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LETS RECAP COVID-19

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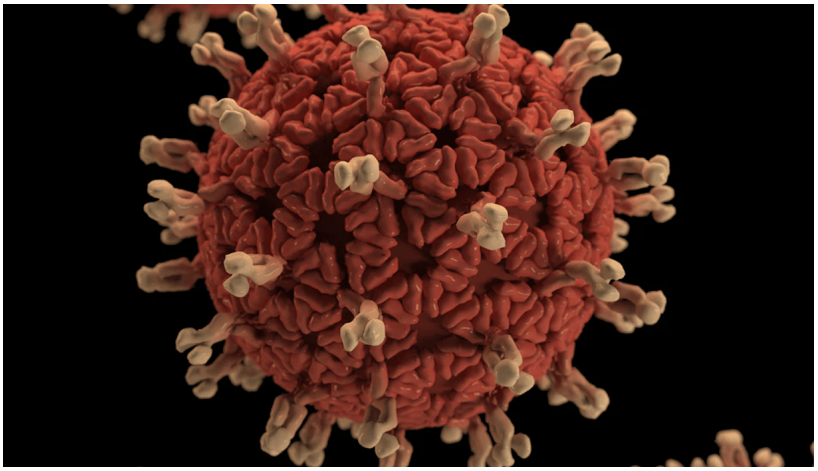
In This Issue



Is COVID-19 Reinfection Possible?

By Raymond Wong

SARS-CoV-2-associated disease (COVID-19) proceeds to be a global health emergency that has led to aggressive progressions in morbidity and mortality. Several cases of new COVID-19 variants have raised further concerns with the possibilities of reinfection. Therefore, natural exposure to COVID-19 may not guarantee life-long immunity, rather it is likely to be temporary. Reinfection is not uncommon in many respiratory viruses such as prior coronaviruses (SARS-COV-1 and MERs-CoV). Recent COVID-19 studies have revealed antibodies rapidly declining over a period of one to three months, and subsequently, individuals initially exposed to the coronavirus may be susceptible to reinfection. Currently, recorded cases of COVID-19 reinfection are relatively rare among the millions of cases worldwide, however, there is an emerging possibility of significantly more reinfection cases in the near future as new COVID-19 variants are found. Even with several vaccine rollouts in the upcoming months, all individuals must continue to follow CDC safety guidelines and protocols to mitigate the spread of the novel coronavirus.

The Effects of COVID-19 in Pregnant Women

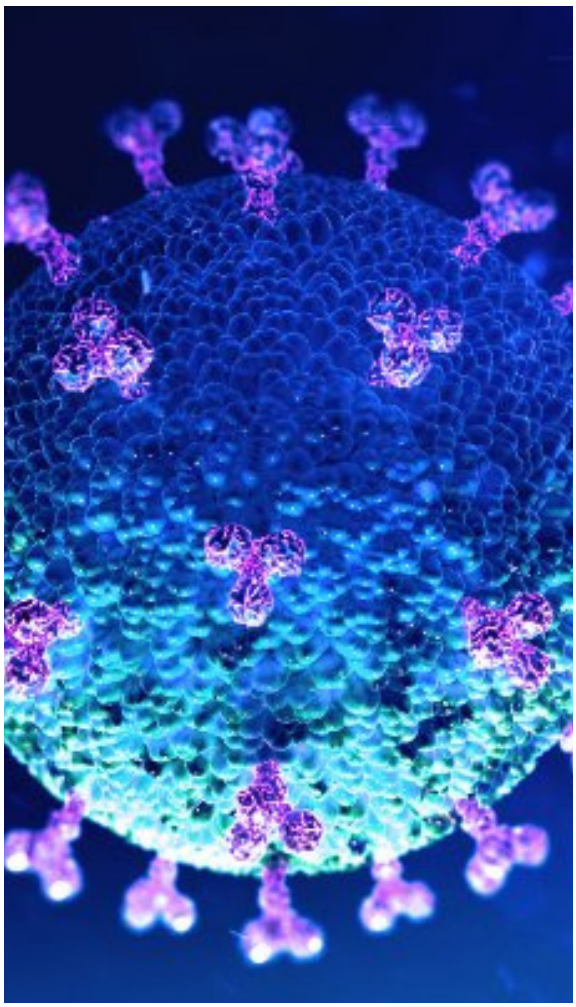
By Leanne Ahra Menguito

There have hundreds of cases of pregnant women diagnosed with COVID-19, but there have not been any studies regarding the effects the disease has on pregnant women. While there have been case studies with sample sizes of less than 10 people, there has not been a large scale study that can apply to a larger population. A large-scale study conducted by Rong Yang in Wuhan, China was published in October 2020, in which they analyzed the presentations of the disease in pregnant women and their medical implications. Using the Maternal and Child Health Information Management System of Wuhan (MCHIMS), Yang collected data on 58 women diagnosed with COVID-19 and their newborns. While there were no deaths reported, COVID-19 complications showed an increased risk of preterm birth and cesarean deliveries. Yang also discovered that women are not more susceptible to the disease and there is no evidence of vertical transmission of SARS-CoV-2.

Medical Neglect Based on Skin Color: COVID-19

By Mahnoor Faheem

Medical neglect based on race in the United States is not something new, and with the spread of COVID-19, the disparities have become ever more apparent. As the symptoms of COVID-19 are being studied and further understood, there has not been enough research done on what these symptoms may look like on darker skin tones. While many are told to rush to the hospital if their skin turns blue due to the lack of oxygen, these symptoms are not easily noticeable on darker skin tones, and health care providers have often overlooked this. Instead, looking at someone's eyelids or the inside of their mouth can also indicate the lack of oxygen flow. The physical symptoms of COVID-19 may be the first sign that someone has the virus, so it is crucial that healthcare providers and educators ensure that more research is being done to address people of color and provide them with the care they need.



Not the regular common cold: SARS-CoV-2 viral proteins can inhibit our antiviral response

By Lior Boguslavski

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus is highly contagious and is the cause of the current COVID-19 pandemic. This is a respiratory virus that has and continues to, pose great challenges to global human health. A recent study has found specific SARS-CoV-2 proteins that inhibit the innate immune response, namely the type I interferon (IFN) signaling pathway. The IFN response is responsible for putting the body into an antiviral state to fight off the infection. It was found that SARS-CoV-2 proteins, ORF6, ORF8, and N protein, interfere with this signaling cascade, thus delaying the immune response. They inhibit NF-kB, a transcription factor that controls the activity of specific genes, from binding to interferon promoters to initiate the type I IFN signaling pathway. These results unveil the key viral modulators of the immune response and can be further studied as targets for therapeutics.