

# Curriculum Vitae

## **Personal information**

Name: Sukmo Kang, D.V.M, Ph.D.

Biototech co, Ltd,

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## **Education**

2013/09 ~ 2017/8      **Bionanomedicine lab, Department of Biological Science, KAIST (Korea Advanced Institute of Science and Technology), Daejeon, South Korea**

- **PhD course**

- Thesis theme: **Engineering of gold nanoparticles for effective cancer vaccines** (Advisor: Dr. Sangyong Jon)

- Gold nanoparticle, iron oxide nanoparticle, lipid nanoparticle or protein cage based vaccine development and evaluation

2010/03 ~ 2012/02      **Laboratory of Environmental Health and Biomarkers, Department of Public Health, College of Veterinary medicine, Seoul National University, Seoul, Korea.**

- **Master of Veterinary Medicine**

- Thesis theme : **Functional characterization of cytochrome P450 1A1 Ala62Pro allelic variant** (Advisor: Dr. Doug-young Ryu)

2004/03 ~ 2010/02      **College of Veterinary Medicine, Seoul National University, Seoul, Korea**

- **Doctor of Veterinary Medicine (D.V.M)**

## **Professional & Research Experiences**

2013/09 ~      Research planning office, Biototech co, Ltd., Cheongju, Korea

- General Manager

- 2012/10 ~ 2013/8      Department of Biological Science, KAIST (Korea Advanced Institute of Science and Technology), Daejeon, South Korea
- Appointed Researcher
- 2012/05 ~ 2012/10      Department of Pharmacological Efficacy, Biototech Co Ltd., Cheongju,, South Korea
- Researcher
- 2012/03 ~ 2012/04      Laboratory of Environmental health and biomarkers, College of Veterinary Medicine, Seoul National University, Seoul, Korea.
- Researcher

## **Publication**

**\* First/Corresponding author**

1. Chung-Tack Han, Du-Yeol Kim, Chunja Nam, Seol-Hee Moon, Sun-Hee Park, Kyoung-Goo Han, Hye-Yeong Lee, Heung-Mo Bae, Cheol-Beom Park, Jai-Hyun So, **Sukmo Kang\***, Jong-Koo Kang, Acute and 13-week subchronic toxicity studies of hot-water extract of Cynanchi wilfordii Radix in Sprague-Dawley rats, Toxicological Research, in press.
2. Yujin Sun, Hoe Suk Kim, **Sukmo Kang\***, Yin Ji Piao, Sangyong Jon, Woo Kyung Moon, Magnetic Resonance Imaging-Guided Drug Delivery to Breast Cancer Stem-Like Cells., Adv Healthc Mater. 2018 Nov;7(21):e1800266.
3. **Sukmo Kang\***, Sukyung Ahn, Jeewon Lee, Jinyong Kim, Minsuk Choi, Vipul Gujrati, Hyungjun Kim, Jinjoo Kim, Eui-Cheol Shin, Sangyong Jon, Effects of gold nanoparticle-based vaccine size on lymph node delivery and cytotoxic T-lymphocyte responses, Journal of Controlled Release, 2017, Apr 18;256:56-67.
4. **Sukmo Kang\***, Jung-Hoon Kang, Soohee Kim, Seung Heon Lee, Seungwoo Lee, Hee Jeong Yu, Su-Jun Oh, Jung-Duck Park, Ki-Hoan Nam, Sung Yong Han, Jong-Deock Lim, Doug-Young Ryu, Trace element analysis of three tissues from Eurasian otters (Lutra lutra) in South Korea, Ecotoxicology, 2015 Jul;24(5):1064-72.

