Dr Ashok IYASWAMY

Visiting Assistant Professor, Teaching and Research Division

教學科研部客座助理教授

jashok@hkbu.edu.hk

Dr Ashok Iyaswamy graduated with a B.Sc. degree from Madurai Kamaraj University in 2005, an M.Sc. degree from University of Madras in 2007, and a Ph.D. degree in Physiology and Neuroscience from Institute of Basic Medical Science at University of Madras in 2015. He then undertook postdoctoral training (2014–2020) and served as a Research Assistant Professor (2020–2025) at the School of Chinese Medicine of Hong Kong Baptist University.

With 17 years of research experience on therapeutic and pharmaceutical applications for neurodegenerative disease treatment, he has published 65 articles in SCI journals, received 2,941 citations on Google Scholar with an i10-index of 55 and an h-index of 38, and holds 6 international patents.

His current research blends multidisciplinary fields of biomedical sciences, including neuroscience and pharmacology, with applications across various biomedical areas. His key research interests include:

- Molecular mechanisms and pathophysiology of Alzheimer's disease and other neurodegenerative diseases;
- Brain drug delivery systems and biomaterials for neurodegenerative disease diagnosis; and
- Therapeutic potential of herbal medicine in neurodegeneration.

Dr Iyaswamy has received 11 scientific awards, including the HKBU Innovation Award (2025) and Outstanding Research Output Award (2023/24), as well as the Long Service Award for a decade of commitment to HKBU. Driven by a passion for research and continuous learning, he actively teaches undergraduate courses and supervises postgraduate students, fostering the next generation of scientists.

Ashok Iyaswamy 博士於 2005 年修畢馬杜賴卡瑪拉吉大學理學士學位，2007 年完成馬德拉斯大學理學碩士學位，2015 年獲馬德拉斯大學基礎醫學科學研究所頒授生理學與神經科學博士學位。他於 2014 至 2020 年在香港浸會大學中醫藥學院進行博士後研究，並於 2020 至 2025 年擔任研究助理教授。

他在神經退行性疾病的治療和藥物應用研究方面擁有 17 年經驗，於 SCI 期刊上發表 65 篇文章，於 Google Scholar 上累積 2,941 次引用（i10 指數為 55，h 指數為 38），並持有 6 項國際專利。目前，他的研究結合神經科學、藥理學等多個生物醫學領域，主要研究方向包括：

- 阿茲海默症及其他神經退行性疾病的分子機制和病理生理學；
- 診斷神經退行性疾病的新型腦部藥物傳遞系統和生物材料；及
- 草藥治療神經退行性疾病的潛力。

Iyaswamy 博士曾獲 11 項科研獎項，包括 2025 年浸大創新獎、2023/24 年度傑出研究成果獎，以及表彰其在校十年服務的長期服務獎。他熱衷於研究及持續學習，積極教授本科課程及指導研究生，致力培養新一代科學家。

Selected Publications 精選出版物

[¶ Co-first author (equal contribution); *Corresponding author]

