

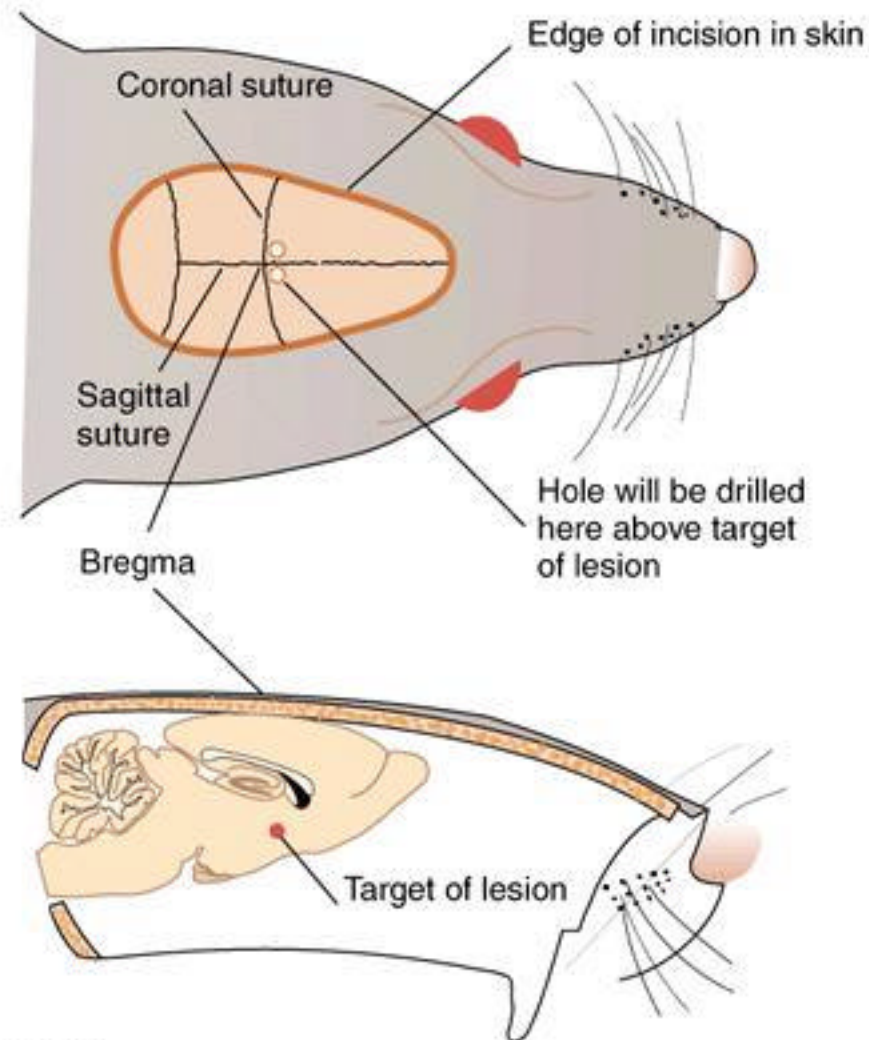
A L L Y N A N D B A C O N



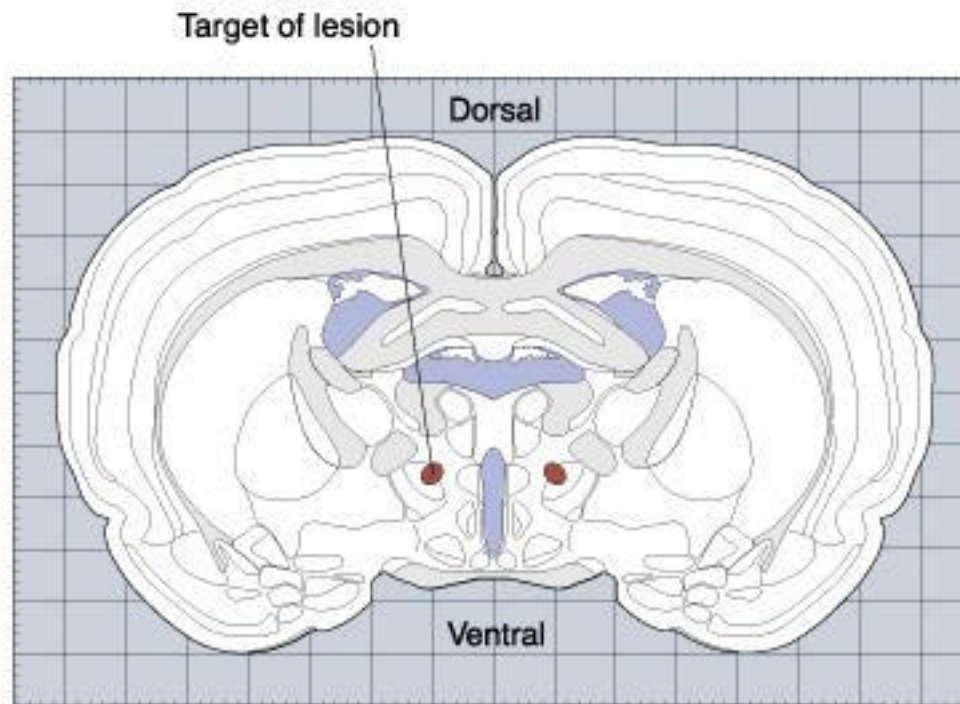
for Physiology of Behavior
by Neil R. Carlson Seventh Edition

