

# Local run has raised \$2 million in 15 years!

www.runforovariancancer.ca

Next run Mother's Day, Sunday, May 13, 2018

Now in its 16th year, the London Run for Ovarian Cancer, supported by London Health Sciences Foundation, generates the largest amount of funding for LHSC of any volunteer group in London – more than \$2 million to date – all with only a one-day event!

# Help us raise even more this year.

Ovarian cancer is the fifth-ranking cause of cancer deaths for women with about 2,800 women diagnosed each year in Canada. Even so, only 2.1 per cent of Canadians' donations for cancer research is directed toward ovarian cancer. That's because the disease leaves few survivors to advocate and raise funds.

Ovarian cancer is called the silent killer. Unlike other cancers, there is no screening test and there are few obvious symptoms to this cancer. As a result, by the time 70 per cent of cases are diagnosed, the patients are at stages three or four, and at that late stage, 70 per cent of those diagnosed will die. London Health Sciences researchers and clinicians are working to change those statistics.

### **London Regional Cancer Program**

London Regional Cancer Program (LRCP) is the home of cancer treatment, education and research at London Health Sciences Centre (LHSC), serving over one million people in Southwestern Ontario at Victoria Hospital.

Through its unique research initiatives, LRCP is recognized internationally for its innovative basic, clinical and translational cancer research – the transfer and advancement of knowledge from basic research through to implementation of new clinical practices – in cancer biology, new therapeutics and cancer imaging.

Researchers in the Translational Ovarian Cancer Research Program (TOCRP) are studying how a key enzyme called LKB1 controls "energy stress" and helps ovarian cancer survive during spread of disease. Lawson Health Research Institute scientist Dr. Trevor Shepherd says the overall work is focusing on finding novel ways to knock out LKB1 activity in ovarian tumours. He credits the London Run for Ovarian Cancer with providing funding that was critical to obtain information needed for his successful grant from the Canadian Institutes of Health Research. Over this past year, he has established new collaborations with researchers at the Ontario Institute of Cancer Research in Toronto to apply innovative molecular approaches for discovering LKB1 targets in ovarian cancer and how to therapeutically target the process of *autophagy* used by cancer cells to evade the effects of chemotherapeutic drugs. Dr. Shepherd's innovative approaches are determining new ways of stopping cancer cells from using autophagy to stay alive so that chemotherapeutics can be more effective. This is just one more example of how the research activities of London's TOCRP are broadening its scope and recognition in the field.

<u>READ MORE</u> at http://www.lfpress.com/2015/07/22/scientists-at-lawson-health-research-institute-in-london-identify-jekyll-and-hyde-molecule

"We want the community to realize we appreciate the support that we have. It is absolutely essential for us to continue our pace of ground-breaking research." Dr. Trevor Shepherd

# **Translational Ovarian Cancer Research Program**

The Translational Ovarian Cancer Research Program was initiated in 2007 with the recruitment of Dr. Trevor Shepherd, who was appointed the first Translational Oncology Scientist of the LHSC and Cancer Research Laboratory Program (CRLP). Dr. Shepherd brought considerable expertise in ovarian cancer research. He and Dr. Gabriel DiMattia, Senior Oncology Scientist, co-lead the TOCRP to develop research projects that will impact the health of ovarian cancer patients. This research group works alongside LRCP gynecologic cancer surgeons – Doctors Bertrand, McGee, Préfontaine and Sugimoto – who provide clinical input and essential material needed to conduct research.

### **Current research initiatives**

Ovarian cancer patients often accumulate fluid in the belly (ascites) that can lead to the spread of the disease because it contains cancer cells. These cells often form floating clusters or spheroids that are thought to be responsible for the spread of ovarian cancer. Proceeds from the <u>London Run for Ovarian Cancer</u> have supported the establishment of a biobank with more than 300 patient samples of ovarian cancer cells, the testing and development of new therapeutics, research into how to make cancer cells more susceptible to treatment, and the development of new model systems to study this disease.

Dr. G. DiMattia uses these ascites samples to develop new models of ovarian cancer in the form of immortalized cell lines. These are the most essential and fundamental tools cancer researchers use worldwide. This work has led to the development of new cell lines from rarer forms of ovarian cancer that weren't previously available. Dr. DiMattia has developed a number of cell lines from women battling low-grade ovarian cancer for which there are few treatments. These cell lines stimulated a collaboration with Dr. Mark Carey, University of British Columbia gynecologic oncology surgeon, to test new drugs that may be effective against this type of ovarian cancer. Another collaboration made possible by the biorepository is with Dr. Fred Dick, Western University. Drs. Dick and DiMattia are studying the proteins that control how cancer cells evade chemotherapeutics when they form floating clusters and have discovered that a protein called p57 is important for keeping cancer cells alive. These cell lines have also led to a collaboration with Dr. Jim Petrik, University of Guelph, to develop a new way to kill cancer cells based on how they generate specific fat molecules and how these molecules exert control over the growth of ovarian cancer cells.

### You can help – it's money well spent

People who financially support the cause of overcoming ovarian cancer – "the most lethal women's cancer" – have a "moderate to high donor opportunity for impact," according to a recent research report *Cancer in Canada*, conducted by Charity Intelligence Canada.

The London Run for Ovarian Cancer was initiated in 2003 by a London woman, Ann Crowley, after she was diagnosed with Stage III ovarian cancer. In the first year, Ann with the support of friends and family raised \$85,000 and dedicated all funds raised by runners and their supporters to research focused on early detection and to discovering a cure for ovarian cancer. Since her death in 2003, Ann's friends have continued her quest. Since 2006, the funds raised have gone directly toward the Translational Ovarian Cancer Research Program.

Each year, more people from across the London region are joining this grassroots volunteer organization in the challenge to conquer this stealthy disease.

We would be delighted to include you on our team. Help us to make a difference and create the moments that have the power to change and save lives.