



Accolades and Newsworthy Notes

YOUR BEST CHANCE

Karmanos Cancer Institute has launched a new advertisement campaign starting on April 17. Our marketing team sends their special thanks to those of you who participated in the campaign. The ads will appear on television, radio, digital social media and a dramatic 8 page insert in the Detroit Free Press on April 23.

Click here and keep a lookout for some familiar faces from our Program membership.

https://www.youtube.com/watch?v=FDf19HrUDN0&index=2&list=PLCZleQvSw9_EwAZiTrqZ0ToBGeUtGs8ws

Cancer Warriors academic quest for excellence

The Leonard N. Simons Award for exemplary research and scholarly achievement was granted to Mr. John Diedrich, a scholar mentoring with Dr. Izabela Podgorski. The award was presented on March 31 at the 7th annual cancer biology research symposium. John's work was titled "Bone marrow adipocyte-derived lipids alters the metabolic phenotype of metastatic prostate cancer cells through activation of HIF-1 α ". John is shown here (with his trophy) along with Mary Lou Zieve, daughter of Leonard N. Simons, and Dr. Podgorski. Cheers !



In addition, many of our Program faculty members and their protégé participated in this annual event. Specific nods go to our members who served as Judges including Drs. Benjamin Kidder, Sreenivasa Chinni, Kang Chen, Daniel Bonfil, Karin List, Izabela Podgorski, and Youming Xie.

In the spirited pursuit of academics and scientific training

Dr. Kang Chen shared news that Wayne State announced Mr. Michael Pawlitz, a master's scholar in his lab, received first place in the university wide graduate and post doc symposium. Mr. Pawlitz' is work was titled "Interleukin 33 induced expression of PIBF1 by decidual B cells protect against preterm labor".

Dr. Shijie Sheng acknowledged her undergraduate student, Ms. Maria Matta, who received an award at the Wayne State University Undergraduate Research and Creative Projects Conference. Maria has gone on to present her work at other conferences and has been approached by academic recruiters in research and medical programs.

Drs. Rafi Fridman, Sijana Dzinic, Margardia Bernardo and colleagues have designed a new curriculum focusing on the key hallmarks of cancer. This new biology class will be offered to undergraduates and pre-med students at Wayne State. Their plan includes laboratory approaches using cell lines and animal models.

Dr. Margarida Bernardo notes their new publication titled 'The opportunity of precision medicine for breast cancer with context sensitive tumor suppressor maspin'. Joining Dr. Bernardo (as first author) on the marquee are Sijana H. Dzinic, Maria J Matta, Ivory Dean, Lina Saker and Shijie Sheng. Please remember Dr. Dean was a previous student with us.

<http://onlinelibrary.wiley.com/doi/10.1002/jcb.25969/epdf>



Pathology Lecture Series

Program Leader and members Drs. Shijie Sheng, Wael Sakr and Rodrigo Fernandez-Valdivia are busy with the Pathology Lecture Series at Wayne State. Look for future posting on the Wayne Calendar of Events. On April 19 the speaker will be Dr. Ivory S. Dean, a former scholar in our cancer biology program.



New Funding \$\$

...to borrow a quote and some words of wisdom...

“I love mathematics and that has helped humans abstractly think deeper about the essence of the universe”

Dr. Jeffrey Tseng, humbly shared news of a new award announced on March 14, 2017. The NIH project is titled: Database and Tools for Functional Inference and Mechanistic Insight into Somatic Cancer Mutations. Our Wayne State collaborators share this NCI, NIH award with Dr. Jie Liang at University of Illinois at Chicago. R01CA204962.

Dr. Tseng mentored under Dr. Jie Liang to develop strategies in computational geometry in addition to algebraic topology and knot theory. Cheers !

Follow these links to the fine work of Drs. Tseng and Liang:

<http://pocket.med.wayne.edu/ytseng/>

<http://gila.bioe.uic.edu/lab/>

Our university news

Wayne State – please note the importance of mathematics and add it back to your undergraduate general education requirement !
<http://www.freep.com/story/news/local/michigan/detroit/2016/06/12/wayne-state-drops-math-general-ed-requirement/85648592/>

Our nation “March for Science” initiative

<https://www.marchforscience.com/event-details/>

National Meeting AACR

The American Association for Cancer Research held it's annual meeting in Washington DC. This organization is dedicated to prevent and cure cancer through research, education, communication, and collaboration.

