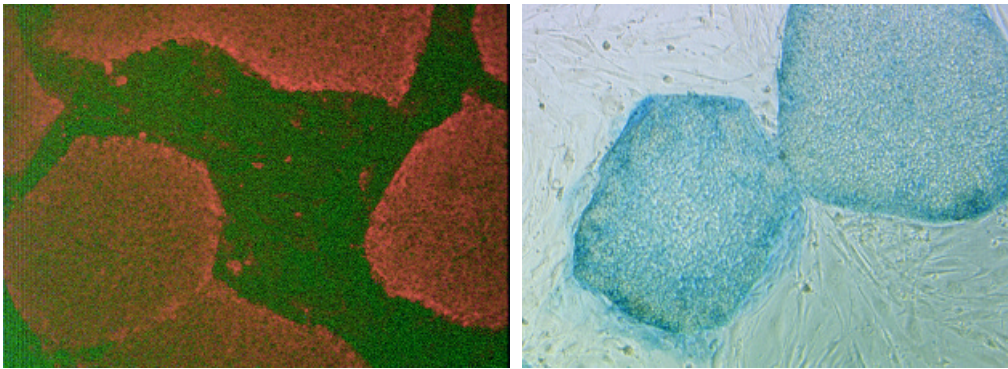
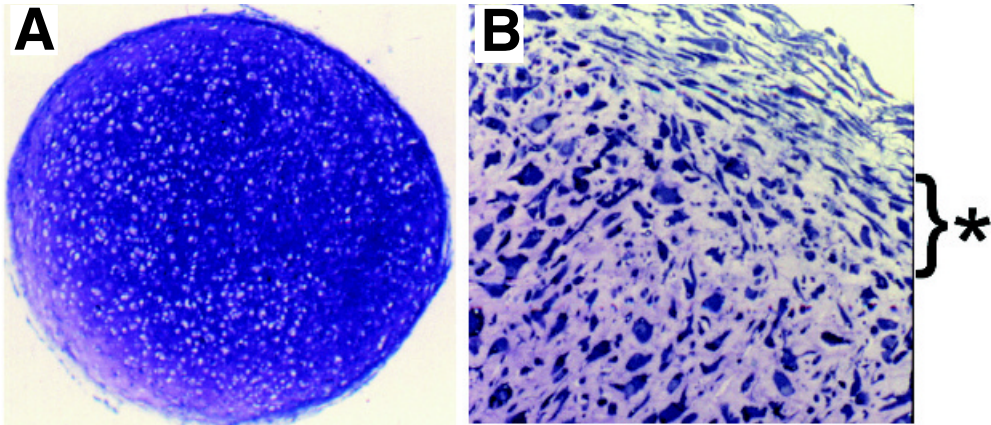


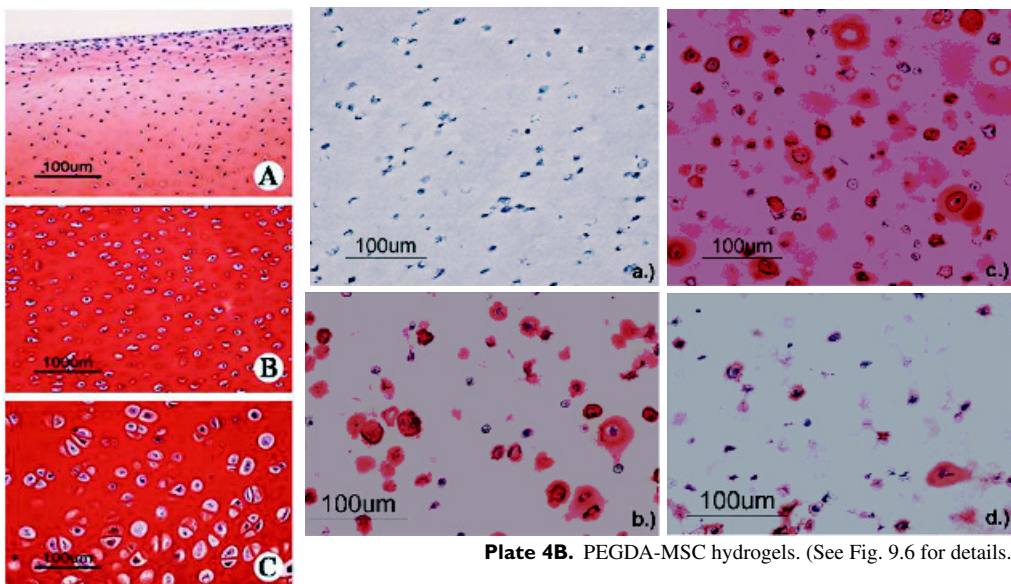
**Plate 1.** Primary explant and outgrowth. A, 4× objective, B, 10× objective. (See Fig. 1.2 for details.)



