

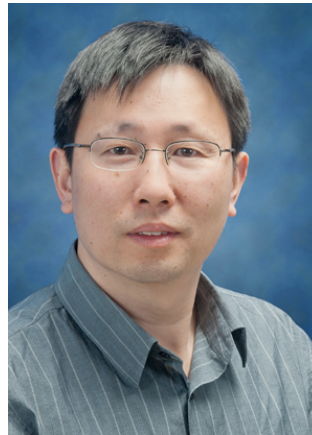


Accolades and Newsworthy Notes - New Funding \$\$

Fei Chen, Ph.D.



Jian Wang, Ph.D.



Fei Chen, Ph.D.

NIH: R01 National Institute of Environmental Health Sciences

Dr. Fei Chen takes the lead as PI in the study titled “Reduced reactive oxygen species and oxidative phosphorylation in arsenic induced cancer stem cells”. Our Program member **Jian Wang, Ph.D.** is a co-investigator. The objectives of the research plan include determining how arsenic activates stress kinases in mitochondria, and how mitochondrial kinase signaling affects mitochondrial DNA stability and metabolism.



Shelly Seward, M.D., team captain, led the Wheels & Teal event, held on September 16 at the Village of Rochester Hills. The annual fun event, supported by the Michigan Ovarian Cancer Alliance, sought to raise funds and awareness of ovarian cancer.

Rodrigo Fernandez-Valdivia, Ph.D., and his team received first place at the Great Lakes International Imaging and Flow Cytometry Association (GLIIFCA) Conference held in Middleton, Wisconsin. Their poster titled “A novel far-red trackable Tet-On system for lineage analysis of stem cells”. The GLIIFCA conferences brings together impassioned cytometry professionals to highlight their research findings in the field of imaging and flow cytometry.

Also at GLIAC, Jessica Back, Ph.D. and colleague led a session for Core Managers titled “ISAC and the Shared Resource Lab: What’s been done and what’s to come”.

**HOT OFF THE PRESS – Selection of recent publications****Cancer Res (in press). 2017.****SMYD5 controls heterochromatin and chromosome integrity during embryonic stem cell differentiation**He R, Wangsa D, Padilla-Nash HM, **Bernardo MM, Sheng S**, Dr. Ried T, Zhao K and **Kidder, B****Nucleic Acids Res. 2017 Jun 20;45(11):6427-6441 PMID: 28402433****H3K4 demethylase KDM5B regulates global dynamics of transcription elongation and alternative splicing in embryonic stem cells**He R, **Kidder BL****Cancer Res. 2017 Sep 6 PMID: 28877938****An Essential Role of Maspin in Embryogenesis and Tumor Suppression-Response**Zhang M, Hendrix MJC, Pemberton PA, **Sakr WA, Sheng S****Cancer Res. 2017 Aug 24 PMID: 28838888****Cancer Self-Defense: An Immune Stealth**Nakajima K, **Nangia-Makker P**, Hogan V, **Raz A****Cancer Res. 2017 Jul 17 PMID: 28716896****Poor Prognosis Indicated by Venous Circulating Tumor Cell Clusters in Early-Stage Lung Cancers**Murlidhar V, Reddy RM, Fouladdel S, Zhao L, Ishikawa MK, Grabauskiene S, Zhang Z, Lin J, Chang AC, Carrott P, Lynch WR, Orringer MB, Kumar-Sinha C, **Palanisamy N**, Beer DG, Wicha MS, Ramnath N, Azizi E, Nagrath S**Int J Gynecol Pathol. 2017 May;36(3):240-252 PMID: 28727617****Granulosa Cell Tumors: Novel Predictors of Recurrence in Early-stage Patients**Sakr S, Abdulfatah E, Thomas S, Al-Wahab Z, Beydoun R, Morris R, **Ali-Fehmi R, Bandyopadhyay S****Int J Gynecol Cancer. 2017 Oct;27(8):1714-1721 PMID: 28945214****Clear Cell Carcinoma of the Endometrium: Evaluation of Prognostic Parameters in a Multi-institutional Cohort of 165 Cases**Abdulfatah E, Sakr S, Thomas S, Al-Wahab Z, Mutch DG, Dowdy S, **Bandyopadhyay S**, Munkarah A, Elshaikh M, Morris R, **Ali-Fehmi R****J Surg Oncol. 2017 Aug 8 PMID: 28787528****Impact of lympho-vascular space invasion on tumor characteristics and survival outcome of women with low-grade serous ovarian carcinoma**Matsuo K, Wong KK, Fotopoulou C, Blake EA, Robertson SE, Pejovic T, Frimer M, Pardeshi V, Hu W, Choi JS, Sun CC, Richmond AM, Marcus JZ, Hilliard MAM, Mostofizadeh S, Mhawech-Fauceglia P, Abdulfatah E, Post MD, Shahzad MMK, Karabakhtsian RG, **Ali-Fehmi R**, Gabra H, Roman LD, Sood AK, Gershenson DM**Oncotarget. 2017 May 16;8(31):51530-51541 PMID: 28881665****HPV-associated differential regulation of tumor metabolism in oropharyngeal head and neck cancer**Jung YS, Najy AJ, Huang W, Sethi S, Snyder M, **Sakr W**, Dyson G, Hüttemann M, Lee I, **Ali-Fehmi R**, Franceschi S, Struijk L, Kim HE, Kato I, **Kim HC****Sci Rep. 2017 Jul 31;7(1):6894 PMID: 28761171****Genomewide Analysis of Clp1 Function in Transcription in Budding Yeast**Al-Husini N, Sharifi A, Mousavi SA, Chitsaz H, **Ansari A****Cell Death Differ. 2017 Oct;24(10):1772-1783 PMID: 28731464****Trophoblast survival signaling during human placentation requires HSP70 activation of MMP2-mediated HBEGF shedding**Jain CV, Jessmon P, Barrak CT, Bolnick AD, Kilburn BA, Hertz M, **Armant DR**

