



IfCC

WORLD LAB

2024 MAY 26-30

In cooperation with



26th International Congress of
Clinical Chemistry and Laboratory Medicine

17th Congress of Arab Federation of Clinical Biology

10th Saudi Society for Clinical
Chemistry Annual Meeting

8th UAEGDA International Genetic
Disorders Conference

Dubai World Trade Centre (DWTC)
DUBAI - UAE



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DATES TO FOCUS ON

March 15th, 2024

Deadline for reduced registration fees

Congress President Message

It gives me an immense pleasure and a great honour to invite you to attend the 26th International Congress of Clinical Chemistry and Laboratory Medicine (ICCCLM) - IFCC WorldLab Congress which will be organized jointly with the 17th Congress of the Arab Federation of Clinical Biology (AFCB); 10th Annual Meeting of the Saudi Society for Clinical Chemistry (SSCC) and 8th International and UAE Genetic Disorders Conference in partnership with MZ Events to be held in Dubai World Trade Centre (WTC) in May 26-30, 2024. 3rd IFCC FORUM for Young Scientists is also planned to be held before the congress. The IFCC WorldLab will deliver a world-wide forum for the free and open exchange of information on the science and technology of clinical chemistry and laboratory medicine in the academic, clinical, and industrial settings; will enable an international forum for clinical laboratory scientists and physicians to interact with their peers; and will provide a forum to promote human health.

The Scientific Program Committee will put together a fantastic multidisciplinary program covering a broad range of important themes such as fundamental concepts, advanced diagnostics and techniques used in laboratory medicine. The program will feature plenary lectures, symposiums on cutting-edge topics, oral presentations, posters and high-level educational workshops. Distinguished international speakers and key opinion leaders will deliver presentations in health care, on recent diagnostic technologies, scientific advances, and challenges. The program will be designed to be interactive allowing sufficient time for discussions giving opportunity to the participants to learn, to understand, to contribute, and question the direction of Laboratory Medicine worldwide.

In Vitro Diagnostic (IVD) Sector will organize a great exhibition providing the attendees a great opportunity to explore the recent novel technological advances and practical solutions fitting to the needs of clinical laboratories. The IVD Sector will support the Congress organizing also high-level Educational Workshops on important topics with eminent speakers presenting the latest scientific advances in all disciplines pertinent to laboratory medicine. I look forward to meeting all the IFCC members worldwide from six IFCC Regional Federations who will participate in this exciting IFCC WorldLab Congress to be held in the Region of the Arab Federation of Clinical Biology. I am confident that you will find your time rewarding and worthwhile enjoying inspirational scientific program, all presentations, discussions, exhibition, networking, and social activities.

Professor Tomris Ozben



*Prof. Tomris Ozben
Congress President*



Congress Organizing Committee Co-chair Message

It is my great pleasure to welcome all attendees of the XXVI IFCC WorldLab Congress, jointly hosted by the IFCC, Arab Federation of Clinical Biochemistry, Saudi Society of Clinical Chemistry, and the UAE Genetics Association. This is the first time the WorldLab is being held in the Middle East, bringing experts from around the world together in the opulent city of Dubai, now one of the most vibrant and technologically advanced cities in the world. The 2024 WorldLab Congress will bring together laboratory professionals and scientists from the UAE and countries across the Arab Federation, as well as all other regional federations within IFCC including Africa, Europe, North America, Central/South America, and Asia-Pacific. It promises to be the most successful IFCC WorldLab ever held outside Europe.

This is a fast-evolving time for the field of clinical chemistry and laboratory medicine, as we face many scientific and technological advancements that allow for a much greater role for our professionals as partners at the centre of healthcare. This timely congress is an excellent opportunity to gather in an international forum to discuss these advancements and foster collaboration with other colleagues. Without a doubt, the biannual WorldLab congress has proven to be one of the leading forums to bring together scientists, laboratory specialists, clinicians, and industry colleagues in the field of clinical chemistry and laboratory medicine. Bringing all of us together in forums like this enables scientific exchange and ensures that our organization and the field of clinical chemistry and laboratory medicine remain at the cutting edge.

During the congress, attendees will experience an outstanding scientific program, featuring innovative and diverse educational opportunities that incorporate the best of clinical laboratory medicine and in vitro diagnostics, including lectures, symposia, recent advancements in clinical practice and science, poster presentations, and much more. Special emphasis will be placed on technological advancements, as this meeting aims to connect the latest technological breakthroughs in diagnostic laboratory technology with the best minds in laboratory medicine to help attendees learn and implement the latest and greatest in clinical laboratory science, technology, and medicine. In addition to the scientific program, the cosmopolitan metropolis of Dubai has something to offer for every visitor, and excellent social opportunities have been organized for attendees to enjoy its many attractions.

I hope you all enjoy the excellent scientific and social programs curated by the congress organizing and scientific committees, and I wish you all a productive conference and a pleasant stay in Dubai.

Prof Khosrow Adeli

*Prof. Khosrow Adeli
Co-Chair
Congress Organizing
Committee*

Congress Organizing Committee Co-chair Message

Dear Colleagues and Friends,

On behalf of the Saudi Society for Clinical Chemistry (SSCC) it is our great pleasure to invite you to the IFCC WorldLab in Dubai from May 26th to 30th, 2024.

The 26th International Congress of Clinical Chemistry and Laboratory Medicine will be an extraordinary as it will be in the Arab world for the first time since the IFCC congress started in 1954 and jointly hosted with the 17th Arab Federation for Biological Sciences (AFBC), the 10th Annual meeting for the SSCC, and the 8th UAE Genetic Disorders Conference.

Worldlab conference organizing committee together with the scientific committee are keen to develop an exciting scientific program and to cover the most relevant aspects in clinical laboratory, medicine, and patient care. For this purpose, local and international key leaders in clinical laboratory were selected to shape a scientific program covering current & future changes in clinical laboratory science, new emerging lab technologies, updated diagnostic strategies, discussing regional health problems, recent quality applications and digitalization of clinical laboratories. The congress will provide you a chance to make remarkable changes, update your scientific skills by our outstanding experts and to develop new personal relationships within the region and other parts of the world with the advantage of exchange in experience, knowledge, and skills. Dubai is a fascinating peaceful city and geographically easily accessible from all over the world. We are confident about our attendees' comfort with Dubai cultural diversity, breathtaking architecture, safety, amazing shopping experience, hospitality, and other top tourists' attractions.

Hosting the 26th IFCC Worldlab Meeting is in line with the Saudi Vision 2030 that aims to achieve a world-class healthcare system and establish the Kingdom as a pioneering healthcare destination in the region, and the world.

SSCC is dedicated to making Worldlab 2024 an unforgettable meeting for all attendees and truly we hope to see you in Dubai next year.

Prof Anwar Borai



*Dr Anwar Borai
Co-Chair
Congress Organizing
Committee*



President Arab Federation of Clinical Biology Message

Dear Colleagues and Friends,
On behalf of the Arab Federation of Clinical Biology (AFCB), it gives me a great honor to invite you to attend the 26th International Congress of Clinical Chemistry and Laboratory Medicine (WorldLab) in Dubai, the sun-soaked metropolis like no other and one of the most popular destinations worldwide these last years. The scientific committee will spare no effort to provide you with a top-level program that meets your expectations in terms of innovation and quality. Not only will you have the opportunity to meet key opinion leaders and listen to international speakers, but you will also discover the world of medical research in the Arab countries, and have the chance to forge new collaborative networks in a context that is surprisingly rich in scientific opportunities, and is as diverse as the twenty-two countries it covers with their half a billion citizens. Submerged hotel, world's tallest tower, artificial peninsulas, largest fountain, ski resort, wonderful museums... Truly, nothing is too crazy for this effervescent futuristic city of Dubai born out of the desert a few decades ago and whose expansion seems to have no limits. So from the various symposia and satellite events, to the young scientists' forum, everything in the scientific program had to be focused on the future as well. The laboratory medicine had to adopt a flawless modernity in this context of constantly evolving city of skyscrapers and challenges. We hope the 2024 WorldLab Conference will provide us not only a chance to discover new horizons, learn top-of-the art skills from experts but also discuss latest developments in all areas of laboratory medicine and broaden our knowledge by sharing what the years of experience have taught each of us. Dubai and its IFCC Worldlab is the place to be in 2024, I wish you will all enjoy the outstanding scientific conference program, experience the amazing pride to belong to the IFCC in this really amazing city!