**Plate 2.** hES cell colonies on mouse embryonic fibroblasts. SSEA-4, red, left and ALP, blue, right. (See Fig. 3.1 for details.)



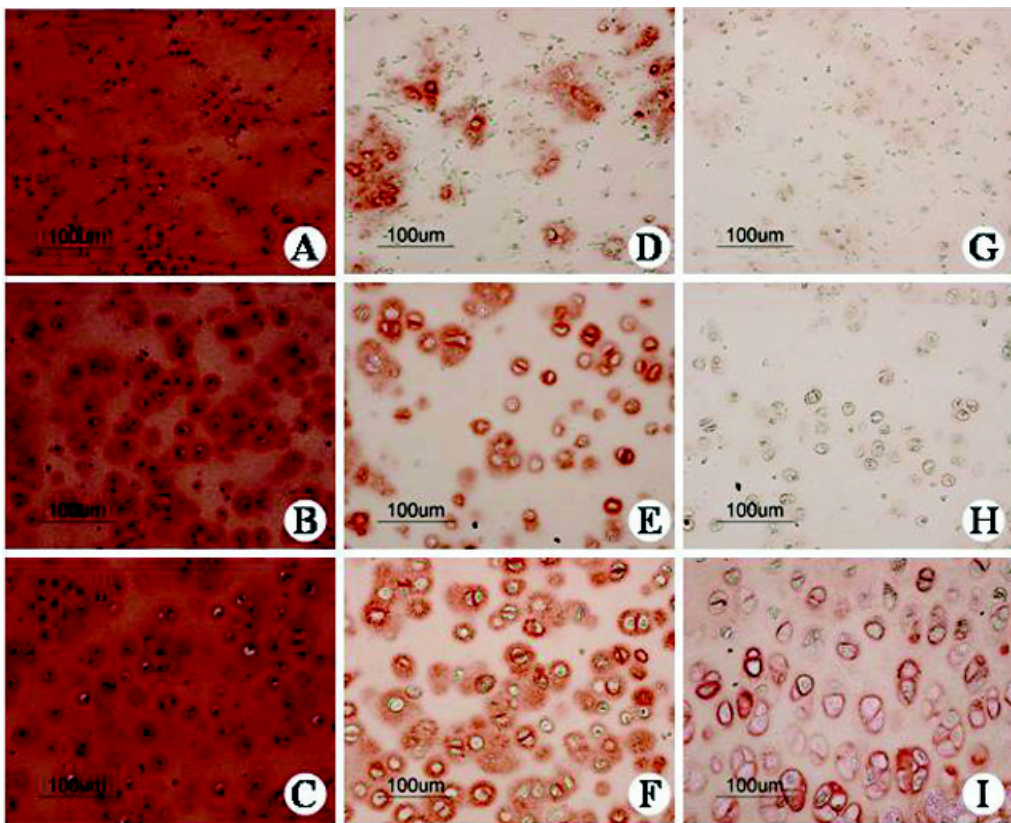
**Plate 3.** The Toluidine Blue metachromatic matrix of cartilaginous aggregates of human marrow-derived cells after 14 days in chondrogenic medium. A, section of paraffin-embedded whole aggregate; B, higher magnification of edge of a methyl methacrylate-embedded section with the region of flattened cells indicated by asterisk. (See Fig. 4.5 for details.)



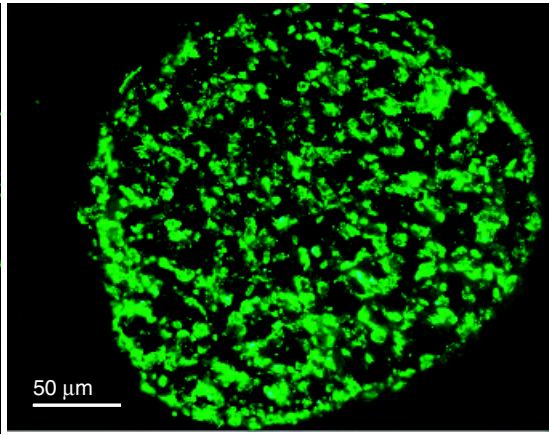
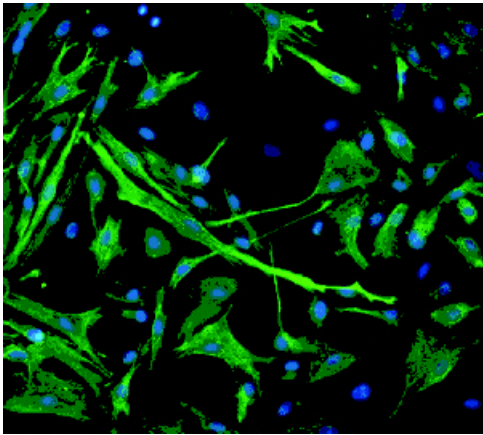
**Plate 4B.** PEGDA-MSC hydrogels. (See Fig. 9.6 for details.)

