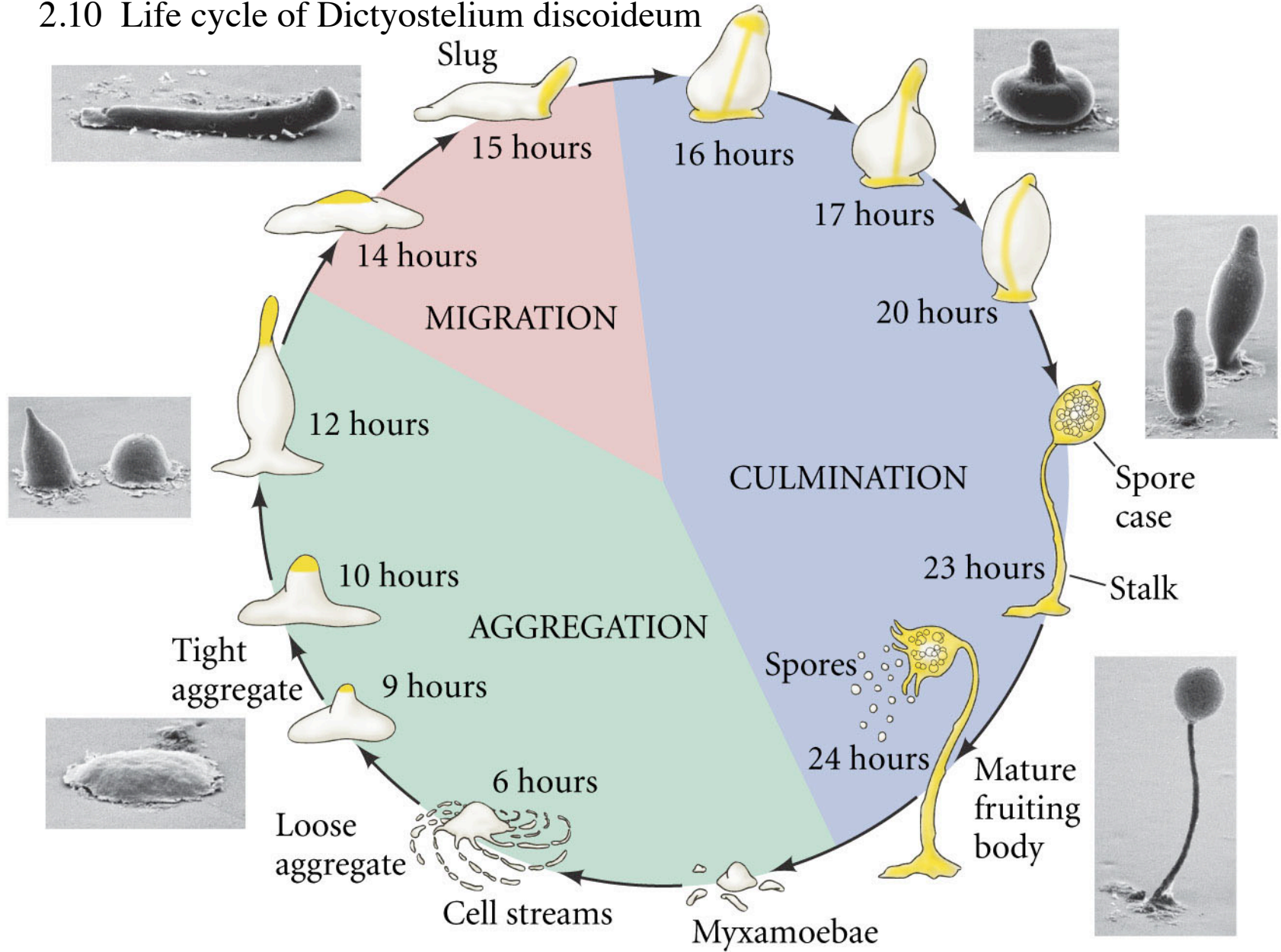
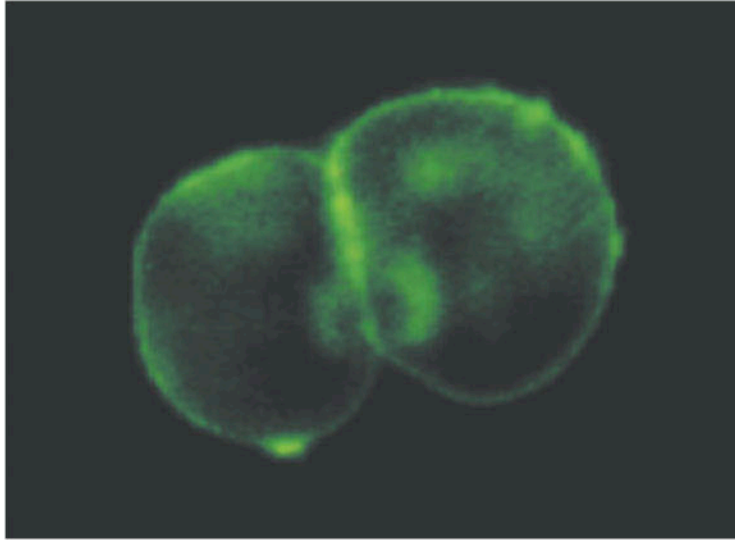


2.10 Life cycle of *Dictyostelium discoideum*

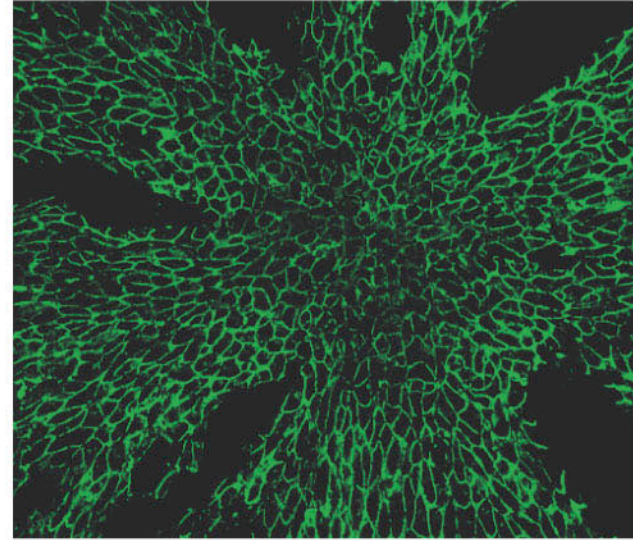


2.12 The three cell adhesion molecules of Dictyostelium

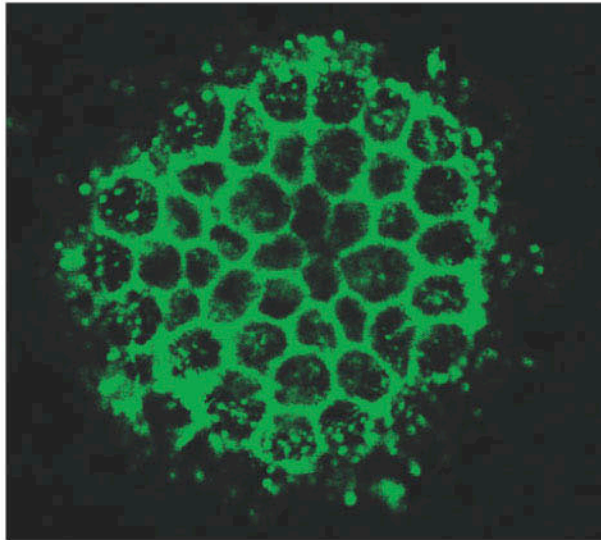
(A)



