

BIOGRAPHICAL SKETCH

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NAME Eggers, Daryl K.		POSITION TITLE Associate Professor Department of Chemistry	
eRA COMMONS USER NAME eggerts			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Rose-Hulman Inst. Technol., Terre Haute, IN	B.S.	1977 - 81	Chemical Engineering
University of California, Berkeley, CA	M.S.	1984 - 87	Chemical Engineering
University of California, San Francisco, CA	Ph.D.	1990 - 97	Pharmacology
University of California, Los Angeles, CA	Postdoc	1997 - 02	Biochemistry

A. Positions and Honors

Positions and Employment

1981 - 84 Associate Engineer, M.W. Kellogg Company, Houston, TX
1987 - 90 Chemist II, Syntex Research, Palo Alto, CA
1997 - 02 Postdoctoral Research Fellow, UCLA
1998 - 99 Summer Lecturer, Biochemistry, UCLA
2002 - 08 Assistant Professor, Department of Chemistry, San Jose State University
2008 - Associate Professor, Department of Chemistry, San Jose State University

Professional Memberships

1990 - Member, American Chemical Society
1996 - Member, AAAS
1999 - Member, Biophysical Society
2004 - Member, The Protein Society
2010 - Member, Society for Biomaterials

Honors

1999 - 02 Fellow of the American Cancer Society
2000 Award of Excellence, Chem & Biochem Advances in Research Forum, UCLA
2008 Early Career Investigator Award, SJSU Research Foundation

B. Selected Peer-reviewed Publications (in chronological order)

1. Eggers, D.K., W.J. Welch, and W.J. Hansen: Complexes between nascent polypeptides and their molecular chaperones in the cytosol of mammalian cells. *Mol. Biol. Cell* 8:1559-1573 (1997)
2. Liu, H., H. Zhu, D.K. Eggers, A.M. Nersissian, K.F. Faull, J.J. Goto, J. Ai, J. Sanders-Loehr, E.B. Gralla, J.S. Valentine: Copper(2+) binding to the surface residue cysteine 111 of His46Arg human copper-zinc superoxide dismutase, a familial amyotrophic lateral sclerosis mutant. *Biochemistry* 39:8125-32 (2000)
3. Eggers, D.K., and J.S. Valentine: Molecular confinement influences protein structure and enhances thermal protein stability. *Protein Science* 10:250-261 (2001)
4. Eggers, D.K., and J.S. Valentine: Crowding and hydration effects on protein conformation: a study with sol-gel encapsulated proteins. *J. Mol. Biol.* 314:911-922 (2001)

5. Rodriguez, J.A., J.S. Valentine, D.K. Eggers, J.A. Roe, A. Tiwari, R.H. Brown, L.J. Hayward: Familial ALS-associated mutations decrease the thermal stability of distinctly metallated species of human copper/zinc superoxide dismutase. *J. Biol. Chem.* 277:15932-37 (2002)
6. Rodriguez, J.A., B.F. Shaw, A. Durazo, S.H. Sohn, P. Doucette, A.M. Nersissian, K.F. Faull, D.K. Eggers, A. Tiwari, L.J. Hayward, J.S. Valentine: Destabilization of apoprotein is insufficient to explain Cu,Zn-superoxide dismutase-linked ALS pathogenesis. *Proc. Nat. Acad. Sci.* 102:10516-21 (2005)
7. Rocha, V.A., and D.K. Eggers: Hydrophobic, organically-modified silica gels enhance the structure of encapsulated apomyoglobin. *ChemComm*, 1266-1268 (2007)
8. Mena, B., Herrero, M., Rives, V., Lavrenko, M., and D.K. Eggers: Favourable influence of hydrophobic surfaces on protein structure in porous organically-modified silica glasses. *Biomaterials* 29, 2710-2718 (2008), PMID: 18359512
9. Mena, B., Torres, C., Herrero, M., Rives, V., Gilbert, A.R.W., and D.K. Eggers: Protein adsorption onto organically-modified silica glass leads to a different structure than sol-gel encapsulation. *Biophysical J.* 95, L51-L53 (2008), PMID: 18676642
10. Mena, B., Miyagawa, Y., Takahashi, M., Herrero, M., Rives, V., Mena, F., and D.K. Eggers: Bioencapsulation of apomyoglobin in nanoporous organosilica sol-gel glasses: Influence of the siloxane network on the conformation and stability of a model protein. *Biopolymers* 91, 895-905 (2009), PMID: 19585561

C. Research Support

Ongoing Research Support

1SC3 GM089591, Eggers (PI) 01/01/10 - 12/31/13
 NIH, NIGMS
 A new interpretation of solute effects on biological equilibria

CHE-0723278, Eggers (PI) 08/01/07 - 07/31/10
 Co-PI's: Collins (SJSU), Gassner (SFSU), Subramaniam (Santa Clara), Whiles-Lillig (Sonoma St.)
 NSF, CHE
 MRI: Acquisition of an Isothermal Titration Calorimeter and a Differential Scanning Calorimeter.

Completed Research Support (none)

S06 GM008192, Eggers (PI) 01/01/06 - 12/31/09
 NIH, NIGMS
 Intermediate States of Aggregation-prone Polypeptides