**Plate 4A.** Juvenile bovine cartilage. (See Fig. 9.2 for details.)

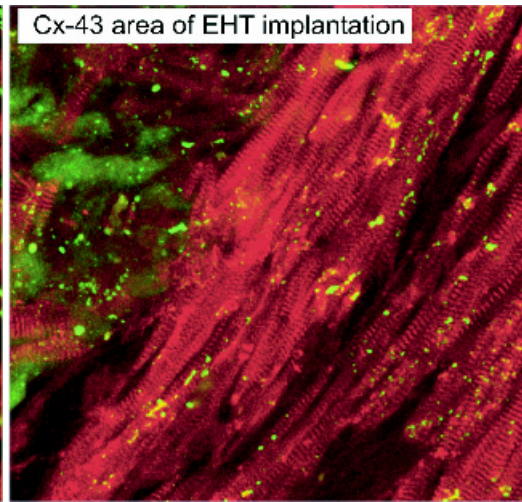
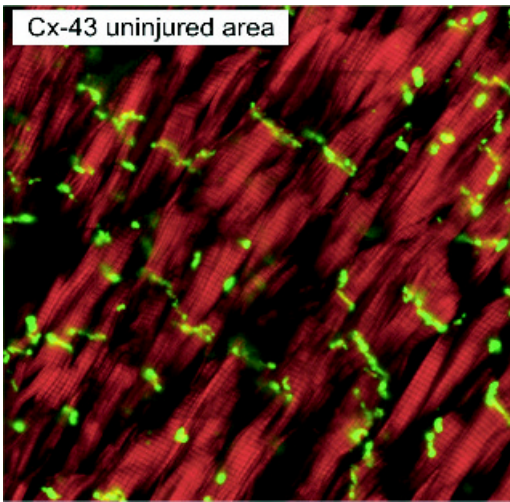
**Plate 4C.** Multilayered PEGDA hydrogel. (See Fig. 9.5 for details.)



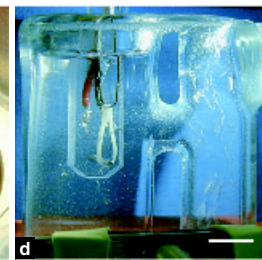
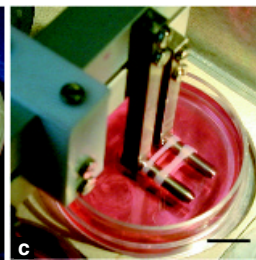
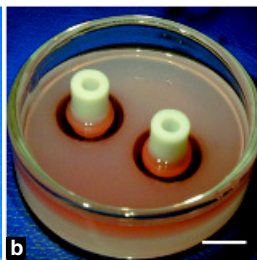
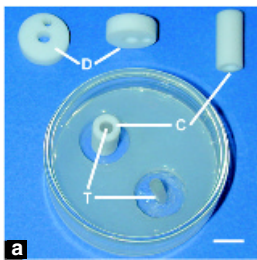




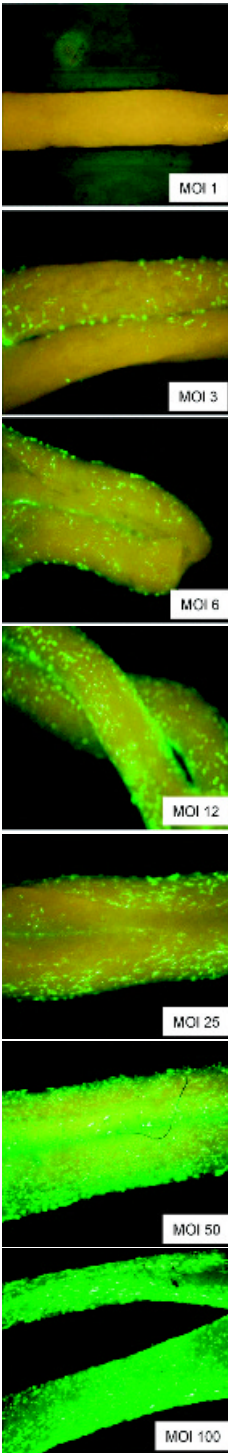
**Plate 5A.** Human skeletal muscle cells. (See Fig. 10.2.) **Plate 5B.** Cross section of 10-day in vitro HBAM. (See Fig. 10.5.)



