

Hudson Institute at a glance



296
STAFF



152
STUDENTS



50
RESEARCH
GROUPS



283
RESEARCH
PUBLICATIONS

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

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 150 students through our academic affiliation with Monash University.



58
POSTGRADUATE
AND HONOURS
STUDENTS
COMPLETED



152
STUDENTS
113 PHD
4 MASTERS
35 HONOURS



28
STUDENTS
WITH
MEDICAL
TRAINING

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 43 student first author publications in 2019)
- 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 2021 Postgraduate and Honours Research Projects booklet or Research Projects database.

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
- hudson_research

Contact us

27-31 Wright Street
Clayton VIC 3168
Australia
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

The Ritchie Centre | Research Themes



Prof Caroline Gargett
Women's Health



Dr Rebecca Lim
Cell Therapy and
Regenerative Medicine



Prof Rosemary Horne
Infant and Child Health



A/Prof Graeme Polglase
Fetal and Neonatal Health:
Respiratory and
Cardiovascular



A/Prof Suzie Miller
Fetal and Neonatal Health:
Brain Injury and
Neurodevelopment



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



Head, The Ritchie Centre
Prof Stuart Hooper



Head, Monash University Dept of Obstetrics and Gynaecology
Prof Euan Wallace



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

Baby and Children's Health

Birth Asphyxia
Bronchopulmonary dysplasia
Cerebral Palsy
Congenital diaphragmatic hernia
Down Syndrome
Epilepsy
Intrauterine Growth Restriction
Necrotising enterocolitis
Premature birth
Pulmonary hypertension
SIDS
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 2019, our students were first authors on the following research publications

- **Li A**, Wilson S, Fitzpatrick I, Barabadi M, Chan ST, Krause M, Kusuma GD, James D, Lim R. *Automated Counterflow Centrifugal System for Small-Scale Cell Processing*. J Vis Exp. 2019 Dec 12;(154).
- **Amberg BJ**, DeKoninck PLJ, Kashyap AJ, Skinner SM, Rodgers KA, McGillick EV, Deprest JA, Hooper SB, Crossley KJ, Hodges RJ. *Placental gas exchange during amniotic carbon dioxide insufflation in sheep*. Ultrasound Obstet Gynecol. 2019 Nov 25.
- **Penny TR**, Sutherland AE, Mihelakis JG, Paton MCB, Pham Y, Lee J, Jones NM, Jenkin G, Fahey MC, Miller SL, McDonald CA. *Human Umbilical Cord Therapy Improves Long-Term Behavioral Outcomes Following Neonatal Hypoxic Ischemic Brain Injury* Front Physiol. 2019 Mar 22;10:283.

Student prizes and awards

In 2019, our students won prestigious prizes and awards, including

- **Ben Amberg (PhD Student)** received the **Umberto Nicolini Award for best oral presentation from a young investigator** at the International Fetal Medicine and Surgery Society (IFMSS) Meeting held in Switzerland in October 2019. Ben presented his research on safer fetal surgical techniques for babies with spina bifida
- **Kyra Chan (PhD Student)** was accepted into the International Brain Research Organisation (IBRO) World Congress Young Investigator Training Program (YITP) which provided a unique opportunity to visit a Neuroscience Laboratory in South Korea and then present her research at the *10th IBRO World Congress of Neuroscience in Daegu, South Korea*.