Name Sookja K. Chung 鍾金淑子

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鍾金淑子 */ Sookja Kim Chung, Professor*
醫學院 */ Faculty of Medicine*
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Teaching Modules:

1978 – 1979: Teaching Assistant, Department of Chemistry, University of Illinois at Chicago, IL., U.S.A.

1982 – 1987: Teaching Assistant, Department of Anatomy (Histology and Gross Anatomy), College of Medicine, University of Illinois, Chicago, IL, U.S.A.

1992 – 2018: Academic staff, Department of Anatomy, The University of Hong Kong (Participated in **undergraduate teaching** and examination for Histology (mainly) and Gross Anatomy and Problem Based Learning tutoring to Medical students; Histology to Medical, Traditional Chinese Medicine, Nursing, Bioengineering, Pharmacy students), Faculty of Medicine, The University of Hong Kong, Hong Kong, China (except 2003), Average 100 hours of undergraduate teaching;

Graduate teaching: Graduated postgraduate student supervision: Total of 71 students (34 students as Principal Supervisor and 37 as Co-Supervisor); At HKU: Serve as a member of Higher Degree Committee; Member and Chairman of Departmental Research Postgraduate Committee; Coordinator for departmental postgraduate program; Coordinator for Postgraduate courses, Current Topics in Morphological Science, Basic molecular biology techniques for medical students and stem cells; Departmental coordinator and examiner for Special Field of Study, Master of Medical Science, Current Topics in Morphological Sciences, Cell Biology and Neuroscience; Postgraduate course: Current Postgraduate Course: Current Morphological Techniques in Cellular Functions (MMPH 6149); Member of Board of Studies and departmental representative of Master of Medical Science; Represent the Faculty and University to recruit postgraduate students from Korea

2018- 2019: Food Science and Technology, United International College, Hong Kong Baptist University and Beijing Normal University

2019- Present: Coordinator for Pathology teaching; Lecture and practical for Histopathology; Team-based learning; Graduate teaching for Pathology to Nursing and public health postgraduate students; Currently, co-supervising 4 PhD students

Research Areas:

Pathogenesis of diabetic and ischemic complications and drug discovery; Cellular osmotic, oxidative and ischemic stress; Diabetes insipidus; Stem cells and regenerative medicine against stroke, Alzheimer's Disease, Parkinson's and depression (Secured Total of 122 grants (65 grants as Principal Investigator and 57 grants as Co-Investigator; Delivered 97 Invited lectures at the International and regional symposiums; Provided service for generating transgenic and knockout mice; Embryonic stem cells culture and gene targeting)

Education:

June, 1988 – Mar., 1991
Winston Foundation Fellow, Laboratory of Neurobiology and Behavior,
Rockefeller University, New York, N.Y., USA
Feb., 1987 - May, 1988
NIH Postdoctoral Fellow, Department of Physiology,
Northwestern University Medical Center, Chicago, IL, USA
1987 *Ph.D.: Department of Anatomy and Cell Biology, University of Illinois College of Medicine, Chicago, U.S.A.*
1981 *M.A.: Department of Chemistry, University of Illinois at Chicago, Chicago, U.S.A.*
1978 B.A.: Double Major in Biology & Chemistry, Lewis University, Lockport, IL, U.S.A.

***Working Experience*:**

2019–Present: Professor, Faculty of Medicine, Macau University of Science and Technology; Honorary Professor at School of Biomedical Sciences at The University of Hong Kong; Honorary Professor at Air Force Military Medical University in Xian, China; Adjunct Professor at Beijing Normal University-Hong Kong Baptist University, United International College in Zhuhai, China; Honorary Professor at Chung-Nam Medical University in Daejeon, South Korea

2018-2019: Professor, General Education Office/Division of Science and Technology (Food Science and Technology), Beijing Normal University-Hong Kong Baptist University, United International College, Zhuhai, China

2015- 2018: Professor at School of Biomedical Sciences, The University of Hong Kong

