CURRICULUM VITAE

Prof. Pingyi Xu (徐评议)
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EDUCATION

1994: PhD, MD of Neurology, the First Affiliated Hospital
Sun Yat-sen University of Medical Sciences, P. R. CHINA
1986: Bachelor's in clinical medicine
Jiangxi Medical University, P. R. CHINA

POSITION HELD

2015.08 to present: Professor, Director, PhD supervisor & Postdoc advisor
Department of Neurology, the First Affiliated Hospital of Guangzhou Medical University.
2004.01 to 2015.08: Professor & PhD supervisor & Postdoc advisor
Department of Neurology, the First Affiliated Hospital of Sun Yat-sen University, CHINA;
2006.09 to 2007.09: Senior visiting scholar,
Neuroscience of University of Kansas State Medical Center, USA;
2003.01 to 2004.01: Associate professor & Deputy chief physician,
Department of Neurology, the First Affiliated Hospital of Sun Yat-sen University, CHINA;
2000.02 to 2002.10: Postdoc in Department of Neurology & Neuroscience, Methodist hospital
Baylor College of Medicine, USA;
1994.07 to 2000.02: Attending physician & Lecturer,
Department of Neurology, the First Affiliated Hospital of Sun Yat-sen University, CHINA.

ACADEMIC AWARDS AND HONORS

1. *National Science and Technology Progress Award (2nd Class),* State Ministry of Science and Technology, P. R. China, 2000
2. *Science and Technology Progress Award (1st Class),* the Ministry of Health, P. R. China, 1999
3. *Science and Technology Progress Award in Medical Health (2nd Class),* Guangdong province, P. R. China, 1999
4. *Guangdong Science and Technology Progress Award (2nd Class),* Guangdong province, P. R. China, 1999

MEMBER OF SOCIETY AND PROFESSIONAL BODY

1. *Membership of Movement Disorder Society* (2008 -)
2. *Guangdong Head of* National Committee of Clinical Quality for Parkinson's Disease (2019 -)
3. *Chief of* Guangdong Special Committee of Dubious Neural diseases, P. R. China (2018 -)
4. *Deputy Leadership of* National Specialty Committee of Pain, P. R. China (2017 -)
5. *Standing Committee Membership of* Neurological Geriatric Society, P. R. China (2017 -)
6. *Council Membership of* Chinese Neuroscience Association (2016 -)

7. *Standing Committee Membership of* Guangdong Neurological Association, P. R. China (2016 -)
8. *Deputy Director of* Parkinson's Disease & Move Disorder Association of Chinese plus Western Medicine in Guangdong Province, P. R. China (2016 -)
9. *Membership of* National Parkinson's Disease & Move Disorder Association of China (2008 -)
10. *Deputy Director of* Guangdong Anti-aging Association, P. R. China (2013 -)

REVIEWER, EDITOR AND EDITORIAL BOARD MEMBER OF JOURNALS

2017--- Member, Editorial Board, Neurotoxicity Research
2017--- Member, Editorial Board, Translational Neurodegeneration
2015--- Member, Editorial Board, Journal of Shanghai Jiao Tong University, P. R. China
2014--- Member, Editorial Board, Neuroimmunology & Neuroinflammation
2014--- Member, Editorial Board, Journal of Neurology, Neurosurgery and Psychiatry
2013--- Member, Editorial Board (official), Chinese Journal of Neurology, P. R. China
2010 to 2013 Member, Editorial Board, Chinese Journal of Neuroscience, Shanghai, P. R. China
2007 to 2009 Member, Editorial Board, Chinese Journal of Neuromedicine, P. R. China
2007 to 2008 Member, Editorial Board, American Academy of Nanomedicine

RECENT PUBLICATIONS (*as Corresponding author)

1.Le, WD*, **Xu, PY***, Jankovic, J, et al. Mutations in NR4A2 associated with familial Parkinson's disease. **Nature Genetics**. 2003.33(1):85-89.doi:10.1038/ng1066

2.**Xu, PY**, Liang, XL. A study of Wilson's disease gene encoded products and gene mutations. **Chin Med Genet J.** 2001 Jun;18(3):165-8. PMID: 11402441.

