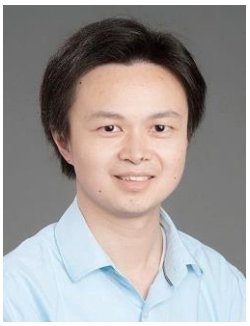
Curriculum Vitae

Name	**Yong Lu**	
Current Position & Affiliation	**Assistant Professor, Department of Microbiology & Immunology, Wake Forest School of Medicine Leader of Wake Forest Baptist Comprehensive Cancer Center, Signaling and Biotechnology (SBT) program**	
Country	**USA**	

Educational Background

I obtained a Ph.D. in 2009 from China Pharmaceutical University, training in tumor immunology. In 2010, I joined Dr. Qing Yi's laboratory as a postdoctoral research fellow to continue my cancer immunology research career. During this 4 year postdoctoral training period, I developed an innovative and significant area in tumor immunology, elucidating the potential role of IL-9 in tumor immunity and exploring the use IL-9-producing T cells for adoptive cancer immunotherapy.

Professional Experience

I am currently serving as one of the six NCI's advisors to: (A) provide NCI with advice on the research gaps in Cancer Adoptive T Cell Immunotherapy; (B) advise the NCI on future directions of Adoptive T Cell Immunotherapy. My work focuses on T-cell based adoptive cell immunotherapy, targeting lung cancer, pancreatic cancer, and other cancers. Our major goal is to develop novel strategies to reprogram the immunosuppressive tumor microenvironment (TME) toward an immunostimulatory transcriptional program in order to restore cytotoxicity T cell activation and sensitize tumors for cancer immunotherapy. We utilize state-of-the-art CyTOF, single-cell RNA sequencing, bioinformatics, computational modeling, tumor models and tumor organoids to investigate mechanisms of resistance and acquired resistance to immunotherapy.

Professional Organizations

2015- Member, Society for Immunotherapy of Cancer
2019- Serving as 1 of the 6 NCI's advisors to: (A) provide NCI with advice on the research gaps in Cancer Adoptive Cell Therapy; (B) advise the NCI on future directions of Adoptive Cell Therapy through proposing competitive Funding Opportunity Announcement mechanisms.
2020-2021 Standing Member of Awards Review Committee: Society for Immunotherapy of Cancer (SITC)
2021 Ad hoc reviewer for Cancer Immunopathology and Immunotherapy (CII) study section (NCI)

Main Scientific Publications

a. **Lu Y**, Hong S, Li H, Park J, Hong B, Wang L, Zheng Y, Liu Z, Xu J, He J, Yang J, Qian J, and Yi Qing. Th9 cells promote antitumor immune responses in vivo. **J Clin Invest** 122:4160-4171, 2012. PMC3484462.
b. **Lu Y**, Hong B, Li H, Zheng Y, Zhang M, Yang J, Qian J, Yi Qing. Tumor-specific CD8+ Tc9 cells are superior effector than Tc1 cells for adoptive immunotherapy of cancer. **Proc Natl Acad Sci USA** 111:2265-2270, 2014. PMC3926063.
c. **Lu Y**, Qian J, Li H, Liu Z, Wang L, Zheng Y, Lan Y, He J, Yang J, and Yi Q. p38 MAPK-inhibited dendritic cells induce superior antitumor immune responses and overcome regulatory T-cell-mediated immunosuppression. **Nat Commun** 2014;5:4229. PMC4249595.
d. **Lu Y***, Wang Q, Xue Gang, Bi E, Ma X, Wang A, Qian J, Dong C and Yi Qing*. Th9 cells represent a unique subset of $CD4^+$ T cells endowed with the ability to eradicate advanced tumors. **Cancer Cell**, 33, 1048–1060; **2018**, June 11. PMC6072282 (*, **Corresponding authors**)
e. Xue G, Fang J, Guangxu J, **Lu Y***. IL-4 together with IL-1β induces antitumor Th9 cell differentiation in the absence of TGF-β signaling. **Nat Commun**, **2019** Mar 26;10(1):1376. PMC6435687 (*, **Corresponding author**)
f. Ma X, Bi E, **Lu Y**, Su P, Huang C, Liu L, Wang Q, Yang M, Kalady MF, Qian J, Zhang A. Cholesterol Induces CD8+ T Cell Exhaustion in the Tumor Microenvironment. **Cell Metabolism**. **2019** Apr 25. PMID: 31031094