

• **Name:** Kyu Lim, Ph.D.

• **Current Position:**

Professor, Department of Biochemistry, College of Medicine, Chungnam National University

• **Country:** KOREA

• **Educational Background:**

1975 Yeungnam University, Korea: Pharmacy, B.S.

1977 Yeungnam University, Korea: Biochemistry, M.S.

1987 Yeungnam University, Korea: Biochemistry, Ph.D.

• **Professional Experiences:**

1978-1983 Teaching and Research Assistant, Dept. of Biochemistry, College of Medicine
Chungnam National University, Korea

1983-present Instructor, Assistant Professor, Associate Professor, Professor
Dept. of Biochemistry, College of Medicine, Chungnam National University,
Korea

1988-1990 Post-doctoral fellow, Dept. of Biochemistry and Biophysics, School of
Medicine, Univ. of North Carolina at Chapel Hill, NC, U.S.A

1991 Visiting Associate Professor, Dept. of Biochemistry and Biophysics, School of
Medicine, Univ. of North Carolina at Chapel Hill, NC, U.S.A

1992-2005 Chairman, Dept. of Biochemistry, College of Medicine, Chungnam National
University, Korea

2005-2007 Visiting Professor, Dept. of Pathology, School of Medicine, Univ. of Pittsburgh,
PA, U.S.A

2007-2008 Vice President, Korean Society of Biochemistry and Molecular Biology

2009-2011 Director, Cancer Research Institute in Chungnam National University

• **Professional Organizations:**

1997, Organizer, International Symposium on Development of Anti-angiogenesis and Anti-metastasis drugs

2010, Organizer, Korea-EU International Forum on Omega-3 Fatty acids and Cancer

• **Main Scientific Publications:**

1. Yao L, Chen W, Song K, Han C, Gandhi CR, **Lim K**, Wu T: 15-hydroxyprostaglandin dehydrogenase (15-PGDH) prevents lipopolysaccharide (LPS)-induced acute liver injury, PLoS ONE 12(4): e0176106, 2017.
2. Yun EJ, Song KS, Shin S, Kim S, Heo JY, Kweon GR, Wu T, Park JI and **Lim K**: Docosaheptaenoic Acid Suppresses Breast Cancer Cell Metastasis by Targeting Matrix-metalloproteinases, Oncotarget, 7(31):49961-49971, 2016
3. Kwon H, Song K, Han C, Chen W, Wang Y, Dash S, **Lim K** and Wu T: Inhibition of hedgehog signaling ameliorates hepatic inflammation in mice with nonalcoholic fatty liver disease (NAFLD). Hepatology, 2015
4. Song K, Kwon H, Han C, Zhang J, Dash S, Lim K and Wu T: Active glycolytic metabolism in CD133(+) hepatocellular cancer stem cells: Regulation by MIR-122. Oncotarget, in press, 2015
5. Yao L, Han C, Song K, Zhang J, Lim K, Wu T: ω -3 Polyunsaturated fatty acids up-regulate the