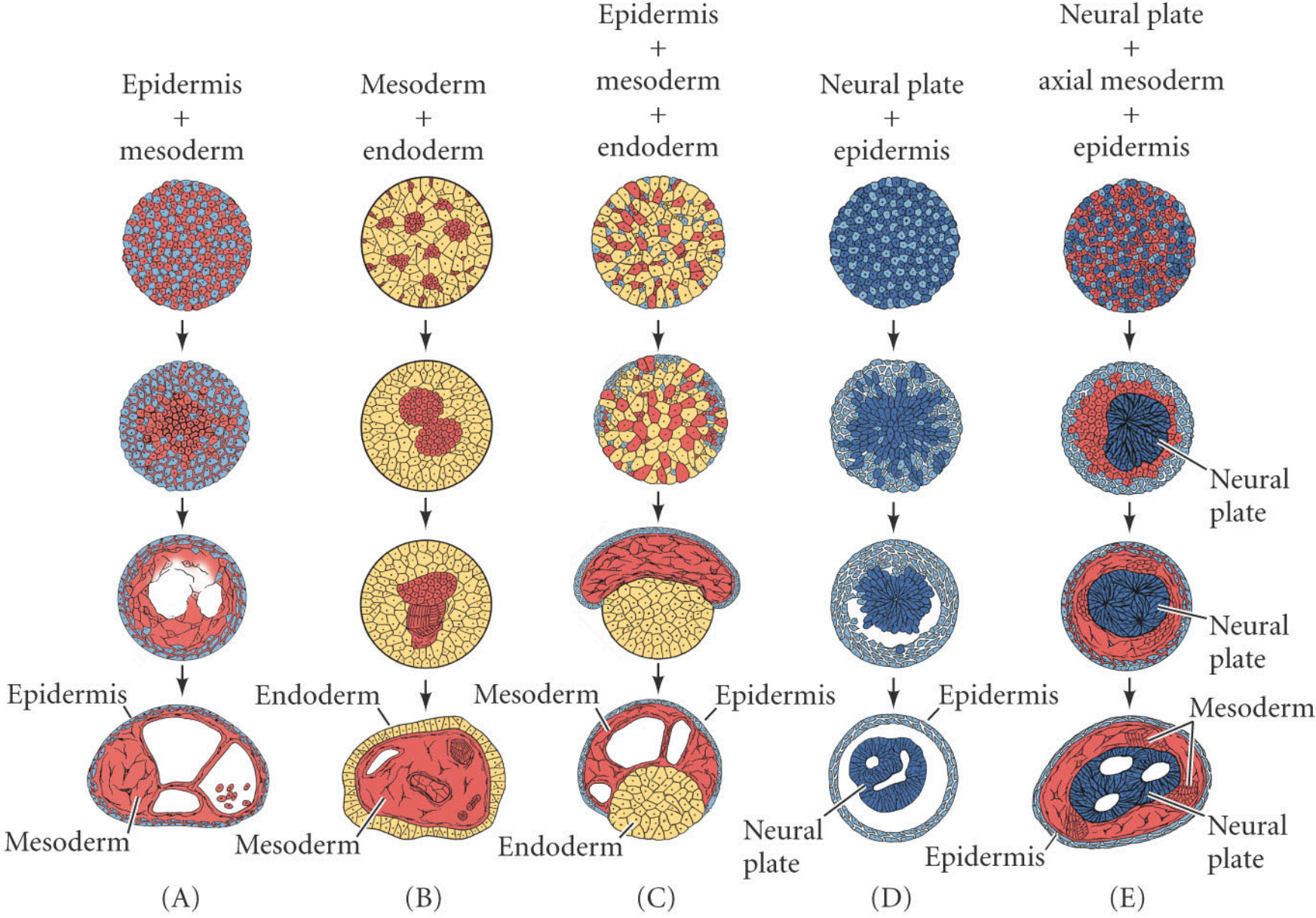
(B)



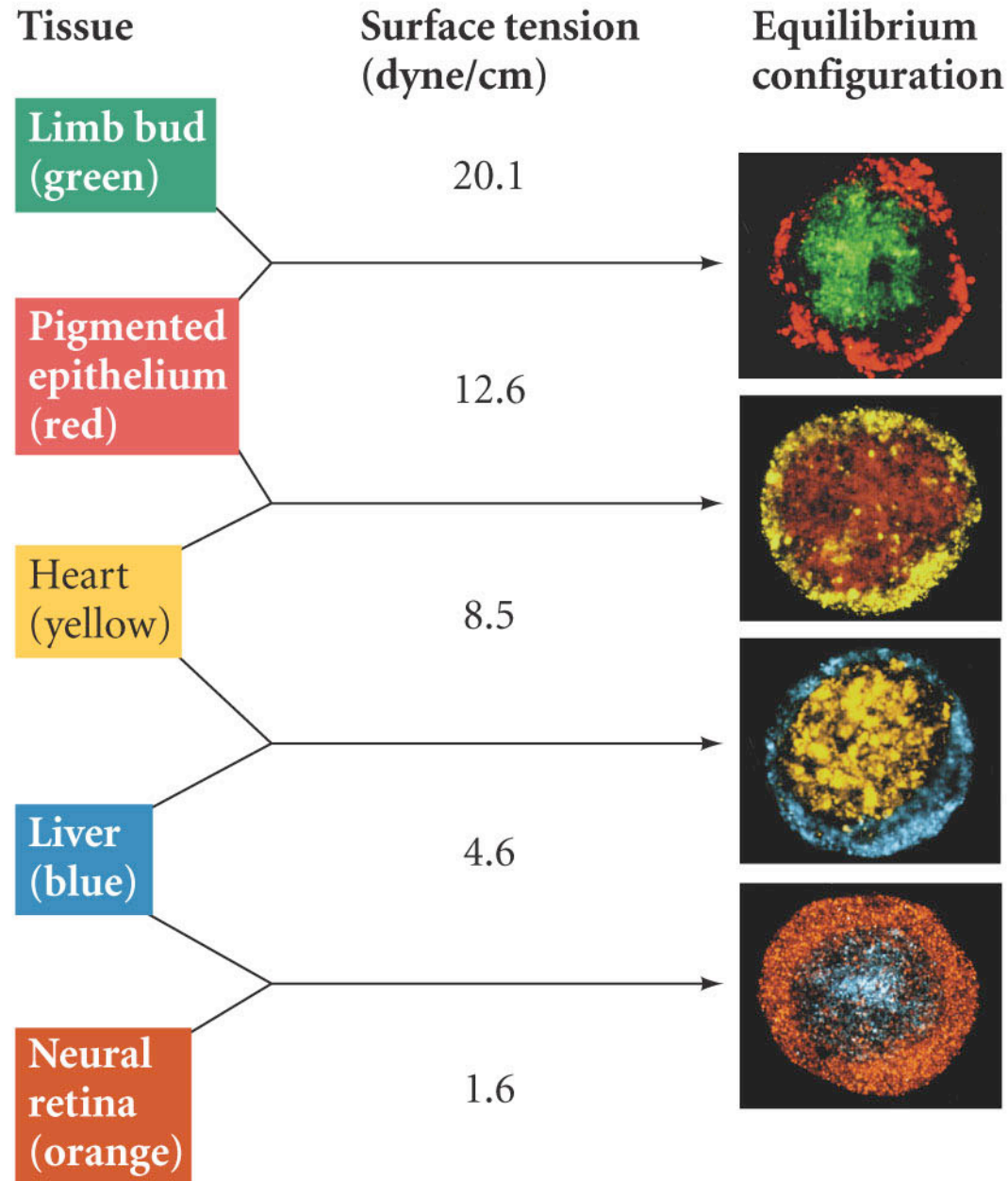
(C)



