



Professor Oh Young Bang is the Professor in the Department of Neurology at Samsung Medical Center, Sungkyunkwan University School of Medicine in Seoul, Korea, where he is also Professor at Samsung Advanced Institute for Health Sciences and Technology. Now he is also CEO of S&E bio which develops stem cell-derived exosome therapies for incurable diseases.

Professor Bang maintains active preclinical and clinical programs on stroke, with interests centered on neuroimaging, risk factors and biomarkers, and stem cell therapy.

He holds 20 patents and has published more than 300 peer-reviewed SCI/SCIE articles and a number of book chapters. In addition, Professor Bang has participated in several international clinical trials and has been an invited speaker and lecturer at international conferences.

Professor Bang has served on the editorial boards of the *Stroke* (2010-2015), *J Stroke* (since 2013), *J Clin Neurol* (2006-2014), and *Cerebrovascular disease* (since 2016). He is editor in chief of *Precision and Future Medicine* (since 2018).

### **Selected Publications**

1. Chung JW, Chang WH, **Bang OY**, Moon GJ, Choi EH, Kim SJ, Kim SK, Lee JS, Sohn SI, Kim YH, as STARTING-2 collaborators. Efficacy and safety of intravenous mesenchymal stem cells for ischemic stroke. *Neurology*, 2021 Feb 16;95(7) e1023
2. **Bang OY**, Chung JW, Kim DH, Won HH, Yeon JY, Ki CS, Shin HJ, Kim JS, Hong SC, Kim DK, Koizumi A. Moyamoya Disease and Spectrums of RNF213 Vasculopathy. *Transl Stroke Res*. 2019 Oct 24. doi: 10.1007/s12975-019-00743-6.
3. **Bang OY**, Chung JW, Cho YH, Oh MJ, Seo WK, Kim GM, Ahn MJ. Circulating DNAs, a Marker of Neutrophil Extracellular Traposis and Cancer-Related Stroke: The OASIS-Cancer Study. *Stroke*. 2019 Oct;50(10):2944-2947.
4. **Bang OY**, Kim EH. Mesenchymal Stem Cell-Derived Extracellular Vesicle Therapy for Stroke: Challenges and Progress. *Front Neurol*. 2019 Mar 12;10:211.
5. Chung JW, Kim DH, Oh MJ, Cho YH, Kim EH, Moon GJ, Ki CS, Cha J, Kim KH, Jeon P, Yeon JY, Kim GM, Kim JS, Hong SC, **Bang OY**. Cav-1 (Caveolin-1) and Arterial Remodeling in Adult Moyamoya Disease. *Stroke*. 2018;49:2597-2604.
6. Moon GJ, Sung JH, Kim DH, Kim EH, Cho YH, Son JP, Cha JM, **Bang OY**. Application of Mesenchymal Stem Cell-Derived Extracellular Vesicles for Stroke: Biodistribution and MicroRNA Study. *Transl Stroke Res*. 2018 Oct 19.
7. Moon GJ, Cho YH, Kim DH, Sung JH, Son JP, Kim S, Cha JM, **Bang OY**. Serum-mediated Activation of Bone Marrow-derived Mesenchymal Stem Cells in Ischemic Stroke Patients: A Novel Preconditioning Method. *Cell Transplant*. 2018;27:485-500.
8. Chung JW, Cho YH, Ahn MJ, Lee MJ, Kim GM, Chung CS, **Bang OY**. Association of Cancer Cell Type and Extracellular Vesicles With Coagulopathy in Patients With Lung Cancer and Stroke. *Stroke*. 2018 May;49(5):1282-1285.
9. Cha JM, Shin EK, Sung JH, Moon GJ, Kim EH, Cho YH, Park HD, Bae H, Kim J, **Bang OY**. Efficient scalable production of therapeutic microvesicles derived from human mesenchymal stem cells. *Sci Rep*. 2018 Jan 19;8(1):1171.

10. Cha JM, Park H, Shin EK, Sung JH, Kim O, Jung W, **Bang OY**, Kim J. A novel cylindrical microwell featuring inverted-pyramidal opening for efficient cell spheroid formation without cell loss. *Biofabrication*. 2017 Aug 14;9(3):035006.
11. **Bang OY**, Kim EH, Cha JM, Moon GJ. Adult Stem Cell Therapy for Stroke: Challenges and Progress. *J Stroke*. 2016;18(3):256-266.
12. Kim DH, Seo YK, Thambi T, Moon GJ, Son JP, Li G, Park JH, Lee JH, Kim HH, Lee DS, **Bang OY**. Enhancing neurogenesis and angiogenesis with target delivery of stromal cell derived factor-1 $\alpha$  using a dual ionic pH-sensitive copolymer. *Biomaterials*. 2015;61: 115-125