This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Transformation-associated recombination (TAR)-based method to capture large, biosynthetic bacterial gene clusters	<p>A TAR-based approach to isolate bacterial gene clusters could aid the synthesis of natural products including antibiotics. In yeast, TAR was used to assemble a contiguous 67 kb region from the marine actinomycete <i>Saccharomonospora</i> sp. that contained 20 transcriptionally silent open reading frames including a biosynthetic gene cluster. Subsequent deletion of an inhibitory gene, heterologous expression in a model biosynthetic host and structural characterization identified the cluster's product as taromycin A, an antibiotic similar to Cubicin daptomycin. Next steps include streamlining the TAR-based approach for high throughput screening of biosynthetic microbial gene clusters.</p> <p>Cubist Pharmaceuticals Inc. markets Cubicin to treat bacteremia and skin and skin structure infections.</p> <p>SciBX 7(6); doi:10.1038/scibx.2014.187 Published online Feb. 13, 2014</p>	<p>Patent application filed; available for licensing from the University of California, San Diego</p> <p>Contact: Dominic Montisano, University of California, San Diego, La Jolla, Calif. e-mail: dfmontisano@ucsd.edu</p>	<p>Yamanaka, K. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Jan. 21, 2014; doi:10.1073/pnas.1319584111</p> <p>Contact: Bradley S. Moore, University of California, San Diego, La Jolla, Calif. e-mail: bsmoore@ucsd.edu</p>