

1: Chen G, Wang M, Zhang Z, Hong DK, Ahn EH, Liu X, Kang SS, Ye K. ApoE3 R136S binds to Tau and blocks its propagation, suppressing neurodegeneration in mice with Alzheimer's disease. *Neuron*. 2025 Mar 5;113(5):719-736.e5. doi: 10.1016/j.neuron.2024.12.015. Epub 2025 Jan 14. PMID: 39814008.

2: DeVeaux SA, Vyshnya S, Propsom K, Gbotosho OT, Singh AS, Horning RZ, Sharma M, Jegga AG, Niu L, Botchwey EA, Hyacinth HI. Neuroinflammation underlies the development of social stress induced cognitive deficit in male sickle cell mice. *Exp Biol Med (Maywood)*. 2024 Nov 19;249:10361. doi: 10.3389/ebm.2024.10361. PMID: 39629138; PMCID: PMC11612828.

3: DeVeaux SA, Vyshnya S, Propsom K, Gbotosho OT, Singh AS, Horning RZ, Sharma M, Jegga AG, Niu L, Botchwey EA, Hyacinth HI. Neuroinflammation underlies the development of social stress induced cognitive deficit in sickle cell disease. *bioRxiv [Preprint]*. 2024 Jan 25:2024.01.24.577074. doi: 10.1101/2024.01.24.577074. Update in: *Exp Biol Med (Maywood)*. 2024 Nov 19;249:10361. doi: 10.3389/ebm.2024.10361. PMID: 38328164; PMCID: PMC10849745.

4: Mei Z, Liu J, Schroeder JP, Weinshenker D, Duong DM, Seyfried NT, Li Y, Jin P, Wingo AP, Wingo TS. Lowering Hippocampal miR-29a Expression Slows Cognitive Decline and Reduces Beta-Amyloid Deposition in 5×FAD Mice. *Mol Neurobiol*. 2024 Jun;61(6):3343-3356. doi: 10.1007/s12035-023-03791-0. Epub 2023 Nov 22. PMID: 37989983; PMCID: PMC11087195.

5: Xiong J, Kang SS, Wang M, Wang Z, Xia Y, Liao J, Liu X, Yu SP, Zhang Z, Ryu V, Yuen T, Zaidi M, Ye K. FSH and ApoE4 contribute to Alzheimer's disease-like pathogenesis via C/EBP β / δ -secretase in female mice. *Nat Commun*. 2023 Oct 18;14(1):6577. doi: 10.1038/s41467-023-42282-7. PMID: 37852961; PMCID: PMC10584868.

6: Armstrong MJ, Jin Y, Vattathil SM, Huang Y, Schroeder JP, Bennet DA, Qin ZS, Wingo TS, Jin P. Role of TET1-mediated epigenetic modulation in Alzheimer's disease. *Neurobiol Dis*. 2023 Sep;185:106257. doi: 10.1016/j.nbd.2023.106257. Epub 2023 Aug 8. PMID: 37562656; PMCID: PMC10530206.

7: Wang H, Chen G, Ahn EH, Xia Y, Kang SS, Liu X, Liu C, Han MH, Chen S, Ye K. C/EBP β /AEP is age-dependently activated in Parkinson's disease and mediates α -synuclein in the gut and brain. *NPJ Parkinsons Dis*. 2023 Jan 6;9(1):1. doi: 10.1038/s41531-022-00430-8. PMID: 36609384; PMCID: PMC9822984.

8: Ahn EH, Liu X, Alam AM, Kang SS, Ye K. Helicobacter hepaticus augmentation triggers Dopaminergic degeneration and motor disorders in mice with Parkinson's disease. *Mol*

Psychiatry. 2023 Mar;28(3):1337-1350. doi: 10.1038/s41380-022-01910-2. Epub 2022 Dec 21. PMID: 36543925.

9: Kang SS, Wu Z, Liu X, Edgington-Mitchell L, Ye K. Treating Parkinson's Disease via Activation of BDNF/TrkB Signaling Pathways and Inhibition of Delta- Secretase. Neurotherapeutics. 2022 Jul;19(4):1283-1297. doi: 10.1007/s13311-022-01248-1. Epub 2022 May 20. PMID: 35595958; PMCID: PMC9587159.

