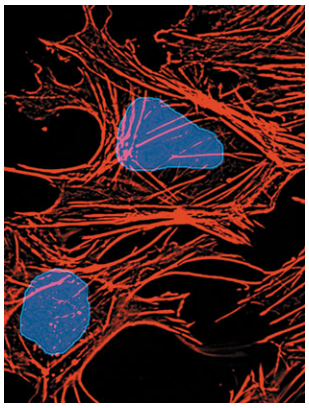
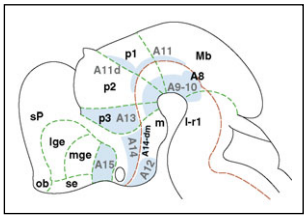
Development



Cover: Cardiac neural crest cells derived from the connexin 43 knockout mouse exhibit altered cell motility associated with a fundamental change in their actin cytoskeleton. Phalloidin staining (red) shows actin stress fibers in connexin 43 deficient crest cells organized in a polygonal network, rather than in parallel stress fiber bundle arrays as seen in wild-type cardiac crest cells. Nuclei are stained with DAPI (blue). **See research article by Xu et al. on p. 3629.**



Midbrain dopaminergic neuron loss is associated with a very common human neurological disorder, Parkinson's disease (PD), yet little is known about this neuron's specification. As Siew-Lan Ang reviews here, the recent identification of major transcriptional determinants that regulate this neuron's development has brought much excitement to this field and should advance efforts to differentiate midbrain dopaminergic neurons in vitro for use in treating PD. **See review article on p. 3499.**

lacZ whole-mount in situ hybridization in an E9.5 BAT-gal transgenic mouse embryo, in which Tcf/β-catenin binding sites regulate *lacZ* expression. In this study, Borello et al. report that *Myf5* is a direct Wnt/β-catenin target, and that its full activation requires a cooperative interaction between the canonical Wnt and the Shh/Gli pathways in muscle progenitor cells. **See research article on p. 3723.**