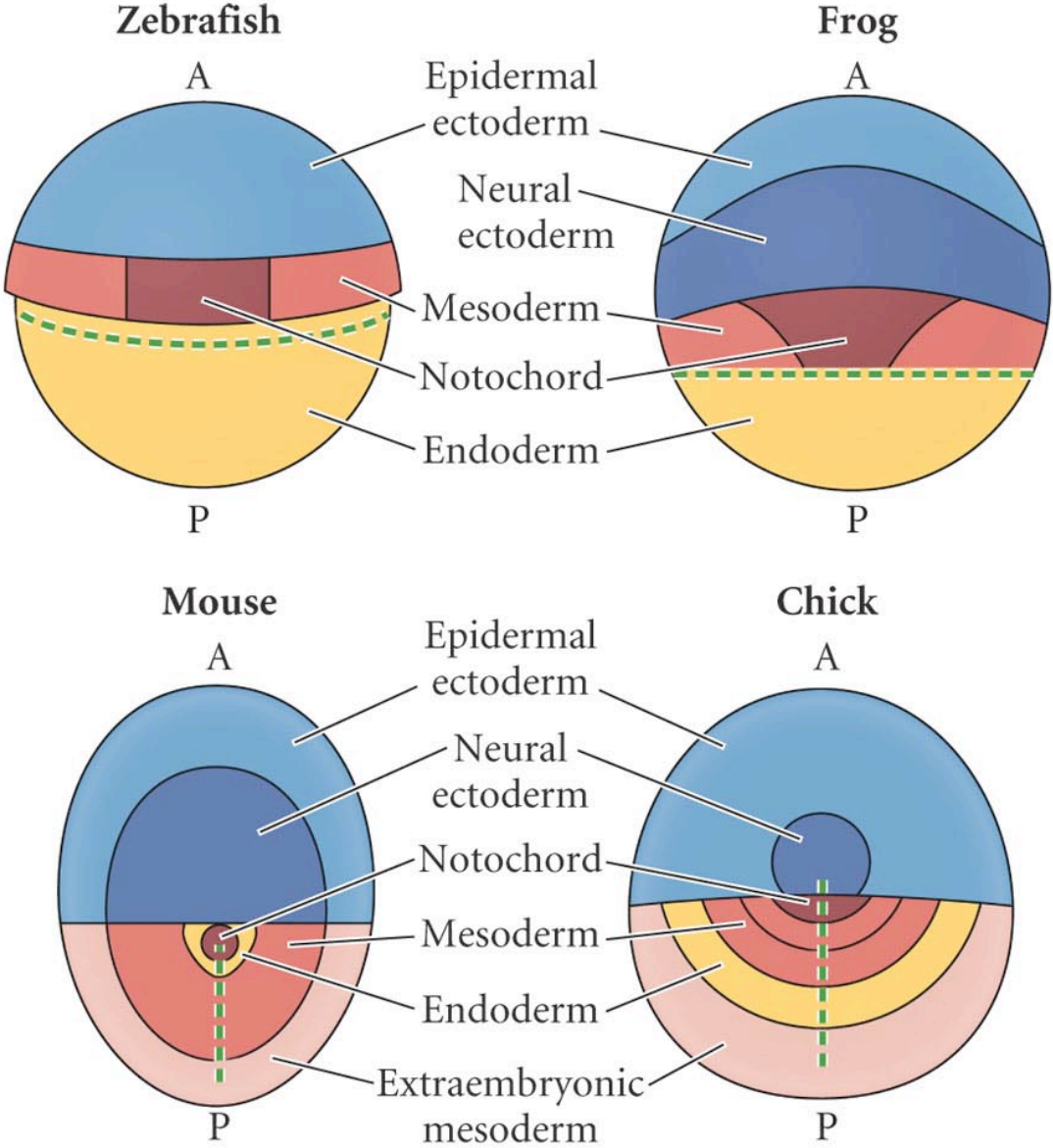
3.24 Sorting out and reconstruction of spatial relationships in aggregates of embryonic amphibian cells