CHAPTER 5
Methods and Strategies of Research

► **Relation of the Skull Sutures to a Rat's Brain, and Target for Electrode Placement**

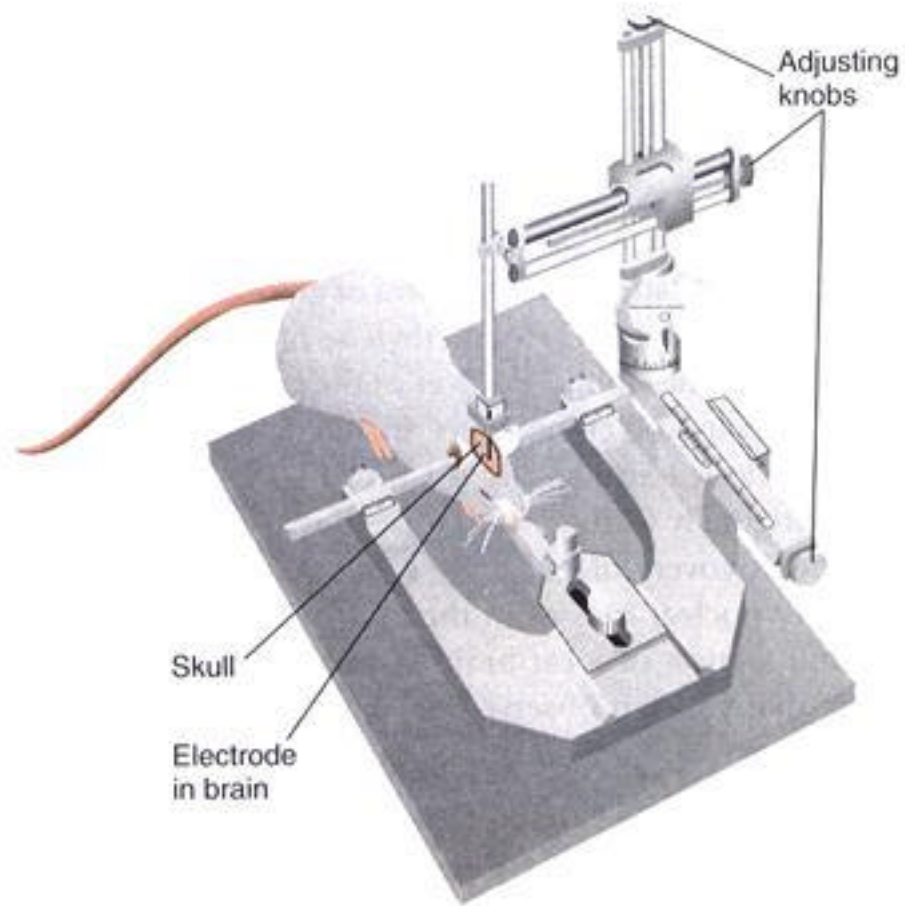


► **A Sample Page from a Stereotaxic Atlas of the Rat Brain**

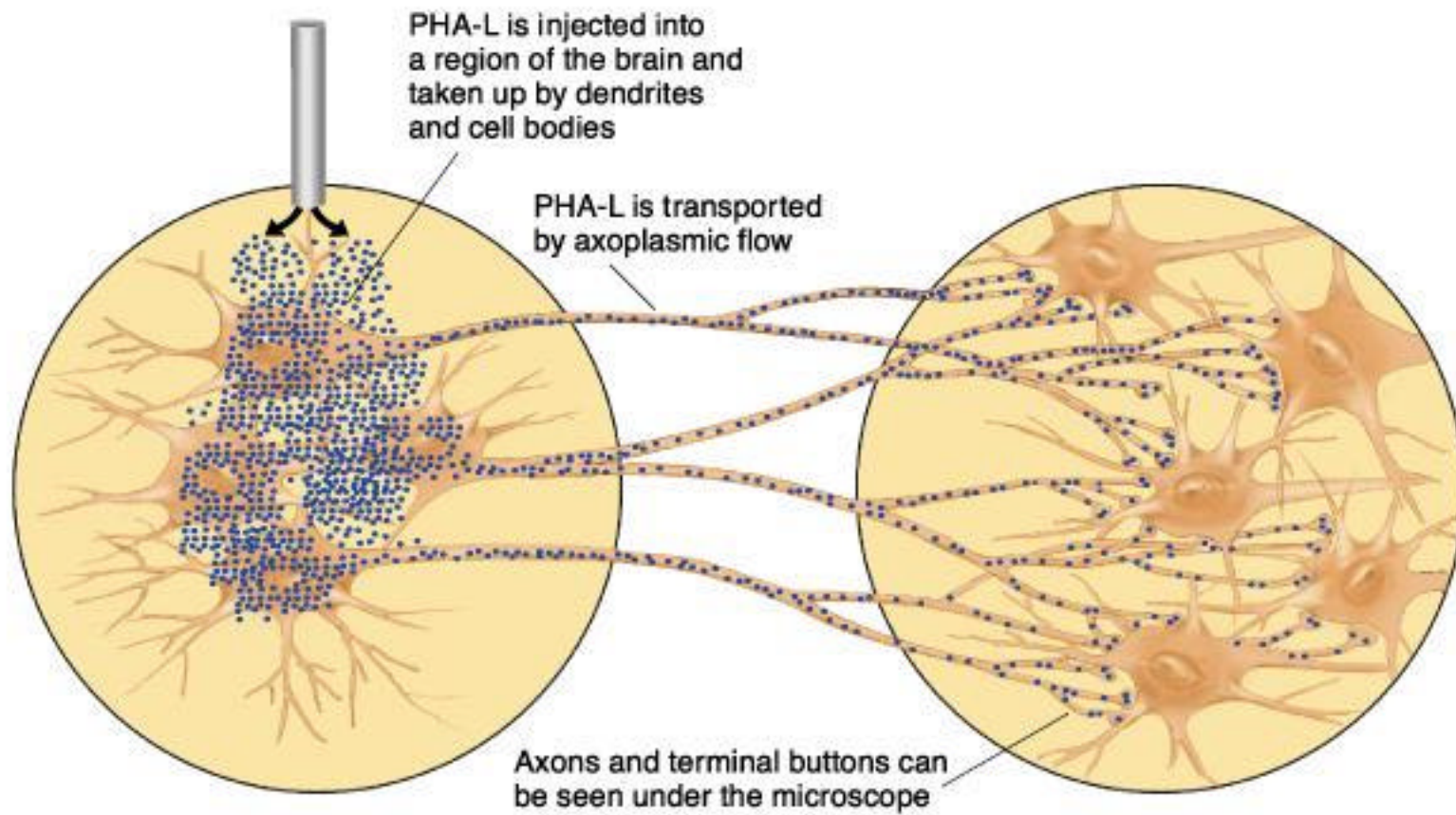