10: Liu P, Wang ZH, Kang SS, Liu X, Xia Y, Chan CB, Ye K. High-fat diet-induced diabetes couples to Alzheimer's disease through inflammation-activated C/EBP β /AEP pathway. Mol Psychiatry. 2022 Aug;27(8):3396-3409. doi: 10.1038/s41380-022-01600-z. Epub 2022 May 11. PMID: 35546632; PMCID: PMC10032575.

11: Kang SS, Meng L, Zhang X, Wu Z, Mancieri A, Xie B, Liu X, Weinshenker D, Peng J, Zhang Z, Ye K. Tau modification by the norepinephrine metabolite DOPEGAL stimulates its pathology and propagation. Nat Struct Mol Biol. 2022 Apr;29(4):292-305. doi: 10.1038/s41594-022-00745-3. Epub 2022 Mar 24. PMID: 35332321; PMCID: PMC9018606.

12: Xiong J, Kang SS, Wang Z, Liu X, Kuo TC, Korkmaz F, Padilla A, Miyashita S, Chan P, Zhang Z, Katsel P, Burgess J, Gumerova A, Ievleva K, Sant D, Yu SP, Muradova V, Frolinger T, Lizneva D, Iqbal J, Goosens KA, Gera S, Rosen CJ, Haroutunian V, Ryu V, Yuen T, Zaidi M, Ye K. FSH blockade improves cognition in mice with Alzheimer's disease. Nature. 2022 Mar;603(7901):470-476. doi: 10.1038/s41586-022-04463-0. Epub 2022 Mar 2. PMID: 35236988; PMCID: PMC9940301.

13: Chen G, Ahn EH, Kang SS, Xia Y, Liu X, Zhang Z, Ye K. UNC5C Receptor Proteolytic Cleavage by Active AEP Promotes Dopaminergic Neuronal Degeneration in Parkinson's Disease. Adv Sci (Weinh). 2022 Mar;9(7):e2103396. doi: 10.1002/advs.202103396. Epub 2022 Jan 12. PMID: 35023303; PMCID: PMC8895126.

14: Wang ZH, Xia Y, Wu Z, Kang SS, Zhang JC, Liu P, Liu X, Song W, Huin V, Dhaenens CM, Yu SP, Wang XC, Ye K. Neuronal ApoE4 stimulates C/EBP β activation, promoting Alzheimer's disease pathology in a mouse model. Prog Neurobiol. 2022 Feb;209:102212. doi: 10.1016/j.pneurobio.2021.102212. Epub 2021 Dec 24. PMID: 34958873.

15: Ahn EH, Lei K, Kang SS, Wang ZH, Liu X, Hong W, Wang YT, Edgington-Mitchell LE, Jin L, Ye K. Mitochondrial dysfunction triggers the pathogenesis of Parkinson's disease in neuronal C/EBP β transgenic mice. Mol Psychiatry. 2021 Dec;26(12):7838-7850. doi: 10.1038/s41380-021-01284-x. Epub 2021 Sep 6. PMID: 34489530.

16: Chen C, Zhou Y, Wang H, Alam A, Kang SS, Ahn EH, Liu X, Jia J, Ye K. Gut inflammation triggers C/EBP β / δ -secretase-dependent gut-to-brain propagation of A β and Tau fibrils in

