

# README Fig3

## Instructions for running the code for figure 3

The dataset here is from: "Infection state can affect host migratory decisions" by: Naven Narayanan Venkatanarayanan, Sandra A. Binning, Allison K. Shaw

This folder contains code to create Figure 3 (.m file), data for creating the figure should you choose to just replot the data (.mat files), and code for making figures (.m file).

### Contents:

#### Code for running model and for obtaining figures

fig3\_calculate.m: code to run model and obtain data for one particular set of cost<sub>i</sub> and cost<sub>m</sub> value. In the main manuscript we show 9 different combinations

fig3\_plot.m: code to use data from fig3\_calculate.m and plot figures. Running this code plots 3 figures one after the other in a vertical fashion.

#### Data obtained from models

Fig3\_cR=0.05\_cM=0.2\_cI=0.2.mat: data for baseline cost of residency (0.05), cost of migration (0.2), and cost of infection (0.2)

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Fig3\_cR=0.05\_cM=0.2\_cI=0.8.mat: data for baseline cost of residency (0.05), cost of migration (0.2), and cost of infection (0.8)

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