



Heart Murmurs

September 2018

Cardiac Athletic Society Edmonton - Contacts

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Heart Murmurs is the newsletter of CASE published in February, March, April, May, September, October, November and December each year. Suggested articles can be submitted to Barry Clark at kbclark1@telus.net Back issues of the newsletter are posted on the CASE website at: <http://www.edmontoncase.ca>

If you wish to unsubscribe from this newsletter, please e-mail stuart_e@telus.net with a subject line 'unsubscribe'.

Cardiac Athletic Society Edmonton -Board

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Hearts and Flowers	Gerri & Cavan Devlin
Director at Large	Wayne Saunders
Director at Large -	Roberto Cruz

Support for CASE

As a recognized charitable institution, CASE makes a significant difference to people interested in maintaining their heart health. If you make a financial gift, either as a direct contribution, or in the memory of a member who has passed, we will issue a tax receipt.

NO VOLLEYBALL UNTIL SEPTEMBER 25...

We have been informed by Terwillegar that CASE will **not** be able to play volleyball at our regular times until after September 24. Lynn has let us know that she is planning to do a walking program from 4:00 to 4:45 on the days that volleyball is cancelled. It will be on the inside track or outdoors on occasion if the weather permits. She is trying to arrange a yoga class with Rachel for one of the days but a date has not been confirmed.

EDUCATION EVENING

The topic for our Monday September 10 Educational meeting at the Terwillegar Recreation Centre will be **“Aging in Place – Getting Organized”**. More and more adults are choosing to stay in their homes for as long as possible. Removing clutter and reorganizing your space is an important part of planning for those changes to your

lifestyle. Find out how to create a safer, clutter free living space to enjoy for many years to come.

The speaker will be Janice Mills, a Professional Organizer. She is a member of the Professional Organizers in Canada (Edmonton Chapter). She successfully completed the POC training program in October 2014. She was part of the Edmonton Executive as the Resource and Education Coordinator for the past four years. As well, in July 2014, she successfully completed the Advanced International Professional Organizing training program with QC Design School. Prior to becoming a professional organizer, Janice worked at a college with students with disabilities identifying learner needs, teaching strategies and coaching students towards independent learning. She believes that many of the skills she developed as an educator are also the essential tools for a professional organizer. Janice assists people to declutter and put organizing systems in place to create a well-organized and clutter-free home.

MARK THE DATES - *Upcoming Talks (more details later)*

Mon. October 15 – **Eye Health as related to diseases and medication** – Dr. K Ford & Dr. K. Krol

Mon. November 19 – **Stress Management and Self Regulation** – Laurie Young who recently spoke to us on “Mindful Aging” and was well received.

Mae Hadley: Education Coordinator

WALKING FOR HEALTH

Starting on Monday Sept 10, Lynn will be instructing a Walking for Health class at the Meadows Recreation Centre each Mondays between 11:45 am to 12:45 pm.

The Meadows is located at 2704-17 street. For CASE members, a current Terwillegar monthly membership covers this class...no extra costs. Each session includes warm up, stretching and light weights (by preference).

Benefits of regular or brisk walking are:

- Maintain a healthy weight
- Prevent or manage various conditions, including heart disease, high blood pressure and type 2 diabetes
- Strengthen your bones and muscles
- Improve your mood
- Improve your balance and coordination.

The faster, farther and more frequently you walk, the greater are the benefits.

ED ABEL GOLF TOURNAMENT

The annual Ed Abel Golf Classic took place at Twin Willows Golf Course on July 12th. The weather was perfect. Sixty golfers took part in the tournament while 20 friends and relatives provided support from the sidelines.

This year, the best ball competition was won by the team led by team captain Kirsten Abel. Kirsten's team included, Melissa Abel, Bud Venne, Duane Dinville and Byron Dudley. Their total score was 7 under par. Congratulations to the winning team and to everyone who participated in keeping the tournament both fun and competitive.

