

## Youchun Zeng

6425 Alamo Ave. 2W, St. Louis, MO 63105  
314-401-6856

United States Permanent Resident  
youchunzeng@yahoo.com

### EDUCATION

Ph.D. in Chemistry	<b>Washington University in St. Louis, MO</b>	1998
	Thesis: Phospholipid subclass specific properties of membrane bilayers	
MA in Chemistry	<b>Washington University in St. Louis, MO</b>	1995
MS in Physical Chemistry	<b>Chinese Academy of Sciences, Beijing, China</b>	1988
BS in Chemistry and Teaching	<b>Hunan Normal University, Changsha, China</b>	1984
Additional Courses	Project Management, Technology for Managers, Web Site Management, Quality Management and ISO Standards at <b>Washington University</b> .	

### EXPERTISE

1. Fluorescence spectrometry and confocal microscopy.
2. Molecular cloning, PCR mutagenesis, cell transformation, DNA sequencing, cell culture, cell transfection, Western blotting, ELISA, immunoprecipitation and immunofluorescence.
3. Synthesis, purification and characterization of lipids, chromatographic isolation of proteins.
4. Transgenic mouse techniques, tissue fixation and sectioning, histology and immunohistochemistry.
5. GC, HPLC, TLC, MALDI-MS, ESI-MS, GC-MS and LC-MS.
6. Computer skills: PC, Apple, Adobe Photoshop and Microsoft Office.

### EXPERIENCE

#### 2005-present Washington University School of Medicine in St. Louis, MO

Staff Scientist in Bioorganic Chemistry and Molecular Pharmacology, Department of Medicine

1. Conducted research on Alzheimer's disease, lipid rafts, glycosynapses, cholesterol and GM1 trafficking using ESI mass spectrometry, Western blotting, confocal fluorescence microscopy and flow cytometry.
2. Studied sulfatide metabolism, trafficking and the interactions with apolipoprotein E and amyloid- $\beta$  peptide.
3. Investigated the roles of cellular endosomes and lysosomes in sulfatide-induced neuroblastoma apoptosis.
4. Assisted with grant preparation, submitted papers based on research work for publication.

#### 1998-2004 Washington University School of Medicine in St. Louis, MO

Research Associate in Lab Medicine, Department of Pathology

1. Investigated the roles of CD36 and caveolin-1 in fatty acid metabolism.
2. Examined protein localization, trafficking and structure-function relationships by confocal microscopy.
3. Maintained laboratory safety and records, trained new employees and interns.

#### 1988-1992 Research Institute of Petroleum Processing in Beijing, China

Project Leader, Chemical Engineer

Supervised research, design, formulation, development and commercialization of petroleum reforming catalysts (Patent, Publishing Number: 1032951A).

### SELECTED PUBLICATIONS

1. **Zeng, Y.** & Han, X. (2008) "[Sulfatides Facilitate Apolipoprotein E-mediated Amyloid- \$\beta\$  Peptide Clearance through an Endocytotic Pathway](#)" *J. Neurochem.* 106, 1275-1286.
2. **Zeng, Y.**, Cheng, H., Jiang, X., & Han, X. (2008) "[Endosomes and Lysosomes Play Distinct Roles in Sulfatide-Induced Neuroblastoma Apoptosis: Potential Mechanisms Contributing to Abnormal Sulfatide Metabolism in Related Neuronal Diseases](#)" *Biochem. J.* 410, 81-92.
3. Ostermeyer, A. G., Ramcharan, T., **Zeng, Y.**, Patwardhan, P., Awdankiewicz, A., Lublin, D. M., & Brown, D. A. (2004) "[Role of Hydrophobic Domain in Targeting Caveolin-1 to Lipid Droplets](#)" *J. Cell Biol.* 164, 69-78.
4. **Zeng, Y.**, Nenbing, T., Koong-Nah, C., John, H. & Lublin, D. M. (2003) "[Endocytosis of Oxidized Low](#)

- [Density Lipoprotein through Scavenger Receptor CD36](#)" *J. Biol. Chem.* 278, 45931-36.
5. Ostermeyer, A. G., Paci, M., **Zeng, Y.**, Lublin, D. M., Munro, S., & Brown, D. A. (2001) "[Accumulation of Caveolin in the ER Redirects the Protein to Lipid Storage Droplets](#)" *J. Cell Biol.* 152, 1071-8.
  6. **Zeng, Y.**, Han, X., & Gross, R.W. (1999) "[Phospholipid Subclass-Specific Partitioning of Lipophilic Ions in Membrane-Water Systems](#)" *Biochem. J.* 338, 651-658.
  7. **Zeng, Y.**, Han, X., Schlesinger, P., & Gross, R. W. (1998) "[Nonesterified Fatty Acids Induce Transmembrane Monovalent Cation Flux](#)" *Biochemistry* 37, 9497-9508.
  8. **Zeng, Y.**, Han, X., & Gross, R. W. (1998) "[Phospholipid Subclass Specific Alterations in the Passive Ion Permeability of Membrane Bilayers](#)" *Biochemistry* 37, 2346-2355.

#### ADDITIONAL INFORMATION

1. Award for Teaching Excellence as a teaching assistant in Chemistry at Washington University in 1996.
2. Languages: English, Chinese (native).
2. Member of American Association for the Advancement of Science.
3. Award for Outstanding Performance as a board member of the [St. Louis Modern Chinese School](#).
5. Conference Young Investigator Fellowships at Second ISN Neurochemistry Conference in 2006.
6. Organized community service events: <http://charles.chizeng.com/community-service>.

#### REFERENCES

Dr. Koong Nah Chung, Ph.D. Assistant Dean  
Washington University School of Medicine  
[chungk@wusm.wustl.edu](mailto:chungk@wusm.wustl.edu), 314-362-6844

Professor Douglas Lublin, MD, Ph.D.  
Washington University School of Medicine  
[dlublin@pathology.wustl.edu](mailto:dlublin@pathology.wustl.edu), 314-362-8847

Professor Richard Gross, MD, Ph.D.  
Washington University School of Medicine  
[rgross@wustl.edu](mailto:rgross@wustl.edu), 314-362-2690

Professor Xianlin Han, Ph.D.  
Washington University School of Medicine  
[xianlin@wustl.edu](mailto:xianlin@wustl.edu), 314-747-2877