Department of Immunology and Pathology



Monash Immunology and Pathology graduate students and postdocs are actively involved in community outreach, including the annual international 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.

There are extensive research programs in basic and translational immunology, including highly successful collaborations with the Alfred hospital and other ARA partners. The department's research activities target diseases including allergy, asthma, autoimmunity, inflammation, immunodeficiency, lupus, organ fibrosis, cancer and helminth infection. The department also focuses on investigating novel treatments, such as the regulation of the microbiota in disease.

See more:

www.monash.edu/medicine/ccs/immunology

PROJECTS AVAILABLE:

<u>Targeting the blood feeding pathway of the hookworm</u> parasites

Supervisor(s): Prof Nicola Harris and Dr Tiffany

Bouchery

Email: Nicola.Harris@monash.edu

Applicable for: Hons

The role of the microbiota in the protection against reinfection with intestinal parasitic worms

Supervisor(s): Prof Nicola Harris and Dr Mati Moyat

Email: Nicola.Harris@monash.edu

Applicable for: Hons

<u>Investigating immunity during "trickle" infection by</u> helminth parasites

Supervisor(s): Prof Nicola Harris and Dr Gillian

Coakley

Email: Nicola.Harris@monash.edu

Applicable for: Hons

<u>Investigating the contribution of a newly identified</u> <u>myeloid cell gene - resistin-like gamma (mRetnlg) -</u> during host immune responses

Supervisor(s): Prof Nicola Harris and Prof Benjamin

Marsland

Email: Nicola.Harris@monash.edu

Applicable for: PhD

Exploring new pathways that control microglial signalling and neuroinflammation

Supervisor(s): Assoc Prof Margaret Hibbs and Dr

Bridgette Semple

Email: Margaret. Hibbs@monash.edu

Applicable for: PhD, Masters, Hons, BMedSc

Defining the factors underpinning steroid-insensitive asthma

Supervisor(s): Assoc Prof Margaret Hibbs Email: Margaret.Hibbs@monash.edu

Applicable for: PhD, Masters, Hons, BMedSc

Targeting the microbiome to prevent asthma

Supervisor(s): Prof Benjamin Marsland and Dr

Tomasz Wypych

Email: Benjamin.Marsland@monash.edu
Applicable for: PhD, Masters, Hons, BMedSc

<u>Does dietary protein intake influence susceptibility to respiratory diseases?</u>

Supervisor(s): Prof Benjamin Marsland and Dr Olaf

Perdijk

Email: <u>Benjamin.Marsland@monash.edu</u>
Applicable for: PhD, Masters, Hons, BMedSc

Therapeutic targeting of interleukin-22 for severe urinary tract infection and associated renal complications

Supervisor(s): Dr Malcolm Starkey and Dr Bernadette

Jones-Freeman

Email: Malcolm.Starkey@monash.edu

Applicable for: PhD, Hons

Manipulating immunisation to achieve preferred outcomes

Supervisor(s): Prof David Tarlinton and Dr Isaak

Quast

 $\textbf{Email:} \ \underline{\textbf{David.Tarlinton@monash.edu}}$

Applicable for: PhD

<u>Using anti-venom antibodies to resolve toxicity,</u> relatedness and improve protection

Supervisor(s): Prof David Tarlinton, Assoc Prof Steven Rockman (External), and Prof Andrew Lew

(External)

Email: David.Tarlinton@monash.edu

Applicable for: PhD