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Education

- 1991~1995 *B.S., Department of Bioengineering, Sichuan University, Chengdu, China*
- Majored in Genetics and Bioengineering
 - Awardee of the Outstanding Undergraduates Awards of the University twice
- 1998-2003 *Ph.D., Department of Biochemistry, School of Life Sciences, Sun Yet-sen University, Guangzhou, China*
- Awardee of the Elite Postgraduate Student Award of the University
 - Dissertation title: "Studies on the Anti-tumor Activities of Two Alkaloids from Chinese Herbs through Biological Methods and Molecular Design"
 - Dissertation was nominated for "China's 100 Top PhD Dissertation of the Year"

Work Experience

- 2004-2008 *Postdoctoral Fellow, Molecular Clinical Nutrition Section, Laboratory of Dr. Mark Levine, NIDDK, NIH, Bethesda, Maryland, USA*
- *In vitro* and *in vivo* studies for possible therapeutic role of ascorbate (vitamin C) in cancer
 - Based on Levine's discovery on vitamin C oral tight control, revealed the pro-oxidant effects of high doses intravenous vitamin C on cancer cells
 - Two of three papers in *PNAS* were featured by the journal, and reported by national and international science and health media
 - Multiple travel awards winner from national and international scientific societies
- 2008-2016 *Assistant Professor, Department of Pharmacology, Toxicology and Therapeutics; KU Integrative Medicine, University of Kansas Medical Center, Kansas City, Kansas, USA*
- 2017-present *Associate Professor, Department of Pharmacology, Toxicology and Therapeutics; KU Integrative Medicine, University of Kansas Medical Center, Kansas City, Kansas, USA*
- Basic and translational research of vitamin C in cancer treatment;
 - Inhibitors for cancer cell epithelial-to-mesenchymal transition, and cancer stem cells;
 - Effects and mechanism studies on anti-cancer natural products
 - A paper in *Science Translational Medicine* on intravenous ascorbate mechanisms and clinical studies, covered by national and international health/science media

Honors

- Excellence in Integrative Medicine Research Award, by the European Society of Integrative Medicine, 2015

Research Interests

My overall research interest is in the area of basic and translational cancer medicine, cancer drug development, and mechanistic studies with small molecules, with current focus on cancer epithelial-mesenchymal transition (EMT) and cancer stem cells (CSCs).

My specific interest is in the use of pharmacologic concentrations of ascorbic acid (vitamin C, ascorbate) as a pro-oxidant agent for cancer treatment. High dose of intravenous ascorbate (IVC) is highly utilized for the treatment of cancer and infections in the world of complementary and alternative medicine (CAM) with profound safety and anecdotal efficacy. However, the efficacy and scientific basis are poorly understood. On the other hand, this treatment has been proved to have low toxicities in a number of Phase I clinical trials, and efficacy has been implied. Because we are still in lack of treatment options for a large number of cancers, IVC as a low toxic and potentially effective agent may have great merits that are worth investigation. In collaboration with the KU Integrative Medicine group and other oncologists and molecular biologists, we are conducting basic and translational research as well as early phase clinical trials using IVC as anti-cancer agent.

First, our group clarified the reasons beneath the conflicting results from early clinical trials. Early clinical studies had conflicting results by using oral and intravenous administrations. Our studies, based on understanding of vitamin C physiological hemostasis, revealed that oral and intravenous vitamin C (IVC) had totally different pharmacokinetics, that only intravenous administration achieved concentrations high enough to induce death in cancer cells.

Then, using cellular and animal models, we proved that only through IV administration, pharmacologic concentrations of ascorbate were reached both in blood stream and in tissue sites. But only at tissue sites, pharmacologic concentrations of ascorbate worked as a pro-oxidant to facilitate hydrogen peroxide formation, and resulted in tumor inhibition. IVC acts as a pro-oxidant delivery system to exert oxidative stress specifically to cancer cells. These findings set a firm basis for understanding the anticancer mechanisms of ascorbate, re-opened investigation on this low-toxic and promising cancer therapy, and is followed and confirmed by many laboratories all over the world.