Donghong Ju, who frequently participates in our Program meetings, presented a poster co-authored with Dr. Mary Kosir titled “Characterize and identify secreted high molecular weight heparanase from PC3M conditioned medium”; abstract # 946. Cheers !

Hot off the Press – SELECTION OF PUBLICATIONS

Nucleic Acids Res. 2017 Apr 10

H3K4 demethylase KDM5B regulates global dynamics of transcription elongation and alternative splicing in embryonic stem cells

He R, **Kidder BL**

PMID: 28402433



Cilia. 2017 Apr 10;6:7

Mutations in IFT-A satellite core component genes IFT43 and IFT121 produce short rib polydactyly syndrome with distinctive campomelia

Duran I, Taylor SP, Zhang W, Martin J, **Qureshi F, Jacques SM**, Wallerstein R, Lachman RS, Nickerson DA, Bamshad M, Cohn DH, Krakow D

PMID: 28400947

Hum Reprod. 2017 Apr 10:1-12

Enhancement of trophoblast differentiation and survival by low molecular weight heparin requires heparin-binding EGF-like growth factor

Bolnick AD, Bolnick JM, Kohan-Ghadr HR, Kilburn BA, Pasalodos OJ, Singhal PK, Dai J, Diamond MP, **Armant DR**, Drewlo S

PMID: 28402449

J Neurochem. 2017 Apr 6

Dimethyl Fumarate Ameliorates Myoclonus Stemming From Protein Misfolding In Oligodendrocytes

Southwood CM, Garshott DM, Richardson CR, Seraji-Bozorgzad N, Fribley AM, **Gow A**

PMID: 28382685

Visualizing Science helps us to understand how studies are conducted

Kezhong Zhang co-stars with college Jie-Mei Wang in this instructional video publication. Dr. Jie Mei Wang will be speaking at our Program meeting on June 12. See you there.

J Vis Exp. 2016 Dec 19;(118)

Isolation and Primary Culture of Mouse Aortic Endothelial Cells.

Wang JM, Chen AF, **Zhang K**

PMID: 28060318

<https://www.jove.com/video/52965/isolation-and-primary-culture-of-mouse-aortic-endothelial-cells>

J Vis Exp. 2017 Mar 12;(121). doi: 10.3791/55446.

Analysis of Termination of Transcription Using BrUTP-strand-specific Transcription Run-on (TRO) Approach

Dhoondia Z, Tarockoff R, Alhusini N, Medler S, Agarwal N, **Ansari A**

Abstract This manuscript describes a protocol for detecting transcription termination defect in vivo. The strand-specific

PMID: 28362387

<http://up7af9tu5s.search.serialssolutions.com/?sid=Entrez:PubMed&id=pmid:28362387>

Understanding vision also helps us to understand the cell microenvironment

Graefes Arch Clin Exp Ophthalmol. 2017 Jan 25

Role of oxidative stress in epigenetic modification of MMP-9 promoter in the development of diabetic retinopathy

Kowluru RA, Shan Y

PMID: 28124145 and Erratum PMID: 28246894

Graefes Arch Clin Exp Ophthalmol. 2017 Feb 28

Erratum to: Role of oxidative stress in epigenetic modification of MMP-9 promoter in the development of diabetic retinopathy

Kowluru RA, Shan Y

Erratum for Role of oxidative stress in epigenetic modification of MMP-9 promoter in the development of diabetic retinopathy. [Graefes Arch Clin Exp Ophthalmol. 2017]

PMID: 28246894



BJU Int. 2017 Feb 15

Calculating life expectancy to inform prostate cancer screening and treatment decisions.
Hawken SR, Auffenberg GB, Miller DC, Lane BR, **Cher ML**, Abdollah F, Cho H, Ghani KR
Michigan Urological Surgery Improvement Collaborative. **PMID: 28199761**