CASE is very pleased with the support and increased turnout as the Ed Abel Golf Classic continues to grow each year. We are also very thankful for the generous donations made to CASE in Ed's name. Wayne would like to one again thank everyone who helped make this tournament a success.

“First, I'd like to thank Greg Abel for his generosity in supporting this event. It has to be mentioned that all the green fees, cart rentals, food and liquid refreshments as well as the swag bags were provided by Greg. For his generous support of CASE, Greg was presented with an Honourary Lifetime Membership in CASE.

A special thank you to Onnalee Kelley for procuring and labeling and packing of all swag bags and helping wherever she could in organizing the tournament. Also, we thank the following volunteers: Andrea Duguay and Tamara Fricke for organizing and presenting swag bags; Robert Cruz for selling mulligans; Andrea Duguay and Shirley Evans for their photos; Gary Duguay for helping me with registration and organization; and Burn Evans for making the CASE presentation to Greg Abel and.

I would like to take this opportunity to invite you to join us again in 2019. Next year's event will be held on Wednesday, July 10, 2019. Mark your calendars!

Wayne Saunders CASE Golf Coordinator

CASE GOLF TOURNAMENT

The annual CASE golf tournament was held Wednesday, August 15th. Sixteen CASE golfers turned out to a beautiful (but smoky) afternoon of golf. This year's winners were:

- Gary Duguay – Best Net score. (handicap score of minus 7).
- Gary Duguay, Neil Mungo and John Sieffert tied for best “gross” score of 45
- Gail Dunnigan – Ladies longest drive
- Neil Mungo - Mens longest drive
- Richard Schopff – Longest Putt

- Bob Zuckerman – Closest to the pin

This year has been an extraordinary one with a high of twenty golfers one Wednesday. We will continue golfing each Wednesday as long as weather prevails.

Wayne Saunders CASE Golf Coordinator

DOUG ROBB

Doug, a long-time member of CASE, passed away August 2, 2018 at age 92. Doug is remembered fondly by many CASE members for his friendship and support of the CASE exercise program and social activities. We will all miss him.

HARNESSING BIG DATA TO DETECT HEART DISEASE

Imagine a world in which a photo of your eye, taken with your smartphone, could determine your risk of a heart attack, and your smartwatch could estimate your odds of experiencing a stroke. Sounds pretty futuristic, right? In fact, preliminary studies showing the feasibility of both approaches have already been published. They're just two examples of the new wave of technology-based innovations (see "Transformative technologies") that are beginning to change health care as we know it.

"There are clear opportunities to improve our ability to screen, diagnose, monitor, and treat people with many diseases using advanced technologies," says Dr. Maulik Majmudar,

Currently, much of what we know about why people get heart disease comes from population studies. Researchers have followed groups of people over time, noted who had heart attacks or strokes, and then looked back at the people's health habits and characteristics to identify which ones correlated with those health outcomes. Doctors treat people based on these well-known risk factors, which include smoking, high cholesterol, and high blood pressure.

"But maybe there aren't just five to 10 risk factors, but 200," says Dr. Majmudar. Our brains have a finite amount of computational ability, but machine learning can

Transformative technologies

Digital health: Wearable, smartphone, and sensor-based technologies.

Big data: The aggregation of large amounts of health information and sophisticated analyses with artificial intelligence, machine learning, and natural language - processing techniques.

Precision health: Approaches designed to identify risks on an individual level and determinants of wellness and illness.

accommodate a far larger number of variables. A computer can take millions of data points and come up with models that might predict risk much more precisely, he explains.

An algorithm (the set of rules that tells a computer what to do) can process all sorts of data. For example, it could analyze results from blood tests, the electrical tracings of a heartbeat (an electrocardiogram or ECG), images from a heart ultrasound (echocardiogram), cardiac stress tests, and genetic information. In the future, we might be able to capture all the health data in a person's electronic health record and process it with advanced machine learning.