Based on these discoveries, my lab documented that combination of IVC with chemotherapies had synergistic effects in tumor inhibition. With collaboration with clinicians, we translated the positive animal studies into clinical trials. A Phase I/II study in stage III and IV ovarian cancer patients showed that adding IVC to standard platinum/taxane chemotherapy was safe and well-tolerated. In addition, it reduced toxic side effects associated with chemotherapy. Time to disease relapse/progress trended towards prolongation. We also conducted a Phase I/II study in locally advanced and metastatic pancreatic cancer. IVC did not interfere with pharmacokinetics of chemotherapeutic drugs, and potentially improved progress free survival. Larger Phase II study focusing on efficacy is under planning.

We also revealed the mechanisms of action for IVC. The ascorbate-generated peroxide is essential in exerting anti-tumor effects. IVC is multiple-targeting and causes genotoxic and metabolic stress that make cancer cells more susceptible than normal cells. The differentiated sensitivity has a root in the Warburg Effect. We had examined the mechanisms in ovarian cancer, pancreatic cancer, and neuroblastoma with preclinical models. The mechanisms proved rationale for combining IVC with chemotherapies and targeted therapies.

Our research on ascorbate and cancer treatment has been widely recognized by the academic and scientific society. The work has been featured in prestigious journals, and reported by national and international health media.

My laboratory has also developed research projects in the discovery of novel EMT inhibitors and CSC inhibitors. Projects include studies on 1) a novel HuR inhibitor in pancreatic cancer EMT and CSC; 2) use of natural products and preparations from medicinal plants for the treatment and prevention of pancreatic cancer and ovarian cancer; 3) high-throughput screening to identify novel EMT inhibitors.

Some contributions to the literature, scientific and medical communities:

1 I have published 36 research articles in high-ranked peer reviewed journals, 22 of them are from independent work at KUMC, with 1 paper in Science Translational Medicine highlighted by a commentary article. Four additional manuscripts are under review by peer reviewed journals or in the process of submission.

2 I have published 1 book, 2 book chapters, 4 review articles, and >40 meeting abstracts at national and international conferences.

3 Our research on ascorbate and cancer treatment has resulted in FDA INDs and a number of early phase clinical trials. Among them 3 clinical trials were at KUMC.

4 Some of my other research papers were highlighted by prestigious journals: 2 were highlighted in PNAS, and 1 was highlighted in Free Radical Biology and Medicine.

5 Up to the date of 3/20/2018, three of my papers published in PNAS have been cited 422, 314, and 267 times in other research papers respectively, as shown by ISI Web of Science, and by Google Scholar total cited times were 697, 519 and 415 times.

6 My other papers are also highly cited. Total citations for my papers are 2834, and among them 1707 citations are since 2013. My Google Scholar h-index is 22, and counting only citations after 2013 the h-index is 17.

7 Our research on ascorbate and cancer is a breakthrough in the field and has attracted wide public attention in receiving media coverage. NBC Health Watch, ABC News Health Index, Washington Post, BBC, and other mainstream media reported about our research in 2005, 2008 and 2014.

8 In September 2015, our research in vitamin C and cancer received the Excellence in Integrative Medicine Research Award, by the European Society of Integrative Medicine.

9 Our research has also been highlighted at national and international scientific meetings. I have been invited to give presentations at a number institutions and conferences. Our abstracts have been frequently chosen for oral presentation. We have received 2 Young Investigator Awards, and a number of travel awards and poster presentation awards.

I believe our research is advancing the front line of the research area in Integrative Medicine. We are building a basis for rational use of the CAM remedy of ascorbate in Integrative Oncology, and we are exploring new territory in cancer stem cells.

