



11-14 NOVEMBER

PM&FG 2023
PRECISION MEDICINE &
FUNCTIONAL GENOMICS

AGENDA





CONFERENCE DESCRIPTION

In our quest to make Qatar a leading hub for research and innovation and building on the success of our previous eight years, Sidra Medicine is excited to announce that its annual flagship conference, Precision Medicine and Functional Genomics (PMFG 2023), is scheduled to take place on November 11-14, 2023, in Doha, Qatar. As part of its National Vision 2030, Qatar is committed to establishing a knowledge-based economy in the biomedical and health sciences. Sidra Medicine supports this goal by actively engaging clinical and scientific expertise to become a leading model for Precision Medicine in the region.

PMFG 2023 is a four-day in-person conference and will revolve around four major themes:

- Large-scale population genomic programs from around the world.
- Innovations in functional assays to elucidate disease mechanisms.
- Advanced therapies for rare/orphan disorders and cancer.
- Population and newborn screening policies and precision public health.

This conference will assemble a unique and highly interdisciplinary international community to provide novel insights on the molecular mechanisms underlying genetic diseases and the strategies used to develop advanced therapies.

Target Audience: Scientists & Physicians; Genetic counselors; Bioinformaticians; Nurse practitioner and physician assistants; Lab professionals; Pharmacists; Allied Health; Public Health; Public Policy; Biotech Industry; Students.

At the end of the Conference, the participants will be able to:

- Learn about coordinated efforts to develop Precision Medicine around the world and specifically in the Middle Eastern region.
- Understand how large-scale population genomic programs from around the world contribute to precision medicine.
- Learn about innovations in functional assays and how they have been implemented to elucidate disease mechanisms.
- Discuss how advanced therapies for rare/orphan disorders and cancer have contributed to precision medicine.
- Understand the value of population/newborn screening policies and their impact on precision public health.

YOUNG SCIENTISTS SYMPOSIUM (NOVEMBER 9) AND GENOME EDITING WORKSHOP (NOVEMBER 15-16)

The **PMFG Young Scientists Symposium (YSS)** is being organized by and for graduate students, post-docs, and other scientists with comparable levels of experience alongside clinical fellows and residents and other clinicians of similar experience levels. The theme of this year's symposium is "The Impact of Biomedical Research on Patient Care".

Keynote Speaker: Dr. Paul Bastard (University of Paris, Inserm, AP-HP, France); Mentorship Session: Dr. Safia Danovi (Senior Editor, Nature Genetics) and Dr. Elizabeth Phimister (Deputy Editor, The New England Journal of Medicine). The symposium also features talks from excellent juniors from around the region: Dr. Idil Ahme (Qatar Biomedical Research Institute, Qatar), Ms. Sara Albasha (Mohammed Al-Mana College for Medical Sciences, KSA), Ms. Omaira Al-Saei (University College London, UK), and Ms. Reem Hasna (Sidra Medicine, Qatar) and many more.

The **Genome Editing Workshop** will offer theoretical basis of gene editing and practical examples presented by renowned experts in the field in the context of different pathological models. Moreover, existing hurdles and the design of successful gene editing experiments will be discussed. The workshop will also include a practical demonstration of experimental flow and advanced platforms utilized for gene editing, providing the attendees the opportunity for a live experimental experience.

Speakers: Dr. Karim Benabdel Lah El Khlanji (GENYO-University of Granada, Spain); Dr. Yonglun Luo (Aarhus University, Denmark); Dr. Mario Amendola (INSERM, France).