3.Hou GQ, Liang XL, **Xu PY**, Chen R. Copper transportation of WD protein in hepatocytes from Wilson disease patients in vitro. **World J Gastroenterol**. 2001 Dec;7(6):846-851. doi: 10.3748/wjg.v7.i6.846

4.**Xu, PY,** Jankovic, J., and Le, WD. Identification of a high frequency of mutation at exon 8 of the ATP7B gene in a Chinese population with Wilson's disease by fluorescent PCR. **Archives Neurology.** 2001, 58; 1879-1882. doi:10.1001 /archneur.58.11.1879

5.**Xu, PY,** Jankovic, J, and Le, WD. Association of homozygous 7048G7049 variant in intron 6 of Nurr1 gene with Parkinson's disease. **Neurology**. 2002, 6:881-4. doi: 10.1212/wnl.58.6.881

6.Pan TH, **Xu PY**, Xie WJ, et al. Upregulation of Nurr1 gene expression by dopamine receptor agonist pramipexole, in human neuroblastoma SHSY-5Y cells. **Movement Disorders** 2002,17:236.

7.**Xu, PY**, and Le, WD. Novel splicing variant of the human orphan nuclear receptor Nurr1 gene. **Chinese Medical Journal**. 2004, 117(6):899-902. PMID: 15198895

8.Chen, SuQin, **Xu, PY,** Wang,YM, et al. Distinct novel mutations affecting the same base in the NIPAI gene cause autosomal dominant hereditary spastic paraplegia in two Chinese families. **Human Mutations**.2005,25:135-141. doi: 10.1002 /humu. 20126

9. By Li*, Xinbo Liao, **Xu, PY***, et al. Dual androgen-response elements mediate androgen regulation of mmp-2 gene expression in prostate cancer cells. **AJA**. 2007 Jan;9(1):41-50. doi: 10.1111/J.1745-7262.2007.00226.x

10.W Zhu, **PY Xu**， M Fridkin, WD Le. Prevention and restoration of lactacystin induced nigrostriatal dopamine neuron degeneration by novel brain permeable iron chelators.**The FASEB Journal.** 2007;21(14):3835-44. doi: 10.1523/JNEUROSCI.0487-19.2019

11.AJ Sun, **Xu PY***, Benyi Li*, et al. Conditional Akt activation promotes androgen-independent progression of prostate cancer. **Carcinogenesis**. 2007 Mar;28(3):572-83. doi: 10.1093/carcin/bgl193

12.**Zhu W**, **Xu PY**, WD Le, et al. Comparison of neuroprotective and neurorestorative capabilities of rasagiline and selegiline against lactacystin-induced nigrostriatal dopaminergic degeneration. **J Neurochem.** 2008 Jun; 105(5): 1970-8. doi: 10.1111/j.1471-4159.2008.05330.x

13.WEI C, LIU NH, **XU PY**, et al. From bench to bedside: successful translational nanomedicine highlights of the third Annual meeting of the American academy of Nanomedicine. **Nanomedicine,** 2007, 3: 322–331. doi: 10.1016/j.nano.2007.10.005

14.Le W*****, Pan T, Huang M, **Xu P**, Zhu W. Decreased NURR1 gene expression in patients with Parkinson's disease. **J Neurol Sci**. 2008 Oct 15;273(1-2):29-33. doi: 10.1016/j.jns.2008.06.007

15.L. Wei, M. Lei,C. Sun, F. Luo, Y. Li, L. Ding, Z. Liu, **P Xu***. Action of Wnt/β-catenin Pathway by expogeneous Wnt1 Protects SH-SY5Y cells Againt 6-Hydroxydopamine Toxicity**. Translational Neurodegeneration**. 2013,49(1):105-15. doi: 10.1007/s12031-012-9900-8

16.H Liu, L Wei, Q Tao, M Ming, **PY Xu**, W Le*. Decreased NURR1 and PITX3 gene expression in Chinese patients with Parkinson's disease, **Eur J Neurol**,49(1):105-15,2013. doi: 10.1111/j.1468-1331.2011.03644.x

17.SUN C, W L, LIU ZL, **P Xu***. HLA-DRB1 Alleles Are Associated with the Susceptibility to Sporadic Parkinson’s Disease in Han Chinese Population. **Plos One**,7(11): e48594,2012. doi: 10.1371/journal.pone.0048594

