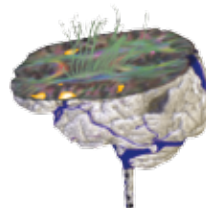


**ESysfMRI** **DynaSuite**  
neuro  
THE COMPLETE NEURO SOLUTION



better images mean better results





Welcome to a better way  
for YOU and YOUR patient

## FunctionalMRI

brought to you by 

is your complete advanced  
neuro solution for streamlining  
workflow and providing  
exceptional clinical results

*"DynaSuite provides our neurosurgeons with tools to operate with increased safety, accuracy and effectiveness. Thus preserving function and improving quality of life."*

John R. Grogan, M.D. Neuroradiology  
Waukesha Memorial Hospital  
Waukesha, WI



### Precision Head Array

*Retractable coil elements for  
fast patient setup*



### Prestige Head Array

*32 Channels and exterior earphone  
design for improved S/N for specialized  
applications such as fMRI.*

## fMRI from Invivo – The Complete Solution

Advancements in MRI technology and analysis capability are revolutionizing the way neuroradiologists interpret MRI studies and the way neurosurgeons plan for procedures. These techniques have been largely confined to the research environment due to the specialized knowledge and skills required to process the data. Until now.

Invivo is leading the way from the research lab to routine clinical practice with a complete solution designed to streamline workflow and provide exceptional clinical results for neuro studies. Based on years of research and development, Invivo now provides the complete clinical solution including state of the art head coils, an fMRI stimulus system and an automated, high performance processing and analysis package. These components can be purchased separately or as a complete solution.

All components by Invivo are multi-vendor compatible without restricting your neuro procedures to a specific MRI system. Radiologists and clinicians will benefit from the simplicity of a single integrated solution regardless of the MRI system employed.

## Head Coils – A History of Innovation

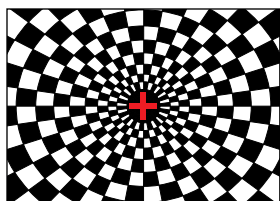
Invivo has been a leading manufacturer of multi-vendor compatible MRI coils since 1980. Our coils provide high resolution, parallel processing, and patient comfort.



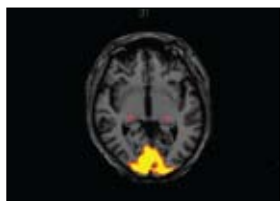
## ESys fMRI Stimulation - Clinically Validated Experiment Paradigms

ESys fMRI is the third generation solution by Invivo for functional MR imaging featuring clinically-validated experiment paradigms. The paradigm suite includes a battery of clinical fMRI tasks that provide proven activation of the motor, visual, auditory and language regions of the brain. The paradigms are easy for patients to perform and they simplify scanning for technologists. ESys fMRI also provides new experiment designs via its E-Prime design suite. Included are a graphical experiment design environment, a general purpose scripting language, a real time experimental presentation engine with millisecond precision, and tools to view, filter, analyze, edit and export behavioral results.

*Experiment Image*



*Response Image*



*Adults and Pediatrics*



ESys fMRI is compatible with any MR system up to 3T. For safety and comfort there are no wires or cables near the patient. Three-way communication for the operator, attendant and patient is provided so you can guide patients through the exam with ease.

On-site installation and applications are included with the system. Fiber optic transfer of signals simplifies installation and insures that no electrical noise is added to the scanning environment.

For additional patient comfort, ESys fMRI includes a patient entertainment system that can be used to improve study quality for non-fMRI studies. It provides complete in-room audio and visual presentations from DVD, CD or Microsoft Windows Media Player for the enjoyment of the patient during MRI exams.

 **ESysfMRI**

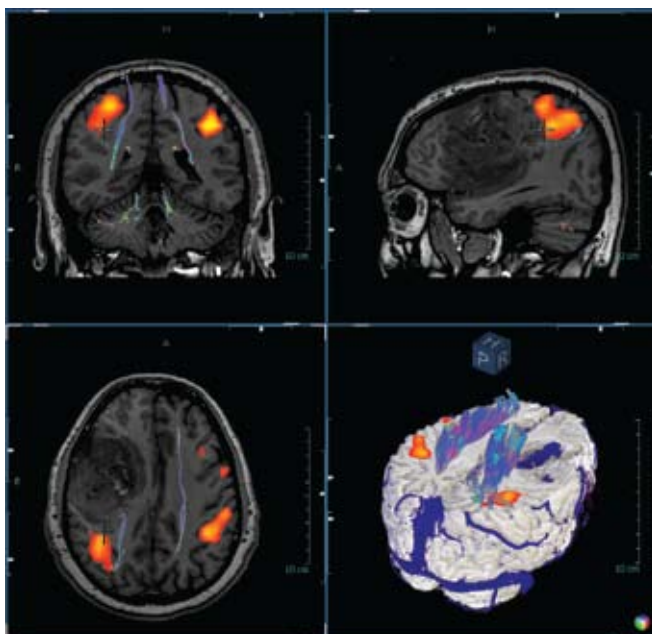
 **DynaSuite**  
neuro



### DynaSuite Neuro – Automated Processing for Optimized Workflow

DynaSuite Neuro is a high performance advanced MR neuro solution by Invivo, designed for optimal workflow and repeatable analysis for pediatrics and adults. The data is automatically processed and displayed in predefined layouts which are customizable for the physicians preference. The simplified user interface provides the neuroradiologist with the tools to analyze perfusion (PWI), diffusion (DWI) and functional MRI (fMRI) quickly and easily.