Source: Adapted from Swanson, L.W. *Brain Maps: Structure of the Rat Brain*. New York: Elsevier, 1992.
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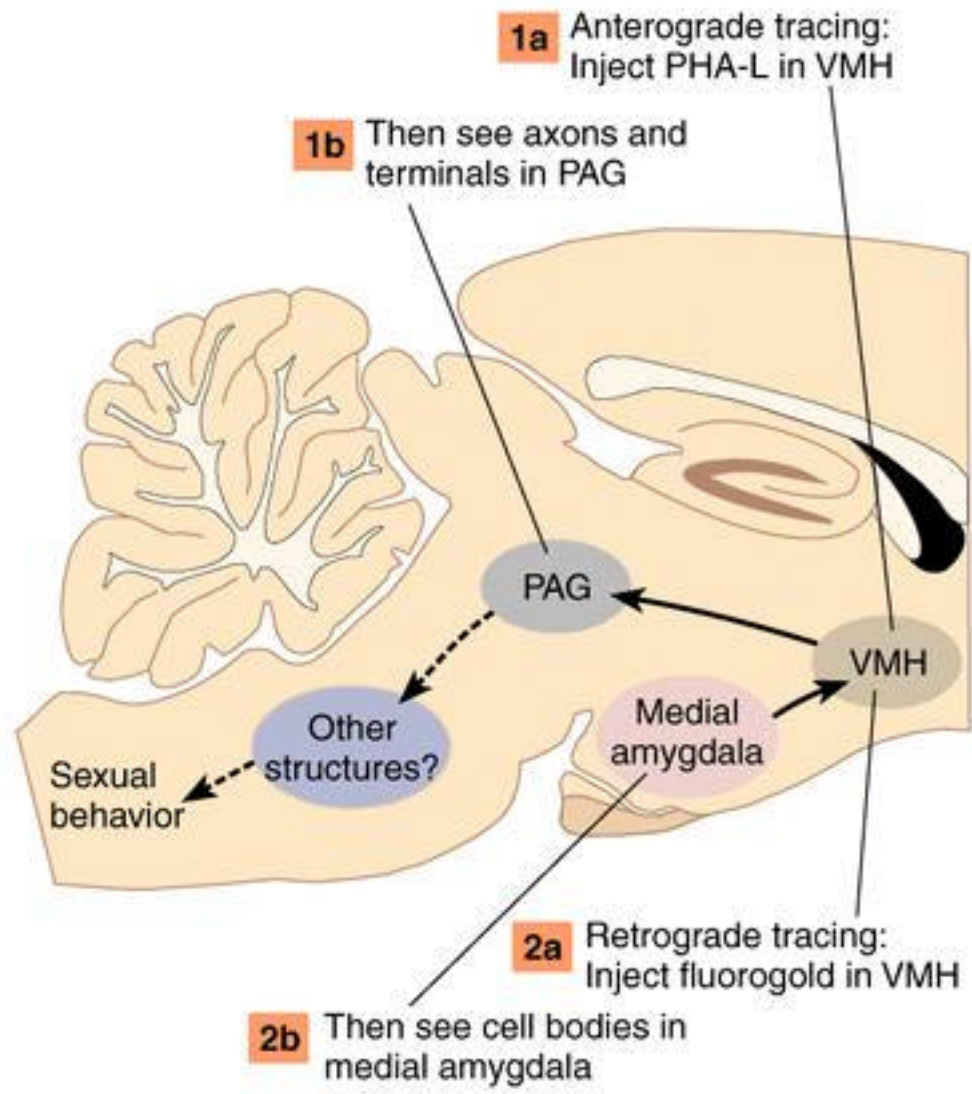
► **Stereotaxic Apparatus for Performing Brain Surgery on Rats**



