

# Stanford

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## Hansen Chen

Postdoctoral Research Fellow, Neurosurgery

### Bio

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#### HONORS AND AWARDS

- Young Investigator Award, 13th International Symposium on Healthy Aging (03/2018)
- Best Oral Presentation, The 8th Symposium for Cross-straits, Hong Kong and Macao on Free Radical Biology and Medicine (09/24/2018)
- Travel Award, 2018 World life Science (10/29/2018)
- Ph.D. studentship, University of Hong Kong (2011-2015)

#### PROFESSIONAL EDUCATION

- B.Sc., Sun Yat-Sen University , Biochemistry (2011)
- PhD, University of New Mexico , Exchange student (2014)
- Ph.D., The University of Hong Kong , Medicine (2016)

#### STANFORD ADVISORS

- Heng Zhao, Postdoctoral Faculty Sponsor

#### COMMUNITY AND INTERNATIONAL WORK

- Reviewer
- Volunteer
- Reviewer
- Reviewer

#### LINKS

- Publons/Researcher ID: <https://publons.com/researcher/1282246/hansen-chen/>
- My ORCID: <https://orcid.org/0000-0001-9506-6894>
- My Bibliography: <https://www.ncbi.nlm.nih.gov/myncbi/1ZkoS7kaa9cUb7/bibliography/public/>

### Research & Scholarship

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#### RESEARCH INTERESTS

- Brain and Learning Sciences

#### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Immune and Nervous Systems Interaction; Ischemic Postconditioning; Optogenetics

## Publications

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### PUBLICATIONS

- **Promotion of Momordica Charantia polysaccharides on neural stem cell proliferation by increasing SIRT1 activity after cerebral ischemia/reperfusion in rats.** *Brain research bulletin*  
Ma, J., Fan, H., Cai, H., Hu, Z., Zhou, X., Li, F., Chen, H., Shen, J., Qi, S.  
2021
- **Peroxynitrite activates NLRP3 inflammasome and contributes to hemorrhagic transformation and poor outcome in ischemic stroke with hyperglycemia.** *Free radical biology & medicine*  
Chen, H. n., Guan, B. n., Chen, S. n., Yang, D. n., Shen, J. n.  
2021; 165: 171–83
- **Proteomics-Guided Study on Buyang Huanwu Decoction for Its Neuroprotective and Neurogenic Mechanisms for Transient Ischemic Stroke: Involvements of EGFR/PI3K/Akt/Bad/14-3-3 and Jak2/Stat3/Cyclin D1 Signaling Cascades** *MOLECULAR NEUROBIOLOGY*  
Chen, X., Chen, H., He, Y., Fu, S., Liu, H., Wang, Q., Shen, J.  
2020
- **Targeting Myeloperoxidase (MPO) Mediated Oxidative Stress and Inflammation for Reducing Brain Ischemia Injury: Potential Application of Natural Compounds** *FRONTIERS IN PHYSIOLOGY*  
Chen, S., Chen, H., Du, Q., Shen, J.  
2020; 11: 433
- **Potential Natural Compounds for Preventing 2019-nCoV Infection**  
Chen, H., Du, Q.  
[www.preprints.org](http://www.preprints.org).  
2020
- **Therapeutic Targets of Oxidative/Nitrosative Stress and Neuroinflammation in Ischemic Stroke: Applications for Natural Product Efficacy with Omics and Systemic Biology.** *Pharmacological research*  
Chen, H. n., He, Y. n., Chen, S. n., Qi, S. n., Shen, J. n.  
2020: 104877
- **A Highly Selective and Sensitive Chemiluminescent Probe for Real-Time Monitoring of Hydrogen Peroxide in Cells and Animals.** *Angewandte Chemie (International ed. in English)*  
Yang, D. n., Ye, S. n., Hananya, N. n., Green, O. n., Chen, H. n., Zhao, A. Q., Shen, J. n., Shabat, D. n.  
2020
- **Rehmapiroside ameliorates cerebral ischemia-reperfusion injury via attenuating peroxynitrite-mediated mitophagy activation.** *Free radical biology & medicine*  
Zhang, Y. n., He, Y. n., Wu, M. n., Chen, H. n., Zhang, L. n., Yang, D. n., Wang, Q. n., Shen, J. n.  
2020; 160: 526–39
- **Astragaloside VI Promotes Neural Stem Cell Proliferation and Enhances Neurological Function Recovery in Transient Cerebral Ischemic Injury via Activating EGFR/MAPK Signaling Cascades** *MOLECULAR NEUROBIOLOGY*  
Chen, X., Wu, H., Chen, H., Wang, Q., Xie, X., Shen, J.  
2019; 56 (4): 3053–67
- **Kinesin-1 Regulates Extrasynaptic Targeting of NMDARs and Neuronal Vulnerability Toward Excitotoxicity** *SCIENCE*  
Lin, R., Duan, Z., Sun, H., Fung, M., Chen, H., Wang, J., Lau, C., Yang, D., Liu, Y., Ni, Y., Wang, Z., Cui, J., Wu, et al  
2019; 13: 82+
- **Glycyrrhizin Prevents Hemorrhagic Transformation and Improves Neurological Outcome in Ischemic Stroke with Delayed Thrombolysis Through Targeting Peroxynitrite-Mediated HMGB1 Signaling.** *Translational stroke research*  
Chen, H. n., Guan, B. n., Wang, B. n., Pu, H. n., Bai, X. n., Chen, X. n., Liu, J. n., Li, C. n., Qiu, J. n., Yang, D. n., Liu, K. n., Wang, Q. n., Qi, et al  
2019
- **Active compounds and molecular targets of Chinese herbal medicine for neurogenesis in stroke treatment: Implication for cross talk between Traditional Chinese Medicine and Biomedical Sciences** *World Journal of Traditional Chinese Medicine*  
Chen, X., Chen, H., Shen, J.