- Alzheimer's disease. *EMBO J*. 2021 Sep 1;40(17):e106320. doi: 10.15252/embj.2020106320. Epub 2021 Jul 14. PMID: 34260075; PMCID: PMC8408610.
- 17: Wu Z, Chen C, Kang SS, Liu X, Gu X, Yu SP, Keene CD, Cheng L, Ye K. Neurotrophic signaling deficiency exacerbates environmental risks for Alzheimer's disease pathogenesis. *Proc Natl Acad Sci U S A*. 2021 Jun 22;118(25):e2100986118. doi: 10.1073/pnas.2100986118. PMID: 34140411; PMCID: PMC8237621.
- 18: Kang SS, Ahn EH, Liu X, Bryson M, Miller GW, Weinshenker D, Ye K. ApoE4 inhibition of VMAT2 in the locus coeruleus exacerbates Tau pathology in Alzheimer's disease. *Acta Neuropathol*. 2021 Jul;142(1):139-158. doi: 10.1007/s00401-021-02315-1. Epub 2021 Apr 25. PMID: 33895869; PMCID: PMC8217363.
- 19: Yao Y, Kang SS, Xia Y, Wang ZH, Liu X, Muller T, Sun YE, Ye K. A delta- secretase-truncated APP fragment activates CEBPB, mediating Alzheimer's disease pathologies. *Brain*. 2021 Jul 28;144(6):1833-1852. doi: 10.1093/brain/awab062. PMID: 33880508; PMCID: PMC8320270.
- 20: Chen G, Kang SS, Wang Z, Ahn EH, Xia Y, Liu X, Sandoval IM, Manfredsson FP, Zhang Z, Ye K. Netrin-1 receptor UNC5C cleavage by active δ -secretase enhances neurodegeneration, promoting Alzheimer's disease pathologies. *Sci Adv*. 2021 Apr 16;7(16):eabe4499. doi: 10.1126/sciadv.abe4499. PMID: 33863723; PMCID: PMC8051868.
- 21: Squires KE, Gerber KJ, Tillman MC, Lustberg DJ, Montañez-Miranda C, Zhao M, Ramineni S, Scharer CD, Saha RN, Shu FJ, Schroeder JP, Ortlund EA, Weinshenker D, Dudek SM, Hepler JR. Human genetic variants disrupt RGS14 nuclear shuttling and regulation of LTP in hippocampal neurons. *J Biol Chem*. 2021 Jan- Jun;296:100024. doi: 10.1074/jbc.RA120.016009. Epub 2020 Nov 22. PMID: 33410399; PMCID: PMC7949046.
- 22: Ahn EH, Kang SS, Qi Q, Liu X, Ye K. Netrin1 deficiency activates MST1 via UNC5B receptor, promoting dopaminergic apoptosis in Parkinson's disease. *Proc Natl Acad Sci U S A*. 2020 Sep 29;117(39):24503-24513. doi: 10.1073/pnas.2004087117. Epub 2020 Sep 14. PMID: 32929029; PMCID: PMC7533679.
- 23: Ahn EH, Kang SS, Liu X, Cao X, Choi SY, Musazzi L, Mehlen P, Ye K. BDNF and Netrin-1 repression by C/EBP β in the gut triggers Parkinson's disease pathologies, associated with constipation and motor dysfunctions. *Prog Neurobiol*. 2021 Mar;198:101905. doi: 10.1016/j.pneurobio.2020.101905. Epub 2020 Sep 7. PMID: 32911010.
- 24: Cantara SI, Blas-Machado U, Zhao X, Moore RH, Schroeder JP, Lee VK. Comparative Effects of 1/4-inch and 1/8-inch Corncob Bedding on Cage Ammonia Levels, Behavior, and Respiratory Pathology of Male C57BL/6 and 129S1/SvIm Mice. *J Am Assoc Lab Anim Sci*.

2020 Nov 1;59(6):695-702. doi: 10.30802/AALAS- JAALAS-19-000152. Epub 2020 Sep 2. PMID: 32878682; PMCID: PMC7604692.

25: Chen C, Ahn EH, Kang SS, Liu X, Alam A, Ye K. Gut dysbiosis contributes to amyloid pathology, associated with C/EBP β /AEP signaling activation in Alzheimer's disease mouse model. *Sci Adv.* 2020 Jul 29;6(31):eaba0466. doi: 10.1126/sciadv.aba0466. PMID: 32832679; PMCID: PMC7439296.

26: Branco RC, Burkett JP, Black CA, Winokur E, Ellsworth W, Dhamsania RK, Lohr KM, Schroeder JP, Weinshenker D, Jovanovic T, Miller GW. Vesicular monoamine transporter 2 mediates fear behavior in mice. *Genes Brain Behav.* 2020 Jun;19(5):e12634. doi: 10.1111/gbb.12634. Epub 2020 Jan 14. PMID: 31898856; PMCID: PMC8170828.

