# **ICoLA 2024**

The 13th International Congress on Lipid & Atherosclerosis

New Perspectives in Lipid and Atherosclerosis: Exploring Innovations

September 26(Thu)-28(Sat), 2024 CONRAD Seoul, Republic of Korea



▲ ABSTRACT BOOK DOWNLOAD

# **PROGRAM BOOK**





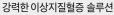
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# **WELCOME MESSAGE**

Dear Colleagues,

On behalf of the organizing committee, we extend a warm and heartfelt welcome to the 13th International Congress on Lipid & Atherosclerosis (ICoLA 2024), taking place at the Conrad Seoul, Republic of Korea, from September 26(Thu) to 28(Sat), 2024. We are thrilled to gather such a distinguished assemblage of experts in the field of lipid and atherosclerosis research in the vibrant, dynamic city of Seoul.

This year's congress, themed "New Perspectives in Lipid and Atherosclerosis: Exploring Innovations," promises an enriching journey into the frontiers of research and development. We will engage in stimulating discussions around the latest advancements, unveil pioneering innovations, and foster impactful collaborations that propel us towards a healthier future.

ICOLA 2024 features an exceptional lineup of internationally renowned speakers who will share their invaluable insights and ignite thought-provoking dialogues. A diverse range of sessions, including key lectures, main symposia, joint symposia, committee sessions, special sessions, oral & mini-oral presentations, will provide a platform for knowledge exchange, collaboration, and inspiration, particularly for young researchers to showcase their works and connect with established leaders in this field.

ICOLA 2024 transcends merely being a scientific gathering; it embodies a vibrant community of passionate individuals dedicated to advancing our understanding of lipids and atherosclerosis. We invite you to actively participate in this stimulating intellectual exchange, forge new collaborations, and contribute to shaping the future of this vital field.

We sincerely hope that you have a truly special experience at the congress. Once again, welcome to ICoLA 2024!

Sincerely,

Ick-Mo Chung President, The Korean Society of Lipid and Atherosclerosis (KSoLA)



Jaetaek KIM Chairman, Board of Directors, The Korean Society of Lipid and Atherosclerosis (KSoLA)

# **ICoLA 2024**

The 13th International Congress on Lipid & Atherosclerosis

New Perspectives in Lipid and Atherosclerosis: Exploring Innovations

# **CONTENTS**

M.	
Organization	5
Scientific Program Committee	6
Floor Plan	7
	4.0
Program at a Glance	10
Program in Detail	13
Oral Presentations	54
Mini-Oral Presentations	57
Event Information	72
CME Credits	
(For Korean Participants)	73
Booth Exhibition	74
2 DOOUT EXTIIDIUOTT	/4
Sponsorship	76

# **ORGANIZATION**

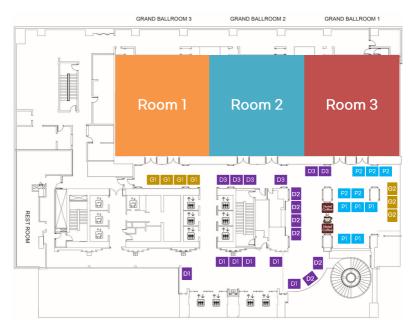
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	Sung Hee Choi	Seoul National University
Auditor	Hyuk-Sang Kwon	The Catholic University of Korea
Auditol	Sang-Hyun Kim	Seoul National University

# **SCIENTIFIC PROGRAM COMMITTEE**

MEMBERS	NAME	AFFILIATION	
Director	Woo Je Lee	University of Ulsan	
	Chang Hee Jung	University of Ulsan	
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iviembers	Hokyou Lee	Yonsei University	
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	Youngwoo Jang	Gachon University	
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	Jae-Hoon Choi	Hanyang University	
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	Hyun-Chang Kim	Yonsei University	
Advisors	Cheol-Young Park	Sungkyunkwan University	
	Sang-Hak Lee	Yonsei University	
	Chang Yeop Han	University of Washington, USA	

# **FLOOR PLAN**

# 3F, Conrad Seoul



Sponsorship	Booth No.	Corporate
	1	Hanmi Pharm
Diamond	2	Daewoong Pharm
	3	JW Pharm
Distance	1	Organon
Platinum	2	GSK
CIL	1	Viatris
Gold	2	LG Chemical

# **FLOOR PLAN**

# 5F, Conrad Seoul



Sponsorship	Booth No.	Corporate	
Gold	3	Novartis	
	4	Chong Kun Dang	
	5	Jeil Pharm	
	6	Abbott	
	7	Yuhan	
Silver	1	Amgen	
	1	Ahngook Pharm	
Bronze	2	Novo Nordisk	
	3	Sanofi	
	4	Hanlim Pharm	

Sponsorship	Booth No.	Corporate
	5	Daewon Pharm
	6	Boryung
	7	HK Inno,N
Bronze	8	Boehringer Ingelheim & Lilly
	9	Dong-A ST
	10	Celltrion Pharm
	11	Daiichi-Sankyo
	12	Hyundai Pharm
	13	Moderna

# **FLOOR PLAN**

# 6F, Conrad Seoul



Sponsorship	Booth No.	Corporate
Bronze	14	Otsuka Pharm
bronze	15	Yooyoung Pharm
		GC Biopharma Corp.
		lldong Pharm
		Kuhnil Pharm
		Astrazeneca
Exhibition Booth	5	Alvogen
	6	BCWorld Pharm
		Korea United Pharm
		Daewoong Bio Inc.
	9	Inbody

# **PROGRAM AT A GLANCE**

[Day 1] September 26(Thu), 2024

(K): Korean Session

	Room 1 Room 2 Room 3 Room 4					
12:00~		Registratio				
13:00~14:30	Research Group Session (K) - TRL/ LP(a) Research TFT Session Lipoprotein(a): Unraveling its Mysteries and Implications  Committee Session 1 (K) Clinical Research Award Session		Committee Session 2 (K) Basic Research Committee Workshop	VAS-KSoLA Joint Symposium Dyslipidemia Guidelines: Similarity and Difference between Asian Countries (Room 4, 5F)	Committee Session 3 (K) Publication Committee Session: 2024 JLA Best Paper Award (Park Studio, 5F)	Dyslipidemia Management Policy Session (K) Significance and Interval of Cholesterol Testing in National Health Examinations (Studio 1,2,3, 6F)
14:30~14:40	Break					
14:40~16:10	Oral Presentation 1 Oral Presentation 2 Oral Presentation 3 FH/Severe Dyslipidem  JAS-KSoLA Joint Symposiu FH and Severe Dyslipider			um on		
16:10~16:20	Break					
16:20~17:50	ASPC-KSoLA Joint Symposium Comprehensive Cardiovascular Prevention: CAC and Beyond  EAVA-KSoLA Joint Symposium Premature Atherosclerosis: What's Going On?  Committee Session 4 (K) Publication Committee Workshop: Research with Al Tools  FH/Severe Dyslipidemia 2  JAS-KSoLA Joint Symposium on FH and Severe Dyslipidemia 2  FH and Severe Dyslipidemia 2			um on		
18:10~		We	elcome Reception (St	tudio 1,2,3, 6F)		

# **PROGRAM AT A GLANCE**

[Day 2] September 27(Fri), 2024

(K): Korean Session

	Room 1	Room 2	Room 3	Room 4
07:30~08:30	Breakfast Symposium 1 (K)	Breakfast Symposium 2	Breakfast Symposium 3	Breakfast Symposium 4
08:30~10:00	Symposium 1 New Antidyslipidemic Agents on the Horizon	Symposium 2 Recent Advances in Metaflammation and Atherosclerosis Research	Symposium 3 (K) Nutrition Management and Related Systems Using Al	Latin America-KSoLA Joint Symposium Genetics and Environment Related to ASCVD
10:00~10:10		Bre	eak	
10:10~10:20		Opening Address		
10:20~11:00	Unrecognized	Special Lecture 1 d role for insulin/IGF-1 signalin	g in the heart	
11:05~11:45	Inflammation	Plenary Lecture 1 and atherosclerosis: from the	ory to practice	
11:45~12:00		Coffee	e Break	
12:00~13:00	Luncheon Symposium 1 (K)	Luncheon Symposium 2	Luncheon Symposium 3	Luncheon Symposium 4
13:00~14:30	<b>Symposium 4</b> New Therapeutic Strategies for Metabolic Diseases	Symposium 5 Comprehensive Cardiac Rehabilitation for Secondary Prevention of Atherosclerotic CVD	Symposium 6 MASLD, Type 2 Diabetes, and Atherosclerotic Cardiovascular Disease	OSLA-KSoLA Joint Symposium Addressing Unmet Needs among High-Risk Patients with Atherosclerotic Cardiovascular Disease with Novel Lipid-Lowering Therapies
14:40~15:50	4:40~15:50 Mini-Oral Presentation 1			
15:50~16:30	<b>Keynote Lecture 1</b> Lipoprotein(a) in cardiovascular disease			
16:30~16:50				
16:50~18:20	2024 KSoLA Awards for Scientific Excellence & Young Investigator (K)	AAS-KSoLA Joint Symposium Diabetes and Vascular Dysfunction	<b>Symposium 7</b> Role of Diets for Cardiometabolic Health	MSA-KSoLA Joint Symposium Metabolic Aspect of Atherosclerosis

# **PROGRAM AT A GLANCE**

[Day 3] September 28(Sat), 2024

(K): Korean Session

	Room 1 Room 2		Room 3	Room 4
07:50~08:50	Breakfast Symposium 5 Breakfast Symposium 6		Breakfast Symposium 7 (K)	Breakfast Symposium 8
08:50~10:20			KNS-KSoLA Joint Symposium (K) Current Knowledge and Future Perspectives in Dietary Fat Intake for Vascular Health	Symposium 9 Biomechanical Factors in Atherosclerosis: Mechanisms and Clinical Implications
10:20~10:40		Coffee	Break	
10:40~11:20	Lipid me	Plenary Lecture 2 etabolism in thermogenic adipos	se tissues	
11:25~12:05	Recent advances in and a look in	with PCSK9 therapy next 10 years		
12:05~12:20		Bre	ak	
12:20~13:20	Luncheon Symposium 5			
13:30~14:40				
14:40~15:20	Dissecting d	d biomarkers		
15:20~15:40				
15:40~17:10	TSLA-KSoLA Joint Symposium Remnant Cholesterol in the Statin Era	SHVM-KSoLA Joint Symposium Insights into Metabolic and Cardiovascular Dynamics	Symposium 10 The Roles of Innate Immune Cells in Cardiovascular Disease	EAS-KSoLA Joint Symposium Novel Therapeutic Targets in Atherosclerosis
17:10~				

# **PROGRAM IN DETAIL**

# Research Group Session (K) - TRL/LP(a) Research TFT Session

Sep 26(Thu) 13:00-14:30 | Room 1 (3F)

Lipoprotein(a): Unraveling its Mysteries and Implications





- 13:00-13:15 Lipoprotein(a) metabolism: unlocking its secrets

  Jang Hoon Lee (Kyungpook National University, Republic of Korea)
- 13:15-13:30 Unveiling the dark side: LP(a)-associated OxPLs and their role in fueling atherosclerosis
  Youngwoo Jang (Gachon University, Republic of Korea)
- 13:30-13:45 Beyond genetics: unraveling the multifaceted influences shaping LP(a) concentrations

  Sang Min Park (Eulji University, Republic of Korea)
- 13:45-14:00 Navigating the LP(a) labyrinth: illuminating measurement challenges and methodological odyssey
  - Sang-Guk Lee (Yonsei University, Republic of Korea)
- 14:00-14:30 Panel Discussion

Sangwoo Park (University of Ulsan, Republic of Korea)

Minjae Yoon (Seoul National University, Republic of Korea)

Ki-Hyun Jeon (Seoul National University, Republic of Korea)

Jung Hyun Choi (Pusan National University, Republic of Korea)

Lipoprotein(a) [LP(a)] is well-established to be closely associated with the development of cardiovascular diseases, and therapies such as ASO and siRNA are actively being researched. This session will explore the metabolism and clinical implications of LP(a). Professor Jang Hoon Lee from Kyungpook National University will unveil the metabolic secrets of LP(a). Professor Youngwoo Jang from Gachon University will elucidate the role of LP(a)-associated oxidized phospholipids in driving atherosclerosis. Professor Sangmin Park from Eulji University will delve into the multifaceted influences beyond genetics that shape LP(a) concentrations. Lastly, Professor Sang-Guk Lee from Yonsei University will illuminate the challenges in measuring LP(a) and the methodological odyssey to overcome these hurdles. Join us in unraveling the mysteries and implications of LP(a) in this comprehensive session.

# Committee Session 1 (K)

Sep 26(Thu) 13:00-14:30 | Room 2 (3F)

#### Clinical Research Award Session

CHAIRPERSONS: Sungha Park (Yonsei University, Republic of Korea)
Seung-Hwan Lee (The Catholic University of Korea, Republic of Korea)



13:00-13:20 Association of triglyceride-to-HDL cholesterol ratio with type 2 diabetes in young adults: a longitudinal study from South Korea

Min-Kyung Lee (Hanyang University, Republic of Korea)

13:20-13:40 Incidence, predictor, and long-term clinical outcomes of intolerance of high-intensity statin in Korean patients with atherosclerotic cardiovascular disease: data from 2 randomized clinical trials

Sung-Jin Hong (Yonsei University, Republic of Korea)

13:40-14:00 Optimal lipid levels according to the characteristics of diabetes mellitus

Mee Kyoung Kim (The Catholic University of Korea, Republic of Korea)

14:00-14:30 Panel Discussion

**Eun Young Lee** (The Catholic University of Korea, Republic of Korea) **Ji-Yong Jang** (National Health Insurance Service Ilsan Hospital, Republic of Korea)

Jun Hwa Hong (Eulji University, Republic of Korea)

This session will highlight recent clinical research breakthroughs in cardiovascular and metabolic health. The esteemed speakers, recognized with clinical research awards, will present their cutting-edge findings. We will begin with Professor Min-Kyung Lee (Hanyang University), an exploration of the cumulative effect of triglycerides on diabetes risk in young adults, followed by an in-depth analysis of the association between perivascular adipose tissue of the carotid artery and acute ischemic stroke. Next, Professor Sung-Jin Hong (Yonsei University) will present the incidence, predictors, and long-term outcomes of high-intensity statin intolerance in Korean patients with atherosclerotic cardiovascular disease, based on data from two randomized clinical trials. The session will conclude with Professor Mee Kyoung Kim (The Catholic University of Korea) on determining optimal lipid levels tailored to the characteristics of diabetes mellitus, offering insights to refine treatment protocols. Join us for this session to gain valuable knowledge that promises to advance clinical practice and improve patient outcomes.

