Hot off the Press – April - June 2014

SELECTION OF PUBLICATIONS


Collaborative work – Drs. Cher, Heath, Fridman, HR Kim and Bonfil


HOT off the Press – Drs. Fridman and HR Kim


From our members and colleagues at Henry Ford the University of Windsor -


Two recent papers from Dr. Granneman

Approximately April 5 – June 24 2014


**Datta NS.** Muscle-bone and fat-bone interactions in regulating bone mass: do PTH and PTHrP play any role? *Endocrine*. 2014 May 7. PMID: 24802058


_A complementary piece to the work presented by our recent faculty candidate, Dr Bethany Kerr_


**Dr. Hillman continues her collaborative work with Drs. Joiner (MT) and Gadgeel (MT)**


**Drs. Qureshi and Ahn and Jacques**


**Drs. Qureshi and Jacques**


**Two papers from Drs. Kandouz M*estafa and Bandyopadhyay S**


_dependent and is impeded in cells expressing a kinase-dead mutant EphB2. In summary, we identified a mechanism involving a triple role for EphB2 in breast cancer progression, whereby it regulates apoptosis, autophagy, and invasion._

**And two papers from Dr Kowluru**


One paper from Dr. Lee and TWO from Dr. Li and one from Dr. List


TWO PAPERS FROM DR G MAO


Two non-tumor recent works from Dr. Melody Neely


HOT OFF THE PRESS with Drs Podgorski and Kodanko (MT) – this was previously epub


TWO PAPERS from Dr Raz and one with Dr Youming Xie (TBM)


Two papers from Dr Speyer's collaborative work with Drs. Sloane (MI) and Gorski (MT) (I missed these on the last pipeline)


Abstract Metabotropic glutamate receptors (mGLuRs) are normally expressed in the central nervous system, where they mediate neuronal excitability and neurotransmitter release. Certain cancers, including melanoma and gliomas, express various mGLuR subtypes that have been implicated as playing a role in disease progression. Recently, we detected metabotropic glutamate receptor-1 (gene: GRM1; protein: mGLuR1) in breast cancer and found that it plays a role in the regulation of cell proliferation and tumor growth. In addition to cancer cells, brain endothelial cells express mGLuR1. In light of these studies, and because angiogenesis is both a prognostic indicator in cancer correlating with a poorer prognosis and a potential therapeutic target, we explored a potential role for mGLuR1 in mediating endothelial cell (EC) proliferation and tumor-induced angiogenesis. GRM1 and mGLuR1 were detected in various types of human ECs and, using mGLuR1-specific inhibitors or shRNA silencing, we demonstrated that EC growth and Matrigel tube formation are dependent on mGLuR1 signaling. In addition, loss of mGLuR1 activity leads to reduced angiogenesis in a murine Matrigel sponge implant model as well as a murine tumor model. These results suggest a role for mGLuR1 in breast cancer as a pro-angiogenic factor as well as a mediator of tumor progression. They also suggest mGLuR1 as a potential new molecular target for the anti-angiogenic therapy of breast cancer.

One from Dr. Todi


A nice splattering of clinical work -


**Two studies from Dr Kezhong Zhang**


**Live WIRE and Accolades**

**Program Announcement: March 27, 2014**

Under the auspices of the cancer center core grant, our Program Leaders, Drs. Shijie Sheng and Larry Lum are pleased to announce our Program name change. Effective immediately, the new name will be the Tumor Biology and Microenvironment Program (TBM). The new name will be used in the competing core grant submission which is due on January 25, 2015 and immediately in all Program correspondence.

**Faculty Candidate Guest: Monday May 12**

Bethany A. Kerr, Ph.D.
Project Staff, Molecular Cardiology, Lerner Research Institute, Cleveland Clinic, Cleveland, Ohio

"Intercepting Cancer's Circulating Communications: Platelets and Progenitor cells in Metastasis"

**Faculty Candidate Guest: Monday May 19 and Tuesday June 24**

Benjamin Kidder, Ph.D.
Research Fellow, National Heart, Lung and Blood Institute (NHLBI, NIH), Bethesda, MD

"Epigenetic regulation of stem cell fate and genome stability"

**New Funding $$**

New Funding Announcement: May 15, 2014

Please join Drs. Shijie Sheng and Lawrence Lum in congratulating Dr. Kang Chen for his very recent funding. Dr. Chen received the Burroughs Wellcome Fund Preterm Birth Initiative Award. This award, was created to increase the understanding of the biological mechanisms underlying parturition and spontaneous preterm birth and will provide up to $600,000 over a four-year period ($150,000 per year). The initiative is designed to bring together a diverse interdisciplinary group with expertise in genetics/genomics, immunology, microbiology and proteomics along with the more traditional areas of parturition research such as maternal fetal medicine, obstetrics, and pediatrics to address scientific issues related to preterm birth.

McLaren Research Awards: April 2014

KCI received a short-term funding from McLaren to support research. All four scientific programs, two Organ-based Team Projects (Lung Cancer and Breast Cancer), and Clinical Trial Office received money to fund their constituents. In consultation with the KCI leadership, we have decided to use our TBM Program share of $250,000 to support members to conduct pilot projects, upgrade equipment and utilize KCI core facilities. Twenty-one projects conducted by TBM members were granted funding under this award.

Dr. Lum receives new 5 year R01: June 2014

R01 CA182526; Dr. Lawrence G. Lum, PI
Targeting Neuroblastoma with Armed T cells

The overall goal is to conduct a phase I/II dose escalation trial in high risk patients with neuroblastoma and other GD2+ pediatric tumors using activated T cells armed with anti-CD3 x humanized anti-GD2 bispecific antibody to determine safety and to determine whether infusions can improve clinical outcomes and induce both adaptive and innate immune responses in patients with high risk neuroblastoma.

**Thank you for reading!**

Approximately April 5 – June 24 2014