

Curriculum Vitae

Kyung A Cho, Ph.D

Professor

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Education and Career

- 2020 – Present CEO, MediSpan. Co., Ltd
- 2022 – Present A board member of the Korea Support Committee for International Vaccine Institute (IVI)
- 2022 – Present Current) Academic Chairperson, Former) Finance, Public Relations Chairperson of the Korean Society for Aging Science
- 2020 – 2022 Vice Dean, Chonnam National University Medical School
- 2006 – Present Assistant Professor, Associate Professor, Professor, Department of Biochemistry, Chonnam National University Medical School
- 2002 – 2006 Post Doc, Department of Biochemistry and Molecular Biology, Seoul National University College of Medicine
- 1999 – 2002 PhD, Department of Biochemistry and Molecular Biology, Seoul National University College of Medicine
- 1997 – 1999 M.S, Department of Microbiology, Hallym University College of Medicine
- 1993 – 1997 B.A, Department of Agriculture biology, Kangwon National University

Research Interests

Longevity, immunosenescence, mucosal immunity, infectious diseases, senescence, senotherapeutics, chronic diseases, senile diseases

Recent papers (2014~)

1. Lim JS, et al., Mucosal TLR5 activation controls healthspan and longevity. *Nature Communications*. 2024 Jan;15:46.
2. Lim JS, et al., Piperine: an anticancer and senostatic drug. *Frontiers in Bioscience*. 2022 Apr 20;27(4):137.
3. Park JH, et al., Disruption of nucleocytoplasmic trafficking as a cellular senescence driver. *Exp Mol Med*. 2021 Jun;53(6):1092-1108

4. Jo D, et al., The Cerebral Effect of Ammonia in Brain Aging: Blood-Brain Barrier Breakdown, Mitochondrial Dysfunction, and Neuroinflammation. *J Clin Med*. 2021 Jun 24;10(13):2773
5. Lim JS, et al., Identification of a novel senomorphic agent, avenanthramide C, via the suppression of the senescence-associated secretory phenotype. *Mech Ageing Dev*. 2020 Dec;192:111355.
6. Kim SY, et al., Global transcriptional downregulation of TREX and nuclear trafficking machinery as pan-senescence phenomena: evidence from human cells and tissues. *Exp Mol Med*. 2020 Aug;52(8):1351-1359.
7. Lee YR, et al., Metabolite Profiling of Rambutan (*Nephelium lappaceum* L.) Seeds Using UPLC-qTOF-MS/MS and Senomorphic Effects in Aged Human Dermal Fibroblasts. *Nutrients*. 2020 May 15;12(5):1430.
8. Kuk MU, et al., Alleviation of Senescence via ATM Inhibition in Accelerated Aging Models. *Mol Cells*. 2019 Mar31;42(3):210-217.
9. Yoon G, et al., Transcriptomic Analysis of High Fat Diet Fed Mouse Brain Cortex. *Front Genet*. 2019 Feb 19;10:83.
10. Sueoka E, et al., Meeting report of the 14th Japan-Korea joint symposium on cancer and aging research: current status of translational research and approaches to precision medicine. *J Cancer Res Clin Oncol*. 2019 May;145(5):1263-1271.
11. Park JT, et al., A crucial role of ROCK for alleviation of senescence-associated phenotype. *Exp Gerontol*. 2018 Jun;106:8-15.
12. Sohn EJ, et al., Restoring Effects of Natural Anti-Oxidant Quercetin on Cellular Senescent Human Dermal Fibroblasts. *Am J Chin Med*. 2018;46(4):853-873.
13. Park JT, et al., Adjustment of the lysosomal-mitochondrial axis for control of cellular senescence. *Ageing Res Rev*. 2018 Nov;47:176-182.
14. Nguyen KC and Cho KA. Versatile Functions of Caveolin-1 in Aging-related Diseases. *Chonnam Med J*. 2017 Jan;53(1):28-36.
15. Lim JS, et al., The role of TLR9 in stress-dependent autophagy formation. *Biochem Biophys Res Commun*. 2016 Dec 9;481(3-4):219-226.
16. Ahn SH, et al., Caveolin-1 serves as a negative effector in senescent human gingival fibroblasts during *Fusobacterium nucleatum* infection. *Mol Oral Microbiol*. 2017 Jun;32(3):236-249.
17. Choi KH, et al., Regulation of Caveolin-1 Expression Determines Early Brain Edema After Experimental Focal Cerebral Ischemia. *Stroke*. 2016 Mar 24. pii: STROKEAHA.116.013205.
18. Lim JS, et al., Direct Regulation of TLR5 Expression by Caveolin-1. *Mol Cells*. 2015 Dec 31;38(12):1111-7
19. Lim JS, et al., Flagellin-dependent TLR5/caveolin-1 as a promising immune activator in immunosenescence.. *Ageing Cell. (JCR Top 3 %)*.2015 Oct;14(5):907-15
20. Jung S, et al., Loss of Caveolin 1 is Associated with the Expression of Aquaporin 1 and Bladder Dysfunction in Mice. *Int Neurorol J*. 2015 Mar;19(1):34-8
21. Lee JA, et al., Methyl- β -cyclodextrin up-regulates collagen I expression in chronologically-aged skin via its anti-caveolin-1 activity. *Oncotarget*. 2015 Feb 10;6(4):1942-53
22. Lim JS, et al., Caveolin-1 mediates Salmonella invasion via regulation of SopE dependent Rac1 activation with actin reorganization. *J Infect Dis (JCR Top 10 %)*. 2014 Sep 1;210(5):793-802.

23. Nguyen KC, et al., Selective transfection with osmotically active sorbitol modified PEI nanoparticles for enhanced anti-cancer gene therapy. *Colloids Surf B Biointerfaces*. 2014 Jul 1 ; 119: 126-36