

**XIANG, ZOU**  
**(Associate Professor)**



**QUALIFICATIONS:**

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| 2001 | PhD, Uppsala University, Uppsala                      |
| 1993 | MMed, Chinese Academy of Preventive Medicine, Beijing |
| 1988 | BSc, Nankai University, Tianjin                       |

**BRIEF OUTLINE OF EXPERIENCE AND POSTS HELD:**

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| June 2016-present | Associate Professor, Department of Health Technology and Informatics, The Hong Kong Polytechnic University, Hong Kong                                  |
| 2012-2016         | Associate professor, Mucosal Immunobiology and Vaccine Center (MIVAC), Department of Microbiology and Immunology, University of Gothenburg, Gothenburg |
| 2008-2011         | Assistant professor, MIVAC, Department of Microbiology and Immunology, University of Gothenburg, Gothenburg  |
| 2004-2007         | Postdoctoral research fellow, Department of Medicine, CIMR, University of Cambridge, Cambridge   |
| 2002-2004         | Project leader, Innoventus Project AB and Uppsala University, Uppsala  |
| 1993-1996         | Teaching assistant & Lecturer, Department of Medical Microbiology, Nanjing University Medical School, Nanjing  |
| 1988-1990         | Technician, Division of Microbiology, Center for Disease Control, Nanjing  |

**RESEARCH INTERESTS:**

My current research interest has primarily focused on the two functional arms of mast cell biology, i.e. their classical role in allergy and the more recently appreciated roles in innate and adaptive immunity. Both of these two lines of research are based on IgG immune complex-mediated regulation of mast cell apoptosis and activation. The overall goal is to develop strategies to limit the “negative impact” of mast cells in allergy, e.g. by reducing mast cell numbers through induction of apoptosis; and conversely to exploit the regulatory functions of mast cells in health, e.g. by optimizing their adjuvant activity in boosting vaccination against infection.

**SERVICE TO PROFESSIONAL & SCIENTIFIC BODIES, CONSULTANCY, MEMBERSHIP OF PROFESSIONAL & LEARNED SOCIETIES:**

- Founding member, Scandinavian Mast Cell Research Network (MacNet)
- Member, European Mast Cell and Basophil Research Network (EMBRN)

**AWARDS:**

- 2008 MIVAC Young Investigator Award, jointly sponsored by the Mucosal Immunobiology and Vaccine Center (MIVAC), Gothenburg, and the Swedish Foundation for Strategic Research (SSF)
- 2006 The Viking Prize Second Prize, by the Scandinavian Society of Immunology

**SELECTED PUBLICATIONS AND CONFERENCE PAPERS:**

- Sun JB, J Holmgren, M Larena, M Terrinoni, Y Fang, AR Bresnick, and **Z Xiang**, Deficiency in Calcium-Binding Protein S100A4 Impairs the Adjuvant Action of Cholera Toxin. *Frontiers in Immunology*, 2017. 8: 1119.
- Sun JB, Holmgren J, Cragg MS, **Xiang Z**. Lack of Fc Gamma Receptor IIIA Promotes Rather than Suppresses Humoral and Cellular Immune Responses after Mucosal or Parenteral Immunization with Antigen and Adjuvants. *Scandinavian Journal of Immunology*. 2017;85(4):264-271. doi: 10.1111/sji.12528.
- Wang R, Yin X, Zhang H, Wang J, Chen L, Chen J, Han X, **Xiang Z\***, D Li\*. Effects of a moderately lower temperature on the proliferation and degranulation of rat mast cells. *Journal of Immunology Research*. 2016; 2016: 8439594. \*These authors share senior authorship.
- Ding J, Y Fang, **Xiang Z**. Antigen/IgG immune complex-primed mucosal mast cells mediate antigen-specific activation of co-cultured T cells. *Immunology*. 2015;144:387–394.
- Bruhn S\*, Fang Y\*, Barrenäs F, Gustafsson M, Zhang H, Konstantinell A, Krönke A, Sönnichsen B, Bresnick A, Dulyaninova N, Wang H, Zhao Y, Klingelhöfer J, Ambartsumian N, Beck MK, Nestor C, Bona E, **Xiang Z**#, M. Benson#, A generally applicable translational strategy identifies S100A4 as a candidate gene in allergy. *Science Translational Medicine*. 2014; 6: 218ra4. #These authors share senior authorship.
- Fang, Y., T. Zhang, L. Lidell, X. Xu, N. Lycke, **Xiang Z**. The immune complex CTA1-DD/IgG adjuvant specifically targets connective tissue mast cells through FcγRIIIA and augments anti-HPV immunity after nasal immunization. *Mucosal Immunology*. 2013; 6(6):1168-78.