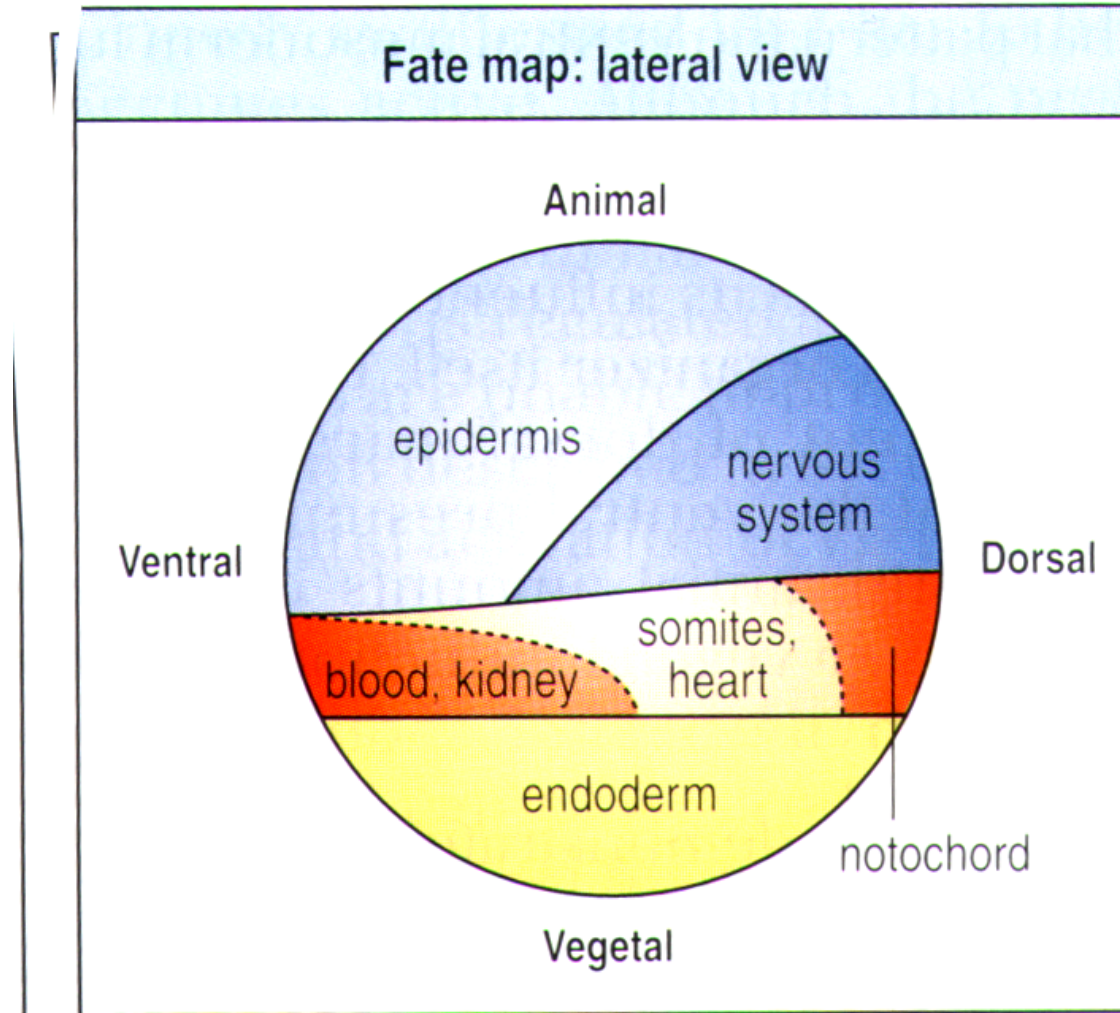


3.27 Hierarchy of cell sorting in order of decreasing surface tensions



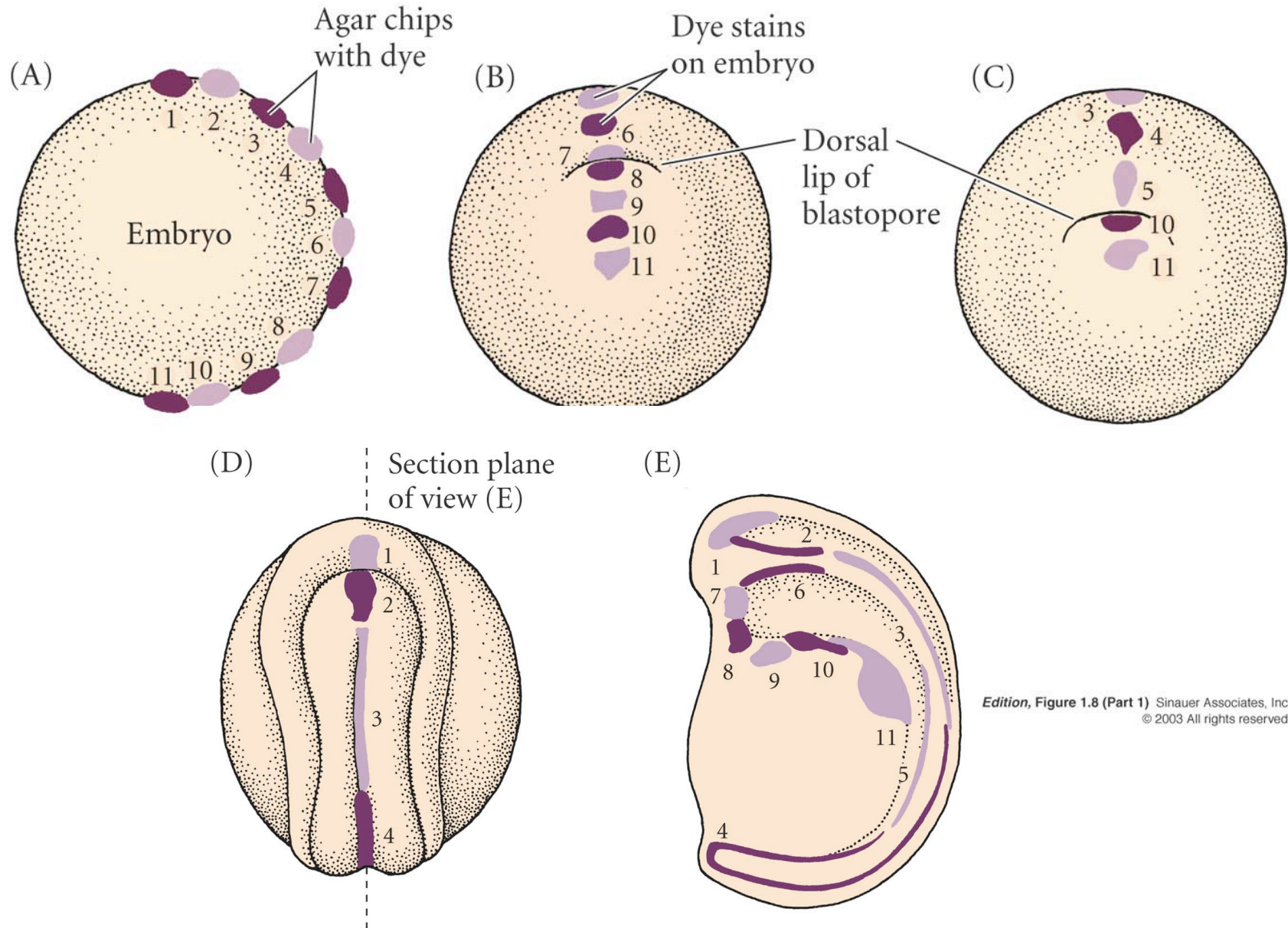
Fate Maps of Different Vertebrate Classes at the Early Gastrula Stage





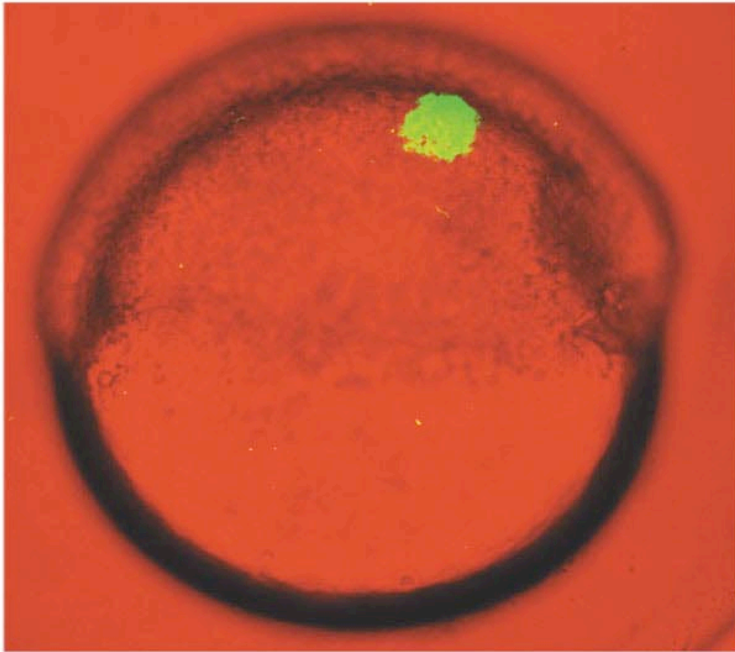
Xenopus fate map

Vital Dye Staining of Amphibian Embryos

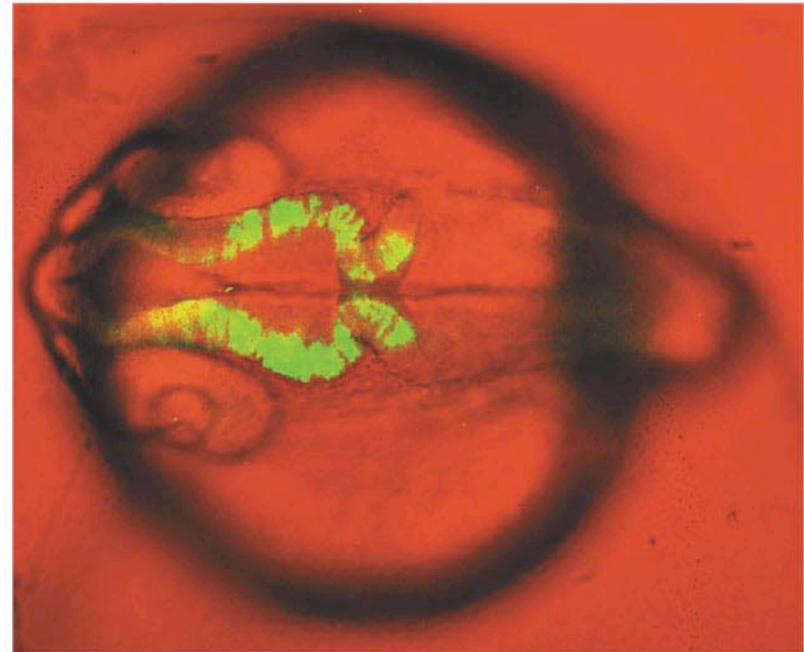


Fate Mapping Using a Fluorescent Dye

(A)

