



## CURRICULUM VITAE of Jae Bum Kim

(May 1<sup>st</sup>, 2010)

### Address

Institute of Molecular Biology and Genetics

School of Biological Sciences

Bldg. 105- Rm. 209

Seoul National University

Daehak-dong, Gwanak Gu

Seoul, Korea. 151-742

Tel: (+82) 2-880-5852

Fax: (+82) 2-878-5852

E-mail: [jaebkim@snu.ac.kr](mailto:jaebkim@snu.ac.kr)

Internet: <http://plaza.snu.ac.kr/~jaebkim/>

### Education and Training

1984 -1988 B.S. Dept. of Zoology, Seoul National University, Seoul, Korea.

1988 -1990 M.A. Cell & Molecular Biology, Seoul National University, Seoul, Korea

1991-1996 Ph.D. Dept. of Microbiology & Molecular Genetics, Harvard University, Boston, USA

1996 -1997 Postdoctoral Fellow. Dana-Farber Cancer Inst., Harvard Medical School, Boston, USA

1997 - 2000 Postdoctoral Fellow. Center for Cancer Research, MIT, Cambridge MA, USA

### Professional Appointments

2000 - 2003 *Assistant Professor*, School of Biological Sciences, Seoul National University, Seoul, Korea.

2004 - present Associate Member of Korean Advanced Science and Technology

2004 - present PI of National Research Laboratory

2007 - 2008 Visiting Professor, Dept. of Medicine, Univ. of California, San Diego

2004 - 2009 *Associate Professor*, School of Biological Sciences, Seoul National University, Seoul, Korea.

2009 - present *Professor*, School of Biological Sciences, Seoul National University, Seoul, Korea.

### Awards

1984-1987 High Honor Student Scholarship, Seoul National University, Seoul, Korea

1991-1995 NIH Genetics Training Scholarship, USA

1995-1996 Harvard Albert J. Ryan fellowship, USA

1996-1997 American Diabetes Association Postdoctoral fellowship, USA

1997-1998 Anna Fuller Postdoctoral Fellowship, USA

1999-2001 Recipient of Leukemia Society of America Special Fellow Award, USA

2007-2008 LG Yonam Professorship

### Current Research

- Mechanism of Adipocyte Differentiation
- Gene Expression Regulation of Lipogenesis and Insulin-dependent Genes
- Molecular Mechanisms for Obesity and Diabetes

### Intramural Activities and Teaching Experience

2000 - present *Courses taught* at Seoul National University:

General Biology, Cell Biology, Molecular Biology, Biomedical Sciences, Genetics, Histology, and Genetic Engineering (for undergraduate courses)

Molecular Cell Biology, Advanced Genetic Engineering, Differentiation, Cell Signaling, Metabolic Diseases (for graduate courses)

### **Extramural Service: Scientific Consultant and Reviewer**

2005 - present Negex Inc., Seoul, Korea, consultant

2004 - 2006 Amore-Pacific Inc., Yongin, Korea, consultant.

### **Editorial Board Member:**

Molecules and Cells (Springer), *Biochemistry and Molecular Biology* (Springer)

### **Regular reviewer for the following journals and grant agencies:**

*Molecular and Cellular Biology, Diabetes, Journal of Biological Sciences, Molecular Endocrinology, Nucleic Acids Research, Journal of Biochemistry, American Journal of Physiology, Diabetologia, Endocrinology, Journal of Lipid Research, Biochemical and Biophysical Research Communications, Molecules and Cells, Biochemistry and Molecular Biology Reports etc*

Research Grants Administrated by Korea Research Foundation, Korea Science and Engineering Foundation, Korea Institute of Science and Technology and Ministry of Health and Welfare etc