2006–2015: Professor, Department of Anatomy, The University of Hong Kong

2005–2006: Associate Professor, Department of Anatomy, The University of Hong Kong

1998- 2005: Honorary Associate Professor, Department of Anatomy, The University of Hong Kong

1992–2005: Investigator, Institute of Molecular Biology, May, 2001 substantiated, The University of Hong Kong
1991-1998: Honorary Lecturer, Department of Anatomy, The University of Hong Kong

1991-1992: Research Officer, Institute of Molecular Biology, The University of Hong Kong

Publication*: *Past 5 years

1. *Li CX, Ng KT, Shao Y, Liu XB, Ling CC, Ma YY, Geng W, Qi X, Cheng Q, Chung SK, Lo CM, Man K. The inhibition of aldose reductase attenuates hepatic ischemia-reperfusion injury through reducing inflammatory response. Ann Surg. 2014 Aug;260(2):317-28, 2014*

2. *Durairajan SS, Huang YY, Yuen PY, Chen LL, Kwok KY, Liu LF, Song JX, Han QB, Xue L, Chung SK, Huang JD, Baum L, Senapati S, Li M. Effects of Huanglian-Jie-Du-Tang and its modified formula on the modulation of amyloid-β precursor protein processing in Alzheimer's disease models. PLoS One. 2014 Mar 26;9(3):e92954. doi: 10.1371/journal.pone.0092954. eCollection 2014. PubMed PMID: 24671102; PubMed Central PMCID: PMC3966845.*

3. *Hung VK, Tai LW, Qiu Q, Luo X, Wong KL, Chung SK, Cheung CW. Over-expression of astrocytic ET-1 attenuates neuropathic pain by inhibition of ERK1/2 and Akt(s) via activation of ETA receptor. Mol Cell Neurosci. 2014 Mar 1;60C:26-35. doi: 10.1016/j.mcn.2014.02.007. [Epub ahead of print]*

4. *Baretella O, Chung SK, Barton M, Xu A, Vanhoutte PM. Obesity and heterozygous endothelial overexpression of prepro-endothelin-1 modulate responsiveness of mouse main and segmental renal arteries to vasoconstrictor agents. Life Sci. 2014 Jan 8. pii: S0024-3205(14)00009-5. doi: 10.1016/j.lfs.2013.12.214. [Epub ahead of print] PubMed PMID: 24412387.*

5. Jo WK, Law AC, Chung SK. The neglected co-star in the dementia drama: the putative roles of astrocytes in the pathogeneses of major neurocognitive disorders. Mol Psychiatry. 2014 Feb;19(2):159-67. doi: 10.1038/mp.2013.171. Epub 2014 Jan 7. PubMed PMID: 24393807.

6. Luo X, Tai WL, Sun L, Qiu Q, Xia Z, Chung SK, Cheung CW. Central administration of C-X-C chemokine receptor type 4 antagonist alleviates the development and maintenance of peripheral neuropathic pain in mice. PLoS One.2014 Aug 13;9(8):e104860. doi: 10.1371/journal.pone.0104860. eCollection 2014. PubMed PMID: 25119456; PubMed Central PMCID: PMC4132096.

7. Zhang L, Chung SK, Chow BK. The knockout of secretin in cerebellar purkinje cells impairs mouse motor coordination and motor learning. Neuropsychopharmacology. 2014 May;39(6):1460-8. doi: 10.1038/npp.2013.344. Epub 2013 Dec 19

8. Zhang Q, Bian G, Chen P, Liu L, Yu C, Liu F, Xue Q, Chung SK, Song B, Ju G, Wang J. Aldose Reductase Regulates Microglia/Macrophages Polarization Through the cAMP Response Element-Binding Protein After Spinal Cord Injury in Mice. Mol Neurobiol. 2014 Dec 19. [Epub ahead of print]

9. Guo Y, Chung SK, Siu CW, Kwan SC, Ho PW, Yeung PK, Chan KH, Endothelin-1 overexpression exacerbate experimental allergic encephalomyelitis. J Neuroimmunol. 276(1-2):64-70, 2014

