This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Chemistry			
Simplified synthesis of pactamycin to aid analog development	A simplified process for pactamycin synthesis could facilitate the generation of less cytotoxic analogs for therapeutic evaluation. Pactamycin is a fungal-derived compound known to have antitumor and antibiotic properties but is itself considered to be too cytotoxic for clinical development. The development of analogs was complicated because the compound was previously synthesized using a 32-step process. In the current approach, a 15-step chemical-synthesis process that includes an enantioselective Mannich reaction and symmetry-breaking reduction sequence produced milligram quantities of the compound with a 1.9% overall yield. Next steps include evaluating unnatural analogs of pactamycin created using this process.	Patent application filed; available for licensing	Malinowski, J.T. *et al. Science*; published online April 12, 2013; doi:10.1126/science.1234756 **Contact:** Jeffrey S. Johnson, The University of North Carolina at Chapel Hill, Chapel Hill, N.C. e-mail: jsj@unc.edu

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