- Sun JB\*, **Xiang Z\***, Smith KG, Holmgren J. Important role for FcγRIIB on B lymphocytes for mucosal antigen-induced tolerance and Foxp3<sup>+</sup> regulatory T cells. **Journal of Immunology**. 2013;191(8):4412-22. \*These authors contributed equally.
- Fang Y, Larsson L, Bruhns P, **Xiang Z**. Apoptosis of mouse mast cells is reciprocally regulated by the IgG receptors FcγRIIB and FcγRIIIA. **Allergy**. 2012; 67: 1233–1240.
- Fang Y, Larsson L, Mattsson J, Lycke N, **Xiang Z**. Mast cells contribute to the mucosal adjuvant effect of CTA1-DD after IgG-complex formation. **Journal of Immunology**. 2010; 185(5):2935-41.
- Brownlie RJ, Lawlor KE, Niederer HA, Cutler AJ, **Xiang Z**, Clatworthy MR, Floto RA, Greaves DR, Lyons PA, KGC Smith. Distinct cell-specific control of autoimmunity and infection by FcγRIIb. **Journal of Experimental Medicine**. 2008; 205(4):883-95.
- **Xiang Z\***, Cutler AJ\*, Brownlie RJ, Fairfax K, Lawlor KE, Severinson E, Walker EU, Manz RA, DM Tarlinton, KGC Smith, FcγRIIb controls bone marrow plasma cell persistence and apoptosis. **Nature Immunology**. 2007; 8(4): 419-29. \*These authors contributed equally.
- Karlberg M, **Xiang Z**, Nilsson G. FcγRI-mediated activation of human mast cells promotes survival and induction of the pro-survival gene Bfl-1. **Journal of Clinical Immunology**. 2008; 28(3):250-5.
- Vigorito E, Perks KL, Abreu-Goodger C, Bunting S, **Xiang Z**, Kohlhaas S, Das PP, Miska EA, Rodriguez A, Bradley A, Smith KGC, Rada C, Enright AJ, Toellner KM, MacLennan IC, Turner M, *bic/miR-155* regulates the generation of Ig class switched plasma cells. **Immunity**. 2007;27(6):847-59.
- **Xiang Z**, Moller C, Nilsson G. IgE-receptor activation induces survival and Bfl-1 expression in human mast cells but not basophils. **Allergy**. 2006; 61(9):1040-6.
- **Xiang Z**, Moller C, Nilsson G. Readministration of IgE is required for repeated passive cutaneous anaphylaxis in mice. **International Archives of Allergy and Immunology**. 2006; 141(2):168-71.
- **Xiang Z**, Ahmed AA, Moller C, Nakayama K, Hatakeyama S, Nilsson G. Essential role of the prosurvival bcl-2 homologue A1 in mast cell survival after allergic activation. **Journal of Experimental Medicine**. 2001; 194(11):1561-69.
- **Xiang Z**, Block M, Lofman C, Nilsson G. IgE-mediated mast cell degranulation and recovery monitored by time-lapse photography. **Journal of Allergy & Clinical Immunology**. 2001; 108(1):116-21.

- Jonsson JI, Xiang Z, Pettersson M, Lardelli M, Nilsson G. Distinct and regulated expression of Notch receptors in hematopoietic lineages and during myeloid differentiation. *European Journal of Immunology*. 2001; 31(11):3240-7.
- Lunderius C, Xiang Z, Nilsson G, Hellman L. Murine mast cell lines as indicators of early events in mast cell and basophil development. *European Journal of Immunology*. 2000; 30(12):3396-402.
- Xiang Z, G. Nilsson. IgE receptor-mediated release of nerve growth factor by mast cells. *Clinical & Experimental Allergy* 2000; 30(10):1379-86.