

CURRICULUM VITAE

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EDUCATION AND PROFESSIONAL EXPERIENCE:

- **Aug. 2014-present: Research associate in Immunology**
Cleveland clinic Lerner Research Institute, Cleveland, Ohio, USA
Project: The role of Act1 in IL-17 signaling and auto-immune diseases;
Molecular regulation of inflammasome.
Advisor: Prof. Xiaoxia Li
- **Nov. 2010- Aug. 2014: Postdoc. in Immunology**
Cleveland clinic Lerner Research Institute, Cleveland, Ohio, USA
Project: The role of Act1 in IL-17 signaling and in auto-immune diseases;
Molecular regulation of inflammasome.
Advisor: Prof. Xiaoxia Li
- **Sep. 2007–Jul. 2010: Ph.D in Cell Biology**
National Center of Biomedical Analysis (NCBA), Beijing, China
Ph.D thesis: “The function and mechanism analysis of CUEDC2 in heat shock and endoplasmic reticulum stress”
Advisor: Prof. Xuemin Zhang
Member of Chinese Academy of Sciences
- **Sep. 2004–Jul. 2007: Master Degree in Cell Biology**
National Center of Biomedical Analysis (NCBA), Beijing, China
M.D thesis: “Construction of deletion mutants of CUEDC2 and preliminary research of its function.”

Advisor: Prof. Xuemin Zhang
Member of Chinese Academy of Sciences

REPRESENTATIVE PUBLICATIONS:

1. Hui-Yan Li¹, Hui Liu¹, **Chen-Hui Wang**, Ji-Yan Zhang, Jiang-Hong Man, Yan-Fei Gao, Pei-Jing Zhang, Wei-Hua Li, Jie Zhao, Xin Pan, Tao Zhou, Wei-Li Gong, Ai-Ling Li & Xue-Min Zhang. Deactivation of the kinase IKK by CUEDC2 through recruitment of the phosphatase PP1. *Nature Immunology*, 2008, 9(5): 533-541. (The second author)
2. H-Y Zhang¹, J-H Man¹, B Liang, T Zhou, **C-H Wang**, T Li, H-Y Li, W-H Li, B-F Jin, P-J Zhang, J Zhao, X Pan, K He, W-L Gong, X-M Zhang and A-L Li. Tumor-targeted delivery of biologically active TRAIL protein. *Cancer Gene Therapy*. 2010, 17: 334-343.
3. Tao Zhou¹, Bing Liang¹, Gui-Ying Su, Wei-Li Gong, Hui-Yan Li, Li-Feng Tian, Kun He, Jie Zhao, Jiang-Hong Man, Tao Li, Wei-Hua Li, Zhi-Yi Zhang, **Chen-Hui Wang**, Ai-Ling Li, Hui Liu, Xin Pan, Pei-Jing Zhang, Bao-Feng Jin and Xue-Min Zhang. Identification of ubiquitin target proteins using cell-based arrays. *Journal of Proteomics Research*, 2007, 6(11): 4397-406.
4. LI Wen-long, **WANG Chen-hui**, WEI Chuan-yu, GONG Wei-Li, MU Rui, FANG Di-feng, CHEN Liang, ZHOU Tao. MKP2 and MKP3 Inhibit Transcriptional Activity of TGF-beta/Smad. *Science Technology and Engineering*. 13, 007, 2010.
5. W LI, WL GONG, C WEI, **C WANG**, R MU, D FANG, L CHEN, T ZHOU. Conservative Analysis of CUEDC1 Amino Acid Sequence and CUEDC1 Inhibits Transcriptional Activity of TGF-beta/SMAD. *Science Technology and Engineering* 13, 006, 2010.
6. Liu C, Swaidani S, Qian W, Kang Z, Sun P, Han Y, **Wang C**, Gulen MF, Yin W, Zhang C, Fox PL, Aronica M, Hamilton TA, Misra S, Deng J, Li X. A CC' loop decoy peptide blocks the interaction between Act1 and IL-17RA to attenuate IL-17- and IL-25-induced inflammation. *Sci Signal*. 2011 Nov 1;4(197):ra72.
7. Kang Z, Swaidani S, Yin W, **Wang C**, Barlow JL, Gulen MF, Bulek K, Do JS, Aronica M, McKenzie AN, Min B, Li X. Epithelial cell-specific Act1 adaptor

