This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Exogenous lysyl oxidase (LOX) treatment to enhance tensile properties in musculoskeletal grafts	*In vitro* and *in vivo* studies suggest LOX could help enhance the function and durability of musculoskeletal grafts by improving their tensile properties. In cultured bovine articular cartilage and a bovine model of new cartilage formation, exogenous LOX increased mature collagen cross-links and tensile strength in a concentration-dependent manner compared with control treatment. In mice, a subcutaneous transplant of LOX-treated neocartilage showed improved tensile strength and 14-fold higher levels of mature collagen cross-links at 6 weeks than LOX-treated neocartilage cultured *in vitro*, suggesting the graft's properties continue to improve following transplant. Ongoing work includes investigating biomechanical functionality of the improved cartilage grafts in large-animal knee joints.	Patent application filed; available for licensing	Makris, E.A. *et al. Proc. Natl. Acad. Sci. USA*; published online Oct. 27, 2014; doi:10.1073/pnas.1414271111 **Contact:** Kyriacos A. Athanasiou, University of California, Davis, Calif. e-mail: athanasiou@ucdavis.edu

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