

Spotlight



Schulich London Health Sciences Centre





A collaboration and partnership by the Cancer Research Laboratory Program (CRLP) with the Centre for Translational Cancer Research (CTCR), London Health Sciences Centre's London Regional Cancer Program (LRCP), Western University, Schulich School of Medicine & Dentistry and the Lawson Health Research Institute.

## **IN THE SPOTLIGHT:**

Congratulations to the co-recipients of the

WOLRDiscoveries<sup>®</sup> 2016 Vanguard Innovator of the Year Award

## Dr. Eva Turley & Dr. Len Luyt (CRLP)

WORLDiscoveries" is the technology & business development office for Western University, Lawson Health Research Institute & Robarts Research Institute.

This annual celebration recognizes local researchers for their dedication to innovative research. It was a great time celebrating research innovation & excellence in our community!



Drs. Luyt & Turley of the CRLP celebrating their prestigious award: Innovator of the Year!





Dr. Lenn Luyt networking with Dr. John Capone, Western's Vice-President of Research.

Lisa Cechetto, Executive Director of WORLDiscoveries presenting the Innovator of the Year Award.



Dr. David Hill, Scientific Director of Lawson Research Institute, speaking & presenting the awards.



Find WORLDiscoveries on social media: @WOLRDiscoveries

& Dr. Luyt's Lab: @LuytGroup



Dr. Amit Chakma, President of Western University, recognizing innovative leaders of our community & highlighting successes of the year!







# LOCAL RESEARCH SUCCESS

Congratulations to London Cancer Researchers on having been awarded the Canadian Institute of Health Research (CIHR) Grants from the last Competition:

Dr. Bhattacharya, Dr. Shawn Li & Dr. Mymryk!

34 projects were funded at Western, LHSC & Lawson Health Research Institute totaling \$30 million over the next 5 years!

Congratulations to members of our Division who were successful:

Dr. Moshmi Bhattacharya on her 5-year grant entitled, "Targeting Triple Negative Breast Cancer: Role of KISS1R"

Dr. Shawn Li on his 3-year grant entitled, "Characterization of a new histone mark in stem cell differentiation"

Dr. Joe Mymryk on his 5-year grant entitled, "Molecular genetic analysis of adenovirus E1A function"

# Do YOU want to get involved & support local cancer researchers?!

Donors (individuals who donate) help support the outstanding medical minds at LHSC and enable our doctors, researchers, nurses & staff to deliver quality care and perform research that changes and saves lives in our community.

The London Health Science Foundation (LHSF) has introduced donor tours. These tours provide potential donors with an opportunity to meet & engage with staff, visit different working environments, understand various needs & most importantly get inspired!

If you are interested in supporting cancer research and would like to experience a donor tour, please contact **Pam Taylor** (LHSF Development Officer) at Pamela.Taylor@lhsc.on.ca or 519.685.8500.58721

Pam also sits on the Management Committee for the Centre for Translational Cancer Research (CTCR). We would like to say CONGRATULATIONS on your recent promotion within the LHSF! Her new role is Senior Development Officer! Great work & congrats.

OUR SUCCESS IS YOUR SUCCESS. THANK YOU FOR YOUR CONSIDERATION!

Follow LHSF on Twitter: @LHSFCanada

## **Congratulations to our Cancer Researchers!**

# Congratulations to ...

• **CIHR Project Grant** entitled, "Identification of acute radiation-induced cardiac toxicity after locally advanced non-small cell lung cancer radiotherapy with hybrid PET-MRI". **PI:** Stewart Gaede & **Co-applicants:** Drs. Alexander Louie, Brian Yaremko, David Palma, Edward Yu, Frank Prato, George Ro-drigues and Gerald Wisenberg. Bridge Funding for \$88,750.

• Congratulations **Dr. Fred Dick** for your recent **2016 Operating Grant by the Cancer Research Society** entitled, "Exploiting DNA damage and replication stress to kill osteosarcoma cells". Well done!

• Lawson Internal Research Fund entitled, "Differentiating the role of host IDO from tumour IDO in suppressing antitumour immunity". PI: Dr. Xiufen Xeng & Collaborators: Drs. Saman Maleki Vareki, Weiping Min and James Koropatnick. Amount awarded: \$12,922.50 for two years.

• Ontario Ministry of Education Student Success Policy Branch to Dr. James Koropatnick & Mr. Rodger Dusky for "Partners in Experiential Learning (PEL): Providing Cooperative Education to Senior Secondary School Students". Amount awarded: \$150,000 for one year.

• Matthew Mouawad, PhD candidate in Dr. Gaede's lab, and co-supervised by Dr. Neil Gelman, recently received a **Translational Breast Cancer Research Unit PhD salary award** of \$18,000 for one year.

