnes/pb_pasys/pb_pasys_nw02.asp	http://www.songpagongdan.or.kr/present/present01.asp#p03

● 봉은로에서 탄천주차장 가는 방법

- 봉은로 직진 → 봉은교 직진 → 종합운동장 서문 앞에서 비보호 좌회전 → 송파탄천주차장 입구
- 영동대로 → 휘문고교앞 좌회전 → 강남서 → 탄천길 → 강남탄천주차장 입구

● 테헤란로에서 탄천주차장 가는 방법

- 테헤란로 직진 → 종합운동장 전철역 앞에서 U턴 → 올림픽(88)도로 방면으로 우회전 → 종합운동장 서문 앞에서 비보호 좌회전 → 송파탄천주차장 입구
- 삼성역 우회전 \rightarrow 영동대로 \rightarrow 휘문고교 좌회전 \rightarrow 강남서 \rightarrow 탄천길 \rightarrow 강남탄천주차장 *송파구와 강남구 탄천 주차장에 이용요금이 상이하므로 비교하여 이용에 착오 없으시길 바랍니다.





서울특별시 강남구 테헤란로 북4길 22 (역삼동 635-4) 한국과학기술회관 1105호

Tel: 02-568-4490, 4544 Fax: 02-558-0131 E-mail: home@ksmcb.or,kr URL: http://www.ksmcb.or,kr