PEDIATRIC PRESSE

CANADIAN SOCIETY OF TRANSPLANTATION PEDIATRIC GROUP NEWSLETTER

Issue 2

Spring/Summer 2014

Summer is almost here! Before everyone leaves for holidays, please take a minute to read through the second edition of the CST Pediatric Group newsletter.

TRAINEE ABSTRACT AWARD

Each year the CST Pediatric Group bestows a "Best Abstract Award" for the best clinical and basic science research abstracts submitted to the annual CST meeting. This year's clinical research abstract award winner was Dr. Achiya Amir. Please read more about Dr. Achiya's work and also about his supervisor Dr. Yaron Avitzur.

Dr. Achiya Amir

Dr. Amir obtained his MD at the Tel-Aviv University, Israel. He completed his Paediatrics residency in Schneider Children's Medical Center, in Petach-Tikva, Israel. He is a clinical and research fellow in the GI/Hepatology/Nutrition Division at the SickKids Hospital in Toronto.

His clinical and basic-science research is centered on transplant medicine. Under the supervision of Dr. Yaron Avitzur he engaged in clinical research focusing on allergic and autoimmune disorders following solid organ transplantation; a study that was presented

at the recent CST meeting and was awarded the CST Pediatric Group Best Abstract Award. Under the supervision of Dr. Gary Levy and Dr. Nicola Jones, he is studying regulatory T-cells, the immune-regulatory Fgl2 protein and their importance in tolerance induction.

Interesting Fact: Dr. Amir knew and collaborated with Dr. Avitzur in their pre-Canadian days in Israel, when they worked at the same pediatric hospital and engaged in transplant-related clinical research. Family connections between the two go further back. Dr. Amir's father, who is also a pediatrician, was Dr. Avitzur's mentor earlier in his career.

Congrats to both mentee and mentor!

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UPCOMING EVENTS

World Transplant Conference—San Francisco, CA

July 26-31, 2014
See their <u>website</u> for more

IPTA Fellows Symposium on Pediatric Transplantation—Heidelberg, Germany October 10-11, 2014

See their <u>website</u> for more details. <u>Travel grants are</u> available.

International Pediatric Transplant Association 2015 Congress—San Franciso, CA March 28-31, 2015

See their <u>website</u> for more details.





Dr. Yaron Avitzur

Dr. Avitzur is a graduate of Sackler Faculty of Medicine at Tel-Aviv University, Israel. He completed his Pediatric residency at Schneider Children's Medical Center of Israel, the largest tertiary pediatric care centre in Israel and the only solid organ transplant hospital in the country. He completed a dual fellowship in Pediatric Gastroenterology and Pediatric Academic Multi-Organ Transplantation (PAMOT) at The Hospital for Sick Children, Toronto. Upon the completion of his fellowship Dr. Avitzur returned to Israel and joined the Institute of Gastroenterology, Nutrition and Liver Diseases at Schneider Children's Medical Center as a senior Pediatric Gastroenterologist. While in Israel he led the establishment of the national pediatric small bowel transplantation program and also cared for children before and after liver transplantation. Dr. Avitzur returned to Canada in 2009 and was appointed as Medical

Director, Intestinal Rehabilitation and Transplantation at the Hospital for Sick Children and Assistant Professor of Paediatrics in the University of Toronto. Since 2012, he is also involved in adult intestine transplantation as the Medical director of the joint program in intestine transplantation, University Health network and Hospital for Sick Children.

Dr. Avitzur's research interest and work focuses on short and long term outcomes after pediatric liver and intestine transplantation, with a specific interest in immune dysregulation post transplant and its clinical and immunological impact on pediatric recipients of liver and other solid organ transplants. The research project on allergy and autoimmunity following solid organ transplantation with Dr. Amir stems from this research interest.

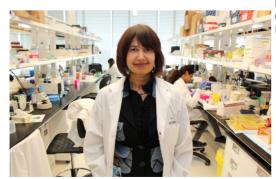
RESEARCH NEWS

PersOnaliSing Immunosuppression To ImproVe Efficacy (POSITIVE study)



Adequate control of immunosuppression is difficult to achieve but is critical in the prevention of graft failure and graft-vs-host disease following solid organ transplantation and hematopoietic stem cell transplantation. Immunosuppression management is especially challenging in infants, children, and youth due to changes in physiological processes, immune maturation, and behaviours linked with treatment adherence. The POSITIVE study aims to identify factors that influence immunosuppression control across the pediatric age range, including agerelated changes in drug metabolism, immune function, and susceptibility to viral infections, as well as health care system factors affecting treatment adherence.