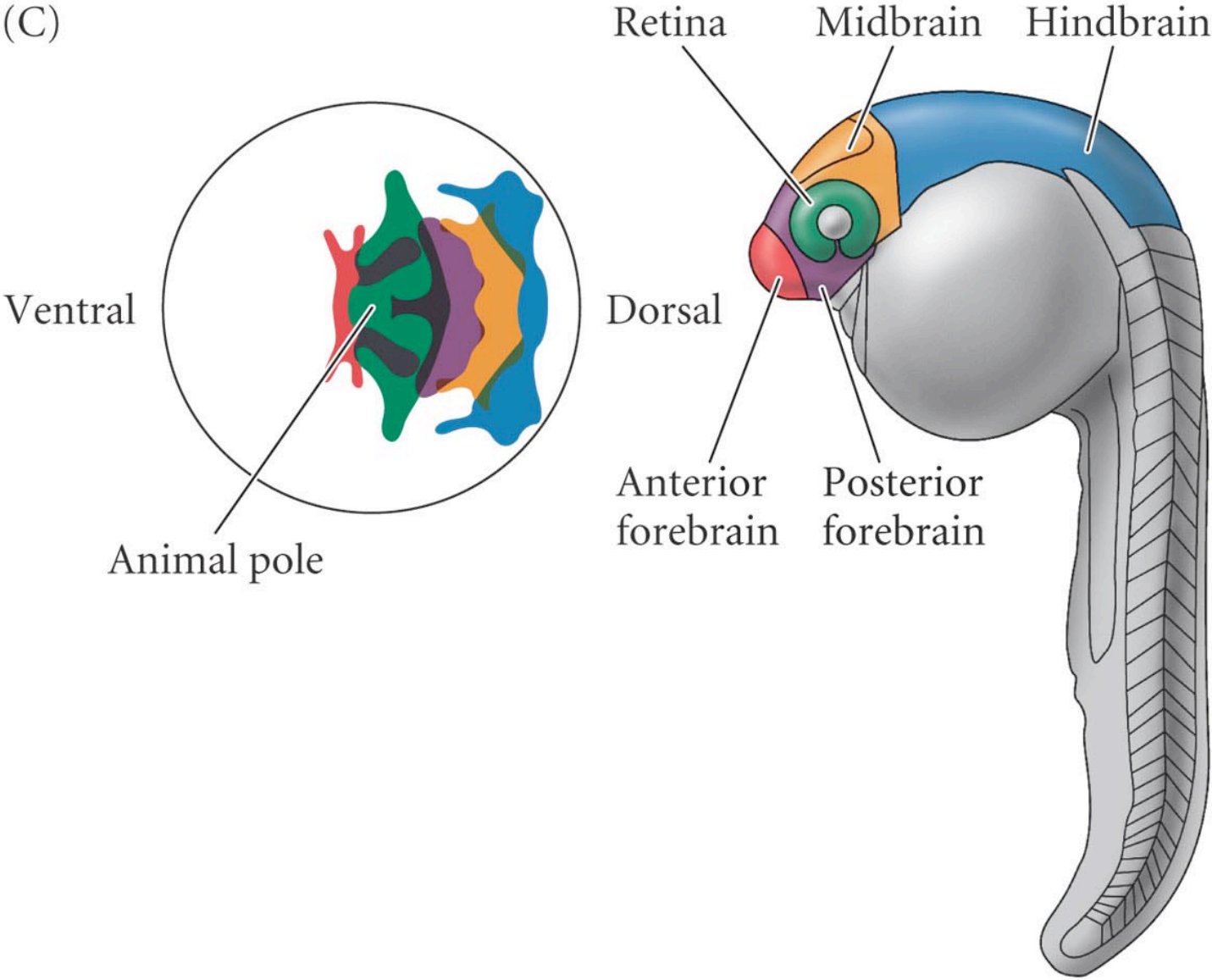


(B)

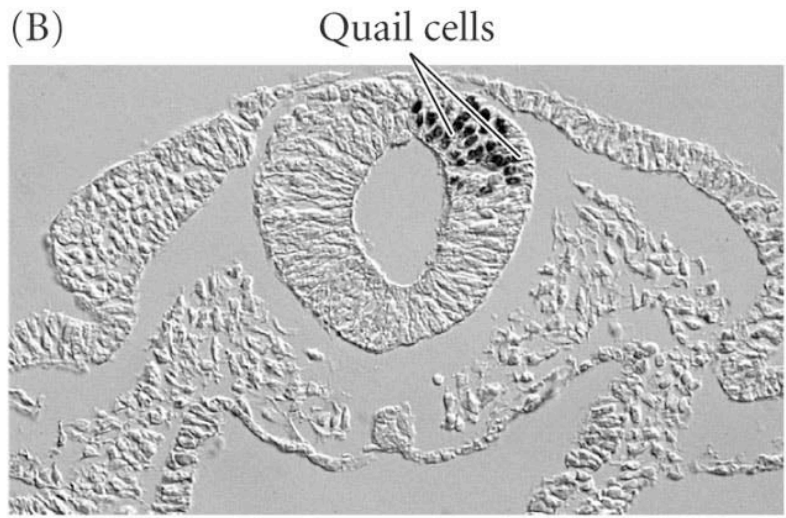
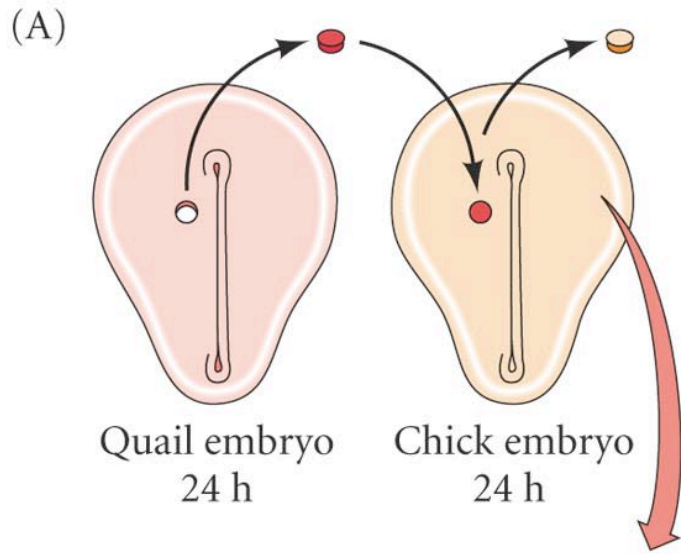


Fate Mapping Using a Fluorescent Dye

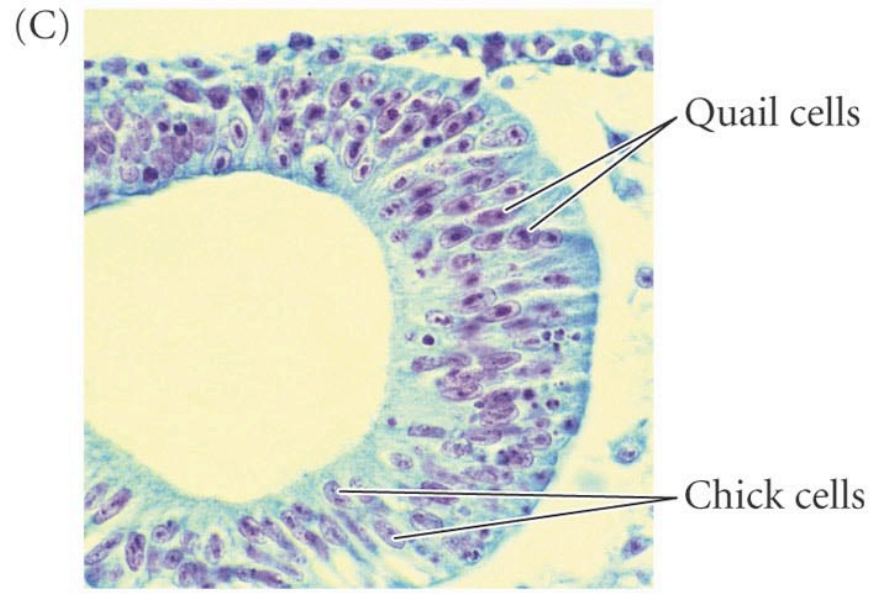
(C)



Genetic Markers as Cell Lineage Tracers



Chick embryo with region of quail cells on the neural tube



Experimental manipulation

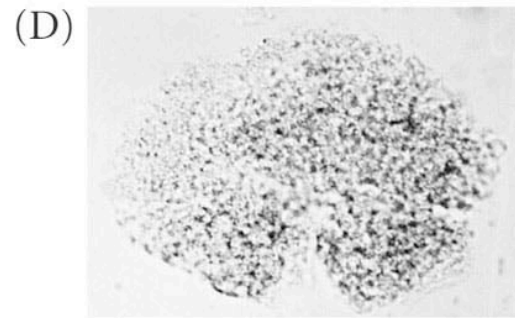
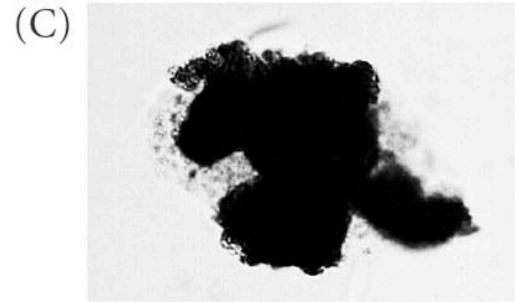
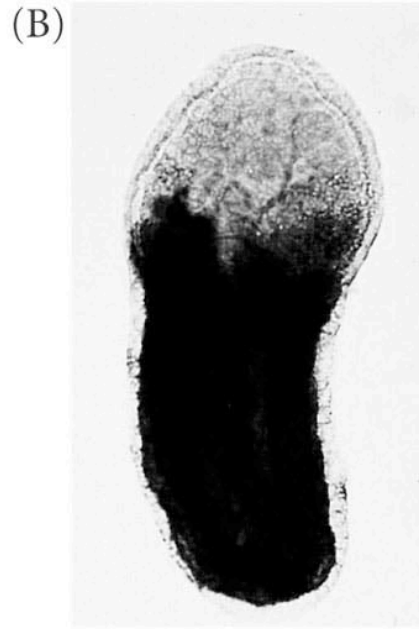
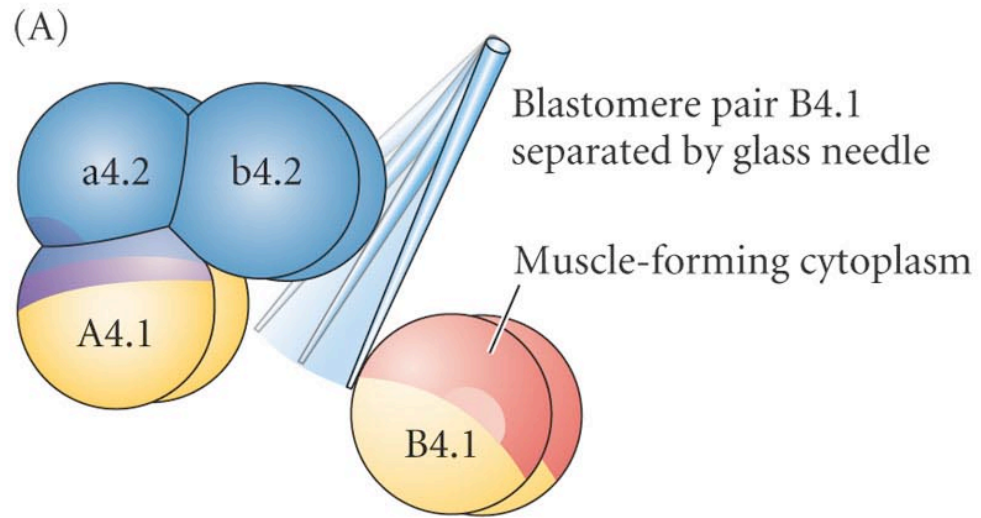
Remove cells (blastomeres), kill,
ablate