Breast Cancer Res Treat. 2017 Aug 5 PMID: 28780701

Riluzole synergizes with paclitaxel to inhibit cell growth and induce apoptosis in triple-negative breast cancer
Speyer CL, Bukhsh MA, Jafry WS, Sexton RE, **Bandyopadhyay S**, Gorski DH

Stem Cells Transl Med. 2017 Aug;6(8):1730-1739 PMID: 28714557

Concise Review: Developing Best-Practice Models for the Therapeutic Use of Extracellular Vesicles

Reiner AT, Witwer KW, van Balkom BWM, de Beer J, **Brodie C**, Corteling RL, Gabrielsson S, Gimona M, Ibrahim AG, de Kleijn D, Lai CP, Lötvall J, Del Portillo HA, Reischl IG, Riazifar M, Salomon C, Tahara H, Toh WS, Wauben MHM, Yang VK, Yang Y, Yeo RWY, Yin H, Giebel B, Rohde E, Lim SK

Theranostics. 2017 Jul 6;7(10):2690-2703 PMID: 28819456

Therapeutic Effect of Astroglia-like Mesenchymal Stem Cells Expressing Glutamate Transporter in a Genetic Rat Model of Depression

Shwartz A, Betzer O, Kronfeld N, Kazimirsky G, Cazacu S, Finniss S, Lee HK, Motiei M, Dagan SY, Popovtzer R, **Brodie C**, Yadid G

BMC Immunol. 2017 Jul 17;18(1):37 PMID: 28716125

Mercury alters endogenous phosphorylation profiles of SYK in murine B cells

Caruso JA, Carruthers N, Shin N, Gill R, **Stemmer PM**, Rosenspire A

Expert Rev Anti Infect Ther. 2017 Aug 14:1-9 PMID: 28783385

Candida auris: a worrisome, globally emerging pathogen

Navalkele BD, **Revankar S**, **Chandrasekar P**

J Urol. 2017 Aug 3 PMID: 28782516

A Roadmap for Improving the Management of Favorable Risk Prostate Cancer

Auffenberg GB, Lane BR, Linsell S, Brachulis A, Ye Z, Rakic N, Montie J, Miller DC, **Cher ML**

Prostate. 2017 Aug 29 PMID: 28856702

Avoidance of androgen deprivation therapy in radiorecurrent prostate cancer as a clinically meaningful endpoint for salvage cryoablation

Ginsburg KB, Elshafei A, Yu C, Jones JS, **Cher ML**

J Assist Reprod Genet. 2017 Sep 20 PMID: 28932969

Primary ovarian insufficiency in classic galactosemia: current understanding and future research opportunities

Thakur M, **Feldman G**, Puscheck EE

Clin Case Rep. 2017 Jul 3;5(8):1323-1326 PMID: 28781851

Cell-free DNA results lead to unexpected diagnosis

Smith J, Kean V, Bianchi DW, **Feldman G**, Petrucelli N, Simon M, Gonik B

Biochim Biophys Acta. 2017 Jul 22 PMID: 28739264

Preface - Matrix metalloproteinases

Fridman R

Sci Rep. 2017 Sep 12;7(1):11403 PMID: 28900154

Synthesis and Evaluation of GM2-Monophosphoryl Lipid A Conjugate as a Fully Synthetic Self-Adjuvant Cancer Vaccine

