Accolades and Newsworthy Notes - New Funding $$

**Special Commendation !**
Program member, Dr. Avraham Raz was lauded by the journal Neoplasia for one of the most cited articles in the publication. As senior author, this study helps us to understand how soluble galectin-3 in the bone microenvironment regulates bone remodeling through Notch signaling. The paper can be found here: PMID: 25425968

**HOORAY !**
Program member, Dr. Cecilia Speyer is one of four researchers from Karmanos Cancer Institute awarded an American Cancer Society Institutional Research Grant. Support provides one year of funding in the amount $30,000 for her project titled “Fc-folate conjugates for treating triple negative breast cancer”. Please recall Dr. Speyer presented her work on April 10 at our Program meeting.

**Laurels of distinction !**
Program member, Dr. Menq-Jer Lee is the recipient of a new two year grant from the National Cancer Institute. Support provides two years of funding for his project titled “Sphingosine-1-phosphate receptor subtype 3 in oncogenic driven lung adenocarcinoma. Co-investigators are Drs. Young-Hoon Ahn, Fulvio Lonardo and Wei Chen.

**BRAVO !**
Program member, Dr. Assia Shisheva is the recipient of an 18 month $308,000 Discovery Award from the Department of Defense. Her study is based on the paradox that type 2 diabetes is largely associated with obesity. The study will characterize different genetic variations within obese and non-obese people.
Drs. Wei-Zen Wei and Nerissa Viola-Villegas are the recipients of a new two-year grant from the National Institutes of Health for their project titled "Directing cancer immunotherapy and real time immunePET". Special thanks to Wayne State for featuring their work on the Division of Research website.

Our national news

President Donald Trump has selected Dr. Norman (Ned) Sharpless to lead the National Cancer Institute. Dr. Sharpless’ recent publication titled “Senescence in health and disease” can be found here: PMID: 28575665

The announcement can be found here:
UNC Cancer Center Director to Lead NCI
HOT OFF THE PRESS – Selection of recent publications

…Force implies strength or energy and is incorporated into the work of our Program members whether to understand the dynamics of the invasive cancer process…. or employed as a technology (atomic force microscopy) to help us understand size and composition…or to compel compliance in regulations…

J Cell Sci. 2017 Apr 26
Transient mechanical strain promotes the maturation of invadopodia and enhances cancer cell invasion in vitro
Gasparski AN, Ozarkar S, Beningo KA
PMID: 28446539

J Proteome Res. 2017 Jun 9. Epub
Human Platelet Vesicles Exhibit Distinct Size and Proteome
PMID: 28587468

J Pediatr. 2017 May 25
Factors Associated with Pediatric Mortality from Motor Vehicle Crashes in the United States: A State-Based Analysis
Wolf LL, Chowdhury R, Tweed J, Vinson L, Losina E, Haider AH, Qureshi FG
PMID: 28552450

…the role of oxidative stress is included within a number of studies…

PIF* promotes brain re-myelination locally while regulating systemic inflammation- clinically relevant multiple sclerosis M.smegmatis model
Migliara G, Mueller M, Piermattei A, Brodie C, Paidas MJ, Barnea ER, Ria F
PMID: 28423529

Mol Cell Biol. 2017 May 1
CREBH Maintains Circadian Glucose Homeostasis by Regulating Hepatic Glycogenolysis and Gluconeogenesis
PMID: 28461393

Fertil Steril. 2017 May 5
Oxidative stress: a key regulator of leiomyoma cell survival
Fletcher NM, Abusamaan MS, Memaj I, Saed MG, Al-Hendy A, Diamond MP, Saed GM
PMID: 28483502

…the role of oxidative stress is included within a number of studies…

J Robot Surg. 2017 May 3
Prospective assessment of positioning-related pain in robotic urologic surgery
Ginsburg KB, Pape K, Heilbronn C, Levin M, Cher ML
PMID: 28470407

…the role of oxidative stress is included within a number of studies…

Expert Rev Anticancer Ther. 2017 Jul;17(7):577-584
Cabozantinib for the treatment of kidney cancer
Abdelaziz A, Vaishampayan U
PMID: 28633552
Pharmacokinetics and safety of carfilzomib in patients with relapsed multiple myeloma and end-stage renal disease (ESRD): an open-label, single-arm, phase I study
PMID: 28424963