Patents

- China Patent #99117036.9
- China Patent #03136406.3
- US Patent #US8772311 B2

Peer Reviewed Publications

Pre-doctoral

1. Chen Q., Qi S.J., Zhu H.L., Peng W.L., Xu A.L. Synthesis and cytotoxicity evaluation of silver (I) compounds of propandioic acid: Dimesion structure analogues of carboplatin. *Chinese J. Med. Chem.* 2001; 11(1): 5-8.

2. Chen Q., Zhu H.L., Qi S.J., Peng W.L., Xu A.L. Studies on anti-tumor activity of several complexes of hexaaza-macrocyclic schiff base with silver (I). *Acta Scientiarum Naturalium Universitatis Sunyatseni.* 2001; 40(2): 65-7.

3. Chen Q., Qi S.J., Peng W.L., Xu A.L. Cytotoxic Activity of acutiaporberine, a novel bisalkaloid of plant origin, on several human carcinoma cell lines. *Acta Scientiarum Naturalium Universitatis*

Sunyatseni. 2001; 40(4): 9-12.

4. Zhu H.L., Chen Q., Peng W.L., Qi S.J., Xu A.L., Chen X.M. Syntheses, crystal structures and cytotoxicities of Xilver (I) complexes of 2,2'-bipyridines and 1,10-phenanthroline. *Chinese J. Chem.*, 2001; 19(3): 263-7.
5. Chen Q., Peng W.L., Xu A.L. Apoptosis of a human non-small cell lung cancer (NSCLC) cell line, PLA-801, induced by acutiaporberine, a novel bisalkaloid derived from *Thalictrum acutifolium* (Hand.-Mazz.) Boivin. *Biochemical Pharmacology*. 2002; 63: 1389-96.
6. Chen Q., Peng W.L., Qi S.J., Xu A.L. Apoptosis of a human highly metastatic lung cancer cell line 95-D induced by acutiaporberine, a novel bisalkaloid derived from *Thalictrum acutifolium*. *Planta Medica*. 2002; 68: 550-3.
7. Qi S.J., Chen Q., Peng W.L., Xu A.L. Cytotoxic properties of cembrenolide diterpenoids from soft coral *Sinularia Tenella* Li. *J. Tropical Oceanography*. 2002; 21(1): 87-91.
8. Hou X.R., Chen Q., Cao R.H., Peng W.L., Xu A.L. A comparative molecular field analysis of cytotoxic beta-carboline analogs. *Acta Pharmacol Sin*. 2004; 25(7): 959-65.
9. Cao R.H., Chen Q., Hou X.R., Chen H.S., Guan H.J., Ma Y., Peng W.L., Xu A.L. Synthesis, acute toxicities, and antitumor effects of novel 9-substituted beta-carboline derivatives. *Bioorg Med Chem*. 2004; 12(17): 4613-23.
10. Cao R.H., Peng W.L., Chen H.S., Hou X.R., Guan H.J., Chen Q., Ma Y, Xu A.L. Synthesis and in vitro cytotoxic evaluation of 1,3-bisubstituted and 1,3,9-trisubstituted beta-carboline derivatives. *Eur J Med Chem*. 2005; 40(3): 249-57.
11. Chen Q., Cao R.H., Chen H.S., Hou X.R., Yan H.F., Zhou S.S., Peng W.L., Xu A.L. Antitumor and neurotoxic effects of novel harmine derivatives and structure-activity relationship analysis. *Int. J Cancer*. 2005; 114(5): 675-82.

