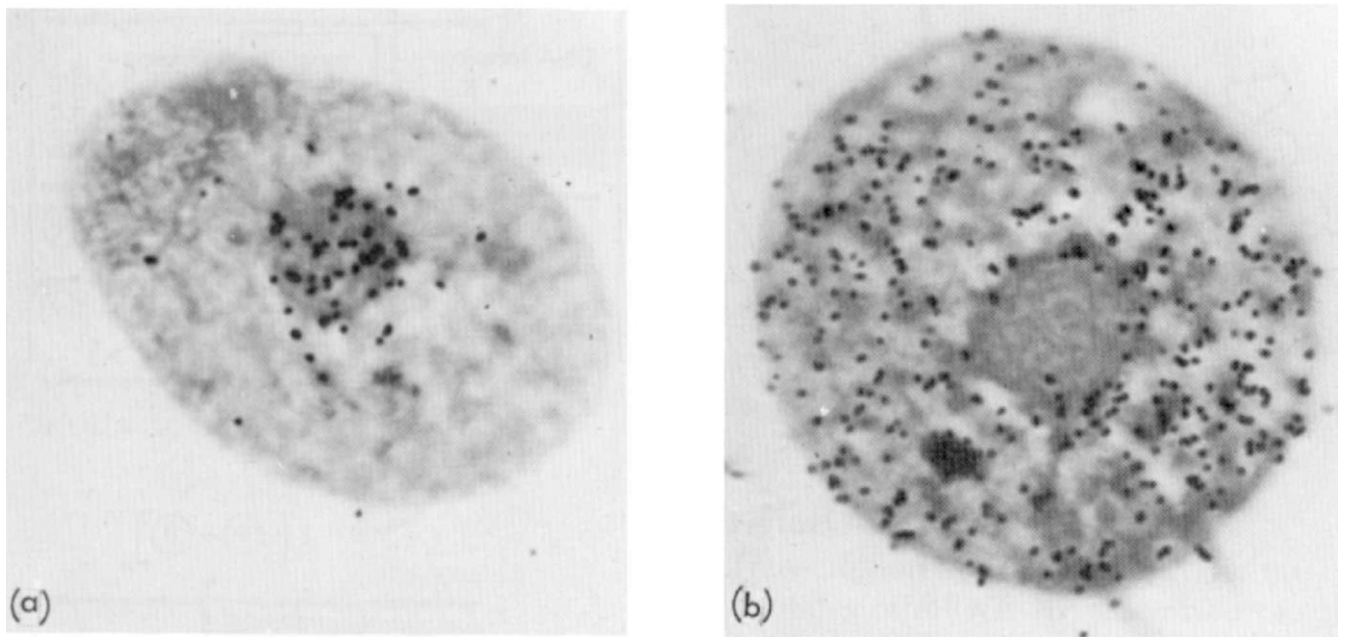


# $[^3\text{H}]$ CYTIDINE LABELING OF EUKARYOTIC CELLS

**Terms to be familiar with before you start to analyze the figure**

*radioactive labeling \* nucleosides \* detection of radioisotopes \* microscopy*

**The figure**



*Tetrahymena* cells were cultured in the presence of  $[^3\text{H}]$ cytidine for 12 minutes (a), and then for 88 minutes in a medium that did not contain radioactive cytidine (b). Answer the following questions:

1. What is the name of this type of labeling?
2. How did they study the incorporation of radioactive cytidine in the cells?
3. What processes were studied in this experiment?
4. What conclusions can be drawn from the micrographs?

## The source of the figure

Watson,J.D., Hopkins,N.H., Roberts,J.W., Steitz,J.A., Weiner,A.M.: Molecular Biology of the Gene. Fourth Edition. The Benjamin/Cummings Publishing Company, Inc., 1987. Fig. 3-18.

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