

(사)한국독성학회/한국환경성물연변이발암원학회

2024 제40차 정기학술대회

혁신적 독성과학: 더 건강한 사회를 위한 한계극복

The 40th Annual Meeting of KSOT/KEMS

Innovative Toxicology: Breaking Limitations for a Healthier Society

November 4 (Mon) ~ 6 (Wed), 2024

- Venue : Convention Hall, BEXCO, Busan, Korea

Invitation

존경하는 (사)한국독성학회/한국환경성물연변이발암원학회 회원 여러분,

우리 학회 학술행사에 변함없이 관심을 주시고 참여해주시는 회원 및 임원 여러분께 항상 깊은 감사의 말씀을 드립니다.

가을의 정취가 무르익는 11월, 금번 제40차 정기학술대회는 아름다운 도시 부산의 벡스코에서 "Innovative Toxicology: Breaking Limitations for a Healthier Society"의 대주제를 가지고 개최됩니다. "더 건강한 사회를 위해 혁신적 독성과학을 통한 한계극복" 관련 국내외 훌륭한 연자들을 모시고 알찬 학술 프로그램을 준비하였으며 포스터 발표 및 학술상, 우수포스터상 시상 등 다채로운 학술 행사와 격려의 자리가 마련될 예정입니다. 특히 이번 정기학술대회는 한국바이오횰약품협회와 공동주관으로 개최하게 되어 더 풍성한 학술프로그램을 준비하였습니다.

기조연설로 한국독성학회 명예회장인 동국대학교 김상건 교수님과 대만독성학회 회장인 National Cheng Kung University의 Ying-Jan Wang 교수님, 네덜란드 Utrecht University의 Hans Clevers 교수님 및 특별 강연으로 일본 Tohoku Medical and Pharmaceutical University의 황기욱 교수님의 강연이 예정되어 있습니다. 그 외 저명한 국내외 석학을 모시고 진행 될 본 행사는 우리 독성학 분야 학계 및 산업계 발전에 큰 도움이 될 것으로 기대하며, 최신 학문 발전, 환경보건, 산업안전보건, 생명과학 연구의 최신 지견을 제공하여 학회의 국제적인 위상을 높이고 국민 건강 및 복지 향상에도 기여할 것으로 기대합니다.

특히 이번 정기국제학술대회에서 화학물질의 안전성·독성뿐만 아니라 백신 등 첨단바이오횰약품 개발에서 전임상시험 및 안전성·독성에 관한 최신 동향을 살펴보고, 실험동물의 희생을 줄이고 규제과학에서 새로운 방법으로 시도 중인 오가노이드·생체조직칩 기술을 중심으로 최근에 대두되고 있는 안전성·위해성 관련 이슈를 보다 심도있게 논의할 예정입니다. 또한 최근에 이슈화되고 있는 과불화합물의 독성 및 담배 독성평가 및 화학물질의 안전관리 방안에 대한 국민 건강에 관한 사회적 논의를 위한 프로그램도 마련하였습니다.

끝으로 회원 여러분의 건승을 기원하며 본 행사의 준비를 위해 수고해 주신 임원진과 학회 발전에 많은 도움을 주신 식품의약품안전처 식품의약품안전평가원과 많은 후원사의 지원에 깊은 감사를 드립니다.