Cancer Med. 2017 Apr 16

Characterizing the outcomes of metastatic papillary renal cell carcinoma

Connor Wells J, Donskov F, Fraccon AP, Pasini F, Bjarnason GA, Beuselinck B, Knox JJ, Rha SY, Agarwal N, Bowman IA, Lee JL, Pal SK, Srinivas S, Scott Ernst D, **Vaishampayan UN**. et al.
PMID: 28414866

Laryngoscope. 2017 Mar 8

Definitive chemoradiotherapy with carboplatin for squamous cell carcinoma of the head and neck

Nagasaka M, Zaki M, Issa M, Kim H, **Abrams J**, Sukari A
PMID: 28271529

Int J Gynecol Pathol. 2017 Mar 8.

The Impact of Androgen Receptor Expression on Endometrial Carcinoma Recurrence and Survival.

Mahdi Z, Abdulfatah E, Pardeshi V, Hassan O, Schultz D, Morris R, Cote ML, Elshaikh MA, **Bandyopadhyay S, Ali-Fehmi R**
PMID: 28277313

Free Radic Biol Med. 2016 Dec;101:44-52. Epub 2016 Sep 25.

Hypochlorite converts cysteinyl-dopamine into a cytotoxic product: A possible factor in Parkinson's Disease
Mehta NJ, Asmaro K, Hermiz DJ, Njus MM, Saleh AH, **Beningo KA**, Njus D
PMID: 27682361

JAMA Surg. 2016 Nov 1;151(11):1086-1088.

Pancreatic Cancer Cell Lysis by Cell-Penetrating Peptide-MAGE-A3-Induced Cytotoxic T Lymphocytes.
Batchu RB, Gruzdyn OV, Qazi AM, Mahmud EM, Mostafa G, Weaver DW, Gruber SA
PMID: 27851862

This work was noted in Mammary Cell News via twitter. Should your interest be peeked, here's the link to subscribe: <https://twitter.com/MammaryCell>

J Cell Biochem. 2017 Mar 6

The Opportunity of Precision Medicine for Breast Cancer With Context-Sensitive Tumor Suppressor Maspin.
Bernardo MM, Dzinic SH, Matta MJ, Dean I, Saker L, **Sheng S**
PMID: 28262971

Cancer Lett. 2016 Dec 28;383(2):309-317. Epub 2016 Sep 28

Anti-tumor activity of selective inhibitor of nuclear export (SINE) compounds, is enhanced in non-Hodgkin lymphoma through combination with mTOR inhibitor and dexamethasone
Muqbil I, Aboukameel A, Elloul S, Carlson R, Senapedis W, Baloglu E, Kauffman M, Shacham S, **Bhutani D**, Zonder J, Azmi AS, Mohammad RM
PMID: 27693556

Nanomedicine. 2017 Feb;13(2):421-429

Design principles for noninvasive, longitudinal and quantitative cell tracking with nanoparticle-based CT imaging.
Meir R, Betzer O, Motiei M, Kronfeld N, **Brodie C**, Popovtzer R
PMID: 27720990

Sci Rep. 2017 Feb 17;7:42589

Molecular Basis of ABHD5 Lipolysis Activation

Sanders MA, Zhang H, Mladenovic L, **Tseng YY**, **Granneman JG**
PMID: 28211464

**Pediatr Nephrol. 2017 Feb 10****Marked increase in urinary excretion of apolipoproteins in children with nephrolithiasis associated with hypercalciuria.**Kovacevic L, Lu H, **Caruso JA**, Govil-Dalela T, Thomas R, Lakshmanan Y**PMID: 28188435****Clin Exp Metastasis. 2017 Feb;34(2):155-169****Activated thrombin-activatable fibrinolysis inhibitor attenuates the angiogenic potential of endothelial cells: potential relevance to the breast tumour microenvironment**Bazzi ZA, Balun J, **Cavallo-Medved D, Porter LA**, Boffa MB**PMID: 28124276****Comput Methods Programs Biomed. 2016 Dec;137:137-148. Epub 2016 Sep 22**

Classification-based quantitative analysis of stable isotope labeling by amino acids in cell culture (SILAC) data.

