

### This week in therapeutics

| Indication                | Target/marker/<br>pathway | Summary   | Licensing<br>status   | Publication and contact<br>information   |
|---------------------------|---------------------------|---|---|--|
| <b>Infectious disease</b> |                           |   |   |  |
| Bacterial infection       | IgA                       | <p>Mouse studies suggest secretory IgA could help prevent bacterial infections in formula-fed neonates. Maternal secretory IgA in breast milk protects infants from multiple bacterial infections. In mouse pups not receiving maternal secretory IgA during breast feeding, post-weaning gut levels of endogenous secretory IgA were lower than those in pups that did receive maternal secretory IgA. In the pups, post-weaning levels of endogenous secretory IgA altered the microbial composition of the gut and were inversely associated with numbers of opportunistic bacteria in mesenteric lymph nodes and colonic upregulation of genes linked to inflammatory bowel disease (IBD) and other conditions. Ongoing work includes investigating the role of secretory IgA in preventing infection in neonatal mouse pups.</p> <p><b>SciBX 7(7); doi:10.1038/scibx.2014.202</b><br/>Published online Feb. 20, 2014</p> | Patent application to be filed by the University of Kentucky; available for licensing | <p>Rogier, E.W. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Feb. 3, 2014;<br/>doi:10.1073/pnas.1315792111<br/><b>Contact:</b> Charlotte S. Kaetzel,<br/>University of Kentucky, Lexington, Ky.<br/>e-mail:<br/><a href="mailto:cskaet@uky.edu">cskaet@uky.edu</a></p> |