10. Z. Oaks, R. Hanczko, M. Beckford, Chung, S.K. Landas, J.M. Asara, A. Perl, Aldose

reductase contributes to hepatocarcinogenesis in transaldolase deficiency, Vol 60, issue 1, Supplement, pg S98, 2014, DOI: http://dx.doi.org/10.1016/S0168-8278(14)60259-2

11. Sin A, Tang W, Wen CY, Chung SK, Chiu KY. The emerging role of endothelin-1 in the pathogenesis of subchondral bone disturbance and osteoarthritis. Osteoarthritis Cartilage. 23(4):516-24. 2015

12. Fu Z, Nian S, Li SY, Wong D, Chung SK, Lo AC. Deficiency of aldose reductase attenuates inner retinal neuronal changes in a mouse model of retinopathy of prematurity. Graefes Arch Clin Exp Ophthalmol. 253(9):1503-13, 2015

13. Hung VK, Tai LW, Luo X, Wang XM, Chung SK, Cheung CW. Targeted Overexpression of Astrocytic Endothelin-1 Attenuates Neuropathic Pain by Upregulating Spinal Excitatory Amino Acid Transporter-2. J Mol Neurosci. 57(1):90-6, 2015

14. Zhang K, Zheng J, Bian G, Liu L, Xue Q, Liu F, Yu C, Zhang H, Song B, Chung SK, Ju G, Wang J. Polarized Macrophages Have Distinct Roles in the Differentiation and Migration of Embryonic Spinal-cord-derived Neural Stem Cells After Grafting to Injured Sites of Spinal Cord. Mol Ther., 23(6):1077-91, 2015

15. Hung VK, Yeung PK, Lai AK, Ho MC, Lo AC, Chan KC, Wu EX, Chung SS, Cheung CW, Chung SK. Selective astrocytic endothelin-1 overexpression contributes to dementia associated with ischemic stroke by exaggerating astrocyte-derived amyloid secretion. J Cereb Blood Flow Metab. 35(10):1687-96, 2015

16. Liu J, Yeung PK, Cheng L, Lo AC, Chung SS, Chung SK. Epac2-deficiency leads to more severe retinal swelling, glial reactivity and oxidative stress in transient middle cerebral artery occlusion induced ischemic retinopathy. Sci China Life Sci. 58(6):521-30, 2015 (Invited for special issue on Diabetic retinopathy)

17. Guo Y, Chung SK, Siu CW, Kwan SC, Ho PW, Yeung PK, Chan KH. Endothelin-1 overexpression exacerbate experimental allergic encephalomyelitis. J Neuroimmunol. 2014 Nov 15;276(1-2):64-70. doi: 10.1016/j.jneuroim.2014.08.616. Epub 2014 Aug 19. PubMed PMID: 25205217.

18. Chua OW, Wong KK, Ko BC, Chung SK, Chow BK, Lee LT. Role of nuclear factor of activated T-cells 5 in regulating hypertonic-mediated secretin receptor expression in kidney collecting duct cells. Biochim Biophys Acta. 2016 Jul;1859(7):922-32. doi: 10.1016/j.bbagrm.2015.12.009. Epub 2016 Apr 11. PubMedPMID: 27080132.

19. Yu JL, Deng R, Chung SK, Chan GC. Epac Activation Regulates Human Mesenchymal Stem Cells Migration and Adhesion. Stem Cells. 2016 Apr;34(4):948-59. doi: 10.1002/stem.2264. Epub 2016 Jan 4. PubMed PMID: 26727165.

20. Luo X, Tai WL, Sun L, Pan Z, Xia Z, Chung SK, Cheung CW. Crosstalk between astrocytic CXCL12 and microglial CXCR4 contributes to the development of neuropathic pain. Mol Pain. 2016 Mar 8;12. pii: 1744806916636385. doi: 10.1177/1744806916636385. Print 2016. PubMed PMID: 27030717; PubMed Central PMCID: PMC4956184.