## Committee Session 2 (K)

Sep 26(Thu) 13:00-14:30 | Room 3 (3F)

### **Basic Research Committee Workshop**

CHAIRPERSONS: Minho Shong (KAIST, Republic of Korea)
Jun Namkung (Yonsei University, Republic of Korea)



13:00-13:20 Regulatory mechanism by SREBP-1c in metabolic dysfunction-associated steatohepatitis

Seung-Soon Im (Keimyung University, Republic of Korea)

13:20-13:40 Long-term metabolic programming by perinatal hypothalamic-pituitary hormones

Jun Young Hong (Yonsei University, Republic of Korea)

13:40-14:00 The novel roles of intracellular Ca2+ and Phosphoinositide coupling for metabolic signaling and diseases

Byung-Chul Oh (Gachon University, Republic of Korea)

14:00-14:30 Panel Discussion

**KyeongJin Kim** (Inha University, Republic of Korea)

Hong-Yeoul Ryu (Kyungpook National University, Republic of Korea)

Kae Won Cho (Soonchunhyang University, Republic of Korea)

The Basic Research Committee has prepared a session to introduce the recent outstanding research achievements in the field of lipid and atherosclerosis research. Professors Seung-Soon Im from Keimyung University, Jun-Young Hong from Yonsei University, and Byung-Chul Oh from Gachon University will present their latest research findings. This session is expected to provide new perspectives in the field of lipid and atherosclerosis research.

# **VAS-KSoLA Joint Symposium**

Sep 26(Thu) 13:00-14:30 | Room 4 (5F)

### Dyslipidemia Guidelines: Similarity and Difference between Asian Countries

CHAIRPERSONS: Tien Hoang Anh (Hue University of Medicine and Pharmacy, Vietnam)

Eun-Jung Rhee (Sungkyunkwan University, Republic of Korea)



13:00-13:20 Highlights of the Vietnam Atherosclerosis Society guideline on lipid disorders

Tien Hoang Anh (Hue University of Medicine and Pharmacy, Vietnam)

13:20-13:40 The target LDL-C levels in Korean dyslipidemia guidelines
 Hack-Lyoung Kim (Seoul National University, Republic of Korea)

13:40-14:00 Cardiovascular disease risk prediction in the Korean population

Hokyou Lee (Yonsei University, Republic of Korea)

14:00-14:30 Panel Discussion

Kim Ngoc Thanh (Hanoi Medical University, Vietnam) Yun Kyung Cho (University of Ulsan, Republic of Korea) Jun Hwan Cho (Chung-Ang University, Republic of Korea)

### Committee Session 3 (K)

Sep 26(Thu) 13:00-14:30 | Park Studio (5F)

#### Publication Committee Session: 2024 JLA Best Paper Award

CHAIRPERSONS: Won-Young Lee (Sungkyunkwan University, Republic of Korea) Hyun Kang (Chung-Ang University, Republic of Korea)



- 13:00-13:15 Autophagy enhancers regulate cholesterol-induced cytokine secretion and cytotoxicity in macrophages
  - So Yeong Cheon (Konkuk University, Republic of Korea)
- 13:15-13:30 Lipid-lowering efficacy of combination therapy with moderate-intensity Statin and Ezetimibe versus high-intensity Statin monotherapy: A randomized, open-label, non-inferiority trial from Korea
  - Hyejung Choi (Hallym University, Republic of Korea)
- 13:30-13:45 Higher non-high-density lipoprotein cholesterol was higher associated with cardiovascular disease comparing higher LDL-C in nine years follow up: cohort study Sangmo Hong (Hanyang University, Republic of Korea)
- 13:45-14:00 Clinical characteristics of patients with statin discontinuation in Korea: A nationwide population-based study
  - **Kyung-Soo Kim** (CHA University, Republic of Korea)
- 14:00-14:15 Metformin reduces the progression of atherogenesis by regulating the Sestrin2-mTOR pathway in obese and diabetic rats

Nagaraj Manickam (Madras Diabetes Research Foundation (MDRF), India)

- 14:15-14:25 Discussion
- 14:25-14:30 JLA Award Ceremony

The JLA Publication Committee selected the five excellent papers among the papers published by the JLA in the recent year. In this session, the authors of the selected papers will give lectures on their research achievements. These lectures include the latest research results on lipid metabolism, cardiovascular disease, arteriosclerosis, and new research techniques.

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The 13th International Congress on Lipid & Atherosclerosis

# Dyslipidemia Management Policy Session (K)

Sep 26(Thu) 13:00-14:30 | Studio 1,2,3, (6F)

## 국가검진 콜레스테롤 검사 주기와 중요성

Significance and Interval of Cholesterol Testing in National Health Examinations

CHAIRPERSONS : 김재택 (한국지질·동맥경화학회 이사장) 조연희 (한국건강검진학회 회장)

13:10-13:30 이상지질혈증 조기검진에서의 경제성 평가 활용

조민우 (울산의대 예방의학과)

13:30-13:50 현장에서 느끼는 국가건강검진 이상지질혈증 검사 사후관리 강화 방안

이창혀 (서울행복내과)

13:50-14:10 혈압, 혈당, 지질 등을 함께 관리하는 통합관리 정책 전환

김정환 (을지의대 가정의학과)

14:10-14:30 Panel Discussion

**곽경근** (대한내과의사회)

**김철중** (조선일보)

김희동 (순천향의대 심장내과)

**박지민** (보건복지부 건강증진과)

조용인 (인하의대 내분비내과)

# FH/Severe Dyslipidemia 1

Sep 26(Thu) 14:40-16:10 | Room 4 (5F)

#### JAS-KSoLA Joint Symposium on FH and Severe Dyslipidemia 1

CHAIRPERSON: Sang-Hak Lee (Yonsei University, Republic of Korea)
PANEL: Jae Hyoung Park (Korea University, Republic of Korea)



14:40-15:00	Clinical and molecular risk factors in severe FH
	Soo Heon Kwak (Seoul National University, Republic of Korea)
15:00-15:10	Discussion
15:10-15:30	The current status of HoFH in Japan
	Mariko Harada-Shiba (Osaka Medical & Pharmaceutical University, Japan)
15:30-15:40	Discussion
15:40-15:48	Prevalence and clinical characteristics of FH in patients with ACS in Japan: insight from the EXPLORE-J study
	Yasuaki Takeji (Kanazawa University, Japan)
15:48-15:55	Q&A
15:55-16:03	Omics markers of FH
	Dae Young Cheon (Hallym University, Republic of Korea)
16:03-16:10	Q&A

This session is a part of the cooperation that the Korean Society of Lipid and Atherosclerosis has consistently pursued. We would like to share the latest knowledge of familial hypercholesterolemia with the Japanese Atherosclerosis Society (JAS). Topics from Japan include HoFH in Japan, FH study in patients with acute coronary syndrome, differential diagnosis in patients with FH, and Achilles tendon study in FH. Topics from Korea include risk factors in severe FH, metabolomic analysis, and polygenic factors in FH.

# ICoLA 2024 The 13th International Congress on Lipid & Atherosclerosis

## ASPC-KSoLA Joint Symposium

Sep 26(Thu) 16:20-17:50 | Room 1 (3F)

# Comprehensive Cardiovascular Prevention: CAC and Beyond

CHAIRPERSONS: Sungha Park (Yonsei University, Republic of Korea) Eun-Jung Rhee (Sungkyunkwan University, Republic of Korea)



16:20-16:40 Role of CAC in prevention of ASCVD

Khurram Nasir (Houston Methodist DeBakey Heart & Vascular Center, USA)

16:40-17:00 Clinical implication and limitations of CAC testing

Jang Hoon Lee (Kyungpook National University, Republic of Korea)

17:00-17:20 Role of imaging in CV prevention - beyond CAC

Sang-Eun Lee (Ewha Womans University, Republic of Korea)

17:20-17:50 Panel Discussion

Min Jung Lee (University of Ulsan, Republic of Korea)

**SungWan Chun** (Soonchunhvang University, Republic of Korea)

Jun Hwan Cho (Chung-Ang University, Republic of Korea)

The session "Comprehensive Cardiovascular Prevention: CAC and Beyond," joint symposium by the American Society of Preventive Cardiology (ASPC) and the Korean Society of Lipid and Atherosclerosis (KSoLA), will explore the crucial role of Coronary Artery Calcium (CAC) in the prevention of Atherosclerotic Cardiovascular Disease (ASCVD), its clinical implications, and the role of imaging in cardiovascular prevention. Professor Khurram Nasir from Houston Methodist DeBakey Heart & Vascular Center will discuss the role of CAC scoring in the prevention of ASCVD. Professor Jang-Hoon Lee from Kyungpook National University will cover the clinical implications and limitations of CAC scoring. Additionally, Professor Sang-Eun Lee from Ewha Womans University will present on the role of imaging in cardiovascular prevention.

# **EAVA-KSoLA Joint Symposium**

Sep 26(Thu) 16:20-17:50 | Room 2 (3F)

### Premature Atherosclerosis: What's Going On?

CHAIRPERSONS: Ashraf Reda (Menofia University, Egypt)

Soon Jun Hong (Korea University, Republic of Korea)



**Ashraf Reda** (Menofia University, Egypt)

16:40-17:00 Premature atherosclerosis, archived case scenarios

EL Sayed Farag (Zagazig University, Egypt)

17:00-17:20 Metabolic risk factors and ASCVD in young Korean adults

**Su-Yeon Choi** (Seoul National University, Republic of Korea)

17:20-17:50 Panel Discussion

**Hoyoun Won** (Chung-Ang University, Republic of Korea) **Jung-Hee Lee** (Yonsei University, Republic of Korea)

**Jun Hwa Hong** (Eulji University, Republic of Korea)

Premature atherosclerosis, marked by the early onset of atherosclerotic cardiovascular disease (ASCVD), is a growing global concern. Understanding its risk factors is essential for developing effective prevention and treatment strategies. This joint session will explore the background, risk factors, and latest research findings on premature atherosclerosis across different regions. Professor Ashraf Reda from Menoufia University (current President of the Egyptian Association of Vascular Biology and Atherosclerosis) will present findings from Egyptian data, providing insights into the prevalence and characteristics of premature atherosclerosis in this region. Professor EL Sayed Farag from Zagazig University will discuss archived case scenarios, highlighting unique cases and outcomes that shed light on the clinical manifestations and progression of this condition. Professor Su-Yeon Choi from Seoul National University will examine metabolic risk factors and their association with ASCVD in young Korean adults, offering a comparative perspective and potential preventive strategies.

# Committee Session 4 (K)

Sep 26(Thu) 16:20-17:50 | Room 3 (3F)

### Publication Committee Workshop: Research with Al Tools

CHAIRPERSONS: Hyun Kang (Chung-Ang University, Republic of Korea)

Nam Hoon Kim (Korea University, Republic of Korea)



16:20-16:45 The use of artificial intelligence tools for automating or semi-automating systematic reviews

Miyoung Choi (NECA, Republic of Korea)

16:45-17:10 Use of generative AI for medical research

Seng Chan You (Yonsei University, Republic of Korea)

17:10-17:35 Writing a paper with the help of AI tools

Young-Kook Kim (Chonnam National University, Republic of Korea)

17:35-17:50 **Discussion** 

This session consisted of lectures on research techniques using various Al tools. Al tools are used in almost all research processes, including reference research, data analysis, and paper writing. In this session, lectures will be given through presentations of Al tools and actual cases that are useful in each process of systematic literature review (Dr. Miyoung Choi), data analysis (Professor Seng Chan You), and thesis writing (Professor Young-Kook Kim).

# FH/Severe Dyslipidemia 2

17:28-17:35 **Q&A** 

Sep 26(Thu) 16:20-17:35 | Room 4 (5F)

### JAS-KSoLA Joint Symposium on FH and Severe Dyslipidemia 2

CHAIRPERSON: Sang-Hak Lee (Yonsei University, Republic of Korea)
PANEL: Kyuho Kim (The Catholic University of Korea, Republic of Korea)

16:20-16:40 Polygenic background modifies risk of CAD in individuals with HeFH



10.20 10.40	Polygenic background modilies lisk of CAD in individuals with Herri
	$\textbf{Injeong Shim} \ (\text{Massachusetts General Hospital, Broad Institute of MIT and Harvard, USA})$
16:40-16:50	Discussion
16:50-17:10	Differential diagnosis of severe hypercholesterolemia in clinical practice
	Hayato Tada (Kanazawa University, Japan)
17:10-17:20	Discussion
17:20-17:28	Evaluation of Achilles Tendon Thickness by Ultrasonography as a Predictor of Coronary Artery Disease Severity in Non-Familial Hypercholesterolemia Patients
	Shimpei Fujioka (Osaka Medical & Pharmaceutical University, Japan)

This session is a part of the cooperation that the Korean Society of Lipid and Atherosclerosis has consistently pursued. We would like to share the latest knowledge of familial hypercholesterolemia with the Japanese Atherosclerosis Society (JAS). Topics from Japan include HoFH in Japan, FH study in patients with acute coronary syndrome, differential diagnosis in patients with FH, and Achilles tendon study in FH. Topics from Korea include risk factors in severe FH, metabolomic analysis, and polygenic factors in FH.

# Breakfast Symposium 1 (K)

Sep 27(Fri) 07:30-08:30 | Room 1 (3F)

CHAIRPERSON: Sang Hong Baek (The Catholic University of Korea, Republic of Korea)



07:30-07:50 Cardiac biomarkers for patients with diabetes

Chae Won Chung (Chung-Ang University, Republic of Korea)

07:50-08:00 Panel Discussion

Minjae Yoon (Seoul National University, Republic of Korea)

Yongin Cho (Inha University, Republic of Korea)

# **Breakfast Symposium 2**

Sep 27(Fri) 07:30-08:30 | Room 2 (3F)

CHAIRPERSON: Jeong-taek Woo (Kyung Hee University, Republic of Korea)



07:30-07:50 Timeless choice: evidenced-based lipitor more than 25 years

Dae-Won Kim (The Catholic University of Korea, Republic of Korea)

07:50-08:00 Panel Discussion

Hee-Dong Kim (Soonchunhyang University, Republic of Korea)

Hun Jee Choe (Hallym University, Republic of Korea)

# **Breakfast Symposium 3**

Sep 27(Fri) 07:30-08:30 | Room 3 (3F)

CHAIRPERSON: Hyun Ho Shin (Asan Chungmu Hospital, Republic of Korea)



07:30-07:50 Treat-to-target LDL-C lowering strategy with Lipitor portfolio

Jeehoon Kang (Seoul National University, Republic of Korea)

07:50-08:00 Panel Discussion

**Seon Mee Kang** (Soonchunhyang University, Republic of Korea)

**Hyun-Jin Kim** (Hanyang University, Republic of Korea)

# **Breakfast Symposium 4**

Sep 27(Fri) 07:30-08:30 | Room 4 (5F)

CHAIRPERSON: Jeong Euy Park (Park Jeong Euy Internal Medicine Clinic, Republic of Korea)



07:30-07:50 Lipid-lowering efficacy of combination therapy with moderate-intensity statin and ezetimibe versus high-intensity statin monotherapy

Si-Hyuck Kang (Seoul National University, Republic of Korea)

07:50-08:00 Panel Discussion

**Bukyung Kim** (Kosin University, Republic of Korea) **Sung A Bae** (Yonsei University, Republic of Korea)

## Symposium 1

Sep 27(Fri) 08:30-10:00 | Room 1 (3F)

### New Antidyslipidemic Agents on the Horizon

CHAIRPERSON: Sang-Hak Lee (Yonsei University, Republic of Korea)

08:30-08:50 Cutting-edge LP(a)-lowering therapies: how will they impact our practice?

