

# CURRICULUM VITAE

## Personal Information:

Name: Zhiwei Xu, Ph.D.

China citizen and U.S. Permanent Resident (Green card) since 2005

## Address and Telephone Numbers:

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## Education:

1982,7-1985,7 Jining College of Medicine (Shandong).

1990,7-1993,7 Beijing Medical University (Beijing).  
Master in Immunology.

1997,7-2000,7 Peking University (Beijing).  
Ph.D. in Immunology.

## Academic Positions/Employment:

1985 - 1990 Technician at Medical Laboratory of Yanzhou Coal Hospital.

1993 - 1997 Lecturer at Dept. of Immunology in Weifang Medical College.

2000 - 2002 Lecturer at Dept. of Immunology in Weifang Medical College.

2002 - 2009 Postdoctoral Associate, Department of Pathology, Immunology, and Laboratory Medicine, College of Medicine University of Florida.

2009-Present Research Assistant Professor, Department of Pathology, Immunology, and Laboratory Medicine, College of Medicine University of Florida.

## Awards and Scholarship:

1999, excellent Ph.D student scholarship of Peking University

2001, medal of Weifang outstanding scientist.

## Professional Societies

Membership of America Association of Immunologist, 2005-present

## Publications:

### Peer-reviewed articles:

- 1, **Xu, Z.**, Butfiloski, E.J., Sobel, E.S., and Morel, L. Mechanisms of peritoneal B-1a cells accumulation induced by murine lupus susceptibility locus *Sle2*. *J. Immunol.* 173:6050-6058, 2004.
- 2, **Xu, Z.**, Duan, B., Croker, B.P., Wakeland, E.K., and Morel, L. Genetic dissection of the murine lupus susceptibility locus *Sle2*: contributions to increased peritoneal B-1a cells and lupus nephritis map to different loci. *J. Immunol.* 175: 936-943, 2005.
- 3, **Xu, Z.**, Duan, B., Croker, B.P., and Morel, L. STAT4 deficiency protects mice from lupus nephritis. *Clin. Immunol.*, 120:189-198, 2006.
- 4, Blenman, K.R.M., Duan, B., **Xu, Z.**, Wan, S., Atkinson, M.A., Flotte, T.R., Croker, B.P., Morel, L. IL-10 regulation of lupus in the NZM2410 murine model. *Lab. Invest.*, 86: 1136-1148, 2006.
- 5, Duan, B., Niu, H. **Xu, Z.**, Sharpe, A.H., Croker, B.P., Sobel, E.S., and Morel L. Intrafollicular location of marginal zone/CD1d<sup>hi</sup> B cells is associated with autoimmune pathology in a mouse model of lupus. *Lab. Invest.*, 88: 1008-1020, 2008.
- 6, **Xu Z.**, Vallurupalli A, Fuhrman C, Ostrov D, Morel L. New Zealand Black-derived locus suppresses chronic graft-versus-host disease and autoantibody production through nonlymphoid bone marrow-derived cells. *J Immunol.* 186(7):4130-9. 2011
- 7, **Xu Z.**, Cuda CM, Croker BP, Morel L. The NZM2410-derived **lupus** susceptibility locus *Sle2c1* increases Th17 polarization and induces nephritis in fas-deficient mice. *Arthritis Rheum.* 63(3):764-74. 2011.
- 8, **Xu Z.**, Potula HH, Vallurupalli A, Perry D, Baker H, Croker BP, Dozmorov I, Morel L. Cyclin-Dependent Kinase Inhibitor *Cdkn2c* Regulates B Cell Homeostasis and Function in the NZM2410-Derived Murine Lupus Susceptibility Locus *Sle2c1*. *J Immunol.* 186(12):6673-82, 2011.
9. Cuda CM, Li S, Liang S, Yin Y, Potula HH, **Xu Z et al.** Pre-B cell leukemia homeobox 1 is associated with lupus susceptibility in mice and humans. *J Immunol.* 2012; 188(2): 604-14.
10. Potula HH, **Xu Z.**, Zeumer L, Croker BP, Morel L. Cyclin-dependent kinase inhibitor *Cdkn2c* deficiency promotes B1a cell expansion and autoimmunity in a mouse model of lupus. *J. Immunol.* 2012; 189(6):2931-40. (Co-first authors).
- 11, **Xu Z.**, Croker BP, Morel L. A short murine lupus-susceptibility *Sle2c1rec1* sublocus functions as both contributor and modifier of autoimmune disease in CD95 deficiency. 2013; submitted to *Gene & Immunity*.

### Invited review:

- 1, **Xu, Z.**, Duan, B. and Morel, L. Genetics of autoreactive B cells. In: Role of B cells in systemic and organ-specific autoimmune diseases, L. Morel Ed. *Frontiers in Biosciences*, 12: 1707-1721, 2007.
  - 2, **Xu Z.**, Morel L. Genetics of systemic **lupus** erythematosus: contributions of mouse models in the era of human genome-wide association studies. *Discov Med*, 10(50):71-8, 2010.
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Abstracts:

