This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Markers			
Forkhead box P3 (FOXP3)-depleted T helper type 17 (Th17) cells as an arthritis biomarker	<p>Mouse studies suggest T_{reg} cells that lose expression of <i>FOXP3</i> and become Th17 cells can contribute to arthritis and could provide a useful biomarker to aid arthritis drug development. In a mouse model of collagen-induced arthritis, a population of Foxp3⁺ T cells lost <i>Foxp3</i> expression, converted into Th17 cells and led to joint swelling and bone destruction. In cell culture, the conversion into Th17 cells depended on the presence of synovial fibroblasts and the production of IL-6. Next steps include identifying a molecular signature specific to Foxp3-depleted T cells that could serve as a biomarker or reveal potential therapeutic targets.</p> <p>SciBX 7(4); doi:10.1038/scibx.2014.132 Published online Jan. 30, 2014</p>	Unpatented; licensing status not applicable	<p>Komatsu, N. <i>et al. Nat. Med.</i>; published online Dec. 22, 2013; doi:10.1038/nm.3432 Contact: Hiroshi Takayanagi, The University of Tokyo, Tokyo, Japan e-mail: takayana@m.u-tokyo.ac.jp</p>