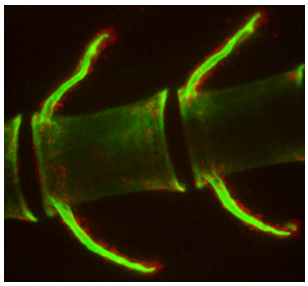
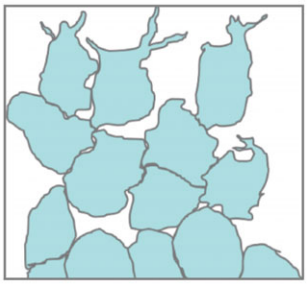
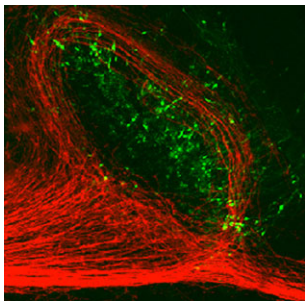
Development



Cover: In zebrafish, osteoblasts are positioned distal to the mineralized matrix, allowing the simultaneous in vivo visualization of osteoblasts (red, *osterix:mCherry*) and calcified tissue (green, calcein staining). In this example, adjacent centra of a 20-day-old zebrafish axial skeleton are shown, with osteoblasts covering the neural and hemal arches. **See research article by Spoorendonk et al. on p. 3765.**



Although different organisms undergo diverse cell movements during gastrulation, studies of the mechanisms and regulation of cell adhesion, as reviewed here by Matthias Hammerschmidt and Doris Wedlich, reveal that different modes of gastrulation cell movements employ the same principles to regulate adhesion. **See review on p. 3625.**



Longitudinal axons (red) of a chick embryonic hindbrain co-transfected with Shh and GFP (green) expression plasmids prior to axon outgrowth, from a study by Farmer et al. that analyses how longitudinal axon tracts are guided towards posterior regions of the developing central nervous system. **See research article on p. 3643.**