



CUDOS 2018

Doha-Qatar



Conference Series on Understanding molecular mechanisms in cardiovascular biology, Diabetes, Obesity and Stroke (CUDOS)

CUDOS 2018: *Childhood Diabetes: From Novel Discoveries to Clinical Practice*

22-24th September, 2018

Qatar National Convention Centre, Doha, Qatar

CUDOS meetings series aim to target areas of human health related to underlying mechanisms of metabolic disease, disease biomarkers and therapeutic options. This year, we focus on childhood diabetes, aiming to bring together a three-day conference with talks specifically discussing the current research innovation in diabetes technologies and treatment strategies for mothers and children with or at risk of diabetes. The conference brings together a wealth of international research expertise whilst identifying key research strengths and capabilities relevant to developing future research programs in understanding the health of women and children with type 1 diabetes.

The key objectives are:

- To identify, discuss and understand the research priorities for Type 1 diabetes in Qatar
- Facilitate research development in understanding the environmental determinant of Type 1 diabetes
- Encourages collaboration and communication between academia, clinicians, government and non-profit research funding agencies, commercial organisations and the type 1 diabetes community
- Understand the potential in development of newer technologies for a cure to childhood obesity and Type 1 diabetes.

Key speakers:



Professor the Lord Darzi of Denmark



Sheikh Dr. Mohammed Bin Hamad Al-Thani



Professor Christof von Kalle



Professor Ziyad Hijazi



Professor Jennifer Couper



Professor Joseph Wolfsdorf



Professor Antony Keech



Professor Abdul-Badi Abou-Samra



Dr. Aaron Kowalski



Professor Torben Hansen



Professor José M Ordovás



Professor Chittaranjan Yajnik



Professor Anders Carlson



Professor Tadej Battallino



Professor Kristina Ingeborg Rother



Professor Deborah Christie

Program Agenda

Day 1, Saturday 22nd September 2018

Registration 7:00-12:00 PM	
7:00 -8:00 AM	Exhibitors and Sponsors Welcome Reception Conference Exhibition Hall-QNCC (60 minutes)
8:00-8:50 AM	Opening and Welcoming Remarks
8:00-8:15 AM	Opening -1 Talk Title: "TBD" Professor the Lord Darzi of Denham Vice Chair of the Board of Governors for Sidra Medicine
8:15-8:30 AM	Opening -2 Talk Title: "TBD" Sheikh Dr. Mohammed Bin Hamad Bin J. Al-Thani Director of Public Health Department, Ministry of public Health, Qatar
8:30-8:35 AM	Welcoming-1 Talk Title: "TBD" Professor Christof von Kalle Chief Research Officer, Sidra Research Branch, Sidra Medicine, Qatar
8:35-8:45 AM	Welcoming-2 CUDOS series chair The CUDOS Conference Series Dr. Ammira-Sarah Akil Sidra Research Branch, Conference Chair and Organizer, Sidra Medicine, Qatar
8:50-9:00 AM	Short Break
CONFERENCE KEYNOTE OPENING LECTURE	
9:00- 9:40 M	CONFERENCE KEYNOTE LECTURE Talk Title: "TBD" Professor Joseph Wolfsdorf President, International Society for Pediatric and Adolescent Diabetes (ISPAD) Director of Diabetes Program, Boston Children Hospital, Boston, MA, USA
DAY-I- SESSION-I	Genetics and Environmental Triggers and Determinants of Type 1 Diabetes
Learning Objectives	<i>To learn the specific role of genetic susceptibility and environmental factors triggering and driving pancreatic cell destruction in type 1 diabetes</i>
9:40-10:20 AM	Type 1 diabetes genetics: Lost in translation? KEYNOTE LECTURE of SESSION I Professor Flemming Pociot Steno Diabetes Center Copenhagen, Herlev and Gentofte Hospital and Copenhagen Diabetes Research Center (CPH-DIRECT), Copenhagen, Denmark
10:20-10:35 AM	Prevalence of Type 1 Diabetes in Qatar SPECIAL LECTURE Dr. Abdulla Al Hamaq Executive Director, Qatar Diabetes Association, Qatar
10:35-11:05 AM	Sponsors/exhibitors Interactive Refreshment Break

