

Tentative Program

OPENING SESSION

Sunday, December 15th, 2024

OPENING CEREMONY

Time	Grand Ballroom, Shangri-La Hotel
16:45	- Guests to be seated in the Ballroom
17:00	- Arrival of His Majesty King Maha Vajiralongkorn Phra Vajiraklaochaoyuhua and Her Majesty Queen Suthida Bajrasudhabimalalakshana
17:05	- Report by Professor Dr. H.R.H. Princess Chulabhorn, Chairperson of the National Organizing Committee
17:10	- Opening Address by His Majesty King Maha Vajiralongkorn Phra Vajiraklaochaoyuhua - Video Presentation in honor of the 6 th cycle (72 years) birthday of His Majesty King Maha Vajiralongkorn Phra Vajiraklaochaoyuhua
17:20	- Report on Advances in Biological Drugs for the Treatment and Prevention of Disease by Sir Gregory P. Winter (Nobel Laureate, U.K.)

SCIENTIFIC PROGRAM

Monday, December 16th, 2024

Time	Grand Ballroom			
09:00	Keynote Lecture: (Title to be announced) <i>Professor Dr. H.R.H. Princess Chulabhorn (Chulabhorn Research Institute, Thailand)</i>			
09:45	Nobel Laureate Lecture: Harnessing Evolution to Make New Medicines <i>Sir Gregory P. Winter (Nobel Laureate, U.K.)</i>			
10:30	Special Remarks: <i>Tedros Adhanom Ghebreyesus (WHO, Switzerland)</i>			
	Chairpersons: Ram Sasisekharan (U.S.A.) and M.R. Jisnuson Svasti (Thailand)			
10:40	Plenary Lecture 1: One Health: Predicting and Preempting Spillover and Infection Dissemination <i>Julie L. Gerberding (U.S.A.)</i>			
11:25	Plenary Lecture 2: AMR in 2024: We Still Have an Awareness Problem <i>Helen Boucher (U.S.A.)</i>			
12:10	L U N C H			
POSTER PRESENTATION				
Time	Ballroom I	Ballroom II	Ballroom III	The Study
13:00	<p>SYMPOSIUM I: Antimicrobial Resistance (AMR) and One Health: Critical Issues Chairperson: Helen Boucher (U.S.A.) Co-chairperson: Mayuree Fuangthong (Thailand)</p> <p>AMR Governance: Critical Challenges Beyond the Science <i>Adam Kamradt-Scott (U.S.A.)</i></p> <p>Is This the End of the Antibiotic Era? <i>David Paterson (Singapore)</i></p> <p>Ensuring Sustainable Access to Effective Antibiotics <i>Ramanan Laxminarayan (U.S.A.)</i></p> <p>SYMPOSIUM II: One Health: Climate Change and Communicable diseases Chairperson: Paul Hunter (U.K.) Co-chairperson: Mayuree Fuangthong (Thailand)</p> <p>World Health Organization Calls for Urgent Action to Mitigate Climate-Related Health Risks and Promote Resilience through A One Health Perspective <i>Maria Neira (WHO, Switzerland)</i></p> <p>Climate Change and Emerging Infectious Diseases <i>Paul Hunter (U.K.)</i></p> <p>Elimination of Hepatitis in Thailand by the Year 2030 <i>Yong Poovorawan (Thailand)</i></p>	<p>SYMPOSIUM III: Role of Chemical and Biological Sciences for Discovery of Modern Drugs I Chairperson: Geoffrey A. Cordell (U.S.A.) Co-chairperson: Charnsak Thongsornkleeb (Thailand)</p> <p>Phytochemicals of Liverworts: Structures, Biological Activity, and Their Application to Foods and Medicinal Drugs <i>Yoshinori Asakawa (Japan)</i></p> <p>Phenotypic Assays and Analog Synthesis: Effective Tools for the Discovery and Development of Marine Natural Product Drug Leads <i>Raymond Andersen (Canada)</i></p> <p>Discovery of Antiviral Natural Products Based on Native Mass Spectrometry and Molecular Networking <i>Yang Ye (P.R. China)</i></p> <p>Natural Product Biosynthesis and Associated Molecular Innovation <i>Wen Liu (P.R. China)</i></p> <p>Efficient Synthesis of Bioactive Steroid and Terpenoid Natural Products <i>Jinghan Gui (P.R. China)</i></p> <p>One Health - An Aspect of the Food, Medicines, and Environment Conundrum for 2040 and Beyond <i>Geoffrey A. Cordell (U.S.A.)</i></p>	<p>SYMPOSIUM IV: Genetic Diseases: From Detection to Therapy Chairperson: Pornswan Wasant (Thailand) Co-chairperson: Suthat Fucharoen (Thailand)</p> <p style="text-align: right;"><small>Abstract No.</small></p> <p>Thalassemia: A Model of Genetic Disease <i>Suthat Fucharoen (Thailand)</i></p> <p>Over 3 Decades of Organizing Services for Inherited Metabolic Disorders in Thailand <i>Pornswan Wasant (Thailand)</i></p> <p>Gaucher Disease as A Model for Rare Disorders <i>Ari Zimran (Israel)</i></p> <p>Rare Inborn Metabolic Disorders: From Mystery to Diagnosis and Management <i>Duangrurdee Wattanasirichaigoon (Thailand)</i></p> <p>Newborn Screening by Tandem Mass Spectrometry: From Early Detection of Rare Diseases to Therapy <i>Nithiwat Vatanavicharn (Thailand)</i></p> <p>Lysosomal Storage Diseases: Progress in Diagnosis and Therapy in Thailand <i>Thipwimol Tim-Aroon (Thailand)</i></p>	PLATFORM SESSION