27: Rasmussen SA, Daenzer JMI, MacWilliams JA, Head ST, Williams MB, Geurts AM, Schroeder JP, Weinshenker D, Fridovich-Keil JL. A galactose-1-phosphate uridylyltransferase-null rat model of classic galactosemia mimics relevant patient outcomes and reveals tissue-specific and longitudinal differences in galactose metabolism. *J Inherit Metab Dis.* 2020 May;43(3):518-528. doi: 10.1002/jimd.12205. Epub 2019 Dec 29. PMID: 31845342; PMCID: PMC7318568.

28: Kang SS, Liu X, Ahn EH, Xiang J, Manfredsson FP, Yang X, Luo HR, Liles LC, Weinshenker D, Ye K. Norepinephrine metabolite DOPEGAL activates AEP and pathological Tau aggregation in locus coeruleus. *J Clin Invest.* 2020 Jan 2;130(1):422-437. doi: 10.1172/JCI130513. PMID: 31793911; PMCID: PMC6934194.

29: Ahn EH, Kang SS, Liu X, Chen G, Zhang Z, Chandrasekharan B, Alam AM, Neish AS, Cao X, Ye K. Initiation of Parkinson's disease from gut to brain by δ -secretase. *Cell Res.* 2020 Jan;30(1):70-87. doi: 10.1038/s41422-019-0241-9. Epub 2019 Oct 24. PMID: 31649329; PMCID: PMC6951265.

30: Luo S, Kang SS, Wang ZH, Liu X, Day JX, Wu Z, Peng J, Xiang D, Springer W, Ye K. Akt Phosphorylates NQO1 and Triggers its Degradation, Abolishing Its Antioxidative Activities in Parkinson's Disease. *J Neurosci.* 2019 Sep 11;39(37):7291-7305. doi: 10.1523/JNEUROSCI.0625-19.2019. Epub 2019 Jul 29. PMID: 31358653; PMCID: PMC6759025.

31: Wang ZH, Xiang J, Liu X, Yu SP, Manfredsson FP, Sandoval IM, Wu S, Wang JZ, Ye K. Deficiency in BDNF/TrkB Neurotrophic Activity Stimulates δ -Secretase by Upregulating C/EBP β in Alzheimer's Disease. *Cell Rep.* 2019 Jul 16;28(3):655-669.e5. doi: 10.1016/j.celrep.2019.06.054. PMID: 31315045; PMCID: PMC6684282.

