### **BIOGRAPHICAL SKETCH**



NAME

Kyung-Sun, Kang, DVM. Ph.D

#### POSITION TITLE

Associate Professor (Tenured) of Veterinary College, Seoul National University.

EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Seoul National Univ., Korea	BSc and MSc	1989/1991	Toxicology, Oncology
Seoul National Univ., Korea	PhD	1993	Veterinary Public Health, Oncology
Michigan State University, USA	Post-doctorate	1994-1996	Breast Cancer and Stem Cell Biology

### A. Positions and Honors

<b>Positions</b>	and	emp	loy	yment
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1989-1993	Teaching Assistant of Seoul National University, Korea
1994-1996	Research Associate of College of Human Medicine, Michigan State University, USA
1996-1997	Assistant Professor of College of Human Medicine, Michigan State University, USA
1997-1998	Visiting Researcher of National Institute of Health Science, Japan
1999 -2002	Assistant Professor of College of Veterinary Medicine, Seoul National Univ. Korea.
2004-2004	Visiting Professor of University of British Columbia, Canada.
2002-Present	Tenured Associate Professor of College of Veterinary Medicine, Seoul National Univ. Korea.
2004-Present	Director of Venture Incubation Center, Seoul National Univ., Korea
2005-Present	Committee member of Institutional Review Board of Seoul National University
2005-Present	Director of Adult Stem Cell Research Center of Seoul National University

# **Honors and Awards**

1997- STA fellowship award, Japan Science and Technology Agency, Japan.

2003- Best Professor for SCI paper publication of Seoul National University, Korera.

2004- 2004' Thirty Best Research Award from Ministry of Science and Technology, Korea.

## **Selected Professional Memberships and Editorial Boards**

1994-Present -Active Member: American Association of Cancer Research (AACR)

2003-Present- Active Member: International Society of Stem Cell Research

2003-present- Active member: International Society for Cellular Therapy

2004-Present -Editor in Chief, Journal of Food Hygiene and Food Safety, Korea

2002- present-Advisor for Korean Food and Drug Administration, Korea

2002- present Government Evaluation committee member for Korean Food and Drug Administration(KFDA)

2002- present-Advisory board member, Ministry of Health, Korea

2005 – present - Consortium Project Leader of Umbilical Cord Blood-derived Multipotent Stem Cell Research Project and Public Umbilical Cord blood Bank supported by Seoul City.

# B. Selected peer-reviewed publications (in chronological order) (Publications selected from 100 peer-reviewed papers/reviews/book chapters)

