PhD scholarship: Mathematical modeling in infection and immunity, Infection Analytics Program, Kirby Institute, UNSW Sydney.

The Infection Analytics Program at the Kirby Institute is looking for talented students with a strong interest in applying quantitative approaches to solving major challenges in infectious diseases, health and immunity.

The Group and Projects

The Infection Analytics Program is a team of mathematicians, physicists and other quantitative specialists, working to understand infection and immunity. The group primarily works on HIV, malaria, and SARS-CoV-2 and has an outstanding track record of research, making a major contribution to the medical and biological sciences. These projects rely heavily on experimental data, and members of the Infection Analytics Program work closely with a number of experimental collaborators from across the globe. Students who join the group will be trained in interdisciplinary research with a strong emphasis on using mathematical and quantitative approaches, as well as experimental and clinical data to better understand topics in infection and immunity, such as how antimalarials alter the course of malaria infection, how to optimise treatment for HIV, how vaccines for SARS-CoV-2 boost immunity, and how immunity affects the progression of all three of these infections.

Scholarships

Applicants are sought for both domestic and international student scholarships for PhD studies commencing in 2022. Student scholarships of up to $34,000-37,000 p.a. are available for a duration of 3.5 years (depending on undergraduate performance).

Applicant Requirements

The Infection Analytics Program at Kirby Institute is an ideal group for students with a quantitative background (mathematics / physics / statistics) aiming to diversify their existing experience in mathematical biology or considering a career change from another quantitative science to mathematical biology.

The scholarships are highly competitive. For local students, first class honours is usually required. For international students, first class honours, a high GPA (>87%) and high ranking in graduate class (top 1-2 in year) in Bachelors degree

as well as research experience (>6 month research project) is required. These criteria should be directly addressed in any enquiries on the scholarships.

How to apply

Applications to commence Term 1 2023, in February, will be due April 29th.

Please apply by providing your academic transcripts and CV to Professor Miles Davenport (m.davenport@unsw.edu.au) or Dr. David Khoury (david.khoury@unsw.edu.au)