Zhou Z, Mandal SS, Liao G, Guo J, **Guo Z**

J Pharmacol Exp Ther. 2017 Sep 19 PMID: 28928121

Novel pharmacological probes reveal ABHD5 as a locus of lipolysis control in white and brown adipocytes

Rondini EA, Mladenovic-Lucas L, Roush WR, Halvorsen G, Green AE, **Granneman JG**



Sci Rep. 2017 Aug 2;7(1):7159 PMID: 28769076

Connexin 43 is required for the maintenance of mitochondrial integrity in brown adipose tissue

Kim SN, Kwon HJ, Im SW, Son YH, Akindehin S, Jung YS, Lee SJ, Rhyu IJ, Kim IY, Seong JK, Lee J, Yoo HC, **Granneman JG**, Lee YH

Oxid Med Cell Longev. 2017 PMID: 28685009

MNRR1, a Biorganellar Regulator of Mitochondria

Grossman LI, Purandare N, Arshad R, Gladysck S, Somayajulu M, Hüttemann M, Aras S

Cancer Metastasis Rev. 2017 Jul 5 PMID: 28681240

Platelets and cancer angiogenesis nexus

Wojtukiewicz MZ, Sierko E, Hempel D, Tucker SC, **Honn KV**

Cancer Metastasis Rev. 2017 Jul 20 PMID: 28730545

Platelet "first responders" in wound response, cancer, and metastasis

Menter DG, Kopetz S, Hawk E, Sood AK, Loree JM, Gresele P, **Honn KV**

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Antiplatelet agents for cancer treatment: a real perspective or just an echo from the past?

Wojtukiewicz MZ, Hempel D, Sierko E, Tucker SC, **Honn KV**

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Meconium staining of the amniotic fluid and the presence and severity of acute placental inflammation: a study of term deliveries in a predominantly African-American population

Saeed H, **Jacques SM, Qureshi F**

Biochemistry. 2017 Sep 12 PMID: 28898058

Mechanoregulation of SM22 α /Transgelin

Liu R, Hossain MM, Chen X, **Jin JP**

Vision Res. 2017 Jul 18 PMID: 28700951

Diabetic retinopathy, metabolic memory and epigenetic modifications

Kowluru RA

J Biol Chem. 2017 Sep 8;292(36):14867-14884 PMID: 28710277

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Murray AS, Varela FA, Hyland TE, Schoenbeck AJ, White JM, Tanabe LM, Todi SV, **List K**

Mol Pharm. 2017 Aug 7;14(8):2815-2823 PMID: 28686452

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Yu C, An M, Li M, **Liu H**

Semin Cell Dev Biol. 2017 Aug 3 PMID: 28779980

Secretion induces cell pH dynamics impacting assembly-disassembly of the fusion protein complex: A combined fluorescence and atomic force microscopy study

Lewis KT, Naik AR, Laha SS, Wang S, **Mao G**, Kuhn E, Jena BP

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Li Z, Zhou Z, Hou X, Lu D, Yuan X, Lu J, Wang C, Han L, Cui L, Liu Z, Chen J, Cheng X, Zhang K, Ji J, Jia Z, Ma L, Xin Y, Liu T, Yu Q, Ren W, Wang X, Li X, **Mi QS**, Shi Y, Li C

J Invest Dermatol. 2017 Sep 1 PMID: 28870694

Embryonic fate mapping uncovers the critical role of microRNAs in the development of epidermal $\gamma\delta$ T cells

Yao Y, Liu Q, Martin C, Yin C, Dong Z, **Mi QS**, Zhou L

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Schueller F, Roy S, Loosen SH, Alder J, Koppe C, Schneider AT, Wandrer F, Bantel H, Vucur M, **Mi QS**, Trautwein C, Luedde T, Roderburg C

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Knockout of the urate oxidase gene provides a stable mouse model of hyperuricemia associated with metabolic disorders

Lu J, Hou X, Yuan X, Cui L, Liu Z, Li X, Ma L, Cheng X, Xin Y, Wang C, Zhang K, Wang X, Ren W, Sun R, Jia Z, Tian Z, **Mi QS**, Li C

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Haynes B, Sarma A, **Nangia-Makker P**, Shekhar MP

Mod Pathol. 2017 Jul 21 PMID: 28731045

Renal cell tumors with clear cell histology and intact VHL and chromosome 3p: a histological review of tumors from the Cancer Genome Atlas database

