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Rapid Visualization of Neural Pathways

Researchers at the University of South Florida have developed a method to facilitate the identification of essential fiber tract pathways when planning and performing brain tumor surgery.

The method addresses an important unmet need in the field of neurosurgery. Existing software systems used for neuro-navigation and stereotactic craniotomy have a steep learning curve. Their use for surgical planning is tedious, complex, and prone to individual error, making them unreliable and needlessly complex. The present invention advances the safety, efficiency, and precision of brain tumor surgery with fast-track piloting in the critically important, eloquent areas of the brain.

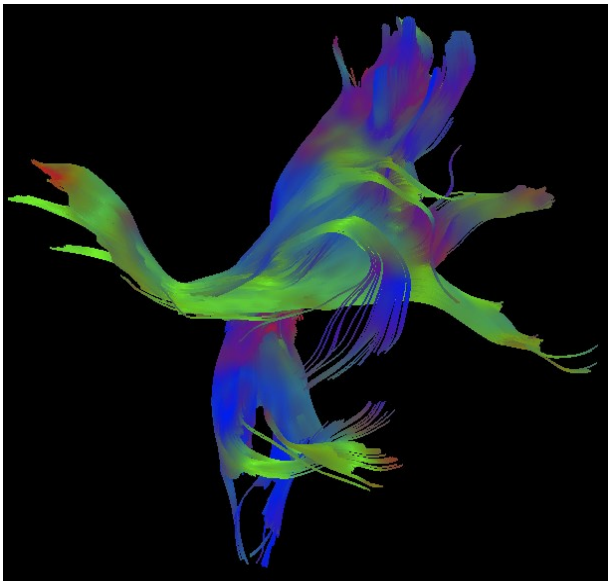
The present method can be integrated with imaging platforms and reduces surgical planning time by up to 95%. The method facilitates the identification of essential fiber tract pathways to avoid when planning and performing an operation, thereby increasing surgical safety and avoiding complications. In addition, it maximizes functional outcomes and enhances quality of life for patients with brain tumors.

ADVANTAGES:

- **Decrease surgical planning time**
- **Increase surgical safety**
- **Maximize functional outcomes**

Improved Precision

During Brain Surgery



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