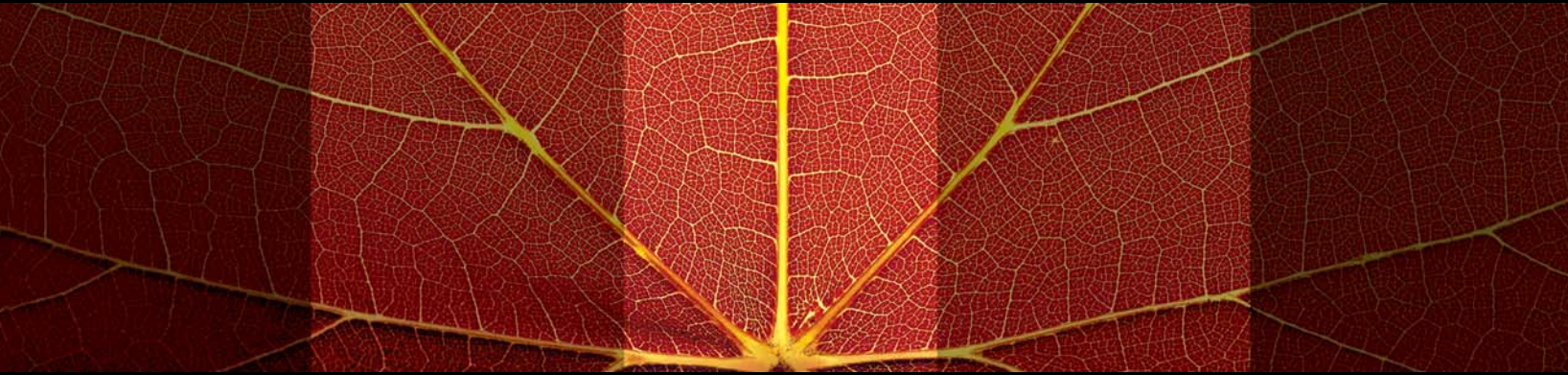


Cinematic Widescreen
for the Retina



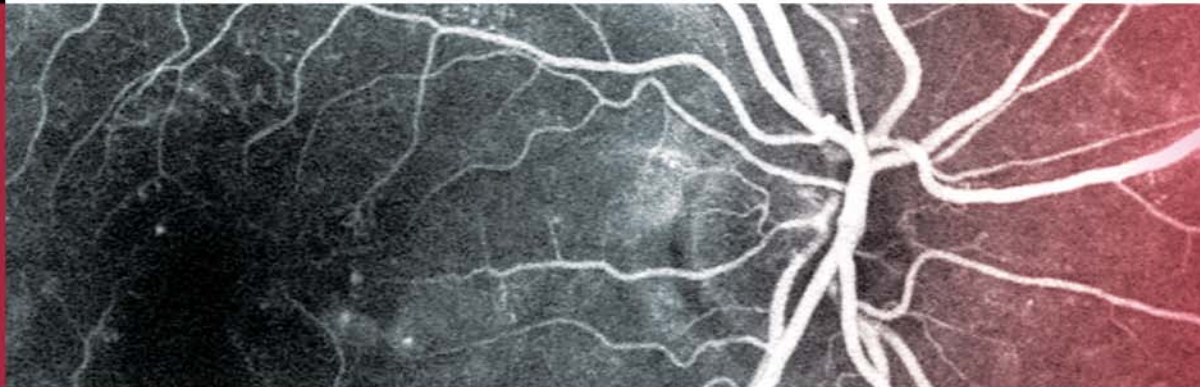
HRA2

Heidelberg Retina Angiograph 2

HEIDELBERG
ENGINEERING

HRA2

Heidelberg Retina Angiograph 2



Beyond Photography

Laser imaging with the HRA 2 provides detail and perspective unseen in still photography whether digital or film. The secret lies in the unique properties of confocal scanning laser technology that enables wavelength-selective imaging and rapid scanning speeds for still or 16 frame-per-second motion images.

- Dynamic high speed angiography—Motion pictures that capture the full cycle of dye uptake and clearing
- Non-invasive imaging—Autofluorescence, “red-free” and infrared imaging modes aid in early disease detection
- ICGA—Enables a clear view into the choroid, eliminates the “fog” seen on standard photographs
- Higher image contrast, greater detail—Pinpoint laser scanning picks up details obscured by white light flash photography

Proven Technology— Powerful New Features

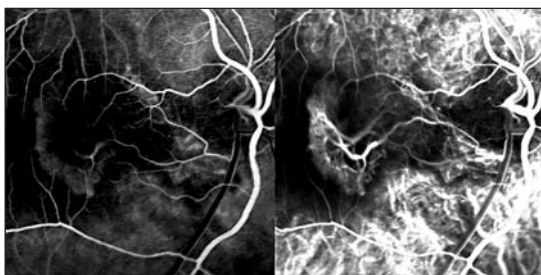
NEW! Wide Field Imaging provides real-time panoramic views of the retina in either angiography or non-invasive imaging modes.

NEW! 55° Lens adds to the currently available 30° lens for greater versatility.

NEW! ART™ Automatic Real-Time Software—a new method of “on-line” image processing which meshes single frame images into a higher quality composite image and can also smooth pan-retinal images to create a seamless wide field view of the entire fundus.

