

# MORLEY

**Precision Measurement Solutions for Manufacturers**

## **Mini Case Study: Medical Research**

**Project: Measure research tracking system**

**Location: Calypso Medical – Seattle, Washington**

This was great experience, to work with some of the brightest people in the industry and also to contribute to Cancer Research. We were asked to devise a method to check the accuracy of their “Tracking Methods” which meant we had to Track objects in 3D space on very light weight “arrays” with a high accuracy and repeatability. The tracker had to create an ISO center and keep the same CRF though out the day. This entailed many data collections with the Faro Laser tracker that had to be stable and accurate for the physicist’s and research team to analyze data.

We were proud to be told at the end of this part of their research program that our Laser Tracker and services were the corner stone of this part of the project.

This excerpt from the Calypso web site explains why our measurements had to be so precise.

**The Calypso® 4D Localization System:** As a result, when the product is available for use, it is expected to be dramatically simpler to locate the true treatment target and — for the first time — to objectively and efficiently manage patient alignment continuously without extra non-therapeutic x-ray dose.



**The Calypso® 4D Localization System Console**

A misalignment of the treatment target can be detected by Calypso® Medical’s proprietary algorithm that identifies sub-millimeter shifts of the target from its prescribed location anytime throughout the treatment. Through an intuitive graphical user interface, the Calypso® 4D Localization System is programmed to exhibit real-time graphs instantaneously highlighting shifts in position that exceed a pre-determined threshold.

For more information visit the Calypso Medical Web site: <http://www.calypsomedical.com>