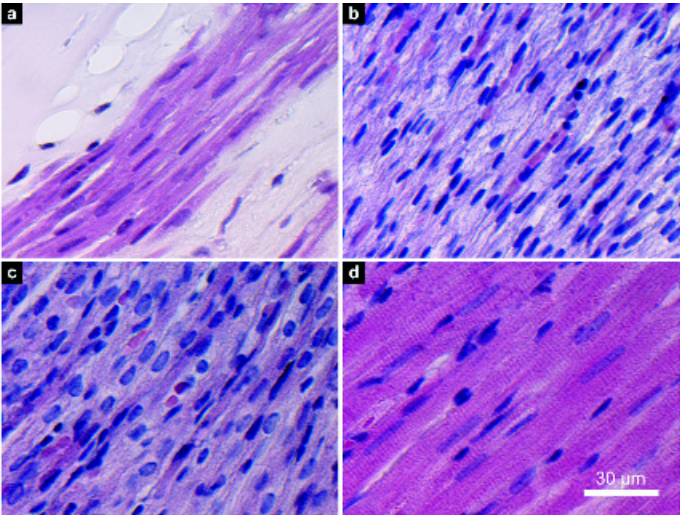
**Plate 6A.** Effect of EHT implantation of the spatial organization of connexin 43 (Cx-43) in rat hearts. (See Fig. 11.3)



**Plate 6B.** Experimental setup for EHT preparation, culture, phasic stretch and analysis of contractile function in the organ bath. (See Fig. 11.4 for details.)