Tuesday, December 17th, 2024

Time	Grand Ballroom
	<u>PLENARY LECTURES:</u> Chairpersons: John M. Essigmann (U.S.A.) and Skorn Mongkolsuk (Thailand)
09:00	Plenary Lecture 3: Drug Development and Regulatory Sciences: Turning Crises into Opportunities — A Valuable Perspective <i>Ram Sasisekharan (U.S.A.)</i>
09:45	Plenary Lecture 4: Two Sides of Precision Medicine: Proteomic Enablement of Biomarkers and Therapeutics <i>Jennifer van Eyk (U.S.A.)</i>
10:30	Plenary Lecture 5: Programmable Therapeutics for Genetic Diseases <i>John M. Essigmann (U.S.A.)</i>
11:15	Plenary Lecture 6: The Lessons Learned from COVID-19 <i>George F. Gao (P.R. China)</i>
12:00	L U N C H

POSTER PRESENTATION

Time	Ballroom I	Ballroom II	Ballroom III	The Study
13:00	<p><u>SYMPOSIUM V:</u> Early Detection and Prevention of Cancer Chairperson: Xin Wei Wang (U.S.A.) Co-chairperson: Jittiporn Chaisaingmongkol (Thailand)</p> <p>Adductomic Strategies for Emerging Risk Factors in Liver Cancer <i>John D. Groopman (U.S.A.)</i></p> <p>Liver Cancer Prevention <i>Hashem B. El-Serag (U.S.A.)</i></p> <p>Emerging Strategies of Early Detection of Liver Cancer <i>Xin Wei Wang (U.S.A.)</i></p> <p><u>SYMPOSIUM VI:</u> Antimicrobial Resistance: One Health Perspectives Chairperson: Peter Dedon (U.S.A.) Co-chairperson: Nisanart Charoenlap (Thailand)</p> <p>One Health Selection and Transmission of Antibiotic Resistance in Thailand, Argentina and the United Kingdom <i>Matthew B. Avison (U.K.)</i></p> <p>Lessons from Wastewater Surveillance: Impact of COVID-19 on AMR <i>Motoyuki Sugai (Japan)</i></p> <p>Mining the Epitranscriptome for First-In-Class Antimicrobials <i>Peter Dedon (U.S.A.)</i></p> <p>AMASS: AutoMated Tool for Antimicrobial Resistance Surveillance System – How Thailand Utilizes Timely Data from 127 Public Hospitals for Actions at the Facility and National Levels <i>Direk Limmathurotsakul (Thailand)</i></p>	<p><u>SYMPOSIUM VII:</u> Zoonotic Diseases Chairperson: Khongsak Thiangtum (Thailand) Co-chairperson: Waraphon Phimprapai (Thailand)</p> <p>Saving Animals and Human Lives from Rabies Project: One Health Approach for Rabies Control and Elimination in Thailand <i>H.R.H. Princess Chulabhorn Mahidol (Thailand)</i></p> <p>One Health in Actions on Zoonoses and Agrifood Systems: Perspectives for Global Health and Food Security <i>Thanawat Tiensin (FAO, Italy)</i></p> <p>Successful One Health Approach to Reduce Zoonotic Disease from Pigs <i>Cate Dewey (Canada)</i></p> <p>Complexity, Context, and Community Engagement: Centering Anthropology Within the One Health Paradigm <i>Elizabeth Finnis (Canada)</i></p> <p><u>SYMPOSIUM VIII:</u> One Health and Therapeutics Chairpersons: Helen Boucher (U.S.A.) Co-chairperson: Ram Sasisekharan (U.S.A.)</p> <p>Vaccine Manufacturing Considerations for Pandemic Preparedness <i>Rahul Singhvi (U.S.A.)</i></p> <p>Design and Patterns of Optimized Drug Combinations for TB <i>Bree Aldridge (U.S.A.)</i></p> <p>Development of Multi-Epitope Subunit Vaccines Against <i>Acinetobacter baumannii</i> <i>Bernard Arulanandam (U.S.A.)</i></p>	<p><u>SYMPOSIUM IX:</u> Environmental Risk Factors Affecting Health Chairperson: Martin van den Berg (The Netherlands) Co-chairperson: Piyajit Watcharasit (Thailand)</p> <p><small>Abstract No.</small></p> <p>Towards One Health: Toxicokinetics at the Intersection of Human and Ecological Health <i>Michelle Embry (U.S.A.)</i></p> <p>Food Safety from a One Health Perspective <i>Maged Younes (U.K.)</i></p> <p>Per- and Polyfluoroalkyl Substances (PFAS): The Complexity in Toxicity and Risk Assessment <i>Martin van den Berg (The Netherlands)</i></p> <p>The Air We Breathe – Chemical Challenges to Health, A UK-Thailand Perspective <i>Dudley E. Shallcross (U.K.)</i></p> <p>PM_{2.5} Toxicity and Adverse Health Effects <i>Herman Autrup (Denmark)</i></p> <p><u>PLATFORM SESSION</u></p>	<u>PLATFORM SESSION</u>