Yu Mi Kang (Havard Medical School/TIMI Study Group, USA)

08:50-09:10 Cutting-edge triglyceride-lowering therapies: can we close the gap in

hypertriglyceridemia management?

Andre Zimerman (Moinhos de Vento Hospital and College of Health Sciences, Brazil)

09:10-09:30 Cutting-edge LDL-lowering therapies: where will the next-generation PCSK9 inhibitors

stand?

**Kyung Woo Park** (Seoul National University, Republic of Korea)

09:30-10:00 Panel Discussion

Nam Hoon Kim (Korea University, Republic of Korea)

Jong-Chan Youn (The Catholic University of Korea, Republic of Korea)

Dong-Hyuk Cho (Korea University, Republic of Korea)

#### Organizer / Chang Hee Jung (University of Ulsan, Republic of Korea)

New treatments for traditional lipid markers associated with atherosclerosis, as well as for newly emerging lipid markers, are being developed. This session is designed to introduce these new treatments in the field of dyslipidemia. First, Professor Yu Mi Kang from TIMI Study Group at Harvard Medical School and Professor Andre Zimerman from the Moinhos de Vento Hospital and College of Health Sciences will present on clinical research of new agents targeting Lp(a) and TG. Additionally, Professor Kyung-Woo Park from Seoul National University College of Medicine will discuss the current status of the development of next-generation PCSK9 inhibitors. This session is expected to be very helpful in understanding the latest trends in the treatment of dyslipidemia.

## Symposium 2

Sep 27(Fri) 08:30-10:00 | Room 2 (3F)

#### Recent Advances in Metaflammation and Atherosclerosis Research

CHAIRPERSONS: Jin Han (Inje University, Republic of Korea)
Sung Joon Kim (Seoul National University, Republic of Korea)



08:30-08:50 Protective roles of BLT2 receptor on the plasma membrane disruption-induced epithelial cell damage

Takehiko Yokomizo (Juntendo University, Japan)

08:50-09:10 Mechanistic insights into the cardioprotective effects of empagliflozin in myocardial

infarction: metabolomic analysis of the emmy trial

Mahmoud Abdellatif (University of Graz, Austria)

09:10-09:30 TM4SF19-mediated lysosomal activity of macrophages in metaflammation

**Yun-Hee Lee** (Seoul National University, Republic of Korea)

09:30-10:00 Panel Discussion

Yong Joo Ahn (POSTECH, Republic of Korea)

**Juhyun Song** (Chonnam National University, Republic of Korea)

Joo-Hui Han (Woosuk University, Republic of Korea)

## Organizer / Jun Namkung (Yonsei University, Republic of Korea)

This session, titled "Recent advances in metaflammation and atherosclerosis research," will introduce the latest researches in metaflammation and atherosclerosis. Professor Takehiko Yokomizo from Juntendo University will present protective roles of BLT2 receptor on the plasma membrane disruption-induced epithelial cell damage. Professor Mahmoud Abdellatif from the University of Graz will present on the cardioprotective mechanisms of the SGLT2 inhibitor, empagliflozin in myocardial infarction. Professor Yun-Hee Lee from the College of Pharmacy at Seoul National University will discuss TM4SF19-mediated lysosomal activity of macrophages in metaflammation, providing insights into macrophage function in metabolic inflammation. This session promises to offer valuable knowledge on the latest research trends and their practical applications in the field.

# ICoLA 2024 The 13th International Congress on Lipid & Atherosclerosis

# Symposium 3 (K)

Sep 27(Fri) 08:30-10:00 | Room 3 (3F)

### Nutrition Management and Related Systems Using Al

CHAIRPERSONS: Hyojee Joung (Seoul National University, Republic of Korea) Eun Mi Kim (Kangbuk Samsung Hospital, Republic of Korea)



08:30-08:50 Advancing precision nutrition: addressing nutritional challenges for Koreans

**Hyunjung Lim** (Kyung Hee University, Republic of Korea)

08:50-09:10 Personalized artificial intelligence nutritional management platform

Saningun Lee (Dr.diary, Republic of Korea)

09:10-09:30 Development of Al-based care system of precision nutrition for health

Jiyoung Kim (NUSEUM-LAB, Republic of Korea)

09:30-10:00 Panel Discussion

Shin Ok Park (Noom Korea, Republic of Korea)

Jean Kyung Paik (Eulji University, Republic of Korea)

Youngmin Han (Yonsei University, Republic of Korea)

Organizer / Hyunjung Lim (Kyung Hee University, Republic of Korea)

이번 세션에서는 인공지능 기술을 활용한 영양관리와 관련된 최신 연구 동향을 다룰 예정입니다. 경희대학교 임현정 교수님께서는 인공지능 분야 관련 최신 연구 트렌드를 소개하실 예정이며, 주식회사 Dr. Diary의 이산인군 연구소장님은 맞춤형 인공지능 영양관리 플랫폼의 개발 및 실제 적용 사례를 공유하실 예정입니다. 또한, 주식회사 NUSEUM-LAB의 김지영 대표님은 건강을 위한 인공지능 기반 정밀영양 헬스케어 시스템 개발에 관한 최근 연구 결과와 이를 통한 향후 전망을 독자적인 시각으로 소개하실 예정입니다. 이 세션은 혁신적인 기술과 첨단 연구를 바탕으로 영양 및 건강 관리 분야에서의 전략적 접근법을 탐구하고자 하는 연구자에게 유익한 시간이 될 것입니다.

# Latin America-KSoLA Joint Symposium

Sep 27(Fri) 08:30-10:00 | Room 4 (5F)

#### Genetics and Environment Related to ASCVD

CHAIRPERSONS: Rodrigo Alonso (Center for Advanced Metabolic Medicine and Nutrition, Chile) In-Kyung Jeong (Kyung Hee University, Republic of Korea)



08:30-08:45	Atherosclerotic risk factors and CVD after cancer: growing unmet needs
	Hokyou Lee (Yonsei University, Republic of Korea)
08:45-09:00	Familial hypercholesterolemia in Latam region; how have we progressed in the last decade?
	Rodrigo Alonso (Center for Advanced Metabolic Medicine and Nutrition, Chile)
09:00-09:15	Lipoprotein(a): past, present, and future insights
	Pablo Corral (Fasta University, Argentina)
09:15-09:30	Dietary intervention and CVD: which is the best diet in Latin America?
	Alvaro Avezum (Sao Paulo University, Brazil)
09:30-10:00	Discussion

This session is a joint session by Latin America and the Korean Society of Lipid and Atherosclerosis (KSoLA), and will address various genetic and environmental factors related to cardiovascular diseases. Professor Hokyou Lee from Yonsei University will discuss atherosclerotic cardiovascular disease and its risk factors in cancer patients. Professor Rodrigo Alonso from Center for Advanced Metabolic Medicine and Nutrition will present research on familial Hypercholesterolemia conducted in the Latam region. Professor Pablo Corral from FASTA University will cover past and current research on Lipoprotein(a), as well as future research directions. Finally, Professor Alvaro Avezum from Sao Paulo University will deliver a lecture on dietary interventions in cardiovascular diseases.

# ICoLA 2024 The 13th International Congress on Lipid & Atherosclerosis

# **Special Lecture 1**

Sep 27(Fri) 10:20-11:00 | Room 1,2,3 (3F)



CHAIRPERSON: Ick-Mo Chung (Ewha Womans University, Republic of Korea)

10:20-11:00 Unrecognized role for insulin/IGF-1 signaling in the heart

Jaetaek Kim (Chung-Ang University, Republic of Korea)

In this special lecture, Professor Jae-Taek Kim, the board of directors of the Korean Society of Lipid and Atherosclerosis and a distinguished professor at Chung-Ang University College of Medicine, will present the culmination of his decades-long research. He will offer an in-depth lecture on the influence of Insulin-like Growth Factor (IGF)-1 signaling pathways on key characteristics of heart disease, including myocardial hypertrophy, cell death, aging, fibrosis, and electrical remodeling. This promises to be a highly insightful and enriching experience, shedding light on critical aspects of cardiovascular health.

# Plenary Lecture 1

Sep 27(Fri) 11:05-11:45 | Room 1,2,3 (3F)



CHAIRPERSON: Jaetaek Kim (Chung-Ang University, Republic of Korea)

11:05-11:45 Inflammation and atherosclerosis: from theory to practice

Paul M Ridker (Harvard Medical School, USA)

Dr. Paul M Ridker, MD, MPH. serves as the Eugene Braunwald Professor of Medicine at the Harvard Medical School and as Director of the Center for Cardiovascular Disease Prevention at the Brigham and Women's Hospital, Boston, Massachusetts, USA. Dr. Ridker, whose research interests encompass inflammation biology, lipids, atherosclerosis, epidemiology, and prevention, has designed and led numerous multi-national trials funded by the NIH or industry, including JUPITER, SPIRE-1, SPIRE-2, PREVENT, CANTOS, CIRT, and PROMINENT. In ICOLA 2024, he will deliver a plenary lecture entitled, "Inflammation and atherosclerosis: from theory to practice".

# Luncheon Symposium 1 (K)

Sep 27(Fri) 12:00-13:00 | Room 1 (3F)

CHAIRPERSON: Myung Ho Jeong (Gwangju Veterans Hospital, Republic of Korea)



12:00-12:20 It's time to break therapeutic inertia in dyslipidemia treatment

Young Sang Lyu (Chosun University, Republic of Korea)

12:20-12:30 Panel Discussion

Inki Moon (Soonchunhyang University, Republic of Korea)

Yeon-Kyung Choi (Kyungpook National University, Republic of Korea)

# Luncheon Symposium 2

Sep 27(Fri) 12:00-13:00 | Room 2 (3F)

CHAIRPERSON: Chee Jeong Kim (Chung-Ang University, Republic of Korea)



12:00-12:20 Cutting edge care of pitavastatin with ezetimibe combination therapy

Chang Hee Jung (University of Ulsan, Republic of Korea)

12:20-12:30 Panel Discussion

You-Jeong Ki (Eulji University, Republic of Korea)
Nam Hoon Kim (Korea University, Republic of Korea)

# Luncheon Symposium 3

Sep 27(Fri) 12:00-13:00 | Room 3 (3F)

 $\textbf{CHAIRPERSON: Hyo-Soo Kim} \ (\textbf{Seoul National University, Republic of Korea})$ 



12:00-12:20 Efficacy and evidence of ezetimibe atorvastatin combination therapy

**Eun Young Lee** (The Catholic University of Korea, Republic of Korea)

12:20-12:30 Panel Discussion

Hoyoun Won (Chung-Ang University, Republic of Korea)

**Dong-Hwa Lee** (Chungbuk National University, Republic of Korea)

# Luncheon Symposium 4

Sep 27(Fri) 12:00-13:00 | Room 4 (5F)

CHAIRPERSON: Moon-Kyu Lee (Eulji University, Republic of Korea)



12:00-12:20 Inflammation and its biomarkers & anti-inflammatory therapy in CVD

Paul M Ridker (Harvard Medical School, USA)

12:20-12:30 Panel Discussion

Youngwoo Jang (Gachon University, Republic of Korea)

**Dughyun Choi** (Soonchunhyang University, Republic of Korea)

## Symposium 4

Sep 27(Fri) 13:00-14:30 | Room 1 (3F)

#### New Therapeutic Strategies for Metabolic Diseases

CHAIRPERSONS: YongSeek Park (Kyung Hee University, Republic of Korea) Chanbae Park (Ajou University, Republic of Korea)



13:00-13:20 Cardiac-specific SERCA overexpression improves cardiac and systemic glucose metabolism during diabetes

Véronique Anne Lacombe (Oklahoma State University, USA)

13:20-13:40 ADAMTS4 elicits myeloid-derived immune cell recruitment and liver fibrogenesis in metabolic dysfunction-associated steatotic liver disease

Won Kim (Seoul National University, Republic of Korea)

13:40-14:00 Gene and cell therapies for metabolic disease

**Il Minn** (University of Texas Southwestern Medical Center, USA)

14:00-14:30 Panel Discussion

Jeonghan Kim (The Catholic University of Korea, Republic of Korea)

Hyeongseok Kim (Chungnam National University, Republic of Korea)

Chang-Myung Oh (GIST, Republic of Korea)

Organizer / Jun Namkung (Yonsei University, Republic of Korea)

This session, titled "New therapeutic strategies for metabolic diseases," will explore the latest treatment strategies and research findings for metabolic diseases. Professor Véronique A. Lacombe from Oklahoma State University will present on "Cardiac-specific SERCA overexpression improves cardiac and systemic glucose metabolism during diabetes: novel therapeutic targets," highlighting innovative therapeutic targets to improve glucose metabolism. Professor Won Kim from Seoul National University will present "ADAMTS4 elicits myeloid-derived immune cell recruitment and liver fibrogenesis in metabolic dysfunction-associated steatotic liver disease," providing the therapeutic potential of ADAMTS4 in hepatic fibrosis. Professor II Minn from University of Texas Southwestern Medical Center will discuss "Gene and cell therapies for metabolic disease," shedding light on the cardiovascular side effects of radiation therapy and the potential of radiopharmaceutical therapy. This session promises to provide valuable insights into the latest trends and novel approaches in the treatment of metabolic diseases.

# ICoLA 2024 The 13th International Congress on Lipid & Atherosclerosis

# Symposium 5

Sep 27(Fri) 13:00-14:30 | Room 2 (3F)

### Comprehensive Cardiac Rehabilitation for Secondary Prevention of Atherosclerotic CVD

CHAIRPERSONS: Ick-Mo Chung (Ewha Womans University, Republic of Korea)
Chul Kim (Inje University, Republic of Korea)



13:00-13:15 How can we recover atherosclerotic cardiovascular disease?

Ick-Mo Chunα (Ewha Womans University, Republic of Korea)

13:15-13:35 Cardiac rehabilitation: A high value service in need of disruptive innovation Randal J. Thomas (Mayo Clinic, USA)

13:35-13:55 Nutritional strategies for the prevention and management of cardiometabolic conditions

Qi Sun (Harvard Medical School, USA)

13:55-14:10 Exercise strategies for optimal cardiovascular recovery: key considerations for cardiovascular disease and type 2 diabetes

**Kyuwan Lee** (Ewha Womans University, Republic of Korea)

14:10-14:30 Panel Discussion

Hyun-Jae Kang (Seoul National University, Republic of Korea)
Jong-Chan Youn (The Catholic University of Korea, Republic of Korea)

Jungeun Lee (Seoul National University, Republic of Korea)
Jong Young Lee (Sungkyunkwan University, Republic of Korea)

Organizer / Ick-Mo Chung (Ewha Womans University, Republic of Korea), Jong-Chan Youn (The Catholic University of Korea, Republic of Korea)

This session will focus on comprehensive cardiac rehabilitation for patients with atherosclerotic cardiovascular disease. We will cover the effectiveness and safety of exercise therapy, dietary control, and cardiac rehabilitation programs for secondary prevention in patients with myocardial infarction, angina, stroke, and peripheral arterial disease. Beyond general exercise and dietary recommendations, Professor Ick-Mo Chung from Ewha Womans University (current President of the Korean Society of Lipid and Atherosclerosis) will discuss the significance and necessity of cardiac rehabilitation, Professor Randal J. Thomas from Mayo Clinic will present the latest insights and applications of cardiac rehabilitation program, Professor Qi Sun from Harvard Medical School will cover nutritional management strategies for cardiometabolic diseases, and Professor Kyuwan Lee from Ewha Womans University will share key insights on exercise therapy for patients with diabetes and cardiovascular disease.

