

## CURRICULUM VITAE

Name: Xuemin Chen  
Address: 2015 Uppergate Drive  
Atlanta, GA 30322  
Telephone: Home: (470) 428-5352  
Work: (404) 727-9230 or (404) 712-2471  
Fax: (404) 727-9223  
Email: [xchen26@emory.edu](mailto:xchen26@emory.edu)

### **EDUCATION:**

1984 - 1987 M.S. Xi'an Jiaotong University, P. R. China  
1978 - 1982 M.D. Xi'an Jiaotong University, P. R. China

### **PROFESSIONAL EXPERIENCE:**

- 2006 – present Research Assistant Professor. Division Pediatric Infectious Disease,  
Emory University School of Medicine.
- 2002 – 2005 Research Instructor. Division of Pediatric Infectious Disease, Vanderbilt  
University School of Medicine.
- 2001– 2002 Research Assistant. Division of Pediatric Infectious Disease, Vanderbilt  
University School of Medicine.
- 1998 – 2001 Research Assistant. Department of Microbiology & Immunology,  
Vanderbilt University school of Medicine.
- 1997 – 1998 Postdoctoral Research Fellow. Department of Microbiology &  
Immunology, Vanderbilt University School of Medicine.
- 1996 – 1997 Visiting Scholar. Department of Microbiology & Immunology, New  
York Medical College.
- 1995 – 1996 Associate director. Division of Hematology, The 1<sup>st</sup> Affiliated Hospital of  
Xi'an Jiaotong University.
- 1987 – 1995 Research Scientist and Clinical Physician. Department of Medicine, The  
1<sup>st</sup> Affiliated Hospital of Xi'an Jiaotong University.
- 1982 – 1987 Clinical Physician and Postgraduate Researcher. The 1<sup>st</sup> Affiliated  
Hospital of Xi'an Jiaotong University.

## **PUBLICATIONS:**

1. Singh K, Marasini B, **Chen X** and Spearman P. A novel Ebola virus antibody-dependent cell-mediated cytotoxicity (Ebola ADCC) assay. *J Immunol Methods.* 2018 Sep; 460:10-16. doi: 10.1016/j.jim.2018.06.002. Epub 2018 Jun 15.
2. Kasturi SP, Kozlowski PA, Nakaya HI, Burger MC, Russo P, Pham M, Kovalenkova Y, Silveira EL, Havenar-Daughton C, Burton SL, Kilgore KM, Johnson MJ, Nabi R, Legere T, Sher ZJ, **Chen X**, Amara RR, Hunter E, Bosing SE, Spearman P, Crotty S, Villinger F, Derdeyn CA, Wrammert J, Pulendran B. Adjuvanting a Simian Immunodeficiency Virus Vaccine with Toll-Like Receptor Ligands Encapsulated in Nanoparticles Induces Persistent Antibody Responses and Enhanced Protection in TRIM5 $\alpha$  Restrictive Macaques. *J Virol.* 2017 Jan 31;91(4).
3. Iyer S, Gangadhara S, Victor B, Shen X, **Chen X**, Nabi R, Kasturi S, Sabulaa MJ, Labranche CC, Reddy PJ, Tomarasb GD, Montefiorid D, Mosse B, Spearman P, Pulendran B, Kozlowski PA, and Amar R. Virus-like particles displaying trimeric SIV envelope gp160 enhance the breadth of DNA/MVA SIV vaccine induced antibody responses in rhesus macaques. Accepted manuscript posted online 27 July 2016, doi: 10.1128/JVI.01163-16 JVI.01163-16.
4. Hicar MD, **Chen X**, Sulli C, Barnes T, Goodman J, Sojar H, Briney B, Willis J, Chukwuma VU, Kalams SA, Doranz BJ, Spearman P, Crowe JE Jr. Human Antibodies that Recognize Novel Immunodominant Quaternary Epitopes on the HIV-1 Env Protein. *PLoS One.* 2016 Jul 13; 11(7):e0158861. doi: 10.1371/journal.pone.0158861. eCollection 2016.
5. Hicar MD, **Chen X**, Kalams SA, Sojar H, Landucci G, Forthal DN, Spearman P, Crowe JE Jr. Low frequency of broadly neutralizing HIV antibodies during chronic infection even in quaternary epitope targeting antibodies containing large numbers of somatic mutations. *Mol Immunol.* 2016 Feb; 70:94-103. doi: 10.1016/j.molimm.2015.12.002. Epub 2015 Dec 31.
6. Williams KL, Cortez V, Dingens AS, Gach JS, Rainwater S, Weis JF, **Chen X**, Spearman P, Forthal DN, Overbaugh J. HIV-specific CD4-induced Antibodies Mediate Broad and Potent Antibody-dependent Cellular Cytotoxicity Activity and Are Commonly Detected in Plasma From HIV-infected humans. *E Bio Medicine.* 2015 Oct; 2(10): 1464-77.
7. Qi M, Chu H, **Chen X**, Choi J, Wen X, Hammonds J, Ding L, Hunter E, Spearman P. A tyrosine-based motif in the HIV-1 envelope glycoprotein tail mediates cell-type- and Rab11-FIP1C-dependent incorporation into virions. *Proc Natl Acad Sci U S A.* 2015 Jun 16; 112(24): 7575-80. doi: 10.1073/pnas.1504174112. Epub 2015 Jun.
8. Chukwuma VU, Hicar MD, **Chen X**, Nicholas KJ, Joyner A, Kalams SA, Landucci G, Forthal DN, Spearman PW, Crowe JE Jr. Association of VH4-59 Antibody Variable Gene Usage with Recognition of an Immunodominant Epitope on the HIV-1 Gag Protein. *PLoS One.* 2015 Jul 30; 10 (7): e0133509. doi: 10.1371/journal.pone.0133509. eCollection 2015.
9. Wen X, Ding L, Wang JJ, Qi M, Hammonds J, Chu H, **Chen X**, Hunter E, Spearman P. ROCK1 and LIM Kinase Modulate Retrovirus Particle Release and Cell-Cell Transmission Events. *J Virol.* 88 (12): 6906-21. doi: 10.1128/JVI.00023-14. Epub (2014).

