

Child Health Research Centre and Clinical Research

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Disclosures

- Research funding
 - Kyowa Kirin International, Plc.
 - Ultragenyx Pharmaceutical, Inc.
 - Alexion International, Plc.

- Consultant & Speaker Fees
 - Kyowa Kirin International, Plc.
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Outline

Overview of Child Health Research Centre



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

CREATE CHANGE

Acknowledgement of Country



A Guidance in Time

Turrbal
Jagera

Centre for Children's Health Research

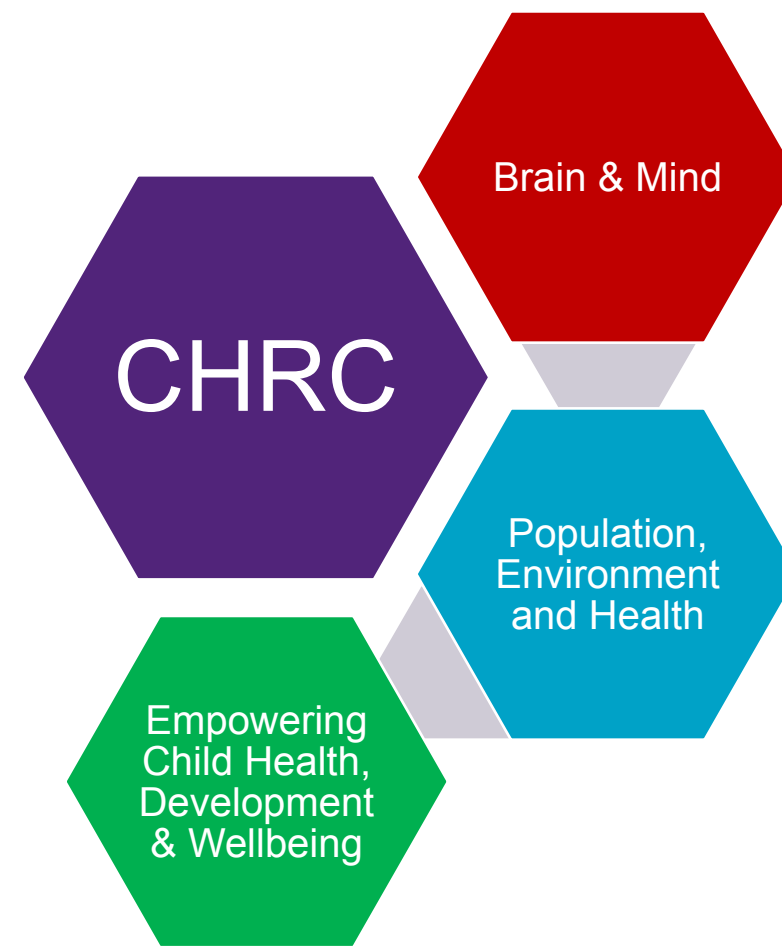
Partnership:

- **The University of Queensland – Child Health Research Centre**
- Children's Health Queensland
- Queensland University of Technology
- Translational Research Institute



Child Health Research Centre Research Groups and Priority Areas

Research Group	Research Leader
Acquired Brain Injury in Children (ABiC)	Prof Karen Barlow
Applied Public Health Research Group	A/Prof Gulam Khandaker
Childhood Allergy & Epidemiology	A/Prof Jennifer Koplin
Children's Health and Environment Program (CHEP) WHO Collaborating Centre for Children's Health and the Environment	Prof Peter Sly, Prof Paul Jagals
Children's Intensive Care Research Program (CHIRP)	A/Prof Kristen Gibbons
Children's Musculoskeletal, Endocrine and Diabetes Research Group (MED-Kids)	Prof Craig Munns, A/Prof Tony Huynh, A/Prof Louise Conwell
Children's Physical Activity Research Group (CPARG)	Prof Stewart Trost (HaBS)
Child and Youth Mental Health Research Group	Prof James Scott, Prof Middeldorp, Dr Enda Byrne
Computational Immunology	Dr Kelvin Tuong
Fetal Alcohol Spectrum Disorder Research Collaboration	Dr Natasha Reid, Prof Karen Moritz
Ian Frazer Centre for Children's Immunotherapy	Prof Di Yu
Kids Sleep Research	A/Prof Jasneek Chawla
Paediatric Nursing and Patient Safety	Prof Amanda Ullman (HaBS)
Queensland Cerebral Palsy Rehabilitation and Research Centre	Prof Ros Boyd, A/Prof Leanne Sakzewski
Queensland Cystic Fibrosis Research Program	Prof Peter Sly, Prof Clare Wainwright