18.Sun C, F Luo, Wei L, M Lei, Z Liu, W Le, **P Xu***. Association of serum uric acid levels with the progression of Parkinson's disease in Chinese patients. **Chinese Med J**, 2012 Feb;125(4):583-7. PMID: 22490478

19.F Luo, L Wei, C Sun, Yi Li, Z Liu, **P Xu***. HtrA2/Omi is involved in 6-OHDA induced endoplasmic reticulum stress in SH-SY5Y cells, **J Mol Neurosci**,2012, 47(1): 120-127. doi: 10.1007/s12031-011-9694-0

20.LI Y, Luo F, Zhou T, Wei L, Liu Z, **Xu PY***. Knockdown of glycogen synthase kinase 3 beta attenuates -hydroxydopamine-induced apoptosis in SH-SY5Y cells.**Neurosci Lett**,487: 41-46,2011. doi: 10.1016/j.neulet.2010.09.070

21.Luo F, Li C, Ondo WG, **Xu P,** Xie W, Le W*. The long-term effects of the dopamine agonist pramipexole in a proposed restless legs syndrome animal model, **Sleep Medicine**,285(32):181-9,2010.

22.Zhou T, Zhang Y, Macchiarulo A, Yang Z, Cellanetti M, Coto E, **Xu P**, Pellicciari R, Wang L*. Novel polymorphisms of nuclear receptor SHP associated with functional and structural changes, **JBC**,85(134):223-234,2010. DOI: 10.1074/jbc.M110.133280

23.Li B, Sun A, Youn H, Hong Y, Terranova PF, Thrasher JB, **Xu P***, Spencer D. Conditional Akt activation promotes androgen-independent progression of prostate cancer. **Carcinogenesis**,28(3):572-83,2007. doi: 10.1093/carcin/bgl193

24.L Zhang, C Sun, **PY Xu***. Dopamine agonists exert Nurr1-inducing effect in peripheral blood mononuclear cells of patients with Parkinson Disease. **Chinese medical journal,** 2015 Jul 5;128(13):1755-60. doi: 10.4103/0366-6999.159349

25.M Lei, T Tiernan, **PY Xu* and S Li*.** Soluble Aβ Oligomers Impair Hippocampal LTP by Disrupting Glutamatergic/GABAergic Balance. **Neurobiology of Disease.** 2016Jan;85:111-121. doi:10.1016/j.nbd.2015.10.019.

26.Li, Shao-Min, Ming-Shu Mo, and **PY Xu***. Progress in mechanisms of acetylcholinesterase inhibitors and memantine for the treatment of Alzheimer's disease. **Neuroimmunology and Neuroinflammation.** 2015 Oct;2 (4): 274-280.doi:10.4103/2347-8659.167305

27.Lei Wei, L Ding, MS Mo, M Lei, LM Zhang, K Chen and **PY Xu***. Wnt3a protects SH-SY5Y cells against 6-hydroxydopamine toxicity by restoration of mitochondria function. **Translational Neurodegeneration**. 2015 Jun 16;4:11. doi: 10.1186/s40035-015-0033-1.

28.M Mo, C Sun, Li Yi, L Zhang, G Li, Z Liu, **PY Xu***. Association Analysis of Proteasome Subunits and Transporter Associated with Antigen Processing on Chinese Patients with Parkinson's Disease. **Chinese medical journal,** 2016 May 5;129(9):1053-8. doi: 10.4103/0366-6999.180513.

29. L Zhang, L Cen1, L Wei, Mu Mo, J Feng, C Sun, Y Xiao, Q Luo, S Li, X Yang, and **PY Xu***. Enhancing Wnt/β-catenin activity protects PC12 Cells against rotenone toxicity through Nurr1 induction. **Plos One**, 2016 Apr 5;11(4):e0152931. doi: 10.1371/journal.pone.0152931.

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31. Y. Zhang, Feng. Tan, **P Xu*** and **S Qu***. Recent advance in the relationship between excitatory amino acid transporters and Parkinson's disease. **Neural Plasticity**. 2016;2016:8941327. doi: 10.1155/2016/8941327.

32. Xiao Y, Cen L, Mo M, Chen X, Huang S, Wei L, Li S, Yang X, Qu S, Pei Z, **P Xu***. Association of IGF1 gene polymorphism with Parkinson's disease in a Han Chinese population. **J Gene Med**. 2017 Apr;19(4). doi: 10.1002/jgm.2949.

