This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
Programmable ligand display system to identify multivalent binders to GPCRs	<p>A programmable ligand-display system could be useful for identifying high-affinity compounds that bind GPCR targets. The system uses ligand-modified peptide nucleic acids (L-PNAs) and complementary DNAs to generate libraries of multivalent scaffolds against a particular GPCR. An L-PNA:DNA multivalent library was generated against the adenosine A_{2A} receptor ($ADORA_{2A}$) and contained multiple configurations of multivalent ligands that bound to the receptor at nanomolar IC_{50} values. Next steps include attaching additional ligands that bind to different membrane receptors to study how multivalent display can modulate intracellular signaling.</p> <p>SciBX 7(36); doi:10.1038/scibx.2014.1078 Published online Sept. 18, 2014</p>	<p>Patent application filed; available for licensing from the NIH Contact: Marguerite Miller, National Institutes of Health, Bethesda, Md. e-mail: marguerite.miller@nih.gov</p>	<p>Dix, A.V. <i>et al.</i> <i>J. Am. Chem. Soc.</i>; published online Aug. 12, 2014; doi:10.1021/ja504288s Contact: Daniel H. Appella, National Institutes of Health, Bethesda, Md. e-mail: appellad@niddk.nih.gov</p>