# Melbourne Biomedical Precinct.

## Clinical Research Strength 04:

### **Child health**

The Melbourne Biomedical Precinct's expertise in child health provides a critical mass for generating and translating research that improves children's lives across the globe. It does so with the united vision to advance child health through prevention, early intervention and health promotion. The Melbourne Biomedical Precinct leverages multi-disciplinary expertise, discovery science, genomic medicine, large patient registries and linkages to healthy population data to conduct child health research.

### **Main players**

- Department of Paediatrics, The University of Melbourne
- · Orygen, The National Centre of Excellence in Youth Health
- · Murdoch Children's Research Institute
- · The Royal Children's Hospital
- · The Royal Women's Hospital
- $\cdot$  The University of Melbourne

#### Advancing areas of strength

- · Ensuring survival for the tiniest babies.
- National and international leadership in the implementation of genomic medicine.
- Preparing Australia for the delivery of stem cell-based therapies and regenerative medicine.
- Impacting global care by leading large paediatric clinical trials.
- Using large patient data cohorts, such as Generation Victoria, to embed research into health education services and place Victoria at the forefront of innovation in child health.
- Improving the global health of children and adolescents through international collaboration and the development of novel vaccines and therapies.
  For example, a world-first study

- conducted by the Murdoch Children's Research Institute has discovered and patented a successful novel therapy for peanut allergy which is now being developed for clinical use in partnership with industry.
- Digital health across a software pipeline for therapeutics, devices, diagnostics, digital health, educational resources and research platforms.
- Identifying the origins of many adult diseases that originate in childhood, such as obesity, cardiovascular disease, mental illness, prevention strategies and issues associated with indigenous health
- Using health economics expertise to design efficient and equitable health care for all children within the Australian healthcare system.

A world-first study conducted by the Royal Women's Hospital has shown that skin-to-skin care (SSC), also known as kangaroo care, is safe for very preterm babies on breathing support and should be encouraged.