

Postdoctoral Positions are available for immediate hire at Research Group of Influenza Virus and Structural Immunology (Prof. George F. Gao's Group) in the Institute of Microbiology, Chinese Academy of Sciences (<http://www.caspmi.cn/gaog/index.html>).

Our research group is strongly interested in Molecular mechanism of interspecies transmission of emerging/re-emerging pathogens and structural immunology. Our group research is now focusing on the influenza virus and the molecular/structural basis of recognition of T cell receptors to peptide-MHC complexes. We are looking for highly motivated candidates whose research interests are virus-host interaction and immune molecule recognition.

A candidate for the postdoctoral positions is required to have a Ph.D. and/or M.D. degree in molecular biology, structural biology, virology or immunology. The candidate with previous experience in sophisticated skills in protein expression purification, macromolecule crystallography and cell culture will be preferentially considered. The candidate with a capability of working independently as well as cooperatively as a member of the team will be welcomed. Successful candidates should be proficient in both written and spoken English.

The candidates who pass the interview could apply for the Chinese Academy of Sciences Fellowships for Young International Scientists, attached is the related regulations. Recipients of the Fellowships will be recommended as candidates for the “Young International Scientists Grant Program” of the National Science Foundation of China.

Interested candidates could submit your CVs in English with two referees' names and contact information (*the email address and telephone number*) to gaof@im.ac.cn and yanq@im.ac.cn together .

Related publications from Gao's Group:

1. **Gao, G. F.**, Tormo, J., Gerth, U. C., Wyer, J. R., McMichael, A. J., Stuart, D. I., Bell, J. I., Jones, E. Y., Jakobsen, B. K., 1997, Crystal structure of the complex between human CD8 $\alpha\alpha$ and HLA-A2. *Nature*, 387: 630-634. (With front cover illustration and short title in the front cover page: CD8 comes to grips with MHC)
2. Liu[#], J., Xiao[#], H., Lei[#], F., Zhu, Q., Qin, K., Zhang, X. W., Zhang, X. L., Zhao, D.,

Wang, G., Feng, Y., Ma, J., Liu, W., Wang, J., **Gao***, **G. F.**, 2005, Highly pathogenic H5N1 influenza virus infection in migratory birds. *Science*, 309 (5738): 1206.

1. Li[#], Q., Qi[#], J., Zhang, W., Vavricka, C. J., Shi, Y., Wei, J., Feng, E., Shen, J., Chen, J., Liu, D., He, J., Yan, J., Liu, H., Jiang, H., Teng, M., Li, X., **Gao***, **G. F.**, 2010, The 2009 pandemic H1N1 neuraminidase N1 lacks the 150-cavity in its active site. *Nature Structural and Molecular Biology*, 17 (10): 1266-1268. (With short title in the front cover: Swine flu NA)
3. Tang^{*#}, J., Wang[#], C., Feng[#], Y., Yang[#], W., Song[#], H., Chen[#], Z., Yu[#], H., Pan, X., Zhou, X., Wang, H., Wu, B., Wang, H., Zhao, H., Lin, Y., Yue, J., Wu, Z., He, X., Gao, F., Khan, A. H., Wang, J., Zhao, G. P., Wang^{*}, Y., Wang^{*}, X., Chen, Z., **Gao***, **G. F.**, 2006, Streptococcal toxic shock syndrome caused by *Streptococcus suis* serotype 2. *PLoS Medicine*, 3 (5): 668-676. (With short title in the front cover: *Streptococcus suis* outbreak in China)
4. Vavricka[#], C. J., Li[#], Q., Wu[#], Y., Qi, J., Wang, M., Liu, Y., Gao, F., Liu, J., Feng, E., Wang, J., Liu, H., Jiang, H., **Gao***, **G. F.**, 2011, Structural and functional analysis of laninamivir and its octanoate prodrug reveals group specific mechanisms for influenza NA inhibition. *PLoS Pathogens*, 7 (10): e1002249.
5. Liu, J., Sun, Y., Qi, J., Chu, F., Wu, H., Gao, F., Li, T., Yan, J., **Gao***, **G. F.**, 2010, The membrane protein of SARS-CoV acts as a dominant immunogen revealed by a clustering region of novel functional and structural defined CTL epitopes. *The Journal of Infectious Diseases (JID)*, 202 (8): 1171-1180. (With front cover)
6. Cheng, H., Mohammed, F., Nam, G., Chen, Y., Qi, J., Garner, L. I., Allen, R. L., Yan, J., Willcox, B. E., **Gao***, **G. F.**, 2011, Crystal structure of leukocyte Ig-like receptor LILRB4 (ILT3/LIR-5/CD85k): a myeloid inhibitory receptor involved in immune tolerance. *Journal of Biological Chemistry (JBC)*, 286: 18013-18025.
7. Wu, Y., Gao, F., Liu, J., Qi, J., Gostick, E., Price, A. D., **Gao***, **G. F.**, 2011, Structural basis of diverse peptide accommodation by the Rhesus Macaque MHC class I molecule Mamu-B*17: insights into immune protection from simian immunodeficiency virus. *Journal of Immunology*, 187 (12):6382-6392. (With front cover)
8. Liu, J., Wu, P., Gao, F., Qi, J., Tachikawa, A. K., Xie, J., Vavricka, C. J., Iwamoto, A., Li^{*}, T., **Gao***, **G. F.**, 2010, Novel immunodominant peptide presentation strategy: a