11: 05-11:25 AM	<p>ENDIA Study: Exploring the Developmental Origins of Type 1 Diabetes</p> <p>EXPERTS LECTURE- SKYPE VIDEO CALL</p> <p>Dr. Ammira-Sarah Akil &</p>
11:25-11:55 AM	<p>Professor Jennifer Couper Head of Pediatrics and Reproductive health, women's and children's hospital, University of Adelaide, Adelaide, Australia and, Research Branch, Human Genetics department, Sidra Medicine, Doha, Qatar</p>
12:00-01:00 PM	Sponsors/exhibitors Interactive Lunch Break and Poster Viewing Session
DAY-I-SESSION II	Clinical Diabetes, Acute and Chronic Complications
Learning Objectives	<i>To understand the complex nature of clinical diabetes and to determine the complications of childhood diabetes and the factors that influence them</i>
1:00-1:40 PM	<p>Perspective on Cardiovascular Disease due to Childhood Diabetes</p> <p>KEYNOTE LECTURE SESSION-II</p> <p>Professor Kristina Ingeborg Rother Chief, Section on Pediatric Diabetes and Metabolism, Diabetes, Endocrinology, and Obesity Branch, National Institute of Health NIH, MA, USA</p>
1:40-2:10 PM	<p>Hypertension in Obese and Diabetic Children</p> <p>SPECIAL LECTURE</p> <p>Dr. Ibrahim Shatat Medical Director - Nephrology and Hypertension Unit, Pediatrics Department, Sidra Medicine, Qatar</p>
2:10-2:35 PM	<p>Childhood Obesity: Complications and New Challenges in Treatment</p> <p>Dr. Elvira Verduci Institute of Pediatrics, University of Milan, Milano, Italy</p>
2:35-3:05PM	<p>Genetics and Epigenetics of Diabetic Complications</p> <p>Professor Ronald Ma Department of Medicine and therapeutics, faculty of Medicine, the Chinese University of Hong Kong</p>
3:10-3:40 PM	Sponsors/exhibitors Interactive Refreshment Break
Day-I- SESSION III	Nursing and Healthcare Strategies in Childhood Diabetes
Learning Objectives	<i>To understand and learn the critical role of diabetes care providers cooperatively dealing with children and families of individuals with diabetes, toward the goals of accomplishing excellent clinical and psychological outcomes for children with diabetes</i>
3:40-4:10PM	<p>Why Psychology Matters in Diabetes</p> <p>SPECIAL LECTURE</p> <p>Professor Deborah Christie University College London Hospitals UCLH, London, UK</p>
4:10-4:35PM	<p>Structured Education in Diabetes Technologies</p> <p>Judith Campbell Nurse Practitioner, Pediatric Endocrinology Department, Sidra Medicine, Qatar</p>
4:35-5:00 PM	<p>Diet and Diabetes</p> <p>Hannah Fisher Dietician Nurse, Sidra Medicine, Qatar</p>

	Registered Dietitian, Clinical Nutrition and Dietetics department
5:00-5:30 PM	The impact of parental obesity and early childhood events EXPERT LECTURE-CLOSING TALK OF DAY-1 Professor Margret Morris Head, Environmental determinants of obesity group, University of New South Wales, Sydney, Australia
5:35-5:40PM	CLOSING REMARKS- CONFERENCE DAY 1

Day 2, Sunday 23rd September 2018

7:00-12:00 PM Registration	
7:00 -7:40 AM	Meet and Greet with the Conference Exhibitors and Sponsors Conference Exhibition Hall-QNCC (40 Minutes)
7:45-8:15 AM	OPENING RESEARCH DAY-2 SPECIAL LECTURE –Research with JDRF. Dr. Aaron Kowalski Juvenile Diabetes Research Fund “JDRF’s” International Chief Mission officer, New York, USA
DAY-II- SESSION I	New Technologies, Clinical Trails and Therapeutic Approaches for the Management of Childhood Diabetes.
Learning Objectives	<i>To learn about new technologies and recent products for the treatment, monitoring, diagnosis, and prevention of childhood diabetes and its complications</i>
8:15-8:55 AM	Genetics of early onset non-autoimmune diabetes – insights into improved diagnostic and treatment strategies KEYNOTE LECTURE of SESSION –I Professor Torben Hansen Scientific Director, Novo Nordisk Foundation Centre, University of Copenhagen, Denmark
8:55-9:25 AM	Tackling Obesity in Qatar SPECIAL LECTURE Professor Sharhad Taheri Consultant Endocrinology, HMC, Assistant Dean for Clinical Investigations, WCMC, Qatar
9:25-09:50 AM	Clinical Implementation on Technology in Type 1 Diabetes Professor Goran Petrovski Diabetes consultant, Pediatric Endocrinology, Sidra Medicine, Qatar
09:50-10:15 AM	Continuous Glucose Monitoring Study Group. Continuous Glucose Monitoring and Intensive Treatment of Type 1 Diabetes Professor Alicia Jenkins NHMRC Clinical Trials Centre, Sydney Medical School, University of Sydney, Australia
10:15-10:45 AM	Sponsors/exhibitors Interactive Refreshment Break
	EXPERT LECTURE
10:45-11:10 AM	Hybrid closed loop insulin delivery Professor Anders L. Carlson Medical Director, International Diabetes Center (IDC), Park Nicollet Health Services, Minnesota, USA
DAY-II- SESSION II	Young Qatari Investigators in the Medical Sciences-Track 1
Learning Objectives	<i>i. To encourage young Qatari scientists in expanding their science skills and developing research pathways that meets Qatar’s long-term development goals. ii. Motivating the young investigators toward enthusiastic education in medical research toward building Qatar’s knowledge-based health system.</i>
11:15- 11:23 AM	Poly-Malformative Cohort Sequencing Study