1. **Iyaswamy A***, Thakur A *, Guan XJ, Krishnamoorthi SK, Fung TY, Lu K, Gaurav I, Yang Z, Su CF, Lau KF, Zhang K, NG RCL, Lian Q, Cheung KH, Ye K, Chen HJ *, Li M*. Fe65 Engineered Neuronal Exosomes Encapsulating Corynoxine-B Ameliorate Cognition and Pathogenesis of Alzheimer's Disease. ***Nature- Sig Transduct Target Ther,*** 2023; 8: 404. https://doi.org/10.1038/s41392-023-01657-4. ***Impact Factor*** **[53]**
2. **Iyaswamy A***, Wang XL, Krishnamoorthi SK, Kaliamoorthy V, Sreenivasmurthy SG, Durairajan SSK, Song JX, Tong BCK, Zhu Z, Su CF, Liu J, Cheung KH, Lu JH, Tan JQ, Li HW, Wong MS, Li M. Theranostic F-SLOH mitigates Alzheimer's disease pathology involving TFEB and ameliorates cognitive functions in Alzheimer's disease models. ***Redox Biology***, 2022; 51: 102280. https://doi.org/10.1016/j.redox.2022. 102280. ***Impact Factor*** **[10.787]**
3. Wang XL, **Iyaswamy A**¶, Xu D, Krishnamoorthi SK, Sravan GS, Yuncong Y, Li YH, Chen C, Li M, Li HW, Wong MS. Real-time Detection and Visualization of Amyloid-β Aggregates Induced Hydrogen Peroxide in Cell and Mouse Models of Alzheimer's Disease. ***ACS Applied Materials & Interfaces.*** 2022;15(1):39-47. https://doi.org/10.1021/acsami.2c07859. ***Impact Factor*** **[10.383]**
4. Yang CB, Su CF, **Iyaswamy A**¶, Krishnamoorthi SK, Zhu Z, Yang S, Tong BCK, Liu J, Sreenivasmurthy SG, Guan XJ, Kan YX, Wu AJ, Huang AS, Tan JQ, Cheung KH, Song JX, Li M. Celastrol Enhances Transcription Factor EB (TFEB)-mediated Autophagy and Mitigates Tau Pathology: Implications for Alzheimer's Disease Therapy. ***Acta Pharmaceutica Sinica B,*** 2022;12(4): 1707-1722. https://doi.org/10.1016/j.apsb.2022.01.017. ***Impact Factor*** **[14.903]**
5. **Iyaswamy A***, Wang XL, Zhang H, Vasudevan K, Wankhar D, Lu K, Krishnamoorthi SK, Guan XJ, Su CF, Liu J, Kan Y, Jaganathan R, Deng Z, Li HW, Wong MS and Li M *. Molecular engineering of a theranostic molecule that detects Aβ plaques, inhibits Iowa and Dutch mutation Aβ self-aggregation and promotes lysosomal biogenesis for Alzheimer's disease. ***J. Mater. Chem. B***, 2024, https://doi.org/10.1039/D4TB00479E ***Impact Factor*** **[7.0]**
6. Asthana P, Li L, Lu L, Wu J, Zhang S, Li N, Wong SKK, Gurung S, Zhang Y, Lin Y, Peng Y, Xu Z, Chan KM, Zhai L, Lyu A, Bian ZX, Ge X, **Iyaswamy A**, Li M, Su Y, Zhou Z, Xu P, Wong HLX. MT1-MMP inhibition rejuvenates ageing brain and rescues cognitive deficits in obesity. ***Nature-Cell Discovery***, 2025. ***Impact Factor*** **[12.5]**

7. Krishnamoorthi S, **Iyaswamy A**[¶,*], Sreenivasmurthy S.G, Thakur A, Vasudevan K, Kumar G, Guan XJ, Lu K, Gaurav I, Su CF, Zhu Z, Liu J, Kan Y, Jayaraman S, Deng Z, Chua KK, Cheung KH, Yang Z, Song JX, Li M*. PPARα ligand Caudatin improves cognitive functions and mitigates Alzheimer's disease defects by inducing autophagy in mice models. ***Journal of Neuroimmune pharmacology***. 2023. https://doi.org/10.1007/s11481-023-10083-w ***Impact Factor* [7.285].**
8. Guan XJ, Deng ZQ, Liu J, Su CF, Tong BC, Zhu Z, Sreenivasmurthy SG, Kan YX, Lu KJ, Chu CP, Pi RB, Cheung KH, **Iyaswamy A***, Song JX*, Li M*. Corynoxine promotes TFEB/TFE3-mediated autophagy and alleviates Aβ pathology in Alzheimer's disease models. ***Acta Pharmacol Sin***. 2024;1-14. doi: 10.1038/s41401-023-01197-1. ***Impact Factor* [8.2].**
9. **Iyaswamy A**, Krishnamoorthi SK, Zhang H, Sreenivasmurthy SG, Zhu Z, Liu J, Su CF, Wang ZY, Cheung KH, Song JX, Durairajan SSK, Li M. Qingyangshen mitigates Amyloid-β and Tau aggregate defects involving PPARα-TFEB activation in transgenic mice of Alzheimer's disease. ***Phytomedicine***, 2021; 91:153648. DOI: 10.1016/j.phymed.2021.153648 ***Impact Factor* [7.9]**

Other publications:

10. Jaganathan R, **Iyaswamy A**, Krishnamoorthi S,Thakur A, Durairajan SSK, Yang C and Wankhar D (2025) Current aspects of targeting cellular senescence for the therapy of neurodegenerative diseases. ***Front. Aging Neurosci.*** 17:1627921. doi: 10.3389/fnagi.2025.1627921
11. Y. Niu, J. Ou, X. Zhong, P. Luo, J. Chen, **A. Iyaswamy**, H. Tong, Z. Zhu, P. Chen, X. Wei, W. Zhang, H. Ma, Y. Feng, C. Yang, J. Wang, Glaucocalyxin A Induces Cytotoxicity in Renal Cancer Cells via ROS-Mediated Autophagy by Direct Targeting of Antioxidant Enzymes PRDX1 and PRDX2. ***Adv. Biology*** 2025, e00031.
12. Wang S, Ding Z, Zhu Z, Zhong X, **Iyaswamy A**, et al. Licochalcone A selectively modulates mTORC1-TFEB to enhance autophagy and demonstrates neuroprotective effects in a mouse model of Parkinson's disease. ***Brain-X***. 2025;3: e70031. https://doi.org/10.1002/brx2.70031
13. Huang P, Bai Y, Zhou C, Zhong X, **Iyaswamy A**, Chen P, Wei X, Zhang W, Yang C, Wang J, Single-cell transcriptomic insights into endosulfan-induced liver injury: key pathways and inflammatory responses, ***Liver Research***, 2025. https://doi.org/10.1016/j.livres.2025.05.002.
14. Yang W, Zhu Z, Zhou C, Chen J, Ou J, Tong H, **Iyaswamy A**, Chen P, Wei X, Yang C, Xiao W, Wang J, Zhang W. The rheumatoid arthritis drug Auranofin targets peroxiredoxin 1 and peroxiredoxin 2 to trigger ROS-endoplasmic reticulum stress axis-mediated cell death and cytoprotective autophagy. ***Free Radic Biol Med.*** 2025; 233:1-12.
15. The Neuroinflammation Enigma. Thakur A, Ghosh D, Sarkar R, Averbek S, **Iyaswamy A**, Upadhyay P, Gupta S, Kumar V, Ajay AK, 22 May 2025, ***Gastrointestinal Inflammations and Gut Microbiota: Pathophysiology, Management, and Emerging Therapies***. 1st ed. CRC Press, p. 251-261,11 p.
16. Patnaik S, Durairajan SSK, Singh AK, Krishnamoorthi S, **Iyaswamy A**, Mandavi SP, Jeewon R, Williams LL. Role of Candida species in pathogenesis, immune regulation, and prognostic tools for managing ulcerative colitis and Crohn's disease. ***World J Gastroenterol.*** 2024; 30(48): 5212-5220.

