

Accolades and Newsworthy Notes







Dr. Ali-Fehmi

Dr. Kang Chen

Dr. Karin List

Wayne State University School of Medicine 2016 faculty awards

Congratulations to our Program members, Dr. Karin List (Pharmacology) and Dr. Kang Chen (Obstetrics and Gynecology) and Dr. Rouba Ali-Fehmi (Pathology and Obstetrics & Gynecology)!

Drs. List and Chen each received the coveted Research Excellence Award from Wayne State University School of Medicine. This award marks high achievement and research excellence with demonstrated independence, a strong record of productivity and a solid continuing record of career accomplishments with sustained extramural support. Dr. Ali-Fehmi received a College Teaching Award for her excellence in instructional guidance.

These accolades, bestowed upon our members by the School of Medicine, are superb examples of our Program's academic accomplishments.

Bioactive Lipids in Cancer, Inflammation and Related Diseases

Program member, Dr. **Kenneth Honn**, distinguished professor, and executive committee and board member of the conference organizing committee, along with colleagues, announced the 2017, 15th international conference to be held in Puerto Vallarta, Mexico. For abstract submission and conference details, link here: http://bioactivelipidsconf.wayne.edu/index.php

A new patented compound

Dr. Cecilia Speyer announced her success in patenting a compound developed within the WSU incubator and FDA Roadmap projects. She is continuing animal studies using this immunoconjugate (IqA attached to a folate) for triple negative breast cancer.

BrainStorm 2016 Symposium

Program member Dr. Alexander Gow, Charles H. Gershenson distinguished fellow, associate director and professor of the WSU center for molecular medicine and genetics and professor of pediatrics and neurology and colleagues announced the 2016 Brainstorm 2016, a Brain Research Symposium" held on **September 29, 2016.** The keynote speaker was Kamil Ugurbil, PhD, director of the Center for Magnetic Resonance Research at the University of Minnesota. The symposium promotes communication and collaboration in neuroscience and brain research, facilitates neuroscience education in both undergraduate and graduate students and improves awareness of brain research at WSU. https://www.med.wayne.edu/news/2016/09/13/brain-storm-2016-brings-together-researchers-in-neurosciences/

A nifty educational visual publication and a star is born !

Dr. Mary Kosir's group has been visualized in the Journal of Visual Experiments. Authors are Daniel Xie, Donghong Ju (Jed), Cecilia Speyer, David Gorski and Mary Kosir. The video instructional manuscript describes a tube formation assay to quantify the effects of a given compound or condition on angiogenesis by using endothelial cell tube formation in a controlled environment. Many of us know Jed, the lead star in the video, as she regularly attends our Program meetings. Jed is so natural in the clip found here. http://www.jove.com/video/54074

Pathology Lecture Series

Several of our TBM Program members are deeply involved with the Pathology Department. This group, including, Drs. **Shijie Sheng**, **Hyeong-Reh Kim**, **Wael Sakr** and colleagues welcomed Heidi L. Ford, Professor, Department of Pharmacy.

Biological Sciences Seminar Series

On October 24, Dr. Karen A. Beningo hosted Dr. Edna Cukieman from Fox Chase Cancer Center. Dr. Cukieman shared her expertise partly gained from her work at the NIH in a talk titled 'Pancreatic cancer associated desmoplasia, a tale of two integrins'. Dr. Cukieman is noted for the development of a cell derived extracellular matrix in which she characterized and defined classes of focal adhesions.



Working toward our research strategic plan

In alignment with the Institute research strategic plan, Dr. Sheng announced the formation of the Epigenetics Workgroup. This newly formed research group will address epigenetics and small molecular imaging. Scientific themes emerged from a brainstorming session with fundamental cell metabolism as a driving force. The unique aspects of cell metabolism will include the role of mitochondria and protein modifications that govern genetics. Initial participants are: Drs. Shijie Sheng, Juri Gelovani, Fei Chen, Yubin Ge, Benjamin Kidder, Mary Kay Pflum, Lori Pile, Zhihui Qin, Douglas Ruden, Zengquan Yang, Zhe Yang, and Xiaohong (Mary) Zhang. Please keep a lookout for future news regarding this initiative.

