This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Markers			
Single-cell immune signatures from mass cytometry to predict clinical recovery from surgery	<p>Single-cell immune signatures generated via mass cytometry could help predict recovery outcomes in patients following surgery. In whole-blood samples from 26 patients taken after primary hip arthroplasty, mass cytometry showed that the signal transducer and activator of transcription 3 (STAT3), cAMP responsive element binding protein 1 (CREB1; CREB) and NF-κB pathways are differentially activated after surgery compared with presurgical baselines. The results were used to define immune signatures that accounted for 40%–60% of the observed interpatient variability in recovery from fatigue, functional hip impairment and pain. Next steps could include validating the immune signatures in larger patient cohorts.</p> <p>SciBX 7(41); doi:10.1038/scibx.2014.1222 Published online Oct. 23, 2014</p>	Patent and licensing status unavailable	<p>Gaudillière, B. <i>et al. Sci. Transl. Med.</i>; published online Sept. 24, 2014; doi:10.1126/scitranslmed.3009701 Contact: Garry P. Nolan, Stanford University School of Medicine, Stanford, Calif. e-mail: gnolan@stanford.edu Contact: Martin S. Angst, same affiliation as above e-mail: ang@stanford.edu Contact: Brice Gaudillière, same affiliation as above e-mail: gbrice@stanford.edu</p>