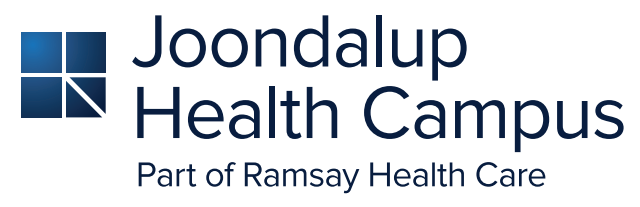


THE ORIGINS PROJECT: CREATING A PLATFORM FOR RESEARCH DISCOVERY



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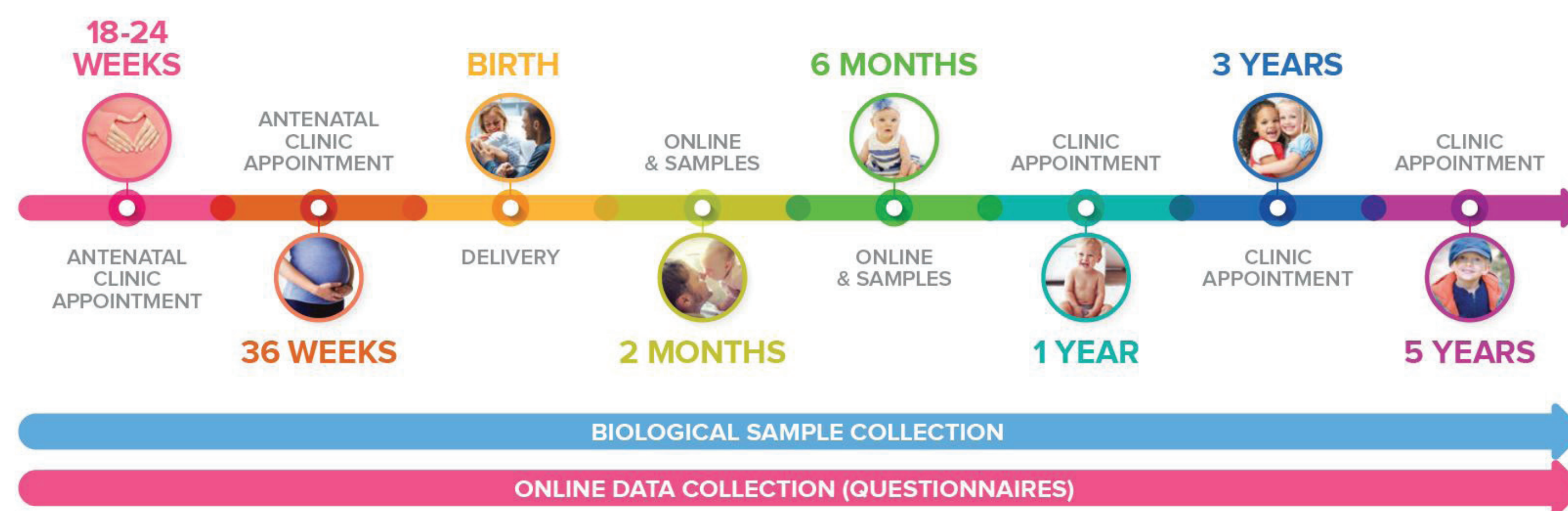
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RAMSAY SITE:
Joondalup Health Campus

INTRODUCTION

The ORIGINS Project is looking to discover how a child's early environment influences the dramatically rising risk of chronic health conditions such as allergies, obesity, mental health issues and neuro-developmental challenges.

Medical, developmental, environmental, educational data and biological samples are collected at multiple timepoints, during pregnancy until the age of five-years, from complete family units where possible.



OBJECTIVE

ORIGINS is developing an extensive databank and biobank in tandem with new technologies and multi-omics platforms to examine health conditions.



DATABANK SNAPSHOT

1,384
One-Year Checks Completed

7,351
Ages and Stage Questionnaires completed

4,904
Australian Eating Surveys completed

841
Conners Early Childhood Assessments completed

18
ORIGINS sub-projects have received data extracts

BIOBANK SNAPSHOT

Samples as at 31 July 2022 – 3,600 active participants

	ANTENATAL			POSTNATAL Home collections			CHILDHOOD		
	20 weeks	28 weeks	36 weeks	Birth	2-4 months	6 months	1 year	3 years	5 years
Blood	Mother 1317 Partner 868	Mother 1569	Mother 2393		Mother* 265 Child* 175	Child* 255	Child 790	Child 315	
Urine	Mother 1224	Mother 1375	Mother 2479		Mother 1181 Child 1012	Mother 1108 Child 884	Child 877	Child 414	Child 21
Buccal Swab	Mother 1259 Partner 850	Mother 1289	Mother 2315			Mother* 227 Child* 231	Mother 1383 Child 1328	Child 475	
Saliva	Mother 1335 Partner 900	Mother 1411	Mother 2391			Mother* 124 Child* 251	Mother 1339 Child 727	Child 162	
Stool	Mother 917	Mother 1176	Mother 1890		Mother 1184 Child 1348	Mother 948 Child 1173	Child 1155	Child 350	Child 15
House dust			Mother 1700				576	302	
Meconium				1822					
Cord Blood				1798					
Placenta				1575					
Colostrum				715					
Breast milk					1226	674	319		
Hair	Partner 110		Mother 1979				Mother 1053 Partner 18		

* Samples are collected from a smaller subset of ORIGINS families and interventions from sub-projects have been conducted on many of these samples.

METHOD

- Questionnaires, clinic appointments, physical measurements, external assessments, hospital paper files and biological samples are collected and stored.
- Data is accessed from multiple sources and linked using project-specific identifiers.
- Integrated and harmonised sub-projects return raw data, diagnostic tests, genome sequencing and additional images or videos.
- Government administrative datasets and other medical provider sources can be linked.

RESULTS

More than **15 million Datapoints** AND **250,000 Biological Samples** from **6,621 Birthing Mothers**, **7,375 Children**, and **2,209 Non-Birthing Partners** as at August 2022

Researchers can seek access to:

- implement a new clinical trial, intervention, or observational study
- to collect new data (biological information, and/or participant information)
- use existing data (biological information, and/or participant information) and undertake data linkage.