Wayne State University Campus News

President M. Roy Wilson was featured in the Detroit Free Press on October 16. President Wilson walks about campus and enlightens readers on diversity and recruitment efforts, especially our successes at the SOM, campus housing, litter (a good thing) and MORE. Remember, say nice things about Detroit and read the story and see our campus photos here: http://www.freep.com/story/news/education/2016/10/16/wayne-state-university-president-wilson/91994290/

Women in Medicine and Science (WIMS)

Co Chair, Dr. Li Li and our Program members, Drs. Izabela Podgorski, Nabanita Datta, Shijie Sheng (Leader) and several faculty peers launched a new initiative at Wayne State University titled 'Women in Medicine and Science Advisory Committee'. This group aims to create an interactive culture on our campus which focuses on peer mentoring for camaraderie, personal growth and career development. The brown bag vignette, held on October 21 featured the topic 'What to do when your voice isn't heard' followed by discussion. The quorum is held on the 3rd Friday of each month at 1140 Scott Hall. All Faculty are welcomed. Contact any one of our participating Program members, noted above, for additional information. The acronym is so clever! If you say it really fast It almost sounds like 'women's'! Cheers. Look for future

New Funding \$\$\$\$ Wayne State University Library

Dr. Sheng reminded attendees that WSU Library recently announced funding to underwrite publication charges for materials published in fee based peer reviewed openly access venues. Applicants can request up to \$1000. Details and restrictions can be found on the WSU library home page. https://library.wayne.edu/blog/blog/2016/10/03/faculty-want-to-make-your-work-open-access-apply-for-funding-from-the-libraries/

Upcoming or recent local, national and international presentations

Oh Canada! Our Windsor colleagues are fighting cancer across the river



Dr. Dora Cavallo-Medved encouraged participation at the 3rd biennial international cancer research conference held on November 19 in Windsor. This group welcomed guest speaker Dr. Shoukat Dedhar from the University of British Columbia. Dr. Dedhar's is distinguished for work on cancer metastasis and the role of the tumor microenvironment. Details can be found here: http://windsorcancerresearch.com/

On November 12, the Michigan Society of Pathologists held their 2016 Fall conference at the Dearborn Inn. Many of our membership were noted as moderators on the 2016 Fall agenda including Drs. **Ulka Vaishampayan, Michael Cher**, and **Wael Sakr**. If you are interested in joining this professional group, details can be found here: http://www.michpath.org/

Hot off the Press - SELECTION OF PUBLICATIONS

A Double Dip for Dr. Avi Raz! Two papers published on the same date!

Oncotarget. 2016 Oct 12

Positive associations between galectin-3 and PSA levels in prostate cancer patients: a prospective clinical study-l

Nakajima K, Heilbrun LK, Hogan V, Smith D, Heath E, Raz A

PMID: 27741512

Oncotarget. 2016 Oct 12

The influence of PSA autoantibodies in prostate cancer patients: a prospective clinical study-ll

Nakajima K, Heilbrun LK, Smith D, Hogan V, Raz A, Heath E

PMID: 27741522

Oncotarget. 2016 Jul 29

Repurposing phenformin for the targeting of glioma stem cells and the treatment of glioblastoma Jiang W, Finniss S, Cazacu S, Xiang C, Brodie Z, Mikkelsen T, Poisson L, Shackelford DB, Brodie C

PMID: 27486821

Clin Transplant. 2016 Sep 1.

Adverse Effects of Voriconazole: Over a Decade of Use

Levine MT, Chandrasekar PH

PMID: 27581783



Cell Rep. 2016 Sep 20;16(12):3232-46.

IL-4 Induces Metallothionein 3- and SLC30A4-Dependent Increase in Intracellular Zn(2+) that Promotes Pathogen Persistence in Macrophages

Subramanian Vignesh K, Landero Figueroa JA, Porollo A, Divanovic S, Caruso JA, Deepe GS Jr

PMID: 27653687

World J Surg Oncol. 2016 Oct 19;14(1):269.

Safety and efficacy of the keystone and rhomboid flaps for immediate reconstruction after wide local excision of non-head and neck melanomas

Taleb M, Choi L, Kim S PMID: 27756412

Cancer. 2016 Oct;122(19):3005-14.

Does FLT3 mutation impact survival after hematopoietic stem cell transplantation for acute myeloid leukemia? A Center for International Blood and Marrow Transplant Research (CIBMTR) analysis

Deol A, Sengsayadeth S, Ahn KW, Wang HL, Aljurf M, Antin JH, Battiwalla M, Bornhauser M, Cahn JY et al.

PMID: 27315441

FEBS Lett. 2016 Aug 8.

Characterization of tunnel mutants reveals a catalytic step in ammonia delivery by an aminoacyl-tRNA amidotransferase.

