**Shanzhi Wang**

Phone: 718-990-3135

Email: [wangs1@stjohns.edu](mailto:wangs1@stjohns.edu)

**Education**

Ph.D. in Biochemistry, Texas A & M University, 2010

B.S. in medicine, Jilin University, China, 2004

**Professtional Experience**

09/2022– present: associate professor, Department of Pharmaceutical Sciences, St. John’s University, Queens, NY

08/2016– 08/2022: assistant professor, Chemistry Department, University of Arkansas at Little Rock, AR

08/2013 – 07/2016: associate, Department of Cell Biology, Albert Einstein College of Medicine, NY

09/2010 – 07/2013: postdoctoral researcher, the Department of Biochemistry, Albert Einstein College of Medicine, NY

09/2005-09/2010: graduate research assistant, the Department of Biochemistry and Biophysics, Texas A & M University, TX

**Publications**

1. **Wang, S.**, Lee, K., Gray, S., Zhang, Y., Tang, C., Morrish, R.B., Tosti, E., van Oers, J., Amin, M.R., Cohen, P.E., MacCarthy, T., Roa, S.\*, Scharff, M.D.\*, Edelmann, W.\*, and Chahwan, R.\* (2022) Role of EXO1 nuclease activity in genome maintenance, the immune response and tumor suppression in Exo1D173A mice*. Nucleic Acids Res*. 50: 8093-8106.
2. Yang, F.#, Bettadapura, S.N.#, Smeltzer, M.S., Zhu, H. \*, and **Wang, S.**\* (2022) Pyroptosis and pyroptosis-inducing cancer drugs*. Acta Pharmacol Sin*. doi: 10.1038/s41401-022-00887-6. Online ahead of print.
3. Yang, F., Darsey J.D., Ghosh A., Li H.Y., Yang, M.Q.\*, and **Wang, S.\*** (2022) Artificial Intelligence and Cancer Drug Development*. Recent Pat Anticancer Drug Discov*. 17: 2-8.
4. Burdette, B.E.#, Esparza, A.#, Zhu, H.\*, and **Wang, S.**\* (2021) GsdmD in pyroptosis. *Acta Pharmaceutica Sinica B*, 11: 2768-2782.
5. Yang, F., Gilreath, C., **Wang, S.\***, and Jiang, Q.\* Bowman-Birk Inhibitors from Plants for Inhibiting Eukaryotic Cells E.S. *Food Agrofor.*, 4: 3-4.
6. Wang, D., Behura, S., Karim, F., Kazi, A., Wangila, G.\*, **Wang, S.**\* Nanoscience and Nanotechnology for Food and Agroforestry. *E.S. Food Agrofor.*, 3: 1-3.
7. Zubair, M., **Wang, S.\*,** andAli, N.\*(2021)Advanced Approaches to Breast Cancer Classification and Diagnosis. Frontiers in Pharmacology 11:632079.
8. Gilreath, C., Borrma, M., Qin, Z., Hudson, M.K.\*, and **Wang, S.**\* (2021) The Hypoxic Microenvironment of Breast Cancer Cells Promotes Resistance in Radiation Therapy. Frontiers in Oncology 10: 629422.
9. Barrett, L., Dai, L., **Wang, S.**, Qin, Z.\* (2021) Kaposi's sarcoma-associated herpesvirus and extracellular vesicles. *J Med Virol.* 93:3294-3299
10. Patel, L.#, Shukla, T.#, Huang, X., Ussery, D.W., and **Wang, S**\* (2020) Machine Learning Methods in Drug Discovery. Molecules. 25:5527.
11. Yan, Z., and **Wang, S.\*** (2020) Proteoglycans as Therapeutic Targets in Brain Cancer. *Frontiers in Oncology* 10: 1358.
12. Geng, B.,Choi, K.H., **Wang, S.,** Chen, P., Pan, X., Dong, N., Ko, J.K., and Zhu, H.\* (2020) A simple, quick and efficient CRISPR/Cas 9 genome editing method for human induced pluripotent stem cells. *Acta Pharmacologica Sinica* 41: 1427-1432.
