Graduate student positions are available in the Elber group at the University of Texas at Austin to conduct Molecular Dynamics simulations of long time processes of biological molecules. Examples are protein conformational transitions, transport through membrane, RNA folding, and molecular machines. A few relevant publications are listed at the end of this message. Interest in scientific programming and statistical mechanics are requirements. Background in chemistry and biology is a plus. Interested candidates should contact ron@ices.utexas.edu. Students in the Elber's group are from three graduate programs in University of Texas at Austin : Computer Science, Computational Science and Engineering Math, and Chemistry and Biochemistry. Candidate should indicate which program they prefer to apply.

Steven Kreuzer, Ron Elber and Tess J Moon, “Early Events in Helix Unfolding Under External Forces: A Milestoning Analysis”, J. Phys. Chem. B, 116,8662–8691(2012)

Serdal Kirmizialtin, Virginia Nguyen, Kenneth A Johnson, and Ron Elber, “How Conformational Dynamics of DNA Polymerase Select Correct Substrates: Experiments and Simulations”, Structure, 20,618-627(2012)

Serdal Kirmizialtin and Ron Elber, “Revisiting and Computing Reaction Coordinates with Directional Milestoning”, J. Phys. Chem. A, 115,6137-6148(2011).