Wednesday, December 18th, 2024

Time	Ballroom I	Ballroom II	Ballroom III
9:00	<p><u>SYMPOSIUM X:</u> Protein Changes in Disease Chairperson: John R. Yates III (U.S.A.) Co-chairperson: Sittiruk Roytrakul (Thailand)</p> <p>How a Single Mutation in CFTR Causes the Systemic Disease Cystic Fibrosis: Interactions, PTMs, and Structure <i>John R. Yates III (U.S.A.)</i></p> <p>Ultrasensitive Proteomics for Precision Oncology <i>Yu-Ju Chen (Chinese Taipei)</i></p> <p>Navigating Drug-Targetome-Phenotype Interaction and Its Translational Implications <i>Ho Jeong Kwon (Republic of Korea)</i></p> <p>Advancements in Peptidoproteomics for Cancer Research <i>Sittiruk Roytrakul (Thailand)</i></p> <p>Exploring Microproteins and Interferon Pathways in Colorectal Cancer: Implications for Disease Progression and FOLFOX Chemoresistance <i>Teck Yew Low (Malaysia)</i></p>	<p><u>SYMPOSIUM XI:</u> Relationships between Genetic Mutation and the Environment in Cancer and Infectious Diseases Chairperson: Tariq Enver (U.K.) Co-chairperson: Panida Navasumrit (Thailand)</p> <p>Genetic and Epigenetic Cues Shape Initiation, Promotion and Therapy Resistance in Childhood Leukaemia <i>Tariq Enver (U.K.)</i></p> <p>Towards an Understanding of Air Pollution Driven Lung Cancer Promotion <i>Charles Swanton (U.K.)</i></p> <p>Axonal Injury Initiates Glioblastoma <i>Simona Parrinello (U.K.)</i></p> <p>What Does Our Knowledge of Innate Immune Regulation during Infection Tell Us about Innate Immune Contribution to Cancer Outcome? <i>Greg Towers (U.K.)</i></p> <p><u>PLATFORM SESSION</u></p>	<p><u>SYMPOSIUM XII:</u> Role of Chemical and Biological Sciences for Discovery of Modern Drugs II Chairperson: Roderick Bates (Singapore) Co-chairperson: Jutatip Boonsombat (Thailand)</p> <p><small>Abstract No.</small></p> <p>The Infinite Loop: Machine Learning for Discovery, Delivery, and Rapid Manufacturing of Potential Medicines <i>Bradley L. Pentelute (U.S.A.)</i></p> <p>Antibody-Drug Conjugates (ADCs) – A Perfect Synergy? <i>John A. Hartley (U.K.)</i></p> <p>Developments of Molecular Probes for Detection of Biological Targets <i>Sun-Joon Min (Republic of Korea)</i></p> <p>From Structural Biology to Organic Synthesis: A Collaborative Search for New Anti-Mycobacterial Drugs <i>Roderick Bates (Singapore)</i></p> <p><u>PLATFORM SESSION</u></p>
12:00	L U N C H		
Time	Grand Ballroom		
13:00	<p><u>CLOSING SESSION:</u></p> <p>Roundtable Discussion - Regulatory Innovation Moderators: Ram Sasisekharan (U.S.A.) and Surachoke Tangwiwat (Thailand)</p> <ul style="list-style-type: none"> U.S. FDA's Efforts to Advance Gene Therapy Development [Virtual Presentation] <i>Peter Marks (U.S.A.)</i> Perspectives from the Thai FDA <i>Worasuda Yoongthong (Thailand)</i> Case Studies of Regulatory Innovations <i>Ram Sasisekharan (U.S.A.)</i> <p>Roundtable Discussion - AMR Policy Impacting South and Southeast Asia Moderators: Helen Boucher (U.S.A.) and Julie L. Gerberding (U.S.A.)</p> <p>Panelists:</p> <ul style="list-style-type: none"> Helen Boucher (U.S.A.) George F. Gao (P.R. China) Julie L. Gerberding (U.S.A.) Ramanan Laxminarayan (U.S.A.) David Paterson (Singapore) 		
16:00	<p><u>CLOSING CEREMONY:</u></p> <ul style="list-style-type: none"> Presentation of the Princess Chulabhorn Gold Medal Award of Appreciation Closing Remarks by Professor Dr. H.R.H. Princess Chulabhorn 		