Isolate blastomeres, or portions of
early embryos

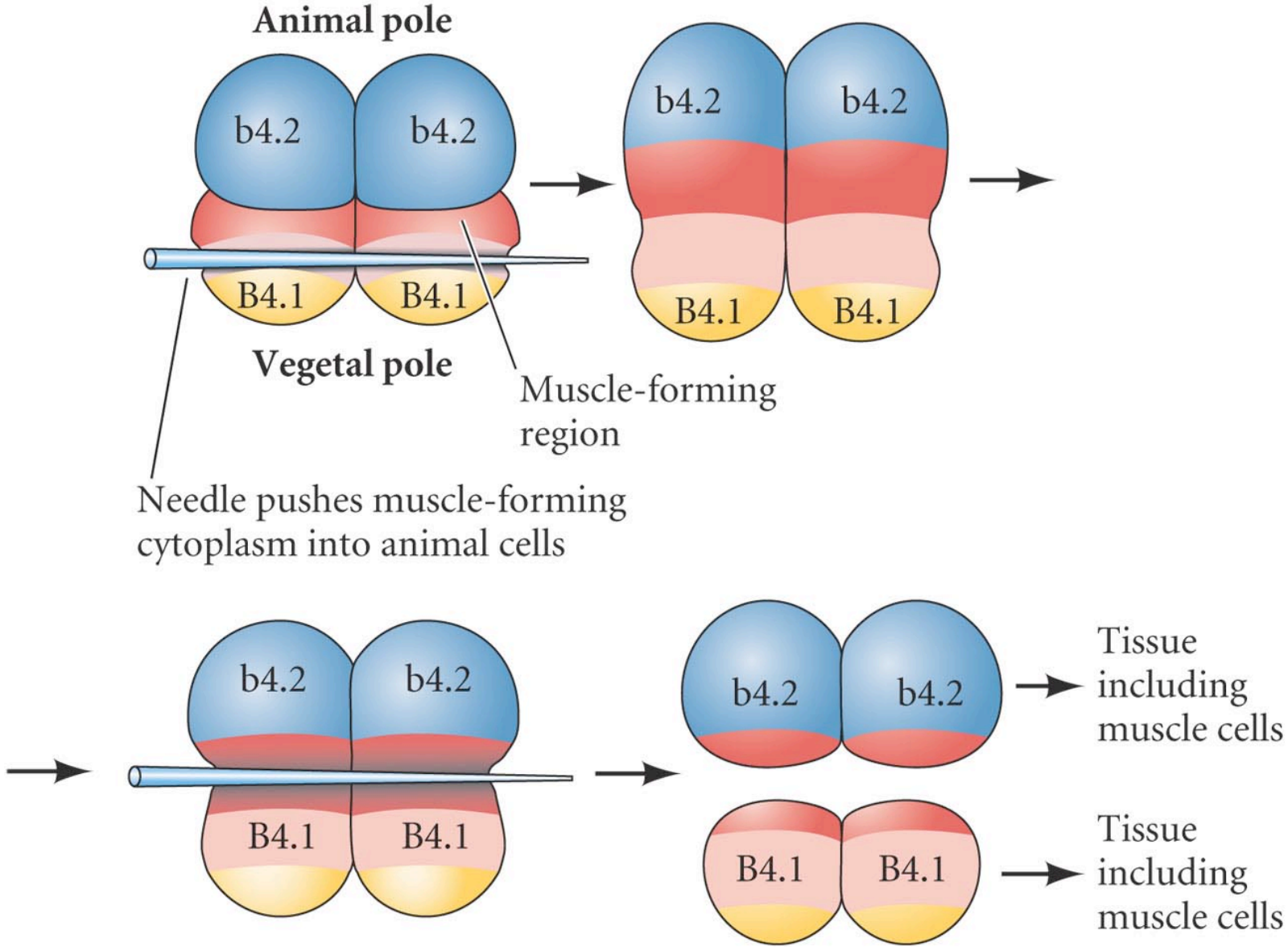
Transplant portions to new sites

OR +/-GENES

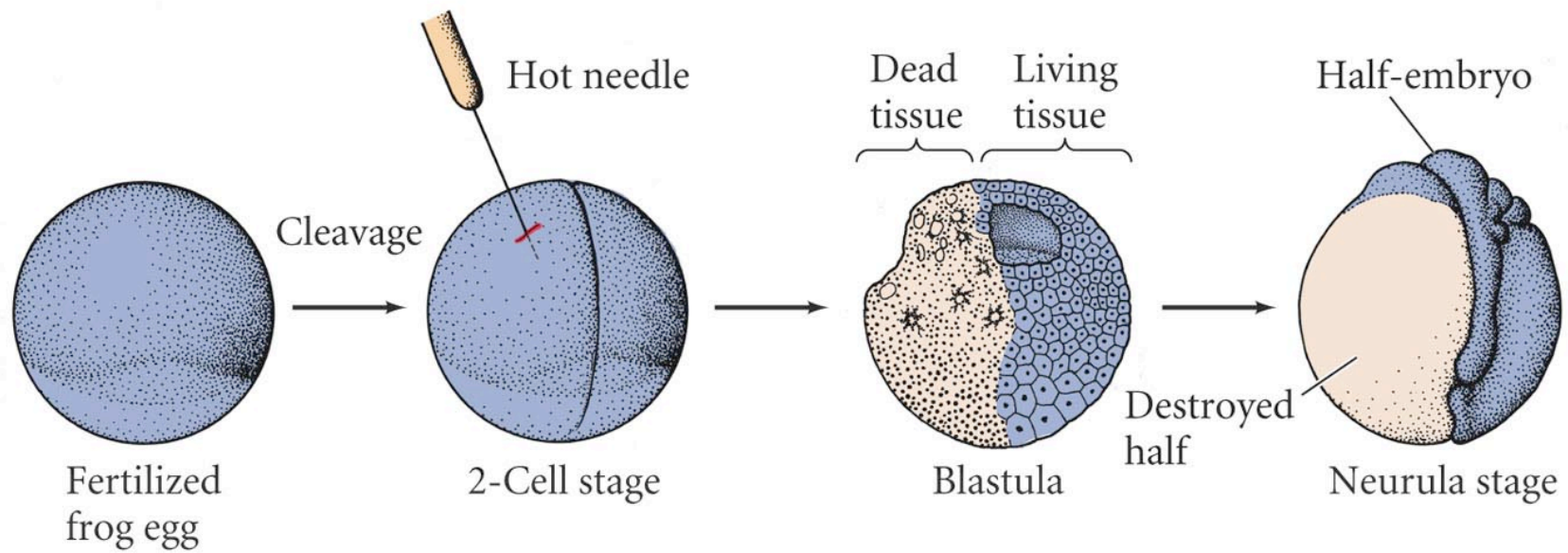
Acetylcholinesterase in the Progeny of the Muscle Lineage Blastomeres



