This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Chemically induced chromosomal evolution (CIChE) strategy for metabolic engineering of bacteria	CIChE, a method for gene and pathway duplication, could provide an alternative to plasmid-based approaches for engineering therapeutically active bacterial metabolites. The strategy involves integrating a DNA cassette containing the genes of the pathway into a bacterial chromosome and allowing the chromosomes to duplicate multiple times. <i>Escherichia coli</i> engineered using the CIChE approach produced up to 40 times more poly-3-hydroxy-butyrate (PHB), a biopolymer, than plasmid-transformed bacteria. Next steps include using the strategy in other bacterial production processes.	Patent application filed in the U.S.; available for licensing	Tyo, K. <i>et al. Nat. Biotechnol.</i> ; published online July 26, 2009; doi:10.1038/nbt.1555 Contact: Gregory Stephanopoulos, Massachusetts Institute of Technology, Cambridge, Mass. e-mail: gregstep@mit.edu
	SciBX 2(30); doi:10.1038/scibx.2009.1196 Published online Aug. 6, 2009		