Christian Haddad, MD, MHS

*Dr. Christian Haddad
President Arab
Federation of Clinical
Biology*



Chairperson UAE Genetic Diseases Association Message

Dear attendees, colleagues, and friends,
On behalf of all the people in the United Arab Emirates, it is with great pleasure and anticipation that we extend our warmest welcome to the World lab International Federation of Clinical Chemistry (IFCC) conference for the first time over the past 70 years scheduled to be held in our vibrant city of Dubai in 2024! Dubai, known for its awe-inspiring architecture, rich cultural heritage, and remarkable hospitality, will set the stage for this prestigious gathering of esteemed professionals, researchers, and experts from around the globe. As one of the leading international conferences in the field, we are thrilled to have you join us for this enriching and innovative event being held in the Middle East for the first time. The IFCC, the Arab Federation of Clinical Biochemistry, the Saudi Society of Clinical Chemistry, and the UAE Genetic Disease Association have prepared an exceptional conference program filled with insightful presentations, cutting-edge research, and engaging discussions that will shape the future of clinical chemistry, clinical molecular biology, and laboratory medicine. Renowned speakers from a wide variety of disciplines will share their expertise, providing invaluable access to the latest advancements, breakthrough technologies, and best practices in our ever-evolving field. In this fast-paced world, it has never been more important to come together and share our collective library of knowledge - to push at the boundaries of our understanding and drive our ambitions for the future. In addition to the exciting scientific program, the conference will offer ample networking opportunities for you to meet like-minded professionals, exchange ideas, and forge new collaborations. The event will be held at a world-class venue, providing a conducive environment for learning, sharing, and fostering meaningful connections. Dubai itself presents a unique blend of old-world charm and modern innovation. It is an inspiring city, where ideas are welcomed and made into reality. From the iconic Burj Khalifa to the awe-inspiring Palm Jumeirah, you will have the chance to explore the city's stunning landmarks and experience its vivid culture. Indulge in delectable cuisine, enjoy luxury shopping or embark on a desert safari for a taste of true adventure - Dubai has something for everyone. We sincerely hope that you will be able to join us at the 26 International Congress of Clinical Chemistry and Laboratory Medicine Conference in Dubai, UAE. Your presence will undoubtedly contribute to the success of this event, and we look forward to sharing an unforgettable experience together. Thank you for your commitment to advancing the fields of clinical chemistry, clinical molecular biology, and laboratory medicine. We eagerly await your arrival in 2024.

Dr. Maryam bin Matar

*Dr. Maryam bin Matar,
M.D, PhD,
Founder and Chairperson
of UAE Genetic Diseases
Association.*



Professor Christa Cobbaert
Co-Chairs Scientific Program Committee

Invitation Scientific Program Committee co-Chairs Message

We are delighted to extend this invitation to join us at the IFCC WorldLab in Dubai from May 26 through May 30, 2024. Along with the organizing committee, the scientific program committee for the Dubai conference is eager to create a stimulating scientific agenda that covers the most important trends and innovations in clinical laboratory medicine and patient care. The fundamental goal of the conference has been to globalize medical knowledge in Clinical Chemistry and Laboratory Medicine through a carefully structured system of ongoing scientific education. The Scientific Committee will work hard to create an amazing, challenging, and inspiring program. A scientific program addressing the present and future developments in clinical laboratory science, novel emerging lab technologies, updated diagnostic methodologies, discussion of global health issues, contemporary quality applications, and digitalization of clinical laboratories. The congress will provide lots of educational opportunities as renowned international speakers, inventors and innovators will update you on the state-of-science in laboratory medicine. Attendees will enjoy an amazing scientific program as presented in the infographic. The titles and speakers of the plenaries are displayed; the symposia are balanced and will specifically cover the themes of Emerging Technologies & Biomarkers, Data Science and Medical Leadership, among others. These educational opportunities will combine the best of clinical laboratory medicine and in vitro diagnostics. The congress will provide the attendees opportunity to make significant improvements, refresh their scientific knowledge with our excellent specialists, and build new personal ties within the area and throughout the world via the sharing of experience, information, and skills. As well, the congress will promote the development of Clinical Chemistry and Laboratory Medicine. We sincerely hope you will join us to exchange experiences, to network, and to participate in the most cutting-edge research in laboratory medicine.

All of our international and national participants attending IFCC WorldLab will undoubtedly have a rewarding and memorable experience. We are eager to meet you at the IFCC WorldLab in Dubai.

Professor Christa Cobbaert
Dr Samia Sobki



Dr Samia Sobki
Co-Chairs Scientific Program Committee



COMMITTEES

Conference Organizing Committee (COC)

- Tomris Ozben, Congress President
- Khosrow Adeli, Co-Chair
- Anwar Borai, Co-Chair
- Paivi Laitinen
- Alexandre Haliassos
- Samia Sobki
- Christa Cobbaert
- Christian Haddad
- Osama Najjar
- Maryam Matar
- Angel De La Fuente
- Vincent Chen
- Stefano Montalbetti

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- Aaron Han
- Rita Tanios
- Laila Abdel Wareth
- Fayha Salah Ahmed
- Rana Nabulsi
- Jyoti Shetye
- Mahammad Althahyabat

Scientific Program Committee (SPC)

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- Christa Cobbaert, Co-Chair
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- Nader Rifai
- Mario Plebani
- Abderrazek Hedhili
- Myrna Germanos Haddad
- Santiago Fares Taie
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Registrations: registrations@dubai2024.org

Hotel reservation: ostoyanova@kenes.com Attn: Olina Stoyanova

SUNDAY 26 MAY 2024

17:00	ROOM E
20:00	
	Opening Ceremony Pushing forward the frontier of cfDNA diagnostics Welcome Cocktail

Timetable

MONDAY 27 MAY 2024

	ROOM E	ROOM A	ROOM B	ROOM C	ROOM D	ABU DHABI B	ROOM F
9.00 11.00	IFCC SYM 1 Present and future of chronic kidney disease and acute kidney injury detection	SYM 1 The promise of -omics biomarkers	EFLM SYM Green Laboratories	AFCB SYM 1 Metabolic diseases in Arabic countries	WASPALM The role of clinical laboratory in the development of new drugs	SYM 2 Aptamers based diagnostic for biomedical applications	09.15-10.30 UAE GDA Longevity, diet & smart aging 10.30-11.00 UAE GDA Advances in genomics & epigenetics
11.00	Break						
11.30 12.30	PL 1 Precision, Prevention and Women's Cardiovascular Health: A Global Perspective						
12.30 13.00	Poster Session Lunch						
13.00 14.00				Lunch Workshop 2 QUIDEL ORTHO			UAE GDA Workshop "Genetics for Non-Genetists"
14.30 15.30	IFCC SYM 2 Flowcytometry principles and its roles	EDUW 1 SNIBE	EDUW 4 WATERS	EDUW 2 ABBOTT	SYM 3 Regulatory challenges for lab-developed-tests		14.00-16.00 UAE GDA Elevating longevity: stem cells, brain health, and smart aging
16.00 17.00		EDUW 5 SNIBE					16.15-17.00 UAE GDA Panel: longevity & smart aging

EXHIBITION HALL 10.00 - 17.30 Exhibition open

TUESDAY 28 MAY 2024

	ROOM E	ROOM A	ROOM B	ROOM C	ROOM D	ABU DHABI B	ROOM F
9.00 11.00	IFCC SYM 3 The potential of single cell and spatial biology	SYM 4 The role of laboratory medicine in Direct-To-Consumer Testing (DTCT)	SSCC SYM 1 Inborn errors of metabolism in Saudi Arabia"	SYM 5 Machine learning and clinical decision support: technologies that genuinely make people's life better	APFCB SYM Clinical decision support	UAE 1 Metabolic and non-communicable diseases	09.15-10.15 UAE GDA Stem cells & regenerative medicine 10.20-11.20 UAE GDA Cellular triumphs: advancing cancer care
11.00	Break						
11.30 12.30	PL 2 Genomics in the Middle East: A report card						
12.30 13.00	Poster Session Lunch						
13.00 14.00			Lunch Workshop 8 GREINER-BIO				UAE GDA Workshop "Genetics for Non-Genetists"
14.30 15.30	IFCC SYM 4 On the way to cardiovascular precision diagnostics	EDUW 9 SNIBE	EDUW 12 BUHLMANN	EDUW 10 ABBOTT	SYM 6 Digital competence and artificial intelligence		14.00-16.00 UAE GDA Leading precision therapies
16.00 17.00		EDUW 13 SNIBE					16.15-17.00 UAE GDA Panel: stem cells & regenerative medicine