(사)한국독성학회/한국환경성물연변이발암원학회
회장 최 경 철

November 4, 2024 (Monday)			
12:00-13:00	Council Meeting Summit Hall		
12:00	Registration		
13:00-13:20	Welcome Remarks Grand Hall Kyung-Chul Choi (President of KSOT, Chungbuk National University) Seogyoun Kang (Director General, National Institute of Food and Drug Safety Evaluation) Jeong-Doo Heo (President of Korea Institute of Toxicology) Jeong Seok Lee (Chairman, Korea Biomedicine Industry Association)		
13:20-14:00	Plenary Lecture I Grand Hall Chairperson: Young-Jin Chun (Chung-Ang University) Alternative Testing Strategies for Nanomaterials Safety Assessment: From Mechanistic Studies to Regulatory Needs Ying-Jan Wang (President of TSTA, National Cheng Kung University, Taiwan)		
14:00-15:30	<table border="0"> <tr> <td style="vertical-align: top;"> Session 1: Mechanisms of Proteotoxicity Arising from Misfolding and Aggregation Grand Hall Chairperson: Ja Hyun Koo (Seoul National University) 14:00-14:30 Acetylated Tau: A Missing Link between Brain Injury and Alzheimer's Disease Min-Kyoo Shin (Seoul National University) 14:30-15:00 Protein Aggregation in The Aberrant Biomolecular Condensates Youngdae Gwon (Sungkyunkwan University) 15:00-15:30 ER-resident Disulfide Reductase ERdj5 in Liver Diseases Yoon Mee Yang (Kangwon National University) </td> <td style="vertical-align: top;"> Session 2: Recent Advances in Cancer Immunotherapy: Insights for Toxicologists Medium Hall Chairperson: Sang-Min Jeon (Seoul National University) 14:00-14:30 Engineering Next Generation T Cell Therapy for Cancer Chan Hyuk Kim (Seoul National University) 14:30-15:00 Regulation of T Cell Immunity Inside and Outside Tumor Sang-Jun Ha (Yonsei University) 15:00-15:30 Cancer Immunotherapy by T Cell Engager Antibody Seung-Woo Lee (POSTECH) </td> </tr> </table>	Session 1: Mechanisms of Proteotoxicity Arising from Misfolding and Aggregation Grand Hall Chairperson: Ja Hyun Koo (Seoul National University) 14:00-14:30 Acetylated Tau: A Missing Link between Brain Injury and Alzheimer's Disease Min-Kyoo Shin (Seoul National University) 14:30-15:00 Protein Aggregation in The Aberrant Biomolecular Condensates Youngdae Gwon (Sungkyunkwan University) 15:00-15:30 ER-resident Disulfide Reductase ERdj5 in Liver Diseases Yoon Mee Yang (Kangwon National University)	Session 2: Recent Advances in Cancer Immunotherapy: Insights for Toxicologists Medium Hall Chairperson: Sang-Min Jeon (Seoul National University) 14:00-14:30 Engineering Next Generation T Cell Therapy for Cancer Chan Hyuk Kim (Seoul National University) 14:30-15:00 Regulation of T Cell Immunity Inside and Outside Tumor Sang-Jun Ha (Yonsei University) 15:00-15:30 Cancer Immunotherapy by T Cell Engager Antibody Seung-Woo Lee (POSTECH)
Session 1: Mechanisms of Proteotoxicity Arising from Misfolding and Aggregation Grand Hall Chairperson: Ja Hyun Koo (Seoul National University) 14:00-14:30 Acetylated Tau: A Missing Link between Brain Injury and Alzheimer's Disease Min-Kyoo Shin (Seoul National University) 14:30-15:00 Protein Aggregation in The Aberrant Biomolecular Condensates Youngdae Gwon (Sungkyunkwan University) 15:00-15:30 ER-resident Disulfide Reductase ERdj5 in Liver Diseases Yoon Mee Yang (Kangwon National University)	Session 2: Recent Advances in Cancer Immunotherapy: Insights for Toxicologists Medium Hall Chairperson: Sang-Min Jeon (Seoul National University) 14:00-14:30 Engineering Next Generation T Cell Therapy for Cancer Chan Hyuk Kim (Seoul National University) 14:30-15:00 Regulation of T Cell Immunity Inside and Outside Tumor Sang-Jun Ha (Yonsei University) 15:00-15:30 Cancer Immunotherapy by T Cell Engager Antibody Seung-Woo Lee (POSTECH)		
15:30-15:50	Coffee Break / Poster Session		
15:50-16:30	Plenary Lecture II Grand Hall Chairperson: Donghak Kim (Konkuk University) Double-Edged Sword: Roles of Ga12 Family in Cell Fate Determination Sang Geon Kim (Dongguk University, Korea)		
