



How does SARS CoV-2 infect blood vessels?

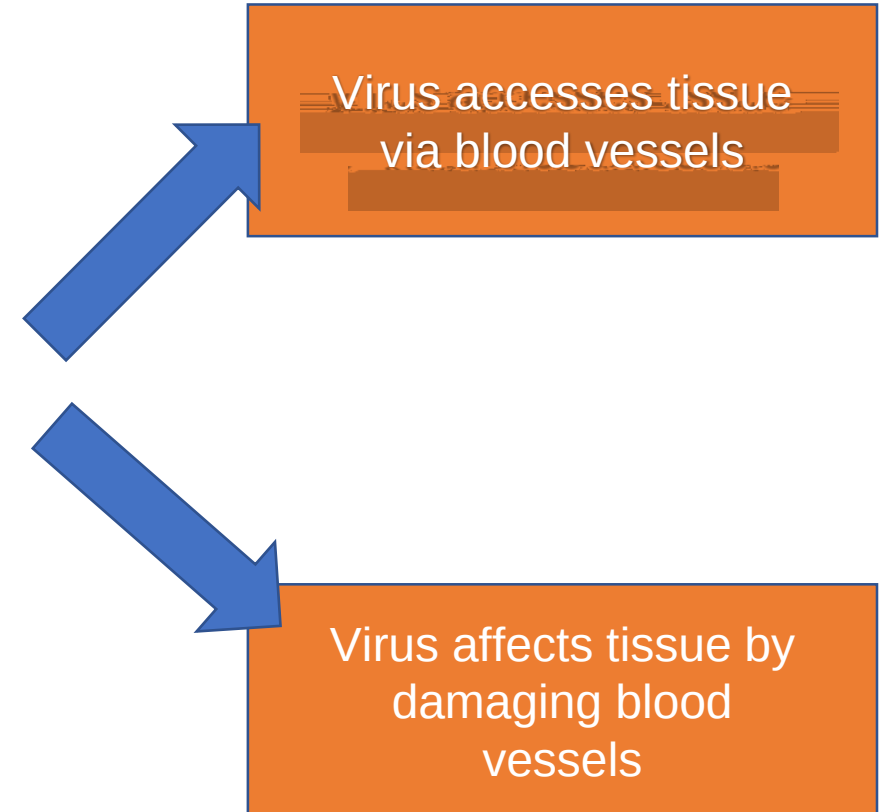
Catherine Hall

Luca Biasetti

Ed Wright

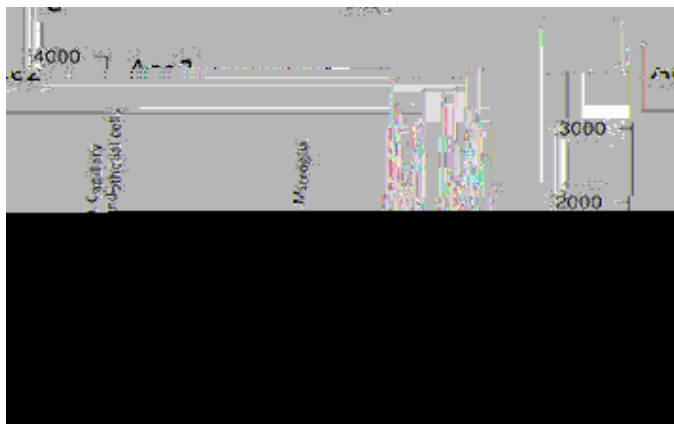
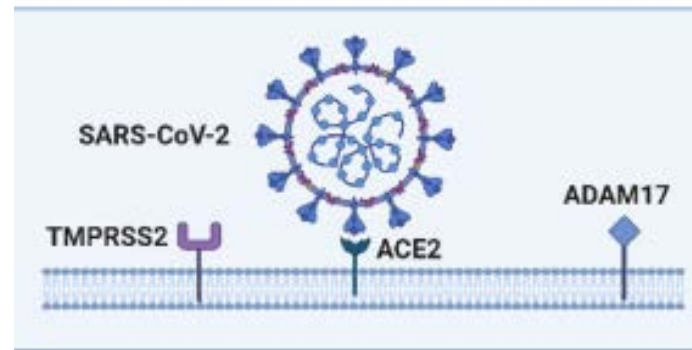
Louise Serpell