	Dr. Aljazi Al-Maraghi Post-Doctoral Fellow, Human Genetics, Research Branch, Sidra Medicine
11:23-11:31 AM	Talk Title “TBD” Njoud Al-Naama Research Specialist II, Dermatology Research Unit, Research Branch, Sidra Medicine
11:31-11:39 AM	Talk Title: “TBD” Speaker name: TBD
11:39-11:47 AM	Determining the key dendritic cell factors required for the induction of the allergic response Khalid Al Lakhen Graduate Associate, Asthma and Allergy Lab Department, Research Branch, Sidra Medicine
11:50-12:00 PM	Talk Title: “TBD” Selected Abstract I for Oral Presentation Speaker name: TBD
	SPECIAL LECTURE
12:00-12:30 PM	Biomarkers and Mechanisms of β cell Stress in Type 1 Diabetes Professor Carmella Evans-Molina Director of islet physiology Core, Diabetes Research Centre, Indiana University, USA
12:30:1:30 PM	Sponsors/exhibitors Interactive Lunch Break and Poster Viewing Session
DAY-II- SESSION III	ASK THE EXPERTS-
Learning Objectives	<i>To learn about the current state-of-the-art efforts aiming to generate a sustainable source of functional human insulin-producing islet cells for cell transplantation as a treatment option</i>
	Pancreatic Islet Cellular Therapy Project in Qatar
1:30-2:20 PM	Presenter and Session Moderator: Professor Abdul Badi Abou Samra Chairman, Department of Medicine, Hamad Medical Corporation Director, Qatar Metabolic Institute, Hamad Medical Corporation
	Panelist: Professor Kristina Ingeborg Rother Chief of the Section on Pediatric Diabetes and Metabolism, National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), NIH, USA
	Panelist: A/ Professor Anand Hardikar Group leader, Diabetes and Islet Biology, NHMRC Clinical Trials Centre, University of Sydney, Australia
	Panelist Professor Bruce Verchere Departments of Surgery and Pathology & Laboratory, University of British Columbia (UBC), Vancouver, Canada
	Panelist: Professor Timothy Barrett Program Director for the Wellcome Trust Clinical Research Facility, Birmingham Children’s Hospital, UK
DAY-II-SESSION VII	Young Qatari Investigators in the Medical Sciences-Track 2
Learning Objectives	<ul style="list-style-type: none"> i. <i>To help creating the new generation of scientists and inventors to build Qatar’s knowledge-based economy and perceive the goals of Qatar National Vision 2030</i> ii. <i>To help the young investigators developing skills, confidence and engage them in an exciting learning experience</i>
02:20-02:27 PM	Understanding early onset Monogenic obesity in children Reem Hasnah

