

George Fu Gao, Institute of Microbiology, Chinese Academy of Sciences

Gao is an influential figure who pioneered the interspecies transmission study on influenza virus and other enveloped viruses. He constructively combined the epidemiological, functional and structural methods in the virus study, and focused on the interactions between viral surface glycoproteins and their host receptors. In the past years, he and his team successfully elucidated the origin, 'host jump' and drug resistance mechanism of influenza viruses, such as H7N9, H10N8. Gao also extended his research to other enveloped viruses, and delineated the molecular mechanism on the receptor binding properties of viruses such as MERS-CoV, measles virus, and herpes simplex virus, etc. He also made great contributions to our understanding of immune recognition. He has won numerous national and international awards, including TWAS Prize in Medical Science (2012), Science and Technology Innovation Talent-CCTV Grand Ceremony for Science and Technology (2013), The 19th Nikkei Asia Prize in Science, Tan Jiazhen (C. C. Tan) Innovation Award (2004) and Grand Achievement Prize (2014). He was elected as CAS academician (CAS member) in 2013 and as a fellow of The World Academy of Sciences (TWAS) in 2014. He is a leading 'flagship' in the area of pathogen biology and immunology in China and even in the world.



国家科技奖证书  
National Prize for Progress in Science and Technology, P. R. China



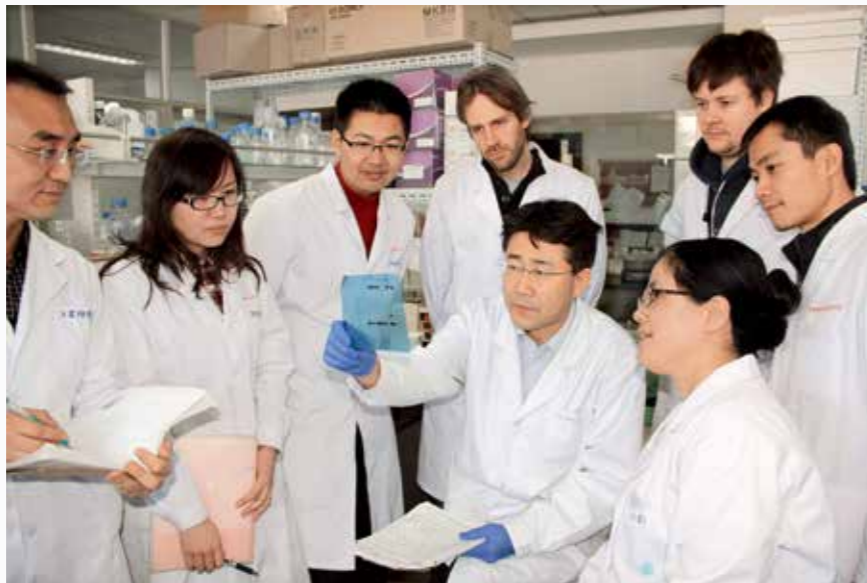
荣获第19届日经亚洲奖  
The 19th Nikkei Asia Prize in Science, Technology and Environment



荣获2012年度发展中国家科学院基础医学奖  
TWAS Basic Medical Sciences Award (TWAS, Third World Academy of Sciences)



研发了结核分枝杆菌效应T细胞检测试剂盒  
The development of a T-cell based detection kit for *Mycobacterium tuberculosis*



高福研究员在实验室  
Prof. Gao discusses with students in the laboratory



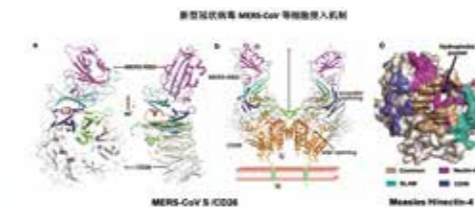
高福  
George Fu Gao

高福

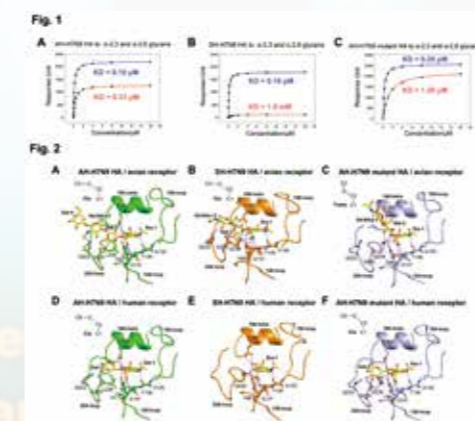
中国科学院微生物研究所

主要科技贡献：

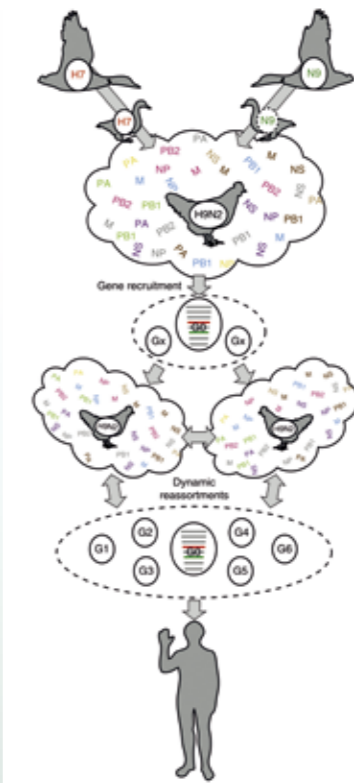
在病毒侵入与释放过程中病毒囊膜蛋白与宿主的相互作用研究中以及免疫细胞与感染细胞（靶细胞）的相互识别机制研究方面进行了系统性和创新性研究，共发表SCI论文300多篇。其中对于H7N9禽流感病毒的溯源以及H5N1流感病毒跨种间传播机制研究获得重大突破，研究成果入选2013年度中国十大科技进展新闻。通过结构生物学等手段揭示了MERS冠状病毒、麻疹病毒、疱疹病毒等病毒的囊膜蛋白与受体的相互作用模式及膜融合机制，为新型抗病毒药物的研发提供了重要的靶标。由于其卓越贡献，他相继荣获发展中国家科学院 (TWAS) 基础医学奖 (2012), 第19届“日经亚洲奖”(2014), 谈家桢生命科学创新奖 (2008) 和成就 (2014), 入选2013科技盛典——中央电视台科技创新人物；2013年当选中国科学院院士，2014年当选发展中国家科学院院士。他是我国病原微生物与免疫学研究领域有较高造诣、并在国际上有影响力的科学家。



新型冠状病毒 MERS-CoV 侵入机制  
Elucidation of the cell entry mechanism of the novel coronavirus MERS-CoV



H7N9 流感病毒受体识别机制与跨种传播潜力的相关性分析  
Delineation of H7N9 influenza virus receptor recognition mechanism and its correlation with the cross species transmission potential



H7N9 禽流感病毒溯源及进化规律  
The origin and evolution of H7N9 influenza virus



积极呼吁关闭活禽市场  
The active call-off of the shutdown of the live poultry market



2013年度十大科技创新人物  
2013 Top 10 Scientists of the Year in China, Awarded CCTV and CAS