21. Zhang Q, Bian G, Chen P, Liu L, Yu C, Liu F, Xue Q, Chung SK, Song B, Ju G, Wang J. Aldose Reductase Regulates Microglia/Macrophages Polarization Through the cAMP Response Element-Binding Protein After Spinal Cord Injury in Mice. Mol Neurobiol. 53(1):662-76, 2016

22. Luo X, Wang X, Xia Z, Chung SK, Cheung CW. CXCL12/CXCR4 axis: an emerging neuromodulator in pathological pain. Rev Neurosci. 27(1):83-92. 2016

23. Zhou L, Ma SL, Yeung PK, Wong YH, Tsim KW, So KF, Lam LC, Chung SK. Anxiety and depression with neurogenesis defects in exchange protein directly activated by cAMP 2-deficient mice are ameliorated by a selective serotonin reuptake inhibitor, Prozac. Transl Psychiatry. 2016 Sep 6;6(9):e881. doi:10.1038/tp.2016.129. PubMed PMID: 27598965.

24. Tian G, Luo X, Tang C, Cheng X, Chung SK, Xia Z, Cheung CW, Guo Q. Astrocyte contributes to pain development via MMP2-JNK1/2 signaling in a mouse model of complex regional pain syndrome. Life Sci. 2016 Dec 2. pii: S0024-3205(16)30683-X.doi: 10.1016/j.lfs.2016.11.030. [Epub ahead of print] PubMed PMID: 27919822.

25. Ng RC, Cheng OY, Jian M, Kwan JS, Ho PW, Cheng KK, Yeung PK, Zhou LL, Hoo RL, Chung SK, Xu A, Lam KS, Chan KH. Chronic adiponectin deficiency leads to Alzheimer's disease-like cognitive impairments and pathologies through AMPKinactivation and cerebral insulin resistance in aged mice. Mol Neurodegeneration. 2016Nov 25;11(1):71. PubMed PMID: 27884163; PubMed Central PMCID: PMC5123368.

26. Yeung PK, Lai AK, Son HJ, Zhang X, Hwang O, Chung SS, Chung SK. Aldose

reductase deficiency leads to oxidative stress-induced dopaminergic neuronal loss and autophagic abnormality in an animal model of Parkinson's disease. Neurobiol Aging. 2017 Feb;50:119-133. doi: 10.1016/j.neurobiolaging.2016.11.008. Epub 2016 Nov 23. PubMed PMID: 27960106.

27. Chan KC, Zhou IY, Liu SS, van der Merwe Y, Fan SJ, Hung VK, Chung SK, Wu WT, So KF, Wu EX. Longitudinal Assessments of Normal and Perilesional Tissues in Focal Brain Ischemia and Partial Optic Nerve Injury with Manganese-enhanced MRI. Sci Rep. 2017 Feb 23;7:43124. doi: 10.1038/srep43124.

28. Baretella O, Chung SK, Xu A, Vanhoutte PM.Endothelial overexpression of endothelin-1 modulates aortic, carotid, iliac and renal arterial responses in obese mice. Acta Pharmacol Sin. 2017 Feb 20. doi: 10.1038/aps.2016.138.

29. Xu WW, Li B, Guan XY, Chung SK, Wang Y, Yip YL, Law SY, Chan KT, Lee NP, Chan KW, Xu LY, Li EM, Tsao SW, He QY, Cheung AL. Cancer cell-secreted IGF2 instigates fibroblasts and bone marrow-derived vascular progenitor cells to promote cancer progression. Nat Commun. 2017 Feb 10;8:14399. doi: 10.1038/ncomms14399.

30. Gao C, Wang Q, Chung SK, Shen J. Crosstalk of metabolic factors and neurogenic signaling in adult neurogenesis: Implication of metabolic regulation for mental and neurological diseases. Neurochem Int. 2017 Feb 7. pii: S0197-0186(17)30077-3. doi: 10.1016/j.neuint.2017.02.001.

