Curriculum Vitae

Personal Information		
Title	**Professor**	
Name	**Byung Gon Kim**	
Degree	**MD, PhD**	
Country	**South Korea**	
Affiliation	**Ajou University School of Medicine**	

Educational Background

2001-2005	**Ph.D.** in Interdisciplinary Program in Neuroscience, Georgetown University, School of Medicine, Washington, DC, USA
1996-1998	**M.S.** in Medical Science (Neuroanatomy concentration) Seoul National University, College of Medicine
1987-1993	**M.D.** in Medical Science Seoul National University, College of Medicine, Seoul, Korea

Professional Career

2021- 2024	**Director**, AI Superconvergence KIURI Translational Research Center
2015- 2020	**Director**, BK21 biomedical science research center
2013- 2023	**Chair**, Department of Brain Science, Ajou University School of Medicine
2010- 2011	**Visiting assistant professor**, Department of Neurology, Yale University School of Medicine
2005- present	**Professor,** Departments of Brain Science and Neurology, Ajou University School of Medicine
1994-1998	**Residency in Adult Neurology,** Seoul National University Hospital, Seoul, Korea

Research Field

Neural repair and functional recovery; Vascular neurodegeneration, Neurological disease

Main Scientific Publications

1. Kim HS, Jee SA, Einisadr A, Yeojin Seo, Seo HG, Jang BS, Park HH, Chung WS, **Kim BG.** Detrimental influence of Arginase-1 in infiltrating macrophages on poststroke functional recovery and inflammatory milieu. **Proc Natl Acad Sci U S A**. 2025 Feb 14. doi.org/10.1073/pnas.241348412

2. Choi JY, Jin X, Kim HK, Koh SY, Cho HJ, **Kim BG**. High Mobility Group Box 1 as an Autocrine Chemoattractant for Oligodendrocyte Lineage Cells in White Matter Stroke. **Stroke**. 2023 Feb;54(2):575-586. doi:10.1161/STROKEAHA.122.041414.

3. Park HH, Kim YM, Anh Hong LT, Kim HS, Kim SH, Jin X, Hwang DH, Kwon MJ, Song SC, **Kim BG**. Dual-functional hydrogel system for spinal cord regeneration with sustained release of arylsulfatase B alleviates fibrotic microenvironment and promotes axonal regeneration. **Biomaterials**. 2022 May;284:121526. doi: 10.1016/j.biomaterials.2022.121526.

4. Kwon MJ, Seo YJ, Cho HN, Kim HS, Oh YJ, Simay G, Kim MJ, Park HH, Joe EH, Kwon MH, Kang HC, **Kim BG**. Nanogel-mediated delivery of oncomodulin secreted from regeneration-associated macrophages promotes sensory axon regeneration in the spinal cord. **Theranostics**. 2022 Aug 1;12(13):5856-5876. doi:10.7150/thno.73386.

5. Shin HY, Kwon MJ, Lee EM, Kim K, Oh YJ, Kim HS, Hwang DH, **Kim BG**. Role of Myc proto-oncogene as a transcriptional hub to regulate the expression of regeneration-associated genes following preconditioning peripheral nerve injury. **J Neurosci**. 2021 Jan 20;41(3):446-460. doi: 10.1523/JNEUROSCI.1745-20.2020.

6. Hong LTA, Kim YM, Park HH, Hwang DH, Cui Y, Lee EM, Yahn S, Lee JK, Song SC, **Kim BG**. An injectable hydrogel enhances tissue repair after spinal cord injury by promoting extracellular matrix remodeling. **Nat Commun**. 2017 Sep 14;8(1):533. doi:10.1038/s41467-017-00583-8.

7. Choi JY, Cui Y, Chowdhury ST, **Kim BG**. High-mobility group box-1 as an autocrine trophic factor in white matter stroke. **Proc Natl Acad Sci U S A**. 2017 Jun 5. doi:10.1073/pnas.1702035114.

8. Kwon MJ, Shin HY, Cui Y, Kim H, Thi AH, Choi JY, Kim EY, Hwang DH, **Kim BG**. CCL2 Mediates Neuron-Macrophage

Interactions to Drive Proregenerative Macrophage Activation Following Preconditioning Injury. **J Neurosci**. 2015 Dec 2;35(48):15934-47. doi:10.1523/JNEUROSCI.1924-15.2015.

9. Hwang DH, Shin HY, Kwon MJ, Choi JY, Ryu BY, Kim BG. Survival of neural stem cell grafts in the lesioned spinal cord is enhanced by a combination of treadmill locomotor training via insulin-like growth factor-1 signaling. **J Neurosci.** 2014 Sep 17;34(38):12788-800. doi: 10.1523/JNEUROSCI.5359-13.2014.

10. Kwon MJ, Kim J, Shin H, Jeong SR, Kang YM, Choi JY, Hwang DH, **Kim BG**. Contribution of macrophages to enhanced regenerative capacity of dorsal root ganglia sensory neurons by conditioning injury. **J Neurosci.** 2013 Sep 18;33(38):15095-108. doi: 10.1523/JNEUROSCI.0278-13.2013.