Partnerships: Queensland Paediatric Infectious Diseases Group & Children's Burns and Trauma Research Group; Tumour Biobank

Clinical Trials

The World Health Organization (WHO) definition for a clinical trial is

‘any research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects on health outcomes’.

Clinical trial interventions can include :

- experimental drugs
- cells and other biological products
- vaccines
- medical devices
- surgical and other medical treatments and procedures
- psychotherapeutic and behavioural therapies
- health service changes
- preventive care strategies and
- educational interventions

How Do Clinical Trials Work?

- Researchers may first test new interventions in the laboratory and in animal studies.
- The most promising experimental interventions are then moved into clinical trials where they are tested in humans.
- During a clinical trial, more information is gathered about the effectiveness and safety of a new intervention.
- In a clinical trial, the new intervention will usually be compared against something else, called a control.
- The control can be either a placebo (a substance containing no medication) or an established intervention that is already in use.
- In Australia, clinical trials are governed by national ethics guidelines and codes of conduct.
- Different 'Phase' studies 1 - 4

Why is Clinical Research Important?

Better patient care outcomes:

- [Patients at research active hospitals have more confidence in staff](#) (Jonker L, et al, 2019)

Patients admitted to more research-active hospitals tended to be better informed about their condition and medication.

- [Study activity, mortality rates and CQC ratings in NHS trusts](#) (Jonker L, Fisher J, 2017)

The greater the amount of research undertaken at a Hospital, the lower the death rate.

- [Research activity and the association with mortality](#) (Ozdemir BA, et al, 2015)

This study found that research-active Hospital Districts have lower risk-adjusted mortality for acute admissions.

- [Cancer survival outcomes in hospitals with high research participation](#) (Downing A, et al, 2016)

Hospitals that undertake greater numbers of interventional clinical trials have better survival rates of patients with colorectal cancer.

- The new treatment offered in clinical trials is usually better than current treatment
- Patients in clinical trials have earlier access to new medications

Why is Clinical Research Important?

A Happier Workforce:

- [Academic factors in medical recruitment](#) (Rees MR, Bracewell M, 2019)

Increasing the academic component of medical jobs helps recruit and retain the medical workforce.

- [Career Fit and Burnout Among Academic Faculty](#) (Shanafelt TD, et al, 2009)

Increasing the time physicians spend on work they find meaningful (research and clinical trials) reduces the risk of burnout.

Why is Clinical Research Important?

Benefit for the health and care system:

- [Advancing health \(.PDF\)](#) (Medical Schools Council, 2022)

Research improves clinical practice, reduces the cost of healthcare and drives policy change.

- [Engagement of clinicians and organisations in research and healthcare performance](#) (Boaz A, et al, 2015)

The engagement of healthcare organisations in research improves healthcare performance.

“In the financial years 2016/17 to 2018/19, it is estimated that clinical research supported by the NIHR Clinical Research Network generated £8 billion in gross value added.”