- expression of 15-PGDH by inhibiting miR-26a and miR26b in human cholangiocarcinoma cells. *Cancer Res*, 75(7):1388-98, 2015
6. Woo J, Lim K, Park YS, Jung MY, Lim HS, Jeon MG, Sang-Il Lee, Park BH: Endogenous conversion of n-6 to n-3 polyunsaturated fatty acids in Fat-1 mice protects against K/BxN serum-transfer arthritis. *J Nutr Biochem*, 26(7):713-20, 2015
 7. Bak DH, Zhang E, Yi MH, Kim DK, **Lim K**, KimJJ and Kim DW: High w3-polyunsaturated fatty acids in fat-1 mice prevent streptozotocin-induced Purinje cell degeneration through BDNF-mediated autophagy. *Scientific Report*, in press, 2015
 8. Kim N, Jeong S, Jing K, Shin S, Kim S, Heo JY, Kweon GR, Park SK, Wu T, Park JI and Lim K: Docosahexaenoic acid induces cell death in human non-small cell lung cancer cells by repressing mTOR via AMPK activation and PI3K/Akt inhibition. *BioMed Res Int*, in press, 2015
 9. Jing K, Shin S, Jeong S, Kim S, Song KS, Park JH, Seo KS, Park SK, Kweon GR, Wu T, Park JI and **Lim K**: Docosahexaenoic acid induces the degradation of HPV E6/E7 oncoproteins by activating ubiquitin-proteasome system. *Cell Death and Diseases*, 2014 Nov 13;5:e1524. doi: 10.1038/cddis.2014.477.
 10. Jeong S, Jing K, Kim N, Shin SW, Kim S, Song KS, Heo JY, Park JH, Seo KS, Han J, Kweon GR, Park SK, Wu T, Park JI and **Lim K**: Docosahexaenoic acid-induced apoptosis is mediated by activation of mitogen-activated protein kinases in human cancer cells. *BMC Cancer*, 14:481, 2014.
 11. Suburu J, **Lim K**, Calviello G and Chen YQ: RE: Serum Phospholipid Fatty Acids and Prostate Cancer Risk in the SELECT Trial. *J Natl Cancer Inst*. 2014 Apr 1;106(4):dju023. doi: 10.1093/jnci/dju023. Epub 2014 Mar 31.
 12. Seo KS, Kim JS, Park JH, Song KS, Yun EJ, Park JI, Kweon GR, Yoon WH, **Lim K**, Hwang BD: PMA synergistically enhances apicuraren A-induced cytotoxicity by disrupting microtubule networks in HeLa cells. *BMC Cancer*, 2014 Jan 22;14:36. doi: 10.1186/1471-2407-14-36 (Co-corresponding author).
 13. Song K, Han C, Zhang J, Lu D, Dash S, Feitelson M, **Lim K**, Wu T: Epigenetic regulation of miR-122 by PPAR γ and hepatitis B virus X protein in hepatocellular carcinoma cells. *Hepatology*, 58:1681-92, 2013
 14. Jing K, Wu T and **Lim K**: Omega-3 polyunsaturated fatty acids and cancer (Review), *Anti-Cancer Agent and Medicinal Chemistry*, 13:1162-1177, 2013.
 15. Shin S, Jing K, Jeong S, Lim N, Kim S, song KS, Heo JY, Park JH, Seo KS, Han J, Park JI, Kweon GR, Park SK, Wu T, Hwang BD, **Lim K**: Omega-3 polyunsaturated fatty acid, DHA simultaneously induces apoptosis and autophagy by mitochondrial ROS-mediated Akt-mTOR signaling in prostate cancer cells expressing mutant p53. *BioMed Res Intl*, 2013;2013:568671. doi: 10.1155/2013/568671. Epub 2013 Jun 10.
 16. Jing K, Song KS, Shin S, Kim N, Jeong S, Oh HR, Park JH, Seo KS, Heo JY, Han J, Park JI, Han C, Wu T, Kweon GR, Park SK, Yoon WH, Hwang BD, **Lim K**: Docosahexaenoic acid induces autophagy through p53/AMPK/mTOR signaling and promotes apoptosis in human cancer cells harboring wild-type p53. *Autophagy*. 7:1348-58, 2011.
 17. Song KS, Jing K, Kim J, Yun EJ, Shin S, Seo KS, Park JH, Heo JY, Kang JX, Park JI, Kweon GR, Yoon WH, Hwang BD, and **Lim K**: ω -3 Polyunsaturated fatty acids suppress pancreatic cancer cell growth in vitro and in vivo via downregulation of Wnt/ β -catenin signaling. *Pancreatology*, 11:574-584, 2011.
 18. **Lim K**, Han C, Da Yi, Shen M, Wu T: Omega-3 polyunsaturated fatty acids inhibit hepatocellular carcinoma cell growth through downregulation of wnt/beta-catenin and COX-2 signaling pathways. *Mol Cancer Ther*. 8(11):3046-55, 2009.
 19. **Lim K**, Han C, Xu L, Isse K, Demetris AJ, Wu T: Cyclooxygenase-2-derived prostaglandin E2 activates β -catenin in human cholangiocarcinoma cells: Evidence for inhibition of these signaling pathway by w3 polyunsaturated fatty acids. *Cancer Res*. 68:553-560, 2008.