17. Singh AK, Durairajan SSK, **Iyaswamy A**, Williams LL. Elucidating the role of gut microbiota dysbiosis in hyperuricemia and gout: Insights and therapeutic strategies. ***World J Gastroenterol.*** 2024; 30(40): 4404-4410.
18. Durairajan SSK, Selvarasu K, Singh AK, Patnaik S, **Iyaswamy A**, Jaiswal Y, Williams LL and Huang J-D (2024) Unraveling the interplay of kinesin-1, tau, and microtubules in neurodegeneration associated with Alzheimer's disease. ***Front. Cell. Neurosci***. 18:1432002. doi: 10.3389/fncel.2024.1432002
19. Gaurav I, Thakur A, Zhang K, Thakur S, Hu X, Xu Z, Kumar G, Jaganathan R, **Iyaswamy A**, Li M, et al. Peptide-Conjugated Vascular Endothelial Extracellular Vesicles Encapsulating Vinorelbine for Lung Cancer Targeted Therapeutics. ***Nanomaterials.*** 2024; 14(20):1669. https://doi.org/10.3390/ nano14201669
20. Chen P, Song Y, Tang L, Qiu Z, Chen J, Xia S, **Iyaswamy A**, Cai J, Sun Y, Yang C, Wang J. Integrated RNA sequencing and biochemical studies reveal endoplasmic reticulum stress and autophagy dysregulation contribute to Tri (2-Ethylhexyl) phosphate (TEHP)-induced cell injury in Sertoli cells, ***Environmental Pollution***, 2024. https://doi.org/10.1016/j.envpol.2024.124536.
21. Durairajan SSK, Singh AK, **Iyaswamy A**. Peroxisome proliferator-activated receptor agonists: A new hope towards the management of alcoholic liver disease. ***World J Gastroenterol.*** 2024; 30(35): 3965-3971.
22. Pandaram A, Paul J, Wankhar W, Thakur A, Verma S, Vasudevan K, Wankhar D, Kammala AK, Sharma P, Jaganathan R, **Iyaswamy A***, Rajan R*. Aspartame Causes Developmental Defects and Teratogenicity in Zebra Fish Embryo: Role of Impaired SIRT1/FOXO3a Axis in Neuron Cells. ***Biomedicines***. 2024 Apr 12;12(4):855. doi: 10.3390/biomedicines12040855.
23. Selvarasu K, Singh AK, Dakshinamoorthy A, Sreenivasmurthy SG, **Iyaswamy A**, Radhakrishnan M, Patnaik S, Huang J-D, Williams LL, Senapati S, et al. Interaction of Tau with Kinesin-1: Effect of Kinesin-1 Heavy Chain Elimination on Autophagy-Mediated Mutant Tau Degradation. ***Biomedicines***. 2024; 12(1):5. https://doi.org/10.3390/biomedicines12010005
24. Bai Y, Zhu Z, Ou J, Zhang W, **Iyaswamy A**, Jiang Y, Wang J, Zhang W, Yang C. Insight into Tetra bromo bisphenol A-Associated Liver Transcriptional Landscape via Single Cell RNA Sequencing. ***Adv. Biology***, 2023, 2300477. DOI:10.1002/adbi.202300477
25. **Iyaswamy A***, Lu K, Guan X-J, Kan Y, Su C, Liu J, Jaganathan R, Vasudevan K, Paul J, Thakur A, Li M. Impact and Advances in the Role of Bacterial Extracellular Vesicles in Neurodegenerative Disease and Its Therapeutics. ***Biomedicines*** 2023, 11, 2056. https://doi.org/10.3390/biomedicines11072056
26. Gaurav I, Thakur A, Kumar G, Long Q, Zhang K, Sidu R.K, Thakur S, Sarkar RK, Kumar A, **Iyaswamy A*,** et al. Delivery of Apoplastic Extracellular Vesicles Encapsulating Green-Synthesized Silver Nanoparticles to Treat Citrus Canker. ***Nanomaterials*** 2023, 13, 1306. https://doi.org/10.3390/nano13081306.
27. **Iyaswamy A***, Vasudevan K, Jayaraman S, Jaganathan R, Thakur A, Chang RC-C and Yang C (2023), Editorial: Advances in Alzheimer's disease diagnostics, brain delivery systems, and therapeutics. ***Front. Mol. Biosci.*** 10:1162879. doi: 10.3389/fmolb.2023.1162879
28. Yang J, Zhang W, Zhang S, **Iyaswamy A**, Sun J, Wang J, Yang C. Novel Insight into Functions of Transcription Factor EB (TFEB) in Alzheimer's Disease and

Parkinson's Disease. ***Aging and disease***, 2023;14(3):652-669. https://doi.org/10.14336/AD.2022.0927

