Seminar Series of the CIHR Training Grant in Protein Folding and Interaction Dynamics

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Site-specific DNA recombination and transposition in 3D

My group combines biochemical and structural approaches to understand how DNA recombinases orchestrate DNA rearrangements. In this seminar, I will focus on two particular types. (1) "Serine" recombinases, which employ a very unusual protein swivel to realign broken DNA ends and (2) a "DDE" transposase that rearranges DNA through an entirely different mechanism. Both types have evolved clever tricks for driving forward chemically isoenergetic reactions, one through exploiting DNA supercoiling, and the other through product binding energy derived from DNA bending.

Host: Dr. Lewis Kay

Wednesday, April 23, 2014 - 12:00pm Medical Sciences Building, Rm. 4171 University of Toronto