



Hawaii Biotech, Inc.

## HAWAII BIOTECH AND UH SCHOOL OF MEDICINE ON TRACK FOR ZIKA VACCINE

**(Honolulu, Dec. 7, 2018)** -- Hawaii Biotech's bet on the use of proteins for its Zika vaccine candidate, being jointly developed with University of Hawaii John A. Burns School of Medicine (JABSOM) researchers, is paying off. Preclinical trials show that that it's effective in protecting both mice and monkeys from the infection, a promising precursor for successful human clinical trials.

"The use of recombinant protein-based vaccines is safer than live-virus vaccines," noted Elliot Parks, Ph.D., chief executive officer of Hawaii Biotech. "Giving a viral vaccine, especially to pregnant women and women of childbearing age, a main target population for the vaccine, is a risky proposition because of potential side effects. A nonreplicating protein vaccine is intrinsically safe."

Currently there is no cure for the Zika virus infection and no vaccine approved for public use. A global push for vaccine development occurred after outbreaks in 2015-16 in Brazil, the Caribbean, and beyond linked the infection in men and women and resulting in severe birth defects in newborns. Zika is spread through the bite of infected mosquitos and through sex.

The proposed vaccine, reported by JABSOM and Hawaii Biotech scientists in the journals [Frontiers in Immunology](#) and [mSphere](#), via the open access journal of the American Society for Microbiology, is a recombinant subunit vaccine that uses only a small part (protein) of the Zika virus, produced in insect cells. Hawaii Biotech has been an industry leader in the development of recombinant subunit vaccines.

The team included Hawaii Biotech scientists, Dr. Jaime Horton and David Clements; JABSOM assistant professor of tropical medicine and infectious disease, Dr. Axel Lehrer, formerly with Hawaii Biotech; JABSOM graduate students Liana Medina and Albert To, along with collaborators from [Bioqual Inc.](#) of Rockville, Maryland, and the Department of Diagnostic Medicine/Pathobiology, [Biosecurity Research Institute](#), College of Veterinary Medicine, at Kansas State University.

JABSOM scientists are collaborating with the UH [Kapi'olani Community College](#) to create antibodies that can be used as treatments or for improved diagnostic tests for Zika virus. Other Zika-related research at JABSOM also focuses on understanding how Zika can hide undetected in the sex organs of men for an extended period.

Funding for the most recent research for the vaccine project was provided in part by Pacific Center for Emerging Infectious Diseases Research (COBRE grant P30GM114737), by the National Institute of General Medical Sciences (NIGMS), NIH/NIAID grant 1R01AI119185, and institutional startup funds.

**About Hawaii Biotech, Inc.**

Hawaii Biotech (HBI) is a privately held biotechnology company focused on the development of prophylactic vaccines for established and emerging infectious diseases and anti-toxin drugs for biological threats. HBI has developed proprietary expertise in the production of recombinant proteins that have application to the manufacture of safe and effective vaccines, diagnostic kits, and as research tools. HBI completed successful first-in-human Phase 1 clinical studies with both West Nile virus and dengue vaccines in healthy human subjects. HBI has developed a product pipeline of recombinant subunit vaccines, including vaccine candidates for West Nile virus, Zika virus, tick-borne flavivirus, malaria, Crimean-Congo hemorrhagic fever, and Ebola. The company is also continuing the development of small molecule anti-toxin drugs for anthrax and botulism. Founded in Hawaii in 1982, HBI is headquartered in Honolulu. For more information, please visit: [www.hibiotech.com](http://www.hibiotech.com)

**About University of Hawaii John A. Burns School of Medicine (JABSOM)**

The John A. Burns School of Medicine (JABSOM) at the University of Hawai'i Mānoa honors its unique research environment to excel in science-based efforts to eliminate diseases that disproportionately affect people in Hawai'i and the Pacific region. Annually at JABSOM, more than 500 future physicians are learning medicine, JABSOM researchers secure up to \$52 million in grants, and overall economic stimulus to Hawai'i from the school tops \$456 million annually. JABSOM also confers degrees in Clinical Translational Research, Communication Sciences and Disorders, Tropical Medicine, Cell and Molecular Biology, Medical Technology and Developmental and Reproductive Biology.

**Contact:**

Elliot Parks, Hawaii Biotech at 808. 342.7281 (m) or [eparks@hibiotech.com](mailto:eparks@hibiotech.com)

Piia Aarma at Pineapple Tweed PR & Marketing, 808.221.2102 (m) or [piia@pineappletweed.com](mailto:piia@pineappletweed.com)