10. Nguyen DC, Hookway TA, Wu Q, Jha R, Preininger MK, **Chen X**, Easley CA, Spearman P, Deshpande SR, Maher K, Wagner MB, McDevitt TC, Xu C. Microscale Generation of Cardiospheres Promotes Robust Enrichment of Cardiomyocytes Derived from Human Pluripotent Stem Cells. *Stem Cell Report* Vol. 3, Issue 2, p260–268, (2014)
11. Kiss G, **Chen X**, Brindley M, Campbell P, Afonso CL, Ke Z, Holl JM, Guerrero-Ferreira RC, Byrd-Leotis LA, Steel J, Steinhauer, DA, Plempner RK, Kelly DF, Spearman P and Wright ER. Capturing Enveloped Viruses on Affinity Grids for Downstream Cryo-Electron Microscopy Applications. *Microscopy and Microanalysis*. DOI: 10.1017/S1431927613013937, (2013)
12. Qi M, Williams JA, Chu H, **Chen X**, Wang JJ, Ding L, Akhirome E, Wen X, Lapierre LA, Goldenring JR, Spearman P. Rab11-FIP1C and Rab14 direct plasma membrane sorting and particle incorporation of the HIV-1 envelope glycoprotein complex *PLoS Pathog.* 9(4): e1003278, (2013)
13. Chu H, Wang JJ, Qi M, Yoon JJ, **Chen X**, Wen X, Hammonds J, Spearman P. Tetherin/BST-2 Is Essential for the Formation of the Intracellular Virus-Containing Compartment in HIV-Infected Macrophages. *Cell Host & Microbe* 12, 1–13, (2012)
14. Chu H, Wang JJ, Qi M, Yoon JJ, Wen X, **Chen X**, Ding L, and Spearman P. The intracellular virus-containing compartments in primary human macrophages are largely inaccessible to antibodies and small molecules. *PLoS One.* 7(6): e39534. (2012)
15. Li L, Wang XH, Banerjee S, Volsky B, Williams C, Virland D, Nadas A, Seaman MS, **Chen X**, Spearman P, Zolla-Pazner S, Gorny MK. Different Pattern of Immunoglobulin Gene Usage by HIV-1 Compared to Non-HIV-1 Antibodies Derived from the Same Infected Subject. *PLoS One.* 7(6): e39534. (2012)
16. Hicar M, **Chen X**, Briney B, Hammonds J, Wang JJ, Kalams S, Spearman P and Crowe J. Pseudovirion Particles Bearing Native HIV Envelope Trimers Facilitate a Novel Method for Generating Human Neutralizing Monoclonal Antibodies Against HIV. *Journal of Acquired Immune Deficiency Syndromes* 54(3):223-235(2010).
17. Dou J, Wang JJ, **Chen X**, Li H, Ding L. and Spearman P. Characterization of a myristoylated, monomeric HIV Gag protein. *Virology* 387(2): 341-52 (2009).
18. Hammonds J, **Chen X\***, Zhang X, Lee F, Spearman P. Advances in methods for the production, purification, and characterization of HIV-1 Gag-Env pseudovirion vaccines. *Vaccine* 25(47):8036-48. (2007). \* (First co-author)
19. Zhang X, Cassis-Ghavami F, Eller M, Currier J, Slike BM, **Chen X**, Tartaglia J, Marovich M and Paul Spearman. Direct Comparison of Antigen Production and Induction of Apoptosis by Canarypoxvirus and Modified Vaccinia Ankara (MVA) HIV Vaccine Vectors. *J Virol* 81(13): 7022-33 (2007).
20. Hammonds J, **Chen X**, Fouts T, DeVico A, Montefiori D, and Spearman, P. Induction of neutralizing antibodies against human immunodeficiency virus type 1 primary isolates by Gag-Env pseudovirion immunization. *J Virol* 79:14804-14814 (2005).
21. **Chen X**, Rock M, Hammonds J, Tartaglia J, Shintani A, Currier J, Slike B, Crowe JE, Marovich M and Spearman. P. Pseudoviron particle production by Live Poxvirus Human Immunodeficiency Virus Vaccine Vector Enhances Humoral and Cellular Immune Responses. *J Virol* 79:5537-5547 (2005).