Zhao L, Rathnayake UM, Dewage SW, Wood WN, Veltri AJ, Cisneros GA, Hendrickson TL

PMID: 27500385

Am J Physiol Lung Cell Mol Physiol. 2016 Sep 9

Human lung fibroblasts produce pro-resolving peroxisome proliferator-activated receptor-gamma ligands in a cyclooxygenase-2 dependent manner

Lacy SH, Woeller CF, Thatcher TH, Maddipati KR, Honn KV, Sime PJ, Phipps RP

PMID: 27612965

Arch Pathol Lab Med. 2016 Jul;140(7):698-713.

Sampling and Definitions of Placental Lesions: Amsterdam Placental Workshop Group Consensus Statement

Khong TY, Mooney EE, Ariel I, Balmus NC, Boyd TK, Brundler MA, Derricott H, Evans MJ, Faye-Petersen OM, Gillan JE, Heazell AE, Heller DS, Jacques SM, et al.

PMID: 27223167

Metabolism. 2016 Oct;65(10):1570-81

Hyperlipidemia and the development of diabetic retinopathy: Comparison between type 1 and type 2 animal models

Kowluru RA, Mishra M, Kowluru A, Kumar B

PMID: 27621192

Cell Physiol Biochem. 2016 Nov 2;39(6):2110-2120

Metabolic Stress Induces Caspase-3 Mediated Degradation and Inactivation of Farnesyl and Geranylgeranyl Transferase Activities in Pancreatic β-Cells

Veluthakal R, Arora DK, Goalstone ML, Kowluru RA, Kowluru A

PMID: 27802439

J Biol Chem. 2016 Jul 29;291(31):16001-10

Characterization of Eicosanoids Produced by Adipocyte Lipolysis: IMPLICATION OF CYCLOOXYGENASE-2 IN ADIPOSE INFLAMMATION

Gartung A, Zhao J, Chen S, Mottillo E, VanHecke GC, Ahn YH, Maddipati KR, Sorokin A, Granneman J, Lee MJ

PMID: 27246851

Oncotarget. 2016 Aug 12

Matriptase regulates c-Met mediated proliferation and invasion in inflammatory breast cancer

Zoratti GL, Tanabe LM, Hyland TE, Duhaime MJ, Colombo É, Leduc R, Marsault E, Johnson MD, Lin CY, Boerner J, Lang JE, List K

PMID: 27528224

Oncotarget. 2016 Aug 15

Conditional ablation of HDAC3 in islet beta cells results in glucose intolerance and enhanced susceptibility to STZ-induced diabetes

Chen WB, Gao L, Wang J, Wang YG, Dong Z, Zhao J, Mi QS, Zhou L

PMID: 27542279



Exp Dermatol. 2016 Aug 31

miRNA miR-17-92 cluster is differentially regulated in the imiqumod-treated skin but is not required for imiqumod-induced psoriasis-like dermatitis in mice

Wu D, Bi X, Qu L, Han L, Yin C, Deng J, Dong Z, Mi QS, Zhou L

PMID: 27579777

Oncotarget. 2016 Sep 20

TIM-4 is expressed on invariant NKT cells but dispensable for their development and function

Zhang X, Gu J, Zhou L, Mi QS

PMID: 27662666

J Radiat Oncol. 2016 Sep;5(3):279-286

Differential effects of patient-related factors on the outcome of radiation therapy for rectal cancer

Kato I, Dyson G, Snyder M, Kim HR, Severson RK

PMID: 27746859

J Trauma Acute Care Surg. 2016 Oct;81(4):666-73

Classification and team response to nonroutine events occurring during pediatric trauma resuscitation

Webman RB, Fritzeen JL, Yang J, Ye GF, Mullan PC, Qureshi FG, Parker SH, Sarcevic A, Marsic I, Burd RS

PMID: 27648769

Mol Pharmacol. 2016 Aug 26

Transcriptional Regulation of Human Cytosolic Sulfotransferase 1C3 by Peroxisome Proliferator-Activated Receptor γ in LS180 **Human Colorectal Adenocarcinoma Cells**

Dubaisi S, Fang H, Kocarek TA, Runge-Morris M

PMID: 27565680

PLoS One. 2016 Aug 18;11(8):e0161539

Gene Signature of High White Blood Cell Count in B-Precursor Acute Lymphoblastic Leukemia

Edwards H, Rubenstein M, Dombkowski AA, Caldwell JT, Chu R, Xavier AC, Thummel R, Neely M, Matherly LH, Ge Y, Taub JW

PMID: 27536776

Animal Models of Streptococcus pyogenes Infection

Watson ME Jr., Neely MN, Caparon MG. Editors

In: Ferretti JJ, Stevens DL, Fischetti VA, editors

Source Streptococcus pyogenes: Basic Biology to Clinical Manifestations [Internet]. Oklahoma City (OK): University of Oklahoma Health

