Stanford

Hansen Chen

Instructor, Neurosurgery

Bio

ACADEMIC APPOINTMENTS

- Instructor, Neurosurgery

HONORS AND AWARDS

- Postdoctoral Fellowship, American Heart Association (01-01-2022)
- 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)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, Society for Neuroscience (2021 - present)
- Member, American Heart Association (2021 - present)

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)

COMMUNITY AND INTERNATIONAL WORK

- Blogger
- Reviewer
- Reviewer
- 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/
- Twitter: https://twitter.com/Chenhsbbb

- My Blog Posts in Stroke Journal: https://www.ahajournals.org/action/doSearch?target=do-blog&content=blog&sortBy=Earliest&ContribAuthorPrimaryRaw=Chen%2C+Hansen&AfterYear=2023&BeforeYear=2023&startPage=&ContentGroupKey=10.1161%2Fstrokeblog

Research & Scholarship

RESEARCH INTERESTS

- Brain and Learning Sciences

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Immune and Nervous Systems Interaction; Ischemic Postconditioning; Optogenetics

Publications

PUBLICATIONS

- **Natural Products for the Potential Use of Neuroprotective and Neurorestorative Effects in Stroke.** *Pharmaceuticals (Basel, Switzerland)*
  Chen, H., Liu, Q.
  2023; 16 (11)

- **Editorial: Natural products in the treatment of neurological diseases: identification of novel active compounds and therapeutic targets.** *Frontiers in pharmacology*
  Zhao, J., Wang, D., Cui, W., Chen, H.
  2023; 14: 1294625

- **Editorial: Advances in integrative medicine for neurodegenerative diseases: from basic research to clinical practice.** *Frontiers in neurology*
  Liu, S., Zheng, G., Chen, H., Li, G., Guo, X.
  2023; 14: 1197641

- **Rapid Complement Activation Induced By Acute Hyperglycemia Worsens Ischemic Stroke Outcome**
  Chen, H., Chiang, T., Kim, A., Tomlinson, S., Bliss, T., Cheng, M. Y., Steinberg, G.
  LIPPINCOTT WILLIAMS & WILKINS.2023

- **Angong Niuhuang Wan reduces hemorrhagic transformation and mortality in ischemic stroke rats with delayed thrombolysis: involvement of peroxynitrite-mediated MMP-9 activation.** *Chinese medicine*
  Chen, H., Luo, Y., Tsoi, B., Gu, B., Qi, S., Shen, J.
  2022; 17 (1): 51

- **Optogenetic Stimulation Effects On Cortico-thalamic Circuit Plasticity After Stroke**
  Chiang, T., Vahdat, S., Pendharkar, A., Harvey, S., Uchino, H., Cao, Z., Kim, A., Choy, M., Chen, H., Lee, H., Cheng, M. Y., Lee, J., Steinberg, et al
  LIPPINCOTT WILLIAMS & WILKINS.2022

- **Editorial: Blood-Brain Barrier Dysregulation and Recovery Following Brain Ischemia: Cellular Constituents, Molecular Mechanisms, and Therapeutic Strategies Enabling Successful Brain Remodeling.** *Frontiers in cellular neuroscience*
  Chen, H., Cao, Z., Gu, Y., Hermann, D. M.
  2022; 16: 968425

- **Glycyrrhetinic acid induces oxidative/nitrative stress and drives ferroptosis through activating NADPH oxidases and iNOS, and depriving glutathione in triple-negative breast cancer cells.** *Free radical biology & medicine*
  Wen, Y., Chen, H., Zhang, L., Wu, M., Zhang, F., Yang, D., Shen, J., Chen, J.
  2021

- **Ischemic Postconditioning Protects Against Hemorrhagic Transformation Induced by Hyperglycemia in Ischemic Stroke**
  Chen Hansen, Cheng, M. Y., Bliss, T., Zhao Heng, Steinberg, G.
  LIPPINCOTT WILLIAMS & WILKINS.2021

- **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., Guan, B., Chen, S., Yang, D., Shen, J.
  2021; 165: 171-183

- **Brain-wide neural dynamics of poststroke recovery induced by optogenetic stimulation.** *Science advances*
  Vahdat, S., Pendharkar, A. V., Chiang, T., Harvey, S., Uchino, H., Cao, Z., Kim, A., Choy, M., Chen, H., Lee, H. J., Cheng, M. Y., Lee, J. H., Steinberg, et al
  2021; 7 (33)

- **Rehmapicroside ameliorates cerebral ischemia-reperfusion injury via attenuating peroxynitrite-mediated mitophagy activation.** *Free radical biology & medicine*
  Zhang, Y., He, Y., Wu, M., Chen, H., Zhang, L., Yang, D., Wang, Q., Shen, J.
  2020; 160: 526-539

- **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

- **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., Ye, S., Hananya, N., Green, O., Chen, H., Zhao, A. Q., Shen, J., Shabat, D.
  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

- **Ischemic postconditioning for stroke treatment: current experimental advances and future directions.** *Conditioning medicine*
  Chen, H., Shen, J., Zhao, H.
  2020; 3 (2): 104-115

- **Potential Natural Compounds for Preventing 2019-nCoV Infection**
  Chen, H., Du, Q.
  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

- **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., Guan, B., Wang, B., Pu, H., Bai, X., Chen, X., Liu, J., Li, C., Qiu, J., Yang, D., Liu, K., Wang, Q., Qi, et al
  2019

- **Astragaloside VI Promotes Neural Stem Cell Proliferation and Enhances Neurological Function Recovery in Transient Cerebral Ischemic Injuryvia 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** *ISCIENCE*
  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-+

- **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

- **Peroxynitrite 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

- **Peroxynitrite 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 Niuhuang Pill (ANP) attenauted 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)