- 1. **Kang, K.-S.,** Morita, I., Cruz, A., Jeon Y. J., Trosko, J.E., and Chang, C.-C., Expression of estrogen receptors in a normal human breast epithelial cell type with luminal and stem cell characteristics and its neoplastically transformed cell lines, *Carcinogenesis*, 18: 251-257, 1997.
- 2. **Kang, K.-S.,** Cruz, A., Morita, I., Trosko, J.E., and Chang, C.-C., Involvement of tyrosine phosphorylation of p185<sup>c-erbB2/neu</sup> in cancer development by x-rays and *neu* oncogene in breast epithelial cells, *Molecular Carcinogenesis*, 21:225-233, 1998.
- 3. Sun W, **Kang KS**, Morita I, Trosko JE, Chang CC. High Susceptibility of a human breast epithelial cell type with stem cell characteristics to telomerase activation and immortalization. *Cancer Research* 59:6118-6123, 1999.
- 4. Cho JH, Cho SD, Hu H, Kim SH, Lee SK, Lee YS, **Kang KS**. The roles of ERK1/2 and p38 MAP kinases in the preventive mechanisms of mushroom Phellinus linteus against the inhibition of gap junctional intercellular communication by hydrogen peroxide. *Carcinogenesis* 23(7):1163-9, 2002.
- 5.Lee KW, Lee HJ, **Kang KS**, Lee CY. Preventive effects of vitamin C on carcinogenesis. *Lancet*. 12;359(9301):172, 2002.
- 6.Joon Suk Park, Dong Young Noh, Seok Hyun Kim, Sung Hoon Kim, Gu Kong, Chia Cheng Chang, Yong Soon Lee, James E Trosko and **Kyung Sun Kang**, Gene expression analysis in SV40-immortalized human breast luminal epithelial cells with stem cell characteristics using a cDNA microarray, *International Journal of Oncology*, 24:1545-1558, 2004.
- 7.Cho SD, Jiang C, Malewicz B, Dong Y, Young CY, **Kang KS**, Lee YS, Ip C, Lu J Methyl selenium metabolites decrease prostate-specific antigen expression by inducing protein degradation and suppressing androgen-stimulated transcription *Mol Cancer Ther* 3(5), 605-611,2004
- 8. Hong IS, Kim SH, Koong MK, Jun JH, Kim SH, Lee YS, **Kang KS**.Roles of p38 and c-jun in the differentiation, proliferation and immortalization of normal human endometrial cells. *Hum Reprod.* 19(10):2192-9, 2004
- 9.Chen Z-H, Hur T-J, Na H-K, Kim J-H, Chun Y-J, Kim D-Y, **Kang K-S**, Cho M-H, and Surh Y-J, Resveratrol inhibits TCDD-induced expression of CYP1A1 and Cyp1B1 and catechol estrogen-mediated oxidative DNA damage in cultured human mammary epithelial cells, *Carcinogenesis*, 2004 (in press).
- 10.Kim JY, Kim DH, Choi IH, Yang JS, Lee DS, Lee JR, **Kang KS**, Kim SH, Hwang WS, Lee JS, Ahn C, MHC expression in a human adult stem cell line and its down-regulation by hCMV US gene transfection, *International Journal of Biochemistry and Cell Biology*, 37:69-78,2005.
- 11. Byeong-Cheol Kang, **Kyung-Sun Kang** and Yong-Soon Lee, Biocompatibility and long-term toxicity of Innopol implant, a biodegradable polymer scaffold, *Experimental Animals* 54:37-5, 2005.
- 12. Se-Ran Yang, Sung-Dae Cho, Nam-Shik Ahn, Ji-Won Jung, Joon-Suk Park, Eun-Hye Jo, Jae-Woong Hwang, Sung-Hoon Kim, Bong-Hee Lee, Yong-Soon Lee, **Kyung-Sun Kang**. The role of p38 MAP kinase and c-Jun N-terminal protein kinase signaling in the differentiation and apoptosis of immortalized neural stem cells. *Mutation Research* 579: 47-57, 2005.
- 13. Nam-Shik Ahn, Hongbo Hu, Jin-Sung Park, Joon-Suk Park, Jong-Sik Kim, Sungwhan An, Gu Kong, Okezie I. Aruoma, Yong-Soon Lee, **Kyung-Sun Kang**. Molecular mechanisms of the 2,3,7,8-tetrachloridibenzo-p-dioxin-induced inverted U-shaped dose responsiveness in anchorage independent frowth and cell proliferation of human breast epithelial cells with stem cell characteristics. *Mutation Research* 579: 189-199, 2005.
- 14. Sung-Dae Cho, Nam-Shiik Ahn, Ji-Won Jung, Se-Ran Yang, Joon-Suk Park, Yong-Soon Lee, Eun-Hye Jo, Jae-Woong Hwang, Junxuan Lu and **Kyung-Sun Kang**. Critical role of the c-JunNH2-termainal kinases and p38 mitogen-activated protein kinases pathways on sodium butyrate-induced apoptosis in DU145 human prostate cancer cells. *European Journal of Cancer Prevention* 15(1):57-63, 2006.
- 15.**K-S Kang**, SW Kim, YH Oh, JW Yu, K-Y Kim, HK Park, C-H Song, H Han, A Thirty-seven-year-old Spinal Cord-Injured Female Patient, Transplanted of Multipotent Stem Cells From Human Umbilical Cord Blood and Improved Sense and Movement, Functionally and Morphologically. *Cytotherapy* 17:.368-373, 2005.

- 16.Se-Ran Yang, Kyoung-Hee Byun, Sun-Jung Kim, Brian Hutchinson, Bong-Hee Lee, Makoto Michikawa, Yong-Soon Lee, **Kyung-Sun Kang**. NPC1 gene deficiency leads to lack of neural stem cell self-renewal and abnormal differentiation through activation of p38 MAP kinase signaling, *Stem Cells* 24:292-298, 2006.
- 17. Sung-Whan Kim, Hoon Han, Gue-Tae Chae, Sung-Hoon Lee, Sun Bo, Jung-Hee Yoon, Yong-Soon Lee, Kwang-Soo Lee, Hwon-Kyum Park, **Kyung-Sun Kang**. Successful stem cell therapy using Umbilical cord blood-derived multi-potent stem cells for Buerger's disease and Ischemic disease animal model. *Stem Cells*(*Published online February 23*), 2006.