EXHIBITION HALL 10.00 - 17.30 Exhibition open

Timetable

WEDNESDAY 29 MAY 2024

	ROOM E	ROOM A	ROOM B	ROOM C	ROOM D	ABU DHABI B	ROOM F
9.00 11.00	IFCC SYM 5 Biomarkers for neurodegenerative diseases	SYM 7 Meeting the challenge of demonstrating value	SYM 8 How to improve access to lab testing in middle & low income countries?	AFCB SYM 2 Epidemic and pandemic infectious in Arabic regions	SYM 9 Healthcare delivery in the 21st century and the role of the clinical laboratory	COLABIO-CLI SYM Emerging and re-emerging diseases in Latin America	09.15-11.00 UAE GDA Genomics of rare diseases I
11.00	Break						
11.30 12.30	PL 3 Obesity: novel developments in diagnostics of underlying causes and treatment						
12.30 13.00	Poster Session Lunch						
13.00 14.00							UAE GDA Workshop "Genetics for Non-Genetists"
14.30 15.30	NAFCC SYM Laboratory medicine advancing global health across the lifespan	EDUW 17 SNIBE	SYM 10 Toxicology environmental and health effects		AFCC SYM Inborn errors of metabolism in africa		14.00-16.00 UAE GDA Genomics of rare diseases II
16.00 17.00		EDUW 20 SNIBE					16.15-17.00 UAE GDA Panel: RDI global commission for rare diseases hybrid: patient and family empowerment

EXHIBITION HALL 10.00 - 17.30 Exhibition open

THURSDAY 30 MAY 2024

	ROOM E	ROOM A	ROOM B	ROOM C	ROOM D	ABU DHABI B	ROOM F
9.00 11.00	SYM 11 Circulating cancer biomarkers: quo vadis?	SYM 12 Preventing kidney disease using advanced urine screening and kidney damage markers	SSCC SYM 2 Dysglycemia - novel biomarkers for diagnosis and monitoring prognosis	SYM 13 Performance specifications of medical tests based on clinical outcome studies	SYM 14 Utilization management and successful approaches to change and improve test requesting	UAE 2 AI & machine learning applications in laboratory medicine	09.15-10.45 UAE GDA Global health AI: uniting nations for genomic insights and data governance 10.45-11.30 UAE GDA Panel: genomics in the metaverse
11.00	Break						
11.30 12.30	PL 4 Making molecular diagnostics faster						
12.30 13.00	Closing Ceremony						



IFCC WorldLab 2024 is accredited!

EFLM Continuing Professional Education Credit System – CPECS®

The 26th International Congress of Clinical Chemistry and Laboratory Medicine (IFCC), the 17th Congress of Arab Federation of Clinical Biology, the 10th Saudi Society for Clinical Chemistry Annual Meeting and the 8th UAEGDA International Disorders Conference are accredited by the EFLM CPECS® to deliver CPECS® credits for participants.

EFLM CPECS® is an administrative system that provides a quality assurance mechanism for the accreditation of continuing education programs and events offered based on high-quality continuing education content in laboratory medicine and relevant scientific topics.

In those countries where a national crediting system is not in place, the CPECS® system can directly represent the system adopted at national level for the certification of the educational events and may recognize CPECS® credits on a voluntary basis.

Delegates from Saudi Arabia who are interested in obtaining CME units (Accredited by the **SCFHS**) should adhere to the same guidelines set for CPECS credits.

At the end of the Congress, in order to get SCFHS CME credits, **please send your request to SSCC**

Breakdown of credits

A maximum of 19,5 CPECS® credits can be awarded for the educational sessions of the IFCC WorldLab 2024. Each participant has to attend at least 75% of each session to get CPECS® credits. Information on CPECS® credits per session can be found in the scientific program and the mobile app.

A board with a specific QR code will be placed inside each conference room.

Each delegate interested in getting the CPECS® credits must scan the QR code at the entrance and at the exit of the room for every session. In order to scan the QR code the delegate has to use the dedicated Congress APP where a section will be entirely dedicated to the CPECS program.

Once the congress is over, only delegates with 75% of attendance will receive a specific email with the evaluation questionnaire for the sessions they attended.

At the end of the whole process, they will automatically receive the CPECS® certificate.

email info.sccc.sa@gmail.com and send a scanned copy of your certificate of attendance, together with your SCFHS registration number. Requests must be sent within 6th June at the latest.

SUNDAY 26 MAY 2024

Opening Ceremony

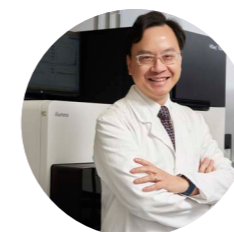
17:00-19:00 Welcome addresses

Opening Lecture

Chair: Tomris Ozben (Turkey)

Pushing forward the frontier of cfDNA diagnostics

Dennis Lo (Hong Kong, China)



Professor Dennis Lo is the Li Ka Shing Professor of Medicine of The Chinese University of Hong Kong (CUHK).

His research interests focus on the biology and diagnostic applications of cell-free nucleic acids in plasma. In particular, he discovered the presence of cell-free fetal DNA in maternal plasma in 1997 and has since then been pioneering non-invasive prenatal diagnosis using this technology. This technology has been adopted globally and has created a paradigm in prenatal medicine. He has also made many innovations using circulating nucleic acids for cancer detection, including the screening of early stage nasopharyngeal cancer.

In recognition of his research, Professor Lo has been elected as Fellow of the Royal Society, Foreign Associate of the US National Academy of Sciences, Fellow of The World Academy of Sciences (TWAS) and Founding Member of the Academy of Sciences of Hong Kong. Professor Lo has won numerous awards, including the 2014 King Faisal International Prize in Medicine, the 2016 Future Science Prize in Life Science, the 2019 Fudan-Zhongzhi Science Award, the 2021 Breakthrough Prize in Life Sciences, the 2021 Royal Medal, the 2021 ESHG Mendel Award, the 2022 ISPD Pioneer Award and the 2022 Lasker-DeBaakey Clinical Medical Research Award.

MONDAY 27 MAY 2024

IFCC SYMPOSIUM 1



09:00-11:00 PRESENT AND FUTURE OF CHRONIC KIDNEY DISEASE AND ACUTE KIDNEY INJURY DETECTION

Chair: Joe M. El-Khoury (USA), Rajeevan Selvaratnam (Canada)

Updates on new eGFR equations and acute kidney injury definitions

Joe M. El-Khoury (USA)

An update on albuminuria as a chronic kidney disease marker

Joris Delanghe (Belgium)

Everything is acute until it becomes chronic – biomarkers of kidney injury

Rajeevan Selvaratnam (Canada)

Using machine learning methods and leveraging electronic health records for acute kidney injury detection and management

Lama Ghazi (UK)

Credits: 2 CPECS®

SYMPOSIUM 1

09:00-11:00 THE PROMISE OF - OMICS BIOMARKERS

Chairs: Hans Jacobs (the Netherlands), Sergio Bernardini (Italy)

Glycomics and glycoproteomics: a new biomarker domain debuts in translational research

Manfred Wuhler (the Netherlands)

Dynamic monitoring of myeloma minimal residual disease with targeted mass spectrometry

Hans Jacobs (the Netherlands)

Integration of artificial intelligence and plasma steroidomics with Laboratory Information Management Systems: application to primary aldosteronism

Graeme Eisenhofer (Germany)

Two oral communications from abstracts

Credits: 2 CPECS®

SYMPOSIUM 2

09:00-11:00 APTAMERS BASED DIAGNOSTIC FOR BIOMEDICAL APPLICATIONS

Chair: Mohammed Zourob (Saudi Arabia), Rajiv T. Erasmus (South Africa)

Development of diagnostics for SARS-CoV-2 with high-affinity DNA aptamers

Yingfu Li (Canada)

Continuous, real-time drug measurements in situ in the living body

Kevin Plaxco (USA)

Development of rapid and low-cost aptameric biosensors for biomedical applications

Mohammed Zourob (Saudi Arabia)

Two oral communications from abstracts

Credits: 2 CPECS®

AFCB SYMPOSIUM 1



09:00-11:00 METABOLIC DISEASES IN ARABIC COUNTRIES

Chair: Myrna Germanos (Lebanon), Adnan Alkhatib (Syria)

Rare genetic diseases in the MENA region

Andre Megarbane (Lebanon)

Inborn errors of immunity in highly consanguineous populations: from diagnosis to intervention

Mohamed Ridha Barbouche (Bahrain)

Epidemiology of the lysosomal storage disorders (LSDs) IN NORTH Africa

Layachi Chabraoui (Morocco)

