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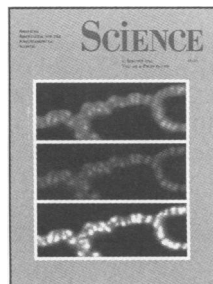
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**COVER** Fluorescence micrographs of a living motor nerve terminal (20 micrometers long) of a frog. The nerve was first stimulated vigorously to label all synaptic vesicles with a dye (top). Each spot is a cluster of vesicles. The nerve was then stimulated briefly to relabel a fraction of the vesicles with a different dye (middle). The uniform yellow color of these two images when superimposed (bottom) shows that the newly recycled vesicles were distributed randomly within the total vesicle pool. See page 200. [Digital film recording by G. W. Hannaway & Associates]

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