31. Lu J, Yao XQ, Luo X, Wang Y, Chung SK, Tang HX, Cheung CW, Wang XY, Meng C, Li Q., Monosialoganglioside 1 may alleviate neurotoxicity induced by propofol

combined with remifentanil in neural stem cells. Neural Regen Res. 2017 Jun;12(6):945-952. doi: 10.4103/1673-5374.208589. PMID: 28761428

32. Li Y, Song J, Tong Y, Chung SK, Wong YH, RGS19 Upregulates Nm23-H1/2 metastasis suppressors by transcriptional activation via the cAMP/PKA/CREB pathway. Oncotarget, Advanced publications, July 2017

33. KC Chan, IY Zhou, SS Liu, Y van der Merwe, SJ Fan, VK Hung, SK Chung, WT Wu, KF So, EX Wu: Longitudinal assessments of normal and perilesional tissues in focal brain ischemia and partial optic nerve injury with manganese-enhanced MRI. Scientific Reports7:43124, 2017

34. W Zhao, VYL Leung, KY Chiu, H Pan, D Chen, SK Chung, and WW Lu, Endothelial Endothelin-1 Over-expression Leads to Abnormal Endochondral Ossification and Accelerates Knee Osteoarthritis Progression, In Press

35. Zhang, Shi Qing; Yung, Kin Lam; Chung, Sookja; Chung, Sum Man. Aldo-Keto Reductases Mediated Cytotoxicity of 2-Deoxyglucose: A Novel Anticancer Mechanism. Accepted by Cancer Science, 2018

36. Niimi N, Yako H, Takaku S, Kato H, Matsumoto T, Nishito Y, Watabe K, Ogasawara S, Mizukami H, Yagihashi S, Chung SK, Sango K. A spontaneously immortalized Schwann cell line from aldose reductase-deficient mice as a useful tool for studying polyol pathway and aldehyde metabolism. J Neurochem. 2017 Dec 14. doi:10.1111/jnc.14277. [Epub ahead of print] PubMed PMID: 29238976.

37. Wong HS, Yeung PKK, Lai HM, Lam KSL, Wutian W, Chung SK. Simple and Rapid Tissue Clearing Method for Three-Dimensional Histology of the Pancreas. Curr Protoc Cell Biol. 2017 Dec 11;77:19.20.1-19.20.10. doi: 10.1002/cpcb.34. PubMedPMID: 29227554.

38. Liu XB, Lo CM, Cheng Q, Ng KT, Shao Y, Li CX, Chung SK, Ng IOL, Yu J, Man K.Oval Cells Contribute to Fibrogenesis of Marginal Liver Grafts under Stepwise Regulation of Aldose Reductase and Notch Signaling. Theranostics. 2017 Oct24;7(19):4879-4893. doi: 10.7150/thno.20085. eCollection 2017. PubMed PMID:29187911; PubMed Central PMCID: PMC5706107.

39. Baretella O, Chung SK, Xu A, Vanhoutte PM. Paradoxical lack of increase in endothelin-1 levels in obese mice - possible role of endothelin-B receptors. ActaPharmacol Sin. 2017 Dec;38(12):1699-1700. doi: 10.1038/aps.2017.155. Epub 2017Nov 9. PubMed PMID: 29119971; PubMed Central PMCID: PMC5719152.

40. Zhang SQ, Yung KK, Chung SK, Chung SS. Aldo-keto reductases-mediated cytotoxicity of 2-deoxyglucose: A novel anticancer mechanism. Cancer Sci. 2018 Jun;109(6):1970-1980. doi: 10.1111/cas.13604. Epub 2018 May 3. PubMed PMID: 29617059; PubMed Central PMCID: PMC5989857

41. Tai LW, Pan Z, Sun L, Li H, Gu P, Wong SSC, Chung SK, Cheung CW. Suppression of Pax2 Attenuates Allodynia and Hyperalgesia through ET-1-ETAR-NFAT5 Signaling in a Rat Model of Neuropathic Pain. Neuroscience. 2018 Aug 1;384:139-151. doi: 10.1016/j.neuroscience.2018.05.024. Epub 2018 May 27. PubMed PMID: 29847776.