Post-doctoral

1. Chen Q., Espey M.G., Krishna M.C., Mitchell J.B., Corpe C.P., Buettner G.R., Shacter E., Levine M. Ascorbic acid at pharmacologic concentrations selectively kills cancer cells: ascorbic acid as a pro-drug for hydrogen peroxide delivery to tissues. *Proc Natl Acad Sci USA*. 2005; 102(38): 13604-9. **(Featured in PNAS papers of the week.)**
2. Chen Q., Espey M.G., Sun A.Y., Lee J.H., Cherukuri M.K., Shacter E, Choyke P.L., Pooput C., Kirk K.L., Buettner G.R., Levine M. Ascorbate in pharmacologic concentrations selectively generates ascorbate radical and hydrogen peroxide in extracellular fluid in vivo. *Proc Natl Acad Sci USA*. 2007; 104(21): 8749-54.
3. Chen Q., Espey M.G., Sun A.Y., Pooput C., Kirk K.L., Krishna M.C., Khosh D.B., Drisko J.A., Levine M.. Pharmacologic doses of ascorbate act as a pro-oxidant and decrease growth of aggressive tumor xenografts in mice. *Proc Natl Acad Sci USA*. 2008; 105 (32): 11105-9. PMID: PMC2516281. **(Featured in PNAS papers of the week. Had a commentary article. One of the most downloaded paper in PNAS August 2008.)**

As a faculty member at KUMC:

1. Padayatty S., Sun A.Y., Chen Q., Norris J., Drisko J., Levine M.. Vitamin C: intravenous use by complementary and alternative medicine practitioners and adverse effects. *PLoS One*. 2010; 5(7): e11414. doi:10.1371/journal.pone.0011414.
2. Espey MG, Chen P, Chalmers B, Drisko J, Sun AY, Levine M, Chen Q. Pharmacologic ascorbate synergizes with gemcitabine in pre-clinical models of pancreatic cancer. *Free Radic Biol Med*. 2011; 50(11): 1610-9. **(Featured with a commentary article.)**
3. Chen P, Stone J, Sullivan G, Drisko J, Chen Q. Anti-cancer effect of pharmacologic ascorbate

