

Special Issue

The Application of 3D Tissue Culture Systems in Virology

Message from the Guest Editor

Since viruses are obligate intracellular parasites, the advent and subsequent innovations in cell culture technology have significantly impacted the field of virology. In recent years, the incorporation of tissue architecture and the integration of relevant cell–cell interactions, together with additional biochemical and mechanical cues that recapitulate the in vivo microenvironment, have yielded more physiologically relevant systems that bridge the gap between standard monolayer cell cultures and animal models. These novel models provide unique opportunities to further analyze virus–host interactions, culture previously hard-to-grow pathogens, identify novel therapeutic targets, and advance drug development. In this Special Issue, we will showcase recent advancements in the engineering and/or application of three-dimensional culture systems with emergent properties for virus infection. We welcome submissions reporting any aspect of virus–host interactions in these systems, especially those focusing on pathogens with patterns of infection that are not easily recapitulated in cell lines.

Guest Editor

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