Overweight and Obesity: the Weight of Genes

Mohamed Makrelouf (Algeria)

Credits: 2 CPECS®



WASPaLM SESSION



09:00-11:00 THE ROLE OF CLINICAL LABORATORY IN THE DEVELOPMENT OF NEW DRUGS
Chair: Roberto Verna (Italy), Veronica Seija (Uruguay)

The Laboratory in Clinical Research
Roberto Verna (Italy)
The Role of Microbiota in Human Health
Luigina Romani (Italy)
Revolutionizing Antibiotic Strategies: The Power of Innovative Technologies
Veronica Seija (Uruguay)

Credits: 2 CPECS®

EFLM SESSION



09:00-11:00 GREEN LABS. IMPLEMENTING SUSTAINABLE PRACTICES IN MEDICAL LABORATORIES
Chair: Tomris Ozben (Turkey), Snezana Jovicic (Serbia)

Green labs: Implementing sustainable practices in medical laboratories
Tomris Ozben (Turkey)
Striking the Right Balance: Sustainability and Innovation
Ffion Jackson (UK)
Strategies for energy conservation and sustainability
Snezana Jovicic (Serbia)
Waste management for clinical laboratories
Alistair Gammie (UK)

Credits: 2 CPECS®

09:00 - 09:15 Opening Message
Mariam Almheiri (UAE)

UAE GDA SESSION

LONGEVITY: DIET & SMART AGING

Chairs: Mishkat Shehata (UAE), Jaffer Khan (UAE), Maryam Matar (UAE)

09:15 - 09:30 Mediterranean diet & the prevention of cardiovascular disease
Samia Mora (USA)
09:30 - 09:45 Glycans are modifiable biomarkers and functional effectors of age-related diseases
Gordon Lauc (UK)
09:45 - 10:00 Healthy Longevity Medicine:
Restoring and maintaining biological age of optimal performance
Evelyne Bischof (Switzerland)
10:00 - 10:15 The role of membrane lipidome in lifespan: why dietary lipids can impact on longevity
Vincenzo Di Donna (UAE)
10:15 - 10:30 Novel strategies to delay brain aging and cognitive decline
David Vazour (UK)

Credits: 1 CPECS®



UAE GDA SESSION

ADVANCES IN GENOMICS & EPIGENETICS

Chairs: Rafaat Abd El-Gawad El-Gharieb EL-Awady (UAE), David Vauzour (UK), Kamal Khazanehdari (UAE)

10:30 - 10:45 Deconstructing rare diseases with functional genomics - a Middle Eastern adventure
Luis Saraiva (Qatar)
10:45 - 11:00 Epigenetics and Cancer
Ali Hamiche (France)

Credits: 0,5 CPECS®

Plenary Lecture

11:30-12:30 Chair: Khosrow Adeli (Canada)
Precision, Prevention and Women's Cardiovascular Health: A Global Perspective
Samia Mora (USA)



Dr. Samia Mora

Dr. Mora is a cardiologist and molecular epidemiologist conducting translational research in the prevention of cardiometabolic disease. She is Professor of Medicine at Harvard Medical School, the Director of the Center for Lipid Metabolomics and Director of the Biorepository, Divisions of Preventive and Cardiovascular Medicine, Brigham and Women's Hospital. She received her undergraduate degree from Harvard University, and her medical degree from Harvard Medical School. Dr. Mora completed an internal medicine residency at Massachusetts General Hospital and cardiovascular disease fellowship at Johns Hopkins Hospital, where she also obtained an MHS degree (Epidemiology) from the Johns Hopkins Bloomberg School of Public Health. Dr. Mora is board certified in cardiovascular disease and echocardiography, and serves on the Editorial Boards of JAMA Internal Medicine and Atherosclerosis. She is an Elected Member of the American Society for Clinical Investigation and the Association of University Cardiologists.

Credits: 1 CPECS®

12:30 - 13:00 POSTER SESSION + LUNCH

**UAE GDA SESSION
MICROBIOME DISCOVERIES**

Chairs: Ahmed ALHammadi (UAE), Azzam Kayasseh (UAE),

- 14:00 - 14:30 The world's most advanced 3D bioprinted human skin models for testing microbiome, vaccines and health
Toby Huang (USA)
- 14:30 - 15:00 Enhancing Longevity: Unveiling the Impact of the Gut Microbiome
Alla Zaentc (UAE)
- 15:00 - 15:30 Understanding the microbiome in rare genetic disorders - Lessons from Very Early Onset inflammatory bowel disease
Souhaila Al Khodor (Qatar)
- 15:30 - 16:00 Investigating microbiome dysbiosis and species interactions within colonies under diseased conditions employing systems biology approaches.
Mohammad Tauqeer Alam (UAE)

Credits: 2 CPECS®

**UAE GDA SESSION
PANEL DISCUSSION - LONGEVITY & SMART AGING**

Chairs: Evelyne Bishof (Switzerland), Alia Issa (UAE), Saba Habibollah (UAE)

- 16:15 - 17:00 Panel discussion
David Vauzour (UK), Jaffer Khan (UAE), Alla Zaentc (UAE), Mishkat Shehata (UAE)

Credits: 0,5 CPECS®





IFCC SYMPOSIUM 2

14:30-16:30 FLOWCYTOMETRY PRINCIPLES AND ITS ROLES IN PRECISION MEDICINE

Chairs: Claude Lambert (France), Heba Raslan (Saudi Arabia)

Principle of flow cytometry and issues in diagnosis

Claude Lambert (France)

FCM in characterizing Lymphoproliferative disorders

Mohamed Brahimi (Algeria)

FCM in diagnosis of immunological disorders and biotherapies

Najla Mekki (Tunisia)

FCM in characterizing acute leukemic disorders

Heba Raslan (Saudi Arabia)

Credits: 2 CPECS®

SYMPOSIUM 3

14:30-16:30 THOUGHTS ON MAINTAINING INNOVATION AND AVAILABILITY OF MEDICAL TESTS OR HOW TO MEET REGULATORY CHALLENGES FOR LAB-DEVELOPED-TESTS

Chairs: Michael Neumaier (Germany), Alexander Haliassos (Greece)

Regulatory considerations for Laboratory-Developed Tests from an international perspective: Opportunities and risks for patient care

Folker Spitzenberger (Germany)

Impact of diagnostic regulations on laboratory developed tests in the US

Tina Lockwood (USA)

Off-label Diagnostics - an analogy to individualized therapeutic medicine: the oncology case

Michael Neumaier, Ralf Hofheinz (Germany)

Two oral communications from abstracts

Credits: 2 CPECS®

TUESDAY 28 MAY 2024

IFCC SYMPOSIUM 3

09:00-11:00 THE POTENTIAL OF SINGLE CELL AND SPATIAL BIOLOGY IN THE EVOLUTION OF CLINICAL MEDICINE

Chairs: Andrew South, Paolo Fortina (USA)

Using single-cell RNA-sequencing to interrogate biologic drug response in psoriasis

Raymond Cho (USA)

Understanding chronic wounds and wound healing using single cell profiling

Ignacia Fuentes (Chile)

Deconvolution of Cell Populations in Non-Melanoma Skin Cancer Using single cell RNA-Seq and Nanostring digital spatial profiling

Bonnie LaFleur

Determining the mechanism of action of cancer therapeutics through single cell profiling

Paolo Fortina (USA)

Credits: 2 CPECS®

SYMPOSIUM 4

09:00-11:00 THE ROLE OF LABORATORY MEDICINE IN DIRECT-TO-CONSUMER TESTING (DTCT)

Chair: Sverre Sandberg (Norway)

What is Direct To Consumer Testing, DTCT and is it compatible with the "choose wisely" campaign?

Sverre Sandberg (Norway)

The variety and range of direct-to-consumer testing

Patti Shih (Australia)

We must speak up – what is the role of laboratory medicine in DTCT?

