Hudson Institute of Medical Research



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 430 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.





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63 POSTGRADUATE AND HONOURS STUDENTS COMPLETED

170 STUDENTS 129 PHD 10 MASTERS 31 HONOURS

2023/2024

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).

Students at the Centre for Reproductive Health are taught the physiology and systems biology of the reproductive system and use cutting-edge cellular models, human reproductive tissues and molecular and protein techniques to achieve their aims. Our Centre is a friendly environment in which students are encouraged to contribute in discussions at our regular formal and informal meetings.

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 our 2025 Student Research Projects 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?"

Contact us

27-31 Wright Street

t: + 61 3 8572 2700

w: hudson.org.au

Clayton VIC 3168 Australia

e: info@hudson.org.au

Connect with us

- hudson.org.au
- f HUDSONResearchAu
- X Hudson_Research
- O Hudson_Research
- in Hudson Institute of Medical Research





Male Reproductive Health Reproductive Developmental Biology Molecular Biology of Reproduction Female Reproductive Health

2025

Centre for Reproductive Health | Our supervisors



A/Prof Patrick Western Centre Head Research Group Head Germ Cell Development and Epigenetics



Prof Kate Loveland Research Group Head Testis Development and Male Germ Cell Biology



A/Prof Robin Hobbs Deputy Centre Head Research Group Head Germline Stem Cell Biology



Dr Rukmali Wijayarathna Research Scientist Endocrinology and Immunophysiology



Prof Mark Hedger Research Group Head Endocrinology and Immunophysiology

Our research

Male Reproductive Health

- Male factor infertility
- Male reproductive cancer
- Immunobiology in male reproductive health

Reproductive Developmental Biology

- Offspring health
- Environmental exposures

For more information about our student projects, see our 2025 Student Research Projects:

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



- Ovarian function and female fertility
- Epigenetics of ovarian follicle growth

Molecular Biology of Reproduction

- Germline genetics and epigenetics
- RNA biology
- Inflammation and immunobiology

Reproductive health is critical for the initiation of life and throughout life

The environment during conception and pregnancy impacts an individual's health and disease risk throughout child- and adulthood. Reproductive problems including infertility, endometriosis and reproductive cancers can impair physical, mental and financial wellbeing. Researchers within the Centre for Reproductive Health:

- Are world-leaders in reproductive health research
- Perform high-quality discovery research using the latest technologies
- Translate their research into preventions, diagnostics and treatments
- Publish in the world's top impact journals.

Student first author publications

In 2023, CRH students were first author on 4 out of 20 research publications including:

Whiley PAF, Nathaniel B, Stanton PG, Hobbs RM, Loveland KL (2023) Spermatogonial fate in mice with increased activin A bioactivity and testicular somatic cell tumors. *Front Cell Dev Biol.* 2023 Jul 26;11:1237273.

Blucher RO, Lim RS, Jarred EG, Ritchie ME, Western PS (2023) FGF-independent MEK1/2 signalling in the developing foetal testis is essential for male germline differentiation in mice. *BMC Biol.* 2023 Dec 5;21(1):281.

Student prizes and awards

In 2023 our students won prestigious prizes and awards including:

Chloe Edwards-Lee (Supervisors: A/Prof Patrick Western and Dr Elly Jarred) – Monash University Biomedicine Discovery Institute Christina Lackmann Honours Medal. \$1000.

Penny Whiley (Supervisors: Prof Kate Loveland and A/Prof Robin Hobbs) – Salamonsen PhD Student Travel Award \$750.

Rheannon Blucher (Supervisors: A/Prof Patrick Western and Dr Elly Jarred) - Int. Symposium on the Biology of Vertebrate Sex Determination Travel Award USD\$600.