29. Sreenivasmurthy SG, **Iyaswamy A**¶, Krishnamoorthi S, Reddi RN, Kammala AK, Vasudevan K, Senapati S, Zhu Z, Su C-F, Liu J, Guan X-J, Chua K-K, Cheung K-H, Chen H, Zhang H-J, Zhang Y, Song J-X, Kumar Durairajan SS and Li M. Bromo-protopine, a novel protopine derivative, alleviates tau pathology by activating chaperone-mediated autophagy for Alzheimer's disease therapy. ***Front. Mol. Biosci***. 2022; 9: 1030534. Doi: 10.3389/fmolb.2022.1030534. ***Impact Factor* [6.113]**
30. Sreenivasmurthy SG, **Iyaswamy A**¶, Krishnamoorthi SK, Senapati S, Malampati S, Zhu Z, Su CF, Liu J, Guan XJ, Tong BCK, Cheung KH, Song JX, Durairajan SSK, Li M. Protopine mitigates tau pathology via histone deacetylase 6 inhibition in preclinical Alzheimer's disease models. ***Phytomedicine***. 96, 2022, 153887. https://doi.org/10.1016/j.phymed.2021.153887. ***Impact Factor* [7.9]**
31. Tong BCK, Huang AS, Wu AJ, **Iyaswamy A** et al. Tetrandrine ameliorates cognitive deficits and mitigates tau aggregation in cell and animal models of tauopathies. ***Journal of Biomedical Science***, (2022);29:85. https://doi.org/10.1186/s12929-022-00871-6
32. Chen Y, Xie C, Wang X, Cao G, Ru Y, Song Y, **Iyaswamy A**, Li M, Wang J, and Cai Z. 3-Acetylpyridine On-Tissue Paternò–Büchi Derivatization Enabling High Coverage Lipid C═C Location-Resolved MS Imaging in Biological Tissues. ***Analytical Chemistry***. 2022; 94(44): 15367–15376. DOI: 10.1021/acs.analchem.2c03089
33. Throwba PK H, Unnikrishnan L, Pangath M, Vasudevan K, Jayaraman S, Li M, **Iyaswamy A***, Palaniyandi K, Gnanasampanthapandian D. The epigenetic correlation among ovarian cancer, endometriosis and PCOS: A review. ***Critical Reviews in Oncology / Hematology***. 2022; 180: 103852. https://doi.org/10.1016/j.critrevonc.2022.103852.
34. Selvarasu K, Singh AK, **Iyaswamy A**, Gopalkrishnashetty Sreenivasmurthy S, Krishnamoorthi S, Bera AK, Huang J-D and Durairajan SSK. Reduction of kinesin I heavy chain decreases tau hyperphosphorylation, aggregation, and memory impairment in Alzheimer's disease and tauopathy models. ***Front. Mol. Biosci***. 2022; 9: 1050768. Doi: 10.3389/fmolb.2022.1050768
35. Chhetri D, Vengadassalapathy S,Venkadassalapathy S, Balachandran V, Umapathy VR, Veeraraghavan VP, Jayaraman S, Patil S, **Iyaswamy A**, Palaniyandi K and Gnanasampanthapandian D. Pleiotropic effects of DCLK1 in cancer and cancer stem cells. ***Front. Mol. Biosci***. 2022; 9: 965730. doi: 10.3389/fmolb.2022.965730
36. Guan X, **Iyaswamy A**, Sreenivasmurthy SG, Su C, Zhu Z, Liu J, Kan Y, Cheung K-H, Lu J, Tan J, Li M. Mechanistic Insights into Selective Autophagy Subtypes in Alzheimer's Disease. ***International Journal of Molecular Sciences.*** 2022; 23(7):3609. https://doi.org/10.3390/ijms23073609
37. Fung TY, **Iyaswamy A***, Sreenivasmurthy SG, Krishnamoorthi SK, Guan XJ, Zhu Z, Su CF, Liu J, Kan YX, Zhang Y, Wong HLX, Li M. Klotho an autophagy stimulator as a potential therapeutic target for Alzheimer's disease: A review. ***Biomedicines***, 2022, 10, 705. https://doi.org/10.3390/biomedic ines10030705
38. Zhu Z, Liu LF, Su CF, Liu J, Tong BC, **Iyaswamy A**, Krishnamoorthi S, Sreenivasmurthy SG, Guan XJ, Kan YX, Xie WJ, Cheung KH, Song JX, Li M.

Corynoxine B derivative CB6 prevents Parkinsonian toxicity in mice by inducing PIK3C3 complex-dependent autophagy. ***Acta Pharmacol Sin***, 2022 ;43(10):2511-2526. https://doi.org/10.1038/s41401-022-00871-0