Microsurgery on Tunicate Eggs

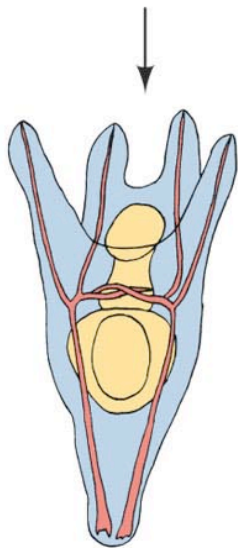
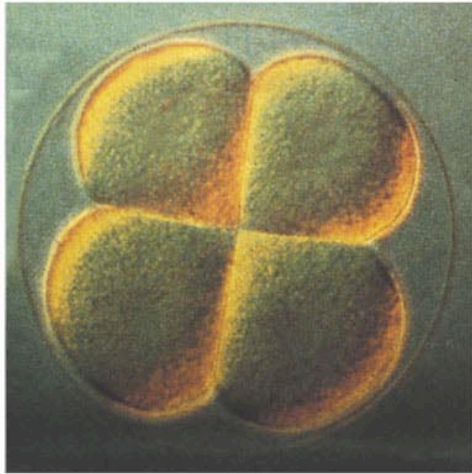


Roux's Attempt to Demonstrate Mosaic Development



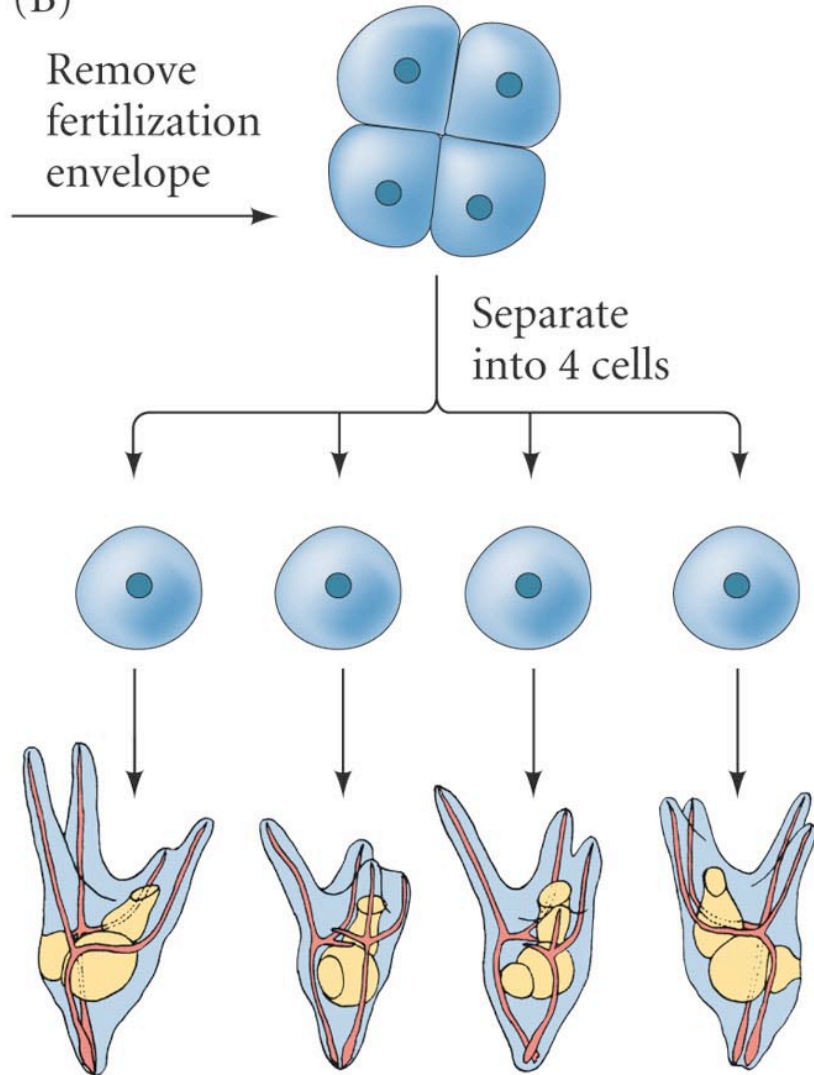
Driesch's Demonstration of Regulative Development

(A) Fertilization envelope



Normal pluteus larva

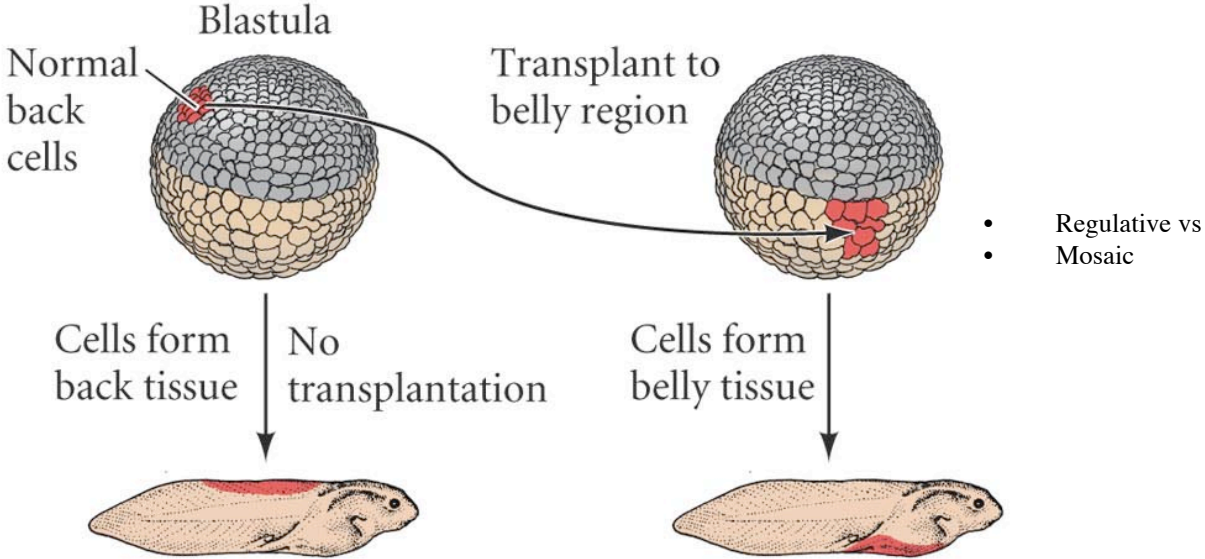
(B)



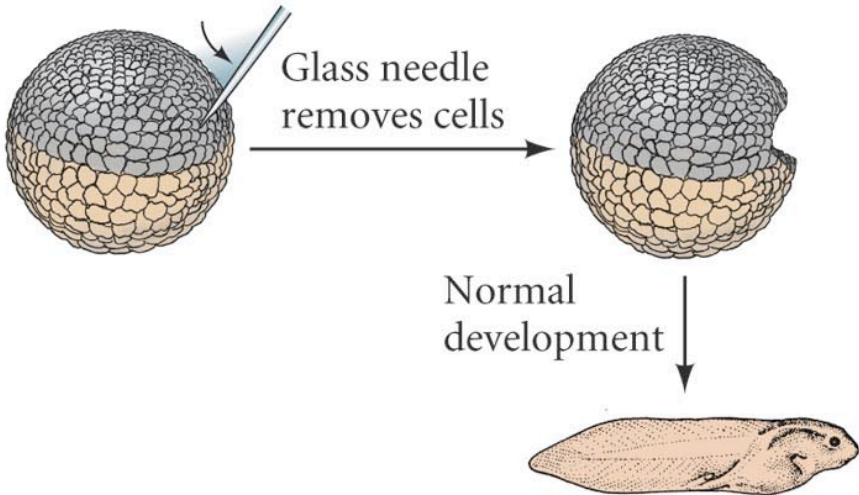
Plutei developed from single cells of 4-cell embryo

