

## Maritime Heart Centre Innovation Fund

### 2017 GRANT RECIPIENTS

#### **Real-time Automated Program for Identification of VT origin – Pilot Study (RAPID-VT Pilot)**

Lead Investigator: Dr. Amir Abdelwahab | \$49,481

Maritime Heart Centre researchers at the QEII have been studying the dangerous heart rhythms that can cause cardiac arrest, and developing methods to treat them. The RAPID-VT study will determine whether a new method to quickly identify the spots in the heart causing the bad heart beats can be effective during a catheter ablation procedure. Using computerized automatic analysis of the ECG can bring new effectiveness to an old technology – with the potential of making the procedure faster, more effective and safer.

#### **Computer Simulated Atrial Fibrillation Tool to Reduce Hospitalizations and Emergency Department Visits**

Lead Investigator: Dr. Ratika Parkash | \$35,086

Atrial fibrillation is the most common abnormality of heart rhythm, and causes important risk to those who have it. The QEII's Maritime Heart Centre has been working on ways to get specialist-level information to patients with atrial fibrillation in the community and in their own homes. Using new web-based and mobile device-based applications, patients will be able to follow a personalized treatment plan and monitor their progress. This study will determine whether this effectively puts peoples' health care in their own hands, reducing unnecessary hospital and emergency room visits.

#### **Access to Cardiovascular Care in the Aboriginal population**

Lead Investigator: Dr. Christine Herman | \$16,000

Aboriginal populations in Canada have higher rates of cardiovascular events, including coronary artery disease and stroke. The Maritime Heart Centre at the QEII is working with aboriginal leaders to try to understand whether access to cardiovascular care plays an important role in these outcomes, and whether there are identifiable avenues for improvement in access to coronary artery bypass surgery and carotid artery interventions.

#### **Shared Decision Making in Cardiovascular Care**

Lead Investigator: Dr. Greg Hirsch | \$50,000

Decisions surrounding cardiac care can be complex, and particularly difficult during the stress of acute illness in a time-sensitive environment. Careful communication between the health care team and patients is critical to making the right decision for the best possible outcome, tailored to the values and preferences of each patient and their family. Maritime Heart Centre researchers at the QEII are studying how to maximize the effectiveness of this communication that best inform and empower patients to make individualized medical decisions surrounding their care.

## **Cardio-Aortic Mechanics in Genetically Triggered Aortopathy**

**Lead Investigator: Dr. Gabrielle Horne | \$49,657**

New research has shown that aortic enlargement and aneurysms can be genetic. New knowledge in this area has grown dramatically in recent years, and the Connective Tissue Clinic at the QEII Maritime Heart Centre is at the forefront of this work. A tool for the non-invasive measurement of aortic pressure will enable an expansion of our research program to better predict the risk of dangerous complications of aortic diseases, and help us to better protect patients and families with genes that cause aneurysms.