- 32: Rutkowski TP, Purcell RH, Pollak RM, Grewenow SM, Gafford GM, Malone T, Khan UA, Schroeder JP, Epstein MP, Bassell GJ, Warren ST, Weinshenker D, Caspary T, Mulle JG. Behavioral changes and growth deficits in a CRISPR engineered mouse model of the schizophrenia-associated 3q29 deletion. *Mol Psychiatry*. 2021 Mar;26(3):772-783. doi: 10.1038/s41380-019-0413-5. Epub 2019 Apr 11. PMID: 30976085; PMCID: PMC6788962.
- 33: Wang H, Liu X, Chen S, Ye K. Spatiotemporal activation of the C/EBP β / δ -secretase axis regulates the pathogenesis of Alzheimer's disease. *Proc Natl Acad Sci U S A*. 2018 Dec 26;115(52):E12427-E12434. doi: 10.1073/pnas.1815915115. Epub 2018 Dec 10. Erratum in: *Proc Natl Acad Sci U S A*. 2019 Dec 17;116(51):26090. doi: 10.1073/pnas.1920626117. PMID: 30530690; PMCID: PMC6310855.
- 34: Zhang Z, Li XG, Wang ZH, Song M, Yu SP, Kang SS, Liu X, Zhang Z, Xie M, Liu GP, Wang JZ, Ye K. δ -Secretase-cleaved Tau stimulates A β production via upregulating STAT1-BACE1 signaling in Alzheimer's disease. *Mol Psychiatry*. 2021 Feb;26(2):586-603. doi: 10.1038/s41380-018-0286-z. Epub 2018 Oct 31. PMID: 30382187; PMCID: PMC6684859.
- 35: Wang ZH, Liu P, Liu X, Yu SP, Wang JZ, Ye K. Delta-secretase (AEP) mediates tau-splicing imbalance and accelerates cognitive decline in tauopathies. *J Exp Med*. 2018 Dec 3;215(12):3038-3056. doi: 10.1084/jem.20180539. Epub 2018 Oct 29. PMID: 30373880; PMCID: PMC6279401.
- 36: Wang ZH, Wu W, Kang SS, Liu X, Wu Z, Peng J, Yu SP, Manfredsson FP, Sandoval IM, Liu X, Wang JZ, Ye K. BDNF inhibits neurodegenerative disease-associated asparaginyl endopeptidase activity via phosphorylation by AKT. *JCI Insight*. 2018 Aug 23;3(16):e99007. doi: 10.1172/jci.insight.99007. PMID: 30135302; PMCID: PMC6141178.
- 37: Kang SS, Ahn EH, Zhang Z, Liu X, Manfredsson FP, Sandoval IM, Dhakal S, Iuvone PM, Cao X, Ye K. α -Synuclein stimulation of monoamine oxidase-B and legumain protease mediates the pathology of Parkinson's disease. *EMBO J*. 2018 Jun 15;37(12):e98878. doi: 10.15252/embj.201798878. Epub 2018 May 16. PMID: 29769405; PMCID: PMC6003650.
- 38: Wang ZH, Gong K, Liu X, Zhang Z, Sun X, Wei ZZ, Yu SP, Manfredsson FP, Sandoval IM, Johnson PF, Jia J, Wang JZ, Ye K. C/EBP β regulates delta-secretase expression and mediates pathogenesis in mouse models of Alzheimer's disease. *Nat Commun*. 2018 May 3;9(1):1784. doi: 10.1038/s41467-018-04120-z. Erratum in: *Nat Commun*. 2019 Nov 26;10(1):5452. doi: 10.1038/s41467-019-13553-z. PMID: 29725016; PMCID: PMC5934399.
- 39: Chen C, Wang Z, Zhang Z, Liu X, Kang SS, Zhang Y, Ye K. The prodrug of 7,8-dihydroxyflavone development and therapeutic efficacy for treating Alzheimer's disease. *Proc Natl Acad Sci U S A*. 2018 Jan 16;115(3):578-583. doi: 10.1073/pnas.1718683115. Epub 2018 Jan 2. PMID: 29295929; PMCID: PMC5777001.