5. Hyungjun Kim, Dobeon Hwang, Minsuk Choi, Soyoung Lee, **Sukmo Kang**, Yonghyun Lee, Sunghyun Kim, Junho Chung, Sangyong Jon, Antibody-Assisted Delivery of a Peptide–Drug Conjugate for Targeted Cancer Therapy, *Molecular Pharmaceutics*, 2019 Jan 7;16(1):165-172.
6. Minsuk Choi, Seung J. Yu, Yoonjung Choi, Hak R. Lee, Eunbeol Lee, Eunjung Lee, Yumi Lee, Junhyuk Song, Jin G. Son, Tae G. Lee, Jin Y. Kim, **Sukmo Kang**, Jieung Baek, Daeyoup Lee, Sung G. Im and Sangyong Jon, Polymer Thin Film–Induced Tumor Spheroids Acquire Cancer Stem Cell–like Properties, *Cancer Research*. 2018 Dec 15;78(24):6890-6902.
7. Hyungsu Jeon, Daejin Kim, Minsuk Choi, **Sukmo Kang**, Jin Yong Kim, Sunghyun Kim, Sangyong Jon, Targeted cancer therapy using a fusion protein of TNF $\alpha$  and a tumor-associated fibronectin-specific aptide, *Molecular Pharmaceutics*, 2017 Nov 6;14(11):3772-3779.
8. Jin Yong Kim, Dong Yun Lee, **Sukmo Kang**, Wenjun Miao, Hyungjun Kim, Yonghyun Lee, Sangyong Jon, Bilirubin nanoparticle preconditioning protects against hepatic ischemia-reperfusion injury, *Biomaterials*, 2017, Jul;133:1-10
9. Hyungjun Kim, Yonghyun Lee, **Sukmo Kang**, Minsuk Choi, Sunghyun Kim, Vipul Gujrati, Jinjoo Kim, Sangyong Jon, Self-assembled nanoparticles comprising aptide-SN38 conjugates for use in targeted cancer therapy, *Nanotechnology*, 2016, Dec 2;27(48):48.
10. Wenjun Miao, Hyungjun Kim, Vipul Gujrati, Jin Yong Kim, Hyeongsu Jon, Yonghyun Lee, Minsuk Choi, Jinjoo Kim, Soyoung Lee, Dong Yun Lee, **Sukmo Kang**, Sangyong Jon, Photo-decomposable Organic Nanoparticles for Combined Tumor Optical Imaging and Multiple Phototherapies, *Theranostics*, 2016; 6(13): 2367-2379.
11. Yonghyun Lee, Hyungjun Kim, **Sukmo Kang**, Jinju Lee, Jinho Park, Sangyong Jon, Bilirubin Nanoparticles as a Nanomedicine for Anti-inflammation therapy, *Angew Chem Int Ed Engl*. 2016 Jun 20;55(26):7460-3.
12. Jinju Lee, Phei Er Saw, Vipul Gujrati, Yonghyun Lee, Hyungjun Kim, **Sukmo Kang**, Minsuk Choi, Jae-II Kim, Sangyong Jon, Mono-arginine Cholesterol-based Small Lipid Nanoparticles as a Systemic siRNA Delivery Platform for Effective Cancer Therapy, *Theranostics*, 2016, Jan 1;6(2):192-203.
13. Vipul Gujrati, Miriam Lee, Young-Joon Ko, Sangeun Lee, Daejin Kim, Hyungjun Kim, **Sukmo Kang**, Soyoung Lee, Jinjoo Kim, Hyungsu Jeon, Sun Chang Kim, Youngsoo Jun, and Sangyong Jon, Bioengineered yeast-derived vacuoles with enhanced tissue-penetrating ability for targeted cancer therapy, *Proc Natl Acad Sci U S A*. 2016, Jan 19;113(3):710-5.

14. Seung Heon Lee, **Sukmo Kang**, Mi Sook Dong, Jung-Duck Park, Jinseo Park, Sangkee Rhee, Doug-Young Ryu, Characterization of the Ala62Pro polymorphic variant of human cytochrome P450 1A1 using recombinant protein expression, *Toxicology and Applied Pharmacology*, 2015 Jun 15;285(3):159-69.
15. Sukyung Ahn, In-Hyun Lee, **Sukmo Kang**, Daejin Kim, Minsuk Choi, Phei Er Saw, Eui-Cheol Shin, Sangyong Jon, Gold Nanoparticles Displaying Tumor-Associated Self-Antigens as a Potential Vaccine for Cancer Immunotherapy, *Adv Healthc Mater.*, 2014, 8:1194-9 .
16. Jin Seok Kang, **Sukmo Kang**, Doug-Young Ryu, Yun-Seok Lee, Jong Kwon Lee, Tae Seok Kang, Han-Jin Park and Seokjoo Yoon, Comparative study of active and inactive hepatocarcinogens using a QSAR-based prediction model, *Mol .Cell. Toxicol.*, 2012, 8:383-391.
17. Soohye KIM, Seung Heon LEE, **Sukmo KANG**, Lyon LEE, Jung-Duck PARK, and Doug-Young RYU, Involvement of c-Met- and Phosphatidylinositol 3-Kinase Dependent Pathways in Arsenite-Induced Downregulation of Catalase in Hepatoma Cells, *Biol. Pharm. Bull.*2011, **34**(11) 1748—1752.