Glucocorticoid modulation of the immune response: Studies in zebrafish

Xie, Y

Curriculum vitae

Yufei Xie was born on November 17th 1990 in Pingxiang, Jiangxi, China. After graduating from Pingxiang High School in 2009, she started a Bachelor's program in Biology at the Faculty of Life Science of Beijing Normal University (BNU). In 2013, she obtained her BSc degree and started to pursue a Master's degree at the same faculty of BNU. During this period, she performed a research project on the immunological and anti-tumor effects of monomeric compounds extracted from Chinese medicinal herbs. After completion of her MSc degree in 2016, Yufei was awarded a scholarship from the China Scholarship Council (CSC) to carry out a PhD research project at the Institute of Biology of Leiden University under the supervision of Dr. Marcel J.M. Schaaf and Prof. Dr. Annemarie H. Meijer. In this project, she used zebrafish as a model for inflammation to investigate the effect of glucocorticoids on the innate immune system, resulting in the work presented in this thesis.

List of Publications

He, M., Huang, X., Liu, S., Guo, C., **Xie, Y.**, Meijer, A.H., & Wang, M. (2018). The difference between white and red ginseng: variations in ginsenosides and immunomodulation. *Planta Medica*, 84(12/13), 845-854.

Xie, Y., Tolmeijer, S., Oskam, J.M., Tonkens, T., Meijer, A.H., & Schaaf, M.J.M. (2019). Glucocorticoids inhibit macrophage differentiation towards a pro-inflammatory phenotype upon wounding without affecting their migration. *Disease models & mechanisms*, 12(5), dmm037887.

He, M., Halima, M., **Xie, Y.**, Schaaf, M.J.M., Meijer, A.H., & Wang, M. (2020). Ginsenoside Rg1 acts as a selective glucocorticoid receptor agonist with anti-inflammatory action without affecting tissue regeneration in zebrafish larvae. *Cells*, 9(5), 1107.

Xie, Y., Meijer, A.H. & Schaaf, M.J.M. (2020). Glucocorticoid treatment exacerbates mycobacterial infection by reducing the phagocytic capacity of macrophages. *bioRxiv* doi: 10.1101/2020.06.19. 161653.

Xie, Y., Meijer, A.H. & Schaaf, M.J.M. Modeling inflammation in zebrafish for the development of anti-inflammatory drugs. *Submitted*.

Xie, Y., Papadopoulou, P., D'Engelbronner, J.C., De Wit, B., Van Hage, P., Campbell, F., Meijer, A.H. & Schaaf, M.J.M. Liposome encapsulation of prednisolone phosphate improves its therapeutic ratio in a zebrafish model for inflammation. *Manuscript in preparation*.