

**Satellite Meeting** 

WORLDLAB 2024 MAY 26-30

> SATURDAY 25<sup>th</sup> MAY 2024

# INTERNATIONAL CONGRESS OF PEDIATRIC LABORATORY MEDICINE

**TOPICS:** 

Immunodeficiencies

XVII ICPLM 🕅

Emerging Technologies in **Pediatric Laboratory Medicine** 

Immuno-flow cytometry in pediatric laboratory medicine

Genomics vs Mass spectrometry in pediatric laboratory medicine

Newborn Screening for SCIDs

NGS in diagnosing undiagnosed diseases

CHAIR OF THE CONGRESS: Tim Lang, UK

It is our pleasure to announce the next meeting of the International Congress of Pediatric Laboratory Medicine (ICPLM) to be held on Saturday May 25, 2024, in Dubai, IUAE, as a Satellite to the main XXVI IFCC WorldLab Congress.

This special conference is being organized by the IFCC Committee on **Emerging Technologies in Pediatric** Laboratory Medicine (C-ETPLM) with the support of the IFCC Congresses and Conferences Committee as well as MZ Events. This is the 17th ICPLM conference organized internationally to bring together laboratory professionals and experts in pediatric laboratory medicine from around the world. ICPLM has become a leading forum in the field to discuss latest advances in key areas of special interest to pediatric laboratory specialists, scientists, pediatricians, and industry colleagues. This meeting will have a focus on immunodeficiencies including the related analytical methodologies and novel treatments and the benefits of Mass Spectrometry vs Genomics in Paediatric Lab Medicine Dubai, is now one of the most vibrant and technologically advanced cities in the world. Being geographically easily accessible from all over the world will provide the perfect setting for this event.

As IFCC continues to grow and expand its international reach, we remain committed to the key goal of advancingbetterhealthcareworldwide. International forums such as the XXVI WorldLab Congress as well as the 17th ICPLM satellite meeting support us in this effort by ensuring our organization and field remain at the cutting edge. In support of this mission, the conference organizingcommitteehasbeenworking hard to build a very strong program with a truly international faculty. Looking forward to seeing many of you in our pediatric laboratory medicine community at the ICPLM conference in Dubai. An event not to be missed!

Prof. Khosrow Adeli IFCC President

Dr. Tim Lang Congress Chair



## Dr. Hiba Shendi

Tawam Hospital UAE Immunodeficiencies

Past/Present/Future (Opening Plenary) Dr. Hiba Shendi, MBBS, MD, MRCPCH, MSc, FRCPath, CCT

DrHibaShendiisConsultantImmunologist/Allergist in Tawam Hospital, Alain, UAE. She completed a Clinical MD in Pediatrics and Child Health and obtained Membership of the Royal Pediatrics and Child Health (London), followed by MSc in Immunology of Infectious Diseases, London School of Hygiene and Tropical Medicine and completed specialist training in Allergy/Immunology in the UK in 2012.

She worked as Consultant Immunologist/Allergist, Regional Immunology Service, Royal Victoria Hospital, Belfast, UK before joining Tawam Hospital in December 2015, as lead in Pediatric Allergy and Immunology and is currently the only Clinical Immunologist in SEHA. She is responsible for the significant expansion of the Pediatric Allergy/ Immunology service, now a tertiary referral centre for children as well as adults with Primary Immunodeficiency Disorders in the UAE. She also manages children and adults with various allergic conditions. She has been working on increasing awareness on primary immunodeficiency disorders and allergic conditions, locally and nationally. She has various publications and presentations and is the main author on the first publication on primary immunodeficiency disorders in the UAE.



Dr. Marianna Tzanoudaki

Aghia Sophie Children's Hospital, Athens, Greece

Introduction to flow cytometry in diagnosing PIDs (1st symposium) Marianna Tzanoudaki, MD PhD

Born and currently living in Athens, Greece. Medical Doctor specialized in Laboratory Medicine. PhD thesis on CMV specific T cell reconstitution post HSCT.

