MEDIA RELEASE

First-ever Unmanned Aerial Vehicle trial to combat dengue in Fiji

International not-for-profits, the World Mosquito Program (WMP) and WeRobotics, are joining forces to combat mosquito-borne diseases, in a first-ever trial using an Unmanned Aerial Vehicle (UAV) to release *Wolbachia* carrying mosquitoes in Nakasi, Fiji.

The WMP, with core research facilities at Monash University, Australia, is also carrying out non-aerial releases to help protect communities from dengue, Zika and chikungunya in Fiji's Lami, Suva and Nausori.

WMP's Fiji Project Coordinator Mr Aminiasi Tavui said the UAV trial could help millions of people around the world.

"Although this work is in its very early stages, there is the potential for UAV technology to help disperse mosquitoes with *Wolbachia* across large cities where diseases like dengue cause heartache for many families," Mr Tavui said.

"We know the Nakasi community is excited to be at the forefront of trialling this new release method."

The team is testing flight altitude and UAV speed by using a remote controlled hexacopter to release a small number of *Wolbachia* carrying mosquitoes over a one-kilometre square area.

WeRobotics Lead Engineer Dr Jürg Germann said they were delighted to be collaborating with the WMP, and Pacific Flying Labs, Fiji, on this important project.

"This UAV collaboration has the potential to provide significant operational efficiencies. For example, to cover an area of 10 square kilometres via ground releases takes about four days, while with the UAV and our mechanism this could be done in a couple of hours," Dr Germann said.

WMP Director of Product Development and Supply Dr Jeremie Gilles said they were very encouraged by the early stages of the trial.

"Our aim is to obtain information about the release method's effect on mosquito quality and ability to establish in the wild compared with that of ground release mosquitoes," Dr Gilles said.

When an *Aedes aegypti* mosquito carries *Wolbachia* bacteria it reduces its ability to transmit dengue, chikungunya or Zika between people, helping to provide communities long-term protection from these harmful viruses. The program has expanded to operate in 12 countries.

The UAV trial is funded by the United States Agency for International Development through the Combating Zika and Future Threats Grand Challenge. The WMP in Fiji is working in partnership with the Ministry of Health and Medical Services.

About the World Mosquito Program

Working to help protect the global community from mosquito-borne diseases, the World Mosquito Program is a not-for-profit initiative that uses a safe, natural and effective method to reduce the threat of Zika, dengue and chikungunya. Through our collaborative and innovative approach, we are helping to protect local communities from these diseases across Australia, Asia, Latin America, and the Pacific Islands.

About WeRobotics

WeRobotics is a not-for-profit organization established in 2015 enabling communities in Africa, Asia, Latin America and Oceania to solve local social challenges by using robotics technologies such as drones and AI through a bottom-up approach, sector-oriented best practices, ethical guidelines and global sharing.

Media contact:

Diana Robertson, Senior Media Adviser, WMP
E diana.robertson@worldmosquito.org | **T** +61 421 638 291

Viviana Laperchia, Communication Manager, WeRobotics
E viviana@werobotics.org | **T** +49 176 5792 0304

Skype: *viviana.laperchia*