DynaSuite Neuro is compatible with all major MRI systems. Data sets from the MR System are automatically sent to **DynaSuite Neuro**, processed in the background and registered to a high resolution 3D T1. In each review screen, images are synchronized for easy viewing and correlation.



### Smart Fusion Review

*The Smart Fusion review provides the standard 3 views plus a 3D reconstruction. Any image can be used as an underlay with multiple overlays to easily visualize the fiber tracks, activation areas, vessels and the results of other analysis. The 3D display provides rotation for surgical planning, as well as cut planes, adjustable thresholds and transparency levels for optimal visualization.*

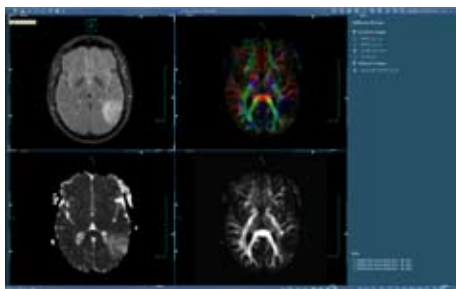


*"DynaSuite Neuro has improved workflow and given me greater confidence in the images and data we are collecting. This should in turn have a positive impact on patient care – our ultimate goal!"*

**Kevin Abrams, M.D.**  
 Medical Director of Neuroradiology & MRI  
 Baptist Hospital  
 Miami, FL

*"The DynaSuite Neuro System is fast, intuitive and user friendly, generating complex data sets without labor intensive effort."*

**Jim Dix, M.D.**  
 South Texas Methodist Hospital



### Diffusion Review

- DWI and DTI color map
- Fractional anisotropy (FA) and apparent diffusion coefficient (ADC)
- FA and ADC values on a voxel by voxel basis or for a region of interest (ROI). Mean and standard deviations for ROIs

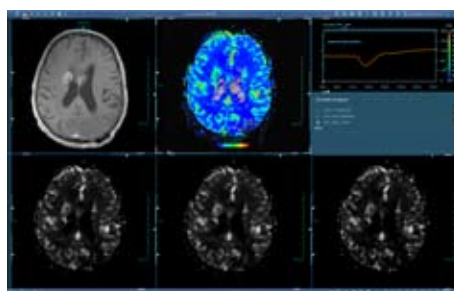


### fMRI Review

- Displays single or multiple fMRI activations
- Threshold, opacity, and color selections
- Time course graphs for activations

**DynaSuite Neuro** is designed to streamline your workflow through automated processes. Its algorithms optimize settings that have been proven in the clinical environment. Comprehensive quality checks are available to provide you with that extra measure of confidence. Registration, vessel, skull stripping, diffusion and fMRI QC applications allow you to make a visual inspection of the results and make adjustments to positioning or thresholds.

**DynaSuite Neuro** also provides you with the ability to create a "results image series" and a final report. The results images as well as the report can be sent to your PACS system and automatically combined with the original study data. The report is converted to a DICOM file and can be viewed with the images. The results images can also be exported to a surgical planning system.



### Perfusion Review

- Relative Cerebral Blood Volume (rCBV), relative Cerebral Blood Flow (rCBF), Mean Transit Time (MTT), and relative Time To Peak (rTTP)
- Acquired values, plus corrections for leakage and gamma variate
- Color coded graph of results



## fMRI from Invivo – The Complete Solution

Invivo can provide you the complete solution for neuro imaging and analysis. We supply comprehensive applications training for **ESys** and **DynaSuite Neuro** for optimal equipment utilization. It's backed by our Best in Class Service with on-site and remote technical support.



inspired by a better way

For more information about **Functional MRI** or any of the Complete Solution products from Invivo, please call us at 1-800-331-3220, or visit our website at [www.invivocorp.com](http://www.invivocorp.com)

### Invivo Corporation

Orlando, FL U.S.A.  
T: 800-331-3220  
T: 407-275-3220  
E: [info@invivocorp.com](mailto:info@invivocorp.com)

Europe:  
T: +31 (0)499 378299  
[contact@invivocorp.com](mailto:contact@invivocorp.com)

[www.invivocorp.com](http://www.invivocorp.com)

*Windows is a registered trademark of Microsoft Corp.  
Products, services, and technical specifications are subject to change without notice.  
©2009 Invivo Corporation All Rights Reserved. 580223 Rev 01*