

Jung-whan Kim, D.V.M., Ph.D.

Assistant Professor
The University of Texas at Dallas
Department of Biological Sciences
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ACADEMIC POSITIONS

04/2013 – Present Assistant Professor, Department of Biological Sciences,
The University of Texas at Dallas, Richardson, TX, USA

EDUCATION AND PROFESSIONAL TRAINING

05/2012 – 03/2013 Salk Institute for Biological Studies, La Jolla, CA, USA
Post-Doctoral Fellow (Supervisor; Reuben Shaw)
07/2008 – 04/2012 University of California San Diego (UCSD), Division of Biological Sciences, La Jolla, CA, USA
Post-Doctoral Fellow (Supervisor; Randall S. Johnson)
10/2007 – 06/2008 University of California San Francisco, Department of Anatomy, San Francisco, CA, USA
Post-Doctoral Fellow (Supervisor: Zena Werb)
06/2006 – 09/2007 Johns Hopkins University, Department of Medicine, Baltimore, MD, USA
Post-Graduate Research (Supervisor; Chi V. Dang)
08/2002 – 05/2006 Johns Hopkins University, School of Medicine, Baltimore, MD, USA
Ph.D., Pathobiology (Thesis Mentor; Chi V. Dang)
10/2000 – 05/2002 Univ. of Pennsylvania, Department of Pathology & Lab Medicine, Philadelphia, PA, USA
Research Fellow (Supervisor; Ruth J. Muschel)
03/1995 – 02/2000 Konkuk University, School of Veterinary Medicine, Seoul, Korea,
D.V.M., Veterinary Medicine (Summa cum Laude)

ACADEMIC AWARDS

2012 Keystone Symposia Scholarship, Advances in Hypoxic Signaling: from Bench to Bedside
2006 Keystone Symposia Scholarship, Metabolomics: From Bioenergetics to Apoptosis
2004 Pathology Young Investigators' day Award, Excellence in Basic Research, Johns Hopkins School of Medicine
2000 Dean's Award for Academic Achievement, summa cum laude, Konkuk University, School of Vet Medicine, Korea
2000 Achievement Award for the 1st rank in The Korean Veterinary National Board Examination, Korea

FELLOWSHIPS

2011-2013 NIH NRSA F32 Post-Doctoral Fellowship
2010-2011 NIH NRSA T32 Post-Doctoral Fellowship
2008 Susan G. Komen Foundation, Post-Doctoral Fellowship
2003-2006 Howard Hughes Medical Institute (HHMI), Pre-Doctoral Fellowship

PUBLICATIONS

1. Jae-jun Ban, Robin Ruthenborg, Kevin Cho, **Jung-whan Kim**. Regulation of obesity and insulin resistance by hypoxia-inducible factors. **Hypoxia**, **2:171-183 (2014)**
2. Colin Evans, Steven Grover, Prakash Saha, Julia Humphries, **Jung-whan Kim**, Bijan Modarai, Alberto Smith. Suppression of angiogenic response in local vein wall is associated with reduced thrombus resolution. **Thrombosis Research**,

134:682-685 (2014)

