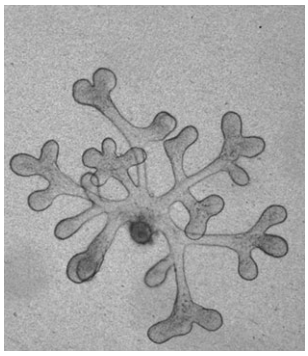
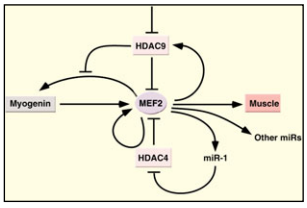
Development



Cover: An embryonic mouse salivary epithelium cultured in laminin-111 with FGF10 (a sub-optimal dose for growth) and recombinant, active heparanase. The heparanase cleaves heparan sulfate and increases FGF10 bioactivity resulting in increased lateral branching, end-bud clefting and duct elongation. **See research article by Patel et al. on p. 4177.**



In this issue, Matthew Potthoff and Eric Olson review the myriad roles that the transcription factor MEF2 plays in development and discuss how it transmits extracellular signals to the genome to activate the differentiation, proliferation, morphogenesis, survival and apoptosis of numerous cell types. **See review on p. 4131.**

A viral-induced gene silencing (vigs)PI-D poppy flower showing strong homeotic transformations of petals and stamens. The *AP3* lineage, this study reports, has undergone both gene duplication and sub-functionalization in the poppy, providing insights into how the petal developmental program evolved. **See research article on p. 4157.**