KOREA-US
Frontiers in Health and Life Sciences
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Four Seasons Hotel, Grandballroom(3F)

# Curriculum Vitae

| Name | First Name | Kwang-Soo | Last Name | Kim |
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| Country | USA | | |  |
| Affiliation | McLean Hospital/Harvard Medical School | | | |

## Educational Background

1988 *Postdoc, MIT, Molecular Biology*
1983 *M.S./Ph.D., KAIST, Microbial Genetics*
1977 *B.S., Seoul National University, Microbiology*

## Professional Career

1998-present *Director, Molecular Neurobiology Lab, McLean Hospital*
*Professor, Department of Psychiatry, Harvard Medical School*
1994-1998 *Associate Professor, Department of Neuroscience, University of Tennessee, College of Medicine*
1989-1994 *Assistant Professor, Department of Neurology, Cornell University Medical College*

## Research Field

*Molecular Neuroscience*
*Stem Cell Biology and Regenerative Medicine*
*Parkinson's disease*
*Translational Neuroscience*

## Selected papers and reviews since 2020



1. Rajan S, Jang Y, Kim CH, Toh HT, Jeon J, Song B, Maqueda AS, Lescar J, Yoo JY, Beldar S, Liu X-W, Feitosa M, Hwang D, Goh G, Lim K-L, Park HM, Lee CH, Oh SF, Petsko GA, Yoon HS, **Kim KS** (2020) PGE1 and PGA1 bind to Nurr1 and activate its transcriptional function. Nat. Chem. Biol., 16(8):876-886.
2. Schweitzer JS, Song B, Herrington TM, Park T-Y, Lee N, Ko S, Jeon J, Cha Y, Kim K, Li Q, Henchcliffe C, Kaplitt M, Neff C, Rapalino O, Seo H, Lee I-H, Kim J, Kim T, Petsko GA, Ritz J, Cohen BM, Kong SW, Leblanc P, Carter BS, and **Kim KS** (2020) Personalized iPSC-derived Dopamine Progenitor Cells for Parkinson's Disease. N Eng J Med. 382(20):1926-1932. PMID: 32402162. (featured by Malin Parmar and Anders Bjorklund Anders, Cell Stem Cell (2020) 27:8-10; featured by Hannah Stower in Research Highlight, Nat. Medicine (2020) 26:822).
3. Song, B., Cha, Y., Ko, S., Jeon, J., Lee, N., Seo, H., Park, K.-J., Feitosa, M., Luna, M., Jung, J.-H., Kim, J, Lee I-H, Hwang, D., Cohen, B., Teicher, M., Leblanc, P., Carter, B., Kordower, J.H., Bolshakov, V.Y., Kong, S.W., Schweitzer, J,, and **Kim, K.S.** (2020) Human autologous iPSC-derived dopaminergic progenitors restore motor function in Parkinson's disease models. J. Clin. Invest. 130(2):904-920. PMID: 31714896. (featured in Commentary, Takahashi, J. J. Clin. Invest. 130(2):601-603).
4. Cha Y, Kim T, Jeon J, Jang Y, Kim PB, Lopes C, Leblanc P, Cohen BM, **Kim KS** (2021) SIRT2 regulates mitochondrial dynamics and reprogramming via MEK1-ERK-DRP1 and AKT1-DRP1 axes. Cell Reports, 37(13): 110155
5. Kim W, Tripathi M, Kim C, Vardhineni S, Cha Y, Kandi SK, Feitosa M, Kholiya R, Sah S, Thakur A, Kim Y, Ko S, Bhatia K, Manohar S, Kong Y-B, Sindhu G, Kim Y-S, Cohen B, Rawat DS, **Kim KS** (2023) An optimized Nurr1 agonist provides disease-modifying effects in Parkinson's disease models. Nat. Commun. 14:4283
6. Park T-Y, Jeon J, Lee N, Kim J, Song B, Kim J-H, Lee S-K, Liu D, Cha Y, Kim M, Leblanc P, Herrington TM, Carter BS, Schweitzer JS, **Kim KS** (2023) Co-transplantation of autologous $T_{REG}$ in Parkinson's disease cell therapy. Nature 619(7970):606-615. PMID: 37438521. (featured in News & Views, Tang Q, Nature 619 (7970):470-472)
7. Park TY, Jeon J, Cha Y, and **Kim KS** (2024) Past, present, and future of cell replacement therapy of Parkinson's disease: a novel emphasis on host immune responses. Cell Research 34(7):479-492.
8. Jeon J, Cha Y, Hong YJ, Lee I-H, Jang H, Ko S, Naumenko S, Kim M, Ryu HL, Shrestha Z, Lee N, Park T-Y, Park H, Kim SH, Yoon K-Y, Song B, Schweitzer J, Herrington TM, Kong SW, Carter B, Leblanc P, **Kim KS** (2025) Pre-clinical safety and efficacy of human induced pluripotent stem cell-derived products for autologous cell therapy in Parkinson's Disease. Cell Stem Cell 32(3):343-360. PMID: 39952239. (featured by Malin Parmar, Cell Stem Cell, 32 (3); 341-342. PMID: 40054453).
9. Cha Y, Leblanc P, and **Kim KS** (2025) A new era in regenerative medicine: Cell replacement therapy for Parkinson's disease is on the horizon. Cell Stem Cell. 32: 864-866. PMID: 40480206