

THE DISTILLERY

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Imaging			
Brain imaging in nonanesthetized mice	A method for imaging the brains of nonanesthetized mice may help with studies of neurological diseases and identification of potential treatments. An optical window was created by mechanically thinning the skull of mice and fusing a transparent mixture of cement and glass to the thinned bone. Using two-photon laser scanning microscopy, neuronal dendritic spines, microglial processes and brain microvessels could be imaged in nonanesthesized animals for up to three months. Using photosensitizers, neurons expressing light-sensitive channels could be selectively activated and microstrokes could be induced. Next steps could include combining this window with a head- mounted microscope for long-term imaging in freely moving mice.	Patent and licensing status unavailable	Drew, P.J. <i>et al. Nat. Methods</i> ; published online Oct. 21, 2010; doi:10.1038/nmeth.1530 Contact: David Kleinfeld, University of California, San Diego, La Jolla, Calif. e-mail: dk@physics.ucsd.edu

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