- 40: Chalermphanupap T, Schroeder JP, Rorabaugh JM, Liles LC, Lah JJ, Levey AI, Weinshenker D. Locus Coeruleus Ablation Exacerbates Cognitive Deficits, Neuropathology, and Lethality in P301S Tau Transgenic Mice. *J Neurosci*. 2018 Jan 3;38(1):74-92. doi: 10.1523/JNEUROSCI.1483-17.2017. Epub 2017 Nov 13. PMID: 29133432; PMCID: PMC5761438.
- 41: Rorabaugh JM, Chalermphanupap T, Botz-Zapp CA, Fu VM, Lembeck NA, Cohen RM, Weinshenker D. Chemogenetic locus coeruleus activation restores reversal learning in a rat model of Alzheimer's disease. *Brain*. 2017 Nov 1;140(11):3023-3038. doi: 10.1093/brain/awx232. PMID: 29053824; PMCID: PMC5841201.
- 42: Christopher MA, Myrick DA, Barwick BG, Engstrom AK, Porter-Stransky KA, Boss JM, Weinshenker D, Levey AI, Katz DJ. LSD1 protects against hippocampal and cortical neurodegeneration. *Nat Commun*. 2017 Oct 9;8(1):805. doi: 10.1038/s41467-017-00922-9. PMID: 28993646; PMCID: PMC5634471.
- 43: Kang SS, Zhang Z, Liu X, Manfredsson FP, Benskey MJ, Cao X, Xu J, Sun YE, Ye K. TrkB neurotrophic activities are blocked by α -synuclein, triggering dopaminergic cell death in Parkinson's disease. *Proc Natl Acad Sci U S A*. 2017 Oct 3;114(40):10773-10778. doi: 10.1073/pnas.1713969114. Epub 2017 Sep 18. PMID: 28923922; PMCID: PMC5635931.
- 44: Wang ZH, Liu P, Liu X, Manfredsson FP, Sandoval IM, Yu SP, Wang JZ, Ye K. Delta-Secretase Phosphorylation by SRPK2 Enhances Its Enzymatic Activity, Provoking Pathogenesis in Alzheimer's Disease. *Mol Cell*. 2017 Sep 7;67(5):812-825.e5. doi: 10.1016/j.molcel.2017.07.018. Epub 2017 Aug 17. PMID: 28826672; PMCID: PMC5753427.
- 45: Giddens MM, Wong JC, Schroeder JP, Farrow EG, Smith BM, Owino S, Soden SE, Meyer RC, Saunders C, LePichon JB, Weinshenker D, Escayg A, Hall RA. GPR37L1 modulates seizure susceptibility: Evidence from mouse studies and analyses of a human GPR37L1 variant. *Neurobiol Dis*. 2017 Oct;106:181-190. doi: 10.1016/j.nbd.2017.07.006. Epub 2017 Jul 6. PMID: 28688853; PMCID: PMC5569905.
- 46: Zhang Z, Kang SS, Liu X, Ahn EH, Zhang Z, He L, Iuvone PM, Duong DM, Seyfried NT, Benskey MJ, Manfredsson FP, Jin L, Sun YE, Wang JZ, Ye K. Asparagine endopeptidase cleaves α -synuclein and mediates pathologic activities in Parkinson's disease. *Nat Struct Mol Biol*. 2017 Aug;24(8):632-642. doi: 10.1038/nsmb.3433. Epub 2017 Jul 3. PMID: 28671665; PMCID: PMC5871868.
- 47: Rha J, Jones SK, Fidler J, Banerjee A, Leung SW, Morris KJ, Wong JC, Inglis GAS, Shapiro L, Deng Q, Cutler AA, Hanif AM, Pardue MT, Schaffer A, Seyfried NT, Moberg KH, Bassell GJ, Escayg A, García PS, Corbett AH. The RNA-binding protein, ZC3H14, is required for proper poly(A) tail length control, expression of synaptic proteins, and brain function in mice. *Hum*

Mol Genet. 2017 Oct 1;26(19):3663-3681. doi: 10.1093/hmg/ddx248. PMID: 28666327; PMCID: PMC5886104.

48: Zhang Z, Obiany O, Dall E, Du Y, Fu H, Liu X, Kang SS, Song M, Yu SP, Cabrele C, Schubert M, Li X, Wang JZ, Brandstetter H, Ye K. Inhibition of delta- secretase improves cognitive functions in mouse models of Alzheimer's disease. Nat Commun. 2017 Mar 27;8:14740. doi: 10.1038/ncomms14740. PMID: 28345579; PMCID: PMC5378956.

49: Lebois EP, Schroeder JP, Esparza TJ, Bridges TM, Lindsley CW, Conn PJ, Brody DL, Daniels JS, Levey AI. Disease-Modifying Effects of M₁ Muscarinic Acetylcholine Receptor Activation in an Alzheimer's Disease Mouse Model. ACS Chem Neurosci. 2017 Jun 21;8(6):1177-1187. doi: 10.1021/acschemneuro.6b00278. Epub 2017 Mar 7. PMID: 28230352; PMCID: PMC5808561.

50: Kang SS, Zhang Z, Liu X, Manfredsson FP, He L, Iuvone PM, Cao X, Sun YE, Jin L, Ye K. α -Synuclein binds and sequesters PIKE-L into Lewy bodies, triggering dopaminergic cell death via AMPK hyperactivation. Proc Natl Acad Sci U S A. 2017 Jan 31;114(5):1183-1188. doi: 10.1073/pnas.1618627114. Epub 2017 Jan 17. PMID: 28096359; PMCID: PMC5293033.