Sciences Center; 2016

PMID: 26866224

Gynecol Oncol. 2016 Aug 16

Is age a prognostic biomarker for survival among women with locally advanced cervical cancer treated with chemoradiation? An NRG Oncology/Gynecologic Oncology Group ancillary data analysis

Moore KN, Java JJ, Slaughter KN, Rose PG, Lanciano R, DiSilvestro PA, Thigpen JT, Lee YC, Tewari KS, Chino J, Seward SM, Miller DS,

Salani R. Moore DH. Stehman FB

PMID: 27542967

J Vis Exp. 2016 Aug 14;(114)

Strategic Endothelial Cell Tube Formation Assay: Comparing Extracellular Matrix and Growth Factor Reduced Extracellular

Matrix

Xie D, Ju D, Speyer C, Gorski D, Kosir MA

PMID: 27585062

Brain, 2016 Sep 19

Unbiased screen identifies aripiprazole as a modulator of abundance of the polyglutamine disease protein, ataxin-3

Costa MD, Ashraf NS, Fischer S, Yang Y, Schapka E, Joshi G, McQuade TJ, Dharia RM, Dulchavsky M, Ouyang M, Cook D, Sun D,

Larsen MJ, Gestwicki JE, Todi SV, Ivanova MI, Paulson HL

PMID: 27645800

Sci Rep. 2016 Aug 23;6:31742

COX7AR is a Stress-inducible Mitochondrial COX Subunit that Promotes Breast Cancer Malignancy

Zhang K, Wang G, Zhang X, Hüttemann PP, Qiu Y, Liu J, Mitchell A, Lee I, Zhang C, Lee JS, Pecina P, Wu G, Yang ZQ, Hüttemann M,

Grossman LI PMID: 27550821



Lab Invest. 2016 Oct;96(10):1040-9

Dynamic DNA methylation of matrix metalloproteinase-9 in the development of diabetic retinopathy

Kowluru RA, Shan Y, Mishra M

PMID: 27454437

Oncotarget. 2016 Aug 30

Bone marrow adipocytes promote the warburg phenotype in metastatic prostate tumors via HIF-1α activation

Diedrich JD, Rajagurubandara E, Herroon MK, Mahapatra G, Hüttemann M, Podgorski I

PMID: 27588494

Chem Commun (Camb). 2016 Oct 18;52(85):12590-12593

Caging the uncageable: using metal complex release for photochemical control over irreversible inhibition

Huisman M, White JK, Lewalski VG, Podgorski I, Turro C, Kodanko JJ

Abstract

PMID: 27711349

Biol Blood Marrow Transplant. 2016 Aug;22(8):1424-30

Intravenous Busulfan-Based Myeloablative Conditioning Regimens Prior to Hematopoietic Cell Transplantation for Hematologic Malignancies

Pasquini MC, Le-Rademacher J, Zhu X, Artz A, DiPersio J, Fernandez HF, Mineishi S, Kamishohara M, Mehta J, Nakamura Y,

Ratanatharathorn V, Sobecks R, Burkart J, Bredeson C

PMID: 27154848

Lancet Oncol. 2016 Sep;17(9):1283-94

Nivolumab for classical Hodgkin's lymphoma after failure of both autologous stem-cell transplantation and brentuximab vedotin: a multicentre, multicohort, single-arm phase 2 trial

Younes A, Santoro A, Shipp M, Zinzani PL, Timmerman JM, Ansell S, Armand P, Fanale M, Ratanatharathorn V, et al.

PMID: 27451390

Am J Hematol. 2016 Sep;91(9):E341-7

Incidence, etiology, and outcome of pleural effusions in allogeneic hematopoietic stem cell transplantation.

Modi D, Jang H, Kim S, Deol A, Ayash L, Bhutani D, Lum LG, Ratanatharathorn V, Manasa R, Mellert K, Uberti JP

PMID: 27238902

Eur Urol. 2016 Oct 8

Nomogram-based Prediction of Overall Survival in Patients with Metastatic Urothelial Carcinoma Receiving First-line Platinum-based Chemotherapy: Retrospective International Study of Invasive/Advanced Cancer of the Urothelium (RISC)

Necchi A, Sonpavde G, Lo Vullo S, Giardiello D, Bamias A, Crabb SJ, Harshman LC, Bellmunt J, De Giorgi U, Sternberg CN, Cerbone L,

Ladoire S, Wong YN, Yu EY, Chowdhury S, Niegisch G, Srinivas S, Vaishampayan UN, et al