39. Durairajan SSK, Selvarasu K, Bera MR, Rajaram K, **Iyaswamy A**, Li M. Alzheimer's Disease and other Tauopathies: Exploring Efficacy of Medicinal Plant-Derived Compounds in Alleviating Tau-Mediated Neurodegeneration. ***Current Molecular Pharmacology*,**15(2),2022,361-379(19). https://doi.org/10.2174/1874467214666210 906125318.
40. Kan YX, Su CF, Zhu Z, Liu J, Guan XJ, **Iyaswamy A**, Cheung KH, Zhang Y, Song JX, Li M. Neuroprotective activities of icariin in rodent models of Alzheimer's disease: a systematic review and meta-analysis. ***Longhua Chin Med*,** 2022;5:3 https://dx.doi.org/10.21037/lcm-21-50.
41. Cai CZ, Zhuang XX, Zhu Q, Wu MY, Su HX, **Iyaswamy A**, He HH, Yue ZY, Xue Y, Tan JQ, Li M, and Lu JH. Enhancing autophagy maturation by CCZ1-MON1A complex alleviates neuropathology and memory defects in Alzheimer disease models. ***Theranostics***. 2022;12(4):1738-1755. doi: 10.7150/thno.64148.
42. Gaurav I, Wang X, Thakur A, **Iyaswamy A**, Thakur S, Chen X, Kumar G, Li M, Yang Z. Peptide-Conjugated Nano Delivery Systems for Therapy and Diagnosis of Cancer. ***Pharmaceutics*** 2021, 13, 1433. https://doi.org/10.3390/pharmaceutics 13091433.
43. Tong BCK, Wu AJ, Huang AS, Dong R, Malampati S, **Iyaswamy A**, Krishnamoorthi SK, Sreenivasmurthy SG, Zhu Z, Su CF, Liu J, Song JX, Lu JH, Tan JQ, Pan WD, Li M, Cheung KH. Lysosomal TPCN (two pore segment channel) inhibition ameliorates beta-amyloid pathology and mitigates memory impairment in Alzheimer disease, ***Autophagy***, 2022 18(3):624-642. doi: 10.1080/15548627.2021.1945220.
44. Yang CB, Liu J, Tong BCK, Wang ZY, Zhu Z, Su CF, Sreenivasmurthy SG, Wu JX, **Iyaswamy A**, Krishnamoorthi SK, Huang SY, Cheung KH, Song JX, Tan JQ, Lu JH, Li M. TFEB, a master regulator of autophagy and biogenesis, unexpected promotes apoptosis in response to the cyclopentenone prostaglandin 15d-PGJ2. ***Acta Pharmacologica Sinica*,** 43, 1251–1263 (2022). https://doi.org/10.1038/s41401-021-00711-7
45. Su CF, Jiang L, Zhang XW, **Iyaswamy A**, Li M. Resveratrol in rodent models of Parkinson's disease: A systematic review of experimental studies. ***Front. Pharmacol.*,** 2021; 12: 644219. doi: 10.3389/fphar.2021.644219.
46. Gaurav I, Thakur A, **Iyaswamy A,** Wang X, Chen X, Yang Z. Factors Affecting Extracellular Vesicles Based Drug Delivery Systems. ***Molecules*** 2021, 26,1544. https://doi.org/10.3390/molecules26061544
47. Wang ZY, Liu J, Zhu Z, Su C, Sreenivasmurthy SG, **Iyaswamy A,** Lu JH, Chen G, Song J-X, Li M. Traditional Chinese medicine compounds regulate autophagy for treating neurodegenerative disease: A mechanism review. ***Biomedicine & Pharmacotherapy*** 2021, 133, 110968. https://doi.org/10.1016/j.biopha.2020.110968
48. Wang XL, Wang CK, Chan HN, **Iyaswamy A**, Krishnamoorthi SK, Li M, Li HW, Wong MS. Amyloid-β oligomer targeted theranostic probes for in vivo NIR imaging and inhibition of self-aggregation and amyloid-β induced ROS generation. ***Talanta***, 2020; 224:121830. https://doi.org/10.1016/ j. talanta.2020.121830