	Graduate Associate, Endocrinology Department, Sidra Medicine
02:27-02:34 PM	Whole genome sequencing of families with rare diseases in Qatar Alya Al- Kurbi Graduate Associate, Human Genetics, Research Branch, Sidra Medicine
02:34-02:41 PM	Research Methods to Study Human Gut Microbiome profile Omair Al Nuaimi Graduate Associate, Immunology, inflammation and Metabolism, Research Branch, Sidra Medicine
02:41 -02:48 PM	Genetic Characterization of Hearing Loss Patients in Qatar Moza Al-Kowari Research Specialist, Maternal Fetal Care, Research Branch, Sidra Medicine
02:50: 3:00 PM	Selected Abstract II for Oral Presentation Speaker name: TBD Presentation Title: TBD
3:00-3:30 PM	Sponsors/exhibitors Interactive Refreshment Break
DAY-II- SESSION VIII	PLENARY SESSION – Advanced Childhood Care in QATAR
Learning Objectives	<i>To learn about the significant advances and new technologies implemented by researchers and clinicians at Sidra Medicine with the aim of improving the health of Qatar’s population, existing and future generations and in coordination and to successfully achieve with Qatar National Vision 2030.</i>
3:30-4:00 PM	Percutaneous valve implantation for patients with defected pulmonary valves SPECIAL LECTURE- I Professor Ziyad Hijazi Chair of the Department of Pediatrics, Sidra Medicine, Qatar
4:00 -4:30 PM	Solving rare and complex pediatric disorders in the genomic ERA: the Qatari experience SPECIAL LECTURE- II A/ Professor Khalid Fakhro Director, Human Genetics, Research Branch, Sidra Medicine, Qatar
DAY-II- SESSION IX	Prevention of Childhood diabetes and it’s complications
Learning Objectives	<ol style="list-style-type: none"> i. <i>To learn why preventing diabetes and its complications from developing is so important especially in high-risk individuals and patients with type 1 diabetes.</i> ii. <i>To highlight the importance of educational interventions of several factors that can help prevent the incidence of type 1 diabetes or its complications</i>
4:30-5:00 PM	Primary Prevention of Childhood Diabetes: Promises and Challenges SPECIAL LECTURE Professor Mikael Knip Professor of Pediatrics, Chief Physician, Children's Hospital, University of Helsinki, Finland
5:00-5:25 PM	Ongoing Efforts and Types of Prevention of Childhood Diabetes Dr. Ahmed El Awwa Attending Physician Children’s Clinical Management Group, Division of Endocrinology, Sidra Medicine, Qatar
5:25-5:55 PM	Diabetes and Pregnancy Professor Badreldeen Ahmed

	Director, Feto Maternal Medical Centre, professor of gynecology, Weill-Cornell Medical College, Qatar
5:25-5:35 PM	CLOSING REMARKS- CONFERENCE DAY-II
7:00-10:00 PM	Conference Gala Dinner “to be removed from the final agenda” TBD

Day 3, Monday 24th September 2018

7:00-12:00 PM Registration	
7:00 -8:00 AM	Meet and Greet with the Conference Exhibitors and Sponsors Conference Exhibition Hall-QNCC
8:00-8:15 AM	VIP Opening speaker
8:15-8:30	
DAY-III- SESSION I	Molecular Mechanisms and clinical Pathophysiology of Childhood Diabetes
Learning Objectives	<ul style="list-style-type: none"> i. To investigate and understand the specific molecular mechanisms and susceptibility determinants by which, certain genetic factors can influence the diseases risk and outcomes ii. To improve in depth our understanding of the molecular pathology pathways of various types of diabetes in children and the role played by the main susceptibility factors iii. To learn about novel biomarkers discoveries and the potential therapeutic strategies
8:30-9:10 AM	Early Life Stages of Diabetes: Experience from Pune Cohort over three generations, India KEYNOTE LECTURE of SESSION –I Professor Chittaranjan S Yajnik Director, Diabetes Unit, KEM Hospital Research Centre, Pune, India
9:10-9:40 AM	Molecular Basis of Rare Types of Diabetes Mellitus EXPERT LECTURE Professor Khalid Hussain Division Chief of Pediatric Endocrinology and Program Director for Research for the Children’s Clinical Management Group, Sidra Medicine, Qatar
9:40-10:05 AM	Childhood Diabetes, Genetics, Epigenetics and Nutrition SPECIAL LECTURE Professor José M Ordovás Director, Nutrition and Genomics Laboratory, Gerald J. and Dorothy R. Friedman School of Nutrition Science and Policy, Human Nutrition Research Centre on Ageing - Tufts University, Boston, USA
9:05 – 10:30 am	Talk Title: “TBD” Dr. Richard Oram Harry Keen Fellow and Clinical Senior Lecturer, NIHR Exeter Clinical Research Facility University of Exeter Medical School, Exeter, UK.
10:30-11:00 AM	Sponsors/exhibitors Interactive Refreshment Break (30 Minutes)
11:00-11:25 AM	The Triple Interaction Diet-Microbiome-Epigenetic in Type 1 Diabetes Dr. Annalisa Terranegra Investigator in Nutritional Genomics and Metabolism, Research Branch, Sidra Medicine, Qatar
DAY-III- SESSION II	Pancreatic Islet Biology and Insulin Secretion
Learning Objectives	<ul style="list-style-type: none"> i. To understand the recent advances in predicting the progression to type 1 diabetes ii. To highlight interesting study designs and data interpretation approaches in order to advance experimental proposals directed on the molecular and physiological foundation of human islet cell dysfunction in childhood diabetes

