

New developments

To reflect the fact that this column consists of not just web links, but also mobile and general technology content we have changed the name from Internet to 'Tech Review'. In keeping with the title, this issue includes a mixture of software, internet, hardware and mobile news.



Figure 1

A x60 magnification microscope for £7.50

In addition to the £7.50 you'll also need a Samsung Galaxy S4 (<http://goo.gl/HsrVfY>) or iPhone 5 (<http://goo.gl/BnyVtF>). This inexpensive device (Figure 1) enhances the built-in camera to provide a massive x60 boost in magnification. This link <http://goo.gl/QYVvVH> shows example photos. The images do have some distortion around the edge, but the images may be of use nonetheless. I haven't been able to test the unit's capabilities to take anterior segment images without a slit-lamp, but at such a low price, I imagine a few of you with compatible phones may like to give it a try. Should any of you take some usable photos (and gain suitable consent) please consider emailing them in and we can feature them in a future issue.

More on smartphone cameras and ophthalmic imaging

Here is a link to an interesting article on the Ophthalmology Times / Modern Medicine website. If nothing else, do watch the short video of recording a video from an indirect ophthalmoscope with nothing more than a smartphone camera and 20 D lens: <http://goo.gl/pG72w4>

Custom ophthalmology (and orthoptic) merchandise

T-shirts, badges, mugs, mouse pads and plenty more. I particularly like the 'Why are



Figure 2

you staring at my rods and cones' t-shirt or badge (Figure 2). I'm thinking Christmas presents.

<http://www.zazzle.co.uk/ophthalmology+gifts>

Managing your batteries

There's been much misunderstanding about how to best look after your laptop or smartphone battery over the years. That's in part because battery technology has changed over the last 10 years, and therefore, so has the advice. These days most mobile technology use lithium ion batteries so here are some general principles that may be useful to know. Further facts, figures and studies are available by following this short link: <http://goo.gl/4ezVY>

- Shallow discharges are best (e.g. 100% to 70% then recharge, rather than 100% to 10%). Frequent deep discharges will shorten the life of the battery.
- If a device is going to be stored without use, try to leave it with between 40-70% charge to prolong the life of the battery.
- Almost all devices now automatically discontinue charging at 100%, so there are no concerns about leaving a device on charge, past the point at which it is full.
- If possible, keep your devices (and their batteries) cool, as 'heat shortens battery life by a factor of two for every 10°C increase above 25-30°C'.

AAO ONE Network updated (one.aoa.org)

The American Academy of Ophthalmology (AAO) has recently redesigned the

Ophthalmic News and Education (ONE) Network website. The new site includes improvements in search optimisation, mobile compatibility and a multimedia library. As usual, members of the Royal College of Ophthalmologists can access much of the content on the ONE network.

Backup Google account and Google calendar (<http://goo.gl/zMrah>)

Many of us use any number of Google's online services to manage our lives. If one use their email, contacts, calendar and document facilities. That's all very well while it works, but what if their services close or data is lost? Alternatively, what if you want to export your data to another service? The short link above links to a well written piece by howtogeek.com that concisely documents how to download or backup all that Google data.

Multi-purpose ophthalmic app – Peek (<http://www.peekvision.org/>)

The Portable Eye Examination Kit (Peek) is a multi-purpose app currently being tested in Kenya. Published in August 2013, the BBC article (<http://www.bbc.co.uk/news/health-22553730>) describes an evolving mobile app that has many useful features including:

- patient record with geo-tagging
- visual acuity and visual field testing
- colour vision and contrast sensitivity testing
- lens imaging for cataract and retinal imaging.

The authors state on their site that they would like those wanting to help develop or use the software to get in touch.



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Declaration of Competing Interests
The author has no proprietary interest in any of the products discussed.