DAY 1: LARGE-SCALE POPULATION GENOMIC PROGRAMS

TIME	DESCRIPTION	SPEAKER
12:00 pm - 1:00 pm	Registration/Check-in	
1:00 pm - 1:05 pm	Opening Remarks	Dr. Bernice Lo and Dr. Matteo Avella PMFG 2023 Chairs Dr. Khalid Fakhro Chief Research Officer, Sidra Medicine
1:05 pm - 1:10 pm	Opening Remarks	Dr. Salih Al Marri Asst. Minister for Health, Ministry of Public Health
1:10 pm	Afternoon Session: A Global Precision Medicine Endeavor: The Qatar Genome and Major Sequencing Programs from the MENA Region for Unraveling and Mapping Human's Genetic Diversity Learning objectives: <ul style="list-style-type: none"> Gain insights into the significance and impact of national genomic projects Explore how biobank-based research and large-scale genetic studies uncover causal relationships within Middle Eastern genetic variation, revealing novel disease mechanisms and informing healthcare practices Discover the latest advancements in regenerative medicine, computational methods for interpreting genomic variants in rare genetic diseases, and the role of genomic screening in identifying individuals at risk of diseases Session Chairs: Dr. Omar Albagha , A/Executive Director, Qatar Biomedical Research Institute (QBRI) Dr. Hamdi Mbarek , Scientific and Industry Partnerships manager, Qatar Genome Programme	
1:10 pm - 2:00 pm	Keynote Lecture: Transforming Genomics in Healthcare: Lessons Learned from the 100,000 Genomes Project	Sir Professor Mark Caulfield Vice Principal for Health Queen Mary University of London; Professor of Clinical Pharmacology, Faculty of Medicine and Dentistry; Director of the NIHR Barts Biomedical Research Centre
2:00 pm - 2:15 pm	Qatar Genome, a National Enabler of Precision Medicine	Dr. Said Ismail Director, Qatar Genome Programme, Qatar
2:15 pm - 2:30 pm	A biobank catalogue of transcriptomes and associated genetic effects based on 2,000 subjects uncovers the causal effects of Middle Eastern genetic variation and uncovers novel disease mechanisms	Dr. Younes Mokrab A/Director of Human Genetics Department, Sidra Medicine, Qatar
2:30 pm - 2:45 pm	Phenotype-driven Computational Methods for Interpreting Genomic Variants in Rare Genetic Diseases	Dr. Imane M Boudellioua Assistant Professor, Information and Computer Science Department, King Fahd University of Petroleum and Minerals, Saudi Arabia
2:45 pm - 3:00 pm	Regenerative medicine	Dr. Maryam Mohamed Fatima Matar MD PhD Founder and Chairperson, UAE Genetic Diseases Association – United Arab Emirates

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TIME	DESCRIPTION	SPEAKER
3:00 pm - 3:15 pm	Cardiovascular Genomics in Qatar	Dr. Jassim Mohammed Al Suwaidi Chief of Scientific, Academic and Faculty Affairs, Hamad Medical Corporation, Doha, Qatar
3:15 pm - 3:30 pm	Genomic screening reveal people with Dyslipidemia and at risk of cardiovascular disease	Dr. Fahad Al Zadjali Director, Center of Studies and Research, Ministry of Health, Oman
3:30 pm - 4:00 pm	COFFEE BREAK	
4:00 pm	Evening Session: Sidra's Clinical Research Programs Learning objectives: <ul style="list-style-type: none"> Gain insights into the breadth and depth of Sidra Medicine's clinical research programs Explore the achievements and real-world impact of Sidra Medicine's programs, with a focus on genetic and metabolic disorders, cancer, fertility/pregnancy complications, immune dysregulation, and neurological disorders Learn about the strategies and approaches employed by Sidra Medicine in the successful implementation and management of healthcare programs across various domains Session Chairs: Dr. Souhaila Al Khodor , Director, Division of Reproductive & Perinatal Health, Sidra Medicine Dr. Ibrahim Janahi , Division Chief, Pulmonology, Sidra Medicine	
4:00 pm - 4:05 pm	Introduction to Sidra Medicine clinical research programs	Dr. Khalid Fakhro Chief Research Officer, Sidra Medicine
4:05 pm - 4:20 pm	Genetic and metabolic disorders program	Dr. Ammira Akil Dr. Tawfeg Omran
4:20 pm - 4:35 pm	Cancer program	Dr. Cristina Maccali Dr. Ayman Saleh
4:35 pm - 4:50 pm	Fertility and pregnancy complications program	Dr. Annalisa Terranegra Dr. Spyridon Chouliaras
4:50 pm - 5:05 pm	Immune dysregulation program	Dr. Bernice Lo Dr. Mohammed Yousuf Karim
5:05 pm - 5:20 pm	Neurological disorders program	Dr. Ruba Benini Dr. Younes Mokrab
5:20 pm - 5:30 pm	Closing Remarks	Dr. Souhaila Al Khodor and Dr. Ibrahim Janahi Sidra Medicine
5:30 pm - 8:00 pm	END OF DAY 1 - DINNER - NIBBLING & NETWORKING: UNWIND AND CONNECT	