- and its interaction with supplementary parenteral glutathione in pre-clinical cancer models. *Free Radic Biol Med*. 2011; 51(3):681-7.
4. Chen P, Yu J, Chalmers B, Drisko J, Yang J, Li BY, Chen Q. Pharmacological ascorbate induces cytotoxicity in prostate cancer cells through ATP depletion and induction of autophagy. *Anticancer Drugs*; 2012; 23(4):437-44.
 5. Kong B, Csanaky IL, Aleksunes LM, Patni M, Chen Q, Ma X, Jaeschke H, Weir S, Broward M, Klaassen CD, Guo GL. Gender-specific reduction of hepatic Mrp2 expression by high-fat diet protects female mice from ANIT toxicity. *Toxicology and Applied Pharmacology*; 2012; 261(2):189-95.
 6. Chen P, Yu J, Knecht J, Chen Q. Decrease of PDSS2 expression, a novel tumor suppressor, in non-small cell lung cancer. *Cancer Epidemiology*. 2013; 37: 166-71.
 7. Yu J, Drisko J, Chen Q. Inhibition of pancreatic cancer and potentiation of gemcitabine effects by extract of Pao Pereira. *Oncology Report*. 2013, 30 (1): 149-56.
 8. Ma Y, Sullivan G, Schrick E, Choi IY, He Z, Lierman J, Lee P, Drisko J, Chen Q. A convenient method for measuring blood ascorbate concentrations in patients receiving high-dose intravenous ascorbate. *Journal of the American College of Nutrition*; 2013, 32(3): 187-93.
 9. Yu J, Chen Q. The plant extract of Pao Pereira potentiates carboplatin effects against ovarian cancer. *Pharm Biol*. 2013 Sep 13.
 10. Yu J, Ma Y, Drisko J, Chen Q. Anti-tumor activities of Rauwolfia vomitoria extract and potentiation of carboplatin effects in preclinical ovarian cancer models. *Current Therapeutic Research*. 2013, 75: 8-14.
 11. Ma Y, Chapman J, Levine M, Polireddy P, Drisko J, Chen Q. High dose parenteral ascorbate enhanced chemosensitivity of ovarian cancer and reduced toxicity of chemotherapy. *Science Translational Medicine*, 2014, 6 (222): 222ra18. **(Featured with a commentary article.)**
 12. Yu J, Chen Q. Anti-tumor activities of Rauwolfia vomitoria extract and potentiation of gemcitabine effects against pancreatic cancer. *Integrative Cancer Therapies*. 2014, 13(3):217-25.
 13. Chen P, Zhang Y, Polireddy K, Chen Q. The tumor suppressing activity of prenyl diphosphate synthase subunit 2 (PDSS2) gene in lung cancer cells. *Anticancer Drugs*. 2014, 25(7):790-8.
 14. Chen Q*, Polireddy K, Dong R. An unpaved journey of vitamin C in cancer treatment. *Canadian Journal of Physiology and Pharmacology*. 2015; 93:1-9. * Corresponding author.
 15. Fukui M, Kang KS, Choi HJ, Chen Q, Zhu BT. Mechanism of Ascorbic Acid-Induced Cell Death in Human Pancreatic Cancer Cells: Role of Bcl-2, Beclin 1 and Autophagy. *Planta Medica*. 2015; 81: 838-46.
 16. Sun A, Li C, Chen RB, Huang YL, Chen Q, Cui XG, Liu HF, Thrasher BJ, Li B. Gsk-3b Controls Autophagy by Modulating LKB1-AMPK Pathway in Prostate Cancer Cells. *Prostate*. 2016; 76(2):172-83.
 17. Klionsky D, Abdelmonhsen K, Abe A, ...Chen Q, ... Zughair M. Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). *Autophagy*. 2016, 12(1): 1-222.
 18. Polireddy K, Chen Q. Cancer of the pancreas: Molecular pathways and current advancement in treatment. *Journal of Cancer*. 2016, 7(11): 1497-1514.
 19. Polireddy K, Dong R, McDonald P, Wang T, Luke B, Chen P, Broward M, Roy A, Chen Q. Targeting Epithelial-Mesenchymal Transition for Identification of Inhibitors for Pancreatic Cancer Cell Invasion and Tumor Spheres Formation. *PLoS One*. 2016, 11(10):e0164811.
 20. Ma E, Chen P, Wilkins HM, Wang T, Russell HS, Chen Q. Pharmacologic ascorbate induces neuroblastoma cell death by hydrogen peroxide mediated DNA damage and reduction in cancer cell glycolysis. *Free Radic Biol Med*. 2017; 113: 36-47.
 21. Polireddy K, Dong R, Reed G, Yu J, Chen P, Williamson S, Violet PC, Pessetto Z, Godwin AK, Fan F, Levine M, Drisko JA, Chen Q. High Dose Parenteral Ascorbate Inhibited Pancreatic Cancer

Growth and Metastasis: Mechanisms and a Phase I/II Study. *Sci Rep.* 2017, 7:17188.

22. Drisko JA, Serrano OK, Spruce LR, Chen Q, Levine M. Treatment of Pancreatic Cancer with Intravenous Vitamin C: a Case Report. *Anticancer Drugs*; 2018; 29 (4):373-9.

Invited Articles, Editorials, Reviews, Letters

1. Frei B., Lawson S., Levine M., Chen Q, Espey M.G.. Reply to Borst: Randomized clinical trials of high-dose intravenous vitamin C in cancer patients are warranted. *Proc Natl Acad Sci USA.* 2008; 105 : E95.
2. Levine M, Espey MG, Chen Q, Losing and finding a way at C: New promise for pharmacologic ascorbate in cancer treatment. *Free Radic Biol Med.* 2009; 47: 27-9.
3. Espey MG, Chen Q, Levine M. Comment re: Vitamin C antagonizes the cytotoxic effects of chemotherapy. *Cancer Res.* 2009; 69 (22): 8830.
4. Chen Q. Vitamin C in cancer treatment: Where pharmacokinetics Speaks. *J Drug Metab Toxicol.* 2012, 3(3): 1000e107. Editorial.
5. Chen Q. More than a Vitamin. *EC Nutrition.* 2016, ECO.01: 04-05. Editorial.
6. Dan X, Ting B, Chen Q, Chen S, Cheng YC, Cullen J, Frank DA, Friedberg JW, Kronish I, Lee JE, Levine M, Li P, Li S, Lu W, Mao JJ, O'Keefe S, Rubinstein L, Shah MA, Standish L, Paller C, Chu E. State of the Science: Cancer Complementary and Alternative Medicine Therapeutics Research – NCI Strategic Workshop Highlights of Discussion Report. *J Natl Cancer Inst Monogr (2017)*, 2017 (52):lgx003.