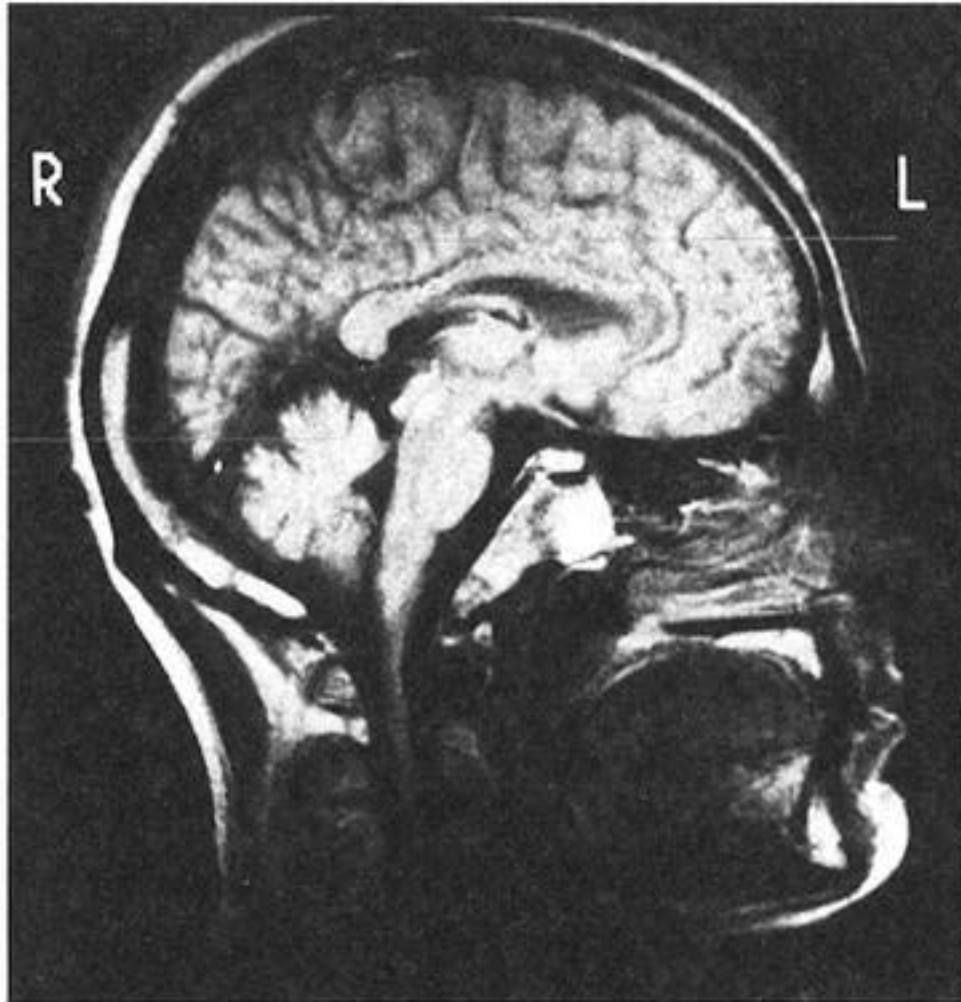
► **Rationale for the Use of PHA-L to Trace Efferent Axons**



