## **Peter Kasson**

## Insight into emerging virus infection from single-virus microscopy

Our work seeks to understand the activation and entry mechanisms of emerging enveloped viruses at a molecular level. To accomplish this, we develop technologies ranging from semi-physiological systems, chemically controllable microfluidic devices, and molecular simulations. I will describe results on both influenza and SARS-CoV-2 entry, in particular showing how single-virus studies of viral entry can provide clearer insight into fundamental mechanisms as well as guide opportunities and illuminate challenges for antiviral inhibition.