

## This week in techniques

Approach	Summary	Licensing status	Publication and contact information
<b>Drug platforms</b>			
Genetically attenuated <i>Mycobacterium smegmatis</i> as a tuberculosis (TB) vaccine vector	Genetically attenuated strains of <i>M. smegmatis</i> could be used as vectors for TB vaccines. <i>M. smegmatis</i> strains lacking the <i>esx-3</i> locus were modified to carry the orthologous <i>esx-3</i> locus from the closely related <i>M. tuberculosis</i> . In mouse models of <i>M. smegmatis</i> infection, the modified strain had attenuated virulence compared with wild-type strains. In a mouse model of lethal <i>M. tuberculosis</i> infection, immunization with the <i>M. smegmatis</i> strains increased survival compared with immunization with the bacillus Calmette-Guérin (BCG) vaccine. Next steps include stabilizing expression of the inserted genes and identifying specific genes encoding TB antigens that could improve the resulting immune response. The <i>M. smegmatis</i> -based TB vaccine program at Aeras is in discovery stages.	Patent pending; use of <i>M. smegmatis</i> vaccine vector for TB licensed to Aeras; use of <i>M. smegmatis</i> vaccine vector for other indications available for licensing	Sweeney, K.A. <i>et al. Nat. Med.</i> ; published online Sept. 4, 2011; doi:10.1038/nm.2420 <b>Contact:</b> William R. Jacobs Jr., Albert Einstein College of Medicine of Yeshiva University, New York, N.Y. e-mail: <a href="mailto:jacobsw@hhmi.org">jacobsw@hhmi.org</a>
	<b>SciBX 4(37); doi:10.1038/scibx.2011.1054</b> Published online Sept. 22, 2011		