Book and Book Chapters

1. Book chapter: Levine M, Padayatty S., Wang Y.H., Corpe C. P., Lee J., Wang J., Chen Q., Zhang L.Q.. Vitamin C. In *Biochemical, Physiological, Molecular Aspects of Human Nutrition (2nd edition)*. Stipanuk M. Saunders, Elsevier Inc. St. Louis MO, 2006; Chapter 27 pp760-96.
2. Book chapter: Espey M.G., Chen Q., Sun A.Y., Kim H.S., Padayatty S., Wang Y., Tu H., Margolis S., Levine M.. Ascorbate Methodologies and Considerations. In: Das DK, editor. *Handbook of the methods for studying redox signaling*. New York: Mary Ann Liebert; 2009; pp 24-31.
3. Book: Chen Q, Polireddy K, Drisko J. *Cancer of the Pancreas: Research Advancement towards Therapy*. LAP Lambert Academic Publishing, Germany. 2016

Selected Meeting Abstracts

1. Chen Q., Espey M., Lee J., Zhang L., Krishna M., Sun A., Pooput C., Kirk K., Choyke P., Buettner G., Shacter E., Levine M. Ascorbic acid in pharmacologic concentrations: a pro-drug for selective delivery of ascorbate radical and hydrogen peroxide to the extravascular space in vivo. *Free Radic. Biol. Med.* 2006; 41(S1): S64. (**FRBM Society Travel Award winner**)
2. Chen Q., Sun A., Espey M., Levine M. Ascorbic acid as a pro-oxidant therapeutic agent in cancer. *Free Radic. Biol. Med.* 2007; 43(S1): S110 (**FRBM Society Travel Award winner**)
3. Chen P., Chalmers B., Yang J., Li B., Drisko J., Chen Q. Ascorbate Induces Cytotoxicity in Prostate Cancer Cells through an Autophagy Pathway. *Molecular Targets and Cancer Therapeutics 8*: C13; Meeting abstract. doi:10.1158/1535-7163.TARG-09-C13. AACR Molecular Target Conference, Boston, MA, Nov. 15-19, 2009
4. Chen Q, Espey MG, Sun AY, Pooput C, Kirk KL, Krishna MC, Khosh DB, Drisko J, Levine M: Pharmacologic Doses of Ascorbate Act as a Prooxidant and Decrease Growth of Aggressive Tumor

Xenografts in Mice Editorial Comment. *Journal of Urology*. 2009,181:2384-2385.

