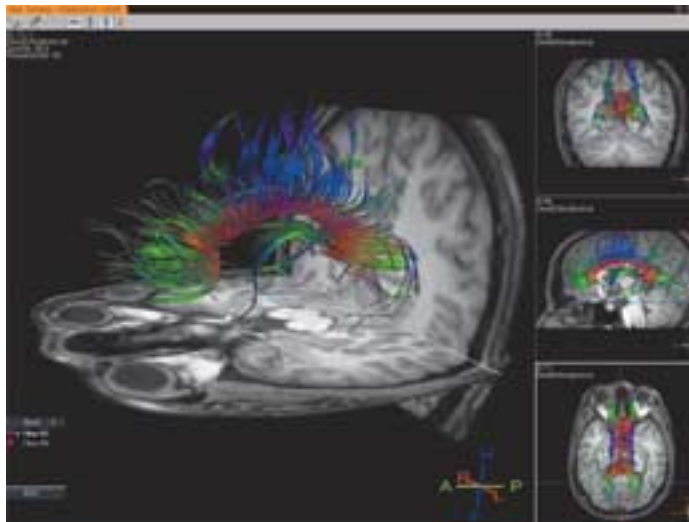# Easy, fast clinical fiber tracking

Magnetic Resonance FiberTrak Specialist

Example of FiberTrak user interface.

Fiber tracking is an advanced tool for pre-operative surgical planning, post-surgery evaluation and for general evaluation of fiber tracts around tumors and lesions in connection with functional areas.

Philips' FiberTrak Specialist package makes visualization of fiber tracts of Diffusion Tensor Imaging (DTI) data simple. With minimal mouse clicks fibers can be traced, analyzed and processed in real-time. When visualization is complete, the 3D or 2D cross-sectional results can be sent to disk or PACS using the standard DICOM interface or be exported to PC compatible formats.

PHILIPS
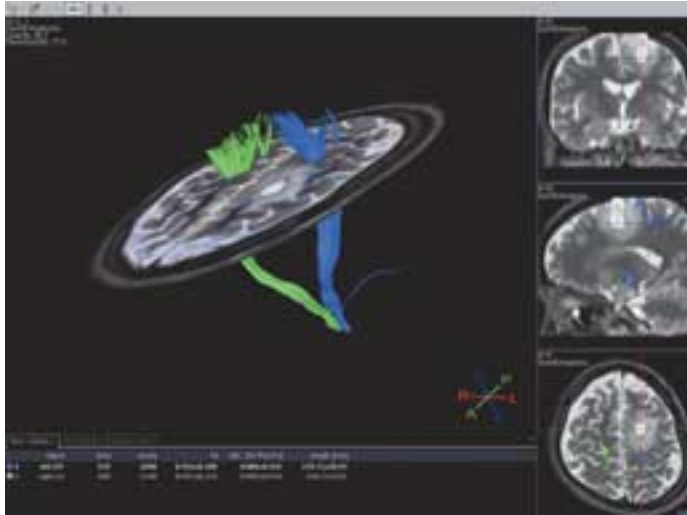
This example shows the position of the left and right Corticospinal Tract (CST) with respect to the lesion. The 3D visualization shows the general curvature and extent of the tracts. The 2D cross sectional results (right column) delineate the tracts within each slice so that accurate pre-surgical planning can be performed.

Example of fiber tract statistics.

Features

- Advanced 3D visualization of (multiple) fiber tracts in the brain with minimal mouse interactions including:
  - Overlays of anatomical datasets or fMRI datasets
  - 2D color cross sections with fiber tracts
- Easy navigation and viewing
  - Orthogonal views of all data, linked to the main 3D view
- Single and multiple ROI fiber tracking
- Statistic analysis on voxels, fibers and ROI's
- DTI data with minimal 6 diffusion directions, up to 32 diffusion directions.
- Output:
  - 3D user-specified views and movies of the entire fiber structures
  - 2D color fiber tract cross section data
  - PACS and DICOM compatibility
  - Windows compatible export for pictures, movies and statistics
- Perform processing anywhere: on operator's console or on MR WorkSpace

Benefits

- Tool for pre-surgical planning and post-surgery evaluation
- Supportive tool for functional assessment of white matter
- Fiber tracking in both brain and spine

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