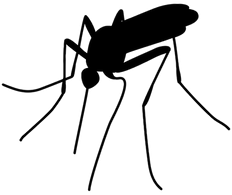
A picture containing logo

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# **Data Visualization with Tableau Course capstone project**

**Problem Statement**

Infected mosquitos are the most prevalent vectors of West Nile virus transmission to humans. Around 20% of those who contract the virus experience symptoms ranging from a persistent fever to catastrophic brain diseases that can lead to death.

[](https://storage.googleapis.com/kaggle-competitions/kaggle/4366/media/moggie2.png)

The first human instances of West Nile virus were discovered in Chicago in 2002. The City of Chicago and the Chicago Department of Public Health (CDPH) launched a thorough surveillance and control program in 2004, which is still in place today. Mosquitos in traps across the city are tested for the virus every week from late spring to late fall. The findings of these tests are used to determine when and where the city will spray airborne pesticides to reduce adult mosquito populations.

With the goal of preventing the spread of West Nile virus, it is critical to forecast when and where distinct kinds of mosquitos will test positive. A more precise way of predicting West Nile virus outbreaks in mosquitos would enable the City of Chicago and the CPHD deploy resources more efficiently and effectively to prevent the spread of this potentially deadly infection.

This project requires you to conduct an Exploratory Data Analysis (EDA) to inform the predictive model's choice based on weather, location, testing, and spraying data. This work entails creating a Tableau dashboard/storytelling to deliver to the project team.

**About the dataset**

Every year, from late May to early October, Chicago public health personnel place mosquito traps around the city. These traps capture mosquitos every week from Monday through Wednesday, and the mosquitos are checked for West Nile virus before the end of the week. The quantity of mosquitos, mosquito type, and whether or not West Nile virus is present in the cohort are all part of the test results. The information is detailed below.

* Id: the id of the record
* Date: date that the WNV test is performed
* Address: approximate address of the location of trap. This is used to send to the GeoCoder.
* Species: the species of mosquitos
* Block: block number of address
* Street: street name
* Trap: Id of the trap
* AddressNumberAndStreet: approximate address returned from GeoCoder
* Latitude, Longitude: Latitude and Longitude returned from GeoCoder
* AddressAccuracy: accuracy returned from GeoCoder
* NumMosquitos: number of mosquitoes caught in this trap
* WnvPresent: whether West Nile Virus was present in these mosquitos. 1 means WNV is present, and 0 means not present