featured HLA-A*2402 restricted CTL-epitope stabilized by intra-chain hydrogen-bonds from SARS-CoV N protein. *Journal of Virology*, 84 (22): 11849-11857.

9. Li[#], X., Liu[#], J., Qi, J., Gao, F., Li, Q., Li, X., Zhang, N., Xia^{*}, C., **Gao^{*}, G. F.**, 2011, Two distinct conformations of a CTL epitope from rinderpest virus presented by cattle MHC class I molecule N*01801: a host strategy for presentation of a featured peptide. *Journal of Virology*, 85 (12): 6038-6048.
10. Liu[#], J., Dai[#], L., Qi, J., Gao, F., Feng, Y., Liu, W., Yan^{*}, J., **Gao, G. F.**, 2011, Diverse peptide presentation of Rhesus Macaque major histocompatibility complex class I Mamu-A*02 revealed by two peptide complex structures and insights into immune escape of simian immunodeficiency virus. *Journal of Virology*, 85 (14): 7372-7383.
11. Wang, M., Qi, J., Liu, Y., Vavricka, C., Wu, Y., Li, Q., **Gao^{*}, G. F.**, 2011, Influenza A virus neuraminidase N5 has an extended 150-cavity. *Journal of Virology*, 85 (16): 8431-8435.
12. Lu, G., Qi, J., Chen, Z., Xu, X., Gao, F., Lin, D., Qian, W., Liu, H., Jiang, H., Yan^{*}, J., **Gao^{*}, G. F.**, 2011, Enterovirus 71 and Coxsackievirus A16 3C proteases: binding to Rupintrivir and their substrates and anti-hand, foot, and mouth disease virus drug design. *Journal of Virology*, 85 (19): 10319-10331.
13. Zhang[#], N., Qi[#], J., Feng, S., Gao, F., Liu, J., Pan, X., Chen, R., Li, Q., Chen, Z., Li, X., Xia^{*}, C., **Gao^{*}, G. F.**, 2011, Crystal Structure of Swine Major Histocompatibility Complex Class I SLA-1*0401 and Identification of 2009 Pandemic Swine-Origin Influenza A H1N1 Virus Cytotoxic T Lymphocyte Epitope Peptides. *Journal of Virology*, 85 (22): 11709-11724.
14. Zhang[#], N., Yan[#], J., Lu[#], G., Guo, Z., Fan, Z., Wang, J., Shi, Y., Qi, J., **Gao^{*}, G. F.**, 2011, Binding of herpes simplex virus glycoprotein D to nectin-1 exploits host cell adhesion. *Nature Communications*, 2: 557.