



Pacific Center for
Emerging Infectious Diseases
Research



UNIVERSITY
of HAWAII
MĀNOA

COBRE/DEPT. OF TROPICAL MEDICINE SEMINAR

SARS-CoV-2 Infection and Persistence throughout the Human Body and Brain



COVID-19 is known to cause multi-organ dysfunction during acute infection with SARS-CoV-2, with some patients experiencing prolonged symptoms. However, the burden of infection outside the respiratory tract and time to viral clearance is not well characterized, particularly in the brain. We carried out complete autopsies on 44 patients who died with COVID-19, with extensive sampling of the central nervous system in 11 of these patients, to map and quantify the distribution, replication, and cell-type specificity of SARS-CoV-2. We show that SARS-CoV-2 is widely distributed, and that **virus replication** is present in multiple respiratory and non-respiratory tissues, including the brain, early in infection. Further, we detected persistent SARS-CoV-2 RNA in multiple anatomic sites, including throughout the brain, as late as 230 days following symptom onset.

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Monday, December 19, 2022 at 11:00 A.M.

**John A. Burns School of Medicine, Kakaako
Medical Education Building Auditorium (Room 315)
University of Hawaii at Manoa, Honolulu, Hawaii**

Zoom link:

<https://zoom.us/j/96867477307?pwd=aDV0RkJuNkFwSGduWk94YXk1K1BpUT09>

Meeting ID: 968 6747 7307

Passcode: 154868

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