13. Zhang, D.#, Burdette, B.E.#, Wang, Z., Karn, K., Li, H.Y.\*, Schramm, V.L.\*, Tyler, P.C., Evans, G.B., **Wang, S.**\* (2020) Transition state analogues enhanced by fragment-based structural analysis: bacterial methylthioadenosine nucleosidases, *Biochemistry* 59:831-835.
14. Hu, J., Duan, Z., Yu, G. and **Wang, S.** \* (2019) Bcl-2 inhibitors as sensitizing agents for cancer chemotherapy, *Protein Kinase Inhibitors as Sensitizing Agents for Chemotherapy*, 2019: 151-168.
15. **Wang, S.**, Chahwan, R., Wei, L., and Scharff, M.D.\* (2016) Error prone mismatch and base excision DNA repair in somatic hypermutation, *Encyclopedia of Immunology* 2: 126-133.
16. **Wang S.**, Cameron S.A., Clinch K.\*, Evans G.B., Wu Z., Schramm V.L.\*, and Tyler P.C.\* (2015) New antibiotic candidates against *Helicobacter pylori*, *Journal of the American Chemical Society* 137:14275-80.
17. Wei, L., Chahwan, R., **Wang, S.**, Wang, X., Phuong, P., Goodman, M., Bergman, A., Scharff, M.D.\*, and MacCarthy, T.\* (2015) Overlapping hotspots in CDRs are critical sites for V region diversification, *Proceedings of the National Academy of Sciences* 112:E728-37.
18. **Wang, S.**, Thomas, K., and Schramm, V.L.\* (2014) Catalytic site cooperativity in dimeric methylthioadenosine nucleosidase *Biochemistry* 53, 1527-1535.
19. **Wang, S.**, Haapalainen, A. M., Yan, F., Du, Q., Tyler, P. C., Evans, G. B., Rinaldo-Matthis, A., Brown, R. L., Norris, G. E., Almo, S. C., and Schramm, V. L.\* (2012) A picomolar transition state analogue inhibitor of MTAN as a specific antibiotic for *Helicobacter pylori*, *Biochemistry 51*, 6892-6894.
20. **Wang, S.**, Lim, J., Thomas, K., Yan, F., Angeletti, R.H., and Schramm, V.L.\* (2012) A complex of methylthioadenosine/S-adenosylhomocysteine nucleosidase, transition state analogue, and nucleophilic water identified by mass spectrometry, *Journal of the American Chemical Society 134*, 1468-1470.
21. **Wang, S.**, Lasagna, M., Daubner, S.C., Reinhart, G.D., and Fitzpatrick, P.F.\* (2011) Fluorescence spectroscopy as a probe of the effect of phosphorylation at serine 40 of tyrosine hydroxylase on the conformation of its regulatory domain, *Biochemistry 50*, 2364-2370.
22. Daubner, S.C.\*, Le, T., and **Wang, S.** (2011) Tyrosine hydroxylase and regulation of dopamine synthesis, *Archives of biochemistry and biophysics 508*, 1-12.
23. **Wang, S.**, Sura, G.R., Dangott, L.J., and Fitzpatrick, P.F.\* (2009) Identification by hydrogen/deuterium exchange of structural changes in tyrosine hydroxylase associated with regulation, *Biochemistry 48*, 4972-4979.

**LICENCED PATENT**

Schramm, V.L., **Wang, S.**, Haapalainen, A.M., Evens, Furneaux, R.H., Clinch, K., Tyler, P.C. and Gulab, S.A. (2014) Treatment of *Helicobacter pylori* infections. PCT International Patent Application No. PCT/US2013/53885.

**Active research funding**

3/1/2022 –2/28/2025: R01 (co I)

Funding Source: NIH NEI