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This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Intestinal organoid model for cystic fibrosis transmembrane conductance regulator (CFTR) function	An intestinal organoid model for CFTR function could help develop compounds to treat cystic fibrosis. Organoids were cultured from human intestinal stem cells and treated with forskolin, which activates CFTR and induces fluid influx and swelling. In organoids cultured from patients carrying mutant CFTR variants, forskolin-induced swelling was lower than that in patients carrying wild-type CFTR. In ΔF508 mutant CFTR–expressing organoids, compounds that increased CFTR function also increased forskolin-induced swelling compared with vehicle. Next steps include using the organoids to model patient response to CFTR-targeted drugs. Vertex Pharmaceuticals Inc.'s VX-809, a CFTR corrector, is in Phase III trials to treat ΔF508 mutant cystic fibrosis (CF) in combination with the CFTR potentiator Kalydeco ivacaftor (VX-770). Vertex markets Kalydeco to treat CF.	Patent application filed; available for licensing	Dekkers, J.F. *et al. Nat. Med.*; published online June 2, 2013; doi:10.1038/nm.3201 **Contact:** Jeffrey M. Beekman, University Medical Center Utrecht, Utrecht, the Netherlands e-mail: jbeekman@umcutrecht.nl

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