

Selected Publications:

- A. L. Lucius**, M. J. Jezewska, W. Bujalowski, “*E. coli* Helicase PriA Protein has Two Nucleotide-Binding Sites Differing Dramatically in Their Affinities For Nucleotide Cofactors. I. Intrinsic Affinities, Cooperativities, and Base Specificity of the Nucleotide Cofactor Binding” *Biochemistry* (2006) **45**, 7202-7216.
- A. L. Lucius**, M. J. Jezewska, A. Roychowdhury, W. Bujalowski, “Kinetic Mechanisms of the Nucleotide Cofactor Binding to the Strong and Weak Nucleotide-Binding Site of The Escherichia coli PriA Helicase. II”, *Biochemistry* (2006) **45**, 7217-7236.
- A. L. Lucius**, M. J. Jezewska, W. Bujalowski, “Allosteric Interactions between the Nucleotide Binding Sites and the ssDNA-Binding Site in the PriA Helicase – ssDNA Complex. III” *Biochemistry* (2006) **45**, 7237-7255.
- A. L. Lucius**, C.J. Wong, and T. M. Lohman, “Fluorescence Stopped-flow Studies of Single Turnover Kinetics of *E. coli* RecBCD Helicase-catalyzed DNA Unwinding” *J. Mol. Biol.* (2004) **339**, 731-750.
- A. L. Lucius**, and T. M. Lohman, “Effects of Temperature and ATP on the Kinetic Mechanism and Kinetic Step-size for *E. coli* RecBCD Helicase-catalyzed DNA Unwinding” *J. Mol. Biol.* (2004) **339**, 751-771.
- T.M. Lohman, J. Hsieh, N.K. Maluf, W. Cheng, **A.L. Lucius**, C.J. Fischer, K.M. Brendza, S. Korolev, and G. Waksman, “DNA Helicases, Motors that Move Along Nucleic Acids: Lessons from the SF1 Helicase Superfamily,” *The Enzymes*, (2003) **23**.
- A. L. Lucius**, N. K. Maluf, C. J. Fischer, T. M. Lohman, “General Methods for Analysis of Sequential ‘n-step’ Kinetic Mechanisms: Applications to Single Turnover Kinetics of Helicase Catalyzed DNA Unwinding,” *Biophysical Journal* (2003) **84**, 2224-2239.
- A. L. Lucius**, A. Vindigni, R. Gregorian, J.A. Ali, A. F. Taylor, G.R. Smith, T.M. Lohman, “DNA Unwinding Step-size of *E. coli* RecBCD Helicase