

Why Multifocal?

Standard ERGs and VEPs use fairly large stimuli to test large retinal areas at a time. Focal damages cannot be detected this way. Many retinal diseases affect small areas on the retina.

With multifocal systems you test locally with hundreds of stimulations done in the same amount of time it would take to record from only one small focal area with conventional methods.

Multifocal techniques can detect small localized anomalies in the retinal response and provide information on nonlinear properties of retinal response components.

Multifocal ERGs can reveal local retinal dysfunction objectively and quantitatively. They can distinguish between retinal and optic nerve disease and can detect malingering.

Multifocal VEPs can evaluate asymmetry of visual function caused by optic nerve dysfunction.



Why VERIS™?

The Original Multifocal

EDI developed the first multi-focal VERIS™ systems more than 20 years ago utilizing special patented m-sequence techniques developed by EDI's founder, Dr. Erich Sutter. There are now several hundred VERIS™ systems in use by clinicians and scientists worldwide.

Easiest to Use

Pre-programmed, fully automated recording and analysis protocols make for easy operation by a technician.

Most Advanced

The objective measurement method used by VERIS™ permits examining and analyzing the responses from photoreceptors, second order neurons, and inner retinal response contributions. Choose from very short screening protocols to very high spatial resolution protocols for precision localization mapping.

Most Reliable

Eye and Fundus monitoring of fixation during data collection provides the best controlled recordings.

Combines Multifocal & Ganzfeld Tests

With the addition of our new Ganzfeld stimulator, EDI can provide the power and flexibility clinicians need to perform all electrophysiological tests using one system.

Most sophisticated

Patented stimulation modes provide emphasis of inner retinal response components. The software provides immediate access to all kernels.

Modular

The software is designed to permit easy updating and expanding of the VERIS™ System.

VERIS™

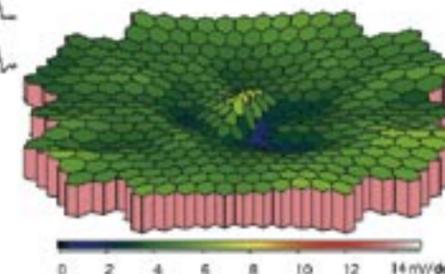
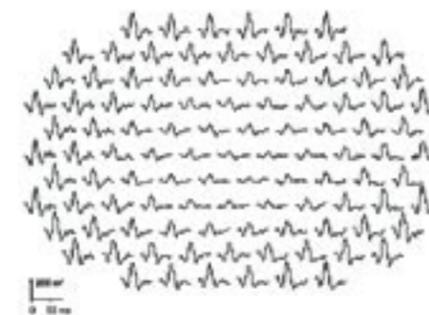
Objective Imaging of Retinal & Cortical Function Combined Multifocal and Traditional Recording Systems for the Clinic & Science



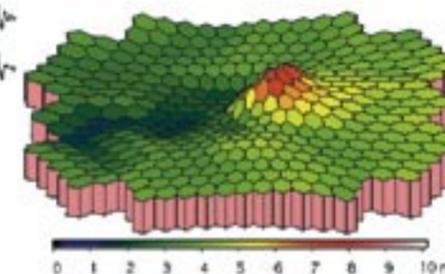
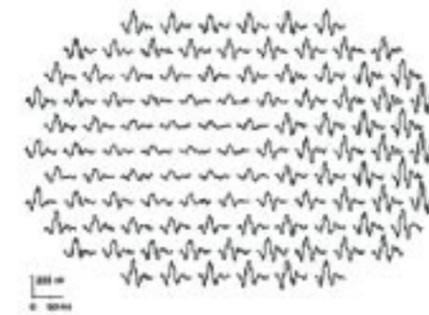
- Easy to Use
- Fast Tests for Screening
- Patented Protocols

