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Epigenetics

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During development, a multicellular organism generates many different cell types (colored marbles) from a single progeny cell (clear marble in the center), yet all of the cells have nominally identical DNA sequences (and, therefore, the same genetic instruction sets). The maintenance and inheritance of these distinct cellular phenotypes is the basis of epigenetics (the prefix "epi-" is Greek for over or above), the subject of a special section beginning on page 611.

Image: Chris Bickel/Science

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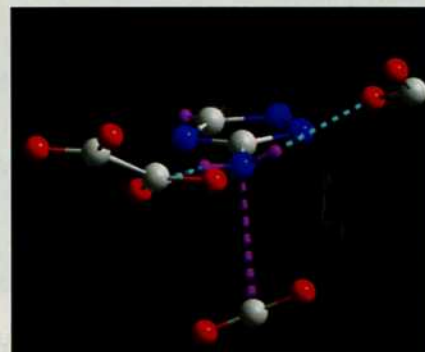
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