This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Markers			
Loss of olfaction as an early symptom of cerebral malaria	<p>Mouse studies suggest loss of olfaction could be an early indicator of cerebral malaria infection. In a mouse model of cerebral malaria, MRI showed microbleeding within the olfactory bulb and other pathophysiology including accumulation of Cd8⁺ T cells in local capillaries. In the mice, impaired olfaction developed within four days of infection and was associated with the loss of blood brain barrier integrity and upregulated expression of chemokine CC motif ligand 21 (Ccl21). An antibody against Ccl21 or knockout of its receptor, <i>CC chemokine receptor 7</i> (<i>Ccr7</i>; <i>Cd197</i>), increased survival in the mice compared with an isotype control antibody or expression of wild-type <i>Ccr7</i>. Next steps include validating the loss of olfaction as a marker of cerebral malaria infection in nonhuman primates and humans.</p> <p>SciBX 7(24); doi:10.1038/scibx.2014.723 Published online June 19, 2014</p>	Patent application filed; unavailable for licensing	<p>Zhao, H. <i>et al. Cell Host Microbe</i>; published online May 15, 2014; doi:10.1016/j.chom.2014.04.008 Contact: Cevayir Coban, Osaka University, Osaka, Japan e-mail: ccoban@biken.osaka-u.ac.jp</p>