

## Gail Wight Spike



Photo: Gail Wight

The conception of ourselves as electrochemical entities is an historical phenomenon, one that has evolved over centuries of philosophical theorizing, experimentation, and practical application. The implications of this self-image have subtle, wide-reaching effects on the construction of our world. At the end of the twentieth century, this is a world where transgenic goats become manufacturing plants for human pharmaceuticals; where ingested radioactive isotopes facilitate the monitoring of our thought processes; and where psychoactive drugs dispel the madness of our historical civilizations, making way for new madnnesses as yet unimagined.

In *Spike*, the history leading to our current view of biology as electrochemically driven is explored. My intent is to analyze an ephemeral concept that, while often overlooked, has enormous significance for contemporary society. *Spike* traces the inventions, empirical practices, frames of mind, twists of fate, and creative insights that have brought us to our current electrified biological self-portrait.

Within a large three-dimensional labyrinth of clear plexiglas suspended in space, vignettes from historical and contemporary science are illustrated using objects, models, miniature dioramas, video displays, text and images. Alongside these vignettes sit small building blocks, presenting information about these historical moments and current experimental methods.

Residing in the maze is a lone rat. As it moves through its environment, most of these objects are exposed, chewed away by the rat during the course of the exhibit, and shifted by its movements through the space. There are also a few events that the rat triggers as it roams through its maze. For instance, as it passes a tiny drooling replica of one of Pavlov's dogs, the rat trips a motion detector that causes a plaintive howl to sound.

Other examples of the rat's environment follow: in one part of the maze, plastic frogs are dissected and wired with elementary batteries to illustrate Galvani's eighteenth century experiment on animal electricity. In another area of the maze, a child's rubber farm animals are hooked to industrial milking machines and display the process of extracting drugs from transgenic udders. In a third, MRI scans course through the human brain on a small video monitor. In each case, brief texts and accompanying images on blocks explain the vignette. The common thread of conceiving biology as electrochemical is emphasized throughout.

Visually, the elements of this work play with light and aspects of electricity. The translucent glass base, reflective surfaces, small LED monitors, careful use of color, and tiny lights and electrical devices combine to create a cool, lab-like feel. Throughout the space, as a subtle background element, is an incessant, quiet clicking—the amplified electrical spike of a single nerve-cell firing.