Kim S, Carruthers N, Lee J, **Chinni S, Stemmer P****PMID: 28110720****Elife. 2017 Feb 28;6****Lipid droplet biology and evolution illuminated by the characterization of a novel perilipin in teleost fish****Granneman JG**, Kimler VA, Zhang H, Ye X, Luo X, Postlethwait JH, Thummel R**PMID: 28244868****Pediatr Dev Pathol. 2017 Mar-Apr;20(2):112-119****Adrenal Histologic Stress-related Changes in Third Trimester Stillbirth****Jacques SM, Qureshi F****PMID: 28326964****Epigenetics Chromatin. 2017 Feb 23;10:8****SMYD5 regulates H4K20me3-marked heterochromatin to safeguard ES cell self-renewal and prevent spurious differentiation****Kidder BL**, Hu G, Cui K, Zhao K**PMID: 28250819****J Cardiovasc Pharmacol Ther. 2017 Jan 1****Parathyroid Hormone-Related Peptide: A Novel Endocrine Cardioprotective "Conditioning Mimetic"**Datta T, Przyklenk K, **Datta NS****PMID: 28403647****Biochem Biophys Res Commun. 2017 Apr 1;485(2):529-534****Structural basis of PDZ-mediated chemokine receptor CXCR2 scaffolding by guanine nucleotide exchange factor PDZ-RhoGEF**Spellmon N, Holcomb J, Niu A, Choudhary V, Sun X, Zhang Y, Wan J, Doughan M, Hayden S, Hachem F, Brunzelle J, **Li C**, Yang Z**PMID: 28179147****Anticancer Res. 2017 Feb;37(2):455-463****Fumonisin B1 Inhibits Endoplasmic Reticulum Stress Associated-apoptosis After FoscanPDT Combined with C6-Pyridinium Ceramide or Fenretinide**Boppana NB, Kravcka JM, Rahmaniyan M, Li LI, Bielawska A, Bielawski J, Pierce JS, Delor JS, **Zhang K**, Korbelik M5, Separovic D**PMID: 28179290****Oncotarget. 2017 Feb 3****HDAC4 is expressed on multiple T cell lineages but dispensable for their development and function**Liu Q, Zhang X, Yin C, Chen X, Zhang Z, Brown S, Xie H, Zhou L, **Mi QS****PMID: 28177888**



Exp Neurol. 2017 Feb 20;292:56-62

Nanoconjugate-bound adenosine A1 receptor antagonist enhances recovery of breathing following acute cervical spinal cord injury

Minic Z, Wilson S, Liu F, Sankari A, **Mao G**, Goshgarian H

PMID: 28223038

Chem Commun (Camb). 2017 Mar 28;53(26):3673-3676

Illuminating cytochrome P450 binding: Ru(ii)-caged inhibitors of CYP17A1

Li A, Yadav R, White JK, Herroon MK, Callahan BP, **Podgorski I**, Turro C, Scott EE, Kodanko JJ

PMID: 28304025

Curr Pharm Des. 2017 Feb 16

The potential roles of radionanomedicine and radioexosomic in prostate cancer research and treatment.

Bakht MK, Oh SW, Hwang DW, Lee YS, Youn H, **Porter LA**, Cheon GJ, Kwak C, Lee DS, Kang KW

PMID: 28215159

Drugs R D. 2017 Mar 21

Revisiting CDK Inhibitors for Treatment of Glioblastoma Multiforme

Lubanska D, **Porter L**

PMID: 28324583

Horm Mol Biol Clin Investig. 2017 Jan 1;29(1):27-36

Expression, purification and characterization of human cytosolic sulfotransferase (SULT) 1C4

Guidry AL, Tibbs ZE, **Runge-Morris M**, Falany CN

PMID: 28222028

Gynecol Oncol. 2017 Feb 23

Updates of the role of oxidative stress in the pathogenesis of ovarian cancer

Saed GM, Diamond MP, Fletcher NM

PMID: 28237618

J Colloid Interface Sci. 2017 Jun 15 Epub 2017 Feb 14

Synthesis and characterization of folate decorated albumin bio-conjugate nanoparticles loaded with a synthetic curcumin difluorinated analogue

Gawde KA, Kesharwani P, Sau S, **Sarkar FH**, Padhye S, Kashaw SK, Iyer AK

PMID: 28236692

J Cell Biochem. 9999:1-9. 2017. DOI 10.1002/jcb.25969

Bernardo MM, Dzinic SH, Matta MJ, Dean I, Saker L, **Sheng S**

The opportunity of precision medicine for breast cancer with context sensitive tumor suppressor maspin.