Since 2002, Working in the Flow Cytometry & Cell Culture Laboratory of the Department of Immunology & Histocompatibility, Specialized and Referral Center for PID, of "Aghia Sophia" Children's Hospital.

#### Main fields of experience:

- Primary Immunodeficiencies: Implementation of Flow Cytometric and Functional methods for PID diagnosis, Contribution on the selection of appropriate tests for PID diagnostic workup, Development of novel affordable clinical diagnostic tests based on current knowledge, Continuous effort to raise awareness of PID in the scientific community, through a series of lectures.

- Pediatric Hematological Malignancies: Flow Cytometric Diagnosis and MRD evaluation of Pediatric Acute Leukemia. Affiliation with the iBFM flow group.

- Hematopoietic Stem Cell Transplantation and Cell Therapies: Hematopoietic stem cell enumeration, Evaluation of immune reconstitution post HSCT, Antigen specific T-cell enumeration for adoptive transfer, CAR-T cell enumeration both for patient followupandinthecontextof CAR-T cell production. - Antigen specific T and B cell Immunity assessment post vaccination.

- Quality assurance of applied techniques by adherence to established guidelines and affiliation with international groups and referral centers.

Other fields of interest:

- Training of Postgraduate Students, Medical Doctors, Biologists and Laboratory Technicians at a local and an international level.

- Assistance to numerous PhD theses.

- Secretary General of the Greek Flow Cytometry Society.



## Prof. Saleh Almuhsen

Professor of Paediatric Allergy and Immunology, King Saud University KSA

Benefits of a National Registry for PID (1<sup>st</sup> symposium) Saleh Zaid Almuhsen, MD, MBA, FRCP, FAAP, MISK 2030 Leaders

Dean, College of Medicine, King Saud University, Riyadh, Kingdom of Saudi Arabia Professor of Pediatrics, Consultant Allergy and

Immunology, King Saud University Leadership and Administrative Positions: Dean, College of Medicine, King Saud University – June 2022 to present

- Professor of Pediatrics, Consultant Allergy and Immunology, King Saud University

- Chief Administrative & Financial Officer, King Saud University Medical City (November 2020 to June 2022)

- Project Lead and Chairman for the Executive Committee, Health Services Revenue Cycle management (Privatization), King Saud University Medical City (KSUMC) Jan 2021 to June 2022

- Senior Consultant of Governance Project, Vision Realization Office 2030, Health Sector Governance, Ministry of Health, Saudi Arabia, 2018

- Commissioning Founder for the Medical Cities, Agency for Security Planning and Development & Medical Services Directorate, Ministry of Interior (2014-2017)

- Founder and Director of Prince Naif Health Science Research Center (2010- 2014)

- Founder and Director, Immunology Research Laboratory, College of Medicine, King Saud University, Saudi Arabia, (March 2009 to Present)

- Chairman, Department of Pediatrics, College of Medicine, KSU (2009-2011)

- Advisor for his Excellency, President of King Saud University (March 2008-2012)

- Senior Advisor, Health Holding Company (May 2023-Present)

- Founder & President of Saudi Society of Allergy, Asthma and Immunology (2009-2014)

- Senior Consultant of Saudi Health Council (March 2019- Dec 2020)



### Dr. Maartje Blom

LUMC Leiden, Netherlands

Introducing NBS for SCIDs in The Netherlands (2<sup>nd</sup> symposium) Maartje Blom, MD, PhD

is a clinical researcher working at the Laboratory for Pediatric Immunology at the Leiden University Medical Center in the Netherlands. She was the lead investigator of a largescale pilot study leading to implementation of newborn screening for severe combined immunodeficiency (SCID) in the Netherlands in 2021. Her current research focuses on newborn screening for other inborn errors of immunity such as XLA and on the use of genetic testing in newborn screening laboratories. In addition to her research activities, Maartje works as a pediatric resident at the academic hospital.



### **Mr Johan Prevot**

Executive Director of the International Patient Organisation for Primary Immunodeficiencies (IPOPI)

The patient/parent perspective of PIDs (2<sup>nd</sup> symposium) Johan Prevot has worked in the healthcare sector for over 22 years in the field of patient advocacy and health policy.