16:30-18:00	<table border="0"> <tr> <td style="vertical-align: top;"> Session 3: Preclinical Safety Evaluation Methods for mRNA Vaccines Grand Hall Sponsored by NIFDS Chairperson: IlUng Oh (National Institute of Food and Drug Safety Evaluation) 16:30-17:00 Safety Profile and Molecular Mechanisms of mRNA Vaccines: A Comprehensive Review Jae-Hwan Nam (The Catholic University of Korea) 17:00-17:30 Use of Animal Models for Identifying Toxicological Considerations of mRNA Vaccine Jun-Won Yun (Seoul National University) 17:30-18:00 Preclinical Evaluation Tools for Accessing Biodistribution of mRNA Vaccines Hyewon Yoon (Seoul National University Hospital) </td> <td style="vertical-align: top;"> Special Session 4: Novel Clues from the Molecular Toxicology Medium Hall Chairperson: Jeong-Hwan Che (Seoul National University Hospital) 16:30-17:00 Development of Transcriptome-based Determination of Innate Immune Suppressor Assay (TDIS) as An in Vitro Test for Immunotoxicity Yi Rang Na (Seoul National University Hospital) 17:00-17:30 Molecular Toxicology Study of Metabolic Intermediates in Synthetic Biology Hangun Kim (Sunchon National University) 17:30-18:00 Decoding Intoxication Pathways and Evolution of Clostridial Toxins via CRISPR Screening Hunsang Lee (Korea University) </td> </tr> </table>	Session 3: Preclinical Safety Evaluation Methods for mRNA Vaccines Grand Hall Sponsored by NIFDS Chairperson: IlUng Oh (National Institute of Food and Drug Safety Evaluation) 16:30-17:00 Safety Profile and Molecular Mechanisms of mRNA Vaccines: A Comprehensive Review Jae-Hwan Nam (The Catholic University of Korea) 17:00-17:30 Use of Animal Models for Identifying Toxicological Considerations of mRNA Vaccine Jun-Won Yun (Seoul National University) 17:30-18:00 Preclinical Evaluation Tools for Accessing Biodistribution of mRNA Vaccines Hyewon Yoon (Seoul National University Hospital)	Special Session 4: Novel Clues from the Molecular Toxicology Medium Hall Chairperson: Jeong-Hwan Che (Seoul National University Hospital) 16:30-17:00 Development of Transcriptome-based Determination of Innate Immune Suppressor Assay (TDIS) as An in Vitro Test for Immunotoxicity Yi Rang Na (Seoul National University Hospital) 17:00-17:30 Molecular Toxicology Study of Metabolic Intermediates in Synthetic Biology Hangun Kim (Sunchon National University) 17:30-18:00 Decoding Intoxication Pathways and Evolution of Clostridial Toxins via CRISPR Screening Hunsang Lee (Korea University)
Session 3: Preclinical Safety Evaluation Methods for mRNA Vaccines Grand Hall Sponsored by NIFDS Chairperson: IlUng Oh (National Institute of Food and Drug Safety Evaluation) 16:30-17:00 Safety Profile and Molecular Mechanisms of mRNA Vaccines: A Comprehensive Review Jae-Hwan Nam (The Catholic University of Korea) 17:00-17:30 Use of Animal Models for Identifying Toxicological Considerations of mRNA Vaccine Jun-Won Yun (Seoul National University) 17:30-18:00 Preclinical Evaluation Tools for Accessing Biodistribution of mRNA Vaccines Hyewon Yoon (Seoul National University Hospital)	Special Session 4: Novel Clues from the Molecular Toxicology Medium Hall Chairperson: Jeong-Hwan Che (Seoul National University Hospital) 16:30-17:00 Development of Transcriptome-based Determination of Innate Immune Suppressor Assay (TDIS) as An in Vitro Test for Immunotoxicity Yi Rang Na (Seoul National University Hospital) 17:00-17:30 Molecular Toxicology Study of Metabolic Intermediates in Synthetic Biology Hangun Kim (Sunchon National University) 17:30-18:00 Decoding Intoxication Pathways and Evolution of Clostridial Toxins via CRISPR Screening Hunsang Lee (Korea University)		
18:00-18:20	General Assembly Grand Hall		
18:20	Banquet Summit Hall		