49. **Iyaswamy A**, Krishnamoorthi SK, Liu YW, Song J-X, Kammala AK, Sreenivasmurthy SG, Malampati S, Tong BCK, Selvarasu K, Cheung KH, Lu JH, Tan JQ, Huang CY, Durairajan SSK and Li M. Yuan-Hu Zhi Tong Prescription Mitigates Tau Pathology and Alleviates Memory Deficiency in the Preclinical Models of Alzheimer's Disease. ***Front. Pharmacol.***, 2020,11:584770. doi:10.3389/fphar.20 20.584770
50. Ng RC, Jian M, Ma OK, Bunting M, Kwan JS, Zhou GJ, Senthilkumar K, **Iyaswamy A**, Chan PK, Li M, Leung KM, Kumar Durairajan SS, Lam KS, Chu LW, Festenstein R, Chung SK, Chan KH. Chronic oral administration of adipoRon reverses cognitive impairments and ameliorates neuropathology in an Alzheimer's disease mouse model. ***Molecular Psychiatry***, 2020; 26(10): 5669-5689. https://doi.org/ 10.1038/s41380-020-0701-0.
51. Yang C, Zhu Z, Tong BC, **Iyaswamy A**, Xie WJ, Zhu Y, Sreenivasmurthy SG, Senthilkumar K, Cheung KH, Song JX, Zhang HJ, Li M. A stress response p38 MAP kinase inhibitor SB202190 promoted TFEB/TFE3-dependent autophagy and lysosomal biogenesis independent of p38. ***Redox Biology***, 2020; 32:101445. https://doi.org/10.1016/j.redox.2020.101445.
52. Song JX, Malampati S, Zeng Y, Durairajan SSK, Yang CB, Tong BC, **Iyaswamy A**, Shang WB, Sreenivasmurthy SG, Zhu Z, Cheung KH, Lu JH, Tang C, Xu N, Li M. Small molecule transcription factor EB activator ameliorates beta-amyloid precursor protein and Tau pathology in Alzheimer's disease models. ***Aging Cell.*** 2019; 00: e13069. DOI:10.1111/acel. 13069
53. **Iyaswamy A**, Krishnamoorthi SK, Song JX, Yang CB, Kaliyamoorthy V, Zhang H, Sreenivasmurthy SG, Malampati S, Wang ZY, Zhu Z, Tong BC, Cheung KH, Lu JH, Durairajan SSK, Li M. NeuroDefend, a novel traditional Chinese medicine, attenuates amyloid-β and tau pathology in experimental Alzheimer's disease models. ***Journal Food and Drug Analysis***, 2020; 28:132 -146. doi.org/10.1016/j.jfda.2019.09.004.
54. Malampati S, Song JX, Chun-Kit Tong B, Nalluri A, Yang CB, Wang Z, Gopalkrishnashetty Sreenivasmurthy S, Zhu Z, Liu J, Su C, Krishnamoorthi S, **Iyaswamy A**, Cheung KH, Lu JH, Li M. Targeting Aggrephagy for the Treatment of Alzheimer's Disease. ***Cells***, 2020;9;311 doi:10.3390/cells9020311.
55. Wang Z, Yang C, Liu J, Chun-Kit Tong B, Zhu Z, Malampati S, Gopalkrishnashetty Sreenivasmurthy S, Cheung KH, **Iyaswamy A**, Su C, Lu J, Song J, Li M. A Curcumin Derivative Activates TFEB and Protects Against Parkinsonian Neurotoxicity in Vitro. ***Int. J. Mol. Sci.*** 2020; 21:1515. doi: 10.3390 /ijms 210415 15.
56. Zhu Z, Yang C, **Iyaswamy A**, Krishnamoorthi S, Sreenivasmurthy SG, Liu J, Wang Z, Tong BC, Song J, Lu J, Cheung KH, Li M. Balancing mTOR Signaling and Autophagy in the Treatment of Parkinson's Disease. ***Int. J. Mol. Sci.*** 2019, 20, 728. doi: 10.3390/ijms20030728.
57. **Iyaswamy A***, Kammella AK, Thavasimuthu C, Wankupar W, Dapkupar W, Shanmugam S, Rajan R, Rathinasamy S. Oxidative stress evoked damages leading to attenuated memory and inhibition of NMDAR-CaMKII-ERK/CREB signalling on consumption of aspartame in rat model. ***Journal Food and Drug Analysis***, 2018; 26: 903-906. doi: 10.1016/j.jfda.2017.11.001.
58. Yang C, Cai CZ, Song JX, Tan JQ, Durairajan SSK, **Iyaswamy A**, Wu MY, Chen LL, Yue Z, Li M, Lu JH. NRBF2 is involved in the autophagic degradation process of

APP CTFs in Alzheimer disease models. ***Autophagy*****,** 2017; 13(12): 2028-2040. doi: 10.1080/15548627.2017.1379633.

