

PERSONAL DATA

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EDUCATION AND PROFESSIONAL EXPERIENCE**CASE WESTERN RESERVE UNIVERSITY** Nov 2010 to present**Assistant Professor, Departments of Physiology and Biophysics***Research:* Understanding ion channel folding and function in the cell**THE SCRIPPS RESEARCH INSTITUTE** Sep 2005 to Nov 2010**Postdoctoral Research Associate, Departments of Chemistry and Molecular and Experimental Medicine, and the Skaggs Institute for Chemical Biology***Research:* Readapting the protein homeostasis network to ameliorate protein-misfolding diseases*Advisor:* Jeffery W. Kelly**CALIFORNIA INSTITUTE OF TECHNOLOGY** Sep 2000 - Aug 2005**Ph.D., Department of Chemistry***Thesis:* A chemical-scale structure-function study on ligand-gated ion channels*Advisor:* Dennis A. Dougherty; *Co-advisor:* Henry A. Lester**UNIVERSITY OF SCIENCE AND TECHNOLOGY OF CHINA** Sep 1995 - July 2000**B.S., Department of Chemistry (00 Class)***Research Assistant:* Elucidating molecular recognition in supramolecular systems*Advisor:* Professor Qing-Xiang Guo

Apr 1999 - July 2000

CONFERENCES AND PRESENTATIONS

Cystic fibrosis Seminar, School of Medicine, Case Western Reserve University Nov 2010

Talk: Readapting the protein homeostasis network to ameliorate loss-of-function diseases

Department of Biochemistry, University of Utah, Salt Lake City, UT Jan 2010

Invited Talk: Readapting the protein homeostasis network to ameliorate protein folding diseases

Department of Chemistry, Boston College, Chestnut Hill, MA Dec 2009

Invited Talk: Readapting the protein homeostasis network to ameliorate protein folding diseases

Department of Chemistry, Emory University, Atlanta, GA Dec 2009

Invited Talk: Readapting the protein homeostasis network to ameliorate protein folding diseases

Gordon Research Conferences on Stress Proteins in Growth, Development & Disease, Andover, NH Jul 2009

Poster: Proteomic profiling of protein homeostasis regulators for protein misfolding diseases

Department of Pharmacology, Baylor College of Medicine, Houston, TX Mar 2009

Invited Talk: Using chemistry to study ion channels and protein misfolding diseases

Department of Chemistry, University of Florida, Gainesville, FL Jan 2009

Invited Talk: Ameliorating protein folding diseases by restoring proteostasis

Department of Chemistry, University of Pittsburgh, Pittsburgh, PA Nov 2008

Invited Talk: Applying chemical biology on ion channels and protein folding diseases

2008 Metachromatic Leukodystrophy Disease (MLD) Symposium, DeKalb, IL Sep 2008

Invited Talk: Ameliorating lysosomal storage diseases by restoring protein homeostasis

The American Chemical Society 236th National Meeting, Philadelphia, PA Aug 2008

Poster: Readapting the protein homeostasis network to ameliorate loss-of-function diseases

Curriculum Vitae

- The American Chemical Society 234th National Meeting, Boston, MA Aug 2007
Talk: Using pharmacologic chaperones to improve mutant enzyme activities in lysosomal storage diseases
- The Biophysical Society 49th Annual Meeting, Long Beach, CA Jun 2005
Poster: Probing the agonist binding sites of the Cys-loop receptors using unnatural amino acids
- Gordon Research Conferences on Ligand Recognition and Molecular Gating, Venture, CA Mar 2004
Poster: Mapping the ligand binding sites of a serotonin-gated ion channel

PROFESSIONAL MEMBERSHIP

- Member of the *American Chemical Society* 2001 to present
Member of the *Biophysical Society* 2005 to present
Member of the *American Association for the Advancement of Science* 2007 to present
Member of *Sigma Xi, the Scientific Research Society* 2007 to present
Member of the *American Society for Cell Biology* 2010 to present

SELECTED PUBLICATIONS

- Ong DS, **Mu TW**, Palmer AE, Kelly JW (2010) Endoplasmic reticulum Ca²⁺ increases enhance glucocerebrosidase folding, trafficking and function. *Nature Chemical Biology*, 6:424-432
- Mu TW**,* Ong DS,* Wang YJ, Balch WE, Yates JR, Segatori L,* Kelly JW (2008) Chemical and biological approaches synergize to ameliorate protein-folding diseases. *Cell*, 134:769-791
Highlighted in *Science*, **2008**, 321, 1419, *Chemical and Engineering News*, **2008**, 86(36), 36, and *ACS Chemical Biology*, **2008**, 3(10), 595.
- Mu TW**, Fowler DM, Kelly JW (2008) Partial restoration of mutant enzyme homeostasis in three distinct lysosomal storage disease cell lines by altering calcium homeostasis. *PLoS Biol*, 6: e26.
Highlighted in *Chemical and Engineering News*, **2008**, 86(6), 46, and *ACS Chemical Biology*, **2008**, 3(3), 137.
- Mu TW**, Lester HA, Dougherty DA (2003) Different binding orientations for the same agonist at homologous receptors: A lock and key or a simple wedge? *J Am Chem Soc*, 125: 6850-6851.
- Mu TW**, Liu L, Li XS, Guo QX (2001) A theoretical study on the inclusion complexation of cyclodextrins with radical cations and anions. *J Phys Org Chem* 14: 559-565.