3. Robin Ruthenborg, Jae-Jun Ban, Anum Wazir, Norihiko Taketa, and **Jung-whan Kim**. Regulation of Wound Healing and Fibrosis by Hypoxia and Hypoxia-inducible Factor-1. **Molecules and Cells, 37:637-643**
4. **Yun Sok Lee***, **Jung-whan Kim***, Olivia Osborne, Da Young Oh, Roman Sasik, Simon Schenk, Ai Chen, Heekyung Chung, Anne Murphy, Steven M. Watkins, Oswald Quehenberger, Randall Johnson**, and Jerrold Olefsky**. Increased adipocyte O₂ consumption triggers HIF-1alpha causing inflammation and insulin resistance in obesity. **Cell, 157:1339-52 (2014)**
*** equally contributed first authors, ** equally contributed corresponding authors**
5. Andrew Cowburn, Norihiko Takeda, Adam Boutin, **Jung-whan Kim**, Jane Sterling, Manando Nakasaki, Colin Jamora, Victor Nizet, Edwin Chilvers and Randall Johnson. HIF Isoforms in the Skin Differentially Regulate Systemic Arterial Pressure. **Proc Natl Acad Sci, 110:17570-5 (2013)**
6. Jonathan Chou, Jeffrey Lin, Audrey Brenot, **Jung-whan Kim**, Sylvain Provot and Zena Werb. GATA3 Suppresses Metastasis and Modulates the Tumor Microenvironment by Regulating miR-29b Expression. **Nature Cell Biology, 15:201-213(2013)**
7. **Jung-whan Kim**, Colin Evans, Alexander Weidemann, Norihiko Takeda, Yun Sok Lee, Christian Stockmann, Cristina Branco-Price, Filip Branberg, Gustavo Leone, Michael Ostrowski and Randall Johnson. Loss of Fibroblast HIF-1a Accelerates Tumorigenesis. **Cancer Research, 72:3187-95 (2012)**
8. Norihiko Takeda, Ellen L. O’Dea, Andrew Doedens, **Jung-whan Kim**, Alexander Weidemann, Christian Stockmann, Masataka Asagiri, M. Selete Simon, Alexander Hoffmann and Randall S. Johnson. Differential activation and antagonistic function of HIF-a isoforms in macrophages are essential for NO homeostasis. **Genes and Development 24:491-501 (2010)**
9. **Jung-whan Kim** and Randall S. Johnson. You Don’t Need a PHD to Grow a Tumor. **Developmental Cell 16:781-2 (2009)**
10. Hosein Kouros-Mehr, **Jung-whan Kim**, Seth K. Bechis, and Zena Werb. GATA-3 and the Regulation of the Mammary Luminal Cell Fate. **Current Opinion in Cell Biology 20:164-170 (2008)**
11. Chi V. Dang, **Jung-whan Kim**, Ping Gao, and Jason Yustein. Interplay between MYC and HIF in cancer. **Nature Reviews Cancer 8: 51-56 (2008) *Featured Cover Article (Jan 2008 Issue)**
12. **Jung-whan Kim**, Ping Gao, Yen-Chun Liu, Gregg L. Semenza and Chi V. Dang. HIF-1 and dysregulated c-Myc cooperatively induce VEGF and metabolic switches, HK2 and PDK1. **Mol. Cell. Biol. 27:7381-7393 (2007)**
13. **Jung-whan Kim**, Ping Gao, and Chi V. Dang. Effects of hypoxia on tumor metabolism. **Cancer and Metastasis Reviews 26:291-8 (2007)**
14. Ryo Fukuda, Huafeng Zhang, **Jung-whan Kim**, Larissa Shimoda, Chi V. Dang, and Gregg L. Semenza. HIF-1 regulates cytochrome oxidase subunit composition to optimize the efficiency of respiration of hypoxic cells. **Cell 129:111-122 (2007)**
15. **Jung-whan Kim**, and Chi V. Dang. Cancer’s molecular sweet tooth and the Warburg effect. **Cancer Res. 66:8927-8930 (2006)**
16. **Jung-whan Kim**, Irina Tchernyshyov, Gregg L. Semenza, and Chi V. Dang. HIF-1-mediated expression of PDK: a metabolic switch required for cellular adaptation to hypoxia. **Cell Metabolism, 3:177-185 (2006) *Featured Cover Article (Mar 2006)**
17. Kathryn O’Donnell, Duonan Yu, Karen Zeller, **Jung-whan Kim**, Frederick Racke, Andrei Thomas-Tikhonenko and Chi V. Dang. Transferrin Receptor 1 is a direct Myc target gene required for cell cycle progression, **Mol. Cell. Biol. 26:2373-2386 (2006)**
18. Rong Mao, Xiaowen Wang, Edward L. Spitznagel Jr., Laurence P. Frelin, Jason C. Ting, Huashi Ding, **Jung-whan Kim**, Ingo Ruczinski, Thomas J. Downey, and Jonathan Pevsner. Role of Gene Expression in the Developing Human Down Syndrome Brain and Heart. **Genome Biology, 6:R107 (2005)**
19. **Jung-whan Kim**, Lawrence B. Gardner and Chi V. Dang. Oncogenic Alterations of Metabolism and the Warburg Effect. **Drug Discovery Today: Disease Mechanisms, 2:233-235 (2005)**
20. Feng Li, Diane Wonsey, Young Ko, Kathryn O’Donnell, Karen Zeller, **Jung-whan Kim**, Jason Yustein, Linda Lee and Chi Dang. Myc stimulates mitochondrial biogenesis and nuclear encoded mitochondrial genes, **Mol. Cell. Biol. 25: 6225-6234 (2005)**
21. **Jung-whan Kim** and Chi V. Dang. Multifaceted Roles of Glycolytic Enzymes. **Trends in Biochem Sci, 30:142-150 (2005)**