### **Research Papers**

65. J. H. Suh, H. W. Lee, J. W. Lee, and **J. B. Kim\***. Hes1 Stimulates Transcriptional Activity of Runx2 by Increasing Protein Stabilization during Osteoblast Differentiation. *Biochem. Biophys. Res. Commu.* 367:97-102, 2008.2.
66. E. S. Shin, J. Park, J.-M. Shin, D. Cho, S. Y. Cho, D. W. Shin, M. Ham, **J. B. Kim**, and T. R. Lee\*. Catechin gallates are NADP<sup>+</sup>-competitive inhibitors of glucose-6-phosphate dehydrogenase and other enzymes that employ NADP<sup>+</sup> as a coenzyme. *Bioorg. Med. Chem.* 16:3580-3586, 2008.2.
67. J. H. Suh, E.-Y. Gong, **J. B. Kim**, I. -K. Lee, H. -S. Choi, and K. Lee\*. Sterol Regulatory Element-Binding Protein-1c Represses the Transactivation of Androgen Receptor and Androgen-Dependent Growth of Prostatic Cells. *Mol. Cancer Res.* 6:314-324, 2008. 2.
68. G.S. Kim, G.Y. Lee, B. Nedumaran, Y.Y. Park, J.T. Kim, S.C. Park, Y.C. Lee, **J. B. Kim\*** and H.S. Choi\*. (co-corresponding author) The orphan nuclear receptor DAX-1 acts as a novel transcriptional corepressor of PPAR $\gamma$ . *Biochem. Biophys. Res. Commu.* 370:264-268, 2008. 3.
69. H. W. Lee, J. H. Suh, H. N. Kim, A Y. Kim, S. Y. Park, C. S. Shin, J. Y. Choi, and **J. B. Kim\***. Berberine Promotes Osteoblast Differentiation by Runx2 Activation with p38 MAPK. *J. Bone Miner. Res.* 23:1227-1237, 2008. 8.
70. Y. S. Lee, A. Y. Kim, J. W. Choi, M. Kim, S. Yasue, H. J. Son, H. Masuzaki, K. S. Park and **J. B. Kim\*** Dysregulation of adipose GPx3 in obesity contributes to local and systemic oxidative stress. *Mol. Endocrinol.* 22:2176-2189, 2008. 9.
71. A. C. Doran, N. Meller, A. Cutchins, H. Deliri, R. P. Slyayton, S. N. Oldham, **J. B. Kim**, S. R. Keller, and C. A. McNamara\*. The helix-loop-helix factors Id3 and E47 are novel regulators of adiponectin. *Circulation Res.* 103:624-634, 2008. 9.
72. S. Choi, H.-J. Cho, H. Kim, K. H. Kim, **J. B. Kim**, and H. Park\*. Stra13/DEC1 and DEC2 Inhibit Sterol Regulatory Element Binding Protein-1c In a Hypoxia-Inducible Factor-Dependent Mechanism. *Nucleic Acids Res.* 36: 6372-6385. 2008. 11.
73. K. G. Park, A. K. Min, E. H. Koh, H. S. Kim, M. O. Kim, H. S. Park, Y. D. Kim, T. S. Yoon, B. K. Jang, J. S. Hwang, **J. B. Kim**, H. S. Choi, J. Y. Park, I. K. Lee and K. U. Lee\*. Alpha-lipoic acid decreases hepatic lipogenesis through AMPK-dependent and -independent pathways. *Hepatology* 48:1477-1486, 2008. 11.
74. S. S. Chung, M. Kim, B. S. Youn, N. S. Lee, J. W. Park, I. K. Lee, Y. S. Lee, **J. B. Kim**, Y. M. Cho, H. K. Lee, K. S. Park\*. Glutathione peroxidase 3 mediates the antioxidant effect of peroxisome proliferators-activated receptor gamma in human skeletal muscle cells. *Mol. Cell. Biol.* 29: 20-30, 2009. 1.