Matthias Orth (Germany)

Two oral communications from abstracts

Credits: 2 CPECS®

SSCC SYMPOSIUM 1



09:00-11:00 INBORN ERRORS OF METABOLISM IN SAUDI ARABIA

Chair: Ali Alothaim (Saudi Arabia), Khalid Al Harbi (Saudi Arabia)

Novel inborn errors of metabolism discovery in Saudi Arabia

Majid Alfadhel (Saudi Arabia)

Landscape of Mitochondrial disorders in Saudi Arabia

Naif Almontashiri (Saudi Arabia)

Overview of Newborn screening program in Saudi Arabia

Faud Almutairi (Saudi Arabia)

Integrates genomic and Metabolomics technologies to unravel the diagnostic odyssey in rare diseases

Malak Alghamdi (Saudi Arabia)

Credits: 2 CPECS®

SYMPOSIUM 5

09:00-11:00 MACHINE LEARNING AND CLINICAL DECISION SUPPORT: TECHNOLOGIES THAT GENUINELY MAKE PEOPLE'S LIFE BETTER

Chair: Hernán Fares Taie (Argentina), Waleed Al Tamimi (Saudi Arabia)

Clinical decision support and Machine Learning: Improving medical decisions and enhancing the value of the clinical laboratory in healthcare

Hernán Fares Taie (Argentina)

Navigating Through Current ML Applications in Clinical Labs: From Preanalytical to Post-analytical Phases

Deniz Ilhan Topcu (Turkey)

Machine Learning in healthcare: Current applications and future perspectives

Stephen Master (USA)

Two oral communications from abstracts

Credits: 2 CPECS®

UAE SYMPOSIUM 1

09:00-11:00 METABOLIC AND NONCOMMUNICABLE DISEASES

Chair: Fayha Salah Ahmed (UAE), Abdelhalim Chachou (Algeria)

UAE cardiometabolic guidelines

Hani Sabbour (UAE)

The burden of Non-alcoholic fatty liver disease: screening, diagnosis and management.

Fayha Salah Ahmed (UAE)

Diabetes in UAE

Riad Bayoumi (UAE)

Markers of Alzheimer and neurological disorders.

Laila AbdelWareth (UAE)

Credits: 2 CPECS®



APFCB SESSION

09:00-11:00 CLINICAL DECISION SUPPORT

Chair: Kay Weng Choy (Australia), Tze Ping Loh (Singapore)

Clinical decision support in clinical practice: a systematic review

Adriana Esho (Australia)

Electronic clinical decision support for pathology requesting

Ken Sikaris (Australia)

Automated intelligent validation and verification of results

Wei Cui (China)

Considerations for result interpretation clinical decision support

Tze Ping Loh (Singapore)

Credits: 2 CPECS®

09:00 - 09:15 **Opening message**
Tomris Ozben (Turkey)



UAE GDA SESSION

STEM CELLS & REGENERATIVE MEDICINE

Chairs: Sfoug AlShameri (Bahrein), Yahya Kiwan (UAE), Fatima Jamali (UAE)

- 09:15 - 09:30 Development of myocardial regenerative medicine for severe heart failure
Yoshiki Sawa (Japan)
- 09:30 - 09:45 Corneal stem cell therapies: from lab to clinic
Sujjad Ahmad (UK)
- 09:45 - 10:00 Towards a better Understanding of Diabetes-Associated Gene Function through iPSC-Derived Islet Organoids
Essam Abdelalim (Qatar)
- 10:00 - 10:15 TBD
Fatima Al Kaabi (UAE)

Credits: 1 CPECS®



UAE GDA SESSION

ADVANCING CANCER CARE

Chairs: Burhan Fakhurji (Saudi Arabia), Thomas Adrian (UAE), Mahmood Yaseen Hachim Al Mashhadani (UAE)

- 10:20 - 10:40 Towards eliminating minimal residual disease in ovarian cancer to prevent recurrence
Ahmed Ashour Ahmed (UK)
- 10:40 - 11:00 AI in Cancer: Pathology Applications
Aaron Han (UAE)
- 11:00 - 11:20 Plasminogen Activator Inhibitor 1: Bridging Bench and Clinic in Cancer Research
Khalid Bajou (UAE)

Credits: 1 CPECS®

Plenary Lecture

11:30-12:30 Chair: Maurizio Ferrari (Italy)
Genomics in the Middle East: A report card
Fowzan Sami Alkuraya (Saudi Arabia)



Fowzan S Alkuraya

Fowzan S Alkuraya is a Professor of Human Genetics at Alfaisal University and the Chairman of the Department of Translational Genomics at King Faisal Specialist Hospital and Research Center. He joined medical school (King Saud University) before turning 15 and graduated first in his class with first class honor. He did his pediatric residency at Georgetown University Hospital, followed by a fellowship in clinical genetics and another in molecular genetics at Harvard Medical School. He also did a postdoctoral research fellowship in the area of developmental genetics in the lab of Prof. Richard Maas at Harvard Medical School. He returned to his native Saudi Arabia to establish the Developmental Genetics Lab, which later evolved into the Center for Genomic Medicine at KFSHRC. He is an authority in the area of Mendelian genetics with more than 520 published manuscripts that describe his lab's discovery of hundreds of novel disease genes in humans as well as many other seminal contributions to the field of human genetics as featured in profiles published by The Lancet and Science. He is a frequently invited speaker at local, regional and international conferences, on the editorial board of prominent human genetics journals, and the recipient of numerous prestigious awards including William King Bowes Award in Medical Genetics (first non-US based winner), King Salman Award for Disability Research and Curt Stern Award (first non-US based winner).

Credits: 1 CPECS®



UAE GDA SESSION

LEADING PRECISION THERAPIES

Chairs: Tomris Ozben (Turkey), Aaron Han (UAE), Rachel Stratton (UAE)

- 14:00 - 14:30 Unlocking the Potential of "Body on a Chip" to recapitulate Living Systems in vitro
Ken-ichiro Kamei (UAE)
- 14:30 - 15:00 Pharmacogenetics and its application to clinical daily life
Andrea Griesmacher (Austria)
- 15:00 - 15:30 Exploring Pharmacogenomics in the Middle East: Opportunities and Challenges
Mohammed Alsbou (UAE)
- 15:30 - 16:00 Advances in Bone Marrow Transplant
Shahrukh Hashmi (UAE)

Credits: 2 CPECS®

UAE GDA SESSION

PANEL DISCUSSION - STEM CELLS & REGENERATIVE MEDICINE

Chairs: Emmanouil Nikolousis (UAE), Fatima Jamali (UAE), Saba Habibollah (UAE)

- 16:15 - 17:00 Panel Discussion
Sajjad Ahmad (UK), Colin McGukin (France), Fatima Al Kaabi (UAE), Essam Abdelalim (UAE)

Credits: 0,5 CPECS®



IFCC SYMPOSIUM 4

14:30-16:30 ON THE WAY TO CARDIOVASCULAR PRECISION DIAGNOSTICS

Chairs: Tony Badrick (Australia), Patrick Bossuyt (the Netherlands)

- Urgent need for Cardiovascular Precision Diagnostics to address Residual Cardiovascular Risk.
Christa M. Cobbaert (the Netherlands)
- Establishing an SI-traceable Reference Measurement System for 7 Serum Apolipoproteins.
Renee Ruhaak (the Netherlands)
- Evaluating the Clinical Effectiveness of Cardiovascular Precision Diagnostics.
Patrick Bossuyt (the Netherlands)
- Demonstrating the clinical value of a multiplexed serum Apolipoprotein Panel in the Odyssey Outcome Study.
Esther Reijnders (the Netherlands)

Credits: 2 CPECS®

SYMPOSIUM 6

14:30-16:30 DIGITAL COMPETENCE AND ARTIFICIAL INTELLIGENCE IN LABORATORY MEDICINE

Chairs: Damien Gruson (Belgium), Santiago Fares Taie (Argentina)

- Embracing the Digital Frontier: Unveiling Unmet Needs in Laboratory Medicine's AI Journey
Andrea Padoan (Italy)
- Revolutionizing Diagnostics: The Clinical Value of Artificial Intelligence in Laboratory Medicine
Damien Gruson (Belgium)
- Efficiency Amplified: Unleashing Operational Benefits through Digital Competence and AI in Laboratory Medicine
Shaikha Almazrouei (UAE)
- Two oral communications from abstracts

Credits: 2 CPECS®

WEDNESDAY 29 MAY 2024



IFCC SYMPOSIUM 5

09:00-11:00 BIOMARKERS FOR NEURODEGENERATIVE DISEASES - IDENTIFICATION, STANDARDIZATION OF PREANALYTICAL AND ANALYTICAL PROCEDURES AND CLINICAL VALIDATION

Chair: Hans Frykman (Canada), Kaj Blennow (Sweden)

The different clinical types of dementia – epidemiology.

Socratis Papageorgiou (Greece)

Metrological standardization of AD biomarkers - current status future perspectives.

Henrik Zetterberg (Sweden)

Identifying clinically useful biomarkers in neurodegenerative diseases - moving from CSF to blood.

Kaj Blennow (Sweden)

Biomarker panels: analytical and clinical validation against clinically relevant reference standards.