33.YL Zhang, F Tan, **PY Xu*, SG Qu***. Recent advance in the relationship between excitatory amino acid transporters and Parkinson’s disease. **Translational Neurodegeneration.** 2016.DOI: 10.1155/2016/8941327

34.Cen L, Xiao Y, Wei L, Mo M, Pei Z, **P Xu***. Association of DYRK1A polymorphisms with sporadic Parkinson's disease in Chinese Han Population. **Neurosci Lett.** 2016 Oct 6;632:39-43. doi: 10.1016/j.neulet.2016.08.022.

35.L Zhang, L Cen, S Qu, L Wei, M Mo, Q Luo, S L, X Yang, **P Xu***. Enhancing Beta-Catenin Activity via GSK3beta Inhibition Protects PC12 Cells against Rotenone

Toxicity through Nurr1 Induction. **PLOS ONE**, 2016 Apr 5;11(4):e0152931. doi: 10.1371/journal.pone.0152931

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37.Zhang Y, He X, Wu X, Lei M, Wei Z, Zhang X, Wen L, Xu P, Li S,Qu S. Rapamycin upregulates glutamate transporter and IL-6 expression in astrocytes in a mouse model of Parkinson's disease. **Cell Death& Dis**. 2017; 8(2): e2611. doi: 10.1038/cddis.2016.491.

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39.He B, Yao Q, Liang Z, Lin J, Xie Y, Li S, Wu G, Yang Z, **P Xu***. The dose of intravenously transplanted bone marrow stromal cells determines the therapeutic effect on vascular remodeling in a rat model of ischemic stroke. **Cell Transplantation**. 2016; 25(12):2173-2185. doi:10.3727/096368916X692627

40.Z Yang, H Ye, J Lin, Y Xie, S Li, Q Yao, **P Xu***. Successful outcome of intra-arterial tissue plasminogen activator treatment for patient with acute middle cerebral artery occlusion beyond the 6-hour time window. **International Journal of Clinical and Experimental Medicine**. **The International Journal of Biochemistry & Cell Biology**. 2016 Dec 13;25(12):2173-2185. doi: 10.3727/096368916X692627.

41.X Chen, Y Xiao, L Wei, Y Wu, J Lu, W Guo, S Huang, M Zhou, M Mo, Z Li, L Cen, S Li, C Yang, Z Wu, X Yang, S Hu, Z Pei, S Qu, **P Xu***. Association of DNMT3b gene variants with sporadic Parkinson's disease in the Chinese Han population. **J Gene Med**. 2017 Nov;19(11):360-365. doi: 10.1002/jgm.2991.

42.Cen, L, Yang, C Huang S, Zhou M, Tang, X, Li K, Guo W, Wu Z, Mo M, Xiao Y, Chen X, Yang, X, Huang Qi, Chen, C , Qu, S, **P Xu***. Peripheral Lymphocyte Subsets as a Marker of Parkinson's Disease in a Chinese Population. **Neuroscience Bulletin**. 2017 Oct;33(5):493-500. doi: 10.1007/s12264-017-0163-9.

43.X Tang, L Jiao, Meige Zheng, Y Yan, Q Nie, T Wu, X Wan, G Zhang, Y Li, S Wu, B Jiang, H Cai, **P Xu***， J Duan*, X Lin*.Tau deficiency down-regulated transcription factor rthodenticle homeobox 2 expression in the dopaminergic neurons in ventral tegmental area and caused no obvious motor deficits in mice. **Neuroscience**, 2018 Mar 1;373:52-59. doi: 10.1016/j.neuroscience.2018.01.002.

44.Eyo UB, Peng J, Murugan M, Mo M, Lalani A, **Xu P**, Xie P, Margolis D, Wu LJ*. 2017. Regulation of physical microglia-neuron interactions by fractalkine signaling after status epilepticus, **eNeuro**, 2017 Jan 16;3(6). pii: ENEURO.0209-16.2016. doi: 10.1523/ENEURO.0209-16.2016

45.Xiao YS, Huang SX; Li GH, Chen, X, Mo MS, Zhang Li, Chen Cj, Guo WY, Cen L, ZhouM, Wu Zh, Long SM, Li SM Yang XL, Qu SG, Pei Z*****, **P Xu***. Iron promotes α-synuclein aggregation and transmission by inhibiting TFEB-mediated

autophagosome-lysosome fusion. **J Neurochem.** 2018 Apr;145(1):34-50. doi: 10.1111/jnc.14312.