PMID: 27726966

J Nucl Med. 2016 Oct 27

Sympathetic Innervation of Cold-Activated Brown and White Fat in Lean Young Adults

Muzik O, Mangner TJ, Leonard WR, Kumar A, Granneman JG

PMID: 27789721

Anticancer Res. 2016 Nov;36(11):5593-5606 Cancer Immunology and Immunotherapy Sukari A, Nagasaka M, Al-Hadidi A, Lum LG

PMID: 27793882

Hepatology. 2016 Nov;64(5):1559-1576

Nogo-B receptor deficiency increases liver X receptor alpha nuclear translocation and hepatic lipogenesis through an adenosine monophosphate-activated protein kinase alpha-dependent pathway.

Hu W, Zhang W, Chen Y, Rana U, Teng RJ, Duan Y, Liu Z, Zhao B, Foeckler J, Weiler H, Kallinger RE, Thomas MJ, Zhang K, Han J Miao

QR

PMID: 27480224

Sci Rep. 2016 Sep 23;6:32382

Altered Biomarkers in Trophoblast Cells Obtained Noninvasively Prior to Clinical Manifestation of Perinatal Disease

Bolnick JM, Kohan-Ghadr HR, Fritz R, Bolnick AD, Kilburn BA, Diamond MP, Armant DR, Drewlo S

PMID: 27660926



PLoS One. 2016 Oct 4;11(10):e0163913

Regulation of HBEGF by Micro-RNA for Survival of Developing Human Trophoblast Cells

Jain CV, Jessmon P, Kilburn BA, Jodar M, Sendler E, Krawetz SA, Armant DR

PMID: 27701455

Invest Ophthalmol Vis Sci. 2016 Oct 1:57(13):5748-5757

The Role of DNA Methylation in the Metabolic Memory Phenomenon Associated With the Continued Progression of Diabetic Retinopathy

Mishra M, Kowluru RA PMID: 27787562

Clin Genitourin Cancer. 2016 Oct;14(5):432-437. doi: 10.1016/j.clgc.2016.03.011. Epub 2016 Mar 12

Phase II Study of Pazopanib and Paclitaxel in Patients With Refractory Urothelial Cancer

Narayanan S, Lam A, Vaishampayan U, Harshman L, Fan A, Pachynski R, Poushnejad S, Haas D, Li S, Srinivas S

PMID: 27068017

J Biol Chem. 2016 Oct 28;291(44):23149-23158. Epub 2016 Sep 16

Toll-like Receptor (TLR) Signaling Interacts with CREBH to Modulate High-density Lipoprotein (HDL) in Response to Bacterial Endotoxin

Dandekar A, Qiu Y, Kim H, Wang J, Hou X, Zhang X, Zheng Z, Mendez R, Yu FS, Kumar A, Fang D, Sun F, Zhang K

PMID: 27637329

Diabetes. 2016 Sep 15. pii: db160052. [Epub ahead of print]

Inositol Requiring Enzyme 1 Facilitates Diabetic Wound Healing through Modulating microRNAs

Wang JM, Qiu Y, Yang ZQ, Li L, Zhang K

PMID: 27634225

Proc Natl Acad Sci U S A. 2016 Sep 13;113(37):10394-9. doi: 10.1073/pnas.1606742113. Epub 2016 Aug 29

Endoplasmic reticulum-resident E3 ubiquitin ligase Hrd1 controls B-cell immunity through degradation of the death receptor CD95/Fas

Kong S, Yang Y, Xu Y, Wang Y, Zhang Y, Melo-Cardenas J, Xu X, Gao B, Thorp EB, Zhang DD, Zhang B, Song J, Zhang K, Zhang J,

Zhang J, Li H, Fang D **PMID: 27573825**

Sci Rep. 2016 Sep 1;6:32246

Glucagon regulates hepatic lipid metabolism via cAMP and Insig-2 signaling: implication for the pathogenesis of hypertriglyceridemia and hepatic steatosis

Wang H, Zhao M, Sud N, Christian P, Shen J, Song Y, Pashaj A, Zhang K, Carr T, Su Q

PMID: 27582413

J Biol Chem. 2016 Oct 28;291(44):23149-23158. Epub 2016 Sep 16

Toll-like Receptor (TLR) Signaling Interacts with CREBH to Modulate High-density Lipoprotein (HDL) in Response to Bacterial Endotoxin

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PMID: 27637329

Public link to abstracts on Pub Med TBM Program, Q4, 2016:

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https://www.ncbi.nlm.nih.gov/sites/myncbi/1FYGjcDKXgCAs/collections/51334746/public/