



I have been a fan of slit-lamp imaging systems for many years. The ability to capture either still or video images of anterior (or posterior structures if a fundus viewing lens is used) cannot be underestimated. It helps in the assessment of anterior lesions which might be magnified and enhanced for better evaluation, and allows for accurate monitoring when subtle changes over time are looked for.

Patient education is important and many a time I have been better able to explain to a patient about a pingueculum or an area of scleral thinning about which they had been worried by referring to a captured image. On a few occasions where patients had been serial contact lens abusers (thankfully less of an issue now we are in silicone hydrogel times) I had used magnified images of their compromised corneas to help bludgeon them into reducing their wear.

Being able to project the view of what is being seen either onto a display unit or a screen is incredibly useful for teaching purposes, and when lecturing to large audiences or simply instructing a small group of pre-registration optometrists in practice, a live capture from a slit lamp is an excellent thing to have.

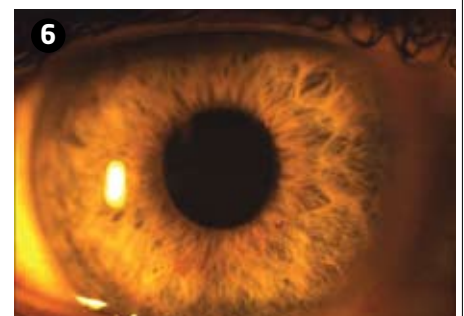
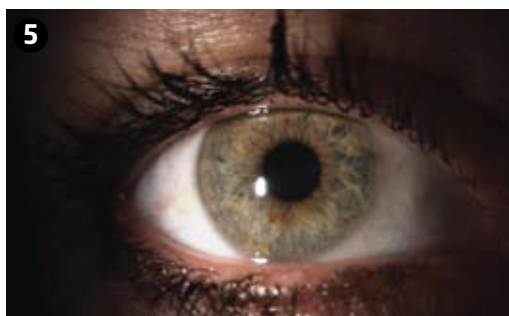
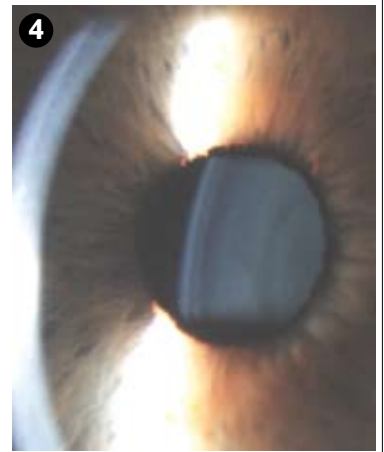
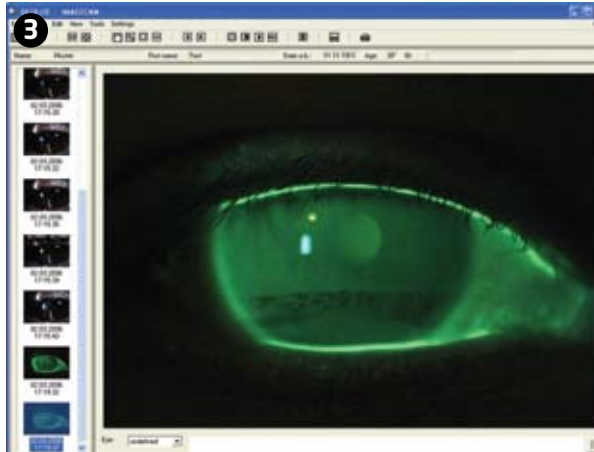
Oculus ImageCam

I first came across the Oculus ImageCam at this year's Optrafair and was able to put it through its paces during a recent pre-reg course at the newly relocated Manchester University Eye Clinic. The first thing that impresses is its small size. The unit is a small box (Figures 1 and 2) measuring a mere 34 x 32 x 34.4mm, and is fitted behind the microscope just like a beam splitter. I need to be able to use the camera on a number of different slit lamps and the unit can be ordered with an adapter for most models of slit lamp or a complete universal adapter set if necessary. I like the idea of being able to use it at different centres on different instruments and setting it up to the slit lamp is easy (once the Birmingham Optical techie shows you how!).

The camera itself is a 2 megapixel unit which may be connected to any laptop or computer via a USB2 link and images are then captured by the software. The unit comes with the Oculus software and allows images, once captured, to be manipulated, annotated and measured in the ways we are now all familiar. JPEG and MPEG capture is easy and best results are obtained using the supplied foot

It's all about image

Bill Harvey is impressed by the flexibility of a new slit-lamp camera system, the Oculus ImageCam



pedal rather than using the capture button on the software display.

Fluorescein images were good (Figure 3), as were images beyond the iris, as long as the rheostat is kept full (see the crystalline lens section in Figure 4). Diffuse light or backlight is best as always for general anterior overview shots (Figures 5 and 6). There is an adjustable aperture to improve the depth of focus when needed.

The software includes a four-image display option, useful for comparison of lesions, and a very nifty loupe

function for magnifying localised areas of any image. I recommend the camera to anyone thinking about a flexible imaging system for their existing slit lamp. Connecting the unit to a PC display unit or to a data projector is easy and this makes the ImageCam perfect for anyone involved in training, particularly in different locations, where live slit-lamp images would be useful. ●

● Further information from Birmingham Optical Group on 0845 230 3020 or sales@nidek.co.uk