Seeing the Invisible Three Examples of Occult Cases

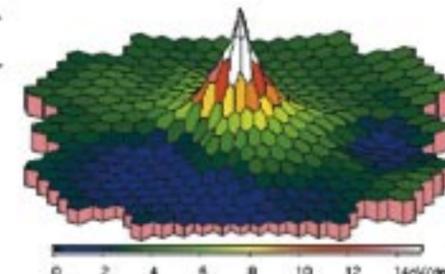
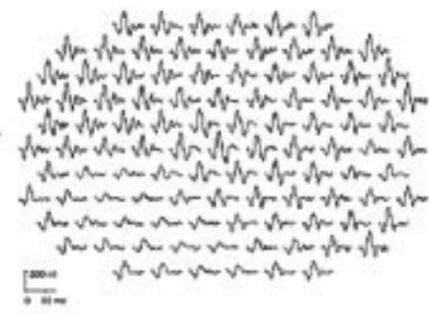
- 45-year-old gentleman with gradual progression of visual field loss in both eyes
- V/A 20/100 OD, 20/200 OS
- Reduced color vision
- Dilated fundus exam normal in both eyes
- MR scan, fluorescein angiogram and vitamin B12/folate levels were unrevealing



- 36-year-old gentleman with vision loss in left eye following a motor vehicle accident six months prior
- V/A 20/30 OS
- Dilated fundus exam shows no evidence of retinal pigment epithelium changes.



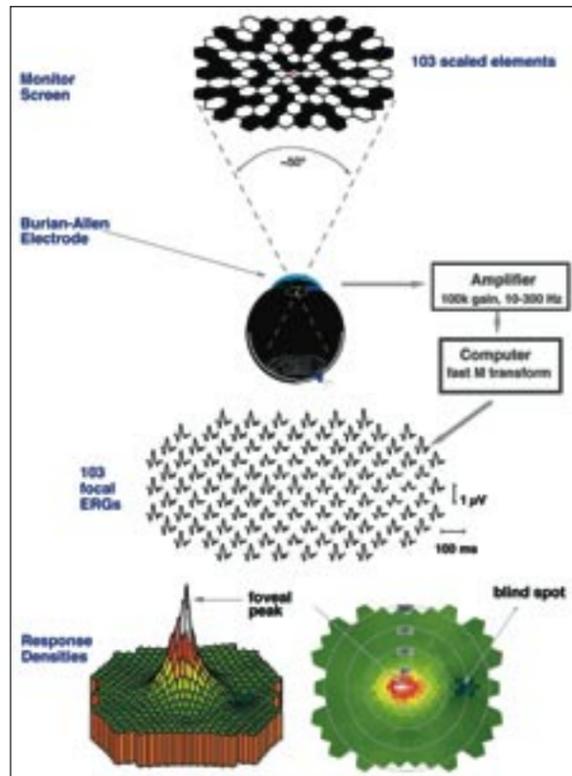
- 42-year-old gentleman with history of HIV infection (CD4 count was 650)
- Inferonasal visual field defect in right eye
- V/A 20/15 in both eyes
- Dilated fundus exam unrevealing except for 3 old chorioretinal scars in right eye



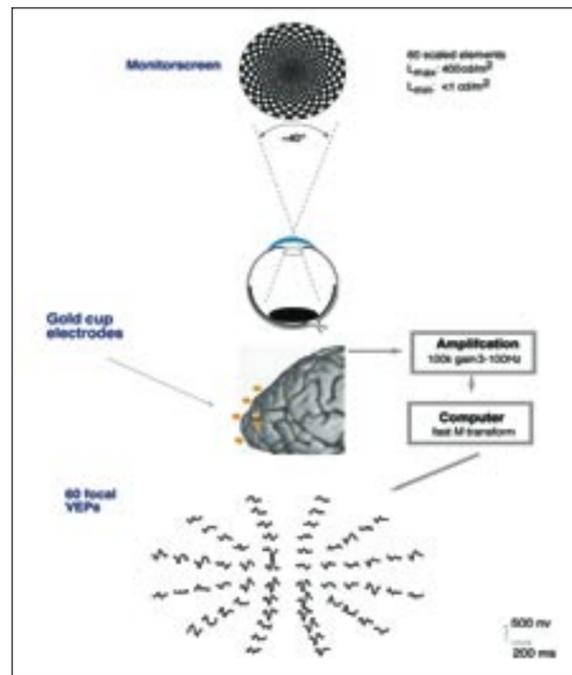
EDI

Electro-Diagnostic Imaging, Inc.
200 F Twin Dolphin Drive
Redwood City, CA 94065-1402