► One of the Inputs to the VMH and One of the Outputs

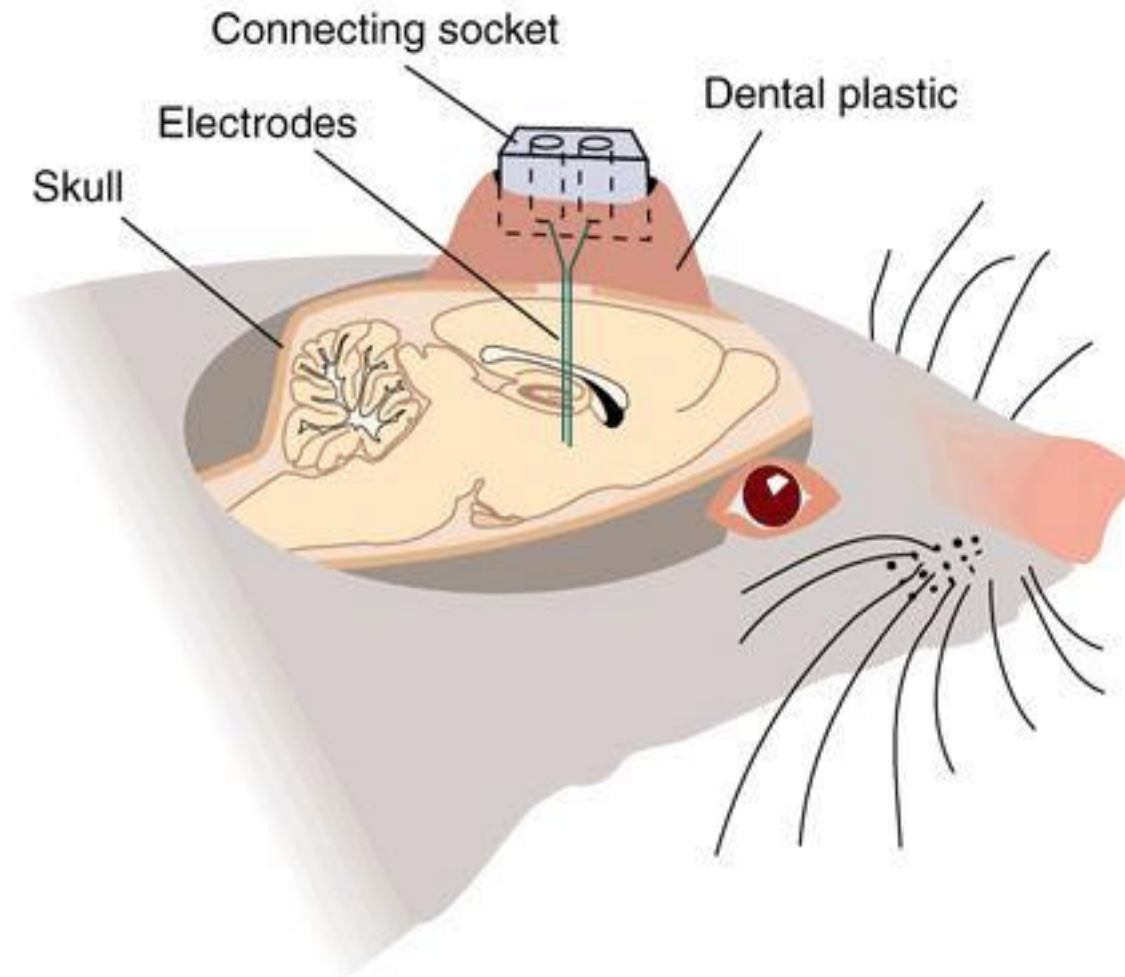


► A Midsagittal MRI Scan of a Human Brain

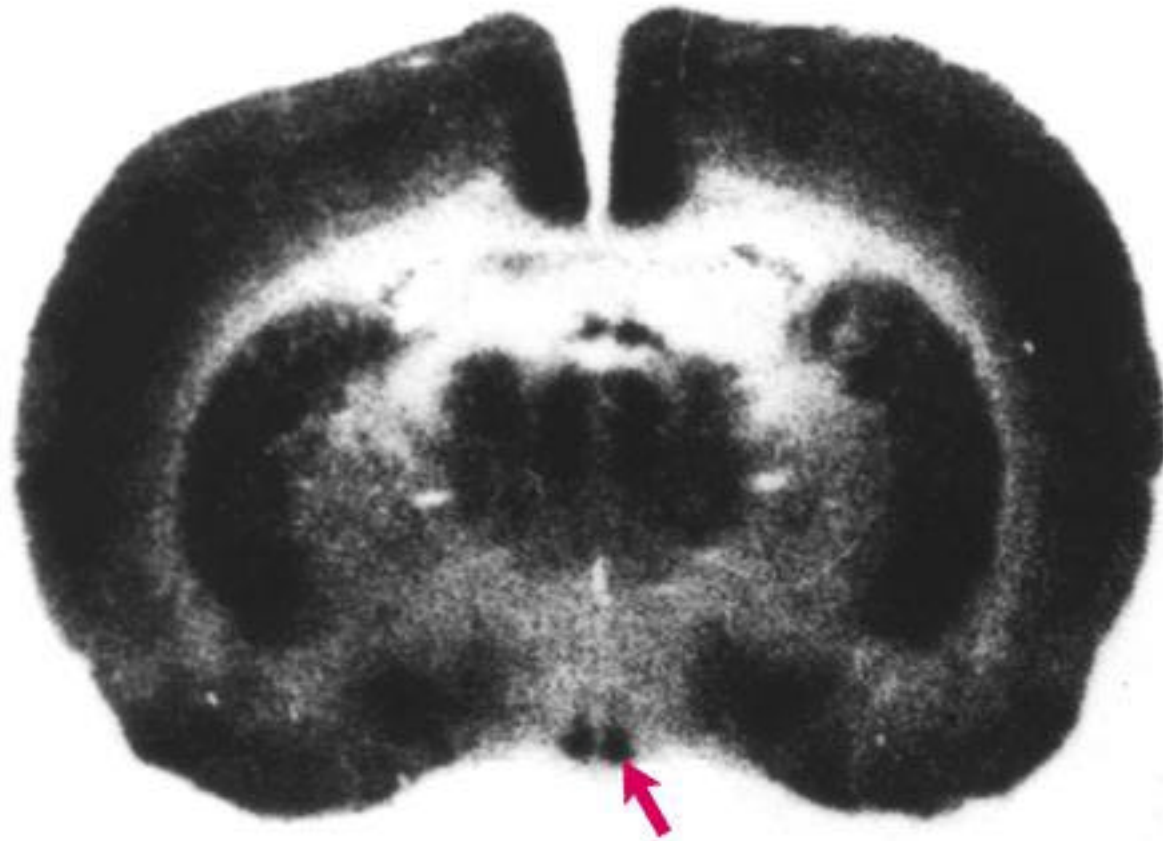


(Photo courtesy of Phillips Medical Systems) Copyright © 2001 by Allyn & Bacon