DAY 2: POPULATION/NEWBORN SCREENING AND PRECISION PUBLIC HEALTH

TIME	DESCRIPTION	SPEAKER
8:00 am	Morning Session: The Power of Precision Medicine and Genomics in Pediatric Healthcare Objectives: <ul style="list-style-type: none"> Explore the latest advancements in the treatment of type 1 diabetes, including novel paradigms and therapeutic approaches, to better understand and manage this chronic condition Gain insights into the Undiagnosed Disease Program at CHOP and its role in the field of precision medicine, focusing on how genomic and functional genomics approaches are revolutionizing the diagnosis and treatment of rare medical conditions Delve into the keynote presentation to understand how precision medicine and functional genomics are reshaping pediatric healthcare, offering new insights into disease mechanisms and personalized treatment strategies for children Session Chairs: Dr. Elizabeth Phimister , Deputy Editor, New England Journal of Medicine-NEJM, Dr. David Brown , Qatar Precision Medicine Institute, Doha, Qatar	
8:00 am - 8:05 am	Opening Remarks	Dr. Elizabeth Phimister NEJM Dr. David Brown Science and Programme Director, Qatar Precision Medicine Institute, Doha, Qatar.
8:05 am - 9:05 am	Keynote Lecture: Path to Precision Medicine: Advancing Human Health and Economic Impact at a National Scale	Dr. Ed Liu Jackson Labs, Professor, President Emeritus and Honorary Fellow
9:05 am - 9:30 am	Genetic newborn screening: the gate to genomic medicine	Dr. Alessandra Ferlini Associate Professor, University of Ferrara, Italy
09:30 am - 10:00 am	POSTER SESSION	
10:00 am - 10:25 am	New paradigms for the treatment of type 1 diabetes	Dr. Carmella Evans-Molina Director, Indiana Diabetes Research Center, Indiana University, USA
10:25 am - 10:50 am	Undiagnosed Disease Program at CHOP and Precision Medicine	Dr. Kathleen Sullivan Chief of the Division of Allergy and Immunology, Children Hospital of Philadelphia, USA
10:50 am - 11:35 am	Keynote Lecture: Rapid genome sequencing for newborn screening and inpatient diagnosis of genetic diseases	Dr. Stephen Kingsmore President/CEO of Rady Children's Institute for Genomic Medicine