Conditional Specification

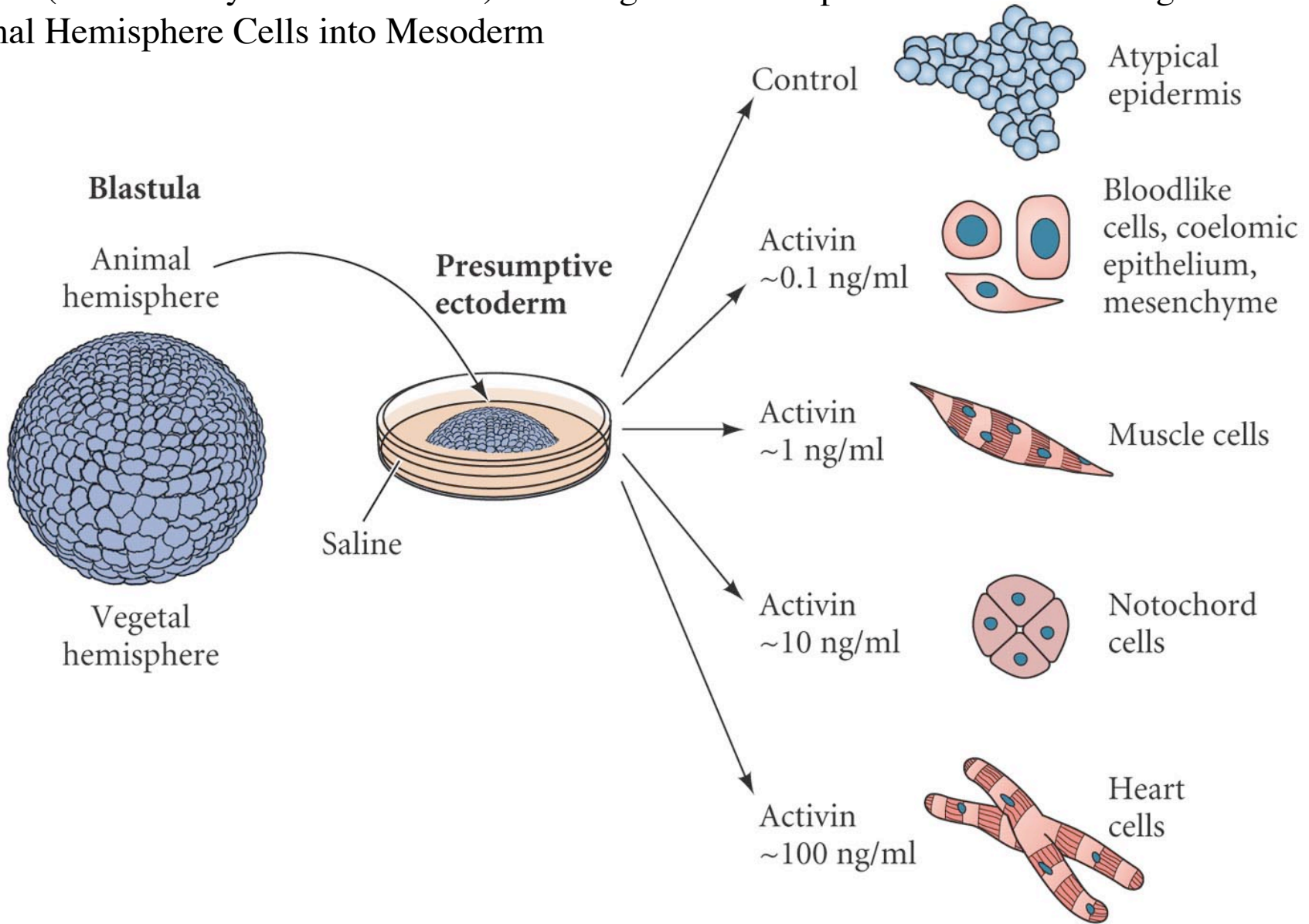
(A)



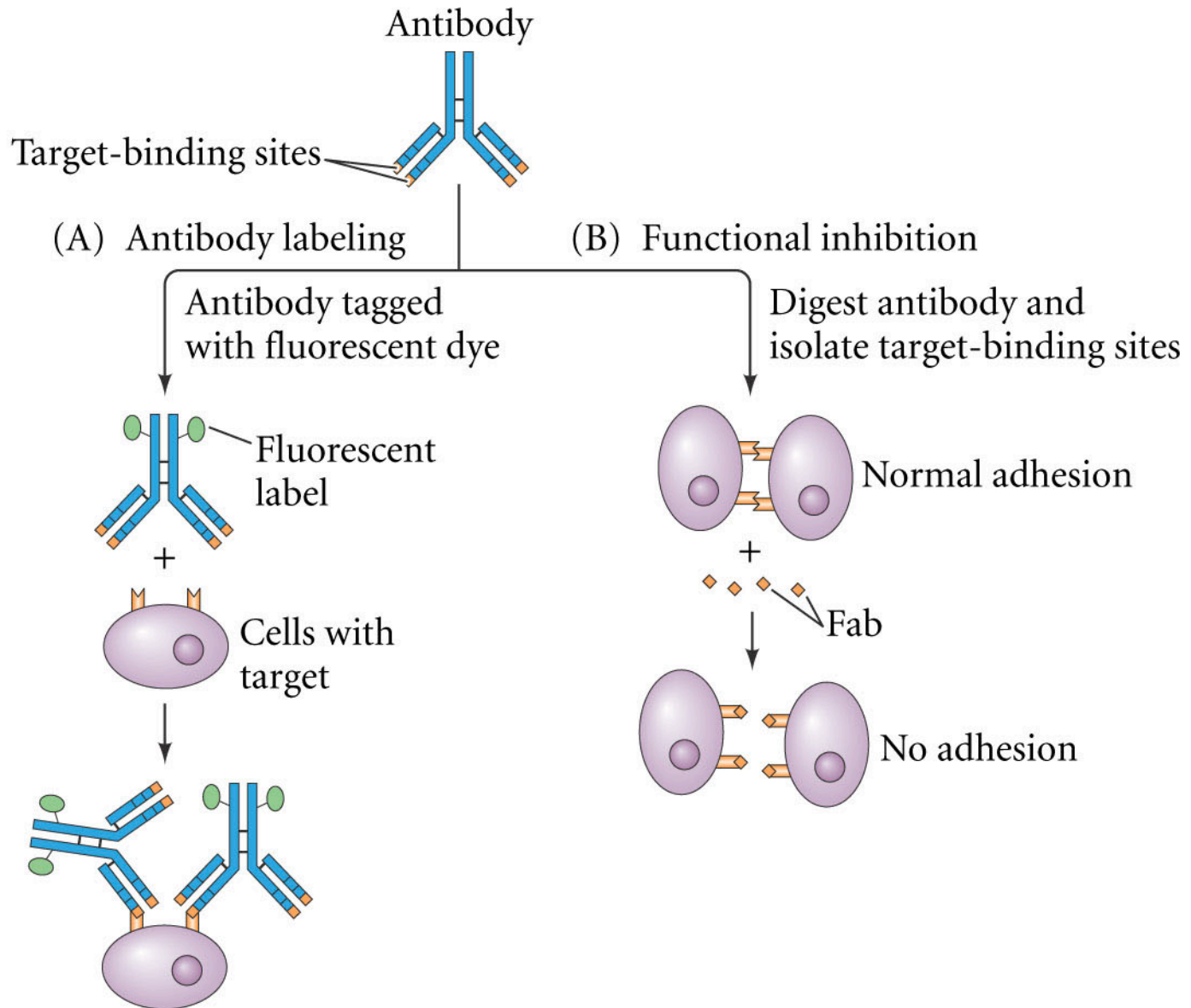
(B)



Activin (Or a Closely Related Protein) Is Thought to Be Responsible for Converting Animal Hemisphere Cells into Mesoderm



2.13 Using antibodies to show location and function of a particular protein



Antibody fluoresces green under ultraviolet light