Mr. Prevot is the Executive Director of the International Patient Organisation for Primary Immunodeficiencies(IPOPI) which he joined in 2010. As such he is responsible for the implementation of IPOPI's global activities, awareness and advocacy campaigns as well as the strengthening of IPOPI's national member organisations network.

Mr Prevot is currently a Board member of several other organisations including the European Reference Network on Rare Primary Immunodeficiency, Autoinflammatory and Autoimmune diseases (ERN-RITA), the AGORA Foundation (Access to Gene Therapies for Rare Diseases) and the RECOMB research programme. He is also a Steering Committee Member of the Platform of Plasma Products Users (PLUS). Screen4Rare (newborn screening multistakeholder platform) and the International Coalition for Safe Plasma Proteins (ICSPP). Previously, Mr Prevot worked as Director of Health Policy Europe for the Plasma Protein Therapeutics Association (PPTA) until 2010 and served as a Board member of Health First Europe (HFE) until 2023.

Mr Prevot has throughout his career been an advocate for improving patient access to early diagnosis and treatment in the field of primary immunodeficiencies and other rare plasma related disorders. Access to diagnosis and treatment for primary immunodeficiencies and other rare plasma related disorders varies greatly from country to country and many people living with these conditions in developing countries still nowadays can not access their life enhancing and/or life saving therapies. Mr Prevot regularly represents patients' interests in policy discussions relating to early diagnosis and access to rare diseases therapies. He has also been an advocate for promoting equitable access to newborn screening and played a key role in the launch of the International Neonatal Screening Day (INSD). He has and continues to work closely with other stake holder or ganisations sharing common objectives and priorities.



### **Prof. Claire Booth**

**GOSH, London, UK** 

Gene therapy for immunodeficiency (2<sup>nd</sup> symposium)

#### Prof Claire Booth, MBBS PhD

is a Gene Therapist and Paediatric Immunologist at UCL Great Ormond Street Hospital Institute of Child Health in London and leads the clinical stem cell gene therapy programme. She graduated from Guy's. King's and St. Thomas' School of Medicine in 2001 and then trained in Paediatrics, subspecialising in Paediatric Immunology and Immunodeficiency. She undertook a Wellcome Trust funded PhD at UCL developing haematopoietic stem cell gene therapy, with continued NIHR and Wellcome Trust post-doctoral support to establish her own research group. She was appointed as a Consultant in Paediatric Immunology at Great Ormond Street Hospital in 2014. Claire now works as a clinical academic leading an expanding number of gene therapy clinical trials at Great **OrmondStreetHospitalwhichtreatspatientswithimmune** deficiencies, hae matological and metabolic disorders. Her lab group is focused on developing novel therapies for immune system disorders using both gene therapy/gene editing and targeted small molecules. She has extensive experience of translating, leading, and delivering first in human clinical trials and the commercialisation pathway. As an attending physician she oversees the clinical management of patients with immune deficiencies. including hematopoietic stem cell transplantation and maintains a strong interest in HLH disorders.

Claire is an internationally recognised expert in gene therapy and immunology, an elected board member of the European Society of Gene and Cell Therapy, Chair of the International Committee of the American Society of Gene and Cell Therapy and previously served two terms on the board of the British Society. She serves on the editorial board of several journals and grant review committees and holds an honorary position at Boston Children's Hospital/Dana Farber Cancer Institute and Harvard Medical School.

She is also the co-founder of the AGORA initiative (Access to Gene therapies fOr Rare disease) which has founding members across 6 European countries and brings together clinicians and scientist with direct experience of developing and delivering ex vivo gene therapies for rare diseases, aiming to facilitate access to effective gene therapies for treatment of patients with ultra-rare diseases.