DAY 2: POPULATION/NEWBORN SCREENING AND PRECISION PUBLIC HEALTH

TIME	DESCRIPTION	SPEAKER
11:35 am - 12:20 pm	Panel discussion: Precision medicine and functional genomics revolutionize pediatric healthcare	Dr. Ed Liu, Dr. Stephen Kingsmore, Dr. Kathleen Sullivan, Dr. Carmella Evans-Molina, Dr. Alessandra Ferlini Panel Chair: Dr. Khalid Fakhro Chief Research Officer, Sidra Medicine
12:20 pm - 1:45 pm	END OF SESSION: LUNCH, WORKSHOPS AND POSTER SESSION	
12:30 pm - 1:00 pm	Workshop 1: Qatar Scientific Toby Huang, Regional Director Middle East, MGI Workshop title: Breaking the \$100 Genome Barrier: Our Journey from Bp to Pb Workshop 2: Al Zahrawi Asem AlNatour (QIAGEN) The Future is Digital: Usage of QIAcuity dPCR Technology in Cell & Gene Therapy	
1:45 pm	Afternoon Session: Genomic Insights and Innovations, From Single-Cell Sequencing to Public Health Applications Learning objectives: <ul style="list-style-type: none"> Learn about advancing disease diagnosis with machine learning Gain insights into the capabilities of single-cell and single-strand sequencing techniques in characterizing genomes and understanding the consequences of mutations at a cellular level Future directions in genomic research: grasp the upcoming frontiers and possibilities in genomics for future research and applications in precision medicine Session Chairs: Dr. Nady El Hajj , Assistant Professor, Hamad Bin Khalifa University (HBKU) Dr. Jithesh Puthen Veettil , Associate Professor, HBKU	
1:45 pm - 1:50 pm	Opening Remarks	Dr. Nady El Hajj and Dr. Jithesh Puthen Veettil HBKU
1:50 pm - 2:05 pm	Novel machine learning perspective to improve transcriptomics and disease diagnosis	Dr. Halima Bensmail Qatar Computing Research Institute (QCRI), Doha, Qatar
2:05 pm - 2:30 pm	Characterizing genomes and mutation consequences by single-cell and single-strand sequencing	Dr. Ashley Sanders Group leader, Max Delbruck Center, Germany
2:30 pm - 2:55 pm	Beyond one T2T human genome: what's next?	Dr. Arang Rhie Staff Scientist, NIH, Bethesda, USA
2:55 pm - 3:20 pm	Translating results from large-scale genetic association studies into public health-relevant measures	Dr. Andrea Ganna Associate Professor, Institute for Molecular Medicine Finland, HiLIFE, University of Helsinki



DAY 2: POPULATION/NEWBORN SCREENING AND PRECISION PUBLIC HEALTH

TIME	DESCRIPTION	SPEAKER
3:20 pm - 3:40 pm	TITANIUM TALK MEDTECH - NON-CME accredited Getting off the cloud - On Premise Tertiary Analysis with Varsome Clinical	Abdulah Alissa (Saphetor)
3:40 pm - 4:10 pm	POSTER SESSION	
4:10 pm - 4:35 pm	The NIH kids first data resource: establishing cross disease collaborative cloud platforms for genomic discovery and clinical translation	Dr. Adam C. Resnick Director, Center for Data-Driven Discovery in Biomedicine (D3b), Children Hospital of Philadelphia
4:35 pm - 4:50 pm	Pharmacometabolomics of Metformin Treatment in Type 2 Diabetes Patients in Qatar	Dr. Mohamed Aghar N M Elrayess Director of Basic Research, Vice President for Medical and Health Sciences Office, Qatar University
4:50 pm - 5:05 pm	Qatar's path to precision psychiatry: the role of pharmacogenomics	Dr. Kholoud Bastaki Research Associate, Vice President for Medical & Health Sciences, Qatar University
5:05 pm - 5:20 pm	Neuroinflammation in atopic dermatitis as basis for precision medicine based and targeted therapies	Dr. Martin Steinhoff Professor & Chairman, Department of Dermatology and Venereology, Director of the HMC Translational Research Institute, Hamad Medical Corporation
5:20 pm - 5:30 pm	Closing Remarks	Session Chairs: Dr. Nady El Hajj Assistant Professor, HBKU Dr. Jithesh Puthen Veettil Associate Professor, HBKU

