



Scoliosis 360°: What Have we Learnt and Where are we Going?



Adolescent Idiopathic Scoliosis (AIS) is one of the most common childhood deformities worldwide, characterized by a 3D spinal deformity with unknown cause, and represents both an immediate medical challenge and a chronic condition affecting individuals throughout their lives. It is the most common orthopedic condition requiring surgery in adolescents and affects 4% of this population. Most patients requiring treatment are females (90%). Indeed more than one million patients in North America are diagnosed with scoliosis. Hence, there is a great need for innovative molecular diagnostics to identify asymptomatic children at risk of developing scoliosis and to predict among the symptomatic ones, those at risk of spinal deformity progression. Dr. Moreau and his team are recognized internationally in the field of pediatric scoliosis. Their seminal discovery of a differential signaling dysfunction of Gi-coupled receptors in AIS patients, led to the stratification into three heritable biological endophenotypes. These endophenotypes were used to partition variation and increase the power to detect genetic associations, which could help not only to predict the disease, but also to guide treatment and clinical decisions by predicting particular clinical outcomes..

Dr. Alain Moreau

Director of Research and Chief Scientific Officer, CHU Sainte-Justine
Full Professor, Faculty of Dentistry / Faculty of Medicine
Université de Montréal

Host: Dr. Brian Ciruna

Date: Tuesday June 17th, 2014

Time: 10:00 a.m.

Place: Medical Sciences Building
1 King's College Circle
Room 4279