### Symposium 6

Sep 27(Fri) 13:00-14:30 | Room 3 (3F)

### MASLD, Type 2 Diabetes, and Atherosclerotic Cardiovascular Disease

CHAIRPERSONS: Sung Rae Kim (The Catholic University of Korea, Republic of Korea)

Cheol-Young Park (Sungkyunkwan University, Republic of Korea)



13:00-13:20 MASLD and type 2 diabetes: are they different disease entities?

Kyung-Soo Kim (CHA University, Republic of Korea)

13:20-13:40 MASLD and ASCVD: epidemiologic and genetic associations

Martijn Brouwers (Maastricht University, Netherlands)

13:40-14:00 Does targeting MASLD reduce cardiovascular risk?

Jae Seung Lee (Yonsei University, Republic of Korea)

14:00-14:30 Panel Discussion

**Yong-ho Lee** (Yonsei University, Republic of Korea)

Jae-Han Jeon (Kyungpook National University, Republic of Korea)

Yun Kyung Cho (University of Ulsan, Republic of Korea)

Organizer / Nam Hoon Kim (Korea University, Republic of Korea)

MASLD, type 2 diabetes, and ASCVD are closely related and share etiology in part. MASLD and type 2 diabetes have a common underlying pathophysiology, insulin resistance, and both MASLD and type 2 diabetes are clear risk factors for ASCVD. In this session, we will have an in-depth discussion about how MASLD and type 2 diabetes are related (Professor Kyung-Soo Kim from CHA University), whether MASLD itself is an independent risk factor for ASCVD (Professor Brouwers from Maastricht University), and whether treatment of MASLD can reduce cardiovascular risk (Professor Jae Seung Lee from Yonsei University).

# ICoLA 2024 The 13th International Congress on Lipid & Atherosclerosis

## OSLA-KSoLA Joint Symposium

Sep 27(Fri) 13:00-14:30 | Room 4 (5F)

Addressing Unmet Needs among High-Risk Patients with Atherosclerotic Cardiovascular Disease with Novel Lipid-Lowering Therapies

CHAIRPERSONS: Khamis Al Hashmi (Sultan Qaboos University, Oman)
Seonghoon Choi (Hallym University, Republic of Korea)



13:00-13:20 Addressing residual risk in diabetes in the Gulf region

Khalid Al Rasadi (Sultan Qaboos University, Oman)

13:20-13:40 Addressing unmet needs in familial hypercholesterolemia in Oman

Khalid Al Waili (Sultan Qaboos University, Oman)

13:40-14:00 Anti-inflammatory therapeutics for atherosclerosis: beyond LDL-C lowering

Nam Hoon Kim (Korea University, Republic of Korea)

14:00-14:30 Panel Discussion

**Kyuho Kim** (The Catholic University of Korea, Republic of Korea)

Sang Min Park (Eulji University, Republic of Korea)

Miniae Yoon (Seoul National University, Republic of Korea)

This session is a joint session of the Oman Society of Lipid and Atherosclerosis (OSLA) and the Korean Society of Lipid and Atherosclerosis (KSoLA) and will be held under the theme "Addressing Unmet Needs Among High-Risk Patients With Atherosclerotic Cardiovascular Disease With Novel Lipid-Lowering Therapies". The session will feature in-depth presentations and discussions on the need for novel lipid-lowering therapies in high-risk patients, with speakers from Oman and Korea. In particular, the President and Vice President of OSLA will present the latest findings on residual risk in diabetic patients and unmet needs in familial hypercholesterolemia in Oman and the Middle East. This session aims to provide insight into the current status and characteristics of lipid atherosclerosis in Korea and Oman. Despite being located in the same region of Asia, these two countries differ significantly in terms of geography, society, and culture. This discussion will be highly valuable for the exchange of knowledge on lipid atherosclerosis between Korea and Oman.

# Keynote Lecture 1

Sep 27(Fri) 15:50-16:30 | Room 1,2,3 (3F)



CHAIRPERSON: Ki Hoon Han (University of Ulsan, Republic of Korea)

15:50-16:30 Lipoprotein(a) in cardiovascular disease

Børge G. Nordestgaard (Copenhagen University, Denmark)

Lipoprotein(a) is a significant genetic risk factor for cardiovascular diseases, and guidelines recommend it be measured at least once in a lifetime for all adults to assess individual cardiovascular risk. Professor Børge Nordestgaard from the University of Copenhagen will deliver a lecture in this session. Professor Nordestgaard has played a pivotal role in the recognition of lipoprotein(a) as a risk factor for cardiovascular disease, aortic valve calcification, and stenosis through his extensive research on biochemical and genetic biomarkers. His work has significantly contributed to guidelines for managing dyslipidemias, including lipoprotein(a), triglycerides, and familial hypercholesterolemia. This session will provide an overview of key findings from observational and genetic studies on lipoprotein(a) in the context of cardiovascular disease, discuss clinical applications, and explore novel therapeutic targets involving lipoprotein(a).

# 2024 KSoLA Awards for Scientific Excellence & Young Investigator (K)

Sep 27(Fri) 16:50-18:20 | Room 1 (3F)



16:50-16:55 **2024 KSoLA Award Ceremony for Scientific Excellence** 

16:55-17:00 2024 KSoLA Award Ceremony for Young Investigator

17:00-17:20 Treatment target discovery from cardio-protective phenotype

Sang-Hak Lee (Yonsei University, Republic of Korea)

17:20-17:25 **Q&A** 

# ICoLA 2024 The 13th International Congress on Lipid & Atherosclerosis

### AAS-KSoLA Joint Symposium

Sep 27(Fri) 16:50-18:20 | Room 2 (3F)

### **Diabetes and Vascular Dysfunction**

CHAIRPERSONS: Georges Grau (The University of Sydney, Australia)

Hyuk-Sang Kwon(The Catholic University of Korea, Republic of Korea)



16:50-17:10 Targeting inflammation to lessen diabetes-associated cardiovascular complications

Judy B. de Haan (Baker Heart and Diabetes Institute, Australia)

17:10-17:30 Endothelial dysfunction in diabetic kidney disease

Jae-Han Jeon (Kyungpook National University, Republic of Korea)

17:30-17:50 Vascular dysfunction in cerebral malaria: a peculiar case of immuno-thrombosis, underpinned by extracellular vesicles

Georges Grau (The University of Sydney, Australia)

17:50-18:20 Panel Discussion

Jin Hwa Kim (Chosun University, Republic of Korea)
Jang Won Son (The Catholic University of Korea, Republic of Korea)
Eun-Hee Cho (Kangwon National University, Republic of Korea)

This session is a joint symposium organized by the Australian Atherosclerosis Society (AAS) and the Korean Society of Lipid and Atherosclerosis (KSoLA), focusing on vascular abnormalities related to diabetes. The session will feature presentations by three distinguished professors on different topics. First, Professor Judy de Haan from the Baker Heart and Diabetes Institute in Australia will give a lecture on "Targeting Inflammation to lessen diabetes-associated cardiovascular complications." This presentation will cover strategies for controlling inflammation to improve cardiovascular health in diabetic patients. The second speaker is Professor Jae-Han Jeon from Kyungpook National University in Korea, who will present on "Diabetic Nephropathy and Endothelial Dysfunction." This presentation will delve into the kidney diseases caused by diabetes and the changes in endothelial cell function associated with it. Lastly, Professor Georges Grau from the University of Sydney in Australia will present an intriguing case study on "Vascular dysfunction in cerebral malaria: a peculiar case of immuno-thrombosis, underpinned by extracellular vesicles," focusing on immunopathology related to extracellular vesicles. This presentation will explore vascular changes in the brain during malaria infection, discussing the related immune responses and pathological mechanisms. We hope this session will provide an opportunity to explore and discuss various vascular abnormalities in diabetes.

# Symposium 7

#### Sep 27(Fri) 16:50-18:20 | Room 3 (3F)

### Role of Diets for Cardiometabolic Health

CHAIRPERSONS: Min-Jeong Shin (Korea University, Republic of Korea)
Oh Yoen Kim (Dong-A University, Republic of Korea)



16:50-17:10 Cardiovascular protective effects of a healthy dietary pattern with carotenoids rich food consumption

**Jung Eun Kim** (National University of Singapore, Singapore)

17:10-17:30 Insights into dietary polyphenols in disorders of lipid metabolism

**Bohkyung Kim** (Pusan National University, Republic of Korea)

17:30-17:50 Plant-based diets and human cardiometabolic health

Qi Sun (Harvard Medical School, USA)

17:50-18:20 Panel Discussion

**Minjoo Kim** (Hannam University, Republic of Korea)

**Kyong Park** (Yeungnam University, Republic of Korea)

Jeong-Hwa Choi (Keimyung University, Republic of Korea)

Organizer / Hyunjung Lim (Kyung Hee University, Republic of Korea)

This session will present the latest research on dietary factors influencing cardiometabolic health. Professor Jung Eun Kim from the National University of Singapore will discuss the impact of consuming foods rich in carotenoids on promoting healthy dietary patterns and cardiovascular protection. Following this, Professor Bohkyung Kim from Pusan National University will introduce the latest findings from experiments on dietary interventions to improve cardiometabolic health, providing insights into current perspectives. Lastly, Professor Qi Sun from Harvard University will comprehensively illuminate the effects of plant-based diets on cardiometabolic health and engage in profound discussions on related topics. This session will explore the significant role of dietary choices in cardiovascular health through diverse research outcomes, offering valuable research insights to participants.

# ICoLA 2024 The 13th International Congress on Lipid & Atherosclerosis

# MSA-KSoLA Joint Symposium

Sep 27(Fri) 16:50-18:20 | Room 4 (5F)

### Metabolic Aspect of Atherosclerosis

CHAIRPERSONS: Hyun-Jae Kang (Seoul National University, Republic of Korea)

Min Kyong Moon (Seoul National University, Republic of Korea)



16:50-17:10 Organokines and atherosclerosis

**Kyung Mook Choi** (Korea University, Republic of Korea)

17:10-17:30 Ectopic fat dynamics: unraveling the interplay between myosteatosis and

cardiometabolic health

**Yun Kyung Cho** (University of Ulsan, Republic of Korea)

17:30-17:50 MASLD, obesity and atherosclerosis

Lee-Ling Lim (University Malaya Medical Centre, Malaysia)

17:50-18:20 Panel Discussion

**Yeoree Yang** (The Catholic University of Korea, Republic of Korea)

Youngwoo Jang (Gachon University, Republic of Korea)

Chang Hee Jung (University of Ulsan, Republic of Korea)

This session will be a joint endeavor between the Malaysian Society of Atherosclerosis and the Korean Society of Lipid and Atherosclerosis (KSoLA), focusing on the metabolic aspects of atherosclerosis. The first speaker, Professor Yoon Kyung Cho from University of Ulsan, will present the latest research on the relationship between metabolites, organ crosstalk, and atherosclerosis. The second speaker, Professor Kyung Mook Choi from Korea University, will discuss the impact of various organokines on atherosclerosis. Lastly, Professor Lim Lee-Ling from University Malaya Medical Centre will address the topics of metabolic-associated fatty liver disease, obesity, and atherosclerosis. Given the recent epidemiological findings that highlight diabetes, obesity, and metabolic-associated fatty liver disease as major contributors to atherosclerosis, we anticipate that this session will be highly beneficial for all attendees.

# **Breakfast Symposium 5**

Sep 28(Sat) 07:50-08:50 | Room 1 (3F)

CHAIRPERSON: Shung Chull Chae (Kyungpook National University, Republic of Korea)



07:50-08:10 New evidence of Atorvastatin: optimal balance between efficacy and safety

Jun Hwa Hong (Eulji University, Republic of Korea)

08:10-08:20 Panel Discussion

Jee Hee Yoo (Chung-Ang University, Republic of Korea)
Dae Young Cheon (Hallym University, Republic of Korea)

# Breakfast Symposium 6

Sep 28(Sat) 07:50-08:50 | Room 2 (3F)

CHAIRPERSON: Hong Seog Seo (Seoul Red Cross Hospital, Republic of Korea)



07:50-08:10 Beyond LDL-C: the role of fenofibrate in exploring non-HDL-C as a predictor of cardiovascular risk

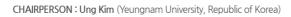
**Soo Lim** (Seoul National University, Republic of Korea)

08:10-08:20 Panel Discussion

**Kyu-Yong Ko** (Inje University, Republic of Korea) **Minyoung Lee** (Yonsei University, Republic of Korea)

# Breakfast Symposium 7 (K)

Sep 28(Sat) 07:50-08:50 | Room 3 (3F)





07:50-08:10 Levacalm: safe and effective agent for all hypertension patients

Jong Young Lee (Sungkyunkwan University, Republic of Korea)

08:10-08:20 Panel Discussion

Joon Ho Moon (Seoul National University, Republic of Korea)

Jung-Joon Cha (Korea University, Republic of Korea)



# **Breakfast Symposium 8**

Sep 28(Sat) 07:50-08:50 | Room 4 (5F)

CHAIRPERSON: Keeho Song (Konkuk University, Republic of Korea)



07:50-08:10 Renal safety issues in dyslipidemia treatment: why is it important?

Se Eun Park (Sungkyunkwan University, Republic of Korea)

08:10-08:20 Panel Discussion

Minkwan Kim (Yonsei University, Republic of Korea)

Joonyub Lee (The Catholic University of Korea, Republic of Korea)

### JAS-KSoLA Joint Symposium

Sep 28(Sat) 08:50-10:20 | Room 1 (3F)

### Clinical Implication of Multi-Agonists in Cardiometabolic Diseases

CHAIRPERSONS: Jung-Hyun Noh (Inje University, Republic of Korea)
Byung-Wan Lee (Yonsei University, Republic of Korea)



08:50-09:10 Efficacy and safety of tirzepatide, a GIP and GLP-1 dual agonist, in persons with type 2 diabetes

Yasuo Terauchi (Yokohama City University, Japan)

09:10-09:30 Upcoming multi-agonists for cardio-metabolic disease

Chang Hee Jung (University of Ulsan, Republic of Korea)

09:30-09:50 A potential mechanism of a dual GLP-1/GIP receptor agonist

Yong-ho Lee (Yonsei University, Republic of Korea)

09:50-10:20 Panel Discussion

Shinae Kang (Yonsei University, Republic of Korea)

Osung Kwon (The Catholic University of Korea, Republic of Korea)

Dae Young Cheon (Hallym University, Republic of Korea)

The joint symposium with the Japan Atherosclerosis Society (JAS) will explore cutting-edge advancements in incretin-based multi-agonist therapies for cardiometabolic disorders. Three distinguished speakers will share their expertise on this crucial topic. Professor Yasuo Terauchi from Yokohama City University, Japan, will discuss the efficacy and safety of tirzepatide, a GIP and GLP-1 dual agonist, in type 2 diabetes. Professor Chang Hee Jung from the University of Ulsan, Republic of Korea, will delve into the implications of GLP-1/GIP therapies for atherosclerotic cardiovascular disease (ASCVD). Professor Yong-ho Lee from Yonsei University, Republic of Korea, will elucidate the potential mechanisms underlying GLP-1/GIP therapies. This session promises to provide a comprehensive overview of the latest developments in multi-agonist therapies, their clinical applications, and their potential to revolutionize cardiometabolic disease treatment.