Telephone: (650) 631-0120
Fax: (650) 631-0122
Internet: <http://www.electro-diagnostic.com>



Multifocal ERG



Multifocal VEP

VERIS™ Science

VERIS™ Science is a unique, highly versatile recording system designed for sophisticated basic and clinical research laboratories engaged in research using ERG and VEP responses. Utilizing a special analysis technique, VERIS™ can simultaneously assess local retinal or cortical responses at hundreds of locations in the visual field. The local responses are extracted from recordings of 1 to 16 minutes in length using a single signal derived from the cornea or the scalp.

Various modes of local stimulation (flash, pattern and color) are available for preferential stimulation of different retinal or cortical mechanisms. The ability of VERIS™ to discriminate effects due to nonlinearities facilitates the identification of signal sources and characterization of their properties. Other applications include spatio-temporal analysis of receptive fields and pupillary responses.

With VERIS™ Science you can create and develop your own recording and analysis protocols and stimulus pictures. VERIS™ Science includes a completely integrated version of VERIS™ Clinic.

VERIS™ Clinic

VERIS™ Clinic incorporates the advanced technology of VERIS™ Science in a simplified version that is easily operated by a technician. VERIS™ Clinic runs a limited set of pre-programmed, fully automated recording and analysis protocols that provide the clinician with the tools to get good results quickly.

All VERIS™ Systems are:

Fast - Screening protocols in under a minute. Patented algorithms extract and analyze data in seconds.

Versatile - Spatial and temporal mapping of retinal and cortical responses.

