



COVID-19: 2020'S MOTHER OF INVENTION

What a year 2020 was. Reflecting on my editorials from the past year, I admittedly focused on the worries of COVID-19 from several fronts. Sadly, things turned out even worse than I had imagined back in February 2020. We cannot, however, dwell in gloom and despair. We must acknowledge that many, having lost their jobs, are in a desperate position. As part of our global family and community, their pain is ours.

In the past 9 months, what has struck me the most is how we have all adapted—not just ourselves as ophthalmologists but all individuals everywhere. The restrictions and curtailment of normal activity during the pandemic have been a stimulus for change. During the initial shock, horror, and concern surrounding the unknowns of this virus, many, I believe, were like the proverbial rabbit in the headlights, not knowing which direction to take. It has been amazing to see how, in so many walks of life, there has been a rapid, innovative adaptation of existing strategies and an adoption of new ones. There is even a website, covidinnovations.com, dedicated to reviewing COVID innovations. Of the approximately 1,000 innovations on the website that have been reviewed, more than 200 are in the health and fitness category. One featured innovation—a 60-foot, drive-through clinic where patients may be seen in the comfort of their cars—may be a wonderful option for drive-through glaucoma clinics.

Telemedicine is a classic example of both adaptation of the old and adoption of the new. In my experience, telemedicine is not completely satisfactory for examining ophthalmology patients, but it provides a means of keeping in contact with them and identifying those in need of urgent care.

Other opportunities are resulting from the pandemic. Although not inexpensive, virus-killing robots are a reassuring option for public spaces, including clinics and hospitals. They can be used to reduce the superspreading of COVID-19 and most other microbes. Tom H. Williamson, MD, MBChB, FRCS(Glas), FRCOphth—a retina colleague and friend—and I have likewise been catalyzed to innovate during this time. Motivated to find appropriate ways to maintain physical distance from patients, we established a company, Infinite Medical Ventures, and, working in alliance with industry, helped develop a glasses-free 3D method of performing a slit-lamp evaluation.¹ This system was recently presented in the company showcase section

at the AAO and ASCRS Eyecelerator 2020.² The Infinite Medical Ventures Imaging System, or IMVIS, enables clinicians to evaluate a patient more remotely in the same room or in a separate room in the same clinic. In time, evaluations from an entirely different location may become possible. What is striking about this technology is its image quality, which with its large size and optical clarity is in many instances better than the view through a slit lamp. We hope to announce the commercial availability of the device in the first quarter of 2021.

During the COVID-19 pandemic, the most significant areas of innovation have been testing and, more important, the development of vaccines. Rapid testing is thankfully more widely available. In our practice, we adopted a rapid antigen test that takes only 15 minutes to provide a result. All of our patients undergoing surgery are tested before they enter the building. Additionally, all of our patient-facing staff is tested weekly. Routine testing is reassuring for all of us and a great way to enable us to continue our work more safely.

With vaccines against the novel coronavirus approved and being distributed, their innovators, developers, and funders must be congratulated on getting to the finish line within such a short time. We all owe them our deepest gratitude. It is to be hoped that this innovation will provide the world with the much-awaited green shoots of recovery. We all look forward to feeling some sense of normality in 2021.

Meanwhile, on behalf of my fellow Chief Medical Editors, Erik L. Mertens, MD, FEBOphth, and Arthur B. Cummings, MB ChB, FCS(SA), as well as all the staff at *CRST Europe*, I wish you, your families, and your communities a safe and happy 2021! ■

1. Infinite MV. Accessed January 5, 2021. www.infinitemv.com

2. Eyecelerator 2020 Conference program. Eyecelerator. Accessed January 13, 2021. <https://www.eyecelerator.com/eyecelerator-2020-program>

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