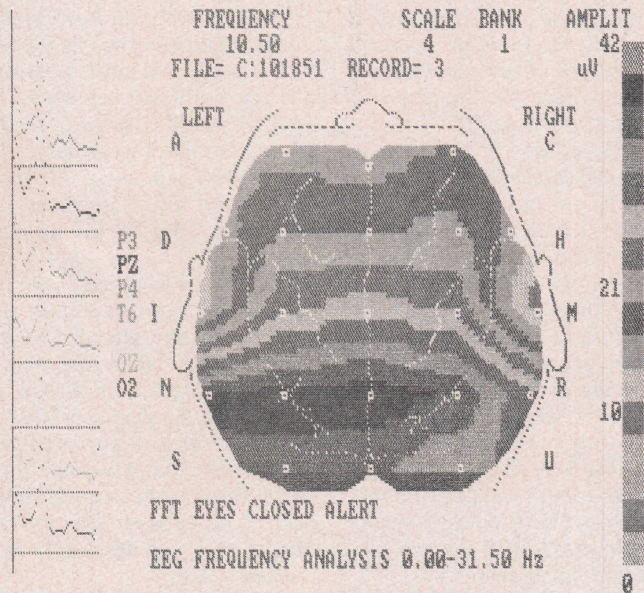


# \$110,000 'Brain Atlas' Diagnoses Abnormalities



By examining Brain Atlas printouts, doctors can locate abnormalities.

PHOENIX — Phoenix Children's Hospital has installed a machine that measures brain waves, feeds them through a computer and then employs statistical data to help doctors diagnose and treat brain disorders.

The "Brain Atlas," which costs \$110,000, can compare one side of the brain against the other and sleep patterns against waking patterns. It also can compare one patient's brain waves against a group of people to determine brain norms or irregularities.

"It allows you to pick up subtle changes that the human eye can't see," says Dr. James Frost, a medical director of the neurophysiology laboratory at Phoenix Children's Hospital. "There are only a very few of these machines that do these comparisons and studies."

Frost also says that the Brain Atlas has one of the largest normative data groups in its data base, which makes it possible to do comparisons and studies on a wide range of brain-wave activity.

According to Frost, the technology behind the Brain Atlas is brand new. Consequently, the scope of its capabilities and potential are unknown.

"We got a grant from the company that manufactures it to find additional uses for it," Frost says. "We're studying normative data in children right now."

Currently, Phoenix Children's Hospital is the only facility in Arizona to have the Brain Atlas, but a handful of the new machines also are in use in California and Colorado.

— Cynthia Scanlon.