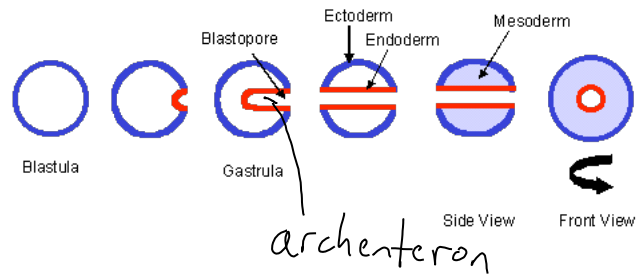
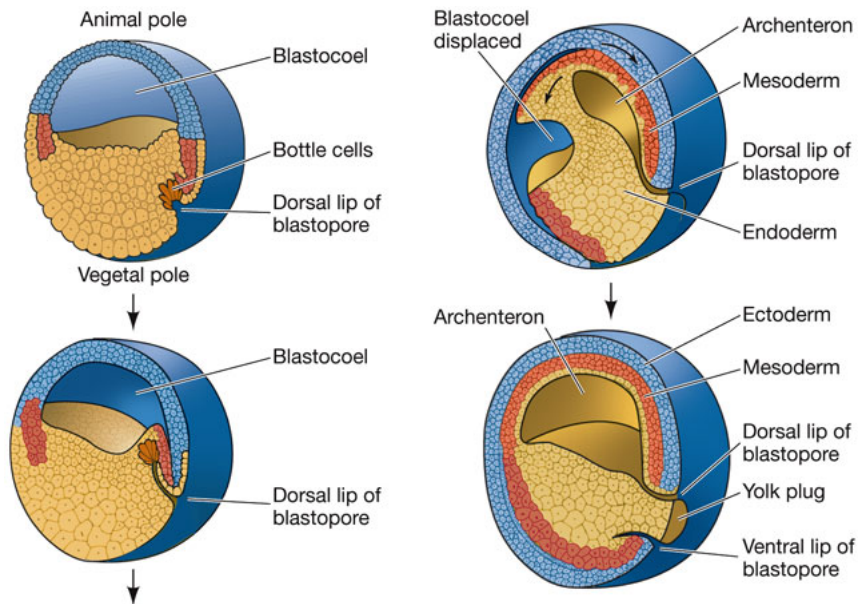


# Animal development: Turning a hollow sphere into a donut



<http://faculty.clintoncc.suny.edu/faculty/michael.gregory/files/bio%20102/bio%20102%20lectures/animal%20diversity/lower%20invertebrates/sponges.htm>



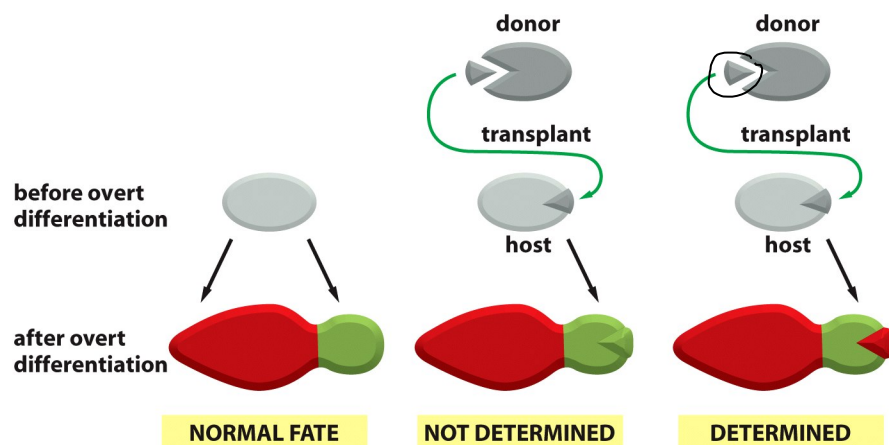
**LIFE 8e, Figure 43.9**

LIFE: THE SCIENCE OF BIOLOGY, Eighth Edition © 2007 Sinauer Associates, Inc. and W. H. Freeman & Co.

Differentiation  
overt development of specialized structure  
or function

Determination  
(commitment)  
sets the fate of the cell  
(usually) before any overt  
diff'n

•Commitment (Determination): The establishment of a fixed developmental fate of a cell. A cell is committed if it maintains its original fate after being put into a new environment.

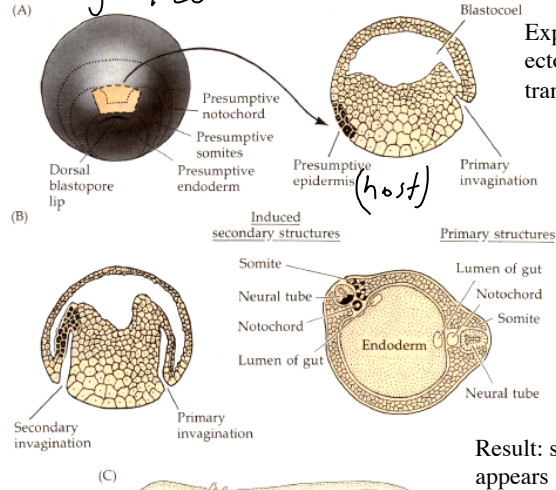


cells are plastic = committed

Figure 22-7 Molecular Biology of the Cell (© Garland Science 2008)

Hypothesis: The dorsal lip of the blastopore is an organizer of the embryo body plan.

*Spemann organizer*



Question: Did she transplant the second axis itself, or did she transplant a tissue which organized the second axis?