This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
3D structure of HIV-1 tat bound to the host's positive transcription elongation factor complex to assist in development of HIV replication inhibitors	<p>The 3D structure of HIV-1 tat complexed with the host's positive transcription elongation factor could help guide the development of compounds that inhibit HIV replication. HIV tat takes over host cell transcriptional machinery by interacting with the host's positive transcription elongation factor to produce HIV mRNA. A crystal structure of the complex showed that tat binds to the factor by making extensive contacts with the two subunits: cyclin T1 (CCNT1) and cyclin-dependent kinase 9 (CDK9). Next steps could include using the structure to develop HIV therapeutics that target the two subunits and block viral replication.</p> <p>SciBX 3(24); doi:10.1038/scibx.2010.748 Published online June 17, 2010</p>	Work unpatented; licensing status not applicable	<p>Tahirov, T.H. <i>et al. Nature</i>; published online June 9, 2010; doi:10.1038/nature09131</p> <p>Contact: Tahir H. Tahirov, University of Nebraska Medical Center, Omaha, Neb. e-mail: ttahirov@unmc.edu</p>