DAY 3: INNOVATIONS IN FUNCTIONAL ASSAYS THAT HELP MODEL DISEASE AND ELUCIDATE MECHANISM

TIME	DESCRIPTION	SPEAKER
TALKS SELECTED FROM ABSTRACTS		
8:30 am - 8:35 am	Opening Remarks	Session Chairs: Dr. Johnny Awwad Chair of Women's Services, Sidra Medicine Dr. Matteo Avella Principal Investigator, Sidra Medicine
8:35 am - 8:45 am	Implication of Functional Analysis in the Classification of Variants of Uncertain Significance (VUS) in Tunisian Patients	Marwa Mahdouani Higher Institute of Biotechnology of Monastir (ISBM), Tunisia
8:45 am - 8:55 am	A Robust OMIC-Based Approach Infers Insulin Resistance at Population Level and Identifies Novel Risk Modalities for Personalized Therapy	Dr. Ilhame Diboun Staff Scientist, Sidra Medicine, Doha, Qatar
8:55 am - 9:05 am	Unlocking ADPKD Mysteries: Leveraging Dysregulation in Urinary Exosome miRNA Profiles for Mechanistic Insights	Dr. Hamad Ali Associate Professor, Kuwait University's Health Science Center, Jabriya, Kuwait
9:00 am	Morning Session: Unveiling the Secrets of Germline Cells, Fertilization & Fertility Preservation & Restoration through Functional Genomics Learning bjectives: <ul style="list-style-type: none"> Explore functional genomics strategies and large-scale functional screening in gene-edited animals to identify novel molecular regulators of female and male fertility Gain insight into the role of germ cell culture and transplantation for fertility preservation and restoration Session Chairs: Dr. Johnny Awwad , Chair of Women's Services, Sidra Medicine Dr. Matteo Avella , Principal Investigator, Sidra Medicine	
9:05 am - 9:20 am	Progesterone triggers Xenopus oocyte maturation through two obligate co-receptors with PLA2 activity	Dr. Khaled Machaka Senior Associate Dean for Research, Weill Cornell, Qatar
9:20 am - 9:45 am	FcRL3, named MAIA, is a newly identified ligand for human sperm-oocyte membrane binding and fusion	Dr. Kateřina Komrsková Professor, Institute of Biotechnology of the Czech Academy of Sciences, Prague, Czech Republic
9:45 am - 10:10 am	Functional Genomics Strategies to Identify Novel Molecular Regulators of Male Fertility	Dr. Jon Oatley Associate Dean for Research; Director, Functional Genomics Initiative; Washington State University, USA
10:10 am - 10:35 am	POSTER SESSION	



DAY 3: INNOVATIONS IN FUNCTIONAL ASSAYS THAT HELP MODEL DISEASE AND ELUCIDATE MECHANISM

TIME	DESCRIPTION	SPEAKER
10:35 am - 11:00 am	iPCS mediated ovarian steroidogenic function recovery and neogametogenesis	Dr. Raymond Anchan Director, Stem Cell Biology and Regenerative Medicine Research Laboratory, Brigham and Women's Hospital and Founding Member Mass General Brigham, Boston, USA
11:00 am - 11:25 am	Is there a role for preventive medicine in gestational diabetes?	Dr. Gunnar Norstedt Center for Molecular Medicine, Karolinska Institute, Sweden
11:25 am - 11:30 am	Closing Remarks	Session Chairs: Dr. Johnny Awwad Chair of Women's Services, Sidra Medicine Dr. Matteo Avella Principal Investigator, Sidra Medicine
11:30 am - 11:50 am	TITANIUM TALK GULF SCIENTIFIC – NON-CME accredited Accelerate Oligonucleotide access: Enzymatic DNA Synthesis on your bench to enable a variety of SynBio and Genomics applications	Dr. Chiraz Khayat Product Management Director - DNA Script, GSC Partner
11:50 am - 1:30 pm	END OF SESSION: LUNCH, SPONSOR WORKSHOPS & POSTER SESSION	
12:00 pm - 12:30 pm	Workshop 1: MEDTECH Niall Hickey, PhD from Bionano Revolutionizing Cytogenomics with Optical Genome Mapping Workshop 2: Sedeer Dr. Walid ESSID Ph.D. Sr Technical Sales Specialist – Middle East & Pakistan, Genetic Testing Solutions, Thermo Fisher Scientific Middle East Dr. Ashok Ayyappa.K., PhD, Application Specialist- Diagnostics & Research Division, Sedeer Medical Services, Qatar Unlocking the Genetic Code of Healing: Pharmacogenomics in Precision Medicine	
1:30 pm	Afternoon Session: Advancements in Pediatric Precision Medicine: From Genomics to Disease Modeling Learning objectives: <ul style="list-style-type: none"> Gain insights into the development and application of chromatin accessibility signatures for predicting relapse in pediatric acute myeloid leukemia Explore the technologies and applications of adaptome analysis for a better understanding of immune system diversity and function Investigate the latest discoveries in novel genes, pathways, and mechanisms associated with pediatric neurodegeneration Session Chairs: Dr. Nicholas Van Panhuys Principal Investigator, Sidra Medicine Dr. Luis Saraiva Director, Disease Modeling and Therapeutics Division, Sidra Medicine	
1:30 pm - 1:35 pm	Opening Remarks	Session Chairs: Nicholas Van Panhuys and Luis Saraiva Sidra Medicine