5. Ma Y, Drisko J, Polireddy K, Chen Q. Synergistic effects of ascorbate with carboplatin against human ovarian cancer in vitro and in vivo. K-INBRE symposium. Kansas City, Kansas, Jan 2011. (**Poster Presentation Award for Ma Y, postdoc in Chen Lab**)
6. Ma Y, Drisko J, Polireddy K, Chen Q. Synergistic effects of ascorbate with carboplatin against human ovarian cancer in vitro and in vivo. Society for Integrative Oncology 8th International Conference, Cleveland, Ohio, Nov. 10-12, 2011. (**Young Investigator Award to Ma Y, postdoc in Chen Lab**)
7. Chen P, Chalmers B, Drisko J, Chen Q. Pharmacologic ascorbate synergizes with gemcitabine in pre-clinical models of pancreatic cancer. Society for Integrative Oncology 8th International Conference, Cleveland, Ohio, Nov. 10-12, 2011. (**Chosen for oral presentation**)
8. Sullivan G, Chen Q, Chen P, Chapman J, Levine M, Drisko J. Prospective randomized phase I/IIa pilot trial to assess safety and benefit administering high-dose intravenous ascorbate in combination with chemotherapy in newly diagnosed advanced stage III or Stage IV ovarian cancer. Society for Integrative Oncology 8th International Conference, Cleveland, Ohio, Nov. 10-12, 2011. (**Chosen for oral presentation**)
9. Chen Q, Polireddy K, Chen P, Chalmers B, Drisko J. Pharmacologic ascorbate inhibits pancreatic cancer cell EMT and sensitizes cancer cells to gemcitabine. AACR Annual Meeting. Chicago, IL. March 31 – April 4, 2012
10. Yu J, Drisko J, Chen Q. Activity of Pao Pereeira and Rauwolfia vomitoria extracts against ovarian cancer and pancreatic cancer. Society for Integrative Oncology 9th International Conference. Albuquerque, NM. Oct 8-10, 2012. (**Chosen for oral presentation**)
11. Polireddy K, Yu J, Drisko J, Chen Q. Ascorbate inhibits tumor invasion and metastasis by inhibiting epithelial mesenchymal transition (EMT) of PANC-1 cells. Society for Integrative Oncology 9th International Conference. Albuquerque, NM. Oct 8-10, 2012. (**Chosen for oral presentation at the Best of SIO session. Early Career Award to Polireddy K, graduate student in Chen Lab**)
12. Polireddy K, Yu, J, Drisko J, Chen Q. Mechanisms of ascorbate inhibiting pancreatic cancer metastasis. Society for Integrative Oncology 10th International Conference. Vancouver, Canada. Oct 20-22, 2013. (**Chosen for oral presentation**)
13. Dong R, Polireddy K, Chen P, Dong Y, Zhou H, Chen Q. A novel micro-RNA, miR-572, mediates the anti-tumor effect of ascorbate on pancreatic cancer. Society for Integrative Oncology 10th International Conference. Vancouver, Canada. Oct 20-22, 2013. (**Chosen for oral presentation**)
14. Dong R, Polireddy K, Chen P, Zhang Y, Ma EL, Chen Q. Inhibiting HuR, a RNA-Binding Protein, for Inhibition of Pancreatic Cancer EMT and CSCs. AACR Annual Meeting 2016. New Orleans, April 16-20, 2016
15. Chen Q, Polireddy K, Dong R, Chen P, Drisko J. Mechanisms of high dose ascorbate inhibiting pancreatic cancer growth and metastasis. AACR Annual Meeting 2016. New Orleans, April 16-20, 2016

Other Professional Experience

Invited speech

National and International:

- 2003 HuaShiDan Pharmaceuticals Research Meeting, SinKiang, China
- 2007 Linus Pauling Institute Seminar Series, Corvallis, OR, USA
- 2008 American College for Advancement Medicine Fall Conference, Las Vegas, Nevada, USA
- 2009 BIT 2nd World Cancer Congress, Beijing, China

- 2010 The 11th International Congress of Integrative Medicine, Tokyo, Japan
- 2010 The 2nd Annual Riordan IVC Symposium, Wichita, Kansas, USA
- 2014 Invited speech at the Peking University School of Medicine, Beijing, China
- 2015 Invited speech at the Shenyang Pharmaceutical College, Shenyang, Chian
- 2016 International Congress on Integrative Medicine and Health, Las Vegas, NV
- 2016 NCI OCCAM Workshop, Bethesda, MD
- 2017 Invited speech at the Goethe University, Frankfurt, Germany
- 2017 Diet and Optimal Health Conference 2017. Linus Pauling Institute, Corvallis, OR

Reginal:

