

CURRICULUM VITAE (PI:DR. JOHN MASON FINKE)

EDUCATION

Ph.D. in Chemistry	2001	University of California San Diego, La Jolla, California
M.S. in Chemistry	1998	University of California San Diego, La Jolla, California
B.A. in Biochemistry	1993	Claremont McKenna College, Claremont, California

PROFESSIONAL EXPERIENCE

2012-present	Assistant Professor of Biochemistry, University of Washington Tacoma, Tacoma WA
2005-2012	Assistant Professor of Chemistry, Oakland University, Rochester MI
2001-2005	Postdoctoral Fellow, University of California San Diego, La Jolla CA
1995-2001	Ph.D. Research Assistant, University of California San Diego, La Jolla CA
1994-1995	Organic Chemist, ICF Kaiser Engineers, Port Orchard WA
1993-1994	Analytical Chemist, Analytical Resources, Seattle WA

PUBLICATIONS (*UNDERGRADUATE OR **M.S. COAUTHOR)

1. Quintyn, R.S, Zhou, M., Dagan, S., Finke, J., Wysocki, V.H. **2013**. "Ligand binding and unfolding of tryptophan synthase revealed by ion mobility-tandem mass spectrometry employing collision and surface induced dissociation", *International Journal of Ion Mobility Spectroscopy*, V. 16, 133-143. (2013).
2. Klaver, A.C., Coffey, M.P., Smith, L.M., Bennett, D.A., Finke, J.M., Dang, L., and Loeffler, D.A. **2011**. "ELISA measurement of specific non-antigen-bound antibodies to Abeta1-42 monomer and soluble oligomers in sera from Alzheimer's disease, mild cognitively impaired, and noncognitively impaired subjects", *Journal of Neuroinflammation*, V. 8, 93.
3. Digambaranath J.L., Campbell T.V.*, Chung A.*, McPhail M.J.*, Stevenson K.E.*, Zohdy M.A., and Finke J.M. **2011**. "An accurate model of polyglutamine", *Proteins: Structure, Function, Bioinformatics*, V. 19, pp. 1427-1440.
4. Klaver A.C., Patrias L.M., Finke J.M., and Loeffler D.A. **2011**. "Specificity and Sensitivity of the A β "Oligomer-Specific" ELISA", *Journal of Neuroscience Methods*, V. 195, pp. 249-254.
5. Patrias L.M., Klaver A.C., Coffey M.P., Finke J.M., Digambaranath J.L., Dang L., Martinez A.A., and Loeffler D.L. **2011**. "Effects of External Beam Radiation on In Vitro Formation of Abeta1-42 Fibrils and Preformed Fibrils", *Radiation Research*, V. 175, pp. 375-381.
6. Klaver, A.C., Patrias, L.M., Coffey, M.P., Finke, J.M., and Loeffler, D.A. **2010**. "Measurement of anti-A β 1-42 antibodies in intravenous immunoglobulin with indirect ELISA: the problem of nonspecific binding", *Journal of Neuroscience Methods*, V. 187, pp. 263-269.
7. Digambaranath, J.L., Dang, L., Dembinska, M.*, Vasyluk, A.*, and Finke, J.M. **2010**. "Conformations within soluble oligomers and insoluble aggregates revealed by resonance energy transfer", *Biopolymers*, V. 93, pp. 299-317.
8. Klaver, A.C., Finke, J.M., Digambaranath, J.L., Balasubramanian, M., and Loeffler, D.A. **2010**. "Antibody concentrations to A β ₁₋₄₂ monomer and soluble oligomers in untreated and antibody-antigen-dissociated intravenous immunoglobulin preparations", *International Immunopharmacology* V. 10, 115-119.
9. Sniady, A., Sevilla, M.D., Meneni, S., Lis, T., Szafert, S., Finke J. M., and Dembinski R. **2009**. "Synthesis and ESR studies of 2'-deoxyuridines tethered with alkynyl, rod-like linkages", *Chemistry – A European Journal*, V. 15, pp. 7569-7577.
10. Andrews, B.T., Gosavi, S., Finke, J.M., Onuchic, J.N., and Jennings, P.A. **2008**. "The dual-basin landscape in GFP folding", *Proceedings of the National Academy of Sciences U.S.A.*, V. 105, pp. 12283-12288.
11. Rao, M.K.**, Chapman, T.R.**, and Finke, J.M. **2008**. "Crystallographic B-factors Highlight Energetic Frustration in Aldolase Folding", *J. Phys. Chem. B.*, V. 112, pp. 10417-10431.
12. Gu, Z., Rao, M.K.**, Forsyth, W.R., Finke, J.M., and Matthews, C.R. **2007**. "Structural Analysis of kinetic folding intermediates for a TIM barrel protein, Indole-3-Glycerol Phosphate Synthase, by Hydrogen Exchange Mass Spectrometry and Go-model Simulation." *Journal of Molecular Biology*, V. 374, pp. 528-546.