#### Other Good News from our Researchers ...

- Congratulations on two successful PhD Defenses in Dr. Gaede's lab! Omar El-Sherif, "Non-Invasive Imaging for the Assessment of Cardiac Dose and Function Following Focused External Beam Irradiation" on June 24, 2016 and Ilma Xhaferllari, "Optimizing Respiratory Gated Intensity Modulated Radiation Therapy Planning and Delivery of Early-Stage Non-Small Cell Lung Cancer" on July 13, 2016.
- Congratulations to **Dr. Jerry Battista** on contributions to the important education text **Advances in Medical Physics** recently published. Many of the authors are from LRCP, UWO or Robarts.
- Congratulations to Dr. Saman Maleki & his wife on their healthy baby boy, Benjamin!
- Please join Dr. Koropatnick & lab in welcoming their newest staff member **Ronak Zareardalan**, the new Laboratory Technician!

The CRLP helps train a new generation of Clinician Scientists!







# Recent News & Updates

## Western Graduate Student Scholarships

Dr. Ann Chambers (of the CRLP) is pleased to announce the 13 new graduate student scholarships at Western University for the 2016-2017 academic year!

These awards are supported by the Breast Cancer Society of Canada's very generous commitment to the Pamela Greenaway-Kohlmeier Translational Breast Cancer Research Unit (TBCRU) at the LRCP.

Seven PhD students and six MSc students were selected for awards this year, congratulations! To read more about the projects please follow the TBCRU's blog: www.bcsc.ca/BLOG

## Mini Medical School

Register for Mini Medical School today by visiting Western's website: www.westernconnect.ca

This informative weekly lecture series features internationally recognized researchers and faculty members from Western. Each week you will experience a captivating lecture covering a wide variety of topics such as cancer research, dialysis, transgender health issues, spinal cord injury & more!

Our very own Drs. Samuel Asfaha, David Palma & Aaron Ward will be lecturing!

Date: October 6, 13, 20, 27 & November 3, 17, 2016 Time: 7:00 - 8:30 p.m. Location: Talbot College, Western University, Room 141 Ticket price: \$60.00 includes all six sessions and parking in the Talbot Lot **Register by:** Thursday, September 29, 2016

#### 2016 President's Award Nominations

At LHSC, staff, faculty & volunteers are given an opportunity to nominate their colleagues for the President's Award. The award recognizes the exceptional work they do! The 2016 program includes the following award categories: Community Service, Living Our Core Values, Leadership, Innovation, Physician Leadership. All staff, physicians, volunteers & administration are eligible for these awards! It is a way to say THANK YOU!

#### **Oncology Grand Rounds**

Oncology Grand Rounds are offered to staff, faculty & trainees as an educational opportunity to learn more about various cancer-related topics. Each week, presenters discuss a unique topic they are

#### RAISING FUNDS FOR THE CANCER RESEARCH LABORATORY PROGRAM

#### Thank you for supporting the Cancer Research Laboratories

Neil Johnson; CRLP Wine Basket Raffle winner

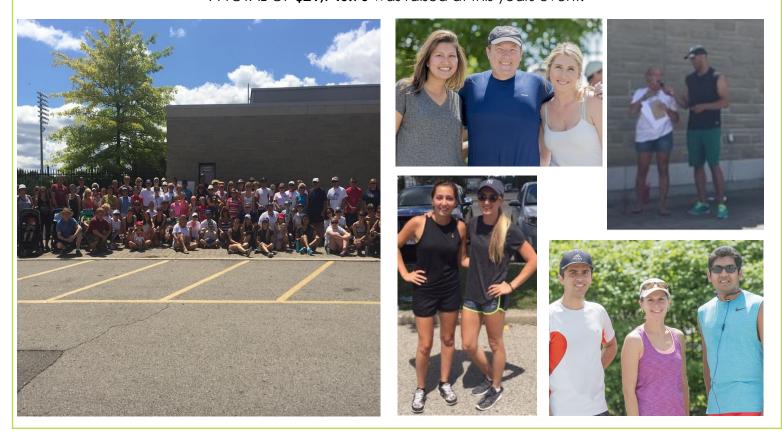
Gail Howard CRLP Manager

Gabe DiMattia Interim Director, CRLP

Thank you to everyone who participated in our annual wine basket raffle. The fundraiser was a huge success! Money raised supports the Cancer Research Laboratory Programs team-building!

#### The Head & Neck Above Cancer Event

The Head & Neck Above Cancer charity walk began in 2013 by **Kathy Turbucz Poirier**, a head and neck cancer patient at LHSC. She continues to coordinate and support this worthy cause. After the loss of her husband Richard Murray to head and neck cancer, **Phoebe Murray** is now helping coordinate this event. All money raised supports **Head & Neck Cancer Research** at the LRCP. A TOTAL OF **\$21,746.76** was raised at this years event!