DAY 3: INNOVATIONS IN FUNCTIONAL ASSAYS THAT HELP MODEL DISEASE AND ELUCIDATE MECHANISM

TIME	DESCRIPTION	SPEAKER
1:35 pm - 2:00 pm	Precision prediction and screening of type 1 diabetes	Dr. Richard Oram Associate Professor, Diabetes UK Harry Keen Fellow, University of Exeter, UK
2:00 pm - 2:25 pm	Adaptome Analysis: Technologies and Applications	Dr. Jian Han Hudson Alpha Institute for Biotechnology, USA
2:25 pm - 2:50 pm	Understanding diversity in the immune system	Dr. Stephan Nutt Professor, The Walter and Eliza Hall Institute of Medical Research, Victoria, Australia
2:50 pm - 3:15 pm	Novel Genes, Pathways, and Mechanisms of Pediatric Neurodegeneration	Dr. Elizabeth Bhoj Attending Physician, Children Hospital of Philadelphia; Assistant Professor, University of Pennsylvania School of Medicine, USA
3:15 pm - 3:40 pm	Opportunities and Challenges in Genome Projects	Dr. Alireza Haghghi Director, International Center for Genetic Disease, Harvard Medical School, and Founding Member Mass General Brigham, Boston, USA
3:40 pm - 4:05 pm	POSTER SESSION	
4:05 pm - 4:30 pm	Human Organ Chips for Disease Modeling, Drug Development, and Personalized Medicine (remote talk)	Dr. Donald Ingber Founding Director, Wyss Institute for Biologically Inspired Engineering, Harvard University, Boston, USA
4:30 pm - 4:45 pm	Association of smoking and oral microbiome with the incidence of cardiometabolic syndrome in Qatari population	Dr. Maha Al-Asmakh Associate Professor and Head, Department of Biomedical Sciences, College of Health Sciences, Qatar University
4:45 pm - 5:10 pm	A Joint Effort to Accelerate the Translation of Genome Editing Technology into Treatments of Human Diseases	Dr. Yonglun Luo Professor in Gene and Stem Cell Technology, Department of Biomedicine, Aarhus University, Steno Diabetes Center Aarhus, Aarhus University Hospital
5:10 pm - 5:25 pm	Genome editing for inherited skin disorders	Dr. Julia Reichelt Principal Research Scientist at Hamad Medical Corporation, Doha, Qatar
5:25 pm - 5:30 pm	Closing Remarks	Session Chairs: Nicholas Van Panhuys and Luis Saraiva Sidra Medicine



DAY 4: GROWING ROLES OF ADVANCED THERAPIES FOR RARE/ORPHAN DISORDERS AND CANCERS IN ADVANCING PERSONALIZED MEDICINE

TIME	DESCRIPTION	SPEAKER
8:30 am - 8:40 am	Opening Remarks	Session Chairs: Julie Decock Senior Scientist, Cancer Research Center, Qatar Biomedical Research Institute Sara Deola Principal Investigator, Sidra Medicine

