This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Chemistry			
Selective arylation of imidazoles to synthesize Tasigna nilotinib and its analogs	N ¹ -selective palladium-catalyzed arylation of imidazoles could be used to synthesize Tasigna nilotinib and its analogs. Synthesis using a preactivated palladium catalyst resulted in more efficient and more selective arylation of imidazoles at the N ¹ position than synthesis without preactivation. The method was used to synthesize Tasigna, with each N-arylated precursor and Tasigna itself obtained as a single, site-selective product. Next steps could include using the method to synthesize analogs of Tasigna and other imidazole-based drugs. Tasigna, a BCR-ABL tyrosine kinase inhibitor from Novartis AG, is marketed to treat chronic myelogenous leukemia (CML).	Unpatented; licensing status not applicable	Ueda, S. <i>et al.</i> <i>J. Am. Chem. Soc.</i> ; published online Nov. 29, 2011; doi:10.1021/ja2102373 Contact: Stephen L. Buchwald, Massachusetts Institute of Technology, Cambridge, Mass. e-mail: sbuchwal@mit.edu
	SciBX 5(1); doi:10.1038/scibx.2012.28 Published online Jan. 5, 2012		