

## This week in techniques

Approach	Summary	Licensing status	Publication and contact information
<b>Disease models</b>			
Modeling cell-surface behavior of glycopolymers	<p>A technique for inserting mucin-like glycopolymers into living cell membranes may provide a model for studying the role of mucins in cancer and other diseases. Researchers used glycopolymer mucin mimics that consisted of a poly(methyl vinyl ketone) backbone, synthetic mono- and disaccharide glycan sidechains and a phospholipid tail. The phospholipid tail enabled the mucin mimics to passively insert into the cell membrane. Spectroscopic imaging revealed that the mimics had more consistent surface densities from one cell to another than did native mucins, and comparable membrane mobility and lectin binding. The researchers are exploring structures with other synthetic backbones and longer glycans, and they are examining the behavior of mimics in mucin-expressing cell types.</p> <p>At least five companies have compounds targeting mucin 1 (MUC1) or mucin 18 (MUC18) in preclinical and clinical development to treat various cancers.</p>	Not patented; licensing status undisclosed	Rabuka, D. <i>et al. J. Amer. Chem. Soc.</i> ; published online April 11, 2008; doi:10.1021/ja710644g <b>Contact:</b> Carolyn R. Bertozzi, Lawrence Berkeley National Laboratory, Berkeley, Calif. e-mail: <a href="mailto:crb@berkeley.edu">crb@berkeley.edu</a>