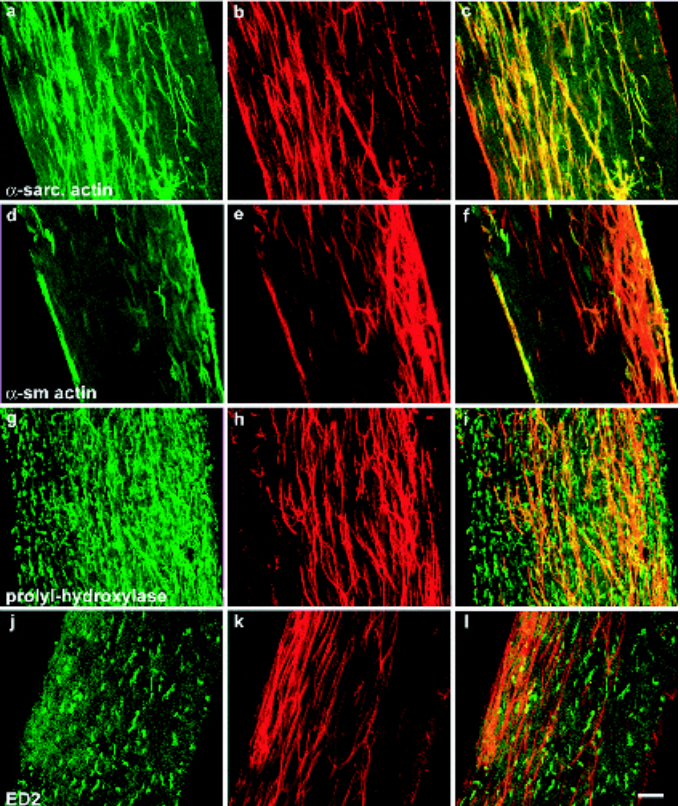


**Plate 6C.** Adenoviral gene transfer in EHT. (See Fig.11.5.)

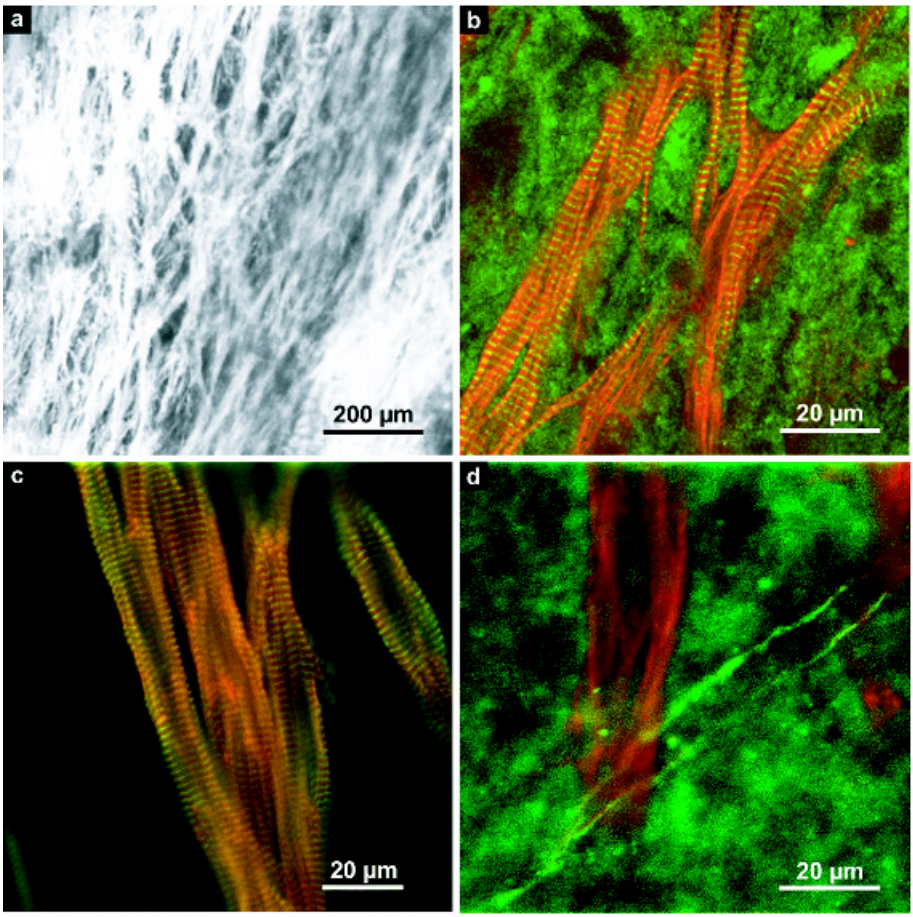


**Plate 6D.** Morphology of EHTs and native myocardium. (See Fig. 11.6.)

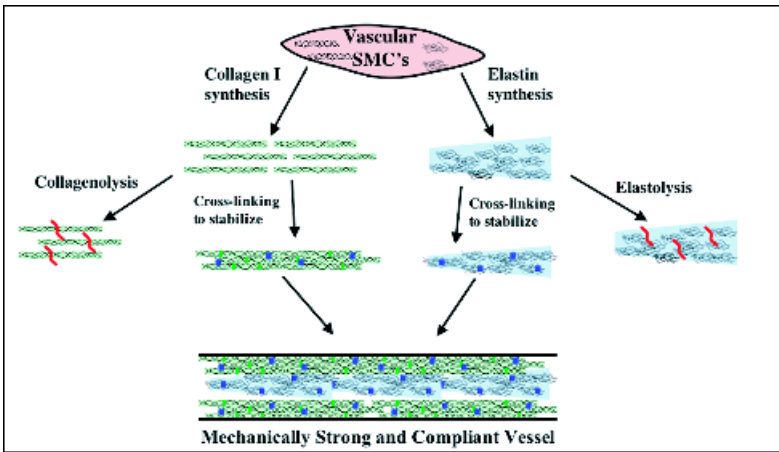
**Plate 6E.** Immunolabeling of distinct cell species within EHT. (See Fig. 11.7.)