2019

- **Potential molecular targets of peroxynitrite in mediating blood-brain barrier damage and haemorrhagic transformation in acute ischaemic stroke with delayed tissue plasminogen activator treatment** *FREE RADICAL RESEARCH*  
Chen, H., Chen, X., Luo, Y., Shen, J.  
2018; 52 (11-12): 1220–39
- **Baicalin Attenuates Blood-Brain Barrier Disruption and Hemorrhagic Transformation and Improves Neurological Outcome in Ischemic Stroke Rats with Delayed t-PA Treatment: Involvement of ONOO--MMP-9 Pathway** *TRANSLATIONAL STROKE RESEARCH*  
Chen, H., Guan, B., Chen, X., Chen, X., Li, C., Qiu, J., Yang, D., Liu, K., Qi, S., Shen, J.  
2018; 9 (5): 515–29
- **Targeting RNS/caveolin-1/MMP signaling cascades to protect against cerebral ischemia-reperfusion injuries: potential application for drug discovery** *ACTA PHARMACOLOGICA SINICA*  
Chen, H., Chen, X., Li, W., Shen, J.  
2018; 39 (5): 669–82
- **Peroxyntirite enhances self-renewal, proliferation and neuronal differentiation of neural stem/progenitor cells through activating HIF-1 alpha and Wnt/beta-catenin signaling pathway** *FREE RADICAL BIOLOGY AND MEDICINE*  
Chen, X., Zhou, B., Yan, T., Wu, H., Feng, J., Chen, H., Gao, C., Peng, T., Yang, D., Shen, J.  
2018; 117: 158–67
- **One-Compound-Multi-Target: Combination Prospect of Natural Compounds with Thrombolytic Therapy in Acute Ischemic Stroke** *CURRENT NEUROPHARMACOLOGY*  
Chen, H., Qi, S., Shen, J.  
2017; 15 (1): 134–56
- **Baicalin Reduces Hemorrhagic Transformation of Rat Ischemic Stroke with Delayed T-PA Treatment**  
Chen, H., Shen, J.  
ELSEVIER SCIENCE INC.2016: S159
- **Glycyrrhizin Could Inhibit HMGB1-MMP-9 Signaling and Prevent Hemorrhagic Transformation in Ischemic Stroke with Delayed T-PA Treatment**  
Shen, J., Chen, H.  
ELSEVIER SCIENCE INC.2016: S167
- **Caveolin-1 Is Critical for Lymphocyte Trafficking into Central Nervous System during Experimental Autoimmune Encephalomyelitis** *JOURNAL OF NEUROSCIENCE*  
Wu, H., Deng, R., Chen, X., Wong, W., Chen, H., Gao, L., Nie, Y., Wu, W., Shen, J.  
2016; 36 (19): 5193–99
- **Targeting ONOO-/HMGB1/MMP-9 Signaling Cascades: Potential for Drug Development from Chinese Medicine to Attenuate Ischemic Brain Injury and Hemorrhagic Transformation Induced by Thrombolytic Treatment** *Integrative Medicine International*  
Chen, H., Guan, B., Shen, J.  
2016
- **Peroxyntirite Decomposition Catalyst Reduces Delayed Thrombolysis-induced Hemorrhagic Transformation in Ischemia-reperfused Rat Brains** *CNS NEUROSCIENCE & THERAPEUTICS*  
Chen, H., Chen, X., Feng, J., Liu, K., Qi, S., Shen, J.  
2015; 21 (7): 585–90
- **Momordica charantia polysaccharides could protect against cerebral ischemia/reperfusion injury through inhibiting oxidative stress mediated c-Jun N-terminal kinase 3 signaling pathway** *NEUROPHARMACOLOGY*  
Gong, J., Sun, F., Li, Y., Zhou, X., Duan, Z., Duan, F., Zhao, L., Chen, H., Qi, S., Shen, J.  
2015; 91: 123–34
- **Pros and cons of current approaches for detecting peroxynitrite and their applications** *Biomedical Journal*  
Chen, X., Chen, H., Deng, R., Shen, J.  
2014; 37
- **Targeting reactive nitrogen species: a promising therapeutic strategy for cerebral ischemia-reperfusion injury** *ACTA PHARMACOLOGICA SINICA*  
Chen, X., Chen, H., Xu, M., Shen, J.

