

Inverse Method in Determining the Transmission Rate of an Infectious Disease

PROJECT DESCRIPTION

The transmission rate is a key parameter in controlling the spread of an infectious disease as it directly determines the disease incidence. However, it is essentially impossible to measure the transmission rate for certain infectious diseases. We will extend our existing inverse method for extracting the time-dependent transmission rate from either prevalence data or incidence data in existing open databases.

FACULTY-DEPARTMENT

Science - Mathematical and Statistical Sciences

DESIRED FIELD OF (STUDENT) STUDY

Applied Mathematics, Numerical Simulations, or Infectious Disease Modeling

INTERNSHIP LOCATION

University of Alberta Main Campus - Edmonton

NUMBER OF INTERNSHIP POSITIONS

2

INTERNSHIP START DATE

July 15

INTERNSHIP END DATE

October 15

ARE THE DATES FLEXIBLE?

Yes, I am flexible regarding the internship dates. Selected students can contact me to request a date change.