Hudson Institute at-a-glance







176 STUDENTS



42
RESEARCH
GROUPS



250 RESEARCH PUBLICATIONS

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

Hudson Institute is 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.

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.



66
POSTGRADUATE
AND HONOURS
STUDENTS
COMPLETED



176 STUDENTS 126 PHD 4 MASTERS 46 HONOURS



47
STUDENTS
WITH MEDICAL
TRAINING

Student figures, 2022

Student research

Honours and PhD 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
- Publish their research (41 student first-author publications in 2022)
- 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 labs any time to discuss projects. Simply email the supervisor to arrange a time.

STEP 1: Find a project in the 2024 Postgraduate and Honours Research Projects booklet that you are interested in.

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



HUDSONResearchAu @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

2024

The Ritchie Centre | Our supervisors



Life Diseases

Prof Claudia Nold

Prof Marcel Nold

Epidemiology and

Clinical Trials

Head. The Ritchie Centre Prof Suzanne Miller



Perinatal Transition Prof Graeme Polglase



Fetal and Neonatal Health Prof Stuart Hooper



Endometrial Stem Cell Biology Prof Caroline Gargett



Amnion Cell Biology A/Prof Rebecca Lim



Lung Development A/Prof Megan Wallace



Interventional Immunology in Early **Neonatal Brain Protection** A/Prof Flora Wong



Perinatal Inflammation and Neurophysiology Dr Robert Galinsky



Translational Tissue Engineering Dr Shayanti Mukherjee



Perinatal Cardiovascular Physiology Dr Beth Allison

Our research

Dr Miranda Davies-Tuck

Women's health



Endometriosis Infertility

IVF

Pelvic organ prolapse

Pre-eclampsia

Premature ovarian failure





Birth Asphyxia Bronchopulmonary dysplasia Cerebral Palsy Congenital diaphragmatic hernia Down Syndrome **Epilepsy** Intrauterine Growth Restriction Necrotising enterocolitis Premature birth

> SIDS Sleep disordered breathing

Pulmonary hypertension



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

Infection, Inflammation and Immunity (

Intrauterine Inflammation Systemic lupus erythematosus Pulmonary arterial hypertension



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 and Monash Newborn. It is also a major research partner of the Monash Children's Hospital.

Student first author publications

In 2022 our students were first authors on the following research publications:

- Di Simone SK, Rudloff I, Nold-Petry CA, Forster SC, Nold MF. <u>Understanding respiratory microbiome-immune system</u> interactions in health and disease. Sci Transl Med. 2023 Jan 11;15(678).
- > Pryor EJ, Blank DA, Hooper SB, Crossley KJ, Badurdeen S, Pollock JA, Stainsby AV, Croton LCP, O'Connell DW, Hall CJ, Maksimenko A, Hausermann D, Davis PG, Kitchen MJ. Quantifying lung aeration in neonatal lambs at birth using lung ultrasound. Front Pediatr. 2022 Sep 28;10:990923.
- Andrew MS, Selvaratnam RJ, Davies-Tuck M, Howland K, Davey MA. The association between intrapartum interventions and immediate and ongoing breastfeeding outcomes: an Australian retrospective population-based cohort study. Int Breastfeed J. 2022 Jul 5;17(1):48.

Student prizes and awards

In 2022, our students won prestigious prizes and awards, including:

- > Annie Langston-Cox 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, normally one from each faculty, who have fulfilled their degree requirements and presented their faculty's best thesis of the year. Annie's PhD thesis is titled: Pursuing a novel adjuvant therapy for preeclampsia.
- > Molly McLaughlin was awarded the Henry Burger Honours Award for 2022. The award recognises the outstanding Honours students at the Hudson Institute for 2022 based on academic merit. Molly's project was titled: "Endometrial Mesenchymal Stem Cells as a Unique Cell Source for Treatment of Graft versus-Host Disease"