# Symposium 8

Sep 28(Sat) 08:50-10:20 | Room 2 (3F)

### Advances in Adipose Tissue Biology

CHAIRPERSONS: Joerg Heeren (University of Hamburg, Germany)
Young Mi Park (Ewha Womans University, Republic of Korea)



08:50-09:10 Cold-activated HuR fuels brown fat thermogenesis via fatty acid utilization

Jae Myoung Suh (KAIST, Republic of Korea)

09:10-09:30 Targets of a novel anti-diabetic drug Imeglimin

Motoharu Awazawa (National Center for Global Health and Medicine (NCGM), Japan)

09:30-09:50 Role of obesogenic memory in obesity-related cardiovascular diseases

**Kae Won Cho** (Soonchunhyang University, Republic of Korea)

09:50-10:20 Panel Discussion

Yun-Hee Lee (Seoul National University, Republic of Korea)

Jae-Han Jeon (Kyungpook National University, Republic of Korea)

Su Myung Jung (Sungkyunkwan University, Republic of Korea)

Organizer / Su Myung Jung (Sungkyunkwan University, Republic of Korea)

Recently, there has been a surge in efforts to find solutions to metabolic disease treatment strategies from adipose tissue biology, such as systematically establishing the hallmarks of adipose tissue dysfunction in the development of metabolic diseases. This session will focus on the latest research on the biological functions of adipose tissue and adipocytes, conducted from various perspectives. Professor Jae Myoung Suh from KAIST will present a study on new regulatory mechanisms of fuel metabolism in adipose tissue from RNA biology perspective. Professor Motoharu Awazawa from National Center for Global Health and Medicine (NCGM) will discuss the effects of new antidiabetic drugs on system-level metabolic physiology including adipose tissues. Professor Kae Won Cho from Soonchunhyang University (SIMS) will discuss the new pathophysiological roles of adipose dendritic cells in metabolic diseases.

### KNS-KSoLA Joint Symposium (K)

Sep 28(Sat) 08:50-10:20 | Room 3 (3F)

### Current Knowledge and Future Perspectives in Dietary Fat Intake for Vascular Health

CHAIRPERSONS: Hye Young Kim (Yong In University, Republic of Korea)
Jeongseon Kim (National Cancer Center, Republic of Korea)



08:50-09:10 Associations of dietary lipid intake with cardiovascular disease in Koreans based on nutritional epidemiology studies

Jung Hyun Kwak (Inje University, Republic of Korea)

09:10-09:30 Fat intake and atherosclerotic cardiovascular diseases

**Youngwoo Jang** (Gachon University, Republic of Korea)

09:30-09:50 Dietary advanced glycation end products and vascular function

**Yoona Kim** (Gyeongsang National University, Republic of Korea)

09:50-10:20 Panel Discussion

Yuri Kim (Ewha Womans University, Republic of Korea)
Jun Hwan Cho (Chung-Ang University, Republic of Korea)

이번 세션은 한국영양학회와 한국지질동맥경화학회의 조인트세션으로, 두 학회가 공통적으로 관심을 가지고 있는 주제를 중심으로 논의할 예정입니다. 세션의 주제는 혈관 건강을 증진하는 데 중요한 역할을 하는 식이 지방 섭취에 대한 현재 지식과 미래 전망입니다. 한국영양학회의 연자로는 인제대학교 곽정현 교수님이 참여하셔서, 한국인의 지질 섭취와 심혈관 질환 사이의 연관성을 영양 역학적 연구를 바탕으로 깊이 있는 강의를 진행해 주실 예정입니다. 이어서 가천의대의 장영우 교수님은 한국지질동맥경화학회의 연자로 관련 주제를 임상적 특성과 관점에서 살펴보고 분석해 주실 예정입니다. 세션의 마지막 한국영양학회의 연자로 경상대학교의 김윤아 교수님께서 식이 고급당화산물과 혈관 기능에 대한 최신 연구 결과를 발표하고 토의를 이어나갈 예정입니다. 이 세션은 식이 지방 섭취가 혈관 건강에 미치는 다양한 측면을 다룰 것이며, 참석자들에게 귀중한 신규 정보와 통찰을 제공할 것입니다.



# Symposium 9

Sep 28(Sat) 08:50-10:20 | Room 4 (5F)

### Biomechanical Factors in Atherosclerosis: Mechanisms and Clinical Implications

CHAIRPERSONS: Kyong Soo Park (Konkuk University, Republic of Korea)

Donghoon Choi (Yonsei University, Republic of Korea)



08:50-09:10 Shear stress on endothelial cell and its molecular cascade to accelerated atherosclerosis Chang-Hoon Woo (Yeungnam University, Republic of Korea)

09:10-09:30 HEG1 protects against atherosclerosis by regulating stable flow-induced KLF2/4 expression in endothelial cells

Hanjoong Jo (Emory University, USA)

09:30-09:50 Perspectives in predicting rapid plaque progression and future coronary events

Kwan Yong Lee (The Catholic University of Korea, Republic of Korea)

09:50-10:20 Panel Discussion

Yoo-Wook Kwon (Seoul National University, Republic of Korea)
Seung-Hwan Lee (The Catholic University of Korea, Republic of Korea)
Kyung-Sun Heo (Chungnam National University, Republic of Korea)

### Organizer / Chang Hee Jung (University of Ulsan, Republic of Korea)

Among the pathophysiological aspects of atherosclerosis, a traditionally overlooked factor is the biomechanical factors such as shear stress. This session aims to address these biomechanical factors. The first speaker, Professor Chang-Hoon Woo from Yeungnam University, will summarize the molecular biological mechanisms of how shear stress on endothelial cells is related to atherosclerosis. The second speaker, Professor Hanjoong Jo from Emory University, will present his recent achievements on flow-mediated reprogramming in endothelial cells. Finally, Professor Kwan Yong Lee from the Department of Cardiology at the Catholic University of Korea will introduce his research on how atherosclerosis progresses rapidly and develops into a disease through plaque and hemodynamic analysis in patients. This session is expected to help us understand and recognize the importance of the impact of biomechanical factors on atherosclerosis, which has been overlooked until now.

# Plenary Lecture 2

Sep 28(Sat) 10:40-11:20 | Room 1,2,3 (3F)



CHAIRPERSON: Jin Han (Inje University, Republic of Korea)

10:40-11:20 Lipid metabolism in thermogenic adipose tissues

Joerg Heeren (University of Hamburg, Germany)

Prof. Joerg Heeren is a Professor in the Department of Biochemistry and Molecular Cell Biology at the University Medical Center Hamburg-Eppendorf. Prof. Heeren's research has delved into systemic energy and lipid metabolism, focusing on the organ-specific processing of lipids and metabolites related to adipose tissue functioning. His research group has established a variety of advanced methods, ranging from high-throughput lipid analysis to nanoparticle-based molecular lipid imaging. One of his landmark findings in the field is the establishment of a critical role for thermogenic adipose tissue in systemic lipoprotein homeostasis. Prof. Heeren has received numerous awards, including recognition from the European Association for the Study of Diabetes and the Heisenberg Professorship. At ICoLA 2024, he will deliver a lecture entitled "Lipid metabolism in thermogenic adipose tissues," based on his scientific journey.

# **Keynote Lecture 2**

Sep 28(Sat) 11:25-12:05 | Room 1,2,3 (3F)



CHAIRPERSON: Sang-Hyun Kim (Seoul National University, Republic of Korea)

11:25-12:05 Recent advances in the treatment of dyslipidemia with PCSK9 therapy and a look into potential new options in the next 10 years

R. Scott Wright (Mayo Clinic, USA)

Dr. R. Scott Wright is a Professor of Medicine and a consultant in cardiology at the Mayo Clinic in Rochester. Dr. Wright focuses his research on acute coronary syndrome, dyslipidemia, type 2 diabetes, and valvular heart disease. He is a renowned international leader and an active clinical investigator of PRINCESS, CRISP and ORION programs. At ICOLA 2024, he will deliver a Keynote Lecture Introduction entitled, "Recent advances in the treatment of dyslipidemia with PCSK9 therapy and a look into potential new options in the next 10 years".

# ICoLA 2024 The 13th International Congress on Lipid & Atherosclerosis

# Luncheon Symposium 5

Sep 28(Sat) 12:20-13:20 | Room 1 (3F)

CHAIRPERSON: In-Ho Chae (Seoul National University, Republic of Korea)



12:20-12:40 New era of siRNA; treatment paradigm shift in ASCVD

R. Scott Wright (Mayo Clinic, USA)

12:40-12:50 Panel Discussion

**Sang-Eun Lee** (Ewha Womans University, Republic of Korea) **Jin Woo Jeong** (Wonkwang University, Republic of Korea)

# Luncheon Symposium 6 (K)

Sep 28(Sat) 12:20-13:20 | Room 2 (3F)

CHAIRPERSON: Young-Bae Park (Seoul National University, Republic of Korea)



12:20-12:40 Why is Shingrix vaccination necessary for patients with diabetes and hypertension?

Jong-Chan Youn (The Catholic University of Korea, Republic of Korea)

12:40-13:00 Panel Discussion

**Dong-Hyuk Cho** (Korea University, Republic of Korea) **Jong Han Choi** (Konkuk University, Republic of Korea)

# Luncheon Symposium 7 (K)

Sep 28(Sat) 12:20-13:20 | Room 3 (3F)





12:20-12:40 Individual treatment strategy for dyslipidemia

Jin Joo Park (Seoul National University, Republic of Korea)

12:40-12:50 Panel Discussion

**Dong Oh Kang** (Korea University, Republic of Korea)

Ye Seul Yang (Seoul National University, Republic of Korea)

# **Special Lecture 2**

Sep 28(Sat) 14:40-15:20 | Room 1,2,3 (3F)



CHAIRPERSON: Jeongseon Kim (National Cancer Center, Republic of Korea)

14:40-15:20 Dissecting dietary approaches targeting lipid biomarkers

Sung Nim Han (Seoul National University, Republic of Korea)

In this special lecture, Professor Sung Nim Han from Seoul National University will deliver a lecture on the topic "Dissecting dietary approaches targeting lipid biomarkers." Professor Han, former president of the Korean Nutrition Society and the Korean Society of Clinical Nutrition, will systematically explore the impact of various dietary factors on lipid biomarkers. The lecture will include in-depth discussions on how dietary management affects lipid biomarkers in the bloodstream, contributing to a deeper understanding of its positive and negative impacts on health. Moreover, Professor Han will share insights based on extensive research experience and discuss future clinical application potential and vision.



# TSLA-KSoLA Joint Symposium

Sep 28(Sat) 15:40-17:10 | Room 1 (3F)

### Remnant Cholesterol in the Statin Fra

CHAIRPERSONS: Byung Jin Kim (Sungkyunkwan University, Republic of Korea)
Young Joon Hong (Chonnam National University, Republic of Korea)



15:40-16:00 How does remnant cholesterol related to cardiometabolic multimorbidity

Jun Hwa Hong (Eulji University, Republic of Korea)

16:00-16:20 Epidemiologic evidence of hyper TG or remnant cholesterol on CVD

Donna Shu-Han Lin (Shin Kong Wu Ho-Su Memorial Hospital, Taiwan)

16:20-16:40 Treatments targeting remnant cholesterol or hyperTG in Asians: do we have an option?

Youngwoo Jang (Gachon University, Republic of Korea)

16:40-17:10 Panel Discussion

Je Sang Kim (Bucheon Sejong Hospital, Republic of Korea) Ye Seul Yang (Seoul National University, Republic of Korea) Hye Jin Yoo (Korea University, Republic of Korea)

The joint symposium with the Taiwan Society of Lipids & Atherosclerosis (TSLA) will delve into the pivotal role of remnant cholesterol in the statin era. We will explore its impact on cardiometabolic health, cardiovascular disease, and treatment options, with a focus on Asian populations. Professor Jun Hwa Hong from Eulji University will begin with "How does remnant cholesterol related to cardiometabolic multimorbidity" highlighting the links between remnant cholesterol and various cardiometabolic conditions. Next, Dr. Donna Shu-Han Lin from Shin Kong Wu Ho-Su Memorial Hospital will present "Epidemiologic evidence of hypertriglyceridemia or remnant cholesterol on cardiovascular disease" providing key epidemiological insights. Finally, Professor Youngwoo Jang from Gachon University will discuss "Treatments targeting remnant cholesterol or hypertriglyceridemia in Asians: do we have an option?" offering a detailed analysis of therapeutic strategies for Asian patients. Join us to gain a comprehensive understanding of remnant cholesterol in contemporary cardiovascular care.

### SHVM-KSoLA Joint Symposium

Sep 28(Sat) 15:40-17:10 | Room 2 (3F)

### Insights into Metabolic and Cardiovascular Dynamics

CHAIRPERSONS: Chi Dae Kim (Pusan National University, Republic of Korea)

Hyoung Kyu Kim (Inje University, Republic of Korea)



15:40-16:00 Regulation of the sphingosine 1-phosphate receptor 1 in nonalcoholic hepatosteatosis

Tae-Sik Park (Gachon University, Republic of Korea)

16:00-16:20 Plasma ceramides in the prediction of cardiovascular disease
Linda Peterson (Washington University, USA)

16:20-16:40 Mechanisms contributing to pregnancy-induced cardiac growth Helen E, Collins (University of Louisville, USA)

16:40-17:10 Panel Discussion

Yong Sook Kim (Chonnam National University, Republic of Korea) Sun-Hee Woo (Chungnam National University, Republic of Korea) Yin Hua Zhang (Seoul National University, Republic of Korea)

This joint session is organized for academic exchange between the Korean Society of Lipid and Atherosclerosis(KSoLA) and the Society for Heart and Vascular Metabolism(SHVM). The first speaker, Professor Tae-Sik Park from Gachon University, will present on the role and regulatory mechanisms of S1P, a bioactive lipid mediator and a sphingolipid metabolite, in NASH, based on his years of research. The second speaker, Professor Linda Peterson from Washington University, will discuss her research achievements on the role of ceramide, another sphingolipid metabolite, in cardiovascular diseases. The final speaker, Professor Helen E. Collins from the University of Louisville, will address the mechanisms of cardiac changes during pregnancy, a somewhat different topic. We hope that this session will help in understanding new risk factors and mechanisms in various diseases and physiological changes.