- 2010 Wichita State University Spring Colloquia, Wichita, Kansas, USA
- 2011 Department of Biochemistry, KUMC
- 2013 KU Cancer Center, KUMC
- 2014 The 2014 KSCLS-MiCLS-CLMA Spring Meeting, Overland Park, Kansas, USA
- 2014 Department of Dietetics & Nutrition, School of Health Professions, KUMC
- 2015 Department of Molecular & Integrative Physiology, KUMC
- 2016 Internal Medicine Ground Round, Department of Internal Medicine, KUMC
- 2016 Bohan Visiting Lectureship, Department of Biochemistry, KUMC
- 2017 School of Pharmacy, University of Missouri Kansas City

Grant review

- 2011, 2013, 2014 Review committee, the Ladies Auxiliary to the Veterans of Foreign Wars of the United States Postdoctoral Cancer Research Fellowship
- 2011-2016 Review panel for the American Cancer Society Institutional Research Pilot Grant at KUMC
- 2011 External grant reviewer, Neurological Foundation of New Zealand
- 2012 Ad Hoc study section member, Department of Veterans Affairs, Veterans health Administration, 2012 Clinical Trials Merit Review Panel
- 2012, 2014 External grant reviewer, Genesis Oncology Trust of New Zealand
- 2012 Reviewer, University of Kansas Cancer Center Fall 2012 Pilot Projects
- 2013 Review panel for the Heartland Institutes for Clinical and Translational Research KL2 grants
- 2014 External reviewer, North Dakota State's (NDSU) review of potential sub-projects for NIH COBRE
- 2014 Review panel for the Lied Basic Science Grant Program at KUMC
- 2017 Reviewer, Prestige Marie Curie Post-doc Fellowship Programme, France
- 2018 Reviewer, Frontier Translational Research and Lied Basic Science Grant Program
- 2018 External reviewer, Cancer Society of New Zealand

Editorial

- 2010-2012 Editorial Board, Journal of Drug Metabolism & Toxicology
- 2017-2018 Editor for Special Issue, Canadian Journal of Gastroenterology and Hepatology: Gastroenterological Cancer and Immunotherapy
- 2011-present Editorial Board, Personalized Medicine Universe
- 2015-present Editorial Board, Journal of Alternative, Complementary and Integrative Medicine
- 2016-present Editorial Board, EC Nutrition (e-Journal)

- Ad hoc reviewer for >20 scientific journals, including Cancer Research, Clinical Cancer Research, etc.
- Reviewed 7 books, and a book chapter.

Professional membership

- 2006-present Member, American Association for Cancer Research, USA
- 2006-present Member, Society for Free Radical Biology and Medicine, USA
- 2008-present Member, Consortium of Academic Health Centers for Integrative Medicine, USA
- 2012-present Member, Society of Integrative Oncology, USA

Teaching

Lectures & Discussion groups

- 2010-2012 PTOX917, Lecture, graduate students, Drug Elimination
- 2013-2014 GSMC853, Lecture, IGPBS course: Protein transport: mitochondria, chloroplast, peroxisome; endothelia reticulum
- 2011-2018 Core860, Small Group, 2nd year medical students: Integration and Consolidation module
- 2008-present PHLC809, evaluation of students seminars, for departmental graduate students
- 2009-present PTOX918, Lecture, graduate students, Plant and Animal Toxins; Food Toxicology
- 2012-present PTOX887, Lecture, graduate students, Oxidative Stress
- 2014-present GSMC853, Lecture, IGPBS course: Molecular Biology of the Cell

PhD Students

Kishore Polireddy, July 2011 – Dec. 2015, graduated PhD with honor.
 Rouchen Dong, Sept. 2013 – present, passed comprehensive exam.
 Tao Wang, 2016 - present

During my tenure at KUMC, I have served on > 15 other PhD students' dissertation committees, and have mentored >10 postdocs, visiting scholar, rotating students, and student interns.