Renal Cell Carcinoma With Chromosome 6p Amplification Including the TFEB Gene: A Novel Mechanism of Tumor Pathogenesis?
Williamson SR, Grignon DJ, Cheng L, Favazza L, Gondim DD, Carskadon S, Gupta NS, Chitale DA, Kalyana-Sundaram S, Palanisamy N
PMID: 28009604

Evolving Treatment Paradigm in Metastatic Renal Cell Carcinoma.
Gill DM, Agarwal N, Vaishampayan U
PMID: 28561652

Oncotarget. 2017 May 9;8(19):31785-31801
The novel long non-coding RNA TALNEC2, regulates tumor cell growth and the stemness and radiation response of glioma stem cells
PMID: 28423669

Pathomimetic avatars reveal divergent roles of microenvironment in invasive transition of ductal carcinoma in situ
Sameni M, Cavallo-Medved D, Franco OE, Ch alasani A, Ji K, Aggarwal N, Anbalagan A, Chen X, Mattingly RR, Hayward SW, Sloane BF
PMID: 28506312

BJU Int. 2017 Mar 29
Prostate cancer family history and eligibility for active surveillance: a systematic review of the literature
Telang JM, Lane BR, Cher ML, Miller DC, Dupree JM
PMID: 28371016

JAMA Surg. 2017 Jun 21 [Epub ahead of print]
Practice-vs-Physician-Level Variation in Use of Active Surveillance for Men With Low-Risk Prostate Cancer: Implications for Collaborative Quality Improvement
Auffenberg GB, Lane BR, Linsell S, Cher ML, Miller DC
PMID: 28636713

Urology. 2017 Jun 23
Establishment of a Web-Based System for Collection of Patient-Reported Outcomes after Radical Prostatectomy in a Statewide Quality Improvement Collaborative.
PMID: 28652160

Open Forum Infect Dis. 2017 Jan 13;4(1)
Infection-Related Hospital Admissions After Prostate Biopsy in United States Men
Evans R, Loeb A, Kaye KS, Cher ML, Martin ET
PMID: 28480258

J Inherit Metab Dis. 2017 May 17
Developmental window of sensorineural deafness in biotinidase-deficient mice
Maheras KJ, Pindolia K, Wolf B, Gow A
PMID: 28516283

Approximately April 18, 2017 – July 7, 2017
Mol Cell Neurosci. 2017 Apr 28
Divergent lactate dehydrogenase isoenzyme profile in cellular compartments of primate forebrain structures
PMID: 28461219

Does vitamin D deficiency affect placental inflammation or infections among very low birth weight infants?
Puthuraya S, Karnati S, Kazzi SNJ, Qureshi F, Jacques SM, Thomas R
PMID: 28514918

Cell Death Dis. 2017 May 11;8(5)
TXNIP regulates mitophagy in retinal Müller cells under high-glucose conditions: implications for diabetic retinopathy
Devi TS, Somayajulu M, Kowluru RA, Singh LP
PMID: 28492550

Biochim Biophys Acta. 2017 May 3
Role of PARP-1 as a novel transcriptional regulator of MMP-9 in diabetic retinopathy
Mishra M, Kowluru RA
PMID: 28478229

Oncotarget. 2017 Apr 4;8(14):23337-23352
The cyclin-like protein, SPY1, regulates the ERα and ERK1/2 pathways promoting tamoxifen resistance
Ferraiuolo RM, Tubman J, Sinha I, Hamm C, Porter LA
PMID: 28423577

…for our female population…one study seeks new safe treatments for patients with ovarian cancer while another uses a well known sample collection technique similar to a Pap smear lead investigators to better treatments and diagnostics tools…while another seeks to understand the role of metformin…

Cancer. 2017 Apr 25
Phase 1 dose-escalation study of mirvetuximab soravtansine (IMGN853), a folate receptor α-targeting antibody-drug conjugate, in patients with solid tumors
PMID: 28440955

Placenta. 2017 Apr 26. pii: S0143-4004(17)30243-6
Quo vadis, trophoblast? Exploring the new ways of an old cell lineage
Drewlo S, Armant DR
PMID: 28483162

Gynecol Oncol. 2017 May 22
Synergistic effect of MEK inhibitor and metformin combination in low grade serous ovarian cancer
PMID: 28545687