The POSITIVE study will recruit patients from seven pediatric centres across five provinces in Canada including The Hospital for Sick Children (Toronto), CHU Sainte-Justine (Montreal), Alberta Children's Hospital (Calgary), Stollery Children's Hospital (Edmonton), Winnipeg Children's Hospital (Winnipeg), McGill University Health Centre (Montreal), BC Children's Hospital (Vancouver) with the help of a 45 member strong research team. The study is funded through the CIHR Canadian National Transplant Research Program (PI, Lori West).



Dr. Seema Mital

POSITIVE Project Leads: Dr. Seema Mital, The Hospital for Sick Children (Lead), Dr. Bethany Foster, McGill University (Co-Lead), Dr. Upton Allen, The Hospital for Sick Children (Co-Lead).





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Exercise following Pediatric Heart and Lung Transplant

Exercise-based cardiac and pulmonary rehabilitation programs are an established therapy for adult transplant recipients. Specialized and developmentally appropriate exercise programs for children with transplants are scarce.

At SickKids Hospital, heart and/or lung transplant recipients older than 6 years of age participate in either a hospital-attended or home-based physiotherapist-prescribed exercise rehabilitation program for 3 months following hospital discharge. The program includes aerobic and resistance training, gross motor activities and stretching based on individual needs, developmental status and sternal healing and is progressed weekly as tolerated. We recently reported the outcomes of this program and found similar improvements in six minute walk distance, strength of proximal muscle groups and low-back and hamstring flexibility between the groups.

Rehabilitation professionals working with pediatric transplant recipients must focus efforts at maximizing life-long commitment to exercise. There are significant gaps in our understanding about the physiology and pathophysiology of exercise following transplant, however, regular exercise is one of the best "medicines" for lessening and preventing long-term morbidities and chronic disease associated with transplant.



- Robin Deliva, MSc, BScPT

See also Deliva, RD. et al., Effects of an Acute, Outpatient Physiotherapy Exercise Program Following Pediatric Heart or Lung Transplantation. *Pediatric Transplantation*, 2012. 16: p. 879-886.



Dr. Ching Kit Chen



Dr. Chen is a Heart Failure and Transplantation Fellow at SickKids Hospital. He completed his undergraduate medical studies at the National University of Singapore and post-graduate training in pediatrics and pediatric cardiology at KK Women's and Children's Hospital, Singapore. His current areas of interest are dilated cardiomyopathy and exercise echocardiography in cardiomyopathy. He is returning to Singapore shortly to start a pediatric heart failure program in KK Women's and Children's Hospital, and

to build a pediatric heart transplant program in Singapore. Best wishes to Dr. Chen!



CELEBRATING ACHIEVEMENTS

Queen Elizabeth II Diamond Jubilee Medal

Dr. Julian Midgley, Kidney Foundation President and Pediatric Nephrologist in Calgary, received the Queen Elizabeth II Diamond Jubilee Medal in in 2013. On February 6, 2012, Her Majesty Queen Elizabeth II marked the 60th anniversary of her accession to the Throne as Queen of Canada - an occasion marked only once





before by her great-great-grandmother, Queen Victoria, in 1897. In celebration of this event, a commemorative medal was created to recognize outstanding Canadians of all ages and from all walks of life, people who have built and continue to build our caring society and country through their service, contributions and achievements. During the year of celebration, 60,000 deserving Canadians were recognized. The Kidney Foundation of Canada was allocated 31 medals for presentation according to the eligibility criteria established by The Chancellery of Honours.



Scientist of the Year Award 2013

Dr. Guido Filler, pediatric nephrologist and Department Head of Pediatrics at the University of Western Ontario, is the recipient of the Scientist of the Year Award fro the Children's Health Research Institute (CHRI). The purpose of this award is to recognize a CHRI Scientist or Associate Scientist who is an active member of the Institute and has made a significant contributions to the field of children's health research. This distinction has formerly only gone to basic scientists.



CST PEDS GROUP MEETING

On February 26, 2014, we held the annual CST Pediatric Group meeting. The meeting was attended by approximately 30 multidisciplinary health professionals and students. Platform presentations were given by Dr. Binita Kamath and Ms. Robin Deliva on the theme of frailty and exercise in pediatric transplantation. Next annual meeting will be in Vancouver in Fall 2015 in conjunction with the annual CST meeting.

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Questions, comments, or to submit anything for future publications, please contact Susan at s.samuel@albertahealthservices.ca
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