► **Permanently Attached Set of Electrodes, with a Connecting Socket Cemented to the Skull**

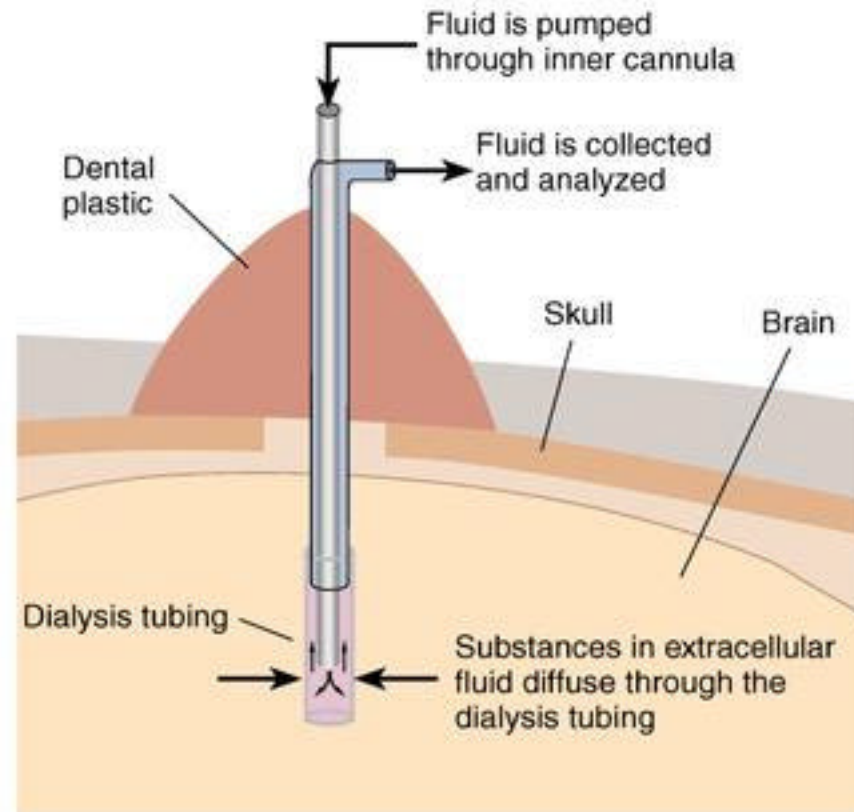


- ▶ A 2-DG Autoradiogram of a Rat Brain Showing Activity in Nuclei of the Hypothalamus



