Hudson Institute of Medical Research

271 STAFF

176 STUDENTS

43 RESEARCH GROUPS

246 RESEARCH PUBLICATIONS

Hudson Institute is a leading Australian medical research institute recognised internationally for discovery science and translational research into inflammation, cancer, and women's and newborn health.

We are leading developments in cell therapies, paediatric cancer and the human microbiome. Our worldwide scientific and medical collaborations provide a foundation for transformative healthcare programs across the globe.

Our 447 scientists, clinicians and graduate students come from around the world to pursue one mission – to make medical research discoveries that save and change lives. Located in the Monash Medical Precinct, our scientists work alongside clinical partners and industry colleagues and use advanced technology platforms to inform their research.

Our students

We nurture and inspire the next generation of scientists and clinicians by educating and training more than 170 students through our academic affiliation with Monash University.

56 GRADUATE AND HONOURS STUDENTS COMPLETED

176 STUDENTS
127 PHD
18 MASTERS
31 HONOURS

Figures from 2025

Student research

Honours and postgraduate students at Hudson Institute are trained by Australia's leading researchers.

Our students

- Are exposed to a unique collaborative environment involving leading researchers, clinicians and industry partners
- Undertake an extensive training program
- Develop life-long technical, communication and presentation skills
- Have access to world-class research facilities
- Obtain a degree from Monash University – in top 50 globally
- Attend national and international conferences
- Win prestigious prizes and awards
- Participate in an active and supportive social club, Hudson Institute Student Society (HISS).

How to enrol

All the information you need to enrol is on our website.
w: hudson.org.au/students/courses-available

Contact supervisors any time

Students are encouraged to contact and visit supervisors in their laboratories to discuss projects. Simply email the supervisor to arrange a time.

STEP 1: Find a project that interests you in our 2027 Student Research Projects – scan the QR code or visit www.hudson.org.au/students/student-projects/

STEP 2: Email the supervisor to indicate your interest and arrange a time to visit.

Connect with us

Website – www.hudson.org.au
LinkedIn – @Hudson Institute of Medical Research
Bluesky – @hudsonresearch.bsky.social
Instagram – @Hudson_Research
Facebook – @HUDSONResearchAu

Contact us

27-31 Wright Street, Clayton VIC 3168 Australia
t: + 61 3 8572 2700 **e:** info@hudson.org.au

HUDSON
INSTITUTE OF MEDICAL RESEARCH

Centre for Innate Immunity and Infectious Diseases

Discovery and translational research in infection, cancer and inflammatory disease

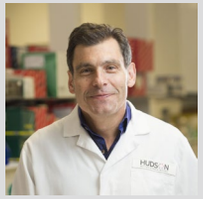
2027

Centre for Innate Immunity and Infectious Diseases (CiiiD) | Our supervisors

CiiiD Centre Head

Professor Seth Masters
Innate Immune and Autoinflammatory Disease

Deputy Centre Head



Professor Richard Ferrero
Gastrointestinal Infection and Inflammation

Deputy Centre Head

Associate Professor Michelle Tate
Viral Immunity and Immunopathology

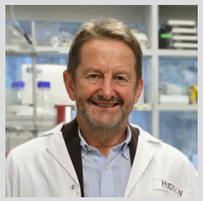
Associate Professor Kate Lawlor
Cell Death and Inflammatory Signalling

Professor Elizabeth Hartland
Innate Immune Responses to Infection

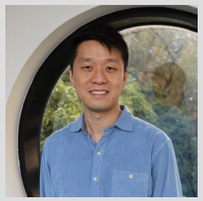
Professor Sam Forster
Microbiota and Systems Biology

Professor Michael Gantier
Nucleic Acids and Innate Immunity

Professor Paul Hertzog
Regulation of Interferon and Innate Signalling



Professor Phil Bardin
Respiratory and Lung



Dr Wilson Wong
Structural Biology of Inflammation and Cancer

Dr Sophia Davidson
Neuroinflammation and Neurodegeneration

Professor Carl Walkley
RNA biology and Innate Immune Sensing

What we research

Infections
COVID-19
HIV
Zika virus
Influenza
Helicobacter pylori
Enteropathogenic *E. coli* (EPEC)
Salmonella enterica serovars
Shigella spp.
Legionella spp. (Legionnaires' disease)
Burkholderia (melioidosis)
Herpes simplex virus
Human metapneumovirus
Respiratory syncytial virus

Inflammation
Sepsis
Arthritis
Systemic lupus erythematosus
Autoinflammatory diseases
Diabetes

Cancer
Stomach
Breast
Lung
Ovary
Pancreas

Gastrointestinal disease
Gastritis
Gastroenteritis / Diarrheal disease
Inflammatory bowel disease

Neurodegeneration
Aicardi-Goutières Syndrome
Parkinson's Disease
Motor Neuron Disease
Dementia

Respiratory disease
Asthma
Chronic obstructive pulmonary disease
Respiratory infections

For more information about our student projects:
Go to **w:** hudson.org.au/students/student-projects/ and search by supervisor name or theme

What we do

Research at the Centre for Innate Immunity and Infectious Diseases has led to ground-breaking discoveries in innate immunology and the microbiome that are changing our understanding and treatment of cancer, inflammatory and infectious diseases.

The Centre for Innate Immunity and Infectious Diseases (CiiiD), led by Professor Seth Masters, houses the largest group of inflammation and immunity researchers in Australia. They are world leaders in studying the body's innate, or first-line, immune response and how it and the microbiome trigger inflammation, leading to cancer, autoimmune conditions (lupus, inflammatory bowel disease, arthritis), lung (COPD, emphysema, silicosis) and infectious diseases (gastroenteritis, influenza, pneumonia).

The Centre for Innate Immunity and Infectious Diseases goals are to

- Discover the steps and connections that turn inflammation on and off
- Develop new treatments for inflammatory diseases and cancer
- Identify markers that help diagnose and detect disease earlier

Student first author publications

- **Arwaf Alharbi** *et al.*, 2'-O-Methyl-guanosine RNA fragments antagonize TLR7 and TLR8 to limit autoimmunity. *Nat Immunol*. 2026. 762-775.
- **Jack Emery** *et al.*, Outer membrane vesicles mediate the secretion and nuclear trafficking of a bacterial nucleomodulin. *J. Extracell. Vesicles*. 2026 (in press).
- **Alexandra McAllan** *et al.*, IsomiR stoichiometry changes as disease biomarkers. *Mol Ther Nucleic Acids*. 2025 16(1):440.
- **Sarah Rosli** *et al.*, Gasdermin E deficiency limits inflammation and lung damage during influenza virus infection. *Cell Death Dis*. 2024 29:203-203.
- **Jasmine Chuah** *et al.*, IFNε, IFNω and IFNλ: interferons defending the mucosa. *Curr Opin Immunol*. 2024 89:102456.

Student prizes and awards

Our students have recently won prestigious prizes, awards and placements, including:

- **Shambel Haile –** travel grant to attend the EMBO Workshop on "*Pathogen Immunity and Signalling*" (Leiden, Netherlands, June 2026).
- **Dianne Xu –** Millennium Science 10x Genomics Fellowship (2025).