- 1, Morel, L., **Xu, Z.**, Duan, B. and Sobel, E. Genetic and Functional Mechanisms of Peritoneal B1a Accumulation in Lupus Mice. 12<sup>th</sup> International Congress of Immunology, Montreal, Canada, 2004.
- 2, Morel, L., **Xu, Z.**, Sobel, E.S., Corker, B.P. Peritoneal B-1a cell accumulation: analysis of its contribution to systemic lupus erythematosus (SLE) and genetic mapping within the *Sle2* locus. B cells Keystone Symposia, Steamboat, Co. March 28 – April 03, 2005.
- 3, Wan, S., **Xu, Z.**, Duan, B., Cuda, C., Croker, B.P., Morel, L. B7-2/CD86, but not B7-1/CD80 deficiency completely prevents anti-nuclear autoantibody production and clinical disease in the NZM2410 lupus model. 9<sup>th</sup> IWAA, Gainesville, Fl, Sept. 29 – Oct. 2, 2005.
- 4, **Xu, Z.**, Duan, B., Croker, B.P., Morel, L. Both STAT4 and STAT6 deficiency abrogate anti-nuclear autoantibody production, but only STAT4 affects clinical disease in the NZM2410 lupus model. 9<sup>th</sup> IWAA, Gainesville, Fl, Sept. 29 – Oct. 2, 2005.
- 5, **Xu, Z.**, Morel, L. The *Sle2* Lupus Susceptibility Locus Inhibits Chronic Graft versus Host Reaction. AAI meeting, Boston, MA, May 12-16, 2006.
- 6, **Xu, Z.** and Morel, L. Multi-positions in the *Sle2* locus derived from lupus NZM2410 mouse inhibit chronic graft versus host reaction. 8<sup>th</sup> International Congress on SLE, Shanghai, China, May 23-27, 2007. *Lupus*, 16, Abstract supplement.
- 7, **Xu, Z.** and Morel, L. The *Sle2c1* murine susceptibility locus controls T cell homeostasis through defective IL-2 production. AAI meeting, Seattle, Washington. May 8-12, 2009.
- 8, **Xu, Z.** and Morel, L. *Sle2c1* sublocus synergizes with *lpr* mutation in contributing to lupus development. ACR/ARHP 2009 scientific meeting, October 17-21, 2009, Philadelphia.
- 9, **Xu, Z.** and Morel, L. *Sle2c2* sublocus, derived from murine lupus susceptibility *Sle2* locus, suppresses chronic graft versus host reaction in late phase. Cold Spring Harbor Asia Conference, Frontiers of immunology in health & disease. November 7-10, 2010. Suzhou China.
- 10, **Xu, Z.**, Potula, H., Vallurupalli, A. and Morel, L. Reduced expression of cyclin-dependent kinase inhibitor *Cdkn2c* reduced IL-2 production by CD4<sup>+</sup> T cells expressing the murine NZB-derived *Sle2c1* susceptibility locus. AAI 98<sup>th</sup> annual meeting. May 13-17, 2011. San Francisco.
- 11, **Xu, Z.** and Morel, L. The lupus-susceptibility *Sle2c1* sub locus regulates T cell expansion through several mechanisms. AAI 99<sup>th</sup> annual meeting. May 5-8, 2012. Boston, MA.
- 12, **Xu, Z.** and Morel, L. The (278-37)*rec1* sublocus from lupus-susceptibility *Sle2c1* locus reduces Treg cell population in the synergy of Fas deficiency. The Third International Conference on Regulatory T Cells and Th Subsets and Clinical Application in Human Diseases. October 13-16, 2012. Shanghai, China.

## Grant support

### Ongoing grants

1, NIH/NIAMS K01 AR056725-01A1 09/08/2009 to 07/31/2014

Title: Genetic and Functional Analysis of IL-2 Deficiency in Lupus-Prone Mice

Role: PI

This project aims at elucidating the genetic and cellular mechanisms of IL-2 deficiency in lupus model and its contribution to autoimmune disease development.

Total cost: \$538,556.00 including 8% indirect cost.

### Completed grants

1, NIH/NIAID R01-A058150-01 Morel, L. (PI) 07/01/04 to 06/30/09

Title: B cell Developmental defect in murine lupus.

This project proposes to define the mechanisms of B cell developmental defects in the NZM2410 model, specifically regarding B-1a and plasma cells, and to define the role of these defects in lupus pathogenesis.

Role: CO-PI

Total cost: \$1,250,000.00

2, Experimental Pathology innovative grants (EPIG), University of Florida College of medicine.10/01/2008 to 06/30/2009.

Role: PI

Title: Functional analysis of murine *Sle2c2* sublocus in experimental autoimmune models. This project is to explore if three different experimental autoimmune disease models can be induced in B6.*Sle2c2* congenic mouse, which will provides insights into the mechanisms of *Sle2c2* sublocus suppressing autoimmunity.

Total cost: \$5,000.00

3, Experimental Pathology innovative grants (EPIG), University of Florida College of medicine.10/01/2009 to 06/30/2010

Title: Characterization of a new lymphoma model in the *Sle2c1.lpr* mouse

Role: PI

The objective of this research is to define the property of enlarged lymph organs in *Sle2c1.lpr* Mouse, tomur characterization or only cell hyperproliferation.

Total cost: \$4,000.00

4, Experimental Pathology innovative grants (EPIG), University of Florida College of medicine.10/01/2010 to 06/30/2011

Title: Transcriptional regulation and IL-2 deficiency in lupus-prone B6. (278-37)rec1 Mouse.

The objective of this research is to investigate the pssoible mechanisms of (278-37) Sublocus resulting in IL-2 production decrease by activated CD4+ T cells.

Total cost: \$2,700.00