11:25-12:05 PM	Development and validation of biomarkers for prediction of Type 1 diabetes KEYNOTE LECTURE of SESSION-II A/ Professor Anand Hardikar Head of Diabetes and Islet Biology Group at the NHMRC Clinical Trials Centre, University of Sydney, Australia
12:05-12:35 PM	Talk Title: "TBD" SPECIAL LECTURE Professor Timothy Barrett Program Director for Wellcome Trust Clinical Research Facility, Leonard Parsons Professor of Pediatrics and Child Health, The Medical School, University of Birmingham and Birmingham Children's Hospital, Birmingham, United Kingdom
12:35-1:35 PM	Sponsors/Exhibitors Interactive Lunch Break and Poster Viewing Session (60 Minutes)
1:35-2:00 PM	Insights into Cause and Consequences of Beta Cell Dysfunction in Diabetes Professor Bruce Verchere Departments of Surgery and Pathology & Laboratory Medicine, University of British Columbia, Vancouver, Canada
2:00-2:25PM	Immune-regulatory properties of human pancreatic islet-derived progenitor cells Dr. Mugdha Joglekar NHMRC Clinical Trials Centre, University of Sydney , Australia
2:25-2:50 PM	Circulating microRNAs altered by childhood obesity Professor Louise Dalgaard Department of Natural Science and Environment, Roskilde University, Denmark
2:50-3:00 PM	Selected Abstract III for Oral Presentation Speaker name: TBD Presentation Title: TBD
3:00-3:30 PM	Sponsors/exhibitors Interactive Refreshment Break (30 minutes)
DAY-III- SESSION III	Young Qatari Investigators in the Medical Sciences-Track 3
Learning Objectives	<ol style="list-style-type: none"> i. <i>To learn why public engagement and participation in scientific events is important for career and personal development</i> ii. <i>To enhance the presentation skills and develop personal confidence</i> iii. <i>Networking with some of the world best scientists and researchers</i> iv. <i>Identify future areas of research collaboration and development.</i>
3:35-3:42 PM	Genetic Analysis of Eye Disorders in the Qatari Population Omayma Al Saei Technologist II - Maternal Fetal Care, Research Branch, Sidra Medicine
3:42 -3:49 PM	The genetic basis of hypogonadism hypogonadotropic Asma Al-Naama Graduate Associate- Human Genetics, Research Branch, Sidra Medicine
3:49- 3:56 PM	Stem Cell Core Facility at Sidra Medicine Sharefa Al-Mannai Research Specialist II, Deep phenotyping core facility, Research Branch, Sidra Medicine
3:56-4:02 PM	Significance and utility of Graph Based Pan-Genomes for Population level genetics Mohammed Ibrahim Janahi Research Specialist II, Biology and Immunology Unit, Research Branch, Sidra Medicine

DAY-III- SESSION IV	PLENARY- BY THE EXPERT- SPECIAL SESSION
Learning Objectives	<i>To encourage and facilitate learning, develop knowledge, skills and attitudes and create a research environment which enable research institutions to set objectives, achieve results and solve problems.</i>
4:05-4:30 PM	<p>Talk Title: “TBD”</p> <p>Professor Tadej Battallino Consultant and Head of department of Pediatric and Adolescent Endocrinology University Children’s Hospital Ljubljana, Ljubljana, Slovenia</p>
4:30-5:00 PM	<p>Building Research Capacity to Answer Important Questions</p> <p>EXPERT LECTURE</p> <p>Professor Tony Keech Professor of Medicine, Cardiology and Epidemiology and Consultant Cardiologist, Royal Prince Alfred Hospital, and, Deputy Director of the NHMRC Clinical Trials Centre, Sydney Medical School, University of Sydney, Australia</p>
5:05 5:15 PM	AWARDS ANNOUNCEMENT
5:15-5:30 PM	CONFERENCE CLOSING REMARKS, SUMMARY & FAREWELL