Favazza L, Chitale DA, Barod R, Rogers CG, Kalyana-Sundaram S, **Palanisamy N**, Gupta NS, Williamson SR

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Increased Expression of EZH2 in Merkel Cell Carcinoma Is Associated with Disease Progression and Poorer Prognosis

Harms KL, Chubb H, Zhao L, Fullen DR, Bichakjian CK, Johnson TM, Carskadon S, **Palanisamy N**, Harms PW

PMID: 28739498

Am J Surg Pathol. 2017 Sep 4 PMID: 28877055

Solitary Fibrous Tumors of the Head and Neck: A Multi-Institutional Clinicopathologic Study

Smith SC, Gooding WE, Elkins M, Patel RM, Harms PW, McDaniel AS, **Palanisamy N**, Uram-Tuculescu C, Balzer BB, Lucas DR, Seethala RR, McHugh JB

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Structural basis of divergent cyclin-dependent kinase activation by Spy1/RINGO proteins

McGrath DA, Fifield BA, Marceau AH, Tripathi S, **Porter LA**, Rubin SM

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Myc mediates cancer stem-like cells and EMT changes in triple negative breast cancers cells

Yin S, Cheryan VT, Xu L, Rishi AK, **Reddy KB**

Gynecol Oncol. 2017 Aug 24 PMID: 28843653

Characterization of folate receptor alpha (FR α) expression in archival tumor and biopsy samples from relapsed epithelial ovarian cancer patients: A phase I expansion study of the FR α -targeting antibody-drug conjugate mirvetuximab soravtansine

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Germes PMID: 28932715

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Ordaya EE, Jarir SA, Yoo R, **Chandrasekar PH**

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Bevacizumab alone or in combination with TRC105 for patients with refractory metastatic renal cell cancer

Dorff TB, Longmate JA, Pal SK, Stadler WM, Fishman MN, **Vaishampayan UN**, Rao A, Pinski JK, Hu JS, Quinn DI, Lara PN Jr



Clin Genitourin Cancer. 2017 Aug 24 PMID: 28923700

Venous Thromboembolism Risk in Patients With Locoregional Urothelial Tract Tumors

Ramos JD, Wingate JT, Gulati R, Plimack ER, Harshman LC, Powles T, Crabb SJ, Niegisch G, Bellmunt J, Ladoire S, De Giorgi U, Hussain S, Alva AS, Baniel J, Agarwal N, Rosenberg JE, **Vaishampayan UN**, Galsky MD, Yu EY; RISC Investigators

Dr. **Ulka Vaishampayan** is noted as a collaborator on the RANGE clinical study published here:

Lancet. 2017 Sep 12 PMID: 28916371

Ramucirumab plus docetaxel versus placebo plus docetaxel in patients with locally advanced or metastatic urothelial carcinoma after platinum-based therapy (RANGE): a randomised, double-blind, phase 3 trial

Petrylak DP, de Wit R, Chi KN, Drakaki A, Sternberg CN, Nishiyama H, et al.

Recent Pat Anticancer Drug Discov. 2017 Jun 19 PMID: 28637419

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Lucas S, Soave C, Nabil G, Ahmed Z, Chen G, El-Banna H, Dou QP, **Wang J**

Genes Dev. 2017 Jul 26 PMID: 28747430

Ferredoxin reductase is critical for p53-dependent tumor suppression via iron regulatory protein 2

Zhang Y Qian Y, Zhang J, Yan W, Jung YS, Chen M, Huang E, Lloyd K, Duan Y, **Wang J**, Liu G, Chen X

Gastroenterology. 2017 Sep 15 PMID: 28923496

Deficiency of the Mitochondrial NAD Kinase Causes Stress-induced hepatic steatosis in mice

Zhang K, Kim H, Fu Z, Qiu Y, Yang Z, **Wang J**, Zhang D, Tong X, Yin L, Li J, Wu J, Qi NR, Houten SM, Zhang R

J Mol Med (Berl). 2017 Aug;95(8):839-849 PMID: 28455595

CREBH mediates metabolic inflammation to hepatic VLDL overproduction and hyperlipoproteinemia

Song Y, Zhao M, Cheng X, Shen J, Khound R, **Zhang K**, Su Q

Angiogenesis. 2017 Jun 16 PMID: 28623423

CXCL10 suppression of hem- and lymph-angiogenesis in inflamed corneas through MMP13

Gao N, Liu X, Wu J, Li J, Dong C, Wu X, Xiao X, **Yu FX**