42. Shi DD, Huang YH, Lai CSW, Dong CM, Ho LC, Wu EX, Li Q, Wang XM, Chung SK, Sham PC, Zhang ZJ. Chemotherapy-Induced Cognitive Impairment Is Associated with Cytokine Dysregulation and Disruptions in Neuroplasticity. Mol Neurobiol. 2018 Jul 14. doi: 10.1007/s12035-018-1224-4. [Epub ahead of print] PubMed PMID: 30008071.

43. Shi, DD, Huang, YH, Lai, CSW, Dong, CM, Ho, LC, Li, XY, Wu, EX, Li, Q, Wang, XM, Chen, YJ, Chung, SK, Zhang, ZJ, Ginsenoside Rg1 Prevents Chemotherapy-Induced Cognitive Impairment: Associations with Microglia-Mediated Cytokines, Neuroinflammation, and Neuroplasticity. MOLECULAR NEUROBIOLOGY[0893-7648], Published 2019, Volume 56, Issue 8, Pages 5626-5642 (Impact Factor: 4.586)

44. Niimi N, Yako H, Takaku S, Kato H, Matsumoto T, Nishito Y, Watabe K, Ogasawara S, Mizukami H, Yagihashi S, Chung SK, Sango K. A spontaneously immortalized Schwann cell line from aldose reductase-deficient mice as a useful tool for studying polyol pathway and aldehyde metabolism. J Neurochem. 2018 Mar;144(6):710-722. doi: 10.1111/jnc.14277. Epub 2018 Jan 16. PubMed PMID: 29238976.

45. He J, Xia M, Yeung PKK, Li J, Li Z, Chung KK, Chung SK, Xia J. PICK1 inhibits the E3 ubiquitin ligase activity of Parkin and reduces its neuronal protective effect. Proc Natl Acad Sci U S A. 2018 Jul 24;115(30):E7193-E7201. doi: 10.1073/pnas.1716506115. Epub 2018 Jul 9. PubMed PMID: 29987020; PubMed Central PMCID: PMC6064985.

46. Bian G, Yu C, Liu L, Fang C, Chen K, Ren P, Zhang Q, Liu F, Zhang K, Xue Q, Xiang J, Guo H, Song J, Zhao Y, Wu W, Chung SK, Sun R, Ju G, Wang J. Sphingosine 1-phosphate stimulates eyelid closure in the developing rat by stimulating EGFR

signaling. Sci Signal. 2018 Oct 23;11(553). pii: eaat1470. doi: 10.1126/scisignal.aat1470. PubMed PMID: 30352949.

47. Ganesan K, Chung SK, Vanamala J, Xu B. Causal Relationship between Diet-Induced Gut Microbiota Changes and Diabetes: A Novel Strategy to Transplant Faecalibacterium prausnitzii in Preventing Diabetes. Int J Mol Sci. 2018;19(12):3720. Published 2018 Nov 22. doi:10.3390/ijms19123720

48. Wong SSC, Lee UM, Wang XM, Chung SK, Cheung CW. Role of DLC2 and RhoA/ROCK pathway in formalin induced inflammatory pain in mice. Neurosci Lett. 2019 Sep 14;709:134379. doi: 10.1016/j.neulet.2019.134379. Epub 2019 Jul 16. PubMed PMID:31323253. (Impact Factpor: 2.18)

49. Sze-Wah Tam, Rui Feng, Way Kwok-Wai Lau, Andrew Chi-Kin Law, Patrick Ka-Kit Yeung and Sookja Kim Chung, Endothelin type B receptor promotes cofilin rod formation and dendritic loss in neurons by inducing oxidative stress and cofilin activation, The Journal of Biological Chemistry, 2019 Aug,, 294, 12495-12506. (Impact Factor: 4.106)