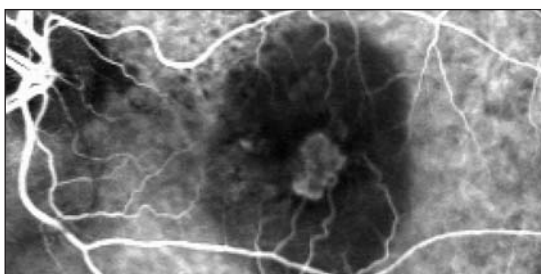
NEW! Enhanced Autofluorescence Imaging using ART software brings crisp images of such evolving areas as geographic atrophy of AMD.

The HRA 2 Advantage



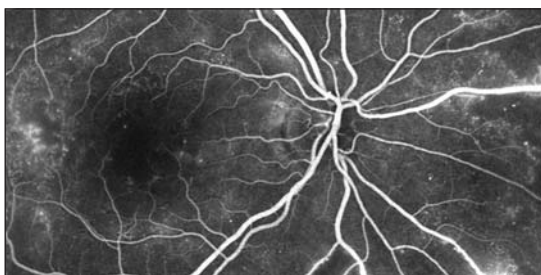
Simultaneous FA/ICGA

Only the HRA 2 provides simultaneous acquisition of both FA and ICGA images, enabling you to positively correlate choroidal pathology seen on ICGA with the retinal landmarks seen on FA.



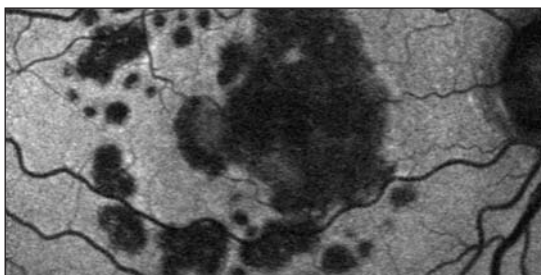
Laser ICGA

Unlike the "foggy" images generated by technologies using white light photography, the HRA 2 generates pristine views of the choroidal vasculature and RAP lesions.



Wide Field Imaging

The new 55° lens combined with ART™ software, enables high resolution pan-retinal imaging in real time. Automatic Real-Time composite image analysis software can make the worst of images look better. Imagine taking 16 photographs, picking the best of each image and creating a single new composite.



Autofluorescence

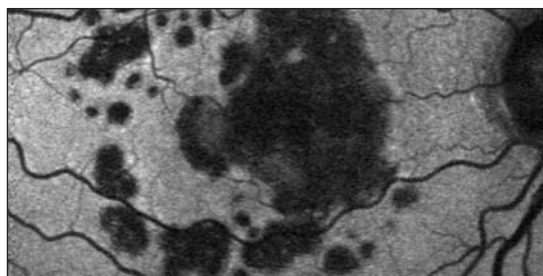
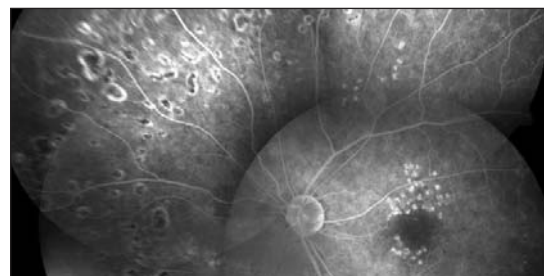
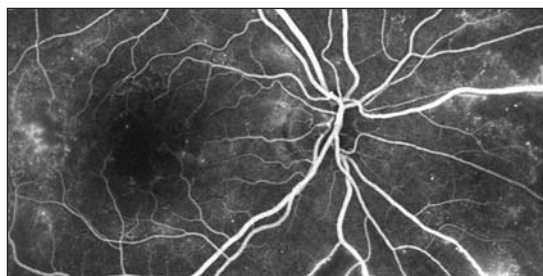
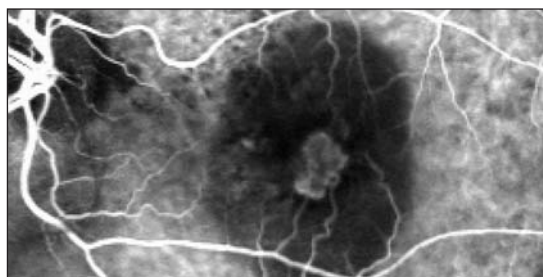
A fast, noninvasive method for identifying areas of AMD geographic atrophy and other diseases.

The difference is clear.

**HRA 2
Laser Imaging**

VS

**Fundus
Photography**



Raw image

After image manipulation



**Precision, clarity, efficiency, comfort...
That's the power of the HRA 2.**

Laser ICGA

Detailed imaging of the choroidal structure requires the power of a laser. ICG fluoresces most when excited by invisible 790 nm light, the exact wavelength used by the HRA 2—capturing superior detail of the microvasculature. In comparison, a standard fundus camera uses a flash and filter, washing out the image as light is scattered across the fundus. Ineffective for the physician.

Wide-Field Angiography

A full picture of the peripheral fundus requires the power of a laser. Rapid scanning and ART™ image alignment software enable the HRA to paint a seamless composite image in real time. In comparison, a fundus camera requires multiple flash photographs and time-consuming post processing to paste the images together. Uncomfortable for the patient, inefficient for the physician.

Autofluorescence

A full picture of geographic atrophy requires the power of a laser. Lipofusins fluoresces most when excited by 488 nm light, the exact wavelength used by the HRA 2. Accumulation of lipofusins is related to a variety of hereditary diseases and may be an indicator of progression of AMD. In comparison, a modified fundus camera captures a very dark raw image that requires photographer time to manipulate to a useable image. Inefficient and impractical for the physician.

HRA2

For more information on the HRA 2, call 800 931-2230 or visit www.HeidelbergEngineering.com



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