# **RECENT PUBLICATIONS BY OUR CANCER RESEARCHERS**

Majumder, M., Xin, X., Liu, L., Tutunea-Fatan, E., Rodriguez-Torres, M., Vincent, K., Postovit, L., Hess, D., Lala, P. (2016). **COX-2 Induces Breast Cancer Stem Cells via EP4/PI3K/AKT/NOTCH/WNT Axis**. Cancer Stem Cells, doi: 10.1002/stem.2126.

Koritzinsky, M,. Koch, CA., Riley, B., Beauchemin, N., Johnston, G., Johnston, M., Koropatnick, J., Loiselle, CG., Maslowska, M., McCormick, C., Miller, WH. Jr, Mulligan, L., Tsao, MS. From Solo in the Silo to Strategic Training Programs. CBE Life Sci Educ. 2016 Spring;15(1):1e1. PMID: 27290740.

Salim, KY., Maleki Vareki, S., Danter, WR., Koropatnick, J. **COTI-2, a novel small molecule that is** active against multiple human cancer cell lines in vitro and in vivo. Oncotarget. 2016 May 2. doi: 10.18632/oncotarget.9133. [Epub ahead of print] PMID: 27150056.

Rytelewski, M., Maleki Vareki, S., Mangala, LS., Romanow, L., Jiang, D., Pradeep, S., Rodriguez-Aguayo, C., Lopez-Berestein, G., Figueredo, R., Ferguson, PJ., Vincent, M., Sood, AK., Koropatnick, J. **Reciprocal positive selection for weakness - preventing olaparib resistance by inhibiting BRCA2**. Oncotarget. 2016 Apr 12;7(15):20825-39. doi: 10.18632/oncotarget.7883. PMID: 26959114.

Siu, KS., Zhang, Y., Zheng, X., Koropatnick, J., Min, WP. Non-Covalently Functionalized of Single-Walled Carbon Nanotubes by DSPE-PEG-PEI for SiRNA Delivery. Methods Mol Biol. 2016;1364:151-63. doi: 10.1007/978-1-4939-3112-5\_13. PMID: 26472449.

Ferguson, PJ., Sykelyk, A., Figueredo, R., Koropatnick, J. **Synergistic cytotoxicity against human tumor** cell lines by oncolytic adenovirus dl1520 (ONYX-015) and melphalan. Tumori. 2016 Jan-Feb;102(1):31 -9. doi: 10.5301/tj.5000438. Epub 2015 Sep 30. PMID: 26429639.

Londoner Article via the Research Information Outreach Team entitled, "Hitting the Bull's-Eye: Hybrid PET/MRI and Radiotherapy of Cancer" by Stewart Gaede, Matthew Mouawad, Omar El-Sherif and John Patrick. July 21, 2016.

Koropatnick. J. & Dusky, R. **Paving the Way for the Future Through Innovative Training and Research**. June, 2016. Scientia Publications, Inc., www.scientiapublications.com.



**Dr. Koropatnick & team (CRLP)** collaborated with **Dr. Andrew Nelson (Anthropology, Western)** to grow human tumours in immunocompromised mice.

Doctoral student, **Jennifer Willoughby**, mummified tumor-striken and healthy mice in an effort to find out how easily identifiable tumors are in mummies!

She mummified the mice to generate "experimental mummies" as surrogates that were

CT-scanned to detect tumours. Some tumours were either frozen, fixed, sectioned or stained to

look at tumour structure and morphology in detail.

A very well-written and informative piece on **Molecular Pathways** by Drs. Adam Rabalski, Laszlo Gyenis and David Litchfield.

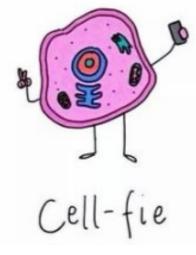
This publication appeared in the June Edition of Clinical Care Research and is accompanied by a learning module on the journal website.

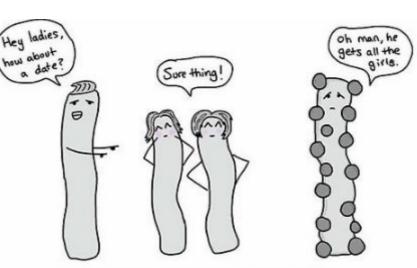
## Molecular Pathways: Emergence of Protein Kinase CK2 (CSNK2) as a Potential Target to Inhibit Survival and DNA Damage Response and Repair Pathways in Cancer Cells @ 12

Adam J. Rabalski<sup>1</sup>, Laszlo Gyenis<sup>1</sup>, and David W. Litchfield<sup>1,2</sup>

## MAD SCIENTIST JOKES







Smooth Endoplasmic Reticulum