Hans Frykman (Canada)

Credits: 2 CPECS®

SYMPOSIUM 7

09:00-11:00 MEETING THE CHALLENGE OF DEMONSTRATING VALUE IN LABORATORY MEDICINE

Chair: Andrew St John (Australia)

The challenges of delivering value through better test implementation

Andrew St John (Australia)

The EFLM TE-WG Evaluation Framework and Clinical Needs Assessment Strategy; Key Practical Tools for Value-Based Biomarker Implementation.

Phillip Monaghan (UK)

How we harnessed laboratory data to improve health and economic outcomes

David G. Grenache (USA)

Two oral communications from abstracts

Credits: 2 CPECS®

SYMPOSIUM 8

09:00-11:00 HOW TO IMPROVE ACCESS TO LAB TESTING IN MIDDLE & LOW INCOME COUNTRIES?

Chairs: Mario Plebani (Italy), Michael Wilson (USA)

The Lancet Commission on Diagnostics

Michael Wilson (USA)

A Global Diagnostics Alliance

Mikashmi Kohli (Switzerland)

The WHO model list of essential in vitro diagnostics and its role in improving access to lab testing in LMICs

Ana Aceves Capri (Switzerland)

Two oral communications from abstracts

Credits: 2 CPECS®



AFCB SYMPOSIUM 2

09:00-11:00 EPIDEMIC AND PANDEMIC INFECTIOUSNESS IN ARABIC REGIONS

Chair: Abderrazek Hedhili (Tunisia)

Earthquakes, wars, and emerging infectious disease

Christian Hadad (Lebanon)

Evolution of the epidemiology of viral diseases in relation to migratory movements in the Arab Maghreb countries

Abdelhalim Trabelsi (Tunisia)

Prevalence and incidence Rate of infectious diseases in the Middle east and North Africa: Management of such diseases in low-income countries

Ghassan Shannan (Syria)

Viral transmission from animal to humans (zoonosis) in Middle East Challenges and risks

Robin Abu Ghazaleh (Palestine)

Credits: 2 CPECS®



SYMPOSIUM 9

09:00-11:00 HEALTHCARE DELIVERY IN THE 21 CENTURY AND THE ROLE OF THE CLINICAL LABORATORY

Chair: Nader Rifai (USA), Nashat Nafouri (Saudi Arabia)

Implementation of Emerging Technologies

Ronda Greaves (Australia)

Sustainability and Environmental Impact of the Clinical Laboratory

Ian Young (UK)

The Role of the Clinical Laboratory in Supporting Equity in the Delivery of Healthcare

Christina Pierre (USA)

Two oral communications from abstracts

Credits: 2 CPECS®



COLABIOCLI SESSION

09:00-11:00 EMERGING AND RE-EMERGING DISEASES IN LATIN AMERICA, A VIEW FROM PUBLIC HEALTH

Chair: Maria Elizabeth Meneses (Brazil), Moisés Ramos Solano (Mexico)

Current Molecular Diagnosis of Dengue, Zika and Chikungunya in the Region of the Americas

Maria Elizabeth Meneses (Brazil)

Molecular and Epidemiological Aspects of Dengue Infection

Moisés Ramos Solano (Mexico)

Advances in the study of innate immunity against Mycobacterium tuberculosis

Luisa María Nieto Ramírez (Colombia)

Zika a Virus that changed the History of a Generation

Marcela Mercado (Colombia)

Credits: 2 CPECS®

09:00 - 09:15 Opening Message

Special Edition: An opening message

highlighting the Importance of Genomics in Mental Health

Saad A. Shakir (USA)

UAE GDA SESSION

GENOMICS OF RARE DISEASES I

Chairs: Bassam Ali (UAE), Maryam AlShehhi (UAE), Shaikha Almazrouei (UAE)

09:15 - 09:40 Unraveling common dyslipidemia in a population through genetic screening

Fahad Mahmood Al Zadjali (Oman)

09:40 - 10:00 Genetics of Pediatric Cardiomyopathy: New Findings and Challenges

Alireza Haghighi (USA)

10:00 - 10:15 Deciphering the Genetic Landscape of ADPKD:

Paving the Way for Novel Therapeutic Targets

Hamad Ali Yaseen (Kuwait)

10:15 - 10:30 Newly identified Syndromes with novel phenotypes in Omani patients

Musallam Al Araimi (Oman)

10:30 - 10:45 Promoting Rare Diseases Research in China: Challenges and Solutions

Boya Yu (China)

10:45 - 11:00 Unveiling the Genetic Landscape of the Arab Population

Zeina Almahayri (UAE)

Credits: 1,5 CPECS®

Plenary Lecture

11:30-12:30 Chair: Matthias Muller (Austria)
Obesity: novel developments in diagnostics of underlying causes and treatment
Elisabeth van Rossum (the Netherlands)



Prof Liesbeth van Rossum, MD PhD

Prof Liesbeth van Rossum, MD PhD, is internist-endocrinologist and professor in the field of obesity and stress hormone research at the Erasmus University Medical Center, Rotterdam, Netherlands. She is co-founder of the Obesity Center CGG, an internationally recognized academic center of expertise for diagnostics of underlying causes of obesity and personalized treatments.

Currently, Van Rossum holds various societal and board positions, amongst which European lead of the theme Obesity, Diabetes, Nutrition and Metabolism of the European Society for Endocrinology, member of the European Policy Working Group for obesity, chair of the National Obesity Guideline, and president of the Partnership Overweight Netherlands, an umbrella organization of 20 associations of health care organisations, with an advisory role to the Ministry of Health Welfare on obesity policy. She received multiple international awards and grants for her scientific research, is a frequently invited speaker on scientific congresses, (inter)national media, TEDx, and published with colleague Mariette Boon an international award-winning book "FAT, the secret organ".

Credits: 1 CPECS®

UAE GDA SESSION

GENOMICS OF RARE DISEASES II

Chairs: Habiba Al Safar (UAE), Hibat Omar (UAE), Noraa Almatrooshi (UAE)

- 14:00 - 14:30 Global and Regional burden of Congenital Disorders Compared with the UAE's National Burden
Wael Osman (UAE)
- 14:30 - 15:00 Testing and Counselling for Genetic Disorders in the Genomic Era
Qurratulain Hasan (India)
- 15:00- 15:20 Rare Diseases(RD): The Importance of Early Detection and Treatment in Ramathibodi Hospital Thailand
Thanyachai Sura (Thailand)
- 15:20 - 15:40 Rare Diseases and Gene Editing: Applications in the Neuromuscular Field
Jon Andoni Urtizberea (France)
- 15:40 - 16:00 A Holistic Model Addressing the Needs of Rare Disorders - Case of Duchenne Muscular Dystrophy (DMD)
B. R. Lakshmi (India)

Credits: 2 CPECS®

UAE GDA SESSION

PANEL DISCUSSION - RDI GLOBAL COMMISSION FOR RARE DISEASES HYBRYD: PATIENT AND AND FAMILY EMPOWERMENT

Chairs: Mariam Aleissa (Saudi Arabia), Hibat Omar (UAE), B. R. Lakshmi (India)

- 16:15 - 17:00 Panel Discussion
Various from RDI

Credits: 0,5 CPECS®



AFCC SESSION

14:30-16:30 INBORN ERRORS OF METABOLISM IN AFRICA
Chair: A.B. Okesina (Nigeria)

Challenges in National Newborn Screening Program in Africa

A.B. Okesina (Nigeria)

Prevalence of Inborn Errors of Metabolism in Africa

John I. Anetor (Nigeria)

Clinical, Laboratory and Molecular Spectrum of Galactosaemia in Newborns in Africa

R.T. Erasmus (South Africa)

Requirements for the establishment of Newborn Screening Program in Africa

G.T. Akalu (Ethiopia)

Credits: 2 CPECS®

NAFCC SESSION

14:30-16:30 LABORATORY MEDICINE ADVANCING GLOBAL HEALTH ACROSS THE LIFESPAN
Chair: Octavia M Peck Palmer (USA), Paul M. Yip (Canada)

Pediatric health: Vitamin and Trace element testing

Kamisha Johnson-Davis (USA)

New chance at life: Infectious disease testing

Allison A Venner (Canada)

Maternal-fetal health: Early detection of pre-eclampsia

Paul M. Yip (Canada)

Medically underserved populations: Delivering evidence-based care via point of care testing

Octavia M Peck Palmer (USA)

Credits: 2 CPECS®

SYMPOSIUM 10

14:30-16:30 TOXICOLOGY ENVIRONMENTAL AND HEALTH EFFECTS
Chair: Abderrazek Hedhili (Tunisia), Ahmad Al Asmari (Saudi Arabia)

Use of Per- and polyfluoroalkyl substances (PFASs) in medical technologies, what are the challenges with finding alternatives, how these technologies containing PFAS are handled at the end of life and how risks are managed

Aldo Tomasi (Italy)

Exposure and Health Effects of Perfluoroalkyl Substances (PFAS): Insights from Population Surveys and Risk Assessment

Nolwenn Noisel (Canada)

Biomedicine and as Biomarker in Clinical Practice and in Environmental Pollution

Alessio Bocedi (Italy)

The evolution of human biomonitoring and its impact on clinical laboratory medicine,

David Kinniburgh (Canada)

Credits: 2 CPECS®

SYMPOSIUM 11

09:00-11:00 CIRCULATING CANCER BIOMARKERS: QUO VADIS?

