

# Department of Immunology and Pathology



*Immunology department volunteers at 2018 Day of Immunology*

The Monash University Department of Immunology and Pathology is internationally renowned for its combined expertise in research, teaching and service delivery in immunology and immunopathology.

Extensive research programs in basic and translational immunology include highly successful collaborations with The Alfred hospital and other AMREP partners. The department's research activities target diseases including allergy, asthma, autoimmunity, inflammation, diabetes, lupus, organ fibrosis, cancer and malaria. The department also focuses on engineering novel treatments such as nanoparticle-based vaccines in cancer and infection.

See more:

<http://www.monash.edu/medicine/ccs/immunology>

## Projects Available:

[Clinical implications of trans-kingdom microbial interactions in the transplanted lung](#)

Supervisor(s): Professor Benjamin Marsland  
Email: [Benjamin.Marsland@monash.edu](mailto:Benjamin.Marsland@monash.edu)

[Implications of antibody repertoires for microbiome composition and susceptibility to asthma](#)

Supervisor(s): Professor Benjamin Marsland and Dr Tomasz Wypych  
Email: [Benjamin.Marsland@monash.edu](mailto:Benjamin.Marsland@monash.edu)

[How Does the Absence of One Enzyme Block an Entire Immune Response?](#)

Supervisor(s): Professor David Tarlinton  
Email: [David.Tarlinton@monash.edu](mailto:David.Tarlinton@monash.edu)

[Molecular basis of CD4+ T cell differentiation and function during tumour development](#)

Supervisor(s): Professor David Tarlinton and Dr Zhoujie Ding, Dr Isaak Quast  
Email: [David.Tarlinton@monash.edu](mailto:David.Tarlinton@monash.edu)

[What are the mechanisms allowing protective immunity while preventing autoimmunity?](#)

Supervisor(s): Professor David Tarlinton and Dr Isaak Quast  
Email: [David.Tarlinton@monash.edu](mailto:David.Tarlinton@monash.edu)

[The use of diet as a mechanism to subvert the progression of chronic lung disease](#)

Supervisor(s): Assoc Professor Margaret Hibbs  
Email: [Margaret.Hibbs@monash.edu](mailto:Margaret.Hibbs@monash.edu)

[Defining mechanisms underlying pathogenic inflammation in lupus](#)

Supervisor(s): Assoc Professor Margaret Hibbs  
Email: [Margaret.Hibbs@monash.edu](mailto:Margaret.Hibbs@monash.edu)

[The role of the Hck tyrosine kinase in B cell development and function](#)

Supervisor(s): Assoc Professor Margaret Hibbs  
Email: [Margaret.Hibbs@monash.edu](mailto:Margaret.Hibbs@monash.edu)

[Resolving the conundrum of antibody deficiency and autoimmunity in patients with primary immunodeficiency](#)

Supervisor(s): Assoc Professor Menno Van Zelm and Dr Emily Edwards  
Email: [Menno.VanZelm@monash.edu](mailto:Menno.VanZelm@monash.edu)

[B-cell T-cell interactions driving granulomatous inflammation in Crohn's disease](#)

Supervisor(s): Assoc Professor Menno Van Zelm  
Email: [Menno.VanZelm@monash.edu](mailto:Menno.VanZelm@monash.edu)

[Immune specificity and memory in asthma and allergic disease](#)

Supervisor(s): Assoc Professor Menno Van Zelm and Dr Craig McKenzie  
Email: [Menno.VanZelm@monash.edu](mailto:Menno.VanZelm@monash.edu)

[Targeting the blood feeding pathway of the hookworm parasites](#)

Supervisor(s): Professor Nicola Harris and Dr Tiffany Bouchery  
Email: [Nicola.Harris@monash.edu](mailto:Nicola.Harris@monash.edu)

[Function and regulation of alternatively activated Macrophages](#)

Supervisor(s): Professor Nicola Harris and Dr Tiffany Bouchery  
Email: [Nicola.Harris@monash.edu](mailto:Nicola.Harris@monash.edu)

[Tetraspanins are key regulators of inflammation](#)

Supervisor: Assoc Professor Mark Wright  
Email: [Mark.Wright@monash.edu](mailto:Mark.Wright@monash.edu)