Some of the Cells that Arise from Animal Gastrulas with Three Germ Layers

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Object is a digital image of an animal triploblastic gastrula. The image labels the three germ layers and some of the fully differentiated cell types that arise from those germ layers. The image shows the egg and sperm germ cells. It also shows and labels the epithelial cells, liver cells, and endothelial cells that develop from endoderm. It also shows the skeletal muscle cells, osteoblast cells, cardiac muscle cells, and red blood cells that develop from the mesoderm. It also shows the hair cells, skin cells, and neuron cells that develop from the ectoderm.

From a developing embryos three primary germ layers, ectoderm (green), mesoderm (pink) and endoderm (yellow), a variety of differentiated cell types and organ systems arise, far more than are shown here. The three primary germ layers are shown during the gastrula stage because they become distinct at the gastrula stage. The germ cells (blue) are pre-cursors to sperm and egg cells, and they are set aside early in development, and are thought to arise from the ectoderm.

Subject

Mesoderm, Gastrulation, Blastula, Germ Layers, Ectoderm, Endoderm

Topic

Theories, Processes

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