In the cardiology realm, two promising applications include retina scans to predict heart disease and pulse monitoring to pick up atrial fibrillation. Experts also hope advanced technologies might one day discover better ways to noninvasively detect dangerous coronary artery blockages and better predict sudden cardiac arrest, when the heart suddenly stops beating without warning.

Blood vessels in the retina (the light-sensitive tissue at the back of the eye) reflect the health of blood vessels throughout your body. Researchers collected retina photos and other health data (such as age, blood pressure, and smoking habits) from more than 280,000 people. Then they used machine learning to create an algorithm to predict a person's risk of heart attack or stroke based on subtle differences in the vessels visible in the photos.

To test the algorithm, they compared retina photos from people who had a major cardiac event within five years of the photo with retina photos of people who had not. The algorithm was accurate 70% of the time. The findings were published in the March 2018 issue of *Nature Biomedical Engineering*.

"What's fascinating is that a single image of the retina is about as accurate for predicting a heart attack as using traditional risk factors, such as age, blood pressure, and cholesterol," says Dr. Majmudar. The model still needs to be validated in many more people. If it is proven accurate, a quick photo would be far simpler than getting a blood test and blood pressure measurement, he says.

Doctors have long sought a better way to detect atrial fibrillation (afib). This rapid, irregular heart rhythm often has no symptoms, but it raises the risk of stroke fivefold. Researchers wondered if the sensors found in smartwatches that track your heart rate could also detect afib. To find out, they studied 9,750 people in the Health eHeart study, including 347 people with afib. All used an Apple Watch, which routinely collects heart rate and step-count data.

These people provided the "big data" (more than 139 million measurements) that researchers used to train an app to detect afib. They then tested the app on 51 people with afib who were undergoing cardioversion, a treatment that uses drugs or electricity to restore a regular heart rhythm. Among this group, the app was very accurate when compared with a 12-lead ECG, the standard diagnostic test for afib. However, the app was only moderately effective when tested on 1,617 people with self-reported afib. This "proof of concept" study appeared online March 21, 2018, in *JAMA Cardiology*.

A much larger study launched in November 2017, the Apple Heart Study, is testing a different afib detection app on an Apple Watch in up to a half-million volunteers. If the app detects an irregular heart rhythm, the participant will receive a notification (via their watch and iPhone), a free consultation with a study doctor, and an ECG patch for additional monitoring. "If the study succeeds, it would be a tremendous advance and radically transform our approach to screening people for atrial fibrillation," says Dr. Majmudar. It's not unusual for people with afib to remain undiagnosed until they experience a stroke. Earlier detection would enable people to start taking anti-clotting medications to lower their risk, he says.

CASE Events Calendar - September 2018

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3 Labour Day	4 Exercise Program NO VOLLEYBALL Aerobic/Stretch 4:45	5 Golf Weather Permitting Twin Willows Golf Club Noon Tee-Off	6 Exercise Program NO VOLLEYBALL Aerobic/Stretch 4:45	7	8
9	10 CASE Education Aging in Place Getting Organized 7:00 TFRC	11 Exercise Program NO VOLLEYBALL Aerobic/Stretch 4:45	12 Golf Weather Permitting Twin Willows Golf Club Noon Tee-Off	13 Exercise Program NO VOLLEYBALL Aerobic/Stretch 4:45	14	15
16	17	18 Exercise Program NO VOLLEYBALL Aerobic/Stretch 4:45	19 Golf Weather Permitting Twin Willows Golf Club Noon Tee-Off	20 Exercise Program NO VOLLEYBALL Aerobic/Stretch 4:45	21	22
23	24 Board Meeting Bonnie Doon 9 a.m.	25 Exercise Program Volleyball 3:45 Aerobic/Stretch 4:45	26 Social Breakfast SEESA 9am Golf, Twin Willows Noon Tee-Off	27 Exercise Program Volleyball 3:45 Aerobic/Stretch 4:45	28	29
30	31					