46.U B. Eyo, M Mo, M-H Yi, M Murugan, J Liu, R Yarlagadda, D J. Margolis, **P Xu*, L-J Wu***. P_2Y_{12} receptor-dependent translocation mechanisms gate the changes of microglial landscape. **Cell reports**. 2018 April 24; 23(4): 959–966. doi:10.1016/j.celrep.2018.04.001.

47.X Chen, Y Xiao, W Guo, M Zhou, S Huang, M Mo, Z Li, G Li, H Liu, G Peng, Z Wu, Y Wu, C Yang, Z Pei, C Chen, **P Xu***. Relationship between Variants of 17 newly loci and Parkinson's disease in a Chinese population. **Neurobiology of Aging**. 2019 Jan;73:230.e1-230.e4. doi: 10.1016/j.neurobiolaging.2018.08.017

48.Z Jiao, W Zhang, C Chen, X Chen, M Zhou, G Peng, H Liu, J Qiu, Y Lin, S Huang, M Mo, X Yang*, S Qu*, **P Xu***. Gene dysfunction mediates immune response to dopamnergic degeneration in Parkinson's disease. **ACS Chemical Neuroscience**, 2019 Feb 20;10(2):803-811. doi: 10.1021/acschemneuro.8b00373.

49.Li Z, Chen J, Cheng J, Huang S, Hu Y, Wu Y, Li G, Liu B, Liu X, Guo W, Huang S, Zhou M, Chen X, Xiao Y, Chen C, Chen J, Luo X, **P Xu***. Acupuncture Modulates the Cerebello-Thalamo-Cortical Circuit and Cognitive Brain Regions in Patients of Parkinson's Disease with Tremor. **Front Aging Neurosci**. 2018 Jul 5;10:206. doi: 10.3389/fnagi.2018.00206.

50. Huang S, Tong H, Lei M, Zhou M, Guo W, Li G, Tang X, Li Z, Mo M, Zhang X, Chen X, Cen L, Wei L, Xiao Y, Li K, Huang Q, Yang X, Liu W, Zhang L, Qu S, Li S, **P Xu***. Astrocytic glutamatergic transporters are involved in Aβ-induced synaptic dysfunction. **Brain Res.** 2018 Jan 1;1678:129-137. doi: 10.1016/j.brainres.2017.10.011.

51.Mo M, Xiao Y, Huang S, Cong S, Cen L, Chen X, Zhang L, Yang X, Qu S, He J, **P Xu***. Dopaminergic neurons show increased low-molecular-mass protein 7 activity induced by 6-hydroxydopamine in vitro and in vivo. **Translational Neurodegeneration**. 2018 Aug 17;7:19. doi: 10.1186/s40035-018-0125-9.

52.Z Li, YW Lin, MM Zhou, QD Cai, XC Li, ZH Wu, XJ Chen, HQ Liu, X Chen, SX Huang, MS Mo, XJ Li, GY Peng, WY Guo, GH Li, JW Qiu, WL Zhang, XL Yang, CJ Chen, XQ Zhu, J Lu, L Zhang, M Zhuo, J Chen, XD Luo, **P Xu***. Reduced regional activity and functional connectivity within sensorimotor network in Parkinson's patients with restless legs syndrome. **Mol Pain**. 2019 Jan-Dec;15:1744806919882272. doi: 10.1177/1744806919882272.

53.Guo W, Zhou M, Qiu J, Lin Y, Chen X, Huang S, Mo M, Liu H, Peng G, Zhu X, **Xu P***. Association of LAG3 genetic variation with an increased risk of PD in Chinese female population. J **Neuroinflammation**. 2019 Dec 17;16(1):270. doi: 10.1186/s12974-019-1654-6.

