[附件二　技術介紹]

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Technology/ Title	AI-based mosquito trap	
Technology Type	□Biotechnology	■Device/Diagnostics
	□Pharmaceutical	□Others:_____-
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Technology Description	Our research team designs a mosquito trap that utilizes computer vision techniques along with deep learning to differentiate between different mosquito species, a special mechanical design is also implemented to successfully capture different mosquitoes into different chambers with sensors to detect environmental data such as CO_2 concentration, temperature, and humidity. We show the implementation of such idea with a predicting accuracy about 90% paired with a workable capturing mechanism. Building such smart mosquito trap is a step toward effectively controlling mosquito-borne diseases or even preventing such outbreaks in the future.	

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Intellectual Property	2018: PCT and ROC Patent entitled Smart mosquito trap with air flow driven check valve.
Key Publications	N/A
Business Opportunity	Global climate change has already had observable effects on the environment. The direct effects of temperature increase are an increase in immature mosquito development, virus development and mosquito biting rates, which increase contact rates with humans. The intelligent mosquito trap we proposed is that could identify the types of vector mosquitoes in real-time using the developed deep machine learning. The trap, based on the 3D printing and embedded system technologies, including the sensors and cameras to instantaneously collect the environmental parameters around and send it to the cloud, which is unavailable in any of the commercial mosquito traps. It's also a product with the user-friendly interface and low-cost.