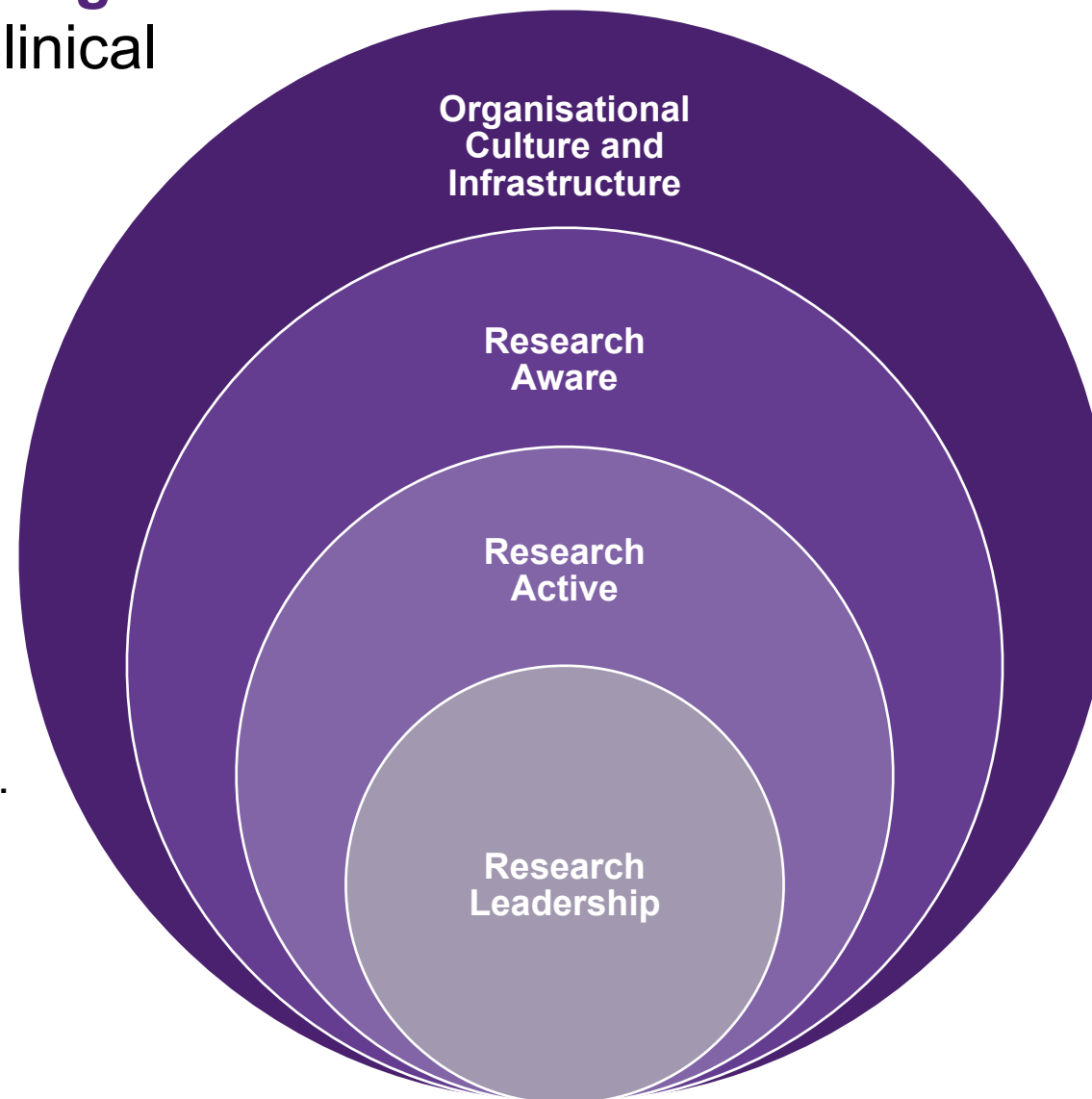
- Advancing Health (Medical Schools Council, 2022)



How do we make sure clinical trials are undertaken?

Grow Research Intensive Organisations

Research Intensive Organisation: Organisational and Clinical Engagement



All staff who wish to be research **active** are provided the opportunity and resources to do so

Grow and support **research leaders** – current and future. Research leaders are those who lead the instigation, analyses and publication of research

The organisation as a whole is responsible for ensuring that its **Culture and Infrastructure** supports and enables research

All staff of the Health Care System are **aware** of the importance of research in improving patient outcome

Thank You