Registration

The registration fee includes admission to all scientific sessions, the exhibition, coffee breaks, and an abstract book. Participants are encouraged to register for the 40th Annual Meeting of KSOT/KEMS by October 10, 2024, to take advantage of the reduced fee.

■ Early registration can be made through the internet site of KSOT/KEMS (www.ksot.or.kr).

	Early Registration (~ October 10)	On-site Registration	Banquet
KSOT Member	₩160,000	₩200,000	₩10,000
KSOT Student Member	₩100,000	₩120,000	* Banquet : November. 4 (Mon) Summit Hall
Non-Member	₩230,000	₩270,000	
Student Non-member	₩120,000	₩140,000	

■ Important Dates

Deadline For Early Registration : October 10, 2024,
Deadline for Abstract Submission : October 10, 2024

November 5, 2024 (Tuesday)			
09:00-09:30	KSOT Unbong Academic Research Award Presentation Grand Hall Chairperson: Ki Taek Nam (Yonsei University) Repeated-dose Toxicity and Toxicokinetic Study of Isobutylparaben in Rats Subcutaneously Treated for 13 Weeks and Risk Assessment of Parabens in Cosmetic Ingredients Kyu-Bong Kim (Dankook University)		
09:30-11:00	<table border="0"> <tr> <td style="vertical-align: top;"> Session 5: Emerging Toxic Mechanisms of Perfluorinated Compounds Grand Hall Chairperson: Young-Suk Jung (Pusan National University) 09:30-10:00 Applying Multi- and Integrated Omics into Toxicity Mechanism Identification of PFAs Sangkyu Lee (Sungkyunkwan University) 10:00-10:30 Developmental Toxicity and Teratogenicity of Perfluoroalkyl Compounds in Xenopus Embryos: Mechanistic Insights and Biological Impacts Hyun-Shik Lee (Kyungpook National University) 10:30-11:00 Impact of Perfluoroalkyl Substances on Thyroid Hormone Using 3D Cell Culture Model Chang Seon Ryu (KIST Europe, Germany) </td> <td style="vertical-align: top;"> Session 6: Advances in Cigarette Smoke Toxicity Research: Chemical Components, Mechanisms and Evaluation Medium Hall Chairperson: Min-Seok Kim (Korea Institute of Toxicology) 09:30-10:00 Current Status of NIFDS' Tobacco Harmful Substance Analysis Hyoung-Joon Park (National Institute of Food and Drug Safety Evaluation) 10:00-10:30 Cellular Impacts of Emissions from Conventional Cigarettes and Heated Tobacco Products Moo-Yeol Lee (Dongguk University) 10:30-11:00 Development of Target Organ Toxicity Test Method for Cigarette Smoke Using Animal Disease Models Min-Seok Kim (Korea Institute of Toxicology) </td> </tr> </table>	Session 5: Emerging Toxic Mechanisms of Perfluorinated Compounds Grand Hall Chairperson: Young-Suk Jung (Pusan National University) 09:30-10:00 Applying Multi- and Integrated Omics into Toxicity Mechanism Identification of PFAs Sangkyu Lee (Sungkyunkwan University) 10:00-10:30 Developmental Toxicity and Teratogenicity of Perfluoroalkyl Compounds in Xenopus Embryos: Mechanistic Insights and Biological Impacts Hyun-Shik Lee (Kyungpook National University) 10:30-11:00 Impact of Perfluoroalkyl Substances on Thyroid Hormone Using 3D Cell Culture Model Chang Seon Ryu (KIST Europe, Germany)	Session 6: Advances in Cigarette Smoke Toxicity Research: Chemical Components, Mechanisms and Evaluation Medium Hall Chairperson: Min-Seok Kim (Korea Institute of Toxicology) 09:30-10:00 Current Status of NIFDS' Tobacco Harmful Substance Analysis Hyoung-Joon Park (National Institute of Food and Drug Safety Evaluation) 10:00-10:30 Cellular Impacts of Emissions from Conventional Cigarettes and Heated Tobacco Products Moo-Yeol Lee (Dongguk University) 10:30-11:00 Development of Target Organ Toxicity Test Method for Cigarette Smoke Using Animal Disease Models Min-Seok Kim (Korea Institute of Toxicology)