- mediates interleukin-25-dependent helminth expulsion through expansion of Lin(-)c-Kit(+) innate cell population. *Immunity*. 2012 May 25;36(5):821-33.
8. Kang Z, Liu L, Spangler R, Spear C, **Wang C**, Gulen MF, Veenstra M, Ouyang W, Ransohoff RM, Li X. IL-17-induced Act1-mediated signaling is critical for cuprizone-induced demyelination. *J Neurosci*. 2012 Jun 13;32(24):8284-92.
 9. **Chenhui Wang**¹, Ling Wu¹, Katarzyna Bulek et al. The psoriasis-associated D10N variant of the adaptor Act1 with impaired regulation by the molecular chaperone hsp90. *Nature Immunology*, 2013, 14 (1) 72-81. **ARTICLE OF THE MONTH of January 2013 in Nature Immunology.**
 10. Zizhen Kang, **Chenhui Wang**, Jarod Zepp, Ling Wu, Kevin Sun, Junjie Zhao, Unni Chandrasekharan, Paul E. DiCorleto, Bruce D. Trapp, Richard M. Ransohoff, Li X. Experimental autoimmune encephalomyelitis: The NG2+ glial cell response to interleukin (IL)-17/Act1 signaling mediates the role of IL-17 in disease pathogenesis. *Nature Neuroscience*. 2013 Oct;16(10):1401-8.
 11. Bertrand Boisson, **Chenhui Wang**, Vincent Pedergnana, Ling Wu, Sophie Cypowyj, Michel Rybojad, Aziz Belkadi, Capucine Picard, Laurent Abel, Claire Fieschi, Anne Puel*, Xiaoxia Li* and Jean-Laurent Casanova*. A biallelic mutation of ACT1 that selectively abolishes IL-17 responses in humans with chronic mucocutaneous candidiasis. *Immunity* 2013 Oct 17;39(4):676-86.
 12. Lin Gong¹, **Chen-Hui Wang**¹, Yi Jiao Huang, Feng Liu, Teng Li, Jiang Dai, Ai ling Li, Tao Zhou, Qing Xia, Liang Chen. CUEDC2 interacts with Heat Shock Protein 70 and negatively regulates its chaperone activity. *Biochem Biophys Res Commun*. 2014 Apr 25;447(1):64-9. **(Co-first author)**.
 13. Ling Wu¹, **Chenhui Wang**¹, Bertrand Boisson, Saurav Misra, Pat Rayman, James H. Finke, Anne Puel, Jean-Laurent Casanova*, Xiaoxia Li*. The differential regulation of human ACT1 isoforms by Hsp90 in IL-17 signaling. *J Immunol*. 2014 Jul 14. pii: 1400715. [Epub ahead of print] **(Co-first author)**.
 14. Bradley N. Martin¹, **Chenhui Wang**¹, Tomasz Herjan, Jami Willette-Brown, Muhammet F. Gulen, Hao Zhou, Katarzyna Bulek, Junjie Zhao, Luigi Franchi, Takashi Sato, Goutham Narla, Xiao-Ping Zhong, Dennis Klinman, Katherine A.

Fitzgerald, Michael Karin, Gabriel Nuñez, George Dubyak, Yinling Hu*, and Xiaoxia Li*. IKK α negatively regulates ASC-dependent inflammasome activation. *Nature Communications*. 2014 Sep 30;5:4977 (**Co-first author**).

15. Bradley N. Martin¹, **Chenhui Wang**¹, Muhammet F. Gulen, Zizhen Kang, Hao Zhou, Katarzyna Bulek, Junjie Zhao and Xiaoxia Li. T cell derived inflammasome activation is essential for the pathogenesis of autoimmune encephalomyelitis. In preparation (**Co-first author**).
16. **Chenhui Wang**, Bradley N. Martin, Cunjin Zhang, Katarzyna Bulek, Zizhen Kang, Xin Chen, Tomasz Herjan, Wen Qian, Junjie Zhao and Xiaoxia Li. IL-17 induced NOTCH activation in NG2+ glial cells plays an important role in the pathogenesis of autoimmune encephalomyelitis. In preparation.

Membership:

Member of *The International Society for Interferon and Cytokine Research (ISICR)* since 2013.

Award:

The 2013 Milstein Travel Award from *The International Society for Interferon and Cytokine Research (ISICR)*.

Meeting attendance:

1. "Multiple Sclerosis: Clinical & Immunological Concepts" in Birmingham, AL on May 16-17, 2013.
2. "Cytokines: From Molecular Mechanisms to Human Disease". September 29 - October 3, 2013. San Francisco, California, USA.
3. "Notch Signaling in Development, Regeneration & Disease" Gordon Research Conference, July 20-25, 2014. Bates College, Lewiston, ME.

AREA OF EXPERTISE:

Immunology, Cell biology and Molecular biology.

EXPERIMENTAL TECHNIQUES:

- **Gene cloning and expression:** molecular cloning, purification of DNA and RNA, PCR, RT-PCR, real time PCR. and expression of target gene in E. Coli and mammalian cells, protein purification.
- **Signal transduction study:** Western Blotting analysis, immunoprecipitation, luciferase reporter gene assay, siRNA related assays. immunofluorescence assay, immunohistochemistry assay, ubiquitination assays, EMSA, in vitro kinase assay, ChIP, clone formation assay, soft agar assay, nude mice related assays, FACS, MTT.
- **Protein-protein interaction:** Screening cDNA library using yeast two-hybrid system, GST pull-down assay, Co-IP assay, confocal colocalization analysis.
- **Tissue culturing:** Cell culture, transient and stable cell transfection, clone selection.
- **In vivo model:** EAE model (active induction and Th1/Th17 adoptive transfer), isolation and analysis of infiltrated cells from CNS.

MY REFERENCES:

Prof. Xiaoxia Li, Ph.D

The Paul L. Fox, PhD, Endowed Chair in Molecular Medicine at the Lerner Research Institute

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Regular member, American Society for Biochemistry and Molecular Biology

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