Color Plate 1. A medical modeler "touches" a cranial defect while sitting at PARIS™. The stylus corresponds to a tool held in the right hand; a virtual hand tracks the position of the left hand. A real model remains visible on the table.

Color Plate 2. After outlining the edge of the cranial defect, VTK extracts the defect edge. The resulting geometry is converted into Open Inventor and GHOST. The modeler draws lines to form the initial implant volume.

Color Plate 3. A view of the environment with 3D medical CT image slices corresponding to a touch position. As the modeler touches the skull, the slices align to match the tool position. Potential patient information is visible on the left. These enhancements were demonstrated to radiologists at the Radiological Society of North America (RSNA) 2003 conference. Patient history images are courtesy GE Medical Systems.