Session 5: Emerging Toxic Mechanisms of Perfluorinated Compounds Grand Hall Chairperson: Young-Suk Jung (Pusan National University) 09:30-10:00 Applying Multi- and Integrated Omics into Toxicity Mechanism Identification of PFAs Sangkyu Lee (Sungkyunkwan University) 10:00-10:30 Developmental Toxicity and Teratogenicity of Perfluoroalkyl Compounds in Xenopus Embryos: Mechanistic Insights and Biological Impacts Hyun-Shik Lee (Kyungpook National University) 10:30-11:00 Impact of Perfluoroalkyl Substances on Thyroid Hormone Using 3D Cell Culture Model Chang Seon Ryu (KIST Europe, Germany)	Session 6: Advances in Cigarette Smoke Toxicity Research: Chemical Components, Mechanisms and Evaluation Medium Hall Chairperson: Min-Seok Kim (Korea Institute of Toxicology) 09:30-10:00 Current Status of NIFDS' Tobacco Harmful Substance Analysis Hyoung-Joon Park (National Institute of Food and Drug Safety Evaluation) 10:00-10:30 Cellular Impacts of Emissions from Conventional Cigarettes and Heated Tobacco Products Moo-Yeol Lee (Dongguk University) 10:30-11:00 Development of Target Organ Toxicity Test Method for Cigarette Smoke Using Animal Disease Models Min-Seok Kim (Korea Institute of Toxicology)		
11:00-11:20	Coffee Break		
11:20-12:00	Special Lecture Grand Hall Chairperson: Keon Wook Kang (Seoul National University) Methylmercury Toxicity and Brain Neurological Disorders Mediated by Microglial Activation Gi-Wook Hwang (Tohoku Medical and Pharmaceutical University, Japan)		
12:00-13:30	Lunch Poster Session		
13:30-15:10	<table border="0"> <tr> <td style="vertical-align: top;"> Session 7: Organoids as Innovative Tools for Toxicology Grand Hall Sponsored by KoBIA Chairperson: Hyun-Jung Kim (Chung-Ang University) 13:30-13:55 Standardization and Validation of Cardiac Organoids for Safety and Efficacy Do-Sun Lim (Korea University) 13:55-14:20 Kidney Micro Physiological Systems for Nephrotoxicity Assessment Sejoong Kim (Seoul National University) 14:20-14:45 Pharmacokinetic Modeling and Simulation in Organoids Kyeong-Ryoon Lee (Korea Research Institute of Bioscience and Biotechnology) 14:45-15:10 Emerging Organoid Technologies for Disease Modeling and Liver Toxicity Assessment Myung Jin Son (Korea Research Institute of Bioscience and Biotechnology) </td> <td style="vertical-align: top;"> Session 8: Young Scientist Forum Medium Hall Chairperson: Jeong-Yun Choi (Sungkyunkwan University) 13:30-13:55 Gene-Environment Interaction on Brain Development: Novel Roles of Placenta Hae-Ryung Park (University of Rochester Medical Center, USA) 13:55-14:20 Chaperone-Mediated Autophagy in Hepatic Lipid Metabolism: A New Avenue for Treating Metabolic Liver Disorders You-Jin Choi (Daegu Catholic University) 14:20-14:45 Study on Preservation of Female Reproduction in Obstetrics and Gynecological Diseases Sunwoo Park (Gyeongsang National University) 14:45-15:10 Dual Role of TYRO3 in Tumor Microenvironment Miso Park (Kangwon National University) </td> </tr> </table>	Session 7: Organoids as Innovative Tools for Toxicology