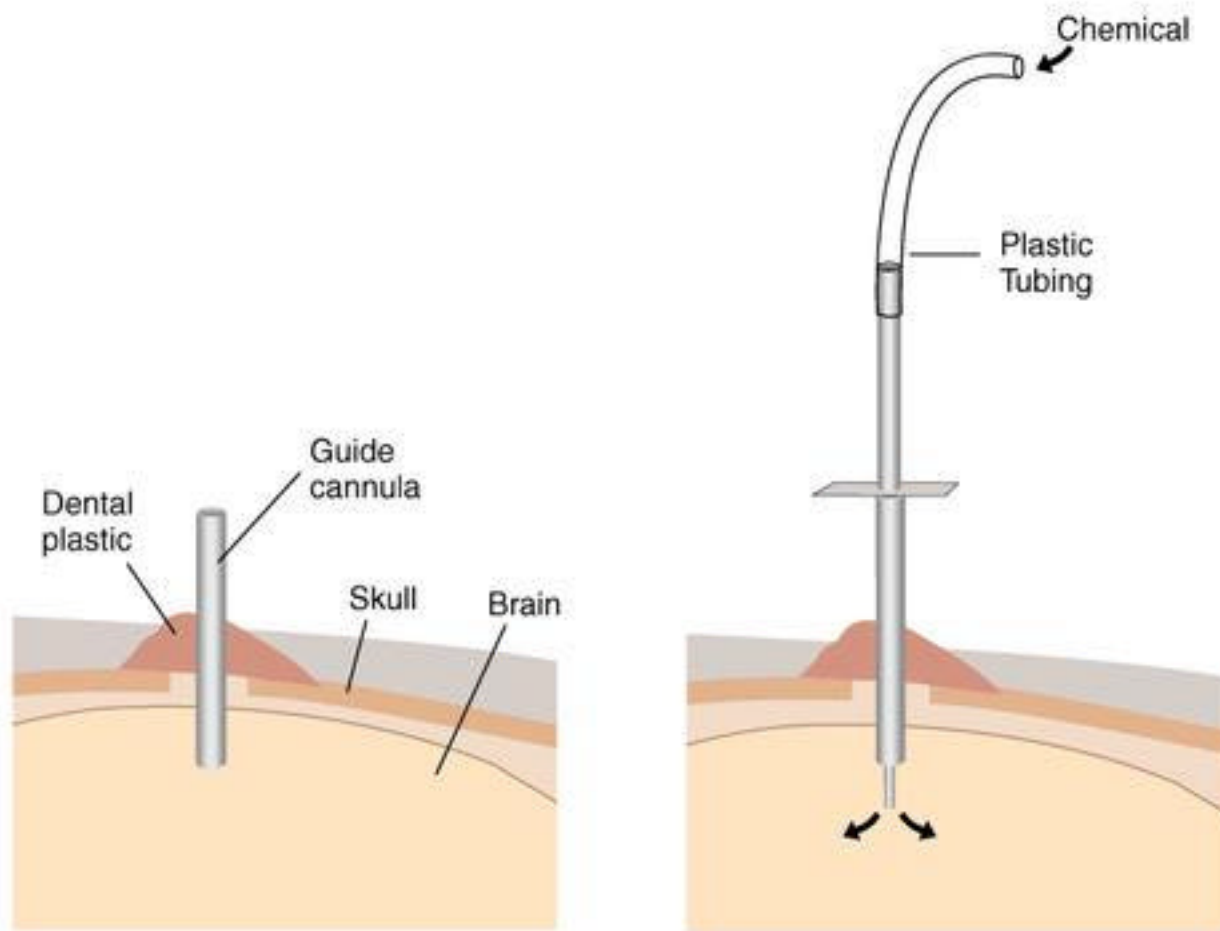
Source: From Schwartz, W.J., and Gainer, H. *Science*, 1977, 197, 1089-1091.
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► Microdialysis