Neuropharmacology. 2017 May 19
A novel iron (II) preferring dopamine agonist chelator D-607 significantly suppresses α-syn- and MPTP-induced toxicities in vivo
Das B, Rajagopalan S, Joshi GS, Xu L, Luo D, Andersen JK, Todi SV, Dutta AK
PMID: 28533164

Multistate Models on Pleural Effusion after Allogeneic Hematopoietic Stem Cell Transplantation
Am J Cancer Res. 2017 May 1;7(5):1213-1226
HDAC2 overexpression correlates with aggressive clinicopathological features and DNA-damage response pathway of breast cancer
PMID: 28560068

Eur J Pharmacol. 2017 May 31
Phosphoproteome and transcription factor activity profiling identify actions of the anti-inflammatory agent UTL-5g in LPS stimulated RAW 264.7 cells including disrupting actin remodeling and STAT-3 activation.
Carruthers NJ, Stemmer PM, Chen B, Valeriote F, Gao X, Guatam SC, Shaw J
PMID: 28576409

Am J Reprod Immunol. 2017 Jul;78(1)
CXCL10 and IL-6: Markers of two different forms of intra-amniotic inflammation in preterm labor
PMID: 28544362

J Surg Res. 2017 May 8
State-level geographic variation in prompt access to care for children after motor vehicle crashes
Wolf LL, Chowdhury R, Tweed J, Vinson L, Losina E, Haider AH, Qureshi FG
PMID: 28558908

Clin Cancer Res. 2017 Jun 12
Age and gender associations of virus positivity in Merkel cell carcinoma characterized using a novel RNA in situ hybridization assay
PMID: 28606924

Appl Environ Microbiol. 2017 Jun 16
Quantifying Vibrio cholerae enterotoxicity in a zebrafish infection model
Mitchell KC, Breen P, Britton S, Neely MN, Withey JH
PMID: 28625997

J Biol Chem. 2017 May 10
Pharmacological targeting of Rad6 enzyme-mediated translesion synthesis overcomes resistance to platinum-based drugs
Sanders MA, Haynes B, Nangia-Makker P, Polin LA, Shekhar MP
PMID: 28490629

Small. 2017 May 19
Dissolving Microneedle Arrays for Transdermal Delivery of Amphiphilic Vaccines
An M, Liu H
PMID: 28544329

Oncotarget. 2017 May 16
PMID: 28574836

Genet Med. 2017 Jun 22
Report on the Banbury Summit Meeting on medical genetics training in the genomic era, 23-26 February 2014.
Korf BR, Blitzer MG, Demmer LA, Feldman GL, Watson MS
PMID: 28640242
FGF21 does not require adipocyte AMP-activated protein kinase (AMPK) or the phosphorylation of acetyl-CoA carboxylase (ACC) to mediate improvements in whole-body glucose homeostasis
Mottillo EP, Desjardins EM, Fritzen AM, Zou VZ, Crane JD, Yabut JM, Kiens B, Erion DM, Lanba A, Granneman JG, Talukdar S, Steinberg GR
PMID: 28580278

Tissue- and Condition-Specific Isoforms of Mammalian Cytochrome c Oxidase Subunits: From Function to Human Disease
PMID: 28593021

Metformin, the aspirin of the 21st century: its role in gestational diabetes, prevention of preeclampsia and cancer, and the promotion of longevity.
PMID: 28619690

Mitochondrial Complex IV Subunit 4 Isoform 2 Is Essential for Acute Pulmonary Oxygen Sensing
PMID: 28620066

Synthesis of biotin-labelled core glycans of GPI anchors and their application in the study of GPI interaction with pore-forming bacterial toxins
Gao J, Zhou Z, Guo J, Guo Z
PMID: 28537279

Increased expression of calponin 2 is a positive prognostic factor in pancreatic ductal adenocarcinoma
PMID: 28537879

Cardiac troponin T and fast skeletal muscle denervation in ageing
PMID: 28419739

Evaluating a Decision Aid for Improving Decision Making in Patients with Early-stage Breast Cancer
Hawley ST, Newman L, Griggs JJ, Kosir MA, Katz SJ
PMID: 26178202

An Integrative Approach for Identifying Network Biomarkers of Breast Cancer Subtypes Using Genomic, Interactomic, and Transcriptomic Data
Firoozbakht F, Rezaeian I, D'agnillo M, Porter L, Rueda L, Ngom A
PMID: 28650678