## Prof. Fatma Al Jasmi

### Chair Department of Genetics & Genomics. Tawam Hospital

UAE – TBC (3<sup>rd</sup> symposium)

#### Fatma Al Jasmi, MBBS, FRCPC, FCCMG

Prof.AlJasmiisChairofGenetic&Genomicdepartment, at College of Medicine & Health science, UAE University, Al Ain. Metabolic consultant at Tawam Hospital. She did her undergraduate studies at UAE University, UAE and graduated in 2000 with bachelor's in medicine and health science. She pursued her postgraduate studies at University of Toronto, and Hospital for Sick Children, Canada. In 2006, Prof. Al Jasmi received Canadian Board of Pediatrics after completing the Pediatric residency program. Subsequently, she did her fellowship in biochemical genetics and in 2008 and certified with Canadian College of Medical Genetics Board (Biochemical Genetics). She participated in the expanding of national newborn screening and the premarital screening pilot study using Whole Exome sequencing. She organized and participated in numerous national and international conferences aiming to advance rare diseases community awareness, education and clinical sciences. She collaborated with numerous national and international clinical scientist to enhance rare metabolic disease research and clinical service. Prof. Al Jasmi research involved Oxygen analyzer as a screening tool for disorders of impaired cellular bioenergetics, prevalence of inborn errors of metabolisminUnitedArabEmirate.Newbornscreening in UAE, Whole exome sequencing for inborn errors of metabolism, mitochondrial DNA variation, lysosomal storage disorders, Peroxisomal disorders in addition to identification of biomarker for propionate metabolism. Dr. Al Jasmi is one of the founder of UAE rare disease society. Prof. Al Jasmi established the UAEU genomic lab and biochemical Genetic Fellowship at UAEU in collaboration with Tawam hospital and graduated two prominent Emirati consultants. She is recipient of Prime Minister Award for excellence

in a specialized job (2017) Chancellors' Innovation Award (2015) Women in Science (WiS) Hall of Fame as an outstanding woman in science throughout the Middle East North Africa region (2015) and L'Oreal UNESCO For Women in Science Pan Arab award (2013) Sheikh Rashid Bin Saeed Al-Maktoum Award for Excellent Achievements in Medicine (2000).



## Dr. Amal Mohamed Jasem Al Tenaiji

Sheikh Khalifa Medical City, Abu Dhabi, UAE

Role of Metabolomics in the diagnosis of rare disease (3<sup>rd</sup> symposium) Dr. Amal Mohamed Jasem Al Tenaiji is a Consultant Pediatric Metabolic Geneticist and Head of the Pediatric Genetics Division at Sheikh Khalifa Medical City. Sheisthe Head of the SEHA Genomic Committee in Abu Dhabi, a member of the Institutional Review Board and Research Ethics Committee at SKMC, a Fellow of the Canadian College of Medical Genetics (CCMG) and a founding Board member of the UAE Rare Disease Association.

Dr. Al Teneiji completed her Bachelor of Medicine, Bachelor of Surgery at the College of Medicine and Health Sciences at UAE University and her Clinical Fellowship in Biochemical Genetics at the University of Toronto, Canada. She has received a Certificate of Clinical Fellowship Training in Clinical Biochemical Genetics, and is certified by the Arab Board Specialty in Paediatrics (CABP) and a Fellow of Canadian College of Medical Genetics - Clinical Biochemical Genetics. She is also a member of the Royal College of Pediatrics and Child Health in the UK.



## **Dr. Chloe Mak**

Hong Kong Children's Hospital

Establishment of a Rare Disease Registry with Artificial Intelligence Integrating Laboratory and Clinical Data (3<sup>rd</sup> symposium)

#### Mak Miu Chloe

Present PositionConsultant Pathologist (Chemical Pathology Division and Newborn Screening Laboratory)

Corresponding Address Department of Pathology, Hong Kong Children's Hospital, Hong Kong QUALIFICATIONS & EDUCATION

2012 MD, the University of Hong Kong, thesis "Chemical pathology analysis of inborn errors of metabolism for expanded newborn screening in Hong Kong"

2011 Scope of Practice in Genetic Pathology, the
Royal College of Pathologists of Australasia (RCPA)
2008 PhD in Chemical Pathology, the Chinese
University of Hong Kong

