

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Humanized mice to study lung inflammatory diseases	<p>Mice engineered to express human IL-3 and granulocyte macrophage colony-stimulating factor (GM-CSF; CSF2) could help model lung inflammatory diseases. In mice, the murine <i>Il3</i> and <i>Gm-csf</i> genes were replaced with human homologs. In the transgenic mice, compared with nontransgenic mice, engraftment of human hematopoietic cells led to a greater inflammatory response and the appearance of proinflammatory alveolar macrophages. In engrafted mice, infection with the H1N1 strain of Influenza A stimulated a 100-fold greater human immune response than that in engrafted, nonhumanized mice. Next steps include engineering additional human immune genes into the mouse model.</p> <p><i>SciBX</i> 4(7); doi:10.1038/scibx.2011.203 Published online Feb. 17, 2011</p>	Patent and licensing status undisclosed	<p>Willinger, T. <i>et al.</i> <i>Proc. Natl. Acad. Sci. USA</i>; published online Jan. 24, 2011; doi:10.1073/pnas.1019682108 Contact: Richard A. Flavell, Yale School of Medicine, New Haven, Conn. e-mail: richard.flavell@yale.edu Contact: Markus G. Manz, University Hospital Zurich, Zurich, Switzerland e-mail: markus.manz@usz.ch</p>