22. Dong X, Li H, Derdowski A, Ding L, Burnett A, **Chen X**, Peter T, Dermody T, Woodruff E, Wang J-J and Spearman, P. AP-3 Directs the Intracellular trafficking of HIV-1 Gag and Plays a Key Role in Particle Assembly. *Cell* 120: 663-674 (2005).
23. Hammonds J, **Chen X**, Ding L, Fouts T, DeVico A, zur Megede J, Barnett S, and Spearman, P. Gp120 stability on HIV-1 virions and Gag-Env Pseudovirions Is Enhanced by An Uncleaved Gag core. *Virology* 314: 636-649 (2003).
24. Lou W, **Chen X**, Fang H, and Green N. Factors Governing Nonoverlapping Substrate Specificity by Mitochondrial Inner Membrane Peptidase. *J Biol Chem* 278:4943-4948 (2003).
25. Liang H, VanValkenburgh C, **Chen X**, Mullins C, Van Kaer L, Green N, Fang H. Genetic Complementation in Yeast Reveals Functional Similarities between the Catalytic Subunits of Mammalian Signal Peptidase Complex. *J Biol Chem* 278: 50932-50939 (2003).
26. Fang Z, Limbach K, Tartaglia J, Hammonds J, **Chen X**, Spearman, P. Expression of Vaccinia E3L and K3L Genes by a Novel Recombinant Canarypox HIV Vaccine Vector Enhances mv -1 Pseudovirion Production and Inhibits Apoptosis in Human Cells. *Virology* 291(2): 272-284 (2001).
27. **Chen X**, Van Valkenburgh C, Liang H, Fang H and Green, N. Signal Peptidase and oligosaccharyltransferase Interact in a Sequential and Dependant Manner within the Endoplasmic Reticulum. *J Biol Chem* 276: 2411-2416 (2001).
28. **Chen X**, VanValkenburgh C, Fang H and Green N. Signal Peptides Having Standard and Nonstandard Sites Can Be Cleaved by Imp1p of the Mitochondrial Inner Membrane Protease. *J Biol Chem* 274:37750-37754 (1999).
29. VanValkenburgh C, **Chen X**, Mullins C, Fang H and Green N. The Catalytic Mechanism of Endoplasmic Reticulum Signal Peptidase Appears to Be Distinct from Most Eubacterial Signal Peptidase. *J Biol Chem* 274:11519-11525 (1999).