54.Z Wei, XJ Meng, R E Fatimy, BW Sun, DM Mai, JF Zhang, AL Zeng, **P Xu**, SG Qu, A M. Krichevsky, Dennis J. Selkoe and SM Li. Environmental Enrichment Prevents Aβ Oligomer-induced Synaptic Dysfunction through miRNA-132 and HDAC3 Signaling Pathways. **Neurobiol Dis**. 2019 Oct 24;134:104617. doi: 10.1016/j.nbd.2019.104617.

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56.MS Mo, Ukpong B. Eyo, ML Xie, JY Peng, Dale B. Bosco, Anthony D. Umpierre, DS Tian, **P Xu*, LJ Wu***. Microglial P2Y12 Receptor Regulates Seizure-Induced Neurogenesis and Immature Neuronal Projections. **J Neurosci**. 2019 Nov 20;39(47):9453-9464. doi: 10.1523/ JNEUROSCI.0487-19.2019.

57.L Wei, L Ding, C Chen, MS Mo, J Zou, ZZ Lu, H Li, HT Wu, YQ Dai, **P Xu* & ZQ Lu***. Wnt1 promotes EAAT2 expression and mediates the protective effects of astrocytes on dopaminergic cells in Parkinson's disease. **Neural Plasticity**. 2019 Sep 9;2019:1247276. doi: 10.1155/2019/1247276.

58.Z Wei, X Meng, R E Fatimy, Bowen Sun, D Mai, J Zhang, A Zeng, **P Xu**, S Qu, Anna M. Krichevsky, Dennis J. Selkoe1 and S Li. Environmental Enrichment Prevents Aβ Oligomer-induced Synaptic Dysfunction through miRNA-132 and HDAC3 Signaling Pathways. **Neurobio of Disease.** 2019 Oct 24;134:104617. doi: 10.1016/j.nbd.2019.104617.

59.X Chen, YS Xiao, MM Zhou, YW Lin, WY Guo, SX Huang, JW Qiu, GY Peng, MS Mo, Z Li, XQ Zhu, **P Xu***. Genetic analysis of NUS1 in Chinese patients with Parkinson's disease. **Neurobiology of Aging**. 2019 Sep 10. pii: S0197-4580(19)30322-7. doi: 10.1016/j.neurobiolaging.2019.09.002.

60.XJ Wu, XG Meng, F Tan, ZG Jiao, XP Zhang, HC Tong, XL He, XD Luo*, **P Xu*, S Qu***. The 4b-4c Loop of Excitatory Amino Acid Transporter 1 Containing Four Critical Residues Essential for Substrate Transport. ***J Biomolecular Structure & Dynamics* (TBSD)**. 2019 Sep 15:1-11. doi: 10.1080/07391102.2019.1664935.

61. G Peng, J Qiu, MM Zhou, SX Huang, WY Guo, YW Lin, HQ Liu, X Chen, Z Li, GH Li, WL Zhang, XJ Li, ZH Wu, CH Yang, YJ Wu, XQ Zhu*, MS Mo*, and **P Xu***. Analysis of cerebrospinal fluid soluble TREM2 and polymorphisms in sporadic Parkinson's disease in a Chinese Population. **J Mol Neurosci.** 2019 Dec 12. doi: 10.1007/s12031-019-01424-7.

62.Y Liu, T Du, WL Zhang, WY Lu, ZH Pengc , SQ Huang XD Sun, XQ Zhu, CJ Chen, LC Qian , L Wen, **P Xu* & YL Zhang***. Modified Huang-Lian-Jie-Du Decoction Ameliorates Aβ Synaptotoxicity in a Murine Model of Alzheimer's Disease. **Oxidative medicine and cellular longevity.** 2019 Nov 3;2019:8340192. doi: 10.1155/2019/8340192.

63.X Chen, YS Xiao, MM Zhou,YW Lin, WY Guo, SX Huang, JW Qiu, GY Peng, MS Mo, Z Li, XQ Zhu, P Xu*. Genetic analysis of *NUS1* in Chinese patients with Parkinson's disease. **Neurobio of Aging**. 2019 Sep 10. pii: S0197-4580(19)30322-7. doi: 10.1016/j.neurobiolaging.2019.09.002.

64.ZG Li, HL Ye, XL Cai, WW Sun, B He, **P Xu***, ZH Yang*****. Bone marrow-mesenchymal stem cells modulate microglial activation in the peri-infarct area in rats during the acute phase of stroke. **Brain Research Bulletin.** 2019 Nov;153:324-333. doi: 10.1016/j.brainresbull.2019.10.001.

