

## This week in techniques

Approach	Summary	Licensing status	Publication and contact information
<b>Chemistry</b>			
Total synthesis of polyene compounds with <i>N</i> -methyliminodiacetic acid (MIDA) boronate building blocks	<p>A method for total synthesis of polyene natural products could be useful for exploring their therapeutic applications. Analysis of a natural product database showed that over 75% of polyene compounds contain no more than 12 different polyene motifs. A two-step iterative coupling reaction used MIDA boronate analogs of polyene motifs to generate polyene chains up to 20 carbons long and utilized additional MIDA boronate analogs to add desired structures to the chain termini. Total synthesis with the method yielded milligram quantities of the antimicrobial and anticancer compound asnipyrone B and two other natural products. Next steps include automating the method and extending it to other classes of small molecules.</p> <p><b>SciBX 7(20); doi:10.1038/scibx.2014.597</b> Published online May 22, 2014</p>	Unpatented; licensing status not applicable	Woerly, E.M. <i>et al. Nat. Chem.</i> ; published online May 11, 2014; doi:10.1038/nchem.1947 <b>Contact:</b> Martin D. Burke, University of Illinois at Urbana-Champaign, Urbana, Ill. e-mail: <a href="mailto:burke@scs.uiuc.edu">burke@scs.uiuc.edu</a>