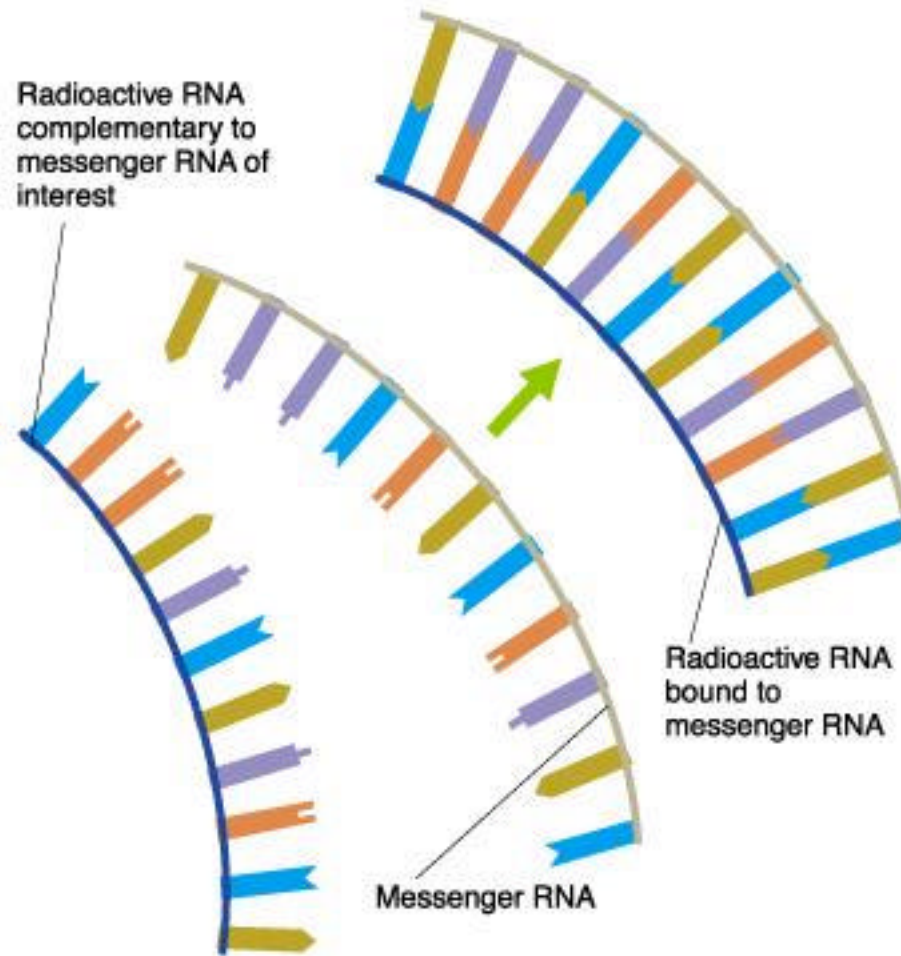


Source: Adapted from Hernandez, L., Stanley, B.G., and Hoebel, B.G. *Life Sciences*, 1986, 39, 2629–2637.
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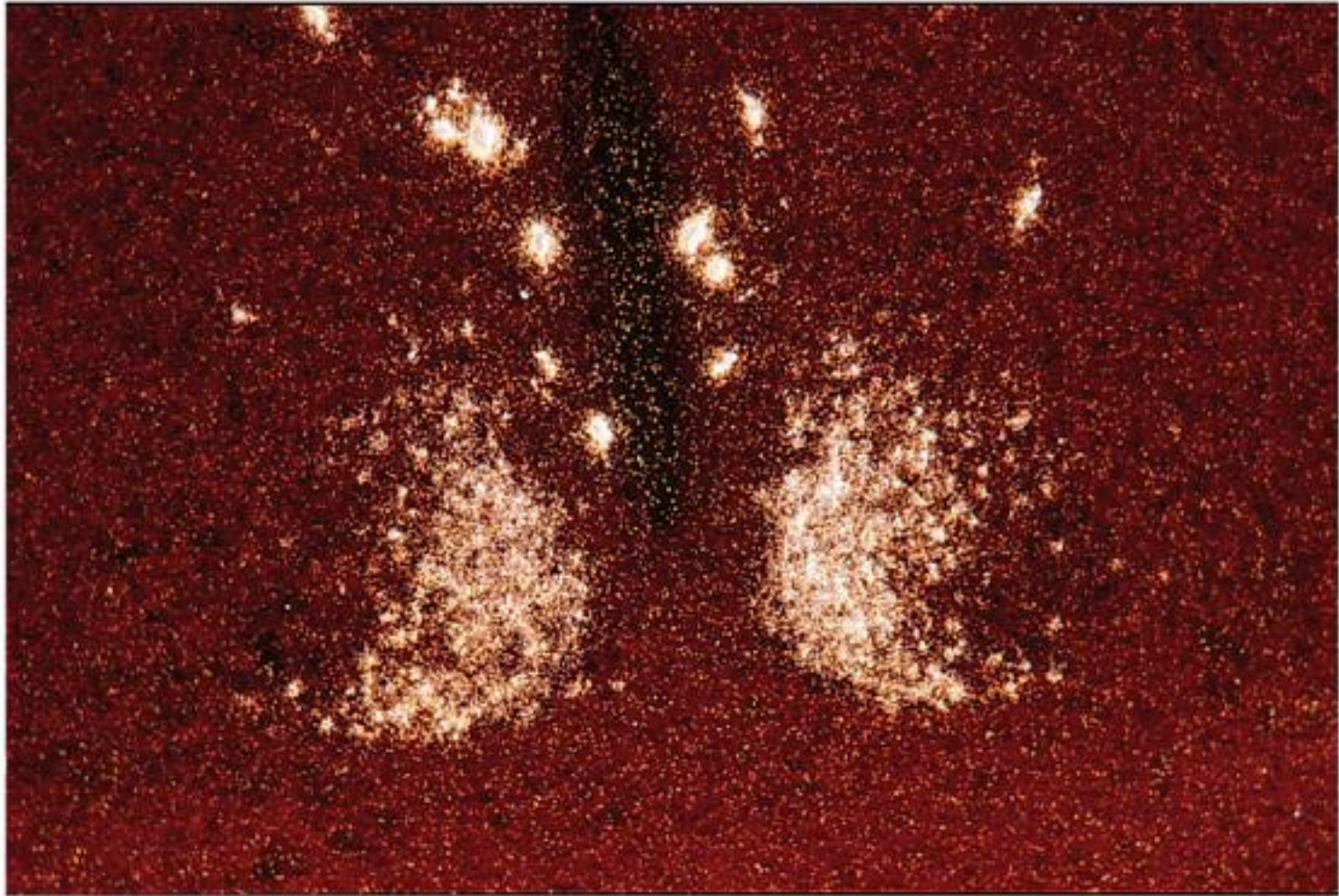
► Intracranial Cannula



► **Explanation of the Use of In Situ Hybridization**



► In Situ Hybridization



Source: Courtesy of Geert DeVries, University of Massachusetts.
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