65. Z Li, HQ Liu, XD Xu, Grace Hammel, YZ Fan, Z Li, YJ Xu, CY Zheng, B Wu, XM Qiu, PH Ye, ZL Zhang, ZY Yue, Y Ren, XQ Zhu, XK Zhang, XD Luo, **P Xu*.** The Gut Microbial Profiles in Parkinson's disease: A systematic review. **Translational Neurodegeneration**. 2020. REVISED.

66.B Shen, Y Pan, X Jiang, ZG Wu, J Zhu, JD Dong, WB Zhang, **P Xu**, YK Dai, Y Gao, CY Xiao, L Zhang*. Altered putamen and cerebellum connectivity among different subtypes of Parkinson's disease. **CNS Neuroscience & Therapeutics**. 2019 Nov 15. doi: 10.1111/cns.13259.

67. WL Zhang, MM Zou, WY Lu, YQ Li, F Gao, XD Xu, YW Lin, JW Gong, XK Zhang, LY Ding, ZL Zhang, GH Li, X Chen, XD Sun, XQ Zhu, P Xu*, L Zhang*. CNTNAP4 Deficiency in Dopaminergic Neurons Initiates Parkinsonian Phenotypes. **Theranostics.** 2020.10(7): 3000-3021. doi: 10.7150/thno.40798, IF：8.063.

68.Z Wu, X Jiang, M Zhong, B Shen, J Zhu, Y Pan, JD Dong, **PY Xu**, WB Zhan, **Li Zhang*.** Wearable Sensors Measure Ankle Joint Changes of Patients with Parkinson's disease Before and After Acute Levodopa Challenge. **Parkinson's Disease**. 2020, accepted.

69.XQ Zhu, Y He, ZR Liu, ZT Zhu, YH He, JW Qiu, DQ Liu, MS Mo, P Wang, XM Tian*****, **PY Xu***. A novel carbazole-based hydrogen-sulfide donor suppresses seizures and upregulates ATP-sensitive potassium channels. **Applied Materials Today**. 2019. https://doi.org/10.1016/j.apmt.2020.100559.

70.X Jiang, Z Wu, M Zhong, B Shen, J Zhu, Y Pan, J Zhang, WB Zhang, **P Xu**, CY Xiao, **Li Zhang*.** Abnormal Gray Matter Volume and Functional Connectivity in Parkinson's Disease with Rapid Eye Movement Sleep Behavior Disorder. **Frontiers in Neurology**, accepted.2020.

71.SS Lei, Y He1, ZT Zhu, ZR Liu, YW Lin, YH He, S Du, X Chen, **P Xu*, XQ Zhu***. Inhibition of NMDA receptors downregulate astrocytic AQP4 to suppress seizures. **Cellular & Mol Neurobio**. 2020. DOI: 10.1007/s10571-020-00813-6**..**

72.WL Zhang, JW Gong, LY Ding, ZL Zhang, X Chen, WY Guo, XK Zhang, XL Yang, GY Peng, YW Lin, F Gao, YQ Li, XQ Zhu, AG Xuan, S Wang, XD Sun, YL Zhang*****, **P Xu***. Functional validation of a human GLUD2 variant in a murine model of Parkinson's disease. **Cell Death& Dis**.2020.recvised

73.GH Li, P Li, L Lu, Z Li, MS Mo, X Chen, GY Peng, YW Lin, JW Qiu, XT Liu, **P Xu***.The outcome and burden of Chinese patients with neurodegenerative diseases: a 10-year clinical feature study. IJCP(international Journal of Clinical Practice). 2020. DOI: 10.1111/ijcp.13534.

74.L Wang, GH Li, R Ogunti, M Puppala, SY Chen, TC He, XH Yu, **P Xu**, A Nezamabadi, A Frost, ST. C. Wong*, R. Jackson. Intelligent-augmented prediction of readmissions in COPD and pneumonia with limited information at day 1 of patient admission to improve outcomes. JAMA Internal Medicine.2020. submitted.