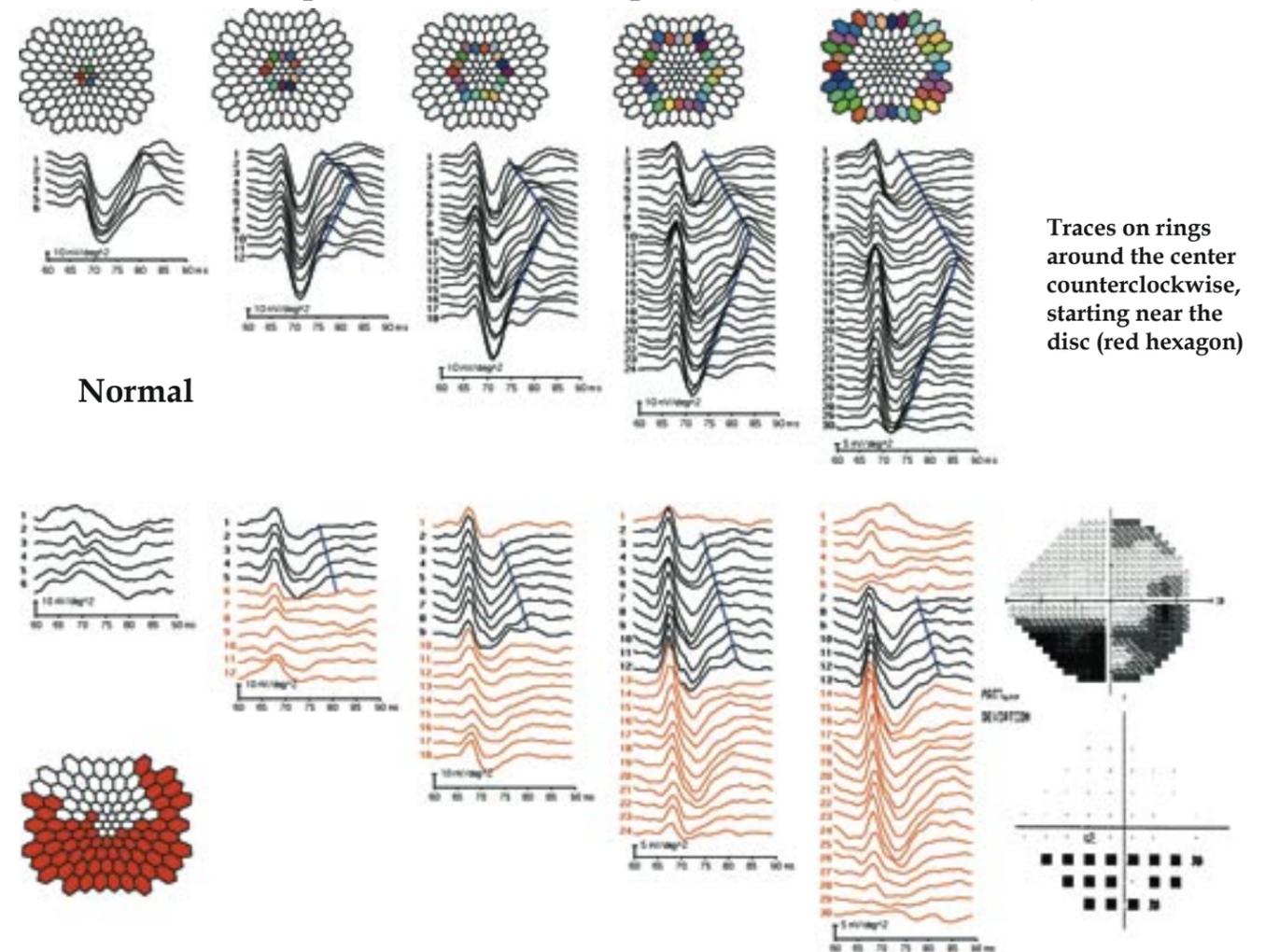
Repeatable - Highly reproducible results.

Accurate - Quality control through eye and fundus monitoring. High spatio-temporal resolution using appropriately scaled stimuli.

Flexible - Used in more than a hundred institutions, including universities, medical centers & hospitals, research laboratories and in private practice. Data can be exported for further analysis or publication.

Extensible - Newly developed protocols are made available to all VERIS™ users.

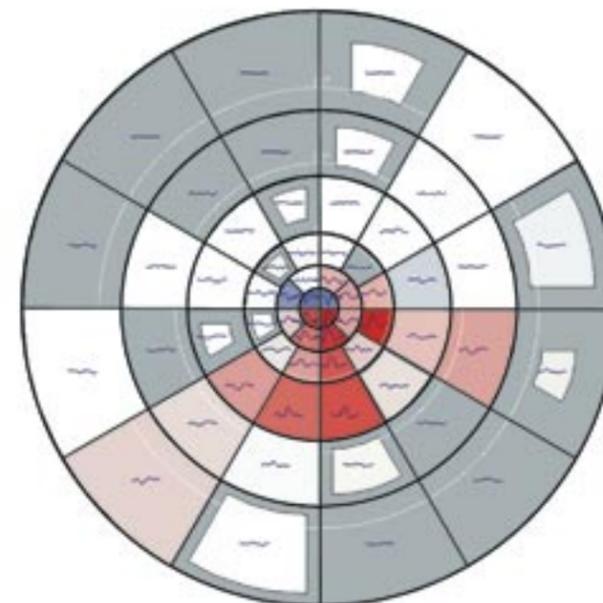
Optic Nerve Head Component Protocol (Patented)



Normal

Glaucoma

Cortical Recording For Testing the Visual Pathway
Difference between the two eyes indicates unilateral dysfunction



High Resolution Visual Function Mapping