Grand Hall Sponsored by KoBIA Chairperson: Hyun-Jung Kim (Chung-Ang University) 13:30-13:55 Standardization and Validation of Cardiac Organoids for Safety and Efficacy Do-Sun Lim (Korea University) 13:55-14:20 Kidney Micro Physiological Systems for Nephrotoxicity Assessment Sejoong Kim (Seoul National University) 14:20-14:45 Pharmacokinetic Modeling and Simulation in Organoids Kyeong-Ryoon Lee (Korea Research Institute of Bioscience and Biotechnology) 14:45-15:10 Emerging Organoid Technologies for Disease Modeling and Liver Toxicity Assessment Myung Jin Son (Korea Research Institute of Bioscience and Biotechnology)	Session 8: Young Scientist Forum Medium Hall Chairperson: Jeong-Yun Choi (Sungkyunkwan University) 13:30-13:55 Gene-Environment Interaction on Brain Development: Novel Roles of Placenta Hae-Ryung Park (University of Rochester Medical Center, USA) 13:55-14:20 Chaperone-Mediated Autophagy in Hepatic Lipid Metabolism: A New Avenue for Treating Metabolic Liver Disorders You-Jin Choi (Daegu Catholic University) 14:20-14:45 Study on Preservation of Female Reproduction in Obstetrics and Gynecological Diseases Sunwoo Park (Gyeongsang National University) 14:45-15:10 Dual Role of TYRO3 in Tumor Microenvironment Miso Park (Kangwon National University)
Session 7: Organoids as Innovative Tools for Toxicology Grand Hall Sponsored by KoBIA Chairperson: Hyun-Jung Kim (Chung-Ang University) 13:30-13:55 Standardization and Validation of Cardiac Organoids for Safety and Efficacy Do-Sun Lim (Korea University) 13:55-14:20 Kidney Micro Physiological Systems for Nephrotoxicity Assessment Sejoong Kim (Seoul National University) 14:20-14:45 Pharmacokinetic Modeling and Simulation in Organoids Kyeong-Ryoon Lee (Korea Research Institute of Bioscience and Biotechnology) 14:45-15:10 Emerging Organoid Technologies for Disease Modeling and Liver Toxicity Assessment Myung Jin Son (Korea Research Institute of Bioscience and Biotechnology)	Session 8: Young Scientist Forum Medium Hall Chairperson: Jeong-Yun Choi (Sungkyunkwan University) 13:30-13:55 Gene-Environment Interaction on Brain Development: Novel Roles of Placenta Hae-Ryung Park (University of Rochester Medical Center, USA) 13:55-14:20 Chaperone-Mediated Autophagy in Hepatic Lipid Metabolism: A New Avenue for Treating Metabolic Liver Disorders You-Jin Choi (Daegu Catholic University) 14:20-14:45 Study on Preservation of Female Reproduction in Obstetrics and Gynecological Diseases Sunwoo Park (Gyeongsang National University) 14:45-15:10 Dual Role of TYRO3 in Tumor Microenvironment Miso Park (Kangwon National University)		
15:10-15:50	Plenary Lecture III Grand Hall (Online Zoom) Chairperson: Hyun-Jung Kim (Chung-Ang University) Organoids to Model Human Disease Hans Clevers (Utrecht University, Netherlands)		
15:50-16:20	Awards Ceremony & Closing Remarks Grand Hall		

November 6, 2024 (Wednesday)	
09:00-11:00	Session 9: KSOT Poster of Distinction Rm. 208 Chairperson: Beum-Soo An (Pusan National University), Yuseok Moon (Pusan National University) Eight awardees oral presentation

주최 (사)한국독성학회/한국환경성물연변이발암원학회

식품의약품안전처 · 식품의약품안전평가원

KoBIA
한국바이오횰약품협회

후원
신입재정평가
안전보건공단

bt 부산관광공사
BUSAN TOURISM ORGANIZATION

KSOT/KEMS Secretariat

Tel : 82-2-888-3248

E-mail : ksot@ksot.or.kr

Website : www.ksot.or.kr



The 40th Annual Meeting App.