Vasculature conduit for SARS CoV-2 infection

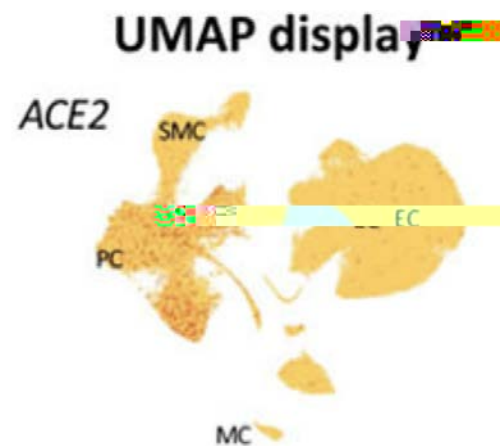


Hamilton, Attwell & Hall (2010)

Can SARS CoV-2 infect vascular cells?



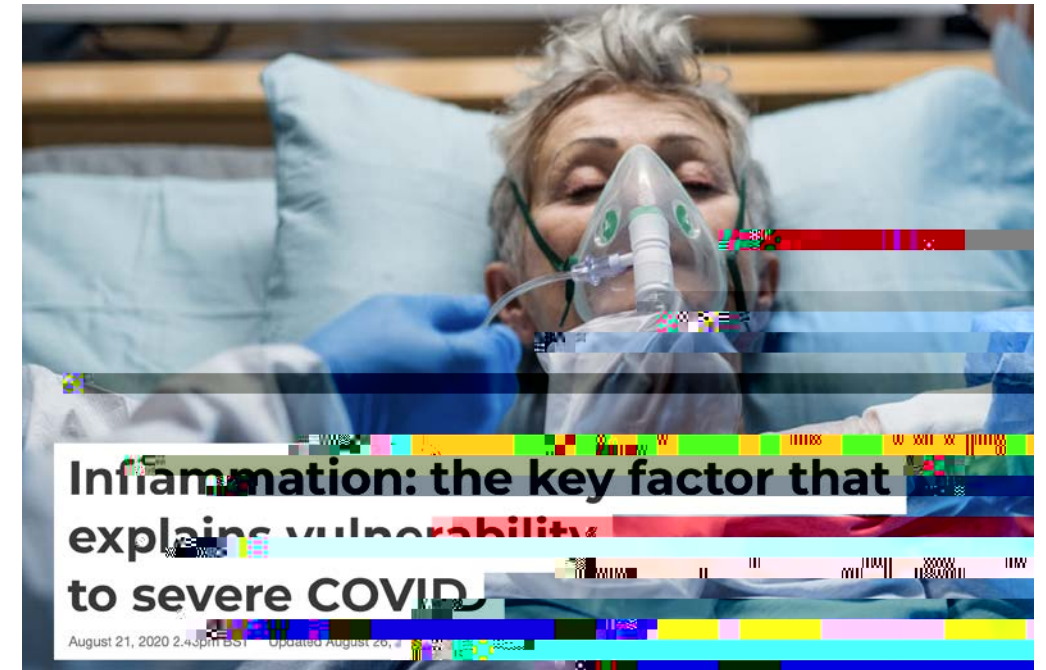
He et al (2020)



McCracken et al (2021)



Factors that affect endothelial permeability might increase COVID19 severity



Do these factors also affect infectivity of vascular cells with SARS CoV-2?

