This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Chemistry			
Generation of high-affinity DNA aptamers using non-natural nucleotides	Non-natural nucleotides could be useful for generating high-affinity DNA aptamers. Libraries of DNA aptamers were generated using the four natural nucleotides plus the non-natural nucleotide 7-(2-thienyl)imidazo[4,5- <i>b</i>]pyridine. <i>In vitro</i> selection experiments against human VEGF-165 and interferon- γ (IFNG; IFN- γ) identified aptamers that bound to the proteins with subpicomolar and subnanomolar K_d values that were a 100-fold improvement over DNA aptamers made from only natural nucleotides. Next steps include using the technology to develop high-affinity aptamers against small molecules and cells.	Patent applications filed; available for licensing from TagCyx Biotechnologies	Kimoto, M. <i>et al. Nat. Biotechnol.</i> ; published online April 7, 2013; doi:10.1038/nbt.2556 Contact: Ichiro Hirao, RIKEN Systems and Structural Biology Center, Kanagawa, Japan e-mail: ihirao@riken.jp
	SciBX 6(15); doi:10.1038/scibx.2013.373 Published online April 18, 2013		