

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

### #JessicaStarr #suicide

This Detroit meteorologist committed suicide in December 2018 following SMILE corrective laser refractive surgery back in October 2018. Small incision lenticule extraction (SMILE) is an alternative technique of laser refractive surgery with different advantages and disadvantages compared to laser-assisted in situ keratomileusis (LASIK). Her husband has now spoken about the events, citing chronic pain and blurred vision associated with secondary dry eye following the procedure as the reason for her suicide, as she was not known to suffer with depression nor take any antidepressants. She leaves behind her husband and two children [1]. Her death has sparked a debate about whether suicide is truly a complication following laser refractive surgery. SMILE was approved by the Food & Drug Administration (FDA) in 2016 [2], therefore the published studies about LASIK outcomes are more numerous. Certainly, SMILE has been shown to be equivalent, if not superior, to LASIK in terms of visual outcomes, complication rates and patient satisfaction [3-6]. A recent large prospective observational study (PROWL-1 & PROWL-2) showed that the rates of dissatisfaction with vision and with the surgery itself were 1% each [7]. I would hesitate to pass any opinion about this case, except to say that the loss of a young life and a mother to young children is tragic regardless of the cause.

### #lensreplacement #blindpatches #Oculentis

Artist Denise di Battista is suing Oculentis for the loss of vision she has suffered following lens extraction and multifocal lens implantation with one of their intraocular lenses [8]. She is an artist, and her vision is her livelihood. She said that she had found it difficult to paint when needing to constantly take her glasses on and off, so had thought surgery would solve the problem, which it had initially, but after a few years she started getting blind patches in the eye that received the new lens [9]. As it turned out, the lenses were prone to opacifying due to calcium deposits accumulating on the lens surface. It is thought that this resulted from residual phosphate as part of the cleaning process of the intraocular lens [10]. She was offered lens replacement, but secondary intraocular lens implantation has its own unique set of risks. It is thought that at least 800 cases in the UK have been reported [9], and the Oculentis lenses beginning with LU- or LS- and having an expiry date between Jan 2017 to May 2020 have been recalled [10].

### #contactlens #recycling

The UK launched its first free national recycling scheme for plastic contact lenses in January 2019 [11]. What a way to start the year off right!

This is the result of a partnership between Acuvue, Terracycle, Boots Opticians, and some independent opticians [12]. Any brand of soft disposable contact lenses with their blister packaging and foil from the blister packaging [12] can be dropped off to recycling bins at Boots Opticians and selected independent opticians. It is estimated that 3.7 million people in the UK wear soft contact lenses, and at least 20% of them flush their lenses down the toilet [11]. This should surely help reduce the amount of plastic ending up in landfills and the oceans.

### #blindemojis

Disability-inclusive emojis approved by the Unicode Consortium were released in early 2019. Another fresh start for a new year! These include emojis for the deaf and hard of hearing, blind and visually impaired, physical disabilities including prosthetic limbs, and a service dog with a vest for those with hidden disabilities [13]. For the most part, these have been well received, as they signify inclusion and representation of those with disabilities on social media [14,15]. However, there have been some queries raised about the utility of 'blind emojis', as many sighted people perceive that those who are visually impaired cannot see the emojis. Jess Marion contributes to the Mighty website, and explained that there are varying levels of sighted-ness amongst those that are visually impaired, so not all people classed as 'blind' lack the ability to see the emojis. But that is beside the point because regardless of the degree of visual impairment, the fact blind emojis exist means that visually impaired people as a group are now represented on the emoji keyboard and can be included in this social media language [16,17]. Emojis can be a double-edged sword, particularly for the visually impaired. Sassy Outwater, Director of the Massachusetts Association for the Blind and Visually Impaired, sparked a heated debate on Twitter about the impact of emoji use in Twitter conversation, explaining that for a non-sighted person who requires the use of VoiceOver to read out the text on the screen, hearing "Face with closed eyes and stuck out tongue" repeated over ten times gets rather exhausting and dilutes the actual message [18]. I'm not sure if she will feel any differently when hearing about the disability-inclusive emojis, but blind author and journalist Beth Finke wrote just before the emojis were released, "When my smart phone starts reading those tweets out loud to me later this year, I'm going to be smiling a lot!" [17].

### #spider #eye #fossil

Upon seeing a spider, many people would shriek and / or run away from it. Not so for these researchers when they found spider fossils in the Jinju Formation, a Mesozoic geological area

in South Korea [19]. Fossilised spiders are a rare entity in themselves, as their soft bodies are usually better preserved in amber than in rock [19]. As if this discovery was not enough, two of these spiders had eyes that still reflected light, 110 million years from the grave. This glow-in-the-dark quality is due to the tapetum, a reflective layer either within the retinal pigment epithelium or in the choroidal layer which reflects light directly back along the path from where it came [20]. This indicates that these spiders were likely night-hunting predators [19]. If you are interested, the full article is available from the *Journal of Systematic Palaeontology* [21].

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(All links last accessed March 2019)

### SECTION EDITOR



### Stephanie Chiu,

Specialty Registrar Year 4,  
Royal Hallamshire Hospital,  
Sheffield, UK.