Chemokine signaling in innate immunity of zebrafish embryos

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Stellingen

Behorende bij het proefschrift

‘Chemokine Signaling in Innate Immunity of Zebrafish Embryos’

1. The chemokine receptor Cxcr3.2 is required for the migration of zebrafish embryonic macrophages towards local sites of bacterial infection. (Chapter 2 and 4)
2. Zebrafish chemokines similar to human IL8 and CXCL11 have specific chemoattractant properties on neutrophils and macrophages, respectively. (Chapter 3)
3. Based on in vivo macrophage migration assays a zebrafish chemokine similar to human CXCL11 is a ligand for the Cxcr3.2 receptor. (Chapter 4)
4. Zebrafish chemokine receptors homologous to human CXCR3,4,7, CCR2,5,9, and CMKLR1 are the primary candidates for orchestrating macrophage functions in the innate immune system. (Chapter 5)
5. Zebrafish research shows that neutrophils can pave the way for cancer cell metastasis. (He *et al*. 2012, Journal of Pathology)
6. Therapeutic targeting of chemokines that play a role in the tumor microenvironment is a promising strategy for improving the effectiveness of chemotherapy in cancer treatment. (Acharyya *et al*. 2012, Cell)
7. The tuberculous granuloma should no longer be regarded as a static host defense structure but as a highly dynamic interface between host and pathogen. (Gideon and Flynn 2011, Immunologic Research)
8. The combination of drugs directed at host targets with conventional antibiotics is an excellent approach for combating the increasing number of multi-drug resistant Mycobacterium tuberculosis strains. (Napier *et al*. 2012 Future Microbiology)
9. Solid friendships and a supportive family are the foundation for a successful PhD.
10. A higher number of PhD diplomas in China does not warrant a better chance for obtaining a higher number of Nobel prize.
11. A single conversation with a wise person is better than many years of study.

20 December 2012, Chao Cui