TALKS SELECTED FROM ABSTRACTS

8:40 am - 8:50 am	Exploring the LDHC protein interactome as novel candidate therapeutic targets to advance breast cancer precision medicine	Dr. Mariam Elesnawy Qatar Biomedical Research Institute (QBRI), Doha, Qatar
8:50 am - 9:00 am	Deciphering the Cellular Impact of a Novel AVPR2 Mutation in X-Linked Recessive Nephrogenic Diabetes Insipidus: Insights and Therapeutic Avenues	Dr. Senthil Selvaraj Staff Scientist, Sidra Medicine, Doha, Qatar
9:00 am - 9:10 am	AI and Precision Medicine: Healthcare Data Fusion at a Population Level Relevant to Clinical Workflow for Patient-Centered Care	Dr. Walid Qoronfleh Executive Director, Q3 Research Institute, Ann Arbor, USA
9:10 am	Morning Session: Functional Genomics in Cancers Objectives: <ul style="list-style-type: none"> Explore how advancements in molecular profiling, including methylation analysis, are reshaping our approach to diagnosing and managing CNS tumors Examine the successes and challenges of applying precision medicine to the treatment of rare pediatric cancers Understand how the identification and utilization of biomarkers can enhance clinical management, leading to more precise and personalized treatment strategies Session Chairs: Julie Decock Senior Scientist, Cancer Research Center, Qatar Biomedical Research Institute Sara Deola Principal Investigator, Sidra Medicine	
9:10 am - 9:35 am	Changing Landscape of CNS Tumors; the impact of Methylation	Dr. Maysa Al-Hussaini Consultant Histopathologist/Neuropathologist, King Hussein Cancer Center, Jordan
9:35 am - 9:50 am	Predicting relapse in pediatric acute myeloid leukemia using chromatin accessibility signatures	Dr. Borbala Mifsud Assistant Professor, College of Health and Life Sciences, Hamad Bin Khalifa University, Doha, Qatar
9:50 am - 10:10 am	TITANIUM TALK SEDEER MEDICAL - NON-CME accredited A Complete Single-Cell Multi-Omics Solution	Ms. Ghida Majed Sleiman Regional Marketing Manager, MEA, BD Biosciences
10:10 am - 10:40 am	POSTER SESSION	

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TIME	DESCRIPTION	SPEAKER
10:40 am - 11:35 am	Keynote Lecture: Precision Medicine for Rare Pediatric Cancers: Lessons Learned and Future Directions	Dr. Ted Laetsch Children's Hospital of Philadelphia, USA
11:35 am - 12:05 pm	Biomarker Discovery, Validation, Assay Development and Implementation: Improving Clinical Management in Early Breast and Prostate Cancers	Dr. Jane Bayani Co-Director, Diagnostic Development, and Principal Research Scientist, Ontario Institute for Cancer Research, Canada
12:05 pm - 12:10 pm	Closing Remarks	Session Chairs: Dr. Julie Decock Qatar Biomedical Research Institute Dr. Sara Deola Sidra Medicine
12:10 pm - 1:30 pm	END OF SESSION: LUNCH AND POSTER SESSION	
12:20 pm - 12:50 pm	Workshop 1: Gulf Scientific Owen Hughes, GSC Partner Beyond the 'omics: Flow Cytometric tools for deep insights into phenotype and function Workshop 2: New England Biolabs GmbH Dr. Kermen Bolaeva, Area sales representative Middle East & CIS Challenging samples for NGS library prep with NEBNext product line	
1:30 pm	Afternoon Session: Precision Medicine in Cancer (in person-online hybrid with SITC) Objectives: <ul style="list-style-type: none"> Explore the utilization of patient-derived platforms to gain clinical insights and a deeper understanding of the mechanism of action of therapeutic interventions Learn novel strategies for improving the affordability and accessibility of the use of CAR-T cell and gene-modified cell therapies Understand the role of initiatives like the Molecular Neuropathology Outreach Consortium in enhancing diagnostic precision and treatment planning on a global scale Session Chairs: Dr. Rimas Orentas Scientific Director, Caring Cross, USA Dr. Wouter Hendrickx Principal Investigator, Sidra Medicine, Qatar	
1:30 pm - 1:35 pm	SITC Session - Intro by session chairs	Dr. Rimas Orentas Scientific Director, Caring Cross, USA Dr. Wouter Hendrickx Principal Investigator, Sidra Medicine, Qatar
1:35 pm - 1:55 pm	Driving clinical line of sight and insights into mechanism of action using patient derived platforms	Dr. Douglas C Palmer Executive Director, AstraZeneca, USA
1:55 pm - 2:15 pm	Engineered T or NK cell immunotherapy (remote lecture)	Dr. Evelyn Ullrich Professor, Goethe University, Frankfurt am Main, Germany



