

THE DISTILLERY

This week in techniques

| Approach | Summary | Licensing status | Publication and contact information |
|---|---|--|---|
| Drug platforms | | | |
| Graded osteoblast interfaces for tissue engineering | Retrovirus-directed cell differentiation may be useful for engineering tissues that better resemble native tissue. Fibroblasts were seeded onto a 3D collagen scaffold containing gradients of immobilized retrovirus encoding the osteogenic transcription factor Runx2. Fibroblasts transfected by the virus expressed Runx2, creating a graded interface of cells with osteoblast-like characteristics. Areas of the matrix with higher concentrations of virus contained higher numbers of osteoblast-like cells than areas with low viral titers. Next steps include assessing the biomechanical properties of the graded interfaces and expanding the technique to additional tissue types. | Patent and licensing status undisclosed | Phillips, J.E. <i>et al. Proc. Natl. Acad.</i> <i>Sci. USA</i> ; published online Aug. 11, 2008; doi:10.1073/pnas.0801988105 Contact: Andrés J. García, Georgia Institute of Technology, Atlanta, Ga. e-mail: andres.garcia@me.gatech.edu |