

Xi Luo

Curriculum Vitae

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Education

2012~2015 **Ph.D.** in Biophysics, Cornell University, Ithaca, NY
2008~2011 **M.S.** in Biochemistry, University of Rochester School of Medicine, Rochester, NY
2006~2008 Senior thesis research in National Institute of Biological Sciences (NIBS), Beijing, China
2003~2007 **B.S.** in Biology, Nankai University, Tianjin, China

Publication

Luo X, Wasilko DJ, Liu Y, Sun JY, Wu XC, Luo ZQ, Mao Y. Structure of a *Legionella* virulence factor reveals a unique PI(4)P binding domain for phagosome targeting.

PLoS Pathogens (2015) 11(6):e1004965.

Luo X*, Hsu F*, Qiu J, Teng YB, Jin J, Smolka MB, Luo ZQ, Mao Y. The *Legionella* effector SidC defines a unique family of ubiquitin ligases important for bacterial phagosomal remodeling.

Proc Natl Acad Sci U S A (2014) 111: 10538-10543. (*equal contribution)

Xing W, Zou Y, Liu Q, Liu J, **Luo X**, Huang Q, Chen S, Zhu L, Bi R, Hao Q, Wu JW, Zhou JM, Chai J.

The structural basis for activation of plant immunity by bacterial effector protein AvrPto.

Nature. (2007) 449(7159):243-7.

Research Experience

2011~2015 **Cornell University** Weill Institute for Cell and Molecular Biology

Advisor: **Dr. Yuxin Mao**

"A *Legionella* effector SidC - a new family of E3 ubiquitin ligase with a specific PI(4)P binding domain."

- Our data reveals that SidC represents a unique E3 ubiquitin ligase family important for phagosomal membrane remodeling by *L. pneumophila*. *Proc Natl Acad Sci USA* (2014)
- Our results delineate the molecular mechanism of PI(4)P targeting by SidC and suggest a potential fallout for the development of a faithful in vivo PI(4)P probe. *PLoS Pathogens* (2015)

2008~2011 **University of Rochester School of Medicine** Musculoskeletal Research Center

Advisor: **Dr. Regis O'Keefe** and **Dr. Jennifer Jonason**

"Investigating the roles of BMP-2/Smad and Ihh signaling in β -catenin-mediated endochondral bone formation."

2006~2008 **National Institute of Biological Sciences (NIBS)**

Advisor: **Dr. Jijie Chai**

"The structural basis for activation of plant immunity by bacterial effector protein AvrPto."

Nature (2007)

2005~2006 **Nankai University**

Advisor: **Dr. Yong Wang**

"Transformation of *Lotus corniculatus* with double salt-tolerant genes."

Presentations and Posters

Presented at biennial Weill Institute Retreat on 10/13/2014

"A *Legionella* effector SidC - a new family of E3 ubiquitin ligase with a specific PI(4)P binding domain."

Presented at Cornell Membrane Signaling Meeting on 03/27/2014

"A *Legionella* effector SidC - a new family of E3 ubiquitin ligase with a specific PI(4)P binding domain."

Posters at Keck Biomembrane Meeting on 06/25/13-06/27/2013 and 06/30/14-07/02/2014

"A novel phosphatidylinositol-4 phosphate specific binding probe derived from *Legionella pneumophila* effector protein SidC"

Poster at 1st annual CMSR Symposium on 07/15/2011

"Investigating the roles of BMP-2/Smad and Ihh signaling in β -catenin-mediated endochondral bone formation."