# Symposium 10

Sep 28(Sat) 15:40-17:10 | Room 3 (3F)

### The Roles of Innate Immune Cells in Cardiovascular Disease

CHAIRPERSONS: Goo Taeg Oh (Ewha Womans University, Republic of Korea)
Jae-Hoon Choi (Hanyang University, Republic of Korea)



15:40-16:00 Refined cardiovascular risk prediction with immune-cell biomarkers
 Andreas Zirlik (Medical University of Graz, Austria)

 16:00-16:20 Control of airway inflammation by lipid metabolism in dendritic cells
 Yeonseok Chung (Seoul National University, Republic of Korea)

16:20-16:40 Extracellular vesicles as mediators of innate immunity in atherothrombosis

Christoph J. Binder (Medical University of Vienna, Austria)

16:40-17:00 Macrophage metabolism in foam cell formation
 Andrew Murphy (Baker Heart and Diabetes Institute, Australia)

### Organizer / Jae-Hoon Choi (Hanyang University, Republic of Korea)

Atherosclerosis is a well-known inflammatory cardiovascular disease involving various immune cells. This session aims to discuss the latest research on the role of innate immune cells, which are crucial in the progression of atherosclerosis. Professor Andreas Zirlik from Medical University of Graz will present the latest insights on innate immune markers related to cardiovascular diseases. Professor Yeonseok Chung from Seoul National University will share his recent findings on the lipid metabolism-related inflammatory mechanisms of dendritic cells, one of the key innate immune cells. Professor Christoph J. Binder from Medical University of Vienna will discuss the role of extracellular vesicles in the pathogenesis of atherothrombosis, and finally, Professor Andrew Murphy from the Baker Heart and Diabetes Institute will present the latest insights on hematopoiesis-related pathogenesis in atherosclerosis.

### **EAS-KSoLA Joint Symposium**

Sep 28(Sat) 15:40-17:10 | Room 4 (5F)

### **Novel Therapeutic Targets in Atherosclerosis**

CHAIRPERSONS: Myung-A Kim (Seoul National University, Republic of Korea)

Kyung Woo Park (Seoul National University, Republic of Korea)



15:40-16:00 Gene editing for dyslipidemia and atherosclerosis

Giuseppe Danilo Norata (University of Milan, Italy)

16:00-16:20 Intravascular multi-modal imaging-assisted targeted theranostic strategy on atherosclerotic plague

**Jin Won Kim** (Korea University, Republic of Korea)

16:20-16:40 LDL burden: a fresh look to cardiovascular prevention

Alberico L. Catapano (University of Milan and IRCCS Multimedica, Milan, Italy)

16:40-17:10 Panel Discussion

Hee-Dong Kim (Soonchunhyang University, Republic of Korea)

Dong-Hyuk Cho (Korea University, Republic of Korea)

Jung-Joon Cha (Korea University, Republic of Korea)

This session will discuss novel therapeutic targets in atherosclerosis. The first lecture will introduce gene editing technology for treating dyslipidemia and atherosclerosis, presented by Professor Giuseppe Danilo Norata from the University of Milan. Following this, Professor Jin Won Kim from Korea University will present targeted treatment strategies for atherosclerotic plaque using intravascular imaging. Lastly, Professor Alberico L. Catapano from the University of Milan and IRCCS Multimedica will deliver a lecture about the LDL burden for cardiovascular prevention. This session aims to present the latest research and innovative therapeutic approaches for patients with atherosclerosis.

# **ORAL PRESENTATIONS**

## **Oral Presentation 1**

Sep 26(Thu) 14:40-16:10 | Room 1 (3F)

CHAIRPERSONS: Kae Won Cho (Soonchunhyang University, Republic of Korea) Jun Namkung (Yonsei University, Republic of Korea)



OP1-1	Saffron extract and reverse cholesterol transport: an innovative approach to atherosclerosis therapy
	Yasmin Mohd Zainal Abidin Shukri (Universiti Teknologi MARA, Malaysia)
OP1-2	Comparative effects of alirocumab and evolocumab on protein and gene expression in stimulated human coronary endothelial cells
	<b>Rahayu Zulkapli</b> (Universiti Teknologi MARA (UiTM), Sungai Buloh Campus, Jalan Hospital, Malaysia)
OP1-3	Obesity-induced imprinting of hematopoietic stem cells exacerbates atherosclerosis progression
	Shindy Soedono (Soonchunhyang University, Republic of Korea)
OP1-4	Cardiovascular disease risk factors are adversely altered by an isocaloric high fat diet enriched with saturated compared to polyunsaturated fat in healthy humans
	Nikola Srnic (University of Oxford, United Kingdom)
OP1-5	HK660S (β-lapachone) ameliorates diabetic cardiomyopathy by enhancing mitochondrial function through activation of NQO1/SOD1 pathway
	<b>Bui Van Nam</b> (Cardiovascular and Metabolic Disease Center, Physiology Department, Inje University, Vietnam)
OP1-6	Porphyromonas gingivalis infection induces dyslipidemia; changes in hepatic, intestinal, and oral microbiota
	Eun Ji Min (Ewha Womans University, Republic of Korea)
OP1-7	Circular RNA circSMAD4 regulates cardiac fibrosis by targeting miR-671-5p and FGFR2 in cardiac fibroblasts
	Anna Jeong (Chonnam National University, Medical School, Republic of Korea)

# **Oral Presentation 2**

Sep 26(Thu) 14:40-16:10 | Room 2 (3F)

CHAIRPERSONS: Young Mi Park (Ewha Womans University, Republic of Korea)
Bohkyung Kim (Pusan National University, Republic of Korea)



OP2-1	Purinergic adipocyte-macrophage crosstalk promotes inflammatory degeneration of thermogenic brown adipose tissue
	Michelle Y. Jaeckstein (University Medical Center Hamburg-Eppendorf, Germany)
OP2-2	Ret finger protein deficiency attenuates adipogenesis in HFD-induced obese mice
	Yun-Gyeong Lee (Chonnam National University Medical School, Republic of Korea)
OP2-3	Differential regulatory effects of exercise and hypocaloric diet on adipose thermogenesis and inflammation in obese mice
	Vivi Julietta (Soonchunhyang University, Republic of Korea)
OP2-4	Telomere stabilization by metformin mitigates the progression of atherosclerosis via the AMPK-dependent p-PGC-1 alpha pathway
	Jin Young Sung (Yeungnam University, Republic of Korea)
OP2-5	PRDX5 exacerbates atherosclerosis via the TLR4/MyD88/NF- $\kappa B$ and P38 pathways in endothelial cells
	Hyae Yon Kweon (Ewha Womans University, Republic of Korea)
OP2-6	Prdx3 defends abdominal aortic aneurysm by suppressing vascular smooth muscle cell senescence
	Moajury-Jung (Ewha Womans University, Republic of Korea)

# **Oral Presentation 3**

Sep 26(Thu) 14:40-16:10 | Room 3 (3F)

CHAIRPERSONS: SungWan Chun (Soonchunhyang University, Republic of Korea)
Seung-Hwan Lee (The Catholic University of Korea, Republic of Korea)



OP3-1	A 10-year prospective cohort study of blood lipid variability, cognitive decline, and dementia in 9846 community-dwelling older adults
	Zhen Zhou (Monash University, Australia)
OP3-2	Low-density lipoprotein cholesterol estimation in youth: Sampson equation superior in predicting mid-adult carotid plaque
	Yaxing Meng (Baker Heart and Diabetes Institute, Australia)
OP3-3	The impact of myosteatosis on cardiac function in a healthy population: insights from abdominal CT imaging
	<b>Yun Kyung Cho</b> (Asan Medical Center, University of Ulsan College of Medicine, Republic of Korea)
OP3-4	The impacts of diabetic retinopathy and chronic kidney disease on cardiovascular disease and all-cause mortality in patients with type 2 diabetes mellitus: findings from the UK Biobank cohort study
	Yeon Soo Park (Seoul National University College of Medicine, Republic of Korea)
OP3-5	Cardiometabolic risk factors and lifestyle in Norwegian patients with a severe mental illness
	Madeleine E Angelsen (University of Oslo, Norway)
OP3-6	Non-calcified plaque on coronary CT angiography (CCTA) in asymptomatic South Asian individuals with zero CAC: insights from the South Asians CCTA (SACTA) study
	<b>Ayeeshik Kole</b> (University of Texas Southwestern Medical Center, Dallas, Texas, United States)

# **MINI-ORAL PRESENTATIONS**

## Mini-Oral Presentation 1-A

MOP1-A-1

Sep 27(Fri) 14:40-15:40 | Mini-Oral A (Studio 5, 6F)

MODERATOR: Eun-Hee Cho (Kangwon National University, Republic of Korea)



MOPT-A-T	Sex difference in reverse cholesterol transport in nepatic CDKAL1-deficient mices
	Ji Eun Lee (Yonsei University Graduate School, Republic of Korea)
MOP1-A-2	Preventing stroke from cerebral cavernous malformations using diet induced microbiome modification
	<b>Jaesung Peter Choi</b> (Centre for Inflammation, University of Technology Sydney (UTS) & Centenary Institute, Australia)
MOP1-A-3	Interplay of lipid uptake and lipid production in brown adipose tissue
	Janina Behrens (University Medical Center Hamburg-Eppendorf, Germany)
MOP1-A-4	Potential renoprotective effects of Boerhaavia diffusa mediated through reduction of lipids and oxidative stress in chronic kidney disease
	On Ying Angela Lee (The Hong Kong Polytechnic University, China)
MOP1-A-5	Metabolic and thermogenic regulation disorders in brown adipose tissue due to UBXN4 deficiency
	<b>Seon Bu Yang</b> (Endocrinology and Metabolism, Department of Internal Medicine, College of Medicine, Chung-Ang University, Republic of Korea)
MOP1-A-6	Lipophagy as therapeutic approach for obesity and metabolic dysfunction associated fatty liver disease
	Tae Hyun Bae (Seoul National University, Republic of Korea)
MOP1-A-7	A bibliometric analysis of cardiovascular disease: risk factors, therapies, and the rise of PCSK9 inhibitors
	Nurmala Widya Absari (UII, Indonesia)
MOP1-A-8	Microcurrent wave mitigates mouse intracranial arterial dolichoectasia development
	<b>Dong Rak Kwon</b> (Catholic University of Daegu School of Medicine, Republic of Korea)

Sex difference in reverse cholesterol transport in henatic CDKAL1-deficient mices

# Mini-Oral Presentation 1-B

Sep 27(Fri) 14:40-15:40 | Mini-Oral B (Studio 6, 6F)

MODERATOR: In-Kyung Jeong (Kyung Hee University, Republic of Korea)



MOP1-B-1	Prevalence and treatment gaps of hyperlipidaemia among patients with type 2 diabetes in Malaysia
	Anis S. Abd Raof (University of Malaya, Malaysia)
MOP1-B-2	Prevalence of metabolic syndrome in patients with subclinical and overt hypothyroidism visiting tertiary care centre of western Nepal
	Binaya Tamang (Universal College of Medical Sciences, Nepal)
MOP1-B-3	Reference range of lipoprotein(a) in the Thai population at King Chulalongkorn Memorial Hospital
	Wachirawit Thipkunok (King Chulalongkorn Memorial Hospital, Thailand)
MOP1-B-4	HIV-associated atherosclerosis data received by optical coherence tomography
	Nuriiat Efendieva (Pirogov Russian National Research Medical University, Russia)
MOP1-B-5	Echocardiographic evaluation of LV parameters and insulin resistance in non-diabetic STEMI patients
	Javad Alizargar (Kashan University, Iran)
MOP1-B-6	A novel the rapeutic agent for inducing atherosclerosis regression: mechanistic in sights into saffron extract
	Iman Nabilah Abd Rahim (Faculty of Medicine, Universiti Teknologi MARA, Malaysia)
MOP1-B-7	Triglyceride and glucose index at mid-pregnancy is a simple and easy-to-calculate marker associated with large for gestational age newborns in women with gestational diabetes mellitus
	<b>Kyung-Soo Kim</b> (Department of Internal Medicine, CHA Bundang Medical Center, CHA University School of Medicine, Republic of Korea)
MOP1-B-8	Real-world effects of imeglimin on cardiovascular risk factors in Japanese patients with type 2 diabetes: a retrospective longitudinal study $\frac{1}{2}$
	<b>Hisayuki Katsuyama</b> (National Center for Global Health and Medicine Kohnodai Hospital, Japan)

# Mini-Oral Presentation 1-C

Sep 27(Fri) 14:40-15:40 | Mini-Oral C (Studio 7, 6F)

MODERATOR: Jin Han (Inje University, Republic of Korea)



MOP1-C-1	The potential of endothelial progenitor cells using Intravascular Therapeutic Microrobot System (ITMS) as a novel therapy of atherosclerosis
	Anindya Amanda Damayanti (Universitas Islam Indonesia, Indonesia)
MOP1-C-2	Study on the mechanism of the Chuanxiong-Chishao pair and its active ingredients in preventing atherosclerosis by inhibiting ferroptosis
	Miao Zhang (The Hong Kong Polytechnic University, China)
MOP1-C-3	Asiatic acid protects against tumor necrosis factor alpha (TNF- $\alpha$ )-or hydrogen peroxide (H2O2)-stimulated oxidative stress in human aortic endothelial cells
	<b>Lai Yen Fong</b> (M. Kandiah Faculty of Medicine and Health Sciences, Universiti Tunku Abdul Rahman, Malaysia)
MOP1-C-4	The metabolic phenotype of intimal foamy macrophages is shaped by Hypoxia-Inducible Factor- $2\alpha$ in atherosclerotic lesions
	Kyu Seong Park (Hanyang University, Republic of Korea)
MOP1-C-5	Asiatic acid alleviates hypercholesterolemia and oxidative stress in high-fat diet-induced apolipoprotein E-knockout mice
	Jian Lee (Universiti Tunku Abdul Rahman, Malaysia)
MOP1-C-6	ANGPTL4 inhibits atherosclerosis by modulating the phenotypic transition of vascular smooth muscle cells
	Dong Im Cho (Chonnam National University Hospital, Republic of Korea)
MOP1-C-7	Echinochrome A inhibits HMGB1-induced vascular smooth muscle cell migration by suppressing osteopontin expression
	Ju Yeon Kim (Pusan National University, Republic of Korea)
MOP1-C-8	STAT3 phosphorylation at the specific Y705 site is essential for the endothelial to mesenchymal transition induced by lipopolysaccharide
	Yujin Jin (College of Pharmacy, Chungnam National University, Republic of Korea)

# Mini-Oral Presentation 1-D

Sep 27(Fri) 14:40-15:40 | Mini-Oral D (Studio 8, 6F)

MODERATOR: Yun-Hee Lee (Seoul National University, Republic of Korea)



