## **Tutorial 3: Types of Neurons**

Intro | Unipolar Neuron | Bipolar Neuron | Multipolar Neuron | Multipolar Interneuron

Part 1: Image-Mapped Tutorial (Printable Version) Part 2: Matching Self-Test Part 3: Multiple-Choice Self-Test

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Although all neurons contain the elements described in <u>Tutorials 1</u> and <u>2</u>, they can be classified according to the placement of the cell body relative to other portions of the neuron. The primary classification scheme is based on the number of branches that originate from the cell body. In this way, neurons are placed in one of three categories: unipolar (one branch), bipolar (two branches), or multipolar (multiple branches). Another way of distinguishing neurons is by overall shape, as affected significantly by the number and length of its branching dendrites and the length of its axon. The pattern of branching from the cell body affects the function of a neuron. These distinguishing characteristics of neurons are the topics of discussion in Tutorial 3.

Suggestions for further study

## SUGGESTED READINGS:

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- Tank, D.W., Hopfield, J.J. (1987, December). Collective computation in neuronlike circuits. *Scientific American*, *257*(6), 104-114.

Wessels, N.K. (1971, October). How living cells change shape. Scientific American, 255(4), 77-82.

## **RELATED LINKS:**

http://sup.ultrakohl.com/index.htm

(Society for Ultrastructural Pathology)

On-line Electron Microscopy.

http://www.europe.apnet.com/www/journal/cn.htm

(Molecular and Cellular Neuroscience) Search this journal's extensive database.

http://faculty.washington.edu/chudler/resources.html

(Internet Neuroscience Resources)

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