LPS and APOE genotype increase SARS CoV-2 infectivity of mouse endothelial cells

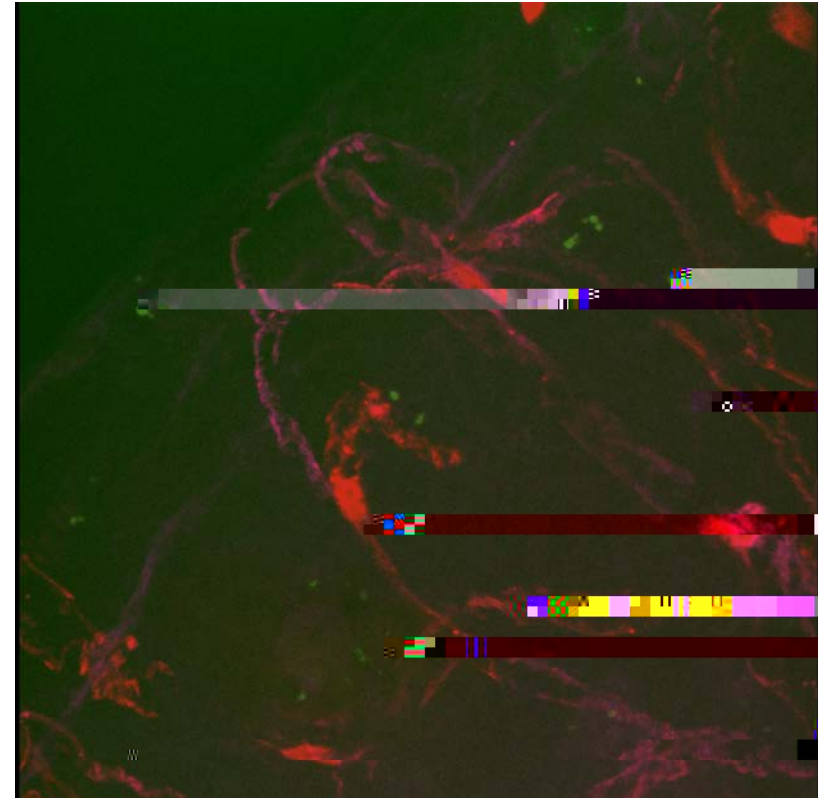
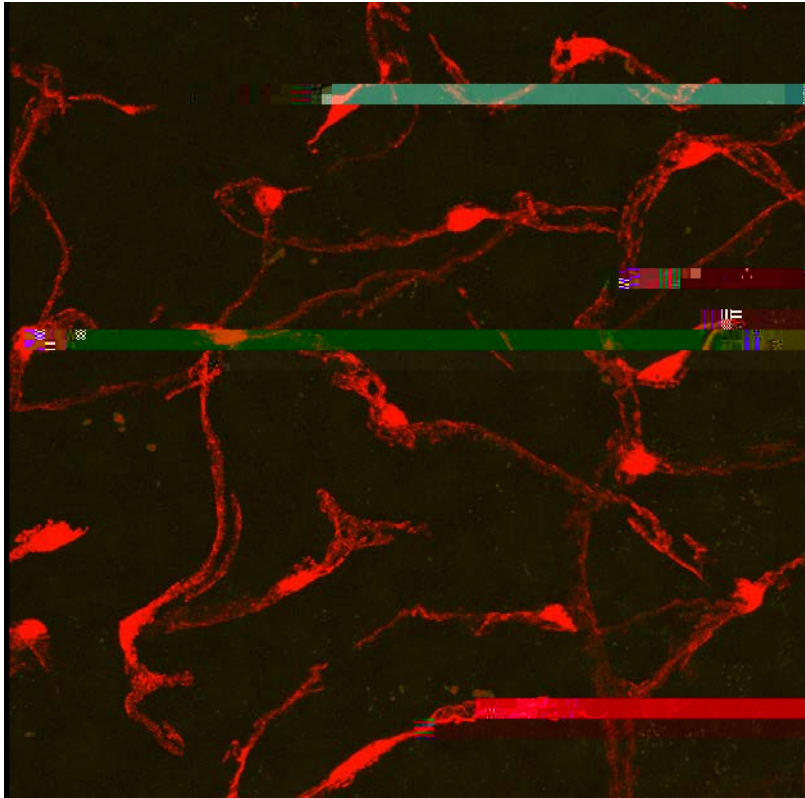
B.1.1.7



B.1.351



In vivo infection with B.1.1.7 of APOE4/4 mouse brain



Next steps

- Cultured mouse pericytes, human endothelial cells and pericytes with LPS.
- In vivo infectivity - cell colocalization, different organs, effect of LPS