51: Rutkowski TP, Schroeder JP, Gafford GM, Warren ST, Weinshenker D, Caspary T, Mülle JG. Unraveling the genetic architecture of copy number variants associated with schizophrenia and other neuropsychiatric disorders. J Neurosci Res. 2017 May;95(5):1144-1160. doi: 10.1002/jnr.23970. Epub 2016 Nov 8. PMID: 27859486; PMCID: PMC5352473.

52: Cubells JF, Schroeder JP, Barrie ES, Manvich DF, Sadee W, Berg T, Mercer K, Stowe TA, Liles LC, Squires KE, Mezher A, Curtin P, Perdomo DL, Szot P, Weinshenker D. Human Bacterial Artificial Chromosome (BAC) Transgenesis Fully Rescues Noradrenergic Function in Dopamine β -Hydroxylase Knockout Mice. PLoS One. 2016 May 5;11(5):e0154864. doi: 10.1371/journal.pone.0154864. PMID: 27148966; PMCID: PMC4857931.

53: Rojas A, Ganesh T, Lelutiu N, Gueorguieva P, Dingleline R. Inhibition of the prostaglandin EP2 receptor is neuroprotective and accelerates functional recovery in a rat model of organophosphorus induced status epilepticus. Neuropharmacology. 2015 Jun;93:15-27. doi: 10.1016/j.neuropharm.2015.01.017. Epub 2015 Feb 3. PMID: 25656476; PMCID: PMC4387070.

54: Zhang Z, Song M, Liu X, Kang SS, Kwon IS, Duong DM, Seyfried NT, Hu WT, Liu Z, Wang JZ, Cheng L, Sun YE, Yu SP, Levey AI, Ye K. Cleavage of tau by asparagine endopeptidase mediates the neurofibrillary pathology in Alzheimer's disease. Nat Med. 2014 Nov;20(11):1254-62. doi: 10.1038/nm.3700. Epub 2014 Oct 19. PMID: 25326800; PMCID: PMC4224595.

- 55: Irier H, Street RC, Dave R, Lin L, Cai C, Davis TH, Yao B, Cheng Y, Jin P. Environmental enrichment modulates 5-hydroxymethylcytosine dynamics in hippocampus. *Genomics*. 2014 Nov;104(5):376-82. doi: 10.1016/j.ygeno.2014.08.019. Epub 2014 Sep 7. PMID: 25205305; PMCID: PMC4252786.
- 56: Lohr KM, Bernstein AI, Stout KA, Dunn AR, Lazo CR, Alter SP, Wang M, Li Y, Fan X, Hess EJ, Yi H, Vecchio LM, Goldstein DS, Guillot TS, Salahpour A, Miller GW. Increased vesicular monoamine transporter enhances dopamine release and opposes Parkinson disease-related neurodegeneration in vivo. *Proc Natl Acad Sci U S A*. 2014 Jul 8;111(27):9977-82. doi: 10.1073/pnas.1402134111. Epub 2014 Jun 16. PMID: 24979780; PMCID: PMC4103325.
- 57: Marvar PJ, Goodman J, Fuchs S, Choi DC, Banerjee S, Ressler KJ. Angiotensin type 1 receptor inhibition enhances the extinction of fear memory. *Biol Psychiatry*. 2014 Jun 1;75(11):864-72. doi: 10.1016/j.biopsych.2013.08.024. Epub 2013 Oct 4. PMID: 24094510; PMCID: PMC3975818.
- 58: Zhang Z, Liu X, Schroeder JP, Chan CB, Song M, Yu SP, Weinshenker D, Ye K. 7,8-dihydroxyflavone prevents synaptic loss and memory deficits in a mouse model of Alzheimer's disease. *Neuropsychopharmacology*. 2014 Feb;39(3):638-50. doi: 10.1038/npp.2013.243. Epub 2013 Sep 11. PMID: 24022672; PMCID: PMC3895241.
- 59: Purcell RH, Papale LA, Makinson CD, Sawyer NT, Schroeder JP, Escayg A, Weinshenker D. Effects of an epilepsy-causing mutation in the SCN1A sodium channel gene on cocaine-induced seizure susceptibility in mice. *Psychopharmacology (Berl)*. 2013 Jul;228(2):263-70. doi: 10.1007/s00213-013-3034-8. Epub 2013 Mar 14. PMID: 23494229; PMCID: PMC3695079.
- 60: Bradner JM, Suragh TA, Wilson WW, Lazo CR, Stout KA, Kim HM, Wang MZ, Walker DI, Pennell KD, Richardson JR, Miller GW, Caudle WM. Exposure to the polybrominated diphenyl ether mixture DE-71 damages the nigrostriatal dopamine system: role of dopamine handling in neurotoxicity. *Exp Neurol*. 2013 Mar;241:138-47. doi: 10.1016/j.expneurol.2012.12.013. Epub 2012 Dec 31. PMID: 23287494; PMCID: PMC3600580.
- 61: Hong Y, Chan CB, Kwon IS, Li X, Song M, Lee HP, Liu X, Sompol P, Jin P, Lee HG, Yu SP, Ye K. SRPK2 phosphorylates tau and mediates the cognitive defects in Alzheimer's disease. *J Neurosci*. 2012 Nov 28;32(48):17262-72. doi: 10.1523/JNEUROSCI.3300-12.2012. PMID: 23197718; PMCID: PMC3518045.
- 62: Mohamad O, Song M, Wei L, Yu SP. Regulatory roles of the NMDA receptor GluN3A subunit in locomotion, pain perception and cognitive functions in adult mice. *J Physiol*.

