

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Crystal structure of the dopamine transporter in complex with a tricyclic antidepressant	<p>The crystal structure of the dopamine transporter in complex with the tricyclic antidepressant nortriptyline could help guide the design of new antidepressants. Analysis of the crystal structure of the <i>Drosophila</i> dopamine transporter, which shares homology with the human transporter, in complex with Pamelor nortriptyline showed that the drug blocks substrate binding and locks the transporter in an outward-open conformation. The structure also revealed a binding site for cholesterol that helps stabilize the outward-open confirmation. Next steps could include using the structural information to rationally design new antidepressants.</p> <p>Mallinckrodt plc markets Pamelor to treat depression.</p> <p>SciBX 6(39); doi:10.1038/scibx.2013.1109 Published online Oct. 10, 2013</p>	Patent and licensing status unavailable	<p>Penmatsa, A. <i>et al. Nature</i>; published online Sept. 15, 2013; doi:10.1038/nature12533 Contact: Eric Gouaux, Oregon Health & Science University, Portland, Ore. e-mail: gouauxe@ohsu.edu</p>