75.X Chen, YW Lin, WY Guo, MM Zhou, ZH Wu, JW Qiu, GY Peng, ZL Zhang, LY Ding, Y Ren, PH Ye, XK Zhang, XL Yang, XQ Zhu, **P Xu***. The detective analysis of six bone derived factors in plasma and cerebrospinal fluid of Chinese patients with Parkinson's disease. Move Dis.2020. submitted.

PATENTS

1. 2017 Customised information management system for early diagnostic biomarkers and comprehensive diagnostic project in Parkinson's disease. Application (No. 2017R11L404161), Applicants: Pingyi Xu, Kang Ren, Zhuohua Wu, Chaohao Yang, Minming Zhang, Weiguo Liu, Li Zhang
2. 2017 Screening application system of prodromal Parkinson's disease (No. 2017R11L40382), Applicants: Pingyi Xu, Kang Ren, Zhuohua Wu, Chaohao Yang, Minming Zhang, Weiguo Liu, Li Zhang
3. 2019 TREM2 protein detection kit in diagnosis and treatment of Parkinson's disease (No. 201910462078.8), Applicants: Pingyi Xu, Mingshu Mo, Xiaoqin Zhu, Wenyuan Guo, Guoyou Peng, Jiewen Qiu, Guihua Li, Zhe Li, Shuxuan Huang, Miaomiao Zhou, Hanqun Liu, Xiang Chen, Xingjian Li
4. 2019 Biomarkers for diagnosis and treatment of Parkinson's disease (No. 201910461749.9), Applicants: Pingyi Xu, Wenyuan Guo, Mingshu Mo, Xiaoqin Zhu, Guoyou Peng, Jiewen Qiu, Xingjian Li, Zhe Li, Shuxuan Huang, Miaomiao Zhou, Xiang Chen, Hanqun Liu
5. 2019 Preparation method of benzazole derivative and its application for H2S donor (No. 201910164930.3), Applicants: Xiaoqin Zhu, Pingyi Xu, Hong Chen, Shuisheng Lei, Wenlong Zhang, Yan He, Jiewen Qiu, Yuwan Lin, Ziting Zhu

RESEARCH GRANTS OBTAINED IN RECENT YEARS

1. 2018-2022 LAG-3 regulating HLA-DR gene involved in the degeneration of DA neurons in Parkinson's disease (No. 81870992), ￥560,000
2. 2018-2022 Long-term environmental enrichment prevents amyloid-induced synaptic dysfunction (No. 81870856), ￥560,000
3. 2010 Molecular pathology of Parkinson's disease (No. 2011CB510000), ￥1,040,000
4. 2007-2010 Biomarkers and targeted therapy for early diagnosis of Parkinson's disease (No. 2007AA02Z460), ￥4,000,000
5. 2011-2013 Relationship between the methylation mechanism of the CpG site in the promoter region of Nurr1 gene and dopamine metabolic disorders (No. 81071032), ￥350,000
6. 2013-2016 Mechanism of ER stress and the irregultation of HtrA2/Nurr1 pathway induced by α-syn protein accumulation in DA neurons (No. 81271428), ￥650,000
7. 2014-2018 Association analysis of HLA gene polymorphism with Parkinson's Disease and its molecular mechanism (No. 81471292), ￥700,000
8. 2014-2019 Molecular mechanism of Nurr1 gene on Parkinson's disease (No. 81430021), ￥1,000,000
9. 2014-2019 Decrease in MHC antigen presentation mediates inflammation and immune dysfunction of DA neuron degeneration (No. U1503222), ￥1,330,000
10. 2015-2018 HLA gene complex involved in the immune-inflammation of PD (No.2015A030311021), ￥300,000
11. 2016-2019 Fatigue mechanism of MHC (HLA) antigen presentation mediating the variation of DA neuron (No. 201504281820463), ￥1,000,000

12. 2016-2020 Interaction between pyrethroid insecticides and genetic factors in the pathogenesis of Parkinson's disease in Xinjiang province (No. U1603281), ￥1,300,000
13. 2016-2020 Early diagnostic biomarker and comprehensive diagnostic index system of Parkinson's disease (No. 2016YFC1306601), ￥6,040,000
14. 2018-2022 Early comprehensive diagnostic technology of Parkinson's disease (No. 2018-1202-SF-0019), ￥4,500,000
15. 2017-2021 Comprehensive treatment of Parkinson's disease (No. 2017YFC1306002), ￥300,000