Hum Mol Genet. 2017 Feb 1

Interaction of the polyglutamine protein ataxin-3 with Rad23 regulates toxicity in Drosophila models of Spinocerebellar Ataxia Type 3

Sutton JR, Blount JR, Libohova K, Tsou WL, Joshi GS, Paulson HL, do Carmo Costa M, Scaglione MK, **Todi SV**

PMID: 28158474

Second author, Dr. Omid Tehrani, is a past scholar in our cancer biology program and also completed his fellowship in our oncology fellowship program. Cheers to this collaboration.

Mol Imaging Biol. 2017 Mar 13

A Pilot Trial Evaluating Zoledronic Acid Induced Changes in [18F]FMAU-Positron Emission Tomography Imaging of Bone Metastases in Prostate Cancer

Vaishampayan UN, Tehrani OS, Lawhorn-Crews JM, Heilbrun LK, Dobson K, Smith D, Dickow B, Shields AF

PMID: 28289967



Urol Oncol. 2017 Apr;35(4):142-148. Epub 2017 Mar 2

Nivolumab treatment for advanced renal cell carcinoma: Considerations for clinical practice

Joseph RW, Chatta G, **Vaishampayan U**

PMID: 28259541

JAMA Oncol. 2017 Mar 30

Abiraterone Acetate for Metastatic Prostate Cancer in Patients With Suboptimal Biochemical Response to Hormone Induction

Flaig TW, Plets M, Hussain MH, Agarwal N, Mitsiades N, Deshpande HA, **Vaishampayan UN**, Thompson IM Jr

PMID: 28358937

Oncologist. 2017 Mar 17

Academic Cancer Center Phase I Program Development

Frankel AE, Flaherty KT, Weiner GJ, Chen R, Azad NS, Pishvaian MJ, Thompson JA, Taylor MH, Mahadevan D, Lockhart AC, **Vaishampayan UN**, et al

PMID: 28314841

Curr Opin Oncol. 2017 Mar 18

Changing face of metastatic prostate cancer: the law of diminishing returns holds true

Vaishampayan UN

PMID: 28323658

Clin Genitourin Cancer. 2017 Feb 27

Clinical Outcomes of Perioperative Chemotherapy in Patients With Locally Advanced Penile Squamous-Cell Carcinoma: Results of a Multicenter Analysis

Necchi A, Pond GR, Raggi D, Ottenhof SR, Djajadiningrat RS, Horenblas S, Khoo V, Hakenberg OW, Draeger D, Protzel C, Heidenreich A, Haidl F, Eigl BJ, Nappi L, Matsumoto K, **Vaishampayan U**, et al.

PMID: 28325636

AMA Oncol. 2016 Dec 22

Association Between Benign Breast Disease in African American and White American Women and Subsequent Triple-Negative Breast Cancer

Newman LA, Stark A, Chitale D, Pepe M, Longton G, **Worsham MJ**, Nathanson SD, Miller P, Bensenhaver JM, Proctor E, Swain M, Patriotis C, Engstrom PF

PMID: 28006062

Dr. Modi is a currently a fellow in our oncology fellowship program.

Support Care Cancer. 2017 Apr 2

Fluoroquinolone prophylaxis in autologous hematopoietic stem cell transplant recipients

Modi D, Jang H, Kim S, Surapaneni M, Sankar K, **Deol A**, Ayash L, **Bhutani D**, **Lum LG**, Ratanatharathorn V, Manasa R, Mellert K, **Chandrasekar P**, **Uberty JP**

PMID: 28365897