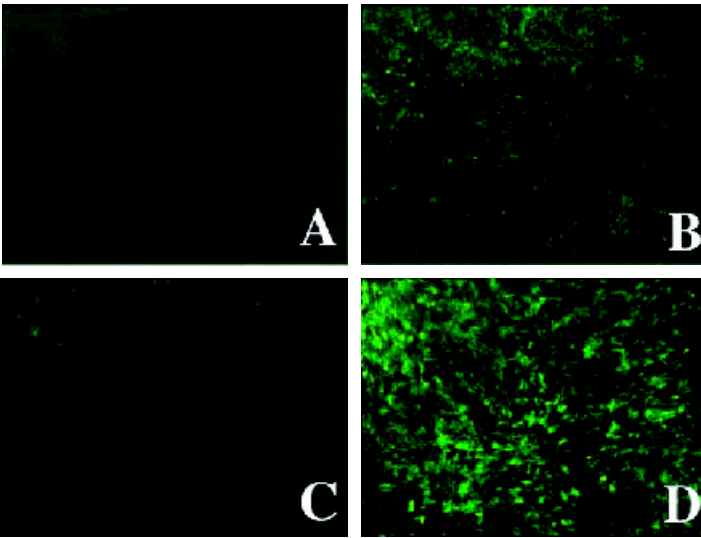




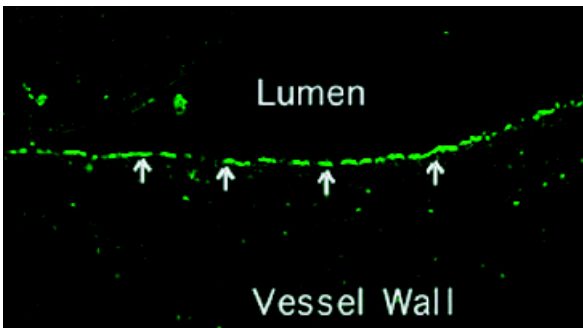
**Plate 6F.** High-power CLSM of EHT. (See Fig. 11.8 for details.)



**Plate 7A.** Secretion of collagen and elastin by smooth muscle cells. (See Figure 12.3.)

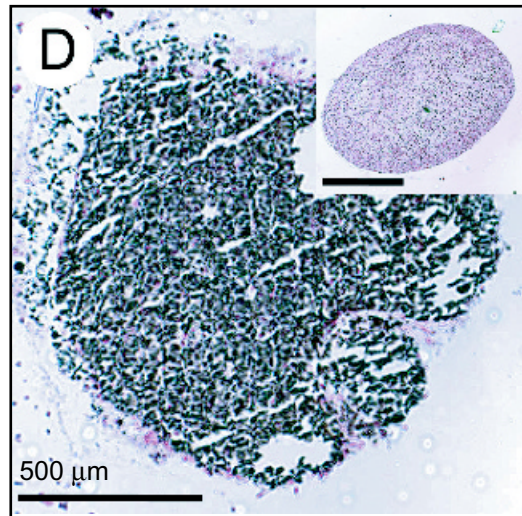
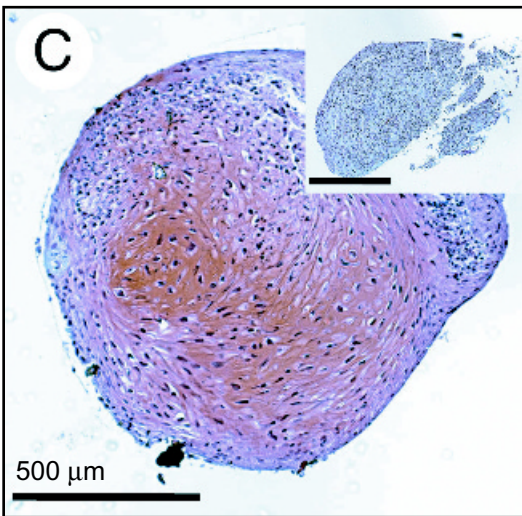


