

Matilin Le Beux is a PhD candidate in the Medical and Veterinary Entomology Unit at Institut Pasteur du Cambodge, where his doctoral research focuses on the application of machine learning to identify potential biomarkers in mosquitoes and humans for dengue and chikungunya viruses. He holds a Master's degree in Interactive Applications and Digital Data from Université Bretagne Sud (France), with advanced training in deep learning and machine learning using Python-based frameworks including PyTorch, Scikit-Learn, and NumPy. Prior to his doctoral studies, he worked as a contractor at Institut Pasteur du Cambodge, developing preliminary models for arbovirus detection in *Aedes albopictus* and *Aedes aegypti*, and presented this work at the 6th International Conference on Aedes Albopictus. His earlier internship at the same institution resulted in a convolutional neural network model capable of classifying MALDI-TOF mass spectra from morphologically similar mosquito vectors of Japanese Encephalitis virus with over 80% accuracy, bridging computational methods and field entomology.