



Dr. Ramos is a leading expert in the study of gene-environment interactions and genomic medicine. A major focus in his laboratory is the elucidation of molecular mechanisms of reactivation of mammalian retroelements and their role in reprogramming the human genome in health and disease. He is Distinguished University Professor of Biochemistry and Molecular Biology and Director of the Center for Environmental Genomics and Integrative Biology.

Grants:

2009-2014 KSR serves as Co-I. "Convergence of MicroRNA and p53 Signaling in Multiple Myeloma: Environmental Connections". National Cancer Institute, NIH, \$1,145,000.

2009-2012 KSR served as PI. "Role of retroelements in atherogenesis. National Institute of Environmental Health Sciences, NIH, \$500,000.

2009-2014 KSR serves as a mentor and member of the Internal Advisory Committee. "UofL Environmental Health Sciences Training Program". National Institute of Environmental Health Sciences, NIH, \$1,992,440.

2010-2013 KSR serves as PI. "Epigenetic regulation of the cellular response to oxidative and cellular stress". Astra Zeneca. \$294,423.

2011-2012 KSR served as PI. "Molecular genetics of L1 retrotransposon". Kentucky Lung Cancer Research Program, \$75,000.

2007-2011 KSR served as PI. "Center for Environmental Genomics and Integrative Biology". National Institute of Environmental Health Sciences. NIH, \$2,700,000.

Publications:

Lu, Z., Kumar, M., Takwi, A. Chen, W, Callander, N.S., **Ramos, K.S.**, Young, K.H. and Li, Y. Inactivation of tumor suppressor p53 microRNAs in multiple myeloma. *Oncogene* 30, 843-853, (2011). PMID: 20935678.

Teneng, I.; Montoya-Durango, D.E.; Quertermous, J.; Lacy, M.E.; **Ramos, K.S.** Reactivation of L1 retrotransposon by benzo(a)pyrene involves complex

genetic and epigenetic regulation. *Epigenetics* 6, 355-367, (2011). PMID 21150308.

Ramos, K.S., Montoya,-Durango, D.E., Teneng, I., Nanez, A. and Stribinskis, V. Epigenetic control of embryonic renal cell differentiation by L1 retrotransposon. *Birth Defects Research: Clinical and Molecular Teratology* 91, 682-692, (2011). PMID 21384534.

Falahatpisheh, M.H., Nanez, A. and **Ramos, K.S.** AHR regulates WT1 genetic programming during murine nephrogenesis. *Molecular Medicine* 17, 1275-1284, (2011). PMID 21863216.

Nanez, A., Ramos, I.N. and **Ramos, K.S.** A mutant allele of AHR protects the embryonic kidney from hydrocarbon-induced deficits in fetal programming. *Environmental Health Perspectives* 119, 1745-1753, (2011). PMID 21803694.

Montoya, D.E. and **Ramos, K.S.** HPV E7 viral oncoprotein disrupts transcriptional regulation of L1Md retrotransposon. *FEBS Letters* 586, 102-106, (2012). PMID: 22172279.

Gao, H., Steffen, M.C. and **Ramos, K.S.** Osteopontin regulates α -smooth muscle actin and calponin in vascular smooth muscle cells. *Cell Biology International* 36, 155-162, (2012). PMID: 22032345.

Ramos, I.N., He, Q. and **Ramos, K.S.** Improvements in environmental health literacy following a community-wide public health educational intervention. *Environmental Justice* 5, 32-37, (2012). PMID:

Williams, E.S., Partridge, C.R., Wilson, E. and **Ramos, K.S.** NF- κ B and matrix-dependent regulation of osteopontin promoter activity in allylamine-activated vascular smooth muscle cells. *Oxidative Medicine and Cellular Longevity* 496-540, (2012). PMID: 22315656.

Bojang, P., Jr. and **Ramos, K.S.** Epigenetic therapies for cancer treatment. *Cancer Treatment: Book 1*, In Tech Open Access, 2011.

Montoya, D.W. and **Ramos, K.S.** Retinoblastoma family of proteins and chromatin epigenetics: A repetitive story in a few LINEs. *BioMolecular Concepts* 2, 233-245, 2011.

Kenneth S. Ramos, M.D., Ph.D.

Professor, Department of Biochemistry and Molecular Biology

Director, Center for Environmental Genomics and Integrative Biology

University of Louisville Health Sciences Center
School of Medicine



External Professional Activities:

Editorial Boards

- 1997 - In Vitro Cellular and Developmental Biology (Animal) (Reviewing Editor)
- 1997 - Cell Biology and Toxicology (Consulting Editor)
- 1998 - 2011 Chemico-Biological Interactions
- since 2007 Environmental Health Perspectives

Other Professional Activities

- 2011-2012 Member of the Search Committee, Associate Director for Health, National Health Research Laboratory, Environmental Protection Agency
- 2012 Consultant, Centers for Scientific Review, Environmental Health and Toxicology Working Group, National Institutes of Health
- 2012-2015 Member, Board of Scientific Counselors, Centers for Disease Control
- 2012-2015 Member, Research Committee of the American Heart Association Greater River Affiliate
- 2012-2015 Continuing Medical Education Task Force, Society of Toxicology
- 2012-2015 Board of Scientific Counselors Chemical Assessment Advisory Committee, Environmental Protection Agency
- 2009-2011 Advisory Board, Fundamental and Computational Sciences Directorate Review Committee, Pacific Northwest National Laboratory
- 2009- Advisory Board, Diabetes and Obesity Research Center, University of Louisville
- 2011 Guest Speaker, Nia Center Community Forum on Infant Mortality, Louisville, Kentucky
- 2007-2011 Kentucky Diabetes Research Board

Grants Review Panels

- 2012 Netherlands Organization for Scientific Research, Netherlands
- 2012 Agence Nationale de la Recherche, France