13. Patel, B.* and Finke, J.M. **2007**. "Folding and unfolding of γ TIM monomers and dimers." *Biophysical Journal*, V. 93, pp. 2457-2471.
14. Finke J.M., Jennings, P.A., Lee, J.C., Onuchic, J.N., and Winkler, J.R. **2007**. "Equilibrium unfolding of the Poly-(Glutamic Acid)₂₀ Helix." *Biopolymers*, V. 86, pp. 193-211.
15. Alfaro, A.*, Doan M.*, Finke J., Glades M.*, Zohdy M. **2006**. "Application of divide and conquer algorithm to tertiary protein structure of chymotrypsin inhibitor-2." *Applied Bionics and Biomechanics*, V. 3, pp. 263-271.
16. Finke J.M. and Onuchic, J.N. **2005**. "Equilibrium and kinetic folding pathways of a TIM barrel with a funneled energy landscape." *Biophysical Journal*, V. 89, pp. 488-505.
17. Roy, M., Chavez, L.L., Finke, J.M., Heidary, D.K., Onuchic, J.N., and Jennings, P.A. **2005**. "The native energy landscape for interleukin-1 β . Modulation of the population ensemble through native-state topology." *Journal of Molecular Biology*, V. 348, pp. 335-347.
18. Finke, J.M., Cheung, M.S. and Onuchic, J.N. **2004**. "A structural model of polyglutamine determined from a host-guest method combining experiments and landscape theory." *Biophysical Journal*, V. 87, pp. 1900-1918.
19. Cheung, M.S., Finke, J.M., Callahan, B.* and Onuchic, J.N. **2003**. "Exploring the interplay of topology and secondary structural formation in the protein folding problem." *Journal of Physical Chemistry B*, V. 107, pp. 11193-11200.
20. Finke J.M. and Jennings P.A. **2002**. "Interleukin-1 β folding between pH 5 and 7: Experimental evidence for three-state folding behavior and robust transition state positions late in folding." *Biochemistry*, V. 41, pp. 15056-15067.
21. Finke, J.M. and Jennings, P.A. **2001**. "Aggregated states in the folding of interleukin-1 β " *Journal of Biological Physics*, V. 27, pp. 119-131.
22. Finke, J.M., Gross, L.A., Ho, H.M.*, Sept, D., Zimm, B.H. and Jennings, P.A. **2000**. "Commitment to folded and aggregated states occurs late in interleukin-1 β folding." *Biochemistry*, V. 39, pp. 15633-15642.
23. Finke, J.M., Roy, M., Zimm, B.H. and Jennings, P.A. **2000**. "Aggregation events occur prior to stable intermediate formation during refolding of interleukin-1 β ." *Biochemistry*, V. 39, pp. 575-583.

INVITED LECTURES

- VA Puget Sound Neuroscience Research Conference, Seattle, WA, 2013
- 5th Annual Midwest Conference on Protein Folding, Notre Dame, IN, 2010
- William Beaumont Hospital Research Symposium, Rochester, MI, 2009
- University of Toledo, Department of Medicinal and Biological Chemistry Seminar, Toledo, OH, 2008
- Michigan Academy of Sciences Annual Meeting, Rochester, MI, 2006
- Michigan State University, Condensed Matter Physics Seminar, East Lansing, MI, 2005
- Oakland University Sigma Xi Seminar, Rochester, MI, 2005
- Center For Theoretical Biological Physics Colloquia, San Diego, CA, 2004
- Biophysical Society 48th National Meeting, Baltimore, MD, 2004
- Symposium, Protein Folding: Simple Models and Experiments, Torino, Italy, 2000
- Biophysical Society 42nd National Meeting, Kansas City, KS, 1998

REGULATORY CERTIFICATION

CITI Program Certification, Human Subjects Research, Biosafety Level 2, 2 years

PROFESSIONAL SERVICE

- Grant Reviewer: NSF, Alzheimer's Association, US/Israel Binational Foundation
- Journal Reviewer: *Biophys. J.*, *Proteins SFB*, *J. Phys. Chem. B*, *J. M. Bio.*, *J. Chem. Phys.*, *Biochemistry*
- Meeting Organizer: 2008, 2010 ACS Student Members Meeting - Detroit Section

MEMBERSHIPS

American Chemical Soc., Biophysical Soc., Protein Society, Sigma Xi, Soc. for Neuroscience