22. Seung-Hoon Lee, **Jung-whan Kim**, Sun-Hee Oh, Yong-Jin Kim, Seung-Bae Rho, Kyungsook Park, Kui-Lea Park and Je-ho Lee. IFN-gamma/IRF-1-induced p27 down-regulates telomerase activity and human telomerase reverse transcriptase expression in human cervical cancer. **FEBS Letters**,**579:1027-1033 (2005)**
23. **Jung-whan Kim**, Karen I. Zeller, Yunyue Wang, Anil G. Jegga, Bruce J. Aronow, Kathryn A. O'Donnell, and Chi V. Dang. Evaluation of Myc E-Box Phylogenetic Footprints in Glycolytic Genes by Chromatin Immunoprecipitation Assays. **Mol. Cell. Biol.** **24:5923-5936 (2004)**
24. **Jung-whan Kim**, Christopher W. Wong, Jeffery D. Goldsmith, C.Song, Weili Fu, Mary-Beth Allion, Meenhard Herlyn, Abu B. Al-Mehdi, and Ruth J. Muschel. Rapid apoptosis in the pulmonary vasculature distinguishes non-metastatic from metastatic melanoma cells. **Cancer Letters**, **213:203-212 (2004)**
25. Seung-Hoon Lee, **Jung-whan Kim**, Yongsuk Cho, Sunhee Oh, Hanwoong Lee, Wei Zhang and Jeho Lee. Interferon Regulatory Factor 1 (IRF-1) Is a Mediator for Interferon- γ -induced Attenuation of Telomerase Activity and Human Telomerase Reverse Transcriptase (hTERT) Expression. **Oncogene**, **22:381-391 (2003)**
26. Seung-Hoon Lee, Wei Zhang, Jung-joo Choi, Yong-Suk Cho, Sun-Hee Lee, **Jung-whan Kim**, Limei Hu, Jie Xu, Jinsong Liu and Joho Lee. Overexpression of the Thymosin beta-10 Gene in Human Ovarian Cancer Cells Disrupts F-Actin Stress Fiber and Leads to Apoptosis. **Oncogene**, **20:6700-6706 (2001)**
27. Seung-Hoon Lee, Yong-Suk Cho, Chan-sub Shim, Jung-joo Choi, Sun-Hee Oh, **Jung-whan Kim**, Wei Zhang and Jeho Lee. Aberrant Expression of Smad4 Results in Resistance against the Growth Inhibitory Effect of Transforming Growth Factor- β (TGF- β) in the SiHa Human Cervical Carcinoma Cell Lines. **Int. J. Cancer**, **94:500-507 (2001)**

BOOK CHAPTERS

1. Chi Dang, Ping Gao and **Jung-whan Kim**. Warburg effect. **Encyclopedia of CANCER**, **4:3195-3199 (2009)**

INVITED TALKS

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| 03/21/2016 | Angiogenesis Seminar Series, Simmons Comprehensive Cancer Center, UTSW, TX, USA |
| 06/20/2014 | Korean Cancer Association, Seoul, Korea |
| 12/06/2013 | Korean Society of Radiation Biosciences, Seoul, Korea |
| 11/21/2013 | Hamon Center for Therapeutic Oncology Research UT Southwestern Medical Center, TX, USA |
| 05/09/2012 | Korean-American Scientists and Engineers Association (KSEA) BioSeminar, Scripps, California, USA |
| 02/14/2012 | Keystone Symposia, Advances in Hypoxic Signaling: From Bench to Bedside, Banff, Canada |
| 08/13/2011 | Mechanisms and Models of Cancer, Salk Institute, California, USA |
| 04/20/2010 | Cancer/Mammals Club Training Grant Monthly Meeting, UC San Diego, California, USA |
| 07/24/2009 | Japanese Association of Metastatic Research (JAMR), Asahikawa, Japan |
| 10/25/2007 | Korean Life Scientists In the Bay Area (KOLIS), UC San Francisco, California, USA |
| 05/29/2007 | Molecular Therapy Research Center, Samsung Medical Center, Seoul, Korea |
| 05/28/2007 | Institute of Biomedical Science and Technology (IBST), Konkuk University, Seoul, Korea |
| 07/24/2006 | Grand Round, Dept. of Pathology, Johns Hopkins University School of Medicine, Maryland, USA |
| 06/29/2005 | Baltimore Life Scientists Association, Maryland, USA |

INVENTIONS

- JHU Ref 4536 C V Dang, J Kim, and G L Semenza: PDKs as Therapeutic Targets for Both Cancer and Ischemic Diseases

MEETINGS ORGANIZED

- 11/2007 Baltimore Life Scientists Association 2007 Conference, Baltimore, MD USA,
Organizing Committee, Scientific Director

ADMINISTRATIVE RESPONSIBILITIES

- 2013 – Present Molecular & Cell Biology Graduate Program Admission Committee, The University of Texas at Dallas