50. Zeng Z, Xia L, Fan X, Ostriker AC, Yarovinsky T, Su M, Zhang Y, Peng X, Xie Y, Pi L, Gu X, Chung SK, Martin KA, Liu R, Hwa J, Tang WH. Platelet-derived miR-223 promotes a phenotypic switch in arterial injury repair. J Clin Invest. 2019 Mar1;129(3):1372-1386. doi: 10.1172/JCI124508. Epub 2019 Feb 18. PubMed PMID:30645204; PubMed Central PMCID: PMC6391113. (Impact Factor: 11.864)

51. Xiao Cheng; Patrick KK Yeung; Ke Zhong; Prince Last Mudenda Zilundu; Lihua

Zhou; Sookja K Chung, Astrocytic endothelin-1 overexpression promotes neural progenitor cells proliferation and differentiation into astrocytes via the Jak2/Stat3 pathway after stroke, J Neuroinflammation. 2019; 16: 227. Published online 2019 Nov 16. doi: 10.1186/s12974-019-1597-yPMCID: PMC6858703 (Impact Factor: 5.193)

52. So, W., Kim, H.K., Chen, Y. Seung Hun Jeong, Patrick Ka Kit Yeung, Billy C. K. Chow, Jin Han & Sookja K. Chung, Pflügers Archiv - European Journal of Phet al. Exchange protein directly activated by cAMP (Epac) 1 plays an essential role in stress-induced exercise capacity by regulating PGC-1α and fatty acid metabolism in skeletal muscle. Pflugers Arch - Eur J Physiol 472, 195–216 (2020). https://doi.org/10.1007/s00424-019-02344-6 (Impact Factor: 2.765)

53. Mi, XS, Feng, Q, Lo, ACY, Chang, RCC, Chung, SK, So, KF, Lycium barbarum polysaccharides related RAGE and A beta levels in the retina of mice with acute ocular hypertension and promote maintenance of blood retinal barrier. NEURAL REGENERATION RESEARCH[1673-5374], Published 2020, Volume 15, Issue 12, Pages 2344-2352 (Impact Factor: 3.171)

54. Min Joung Lee, Yunseon Jang, Jeongsu Han, Soo J Kim, Xianshu Ju, Yu Lim Lee, Jianchen Cui, Jiebo Zhu, Min Jeong Ryu, Song-Yi Choi, Woosuk Chung, Chaejeong Heo, Hyon-Seung Yi, Hyun Jin Kim, Yang H Huh, Sookja K Chung, Minho Shong, Gi-Ryang Kweon, Jun Young Heo, Endothelial-specific Crif1 deletion induces BBB maturation and disruption via the alteration of actin dynamics by impaired mitochondrial respiration, J Cerebral Blood Flow and Metabolism, https://doi.org/10.1177/0271678X19900030 (Impact Factor: 6.04)

55. Roy Chun-Laam Ng, Min Jian, Myriam Bunting, Oscar Ka-Fai Ma, Jason Kwan, Guang-Jie Zhou, Krishnamoorthi Senthilkumar, Ashok Iyaswamy, Min LI, Kenneth Mei-Yee Leung, Siva-Sundara Durairajan, Karen Lam, Sookja Kim Chung, Ping Kei CHAN, Leung Wing CHU, and Richard Festenstein, Koon-Ho Chan, Chronic oral administration of AdipoRon reverses cognitive impairments and ameliorates neuropathology in an Alzheimer's disease mouse model" [Paper #2019MP000320RRR] MOLECULAR PSYCHIATRY[1359-4184], Published 2020 (Impact Factor: 12.384)

56. Boya Liao, Leiluo Geng, Ling Wei, Karen S.L. Lam, Sookja K. Chung, Patrick K.K. Yeung, Junlei Chang, AiminXu, Kai Wang, Ruby L.C. Hoo, Macrophage Derived A-FABP Promotes Cerebral Ischemia Injury via Enhancing MMP-9 Expression through JNK/c-Jun pathway, European Heart Journal[1522-9645], Published 2020, Pages 1-13 (Impact Factor: 22.673)