2007 Specialist in Chemical Pathology, the Medical Council of Hong Kong

2006 Fellowship in Chemical Pathology, the Hong Kong College of Pathologists

2005 Fellowship in Chemical Pathology, RCPA

2003 MSc in Health & Hospital Management by the University of Birmingham and the Management Society for Healthcare Professionals HK

2001 Postgraduate Diploma of Epidemiology and Biostatistics, CUHK

1994 - 1999Bachelor of Medicine & Bachelor ofSurgery, HKU

MAJOR APPOINTMENTS AND POSITIONS IN ACADEMIC SOCIETIES

2019 – present IFCC Committee Member of Emerging Technologies in Pediatric Laboratory Medicine (C-ETPLM)

2020 – present Examiner in Chemical Pathology, RCPA

2017 - 2023 Task force of the Newborn Screening Programme for Inborn Errors of Metabolism, joint with the Department of Health and the Hospital Authority, with the direction stated in the Policy Address 2017

2018 – 2019 Chief Examiner in Chemical



Dr. Ahmad Abou Tayoun

Al Jalila Childrens Hospital, Dubai, UAE

Role of NGS in diagnosing undiagnosed diseases in Middle East (Closing Plenary) Ahmad Abou Tayoun is the Director of the Genomics Center of Excellence at Al Jalila Children's, and an Associate Professor of Genetics at Mohammed Bin Rashid University of Medicine and Health Sciences. He completed his doctoral studies in genetics at Dartmouth College, followed by a fellowship in molecular diagnostics at Dartmouth Medical School. In 2013, he joined Harvard Medical School where he completed his clinical molecular genetics fellowship and, in 2015, became board-certified by the American Board of Medical Genetics and Genomics (ABMGG). Dr. Abou Tayoun is a fellow of the American College of Medical Genetics and Genomics (ACMGG).

Prior to joining Al Jalila Children's, he was a director in the Division of Genomic Diagnostics at the Children's Hospital of Philadelphia, and also an assistant professor of Pathology and Laboratory Medicine at the University of Pennsylvania Perelman School of Medicine. At Al Jalila Children's, Dr. Abou Tayoun established the Genomics Center of Excellence, the first comprehensive, CAP-accredited pediatric genomic diagnostics facility in the UAE.

Dr. Abou Tayoun's main research interests are centered around characterizing the genomic landscape of rare pediatric diseases in the Middle East and cataloguing the normal genetic variation in this population. In addition, his research focuses on implementing new technologies or approaches to enable faster and more effective genomic diagnostics in the Middle East.

Dr. Abou Tayoun serves on several expert groups in his field. He is a co-chair of the Clinical Genome Resource (ClinGen) Hearing Loss Expert Group, a member of the ClinGen Sequence Variant Interpretation (SVI) group, a member of the American College of Genetics and Genomics Interpreting Sequence Variants (ISV) workgroup, and an associate member of the Human Pangenome Consortium. In those capacities, Dr. Abou Tayoun is working with international experts to establish guidelines and recommendations for sequence variant interpretation in genomic diagnostic settings. He has authored or co-authored over 100 peer-reviewed publications in his field.



## By Air

The best way to get into Dubai is via air. Dubai has the metropolis airport of the emirates. Flights land here from all countries. Some popular airports in Dubai are Al Maktoum International Airport that is 32km southwest Dubai in Jebel Ali. Second Airport is Dubai International Airport which is located in Dubai itself. Third airport is Sharjah International Airport which is located in Sharjah. Another airport is Abu Dhabi International Airport. It is located in Emirates of Abu Dhabi. All the above are international airports.

# Registration

### **Registration Fee**

Full registration

€ 100

Young registration <35

€ 75

All delegates must register for the meeting.

The online registration system will be open from January 2024.

The Congress' official language will be English.

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 desk. It must be always worn.

All properly registered attendees will be entitled to receive a certificate of attendance.

Certificates of attendances will be sent via e-mail after the end of the Congress.



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