## Hudson Institute at a glance



STAFF





176 STUDENTS



45 RESEARCH GROUPS



257
RESEARCH
PUBLICATIONS

Hudson Institute is a leading Australian medical research institute recognised internationally for discovery science and translational research into inflammation, reproductive health and pregnancy, infant and child health, cancer, and hormones and 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.

We are a founding member of the Monash Health Translation Precinct with partners Monash Health and Monash University. Our close ties with clinicians and industry give us the ability to translate our discoveries into new preventative approaches, therapies and devices for patients.

## Our students at a glance

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.







176 STUDENTS 125 PHD 1 MASTERS 50 HONOURS



26 STUDENTS WITH MEDICAL TRAINING

Student figures for 2021

### Student research

Honours and PhD students at Hudson Institute are trained by Australia's leading researchers. Our students:

- Attend national and international conferences
- Publish their research (there were 37 student first author publications in 2021)
- Collaborate with leading researchers
- Undertake an extensive training program
- Regularly win prestigious prizes and awards
- Have opportunities to network
- Develop technical, communication and presentation skills
- 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 labs any time to discuss projects. Simply email the supervisor to arrange a time.

**STEP 1:** Find a project you are interested in, either in the 2023 Postgraduate and Honours Research Projects.

w: hudson.org.au/students/student-projects/

**STEP 2**: Once you have identified a project, email the supervisor: "I am interested in your student project. Could I please arrange a time to visit you in your lab?"

## **Connect with us**



hudson.org.au



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Hudson-research



hudson\_research

## **Contact us**

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**t:** + 61 3 8572 2700

e: info@hudson.org.au

w: hudson.org.au



# **The Ritchie Centre**

Women's Health
Fetal and Neonatal Health
Infant and Child Health
Cell Therapy and Regenerative Medicine
Infection, Inflammation and Immunity

2022

# The Ritchie Centre | Our supervisors



Head. The Ritchie Centre **Prof Stuart Hooper** 



**Perinatal Transition** Prof Graeme Polglase

**Neonatal Brain Protection** 

A/Prof Flora Wong



Neurodevelopment and Neuroprotection Prof Suzie Miller



**Endometrial Stem Cell Biology Prof Caroline Gargett** 



**Lung Development** A/Prof Megan Wallace



**Amnion Cell Biology** A/Prof Rebecca Lim

Dr Shayanti Mukherjee



**Translational Tissue** Engineering



Perinatal Cardiovascular Physiology Dr Beth Allison



Interventional Immunology in Early Life Diseases Prof Claudia Nold Prof Marcel Nold



**Epidemiology and Clinical Trials** Dr Miranda Davies-Tuck



**Perinatal Inflammation and** Neurophysiology Dr Robert Galinsky

## Baby and Children's Health



Birth Asphyxia

Pulmonary hypertension





For more information about our student projects visit the Ritchie Centre Website: https://hudson.org.au/research-centre/theritchie-centre/

## Our research

#### Women's health



Endometriosis

Infertility

IVF

Pelvic organ prolapse

Pre-eclampsia

Premature ovarian failure

## Infection, Inflammation and Immunity **(**

Intrauterine Inflammation

Systemic lupus erythematosus

Pulmonary arterial hypertension

Bronchopulmonary dysplasia Cerebral Palsy Congenital diaphragmatic hernia Down Syndrome **Epilepsy** 

Intrauterine Growth Restriction

Necrotising enterocolitis

Premature birth

Sleep disordered breathing

## What we do

Basic and translational research. We take laboratory discoveries to patients for real-world impact. This is through the co-location of researchers with clinicians, state-of-the-art technologies and a clinical trials centre.

The Ritchie Centre's mission to improve the health of women. infants and children through innovative research is achieved through its unique associations as the principal research Centre of the Monash University Department of Obstetrics and Gynaecology and the Department of Paediatrics, Monash Women's Services, Monash Newborn and Melbourne Children's Sleep Centre. It is also a major research partner of the Monash Children's Hospital.

## Student first author publications

In 2021 our students were first authors on the following research publications

- > Smith MJ, Paton MCB, Fahey MC, Jenkin G, Miller SL, Finch-Edmondson M, McDonald CA. Neural stem cell treatment for perinatal brain injury: A systematic review and metaanalysis of preclinical studies. Stem Cells Transl Med. 2021
- Hennes, D.M.Z.B.; Rosamilia, A.; Werkmeister, J.A.; Gargett, C.E.: Mukheriee, S. Endometrial SUSD2+ Mesenchymal Stem/Stromal Cells in Tissue Engineering: Advances in Novel Cellular Constructs for Pelvic Organ Prolapse. J. Pers. Med. 2021, 11, 840.
- Li A, James D, Lim R. The Gibco™ CTS™ Rotea™ system storya case study of industry-academia collaboration. Gene Ther. 2021 Jun 10

## Student prizes and awards

In 2021, our students won prestigious prizes and awards, including

- > Dr Aidan Kashyap was awarded the Mollie Holman Medal which is one of Monash University's highest academic honours. Each year, a maximum of ten medals are awarded to doctoral students, one from each faculty, who have presented their faculty's best thesis of the year. Aidan's PhD thesis was titled: Improving the transition to newborn life for babies with congenital diaphragmatic hernia.
- > Ingrid Dudink was awarded the Tania Gunn Prize for best presentation by a PhD student at the FNPS (Fetal, Neonatal & Physiological Society) conference, 4-7 October 2021. Title: Altered neuronal growth trajectory in fetal growth restriction.