57. Rui Hong Chen, Li Jun Yang, Sami Hamdoun, Sookja Chung, Kai Xi Zhang, Christopher Wai Kei Lam, Xiao Ling Guo, Cheng Lai Xia, Betty Yuen Kwan Law, Vincent Kam Wai Wong, 1,2,3,4,6-Pentagalloyl glucose, a RBD-ACE2 binding inhibitor to prevent SARS-CoV-2 infection, Front. Pharmacol. 12:634176. doi: 10.3389/fphar.2021.634176 (Impact Factor: 4.4)

58. A K W Lai D T C Ng B K C Tam F K C Fung S K Chung A C Y Lo, Lutein for alleviating early high mortality and brain pathology after experimental stroke in a genetic type I diabetic mouse model: abridged secondary publication, Hong Kong Med J 2020 Dec;26 Suppl 7(6):37-41 (Impact Factor: 1.679)

59. S S K Durairajan M Li S K Chung Q B Han A Iyaswamy S G Sreenivasmurthy S Malampati Modified Huang-Lian-Jie-Du-Tang and its combination with memantine

for Alzheimer disease: an in vivo study, Hong Kong Med J 2020 Dec;26 Suppl 7(6):37-41 (Impact Factor: 1.679)

60. u, Pan, Fan, Tingting, Wong, Stanley, Pan, Zhiqiang, Tai, Wai, Chung, Sookja, Cheung, Chiwai, Central Endothelin-1 Confers Analgesia by Triggering Spinal Neuronal Histone Deacetylase 5 (HDAC5) Nuclear Exclusion in Peripheral Neuropathic Pain in Mice, 2021/01/06, The Journal of Pain 10.1016/j.jpain.2020.12.004 (Impact Factor: 4.621)

*61. Naoko Niimi *, Hideji Yako, Shizuka Takaku, Sookja K. Chung, Kazunori Sango, Aldose reductase and the polyol pathway in Schwann cells: old and new problems, Int. J. Mol. Sci. ('Molecular Pathology, Diagnostics, and Therapeutics' Sectio)n), 22(3), 1031; https://doi.org/10.3390/ijms22031031 (Impact Factor: 4.446*

62. Zhang, Kai, Ip, Chi, Chung, Sookja, Lei, Kei Kei, Zhang, Yao, Liu, Liang, Wong, Vincent, Drug-resistance in rheumatoid arthritis: the role of p53 gene mutations, ABC family transporters and personal factors, Current opinion in pharmacology Sept 2020, 54:59-71, DOI: 10.1016/j.coph.2020.08.002 (Impact Factor: 4.807)

63. R C L Ng M Jian L W Yick M Bunting J S C Kwan S K Chung K H Chan Adiponectin gene therapy for Alzheimer disease in a mouse model: abridged secondary publication, Hong Kong Med J 2020 Dec;26 Suppl 8(6):27-33 (Impact Factor: 1.679)

Patents and licensing:

2009 20090076105 Sookja Kim Chung, Stephen Chung and Chihiro Hibi

Preventive or therapeutic agent for cerebral ischemic injury or cerebral

ischemia reperfusion in stroke

2013 8536212 Sookja Kim Chung, Stephen Chung and Chihiro Hibi, Protective agent for retinal nerve or optic nerve

2009 7605265 Ip, Nancy Y, Ip, Fanny Chui Fun, Hu, Yueqing, Han, Yifan, Chung, Sookja Kim Heterodimers and methods of using them USA

2013 20100216856 Sookja Kim Chung, Stephen Chung and Chihiro Hibi Protective agent for retinal nerve or optic nerve European

2019 Sookja Kim Chung and Kazunori Sango Licensing of aldose reductase-deficient Schwann cell line (IKARS1) in collaboration with Prof. Kazunori Sango, Japan to Applied Biological Materials Inc.