**Plate 7B.** Enhanced green fluorescent protein (EGFP) expression in cultured ECs. (See Fig. 12.8.)

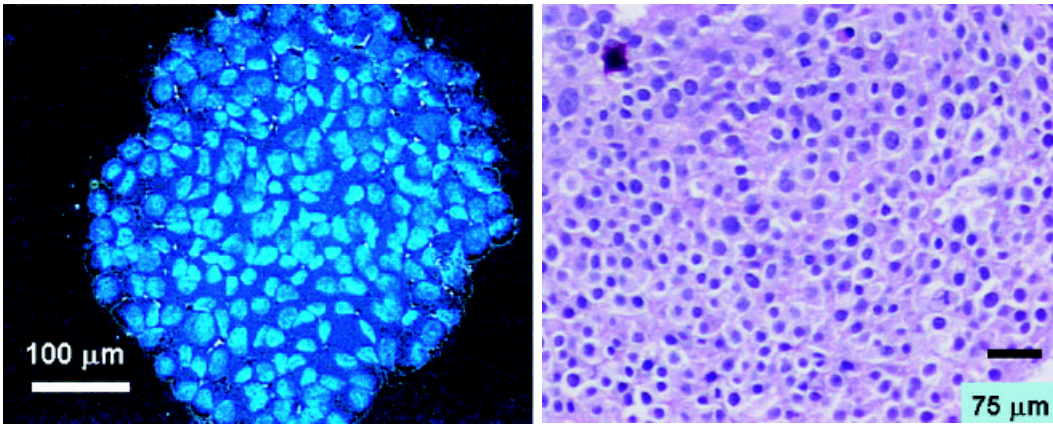


**Plate 7C.** EGFP expressed on engineered vessel lumen. (See Fig.12.9.)

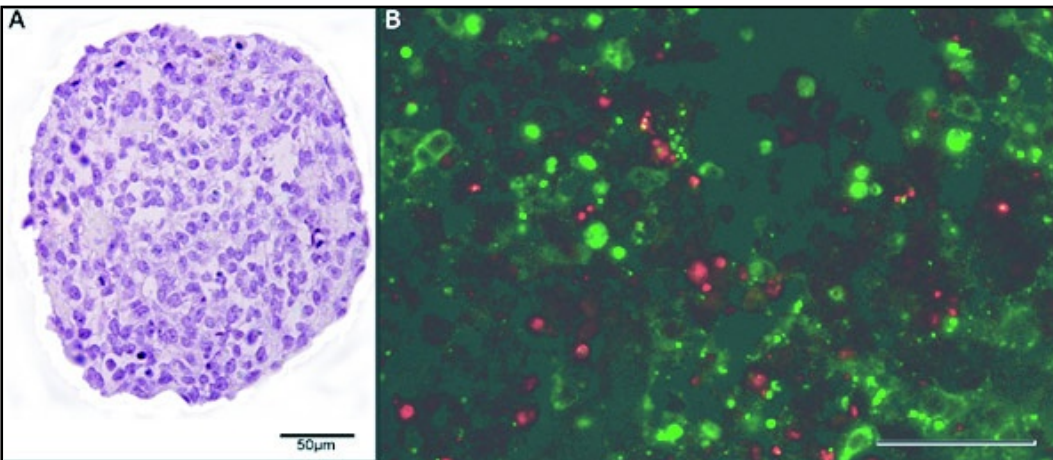
**Plate 8.** Characterization of MSCs.  
 C) Chondrocyte differentiation.  
 D) Osteoblast differentiation.  
 (See Fig.13.2.)





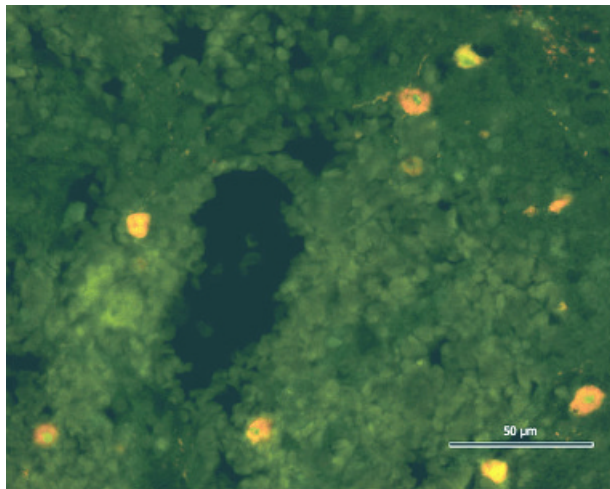


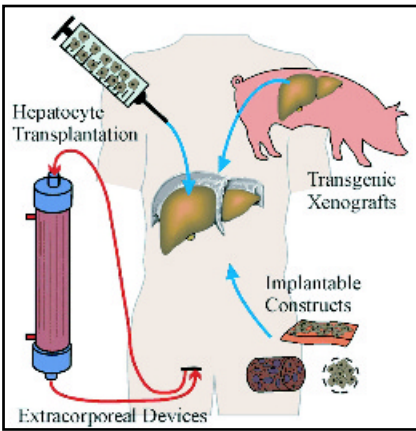
**Plate 9A.** 3-D assemblies of PC12. Left, static aggregate, right, dynamic aggregate in SLTV. (See Fig. 14.3 for details.)



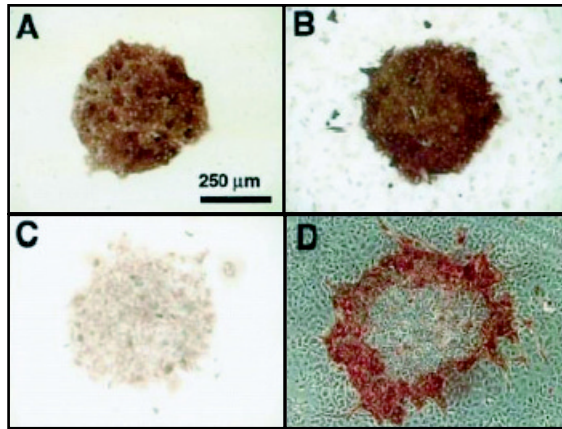
**Plate 9B.** Morphology and TH content of SNAC tissue constructs. A, SNAC section immunostained for human nuclei, (NT2 cells). B, double immunofluorescence; Sertoli cells, green, TH-positive NT2N neurons red. (See Fig. 14.5 for details.)