MOP1-D-1	Heparanase deficiency protects against atherosclerotic plaque development in ApoE knockout mice
	Tien K. Nguyen (La Trobe University, Australia)
MOP1-D-2	Soluble uric acid induced trained immunity in monocytes: implications for atherosclerosis
	Hyeok Jae Mun (Pohang University of Science and Technology, Republic of Korea)
MOP1-D-3	Protective effect of biofabricated curcumin silver nanoparticles against atherosclerosis in rodent model via modulating EGFR/PI3K/Akt/GSK-3β signaling pathway
	<b>Ekta Yadav</b> (Sam Higginbottom University of Agriculture Technology and Sciences, India)
MOP1-D-4	Markers of nonspecific systemic inflammation as criteria for destabilization of coronary heart disease
	Valentyna Romanova (National Pirogov Memorial Medical University, Ukraine)
MOP1-D-5	The association between serum Mannose-Binding Lectin levels and polymorphism in ischemic stroke risk
	<b>Anyeasha Dutta</b> (Govind Ballabh Pant Institute of Postgraduate Medical Education and Research, India)
MOP1-D-6	Polymeric nanoparticles loaded Myricitrin modulates atherosclerosis in apolipoprotein-E deficient mice via altering gut microbiota and lipid gene metabolism (LXR- $\alpha$ /SREBP1 pathway)
	Deepika Singh (Faculty of Health Sciences, SHUATS, India)
MOP1-D-7	Emerging role of IncRNAs in the development of atherosclerosis and therapeutic potential
	<b>Anyeasha Dutta</b> (Govind Ballabh Pant Institute of Postgraduate Medical Education and Research, India)
MOP1-D-8	Machine learning-driven decoding of lipid-modulated IncRNAs in macrophage polarization and atherosclerotic plaque instability
	Rifaldy Fajar (Karlstad University, Sweden)

### Mini-Oral Presentation 1-F

Sep 27(Fri) 14:40-15:40 | Mini-Oral E (Studio 9, 6F)

MODERATOR: Chang-Myung Oh (GIST, Republic of Korea)



MOP1-E-1 Machine learning-driven predictive modeling of foam cell formation and atherosclerosis progression through lipid-responsive enhancer RNAs **Rifaldy Fajar** (Karlstad University, Sweden) MOP1-F-2 Sesame lignans as the platelet aggregation inhibitor in cardiovascular disease: investigation through computational approach Reny Rosalina (Faculty Mathematics and Natural Sciences, University of Palangka Raya, Indonesia) MOP1-E-3 Enhanced reparative effects by PCSK9-dependent cardiac macrophages post-ischemia **Shin Hye Moon** (Ewha Womans University, Republic of Korea) MOP1-E-4 PCSK9 deficiency suppresses cardiac inflammation post-myocardial infarction by elevating atrial natriuretic peptide Na Hyeon Yoon (Heart-Immune-Brain Network Research Center, Republic of Korea) MOP1-F-5 Corticosterone alleviates stroke damage by Prdx1 antioxidant expression **Huiju Jo** (Ewha Womans University, Republic of Korea) MOP1-E-6 Therapeutic mechanisms of the chuanxiong-chishao herbal pair against atherosclerosis: insights from GEO database and network pharmacology Mankit Leung (Hong Kong Baptist University, China) MOP1-F-7 Histone deacetylase 8: novel therapeutic target for vascular calcification Hae Jin Kee (Chonnam National University Hospital, Republic of Korea) MOP1-F-8 Atherosclerosis-preventing effects of Weissella cibaria KCTC3746 Ha Yeon Lim (Ewha Womans University, Republic of Korea)

# Mini-Oral Presentation 1-F

Sep 27(Fri) 14:40-15:40 | Mini-Oral F (Studio 10, 6F)

MODERATOR: Seonghoon Choi (Hallym University, Republic of Korea)



MOP1-F-1	Virtual screening of Indonesian phytochemicals reveals hinokinin, dihydroguaiaretic acid, and deoxylapachol as novel GPR40 activators for type 2 diabetes mellitus
	<b>Dykall Nafan Dzikri</b> (Puskesmas Tasikmadu, Indonesia)
MOP1-F-2	In silico study: exploring Indonesian phytochemicals as DPP-IV inhibitors for Type II diabetes mellitus therapy
	Cindy Ayudia Pramaesti (Faculty of Medicine, Sebelas Maret University, Indonesia)
MOP1-F-3	Young onset type 2 diabetes among Filipino population
	Cherry Ann Garcia Durante (Saint Dominic College of Asia, Philippines)
MOP1-F-4	Incident and risk factors associated with perioperative cardiovascular complication in obese patients undergoing anesthesia: result from a secondary care hospital in Thailand
	Piyanan Pinidsatira (Songkhla Hospital, Thailand)
MOP1-F-5	Impact of cigarette smoking on long-term clinical outcomes in patients with coronary chronic total occlusion lesions
	Jihun Ahn (Eulji University Daejeon Hospital, Republic of Korea)
MOP1-F-6	Psychologically vulnerable patients with cardiovascular disease have poor health-related quality of life and physical activity
	Mi Kyung Lee (Yonsei University, Republic of Korea)
MOP1-F-7	Association of LDL cholesterol levels with the risk of cardiovascular outcome according to stages of chronic kidney disease
	<b>Su-Yeon Choi</b> (Healthcare Research Institute, Gangnam Healthcare Center, Seoul National University Hospital, Seoul, Republic of Korea)

# Mini-Oral Presentation 2-A

Sep 28(Sat) 13:30-14:30 | Mini-Oral A (Studio 5, 6F)

MODERATOR: Su Myung Jung (Sungkyunkwan University, Republic of Korea)



MOP2-A-1	Machine learning-based identification of estrogen therapy-induced lipidomic markers predicting subclinical atherosclerosis in transgender women
	Andi Nursanti Andi Ureng (Andini Persada College of Health Sciences, Indonesia)
MOP2-A-2	Investigating the lipid accumulation in apolipoprotein E deficiency-mediated chronic kidney disease
	Martin Ho Yin Yeung (The Hong Kong Polytechnic University, China)
MOP2-A-3	Tao-Hong-Si-Wu decoction ameliorates hepatic lipid accumulation in female mice with heart failure and preserved ejection fraction via inhibition of SREBP1 signaling
	QI Wensheng (The Hong Kong Polytechnic University, China)
MOP2-A-4	Investigating the effect of fat quantity and composition on hepatocellular lipid metabolism, autophagy and triglyceride-rich lipoprotein processing
	Felix Westcott (University of Oxford, United Kingdom)
MOP2-A-5	Integrative omics approaches to unraveling lipid metabolism and atherosclerosis
	Pavithran Damodaran (ACS Medical College and Hospital, India)
MOP2-A-6	The implication of a polymorphism in the methylenetetrahydrofolate reductase gene and risk of ischemic stroke in Indian population
	Asgar Ali (All India Institute of Medical Sciences, India)
MOP2-A-7	Cereblon's role in dermal fibroblast proliferation and myofibroblast differentiation
	Thien Nguyen Huu (Inje University, Republic of Korea)
MOP2-A-8	Machine learning discovery of lipid-derived extracellular vesicles' role in endothelial dysfunction and atherosclerosis
	Sahnaz Vivinda Putri (International University Semen Indonesia, Indonesia)

# Mini-Oral Presentation 2-B

Sep 28(Sat) 13:30-14:30 | Mini-Oral B (Studio 6, 6F)

MODERATOR: Jang Won Son (The Catholic University of Korea, Republic of Korea)



MOP2-B-1	Evaluation of nomenclature of fatty liver disease in association with hepatocellular
	carcinoma: a 15,5-Year cohort study in Korea
	<b>Tung Hoang</b> (National Cancer Center Graduate School of Cancer Science and Policy, Republic of Korea)
MOP2-B-2	MAFLD criteria more accurately reflect cardiac function than MASLD criteria in a healthy population
	<b>Yun Kyung Cho</b> (Asan Medical Center, University of Ulsan College of Medicine, Republic of Korea)
MOP2-B-3	Analysis of central obesity risk factors and their association with cardiovascular diseases among adults in Indonesia: insights from the Indonesian family life survey
	<b>Nadyatul Husna</b> (Universitas Andalas/dr. Reksodiwiryo Military Hospital Padang, Indonesia)
MOP2-B-4	Association between admission low-density lipoprotein level and ischemia-reperfusion injury in patients with STEMI who treated by primary PCI
	Sunderiya Dalanbaatar (Intermed Hospital, Mongolia)
MOP2-B-5	Features of lipid metabolism disorders in individuals with genetic predisposition to arterial hypertension and patients with essential arterial hypertension
	<b>Anastasiia Ivankova</b> (National Pirogov Memorial Medical University, Vinnytsya, Ukraine)
MOP2-B-6	Associations of dietary intake with cardiovascular disease, blood pressure, and lipid profile in the Korean population: an updated systematic review and meta-analysis
	<b>Jeongseon Kim</b> (National Cancer Center Graduate School of Cancer Science and Policy, Republic of Korea)
MOP2-B-7	Utilizing machine learning algorithms to predict rapid plaque progression and coronary events in patients with familial hypercholesterolemia based on genetic polymorphisms
	Roland Helmizar (Faculty of Medicine Baiturrahmah University, Indonesia)

# Mini-Oral Presentation 2-C

Sep 28(Sat) 13:30-14:30 | Mini-Oral C (Studio 7, 6F)

MODERATOR: Je Sang Kim (Bucheon Sejong Hospital, Republic of Korea)



MOP2-C-1	Exploring Indonesian phytochemicals as novel PPAR-y activators for type II diabetes mellitus therapy: an In Silico Study
	<b>Dykall Nafan Dzikri</b> (Puskesmas Tasikmadu, Indonesia)
MOP2-C-2	Genetic analysis of HMGCR variants reveals potential association with New Onset Statin-induced Diabetes Mellitus (NODM)
	Putrya Hawa (Republic of Indonesia Defense University, Indonesia)
MOP2-C-3	Biochemical, cellular and In Silico characterization of the Exon13_15dup of LDLR associated to familial hypercholesterolemia
	Andrea Sanchez (University of Concepción, Chile)
MOP2-C-4	Ex-Vivo characterization of D47N mutation of LDLR associated to familial hypercholesterolemia
	Catalina Martínez (University of Concepción, Chile)
MOP2-C-5	Unveiling the potential mechanisms of alternanthera sessilis red against atherosclerosis: an in-depth exploration through network pharmacology and molecular docking analyses
	<b>Omilla Ragavan</b> (Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Malaysia)
MOP2-C-6	Aberrant activation of miR10b-5p contributes to the pathogenesis of Kawasaki vasculitis
	<b>Gwang Hyeon Eom</b> (Chonnam National University Medical School, Republic of Korea)

# Mini-Oral Presentation 2-D

Sep 28(Sat) 13:30-14:30 | Mini-Oral D (Studio 8, 6F)

MODERATOR: Soo Lim (Seoul National University, Republic of Korea)



MOP2-D-1	Increased splenic metabolic activity was associated with cardiovascular event and all- cause death after surgery among lung cancer patients
	Jiyeon Ha (Seoul National University Hospital, Republic of Korea)
MOP2-D-2	Incident and risk factors associated with perioperative respiratory complication in obese patients undergoing anesthesia: result from a secondary care hospital in Thailand
	Pakawan Kanjanan (Songkhla Hospital, Thailand)
MOP2-D-3	Global trends in clinical trials of NASH treatment
	Jung Kim (Yonsei University, Republic of Korea)
MOP2-D-4	Current status and clinical characteristics of familial hypercholesterolemia patients in Korea: a two-center, real world experience
	<b>Kyung An Kim</b> (Seoul St. Mary's Hospital, The Catholic University of Korea, Republic of Korea)
MOP2-D-5	Changes in metabolic components before and after the COVID-19 pandemic: analysis of general health check-up data
	Jung-sun Lim (SMG-SNU Boramae Medical Center, Republic of Korea)
MOP2-D-6	Sex differences in all-causes and cause-specific mortality according to body types among Koreans using the Korean Genome and Epidemiology Study (KoGES)
	Jiae Shin (Kangwon National University, Republic of Korea)
MOP2-D-7	A novel self nano emulsifying formulation of hydrochlorothiazide enhanced its diuretic and natriuretic efficacy
	Pankajkumar Yadav (SHUATS, India)

### Mini-Oral Presentation 2-F

Sep 28(Sat) 13:30-14:30 | Mini-Oral E (Studio 9, 6F)

MODERATOR: Se Eun Park (Sungkyunkwan University, Republic of Korea)



MOP2-E-1 Soluble ST-2 association with intima-media thickness in patients with acute myocardial infarction **Borys Shelest** (Kharkiv National Medical University, Ukraine) MOP2-F-2 Comparative assessment of hsCRP and apolipoprotein B as ASCVD risk biomarkers Saheed Amusat (Beaumont Hospital, Ireland) MOP2-F-3 Spontaneous femoral pseudoaneurysm in a 64-year-old patient with chronic kidney disease: a case report Monica Claudine D. Reas (Philippine College of Physician, Philippines) MOP2-F-4 A comparative study to evaluate the role of apolipoprotein B vs low density lipoprotein C in predicting the risk of atherosclerotic cardiovascular disease in obese patients at a tertiary care hospital in India Aashal Bhavesh Shah (GMERS Medical College, India) MOP2-E-6 Long-term efficacy and clinical outcomes of paclitaxel-eluting balloons vs uncoated balloon for coronary in-stent restenosis **Ulil Albab Habibah** (Islamic University of Indonesia, Indonesia) MOP2-F-7 Cardiovascular benefit of Evolocumab in 27,564 patients with and without autoimmune or inflammatory diseases: an analysis of the FOURIER trial Ana Laura Kunzler (Beth Israel Deaconess Medical Center, Harvard Medical School, United States)

# Mini-Oral Presentation 2-F

Sep 28(Sat) 13:30-14:30 | Mini-Oral F (Studio 10, 6F)

MODERATOR: Jun Hwa Hong (Eulji University, Republic of Korea)



MOP2-F-1	Malaysian Tualang Honey (MTH) inhibits cell migration and oxidative stress in Vascular Smooth Muscle Cells (VSMC)
	<b>Ain Nabila Syahira Binti Shamsol Azman</b> (Faculty of Medicine and Health Sciences Universiti Putra Malaysia, Malaysia)
MOP2-F-2	$Bioinformatics\ identification\ of\ high-efficacy\ PCSK9\ siRNAs\ for\ atherosclerosis\ the rapy$
	Rian Ka Praja (Universitas Palangka Raya, Indonesia)
MOP2-F-3	Effect of taurine intake over kidneys and intestinal tissues in ob/ob mice
	Amara Zulfiqar (Changwon National University, Republic of Korea)
MOP2-F-4	Effect of dietary intervention on food intake among CVD patients in comprehensive cardiac rehabilitation: interim analysis
	<b>Jung Eun Lee</b> (Department of Food and Nutrition, Seoul National University, Republic of Korea)
MOP2-F-5	The protective effects of p-Coumaric acid on high-fructose diet-induced metabolic dysregulation
	Hye Jin Yoon (Pukyong University, Republic of Korea)
MOP2-F-6	Brown fat HuR is a cold-induced RNA binding protein that regulates fatty acid oxidation to enhance thermogenesis
	<b>Kun-Young Park</b> (Korea Advanced Institute of Science and Technology, Republic of Korea)
MOP2-F-7	The role of vimentin on microparticle in macrophages
	Soonhyeong Oh (Ewha Womans University, Republic of Korea)
MOP2-F-8	Molecular analysis of use of Anti-FAM19A5 antibodies for treating atherosclerosis
	Haerani (Institute of Health Science Bina Bangsa Majene, Indonesia)