DAY 4: GROWING ROLES OF ADVANCED THERAPIES FOR RARE/ORPHAN DISORDERS AND CANCERS IN ADVANCING PERSONALIZED MEDICINE

TIME	DESCRIPTION	SPEAKER
2:15 pm - 2:35 pm	Improving affordability and access of CAR-T Cell and other gene modified cell therapies	Dr. Boro Dropulic Caring Cross & Vector Biomed, Gaithersburg, USA
2:35 pm - 2:55 pm	POSTER SESSION	
2:55 pm - 3:15 pm	Discovery of brain penetrant ALK2 inhibitors for DIPG (remote lecture)	Dr. Rima Al-awar Head of Therapeutic Innovation and Drug Discovery, OICR, Canada
3:15 pm - 3:35 pm	Allowing the global availability of methylation-based classification tools of CNS tumors and sarcoma through the Molecular Neuropathology Outreach Consortium	Dr. Olfat Ahmad Clinician Scientist Fellow, German Cancer Research Center, Heidelberg, Germany
3:35 pm - 3:45 pm	Empowering precision: the central role of patient organizations in tailored cancer treatments	Dr. Hadi Mohamad Abu Rasheed Head of the Cancer Awareness and Professional Development, Qatar Cancer Society
3:45 pm - 3:55 pm	Advanced therapies manufacturing in Qatar	Dr. Chiara Cugno Director of Advanced Cell Therapy Core and Attending Physician in Pediatric Oncology and Hematology, Sidra Medicine
3:55 pm - 4:25 pm	Panel discussion	Dr. Boro Dropulic, Dr. Olfat Ahmed, Dr. Douglas Palmer, Dr. Rima Al-Awar
4:25 pm - 4:30 pm	SITC Session Closing Remarks	Dr. Rimas Orentas Scientific Director, Caring Cross, USA Dr. Wouter Hendrickx Principal Investigator, Sidra Medicine, Qatar
4:30 pm - 4:45 pm	BEST POSTER AWARDS AND BEST SIDRA MEDICINE PAPER AWARDS WITH GULF SCIENTIFIC, SEDEER & ILLUMINA-MEDTECH	
4:45 pm - 5:00 pm	PMFG 2023 Closing Remarks	Dr. Khalid Fakhro, Dr. Bernice Lo, Dr. Matteo Avella

"This activity is an Accredited Group Learning Activity (Category 1) as defined by the Ministry of Public Health's Department of Healthcare Professions-Accreditation Section and is approved for a maximum of 27 hours for Category 1"

In support of improving patient care, Sidra Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

The Scientific Planning Committee has reviewed all disclosed relevant relationships of speakers, moderators, facilitators, and/or authors in advance of this CPD activity and has implemented procedures to manage any potential or real conflicts of interest.



See you in Doha next year for
PMFG 2024!





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