**Plate 9C.** Photomicrograph through a SNAC tissue construct transplant into the rat striatum 4 weeks postsurgery. Surviving TH-positive NT2N neurons (red) double immunostained with anti-human nuclei antibody (green) can be seen along the course of the penetration. These NT2N neurons contain a green nucleus and lighter green cytoplasm, which now appears yellow because of the double label. Some neurite outgrowth is seen in the TH-positive NT2N neuron near the top right of the photomicrograph.

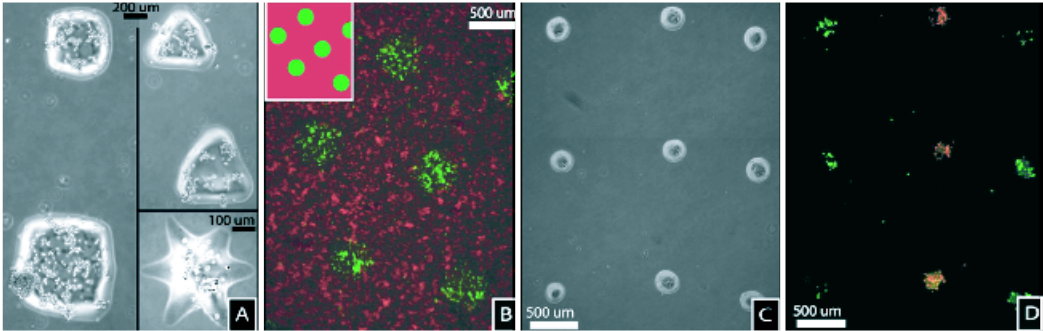




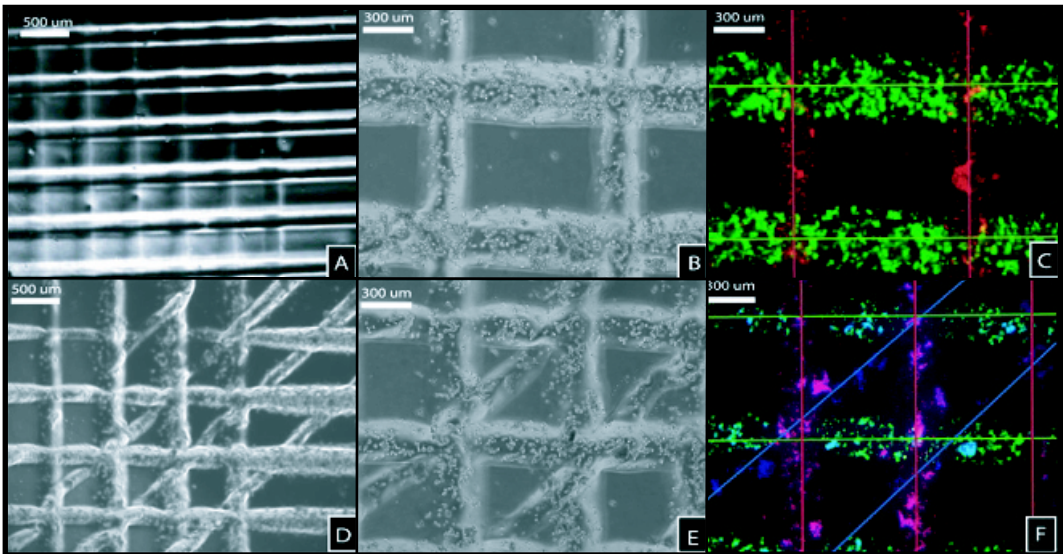
**Plate 10A.** Cell-based therapies for liver disease. (See Fig. 15.1 for details.)



**Plate 10B.** Intracellular albumin in micropatterned hepatocytes. (See Fig.15.5 for details.)



**Plate 10C.** Hydrogel microstructures containing living cells. (See Fig. 15.10 for details.)



**Plate 10D.** Multilayer hydrogel microstructures containing living cells. (See Fig. 15.11 for details.)