2013; 34 (1): 67–77

## PRESENTATIONS

- Angong Niu Huang Pill (ANP) attenuated hemorrhagic transformation and improved neurological outcomes in ischemic stroke with delayed tissue plasminogen activator (t-PA) treatment - The 4th Global Chinese Symposium & The 8th Symposium for Cross-straits, Hong Kong and Macao on Free Radical Biology and Medicine (September 21, 2018 - 9/24/2018)
- Chinese Herbal Medicine: A Great Opportunity for Reducing Thrombolysis-mediated Hemorrhagic Transformation in Ischemic Stroke Treatment - 6th Macau Symposium on Biomedical Sciences (6/13/2019 - 6/13/2019)
- Baicalin is a potential combination therapy with t-PA for ischemic stroke treatment - World life Science Conference (10/29/2018 - 10/29/2018)
- Detrimental role of peroxynitrite in mediating hemorrhagic transformation induced by delayed tissue plasminogen activator treatment in ischemic stroke - 17th Meeting of Consortium for Globalization of Chinese Medicine (8/12/2018 - 8/12/2018)
- Glycyrrhizin Attenuated Hemorrhagic Transformation and Improved Neurological Outcomes in Ischemic Stroke with Delayed t-PA Treatment - 13th International Symposium on Healthy Aging (3/12/2018 - 3/12/2018)
- Baicalin reduces hemorrhagic transformation in ischemic stroke rats with delayed t-PA treatment: involvement of ONOO--MMP-9 pathway - Journal of Cerebral Blood Flow & Metabolism. 28th International Symposium on Cerebral Blood Flow, Metabolism and Function and the 13th International Conference on Quantification of Brain Function with PET (4/1/2017 - 4/4/2017)
- Caveolin-1 phosphorylation plays an important role in inhibition of oxygen-/INS; glucose-deprivation-induced endothelial cell apoptosis via regulating STAT3 pathway - XXI World Congress of Neurolog (9/21/2013 - 9/26/2013)