

A round-up of the eye-related hot topics that have been trending over the last few weeks.

#ArgusI #ArgusII #bioniceye #retinitispigmentosa #SecondSight

Remember Argus I & Argus II? Its star burned bright, touted as the future of treatment for retinitis pigmentosa. It gained Food & Drug Administration (FDA) approval in 2013 and European CE approval in 2011. But things went very quiet, and it has now emerged that the company behind the implant, Second Sight Medical Products, has abandoned the technology without informing the patients who have the implant. An investigation conducted by IEEE Spectrum recounts that the company was on the brink of collapse in 2019 and 2020, and has now merged with Nano Precision Medical, another biotechnology company, but has no plans to maintain or upgrade the technology, despite promising in the past that further software updates would be brought to the Argus II, to improve the quality of vision it conferred. Not only has the technical support for the implant been discontinued, all the vision rehab therapists that had provided post-implant support for the patients with the Argus II have also been laid off. Of the patients left with these devices, one has tracked down a spare part from a patient who was no longer using it, as he felt he must have his vision back. Some others have declined to have surgery to remove the implant, as the risks were greater than the benefits. The majority seem to be crossing their fingers hoping nothing malfunctions or breaks down [1-3].

#bioniceye #AMD #PixiumVision #Moorfields #UCL

Another company, Pixium Vision, based in France, has partnered with Moorfields Eye Hospital and University College London (UCL) in a clinical trial investigating the use of bionic vision for those suffering with geographic atrophy due to age-related macular degeneration. For those non-ophthalmologists, geographic atrophy represents the end stage of dry age-related macular degeneration, and there is currently no visual rehabilitative treatment for this condition. An 88-year-old woman had a 2mm microchip surgically inserted under her retina and will need to wear special video glasses in order to 'see'. The video glasses transmit the visual input to a computer, which is processed by artificial intelligence algorithms. Then an electrical signal is transmitted back to the chip to then pass through the retinal cells and visual pathway to produce an image. The patient will undergo a rehabilitation programme to learn how to use her new vision [4-7].

#mucusfishing #tiktok #eyetrend

I was looking for the name of another TikTok eye trend when I came across this one. 'Mucus fishing' refers to using a cotton bud to forcefully

remove the mucus from one's irritated eye. Not only is this detrimental because of the repeated trauma to the eye and introducing bacteria from fingers or other instruments to it, it also removes the natural protection conferred by the mucus component on the ocular surface. Furthermore, by repeatedly picking out the mucus, it causes more mucus to form, leading to mucus fishing syndrome. Dr Glaucomflecken did a duet with one such eye picker in an attempt to educate on safest eye practices, available here [8].

#tiktok #euphoriaeyetrend

TikTok likes eye trends. This is another trending one, but still not the one I was looking for. Here, TikTok users select an audio ("Feel Something"), which should activate a Euphoria filter. They then zoom in on their own eye initially with the Euphoria filter turned off, then close their eyes when the word "again" is played by the audio, then film again with the Euphoria filter turned on, in time to the music. Having not watched the show Euphoria, I admit this trend is lost on me. The link describing how to do it has embedded a couple example videos, so you can see the trend for yourself [9].

#tiktok #eyecolortrend #eyecolorzoomtrend #pinterest #aesthetic

This is the one I was looking for, as I saw it all over my Instagram. But it seems it was one of those trends that didn't make it off social media, as Googling the hashtag didn't unearth any hits. It wasn't until I went into TikTok itself that I could find the plethora of videos categorised under this. Again, there is an audio that goes with this trend. The user takes serial photos of their face and eye, zooming in on the eye as they go. Then they go to Pinterest and type in their eye colour followed by the word "aesthetic", to find photos that are meant to represent their eye colour. The initial photos of the user's face and eye are first stitched together to simulate 'zooming in' to the eye, then cutting to a photo montage of all these Pinterest photos representing the eye colour, which then cuts out again to the zoomed in eye, now 'zooming out'. The link provided gives both an example of the trend, and a tutorial on how to do it, if you were so inclined [10].

#lifeflashbeforeyoureyes #death

Perhaps your life really does flash before your eyes before you die. That's what Neurosurgeon Dr Ajmal Zemmar and his team speculate. They published their findings in a case report of an 87-year-old man who's brain activity was incidentally recorded as he died. This man was admitted to hospital following a fall with a head injury and deteriorated clinically. They carried out

an electroencephalography (EEG) for other reasons, but during the period he had EEG recordings, he suffered a heart attack and died. In the 30 seconds before and after he died, the brain waves changed and the pattern they showed was similar to those seen when people are dreaming or recalling memories. Dr Zemmar commented he was never comfortable to report his findings as they were in only one patient. A separate study published in 2013 performed on rats showed similar findings. Dr Zemmar and his team say there are important implications, such as challenging our understanding of exactly when life ends and the timing of organ donation. For now, further research on human remains are to be carried out as ethically as possible [11-13].

References

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- (All links last accessed February 2022).

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