**Curriculum Vitae**

JING ZHANG, MD, MS

**HIGHLIGHTS OF QUALIFICATIONS**

 **• Background in clinical medicine**

 **• Extensive laboratory skills**

 **• 10 years teaching experience**

**• 25 years research experience**

**• Dedicated research scientist**

**• Good communication skills**

**ADDRESS**

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**CURRENT POSITION**:

Scientist, assistant, Department of Pharmacology and Chemical Biology, Emory University School of Medicine

**EDUCATION**:

1997-2000 Master of Medicine, Neurobiology, Xuzhou Medical College, Xuzhou, China

1990-1995 MD, Clinical Medicine, Xuzhou Medical College, Xuzhou, China

**CLINICAL/RESEARCH TRAINING AND JOB EXPERIENCE**

2023 – present Scientist, assistant, Department of Pharmacology and Chemical Biology, Emory University School of Medicine (Collect data; Maintain cell lines for the lab; Troubleshoot and perform routine laboratory maintenance; Train lab members; Lab management and order)

2015 – 2023 Research Specialist, Lead, Department of Pharmacology and Chemical Biology, Emory University School of Medicine (Collected data with high efficiency; Generated cell culture for lab use; Troubleshooted and performed routine maintenance of lab equipment; Trained lab members; Lab management and orders)

2011 – 2015 Research Specialist, Department of Pharmacology and Chemical Biology, Emory University School of Medicine (Used multiple approaches study glutamate receptor mutations in human diseases at the single channel level; Performed laboratory maintenance activities. Trained five lab members for proper operation of equipment and laboratory techniques)

2010 – 2011 Research Specialist, Department of Pathology, Winship Cancer Institute Emory University School of Medicine (Used molecular and cell biological techniques to study signaling pathways that contribute to brain tumor formation; Performed laboratory maintenance activities)

2000 – 2005 Instructor, Department of Pharmacology, Xuzhou Medical College

2000 – 2005 Secretary, Department of Pharmacology, Xuzhou Medical College

1995 – 2000 Teaching Assistant, Department of Pharmacology, Xuzhou Medical College

**EXPERIMENTAL SKILLS**:

Molecular and Cell biology: Cell culture; Cell staining; Immunofluorescence; ELISA; Western blot; Plasmid transformation; Transfection; Molecular cloning; PCR; Flow cytometry; HPLC

Electrophysiology: Oocyte preparation, Oocytes recording, RNA microinjection, Whole cell current clamp recording, Single channel recording (cell attach and outside-out)

Animal manipulation: Injections (IP, IM, IV, SC); Anesthesia and surgery; Intracranial cannulation and microinjection; Animal models for neurological diseases, Behavioral tests

**AWARDS, SCHOLARSHIP AND HONORS**:

2009 2nd Prize for Science and Technology Advancement, Government of Xuzhou, China

2005 1st Prize for Science and Technology Advancement, Government of Xuzhou, China

2004 Employee of the Year, Xuzhou Medical College,

2003 - 2005 Distinguished Young Teacher, Xuzhou Medical College,

1990 - 1995 Scholarship for Excellent Medical Student, Xuzhou Medical College

**RESEARCH SUPPORT**

2004-2005 Grant for young investigators, Xuzhou Medical College

2000-2002 Medical Research Grant, Health Department of Jiangsu Province, China

**SLECTED PUBLICATIONS**:

1. Xie L, McDaniel MJ, Perszyk RE, Kim S, Cappuccio G, Shapiro KA, Muñoz-Cabello B, Sanchez-Lara PA, Grand K, **Zhang J**, Nocilla K, Sheikh R, Dulcet LA, Romano R, Pierson TM, Yuan H, Myers SJ, Traynelis SF (2022) Functional effects of disease-associated variants reveal that the S1-M1 linker of the NMDA receptor critically controls channel opening. *Manuscript submitted to CMLS*

2. Perszyk RE, Zheng Z, Banke TG, **Zhang J**, Xie L, McDaniel MJ, Katzman BM, Pelly SC, Yuan H, Liotta DC, Traynelis SF. The Negative Allosteric Modulator EU1794-4 Reduces Single-Channel Conductance and Ca2+ Permeability of GluN1/GluN2A N-Methyl-d-Aspartate Receptors. *Molecular Pharmacology* May 2021, 99 (5) 399-411.

