

### This week in techniques

Approach	Summary	Licensing status	Publication and contact information
<b>Drug platforms</b>			
Cyclic GMP-AMP (cGAMP) as a viral vaccine adjuvant	<p>Cell culture and mouse studies suggest cGAMP could be used as an adjuvant for viral vaccines. cGAMP synthase (cGAS) was recently identified as a cytosolic DNA sensor that produces cGAMP, which then activates the type I interferon pathway through the transmembrane protein 173 (STING; TMEM173) adaptor protein. In cultured, HIV-infected, human monocytes, small hairpin RNA against cGAS or STING decreased the production of type I interferon compared with control shRNA. In mice infected with herpes simplex virus (HSV), knocking out <i>cGAS</i> decreased immune responses and survival compared with no knockout. In mice, immunization with cGAMP plus ovalbumin increased B and T cell responses compared with immunization using ovalbumin alone. Next steps could include testing formulations of HIV or HSV vaccines with cGAMP adjuvants.</p> <p><b>SciBX 6(36); doi:10.1038/scibx.2013.1013</b>  <b>Published online Sept. 19, 2013</b></p>	Patent applications filed; licensing status undisclosed	<p>Gao, D. <i>et al. Science</i>; published online Aug. 8, 2013; doi:10.1126/science.1240933</p> <p>Li, X.-D. <i>et al. Science</i>; published online Aug. 29, 2013; doi:10.1126/science.1244040</p> <p><b>Contact:</b> Zhijian J. Chen, The University of Texas Southwestern Medical Center, Dallas, Texas  e-mail: <a href="mailto:zhijian.chen@utsouthwestern.edu">zhijian.chen@utsouthwestern.edu</a></p>