59. Durairajan SSK, **Iyaswamy A**[¶], Shetty SG, Kammella AK, Malampati S, Shang W, Yang C, Song J, Chung S, Huang J, Ilango K, Han QB, Li M. A modified formulation of Huanglian-Jie-Du Tang reduces memory impairments and β-amyloid plaques in a triple transgenic mouse model of Alzheimer's disease, ***Scientific reports***, 2017;7:6238-6250. doi: 10.1038/s41598-017-06217-9. (¶Co-First Author)
60. Durairajan SSK, Chirasani VR, Shetty SG, **Iyaswamy A**, Malampati S, Song J, Liu L, Huang J, Senapati S, Li M. Salvianolic acid B decreases the generation of amyloid-β by modulating BACE-1 activity, ***Current Alzheimer's Research*****,** 2017;14(11):1229-1237. doi: 10.2174/1567205014666170417130003.
61. **Ashok I**[*]**,** Poornima PS, Wankhar D, Ravindran R, Sheeladevi R. Oxidative stress evoked damages on rat sperm and attenuated antioxidant status on consumption of aspartame. ***Int J Impot Res*****.** 2017;29(4):164-170. doi: 10.1038/ijir.2017.17.
62. **Iyaswamy A**[*]**,** Wankhar D, Loganathan S, Shanmugam S, Rajan R, Rathinasamy S. Disruption of redox homeostasis in liver function and activation of apoptosis on consumption of aspartame in folate deficient rat model. ***Journal of Nutrition & Intermediary Metabolism*****,** 2017; 8: 41-50.
63. **Ashok I**, Wankhar D, Wankhar W, Sheeladevi R. Neurobehavioral changes and activation of neurodegenerative apoptosis on long-term consumption of aspartame in the rat brain, ***Journal of Nutrition & Intermediary Metabolism*** 2015; 2:76-85.
64. **Ashok I,** Sheeladevi R. Oxidant stress evoked damages in rat hepatocyte leading to triggered NOS levels on long term consumption of aspartame, **Journal Food and Drug Analysis,** 2015;23: 679-691. doi: 10.1016/j.jfda.2014.07.011.
65. **Ashok I,** Sheeladevi R, Wankhar D. Acute effect of aspartame-induced oxidative stress in Wistar albino rat brain, ***The Journal of Biomedical Research*****,** 2015; 29(5):390-396. doi: 10.7555/JBR.28.20120118.
66. **Ashok I,** Sheeladevi R. Biochemical responses and mitochondrial mediated activation of apoptosis on long-term effect of aspartame in rat brain. ***Redox Biology*****,** 2014; 2:820–831. doi: 10.1016/j.redox.2014.04.011.
67. Wankhar D, Sheeladevi R, **Ashok I.** Emblica officinalis outcome on Noise stress induced behavioural changes in Wistar albino rats. ***Biomedicine & Preventive Nutrition***, 2014;4(2):219-224.
68. **Ashok I,** Sheeladevi R, Wankhar D, Wankhar W. Long-term effect of aspartame on the liver antioxidant status and histopathology in Wistar albino rats. ***Biomedicine & Preventive Nutrition*****,** 2014;4 (2): 305-311.
69. **Ashok I,** Balaji R, Sakthivel S, Sheela S. Efficacy of accumulation on heavy metals from aqueous solution using water hyacinth (*Eichornia crassipes*). ***Asian Jr. of Microbiol. Biotech. Env. Sc.*** 2014;16(1): 115-120.
70. **Ashok I,** Sheeladevi R, Wankhar D**.** Effect of long-term aspartame (artificial sweetener) on anxiety, locomotor activity and emotionality behavior in Wistar Albino rats. ***Biomedicine & Preventive Nutrition*****,** 2014; 4:39–43.
71. **Ashok I**[*], Sheeladevi R, Wankhar D. Long term effect of aspartame (Artificial sweetener) on membrane homeostatic imbalance and histopathology in the rat brain. ***Free Radicals and Antioxidants*****,** 2013; 3: S42-S49.

72. **Ashok I,** Sheeladevi R. Effect of chronic exposure to aspartame on oxidative stress in the brain of albino rats. ***J. Biosci.*** 2012; 37(4):679–688. DOI: 10.1007/s