This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Mn ²⁺ -peptide complex for preserving immunogenicity of irradiated vaccine epitopes	<p>A radioprotective Mn²⁺-peptide complex could help improve the efficacy of vaccines generated from lethally irradiated viruses and bacteria. Ionizing radiation that renders bacteria and viruses noninfective for vaccine use can also damage the protein epitopes that elicit a protective immune response. <i>In vitro</i>, a Mn²⁺-peptide complex recovered from the radiation-resistant bacterium <i>Deinococcus radiodurans</i> preserved the immunogenicity of both irradiated λ bacteriophage and methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) proteins. In mice, immunization with an irradiated MRSA test vaccine prepared with the Mn²⁺-peptide complex protected against skin MRSA infection, whereas the same test vaccine prepared without the complex did not. Proof-of-concept animal studies are ongoing for a candidate vaccine against Venezuelan equine encephalitis virus, and vaccine candidates against other viruses are planned.</p> <p>SciBX 5(30); doi:10.1038/scibx.2012.797 Published online Aug. 2, 2012</p>	<p>Patent pending; available for licensing from the Henry M. Jackson Foundation for the Advancement of Military Medicine Inc. Office of Technology Transfer Contact: Jonathan Gottlieb, Henry M. Jackson Foundation for the Advancement of Military Medicine Inc., Bethesda, Md. e-mail: jgottlieb@hjf.org phone: 240-694-2633</p>	<p>Gaidamakova, E.K. <i>et al. Cell Host Microbe</i>; published online July 19, 2012; doi:10.1016/j.chom.2012.05.011 Contact: Michael J. Daly, Uniformed Services University of the Health Sciences, Bethesda, Md. e-mail: mdaly@usuhs.edu Contact: Sandip K. Datta, National Institutes of Health, Bethesda, Md. e-mail: dattas@niaid.nih.gov</p>