3. Perszyk RE, Swanger SA, Shelley C, Khatri A, Fernandez-Cuervo G, Epplin MP, **Zhang J**, Le P, Garnier-Amblard E, Yuan H, Menaldino DS, Liotta DC, Liebeskind LS, Traynelis SF (2020) Biased modulation of a ligand-gated ion channel. *Nature Chemical Biology,* 16(2):188-196. doi: 10.1038/s41589-019-0449-5.

4. Fernández-Marmiesse A, Kusumoto H, Rekarte S, Roca I, **Zhang J**, Myers SJ, Traynelis SF, Couce Mª L, Gutierrez-Solana L, Yuan H (2018) A novel missense mutation in *GRIN2A* causes a non-epileptic neurodevelopmental disorder with dystonia. *Movement Disorders,* 33(6):992-999. doi: 10.1002/mds.27315.

5. Gao K, Tankovic A, Zhang Y, Kusumoto H, **Zhang J**, Chen W, XiangWei W, Shaulsky GH, Hu C, Traynelis SF, Yuan H, Jiang Y (2017) A *de novo* loss-of-function *GRIN2A* mutation associated with childhood focal epilepsy and acquired epileptic aphasia. *PLoS One,* 12(2):e0170818. doi: 10.1371/journal.pone.0170818

6. Swanger SA, Chen C, Wells G, Burger PB, Tankovic A, Bhattacharya S, Strong KL, Hu C, Kusumoto H, **Zhang J**, Adams DR, Millichap JJ, Petrovski S, Traynelis SF, Yuan H Mechanistic insight into NMDA receptor dysregulation by disease-associated rare variants in the GluN2A and GluN2B agonist binding domains. *American Journal of Human Genetics,* 99(6):1261-1280. doi: 10.1016/j.ajhg.2016.10.002.

7. Yuan H, Hansen KB, **Zhang J**, Pierson TM, Markello TC, Fuentes Fajardo KV, Holloman CM, Golas G, Adams DR, Boerkoel CF, Gahl WA, and Traynelis SF (2014) Functional analysis of a de novo GRIN2A missense mutation associated with early-onset epileptic encephalopathy. *Nature Communications,* 5:3251 doi: 10.1038/ncomms4251.

8. Ding L, Yuan C, Wei F, Wang G, **Zhang J**, Bellail A.C, Zhang Z, Olson J.J., Hao C. Cisplatin Restores TRAIL apoptotic pathway in Glioblastoma-Derived Stem Cells through Up-regulation of DR5 and Down-regulation of c-FLIP. *Cancer Investigation*, 2011,Oct;29(8):511-20.

9. **Zhang J**, Li M, Guo JD, Gu SL, Dai TJ. Neuroprotective effects of sodium ghydroxybutyrate on neuronal injury induced by hypoxia in cultured cerebral cortical neurons of rats. *Chinese Journal of Pharmacology and Toxicology*, 2004, 18(5): 327-332.

10. **Zhang J**, Guo JD, Xing SH, Gu SL. The protective effect of melatonin on cerebral ischemia-reperfusion injury in gerbils. *Acta Pharmaceutica Sinica*, 2002, 37(5):329-333.

11. Yan M, **Zhang J**, Gao Y, Wang T. Simultaneous determination of Phenobarbital sodium, phenytoin sodium and carbamazepine in serum by reversed-phase high performance liquid chromatography. *Acta Academiae Medicinae Xuzhou*, 2002, 22(4):198-200