Chair: Ron HN van Schaik (the Netherlands), Dobrin Svinarov (Bulgaria)

Liquid biopsy / cell free DNA analysis: too hot to handle, or right up our alley?

Ron HN van Schaik (the Netherlands)

Liquid biopsy: from discovery to clinical implementation

Simon Joosse (Germany)

Integrating liquid biopsy with advanced imaging analysis to improve the prediction of response to immune therapy in patients with NSCLC

Marzia del Re (Italy)

Two oral communications from the abstracts

Credits: 2 CPECS®

SYMPOSIUM 12

09:00-11:00 PREVENTING KIDNEY DISEASE USING ADVANCED URINE SCREENING AND KIDNEY DAMAGE MARKERS

Chair: Joris Delanghe (Belgium), Osama Najjar (Palestine)

Update to laboratory assessment of kidney diseases

Joris Delanghe (Belgium)

Preventing diabetic nephropathy, follow-up with laboratory markers

Marc De Buyzere (Belgium)

Urine particle analysis in detection of kidney diseases

Rosanna Falbo (Italy)

Two oral communications from abstracts

Credits: 2 CPECS®

SSCC SYMPOSIUM 2

09:00-11:00 DYSGLYCEMIA - NOVEL BIOMARKERS FOR DIAGNOSIS AND MONITORING PROGNOSIS

Chair: Suhad Bahijri (Saudi Arabia)

Epidemiology of Diabetes in the Arabian Gulf Countries: Challenges and Opportunities

Yousef Al Saleh (Saudi Arabia)

Use Of Glycated Products In Diagnosis

Nafila Al Riyami (Oman)

Use of 1-hour glucose challenge test in diagnosis and predicting future complications

Jaakko Tuomilehto (Finland)

Novel Biomarkers to improve diagnosis and monitor prognosis

Suhad Bahijri (Saudi Arabia)

Credits: 2 CPECS®

SYMPOSIUM 13

09:00-11:00 PERFORMANCE SPECIFICATIONS OF MEDICAL TESTS BASED ON CLINICAL OUTCOME STUDIES

Chair: Andrea Rita Horvath (Australia), Mohammed Habbab (Saudi Arabia)

Outcome-based analytical performance specifications - current status and future directions

Andrea Rita Horvath (Australia)

Testing related outcomes and analytical performance - the linked evidence approach

Patrick Bossuyt (the Netherlands)

A practical approach to determining blood ketone performance specifications

Eric Kilpatrick (Qatar)

Two oral communications from abstracts

Credits: 2 CPECS®



SYMPOSIUM 14

09:00-11:00 UTILIZATION MANAGEMENT AND SUCCESSFUL APPROACHES TO CHANGE AND IMPROVE TEST REQUESTING

Chair: Mario Plebani (Italy)

Utilization management and appropriateness in clinical laboratory: state-of-the-art

Mario Plebani (Italy)

How to deal with inappropriate laboratory retesting?

Ivana Lopic (Croatia)

The noble art of leaving out

Prabath Nanayakkara (the Netherlands)

Two oral communications from abstracts

Credits: 2 CPECS®

UAE SYMPOSIUM 2

09:00-11:00 AI & MACHINE LEARNING APPLICATIONS IN LABORATORY MEDICINE

Chair: Laila AbdelWareth (UAE)

Case study of machine learning and AI application in pathology

Ayub Nahal (UAE)

AI and Decision support systems

Hady Elkhodary Dubai (UAE)

Intraoperative Mass Spectrometry; Recent updates and Challenges to Implementation

Shereen Hassan Atef (UAE)

Medical Laboratories between shrinking workforce and Artificial Intelligence

Ola Elgaddar (UAE)

Credits: 2 CPECS®

09:00 - 09:15 Opening Message

Ministry of Artificial Intelligence (UAE)



UAE GDA SESSION

GLOBAL HEALTH AI: UNITING NATIONS FOR GENOMIC INSIGHTS AND DATA GOVERNANCE

Moderator: Mazin Gadir (UAE), Fady Hannah-Shmouni (UAE), Philippe Gerwill (UAE)

09:15 - 09:30 From Data to Action: AI-powered Personalized Medicine and Global Health Equity
Noor AlSaadoun (Saudi Arabia)

09:30 - 09:45 Will Artificial Intelligence deliver Genomic Medicine?
Review of applications of artificial intelligence in genomic medicine.
Mark Bartlett (UK)

09:45 - 10:00 Genomic Data Privacy & Security: Emirati Genome Project
Tiago Magalhaes (UAE)

10:00 - 10:15 The Automation of Clinical Genetic Data through Implementation of ACMG guidelines
Mariam Eldesouky (UAE)

10:15 - 10:30 Beyond Borders, Beyond Bias: Can XR Revolutionize Healthcare Equity?
Sana Farid (Saudi Arabia)

10:30 - 10:45 PreciousGPT: Multimodal multiomics multi-species, multi-tissue multitasking transformers for aging research and drug discovery
Alex Zhavoronkov (UAE)

Credits: 1,5 CPECS®

UAE GDA SESSION

PANEL DISCUSSION - GENOMICS IN THE METAVERSE

Chairs: Philippe Gerwill (UAE), Noor AlSaadoun (Saudi Arabia)

10:45 - 11:30 Panel discussion
Ben El Idrissi (UAE), Khulood AlSayeah (UAE), Alex Zhavoronkov (UAE), Sonal Ahuja (UAE), Sana Farid (Saudi Arabia)

Credits: 0,5 CPECS®

Plenary Lecture

11:30-12:30 Chair: Anwar Borai (Saudi Arabia)
Making molecular diagnostics faster
Carl Wittwer (USA)



Carl Wittwer

MD, PhD is Professor Emeritus of Pathology at the University of Utah.

Carl Wittwer, MD, PhD is Professor Emeritus of Pathology at the University of Utah. With more than 200 articles focusing on technique and instrument development in molecular diagnostics, he developed rapid PCR (15 min) in the 1990s and was the primary inventor of the LightCycler® system, with over 10,000 units placed worldwide by Roche. Carl holds over 40 US patents and their foreign equivalents. He introduced SYBR Green, hybridization probes, and melting analysis to real-time PCR and continues to develop extreme PCR (< 1 min) and high-speed DNA melting (<5 s). Carl co-founded BioFire Diagnostics and served as Chairman of the Board from 2012 until its acquisition by bioMérieux in 2014, most notable for the FilmArray syndromic diagnostic platform with over 20,000 placements worldwide. He is an Associate Editor of Clinical Chemistry and chair of the Scientific Advisory Board of CoDiagnostics. Much of his work can be found at www.dna-utah.org.

Credits: 1 CPECS®

CLOSING CEREMONY

12.30-13.00 Closing Remarks
Welcome to WorldLab 2026
Farewell cocktail



ABSTRACT SUBMISSION

Congress delegates are cordially invited to submit abstracts of their scientific work for presentation as a free communication at the IFCC Worldlab 2024 Congress.

An unlimited number of abstracts may be submitted provided the presenting author applies for "full registration" or "young registration".

Abstracts are welcome in all fields of clinical chemistry, haematology, clinical molecular biology and laboratory medicine, in the broader sense. Free communications are primarily presented via poster. A limited number of abstracts will be selected for oral presentation during congress symposia. Authors wishing to compete for these oral communication slots should mark the appropriate field on the on-line abstract-submission form.