### Mini-Oral Presentation 2-G

Sep 28(Sat) 13:30-14:30 | Mini-Oral G (Studio 1, 6F)

MODERATOR: Nam Hoon Kim (Korea University, Republic of Korea)



MOP2-G-1 Rapid detection of beta-blocker in human urine using LC-MS/MS: an antiatherosclerotic agents Awanish Kumar Upadhyay (National Dope Testing Laboratory, India) MOP2-G-2 Non-linear association between admission glucose level and incomplete recovery of coronary blood flow in patients with STEMI treated by primary PCI Surenjav Chimed (Charité - Universitätsmedizin Berlin, Germany) MOP2-G-3 Autonomic rehabilitation enhances cardioplasticity in patients with post COVID-19 cardiopulmonary dysfunctions Priyanka Rishi (Lovely Professional University, India) Yongwoon Lim (Chonnam National University Passel " MOP2-G-5 Selectively targeting the Gasdermin-D pore attenuates cardiac inflammation and fibrosis after ischemia reperfusion injury **Judy Choi** (Baker Heart and Diabetes Institute, Australia) MOP2-G-6 Ex vivo three-dimensional visualization of mouse sinoatrial node Hoang Le (Department of Internal Medicine, College of Medicine, Chung-Ang University, Republic of Korea) MOP2-G-7 Empagliflozin alleviates cardiac lipid accumulation and fibrosis in diabetic mice Trong Kha Pham (Inje University, Republic of Korea) MOP2-G-8 Genetic analysis of methods for detection of atherosclerosis and atherosclerosis diagnostic kits using polypeptide markers and their antibodies for diagnosis of atherosclerosis Ramlah (Universitas Sulawesi Barat, Indonesia)

# Mini-Oral Presentation 2-H

Sep 28(Sat) 13:30-14:30 | Mini-Oral H (Studio 2, 6F)

MODERATOR: Jae-Hoon Choi (Hanyang University, Republic of Korea)



MOP2-H-1	Genome-wide identification and characterization of Senna tora miRNAs and its cross kingdom regulation in atherosclerosis
	Saumya K. Patel (Gujarat University, India)
MOP2-H-2	Probiotic properties and anti-diabetic effects of lactiplantibacillus plantarum LRCC5314 postbiotics in vivo
	Ahyoung Lim (LOTTE R&D Center, Republic of Korea)
MOP2-H-3	M2 macrophage exosomes improve cardiac function in mice with heart failure by suppressing cardiometabolic inflammation and type 1 interferon response
	Martin Ng (UCSF, NCIRE, United States)
MOP2-H-4	Involvement of endocan in vascular dysfunction in angiotensin Il-induced hypertensive mice
	<b>Eun Yi Oh</b> (Department of Physiology, Yonsei University College of Medicine, Republic of Korea)
MOP2-H-5	Protective effect of human milk oligosaccharide on lipopolysaccharide-induced inflammation by inhibiting STAT1 signaling pathway
	<b>Yujin Jin</b> (College of Pharmacy, Chungnam National University, Republic of Korea)
MOP2-H-6	BH4 prevents diabetic cardiomyopathy by activating CaMKK2 signaling pathway
	<b>Nguyen Thi To Hoai</b> (Department of Physiology, BK21 Plus Project Team, College of Medicine, Smart Marine Therapeutics Center, Cardiovascular and Metabolic Disease Center, Inje University, Republic of Korea)
MOP2-H-7	Protective effects of β-lapachone on isoproterenol-induced cardiac hypertrophy
	Mario Albino Sozinho Indarua (Inje University, Republic of Korea)
MOP2-H-8	Epidemiologic data of cardiovascular disease caused by high LDL cholesterol in low sociodemographic index vs high sociodemographic index: a population-based study
	Zavia Putri Salsabila (Indonesia Islamic University, Indonesia)

# Mini-Oral Presentation 2-I

Sep 28(Sat) 13:30-14:30 | Mini-Oral I (Studio 3, 6F)

MODERATOR: Jin Joo Park (Seoul National University, Republic of Korea)



MOP2-I-1	Diabetes distress and psychosocial issues towards Quality of Life (QoL) of outpatients diabetes care
	Rosinta Hotmaida Pebrianti Purba (Socioeconomic Research, The Pranala Institute, Indonesia)
MOP2-I-2	Serum LDL cholesterol lipids serve as predictor of steroid resistance in patients with focal segmental glomerulosclerosis
	Fahad Zadjali (Oman College of Health Sciences, Oman)
MOP2-I-3	Gender specific association of PNPLA3 variants with fatty liver disease trait heritability
	Mustafa Al Hinai (Sultan Qaboos University Hospital, Oman)
MOP2-I-4	The prevalence of dyslipidemia and diabetes mellitus in Thai kidney transplant patients
	Suthida Boonsom (University of Phayao, Thailand)
	Association between cardiometabolic risk factors and COVID-19 severity in patients of tertiary rural hospital Withdrawn
	Percival Dilla (Region II Trauma and Medical Center, Philippines)
MOP2-I-6	Associations of changes in metabolic syndrome status and risk factor count with incident cardiovascular events among cancer survivors
	Jaeyong Lee (Yonsei University College of Medicine, Republic of Korea)
MOP2-I-7	Impact of different quantity and source of dietary protein intake on cardiovascular diseases risk factors in Singapore older adults: a randomized controlled trial
	Yueying Yao (National University of Singapore, Singapore)

# **ICoLA 2024**

The 13th International Congress on Lipid & Atherosclerosis

# **EVENT INFORMATION**

### 01. Gifts for Attendees

Bag & Umbrella will be given to ICoLA 2024 attendees!





### 02. Lucky Draw Event

You can draw your tickets in front of each event entrance.

### Welcome Reception (Day 1)

\* Date and Time: Thursday, 26 September, 18:10~ \* Location: Studio 1+2+3 (6F)



#### Breakfast Symposium 1~4 (Day 2)

\* Date and Time: Friday, 27 September, 07:30~08:30 \* Location: Room 1~3 (3F) & Room 4 (5F)



### Breakfast Symposium 5~8 (Day 3)

\* Date and Time: Saturday, 28 September, 07:50~08:50 \* Location: Room 1~3 (3F) & Room 4 (5F)



#### Closing Ceremony (Day 3)

\* Date and Time: Saturday, 28 September, 17:10~ \* Location: Room 1~3 (3F)



### 03. Photogenic Event

Take a group photo with your colleagues! After the congress, special gifts will be awarded to the top 3 laboratories of groups with the most people in their photos.







Domestic Participants: Starbucks E-Gift Card (KRW 200,000) eas Participants: Amazon E-Card (USD 200)

tic Participants: Starbucks E-Gift Card (KRW 150.000)



Please send the photo via the QR link provided above



estic Participants: Starbucks E-Gift Card (KRW 100,000) as Participants: Amazon E-Card (USD 100)

### 04. Stamp Tour Event

Visit exhibition booths and collect stamps from 80% of the total booths. (Diamond, Platinum, Gold, and JLA booth stamps are mandatory to collect.) Please submit your completed stamp tour sheet to the Secretariat office (5F) and receive the reward!





### 05. Satisfaction Survey Event

Among the attendees of ICoLA 2024 who participate in the survey. those selected through a drawing will receive the reward.

Domestic Participants Overseas Participants





### 06. Congress Review Event

Please share your experience at ICoLA 2024 with your memorable pictures in an MS Word file and submit it to the ICoLA 2024 secretariat at icola2024@planbear.co.kr. Rewards will be distributed to the best review notes.





### 07. Caricature Event

A caricature artist will draw your portrait at ICoLA 2024, and you can meet the artist on Day 3 (Saturday, 28 September) @ Instagram: @shanti1004



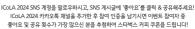


### 08. Social Media Like & Share Event









## **CME CREDITS (FOR KOREAN PARTICIPANTS)**

	구분	9/26(목)	9/27(금)	9/28(토)
의사	대한의사협회 연수교육 평점	최대 4평점	최대 6평점	최대 6평점
영양사	임상영양사 전문연수교육 (CPD)	5평점 * 3일 모두 수강하셔도 최대 5평점 승인됩니다.		

- 등록 시 의사 면허번호를 정확하게 입력해주시기 바랍니다. 면허번호 오류 시 의사협회 평점이수자에서 누락될 수 있습니다.
- 학술대회 종료 후, 학회 사무국에서 의사 명단을 의사협회 연주교육 시스템에 등록하게 되면 자동으로 평점이 부여되고 있으며 개인에게 평점카드를 발급하지 않습니다. (소요기간 : 약 4주)
- 대한의사협회 2016년도 연수교육 관리 변경사항 공지에 따라 학술대회 참석 증명을 위한 출결 확인 작업이 있을 예정입니다.
- 대회 참석 시 명찰 내 QR코드를 2회 이상 QR코드 리더기에 태그하셔야 출결 확인이 되니 유의 바랍니다. (입실 시 1회, 퇴실 시 1회)

#### 부분 평점 인정 기준

0평점	
1평점	
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4평점	
5평점	
6평점 (1일 최대 이수 가능 평점: 최대 6평점)	

#### OR코드 리더기 위치 안내







## **BOOTH EXHIBITION**

### **Enjoy ICoLA Stamp Tour!**

Join our stamp tour and get a chance to win a prize.





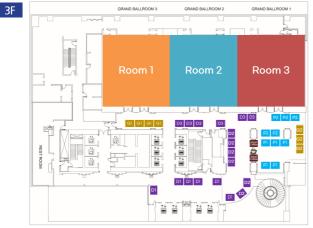


**Domestic Participants:** Starbucks E-Gift Card (KRW 30,000)

Visit, Collect and Get! Visit exhibition booths and collect stamps from 80% of the total booths.

(Diamond, Platinum, Gold, and JLA booth stamps are mandatory to collect.) Please submit your completed stamp tour sheet to the Secretariat office (5F) and receive

the reward!

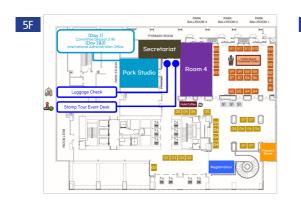




- \* Stamp tour event sheet will be distributed at registration desk.
- \* Please collect your stamp on the given sheet, not on this program book.



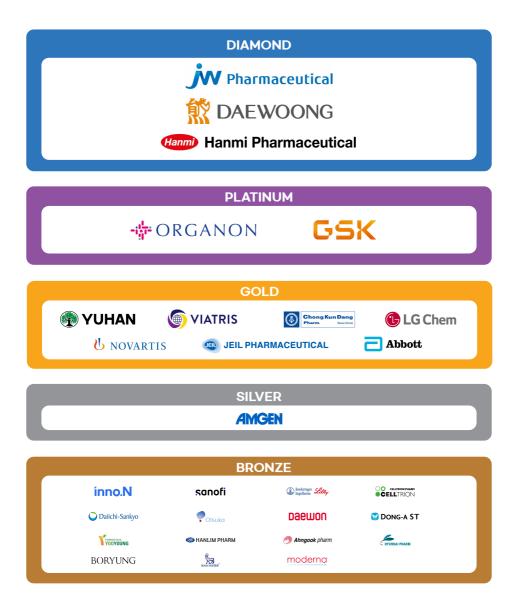
### New Perspectives in Lipid and Atherosclerosis: Exploring Innovations





JLA	G3	G4	G5	G6	G7
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Mandatory					
Journal of Lipid and Atherosclerosis	U NOVARTIS	Chong Kun Dang Pharm. Soul Street	JEIL PHARMACEUTICAL	Abbott	TUHAN
S1	B1	B2	B3	B4	B5
AMGEN	🥙 Ahngook pharm.	novo nordisk <sup>®</sup>	sanofi	MANLIM PHARM	paewon
В6	В7	B8	В9	B10	B11
BORYUNG	ínno.N	Boehringer Leley	₩ DONG-A ST	CELLTRION PHARM CELLTRION	Oaiichi-Sankyo
B12	B13	B14	B15	1	2
HYUNDAI PHARM	moderna	Otsuka	YOOYOUNG	💠 GC Biopharma	ILDONG
3	4	5	6	7	8
C KUHNIL PHARM.	AstraZeneca	<b>Q</b> Alvogen	BCWORLD PHARM, CO, LTD.	For the Control Personal Congress  KOREA UNITED PHARM. INC.	₹ DAEWOONG BIO INC.
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The 14th International Congress on Lipid and Atherosclerosis

September 11(Thu)~13(Sat), 2025 Conrad Seoul, Republic of Korea





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2025 Spring Congress on Lipid and Atherosclerosis of KSoLA

2025년 **4월 4**일(금)~**5**일(토) 서울드래곤시티 컨벤션센터 3층 한라홀





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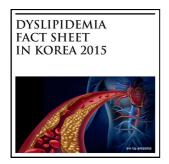
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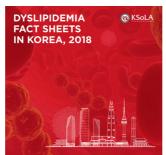
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What's New in

Dyslipidemia Fact Sheet

2024?



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# **MEMO**

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4가지 용량의 01분젯®으로

더욱 강력한 LDL-C 수치 조절을

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대상포진 (HZ; herpes zoster)의 예방 - 만 50세 이상의 성인 - 만 18세 이상에서 질병 혹은 치료로 인한 면역저하 또는 면역억제로 인하여 대상포진의 위험이 높거나 높을 것으로

\*싱그릭스 효능 효과<sup>7</sup>:

예상되는 사람 (예. 자가조혈모세포이식자, 고형암, 혈액암, 고형장기 이식 화지

당뇨병, 고혈압 환자가 대상포진에

뇌졸중, 심근경색 발병 53% 즐가

당뇨병, 고혈압, 이상지질혈증 환자가

발병 2.9배 증가<sup>3</sup>

심근경색 과거력 있는 환자가 대상포진에 걸린 경우 30일 이내에

발병 121배 증가

# 50세 이상에서 **97.2%의 예방효과**를 입증한 대한감염학회 **우선권고 대상포진 백신<sup>6</sup>, 싱그릭스**



# 이상지질혈증 관리 로수젯으로 **맞춤 처방 시작**하세요!



- 국내 최초 Rosuvastatin + Ezetimibe 복합제1
- 세계 최초 Rosuvastatin + Ezetimibe 복합제의 CV Outcome\* 발표(THE LANCET)2
  - 국내 매출 1위 Statin + Ezetimibe 복합제3
  - 한미약품 R&D 및 자체 생산을 통한 Global 진출



<sup>\*</sup> CV(cardiovascular) outcome: 3년 동안의 심혈관계 사망, 주요 심혈관계 사건 또는 비치명적 뇌졸중의 발생





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10/5, 10/10, 10/20, 10/40mg

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