2013 Jan 1;591(1):149-68. doi: 10.1113/jphysiol.2012.239251. Epub 2012 Sep 24. PMID: 23006484; PMCID: PMC3630778.

63: Noorian AR, Rha J, Annerino DM, Bernhard D, Taylor GM, Greene JG. Alpha- synuclein transgenic mice display age-related slowing of gastrointestinal motility associated with transgene expression in the vagal system. *Neurobiol Dis.* 2012 Oct;48(1):9-19. doi: 10.1016/j.nbd.2012.06.005. Epub 2012 Jun 18. PMID: 22722052.

64: Marvar PJ, Vinh A, Thabet S, Lob HE, Geem D, Ressler KJ, Harrison DG. T lymphocytes and vascular inflammation contribute to stress-dependent hypertension. *Biol Psychiatry.* 2012 May 1;71(9):774-82. doi: 10.1016/j.biopsych.2012.01.017. Epub 2012 Feb 22. PMID: 22361077; PMCID: PMC3354001.

65: Keebaugh AC, Mitchell HA, Gaval-Cruz M, Freeman KG, Edwards GL, Weinshenker D, Thomas JW. PRTFDC1 is a genetic modifier of HPRT-deficiency in the mouse. *PLoS One.* 2011;6(7):e22381. doi: 10.1371/journal.pone.0022381. Epub 2011 Jul 27. PMID: 21818316; PMCID: PMC3144895.

66: Xu X, Yang H, Lin YF, Li X, Cape A, Ressler KJ, Li S, Li XJ. Neuronal Abelson helper integration site-1 (Ahi1) deficiency in mice alters TrkB signaling with a depressive phenotype. *Proc Natl Acad Sci U S A.* 2010 Nov 2;107(44):19126-31. doi: 10.1073/pnas.1013032107. Epub 2010 Oct 18. PMID: 20956301; PMCID: PMC2973903.

67: Lee SE, Simons SB, Heldt SA, Zhao M, Schroeder JP, Vellano CP, Cowan DP, Ramineni S, Yates CK, Feng Y, Smith Y, Sweatt JD, Weinshenker D, Ressler KJ, Dudek SM, Hepler JR. RGS14 is a natural suppressor of both synaptic plasticity in CA2 neurons and hippocampal-based learning and memory. *Proc Natl Acad Sci U S A.* 2010 Sep 28;107(39):16994-8. doi: 10.1073/pnas.1005362107. Epub 2010 Sep 13. PMID: 20837545; PMCID: PMC2947872.