ABSTRACT TOPICS

- Accreditation, Patient Safety, Risk management, Quality Assurance, Audit
- Artificial intelligence, clinical decision support and machine learning
- Clinical Chemistry
- Data Science, Digital health, big data and smart technologies
- Demand/test utilization management
- Direct to consumer testing
- Disease specific biomarkers: autoimmune, bone, cardiac, cancer, diabetes, neurological, sepsis, traumatic brain injury, ...
- Emerging & Analytical technologies, applications and limitations
- Emerging biomarkers (-omics type, ...)
- Endocrinology
- Evidence based medicine, including Guidelines
- Genetic diseases
- Geriatric testing
- Green laboratories
- Healthcare reform: from curative to preventive
- Hematology and hemostasis
- Immunology
- Integral Diagnostics, radiomics, ...
- Kidney diseases and transplantation, urinalysis, urinary biomarkers
- Laboratory consolidation, Total lab automation and process design
- Laboratory Information Systems and globalization of NPU
- Laboratory Management, Medical leadership
- Metabolic diseases
- Metrological traceability and test standardization/harmonization
- Microbiology - Infectious diseases including COVID 19
- Molecular diagnostics, including CTC and ctDNA
- Neonatal and paediatric laboratory medicine, including prenatal testing
- Nutrition Trace Elements and Vitamins
- Point of Care testing, critical care, emergency medicine
- Precision Diagnostics and Precision Medicine
- Recruitment, Education and Training of workforces in Laboratory Medicine
- Regulations and Regulatory Science, including suboptimal tests and post-market follow-up
- Remote monitoring and preanalytical challenges
- Test Evaluation, outcome studies, clinical utility of biomarkers
- Total Test process, including preanalytics, analytics and postanalytics
- Toxicology and TDM
- Trends towards regional/national/global ICT connectivity and networks
- Others
- Rare Diseases
- Epigenetics
- Aging & Longevity
- Gut Microbiome
- Biological Cellular Therapies

GENERAL REQUIREMENTS

The text must be clear, concise, and written in proper English. The content must not have been previously published in academic journals or subject to peer review. Significant technical information must not be withheld. Abstracts must absolutely contain results. Statements such as "results will be discussed" are not acceptable and will lead to rejection.

GENERAL INFORMATION

DEADLINE FOR RECEIPT

Abstracts should be submitted by **15th January 2024, 18:30 CET.**

CONFIRMATION OF RECEIPT

Receipt of the abstract will be acknowledged by e-mail immediately after submission.

NOTIFICATION OF ACCEPTANCE OR REJECTION

Authors will be notified of acceptance or rejection before **28th February 2024.**

REGISTRATION

The presenting author of each abstract must register for the congress with "Full Registration" or "Young Registration".

HOW TO PREPARE AND SUBMIT AN ABSTRACT

It is important to carefully follow the instructions below. Incorrectly prepared abstracts will be rejected.

- Abstracts should be prepared off-line in advance;
- Prepare your abstract on a word processor (such as Microsoft Word);
- Do not include title, authors' names and affiliations in the abstract file
- Tables and figures are not allowed;
- References are not allowed;
- When abbreviations are used, spell out the full word at first mention in the text followed by the abbreviation in parentheses. Thereafter, use the abbreviation throughout.

When the on-line system requires the abstract to be entered, copy and paste your text. Abstracts are limited to 2300 characters, spaces included (title, authors' names and affiliations excluded). The system will automatically notify you if the abstract exceeds this number of characters. Title, author(s) and affiliation(s) must be added separately at the appropriate step.

IMPORTANT NOTICE

Abstract authors are asked to indicate the most suitable topic for presentation of their work and will also be asked whether they wish apply for an oral presentation during the scientific symposia. In that case, authors must also select the symposium in which they would like to give their presentation.

**Abstracts should be submitted via the on-line submission system only.
Do not send in an abstract more than once!
Submit your abstract at www.dubai2024.org**



Congress
Venue

Dubai World Trade Centre
Trade Centre – Trade Centre 2
Dubai – United Arab Emirates

GETTING
THERE

Dubai metro

Dubai's public transport is both a safe and cost-effective way to reach. With the dedicated metro station, Dubai's metro system is a quick and efficient option. The world's longest driverless train system is clean, quiet and fully air conditioned. Trains run every few minutes, from 5 am to 11 pm using a Nol Card, which can be obtained easily from any station. You may also want to combine your metro trip with a ride on one of Dubai's many bus routes. For specific journey planning to and from Dubai World Trade Centre, visit the link below.

Dubai taxi

Metered taxis are easy to find, regulated, clean and comfortable. They also provide a great opportunity to take in the sights of the city. With more than 5,300 RTA taxis available, hailing a cab is never a problem. Almost all drivers are familiar with our location and the various drop off points around Dubai World Trade Centre. Female passengers can also opt for a Ladies-only taxi, should they prefer to.

REGISTRATION
DESK

- The registration desk will be open during the congress as follows:

26 May 2024	11:00 - 19:00
27 May 2024	08:00 - 18:00
28 May 2024	08:00 - 18:00
29 May 2024	08:00 - 18:00
30 May 2024	08:30 - 14:00

CONGRESS
LANGUAGE

- The congress' official language is English.

NAME
BADGE

- A name badge will be required for access to the congress area. Participants will receive a name badge when they check in at the registration desks/kiosks. It must be worn at all times.

INDUSTRY
EXHIBITION

- Participants are encouraged to visit the large industry exhibition, which will be open as follows:

27 May 2024	10:00 - 17:30
28 May 2024	10:00 - 17:30
29 May 2024	10:00 - 17:30

Access to the exhibition area is free of charge for participants registered to the congress. All the other visitors will be given the possibility to print a free visitor badge in advance or to collect it at a dedicated desk situated at the entrance of the area.

CERTIFICATE OF
ATTENDANCE

- All properly registered attendees, for the day(s) they actually take part in the congress, will be entitled to receive a certificate of attendance.

VISAS
REQUIREMENTS

- Depending on the nationality of the delegates it may be necessary to obtain a visa before leaving. We recommend asking your country's Embassy or visiting the Emirates Visa Online website.

PERSONAL
INVITATION FOR
VISA PURPOSES

- An official letter of invitation will be sent to you upon request. The invitation letter may be used by visitors to raise travel funds or to obtain a visa, but is not a commitment on the part of the organisers to provide any financial support. Please contact the Organising Secretariat, registrations@dubai2024.org, to request a letter of invitation.

OFFICIAL
CARRIER

- Emirates has been appointed as Official Carrier. Further details on benefits available on the congress website.



REGISTRATION FEES

All delegates must register for the congress. Registration fees are as follows:

	Until 15 March 2024	After 15 March 2024	On-site registration
Full Registration	€500,00	€650,00	€750,00
Young Registration	€250,00	€325,00	€375,00
Day Registration	€175,00	€225,00	€250,00

The full registration and young registration fees include:

- entrance to plenary lectures, symposia, lunch & educational workshops, poster sessions and exhibition
- possibility to submit abstracts
- certificate of attendance
- coffee and tea service during intermissions
- Opening Ceremony (Sunday, 26 May 2024)
- Closing Ceremony (Thursday, 30 May 2024)

The day registration fee includes, for the day of registration only:

- entrance to plenary lectures, symposia, lunch & educational workshops, poster sessions and exhibition
- certificate of attendance
- coffee and tea service during intermissions

REMITTANCE

Registration fees shall be paid by credit card or bank transfer through the on-line system available on the congress web site.

When paying by bank transfer, a copy of the transfer receipt must be sent to registrations@dubai2024.org. Registrations without proof of payment will not be accepted.

On-site registrations may be paid only by credit card or cash. Cheques will not be accepted.

The organising secretariat will send registration receipt upon receipt of payment, via e-mail. Be sure your e-mail address is filled in correctly.

CANCELLATION AND REFUND

Cancellations must be sent in writing to registrations@dubai2024.org

The amount equal to 80% of the fee paid will be refunded for cancellations received by 15 March 2024. Until 30 April, 2024 a refund of 50% of the fee will be granted. After 30 April 2024 no refunds will be issued.

All refunds will be paid in euros after the congress.

CURRENCY

Registration fees and charges for all events related to the IFCC Worldlab 2024 Congress as well as hotel cost must be paid in euros.

LIABILITY AND INSURANCE

Registration fees do not include the insurance of participants against personal accidents, sickness and cancellations by any party, theft, loss or damage to personal possessions. Participants are advised to take out adequate personal insurance to cover travel, accommodation, cancellation and personal effects.

CANCELLATION OF THE CONGRESS

The congress secretariat reserves the right to cancel the congress, shift venue, or change dates without notice, in case of "force majeure". Neither MZ Events nor the Congress Organizing Committee shall be liable for any damage claims.

On-line registration is available on the congress website
<https://www.dubai2024.org>
Registration can be submitted on-line only

HOTEL ACCOMMODATION



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DESTINATION PARTNER



