PhD Opportunity at Monash University

*Interactions between bacteriophage, bacteria and eukaryotic cells*

**Supervisor:** Dr. Jeremy J. Barr, Lecturer and Group Leader at the School of Biological Sciences ([http://thebarrlab.org](http://thebarrlab.org)).

**Project description.**
Bacteriophage are specialist viruses that infect bacteria and are the most abundant biological entities on the planet. Within our bodies bacteriophages control and manipulate our bacterial microbiota, prevent infection and disease and have direct interactions with our own eukaryotic cells and surfaces.

The PhD candidates will work in a multidisciplinary team to investigate the interactions between bacteriophage, their bacterial hosts and eukaryotic cells within the context of the human body. In doing so you will gain valuable experience in microbiology, bacteriophage biology, cell biology, infectious diseases, *in vitro* experimental systems, tissue culture, next-generation sequencing and microfluidics. The candidates will conduct cutting-edge interdisciplinary research, with a strong focus on scientific publication, and will have access to excellent laboratory facilities and resources.

If you would like to work in a great team, gain diverse experimental and research skills in microbiology – get in touch!

**Eligibility & application**
The candidates will have a Masters or 1st class Honours degree in a relevant field, enthusiasm for microbiology and a good work ethic. Successful candidates must secure a Monash PhD stipend scholarship. Successful candidates can commence the project as soon as possible. More details on p2.

To apply, please contact Jeremy Barr ([jeremy.barr@monash.edu](mailto:jeremy.barr@monash.edu), +61 (0) 3 99055486)

**References:**
- Barr et al. (2013) Bacteriophage adhering to mucus provide a non-host derived immunity. *Proceedings of the National Academy of Sciences*. 110(26).
Graduate positions are available at Monash University, Melbourne, Australia

The successful candidates will be offered a scholarship (and fee-waiver in the case of international students) of approximately AU$26,000, tax-free for 3.5 years for full time research. Expenses for relocation, research, coursework and conference attendance are covered.

Monash is a member of the Group of Eight, a coalition of top Australian universities recognised for their excellence in teaching and research.

The School of Biological Sciences is a dynamic unit with strengths in ecology, genetics and physiology and the nexus between these disciplines (monash.edu/science/about/schools/biological-sciences/).

The University is located in Melbourne, one of the most liveable cities in the world and a cultural and recreational hub.

The application process has two stages:

(1) Send an initial application to Jeremy Barr (jeremy.barr@monash.edu), consisting of:
   - a letter of motivation
   - a CV
   - academic transcripts, and translation if required, preferable indicating cohort rank or percentiles
   - English test results if available
   - the names and contact details of two academic references

(2) If you are selected, you will be invited to interview and submit a formal application through the Monash University web portal