75. K. H. Kim, J. M. Yoon, A. H. Choi, G. Y. Lee, and **J. B. Kim\***. Liver X receptor ligands suppress ubiquitination and degradation of LXRalpha by displacing BARD1/BRCA1. *Mol. Endocrinol.* 23:466-74, 2009. 4.
76. H. W. Jeong, K. C. Hsu, J. -W. Lee, M. Ham, H. J. Shin, W. S. Kim, and **J. B. Kim\***. Berberine suppresses proinflammatory responses through AMPK activation in macrophages. *Am. J. Physiol. Endocrinol. Metabol.* 296:E812-9, 2009. 4.
77. W. S. Kim, Y. S. Lee, S. H. Cha, H. W. Jeong, S. S. Choe, M. -R. Lee, G. T. Oh, M. D. Land and **J. B. Kim\***. Berberine improves lipid dysregulation in obesity by controlling central and peripheral AMPK activity. *Am. J. Physiol. Endocrinol. Metabol.* 296:E812-9, 2009. 4.
78. J. Li, K. Murao, H. Imachi, X. Yu, T. Muraoka, **J. B. Kim**, and T. Ishida\*. Prolactin regulatory element binding protein involved in cAMP-mediated suppression of adiponectin gene. *Journal of Cellular and Molecular Medicine*. In Press.
79. H. Jo, J. Shim, J. H. Lee, J. Lee\* and **J. B. Kim\***. IRE-1 and HSP-4 Play Key Roles in Energy Homeostasis via Novel Fasting-induced Lipases in *C. elegans*. *Cell Metab.* 9:440-8, 2009. 5.
80. H. W. Lee, S. Y. Kim, A. Y. Kim, E. J. Lee, J. Y. Choi, and **J. B. Kim\***. Adiponectin stimulates osteoblast differentiation through induction of COX2 in mesenchymal progenitor cells. *Stem Cell.* 27:2254-62, 2009.9.
81. T. A. Knotts, H. W. Lee, **J. B. Kim**, P. J. Oort, R. McPherson, R. Dent, K. Tachibana, T. Doi, S. Yu, J. K. Reddy, K. Uno, H. Katagiri, M. Pasarica, S. R. Smith, D. D. Sears, M. Grino and S. H. Adams. Molecular Characterization of the Tumor Suppressor Candidate 5 Gene: Regulation by PPARgamma and Identification of TUSC5 Coding Variants in Lean and Obese Humans. *PPAR Research*. Accepted 2009. 11.
82. S. Y. Kim, A. Y. Kim, H. W. Lee, Y. H. Son, G. Y. Lee, J. -W. Lee, Y. S. Lee, **J. B. Kim\***. miR-27a is a negative regulator of adipocyte differentiation via suppressing PPARgamma expression. *Biochem. Biophys. Res. Commun.* 392:323-8, 2010.2.
83. S. Okada, C. Kozuka, H. Masuzaki, S. Yasue, T. I- Yonemoto, T. Tanaka, Y. Yamamoto, M. Noguchi, T. Kusakabe, T. Tomita, J. Fujikura, K. Ebihara, K. Hosoda, H. Sakaue, H. Kobori, M. Ham, Y. S. Lee, **J. B. Kim**, Y. Saito, K. Nakao. Adipose tissue-specific dysregulation of angiotensinogen by oxidative stress in obesity. *Metab. Clin. Exp. Inpress.* 2010.
84. A. Y. Kim, Y. S. Lee, K. H. Kim, J. H. Lee, H. K. Lee, S. -H. Jang, S. -E. Kim, G. Y. Lee, J. -W. Lee, S. -A. Jung, H. Y. Chung, S. j. Jeong and **J. B. Kim\***. Adiponectin Represses Colon Cancer Cell Proliferation via AdipoR1- and R2-mediated AMPK Activation. *Mol. Endo.*, In press. 2010.
85. Y. S. Lee, J. W. Choi, I. J. Hwang, J. W. Lee, J. H. Lee, A. Y. Kim, J. Y. Huh, Y. J. Koh, G. Y. Koh, H. J. Son, H. Masuzaki, K. Hotta, A. A. Alfadda, and **J. B. Kim\***. Adipocytokine orsomucoid integrates inflammatory and metabolic signals to preserve energy homeostasis by resolving immoderate inflammation. *J. Biol. Chem.* In press. 2010.