

Department of Tropical Medicine, Medical  
Microbiology and Pharmacology

## ORAL DEFENSE SEMINAR

### Characterizing Protective Antibody Responses to Recombinant Ebola Virus Subunit Vaccines in Non- Human Primates

Ebola virus (EBOV) causes lethal hemorrhagic fever with case fatality rates of up to 90%. Vaccination has been key to controlling outbreaks. However, due to limited stocks of approved vaccines and stringent requirements of ultracold storage and distribution, there is a need to continue developing new vaccines with more appropriate product characteristics. Although all vaccine candidates use the surface and Fc effector functioning antibodies binding regions beneath the mucin-are

also a relatively unexplored aspect of vaccine induced protection. Here we find that rapid antibody responses are needed to confer protection in sensitive NHP models and increases in antibody function later in infection, likely stemming from IgM, are not sufficient for protection in non-survivors. Currently, mechanisms of protection do not have a clear consensus between vaccine platforms. Our findings will be used to guide further vaccine development and provide insights into correlates of protection that are still unknown for Ebola and other filoviruses.

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Friday, May 12, 2023  
2:30 – 3:30 P.M. HST

JABSOM, Kakaako Campus  
Medical Education Building, Room 315  
Zoom Details

Link: <https://zoom.us/j/97962975142?pwd=aFdJZmhrbjdDOGQ2UFZHZTYyeDhUZz09>

Meeting ID: 979 6297 5142

Passcode: 306033

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Seminar Schedule @ <http://manoa.hawaii.edu/tropicalmedicine>